

EHRM TRAINING & ADMIN SPACE SUPPORT

FARGO VA HEALTH CARE SYSTEM
 2101 ELM STREET N.
 FARGO, ND 58102

PROJECT NO. 437-21-225

VA

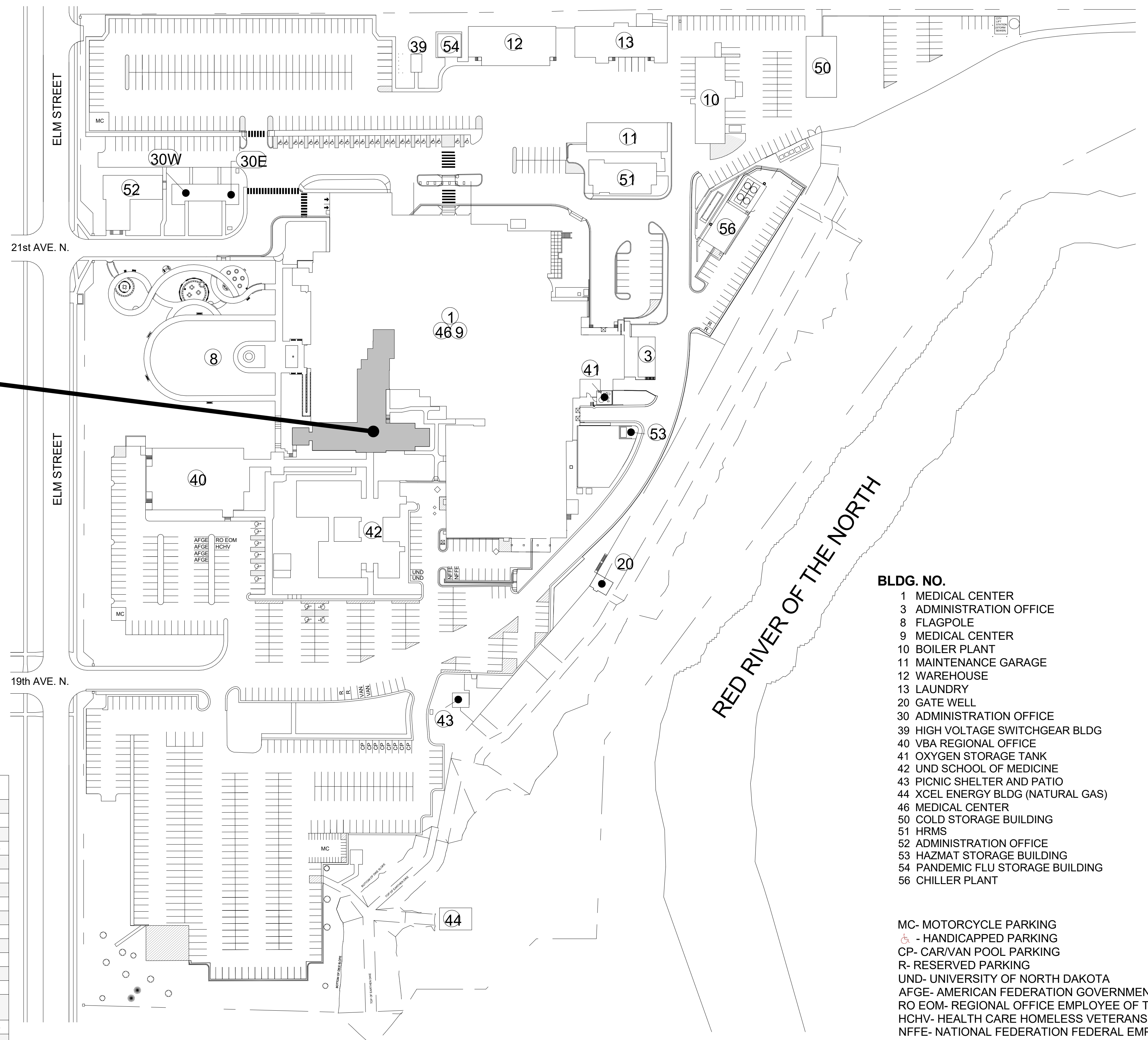


U.S. DEPARTMENT OF VETERAN'S AFFAIRS
 VETERAN'S HEALTH ADMINISTRATION



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**PROJECT
 LOCATION**



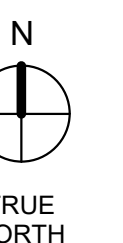
- BLDG. NO.**
- 1 MEDICAL CENTER
 - 3 ADMINISTRATION OFFICE
 - 8 FLAGPOLE
 - 9 MEDICAL CENTER
 - 10 BOILER PLANT
 - 11 MAINTENANCE GARAGE
 - 12 WAREHOUSE
 - 13 LAUNDRY
 - 20 GATE WELL
 - 30 ADMINISTRATION OFFICE
 - 39 HIGH VOLTAGE SWITCHGEAR BLDG
 - 40 VBA REGIONAL OFFICE
 - 41 OXYGEN STORAGE TANK
 - 42 UND SCHOOL OF MEDICINE
 - 43 PICNIC SHELTER AND PATIO
 - 44 XCEL ENERGY BLDG (NATURAL GAS)
 - 46 MEDICAL CENTER
 - 50 COLD STORAGE BUILDING
 - 51 HRMS
 - 52 WAREHOUSE
 - 53 ADMINISTRATION OFFICE
 - 54 HAZMAT STORAGE BUILDING
 - 56 CHILLER PLANT

- MC- MOTORCYCLE PARKING
- - HANDICAPPED PARKING
- CP- CAR/VAN POOL PARKING
- R- RESERVED PARKING
- UND- UNIVERSITY OF NORTH DAKOTA
- AFGE- AMERICAN FEDERATION GOVERNMENT EMPLOYEE
- RO EOM- REGIONAL OFFICE EMPLOYEE OF THE MONTH
- HCHV- HEALTH CARE HOMELESS VETERANS
- NFFE- NATIONAL FEDERATION FEDERAL EMPLOYEE

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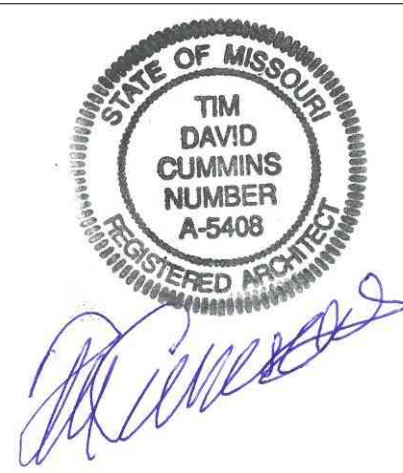
② PROJECT LOCATION
 1" = 80'-0"



100% CONSTRUCTION DRAWINGS

Revisions:	Date

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Drawing Title
COVER SHEET
 FULLY SPRINKLED

Project Title
**EHRM TRAINING AND ADMIN
 SPACE SUPPORT**

Project Number
 437-21-225
 Building Number
9

Location
FARGO, ND

Date
 01/11/2022

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Drawing Number
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 Dwg. 1 of 41

Office of
 Construction
 and Facilities
 Management

Department of
 Veterans Affairs

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ABBREVIATIONS

#	POUND OR NUMBER	HC	HOLLOW CORE	R	RADIUS
@	AND	HDR	HEADER	RBR	RUBBER
AB	ANCHOR BOLT	HEF	HORIZONTAL EACH FACE	RCP	REFLECTED CEILING PLAN
ACI	AMERICAN CONCRETE INSTITUTE	HI	HIGH	RD	ROOF DRAIN
ACT	ACOUSTIC CEILING TILE	HIF	HORIZONTAL INSIDE FACE	RE	RIGHT END
AD	AREA DRAIN	HM	HOLLOW METAL	REINF	REINFORCED
AFF	ABOVE FINISH FLOOR	HOF	HORIZONTAL OUTSIDE FACE	REF	REFERENCE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	HOR	HORIZONTAL	REQD	REQUIRED
AISI	AMERICAN IRON AND STEEL INSTITUTE	HP	HIGH POINT	RET	RETURN
ALUM	ALUMINUM	HR	HOUR	RETG	RETAINING
ANOD	ANODIZED	HS	HIGH STRENGTH	RM	ROOM
ASD	ALTERNATE STRESS DESIGN	HT	HEIGHT	R.O.	ROUGH OPENING
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	ROW	RIGHT OF WAY
AW5	AMERICAN WELDING SOCIETY				
BD	BOARD	ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS	SC	SOLID CORE
BLK	BLOCK	ID	INSIDE DIAMETER	SDI	STEEL DECK INSTITUTE
BM	BEAM	ILO	IN LIEU OF	SECT	SECTION
B.O.	BOTTOM OF	IN	INCH	SF	STEP FOOTING OR SQUARE FOOT
BOT	BOTTOM	INCL	INCLUDE	SHT	SHEET
BRG	BEARING	INSUL	INSULATED OR INSULATION	SIM	SIMILAR
BRKT	BRACKET	INT	INTERIOR	SL	SPLICE LENGTH
B5MT	BASEMENT	INT	INTERIOR	SLV	SHORT LEG VERTICAL
BLDG	BUILDING	INV	INVERT	SOG	SLAB ON GRADE
BYND	BEYOND	IRGWB	IMPACT RESISTANT GYPSUM WALL BOARD	SPEC	SPECIFIED OR SPECIFICATION
				SPK	SPRINKLER OR SPEAKER
				SQ	SQUARE
				SSTL	STAINLESS STEEL
CAB	CABINET	JST	JOIST	STC	SOUND TRANSMISSION CLASS
CER	CERAMIC	JT	JOINT	STD	STANDARD
CIP	CAST-IN-PLACE			STIFF	STIFFENER
CJ	CONTROL JOINT	K	KIP (1000 POUNDS)	STL	STEEL
CLG	CEILING	LLV	LONG LEG VERTICAL	STR	STAIR
CLR	CLEAR	LP	LOW POINT	STRUCT	STRUCTURE OR STRUCTURAL
CMU	CONCRETE MASONRY UNIT	LVL	LEVEL	SUP	SUPPORT
COL	COLUMN	LW	LIGHT WEIGHT	SYM	SYMMETRICAL
COMPR	COMPRESSIBLE	LWC	LIGHT WEIGHT CONCRETE		
CONC	CONCRETE			T&B	TOP AND BOTTOM
CONST JT	CONSTRUCTION JOINT	MAS	MASONRY	T&G	TONGUE AND GROOVE
CONT	CONTINUOUS	MAX	MAXIMUM	TBD	TO BE DETERMINED
CPT	CARPET	MCB	METAL CORNER BEAD	T/D	TELEPHONE/DATA
CRSI	CONCRETE REINFORCING STEEL INSTITUTE	MECH	MECHANICAL	TEL	TELEPHONE
CT	CERAMIC TILE	MEMBR	MEMBRANE	TEMP	TEMPERATURE
		MEZZ	MEZZANINE	THK	THICK OR THICKNESS
DBL	DOUBLE	MFR	MANUFACTURED	THR	THREADED
DEMO	DEMOLISH OR DEMOLITION	MIN	MINIMUM	TLT	TOILET
DET	DETAIL	MO	MASONRY OPENING	T.O.	TOP OF
DIA	DIAMETER	MRGWB	MOISTURE-RESISTANT GYPSUM WALL BOARD	T.O.C	TOP OF CONCRETE
DIM	DIMENSION	MTL	METAL	T.O.F	TOP OF FRAMING
DIR	DIRECTION			T.O.S	TOP OF STEEL/STUD
DN	DOWN			T.O.W	TOP OF WALL
DR	DOOR	NF	NEAR FACE	TPD	TOILET PAPER DISPENSER
DWG	DRAWING	NIC	NOT IN CONTRACT	TPD	TYPICAL
		NO	NUMBER	U/S	UNDERSIDE
EA	EACH	NOM	NOMINAL	UNO	UNLESS NOTED OTHERWISE
EE	EACH END	NTS	NOT TO SCALE	US	UNDERSIDE
EF	EACH FACE	NWC	NORMAL WEIGHT CONCRETE		
EJ	EXPANSION JOINT			VB	VAPOR BARRIER
EL	ELEVATION	OC	ON CENTER	VCT	VINYL COMPOSITE TILE
ELEC	ELECTRICAL	OD	OUTSIDE DIAMETER	VEF	VERTICAL EACH FACE
ELEV	ELEVATOR OR ELEVATION	OH	OPPOSITE HAND	VERT	VERTICAL
EPDM	ETHYLENE PROPYLENE DIENE M-CLASS (ROOFING)	OPNG	OPENING	VIF	VERIFY IN FIELD
EQ	EQUAL	OZ	OUNCE	VOF	VERTICAL OUTSIDE FACE
ES	EACH SIDE			VTR	VENT THROUGH ROOF
EXIST	EXISTING	PC	PILE CAP	VWC	VINYL WALL COVERING
EXP Bolt	EXPANSION BOLT	PCC	PRE-CAST CONCRETE		
EXP JT	EXPANSION JOINT	PL	PLATE	W/	WITH
EXT	EXTERIOR	P.LAM	PLASTIC LAMINATE	WD	WOOD
		PLUMB	PLUMBING	WDW	WINDOW
FD	FLOOR DRAIN OR FIRE DEPARTMENT	PLY	PLYWOOD	WP	WORKING POINT
FEC	FIRE EXTINGUISHER CABINET	PORC	PORCELAIN	WRB	WEATHER RESISTANT BARRIER
FIN	FINISH	PNL	PANEL	WWF	WELDED WIRE FABRIC
FIXT	FIXTURE	PNT	PAINT OR PAINTED		
FLR	FLOOR	PSF	POUNDS PER SQUARE FOOT		
FM	FILLED METAL	PSI	POUNDS PER SQUARE INCH		
FND	FOUNDATION	PT	PRESSURE TREATED		
F.O.	FACE OF	PT	POINT		
FT	FOOT OR FEET	PR	PAIR		
FTG	FOOTING	PROP	PROPERTY		
		PVC	POLYVINYL CHLORIDE		
GA	GAUGE				
GALV	GALVANIZED				
GB	GRADE BEAM				
GP	GUSSET PLATE				
GR	GRADE				
GYP	GYPSUM				

MATERIAL LEGEND

	EARTH/ENGINEERED FILL		CONCRETE
	GRAVEL		ACOUSTIC CEILING TILE
	BRICK		GYPSUM BOARD
	CONCRETE MASONRY		CPT - CARPET
	STEEL METAL		CONC - CONCRETE
	RIGID INSULATION		WM - WALK OFF MAT
	BATT INSULATION		PT - PORCELAIN TILE
	LVT-1 - LUXURY VINYL TILE		

	CENTER LINE
	CUT LINE
	GRID LINE
	PROPERTY LINE
	BID ALTERNATE

V.A. SYMBOLS

	FIRE RESISTIVE RATED LINE, 1 HOUR
	FIRE RESISTIVE RATED LINE, 2 HOUR
	FIRE-RATED, SMOKE BARRIER LINE, 1 HOUR
	FIRE-RATED, SMOKE BARRIER LINE, 2 HOUR
	V V ITEM - VA SUPPLIED AND INSTALLED
	VC ITEM - VA SUPPLIED AND CONTRACTOR INSTALLED
	CC ITEM - CONTRACTOR SUPPLIED AND INSTALLED
	DIMENSION LINE
	NORTH ARROW
	CENTER LINE

LEGEND NOTES:

- THESE LEGENDS ARE COMPOSED OF STANDARD SYMBOLS AND ARE PERTINENT TO THE CONDITIONS ON THIS SET OF DRAWINGS TO THE EXTENT APPLICABLE.
- ADDITIONAL LEGENDS AND/OR OTHER LEGENDS MAY APPEAR IN THIS SET OF DRAWINGS TO INDICATE SPECIFIC CONDITIONS IN LIEU OF SYMBOLS SHOWN ON THIS SHEET.

GENERAL NOTES:

- SHEET SIZE FOR PROPER SCALE IS 30X42.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VISIT THE PROJECT AND VERIFY EXISTING CONDITIONS, DIMENSIONS AND PROPOSED CONDITIONS. COORDINATE DEMOLITION BETWEEN ALL TRADES. NOTIFY A/E IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES.
- WALL PARTITIONS EXTEND TO THE UNDERSIDE OF DECK.
- SEE ENLARGED AREA PLANS FOR WALL TYPE INDICATIONS AND DIMENSIONS.
- SEE CODE PLAN FOR CODE INFORMATION.
- SEE DIMENSION PLAN FOR DIMENSIONS AND WALL TYPES.
- EXISTING DOORS SHOW AT 45 DEGREE ANGLE FOR CLARITY WITH THE EXCEPTION OF TOILET PARTITIONS.
- EXISTING WALL SHADED FOR CLARITY.

ARCHITECTURAL SYMBOLS

	VIEW NAME DRAWING TITLE SCALE 1/8" = 1'-0"		ROOM TAG ROOM NAME ROOM NUMBER
	BUILDING SECTION DIRECTION OF SIGHT DRAWING NUMBER SHEET NUMBER		KEYNOTE TAG KEYNOTE DESIGNATION
	WALL SECTION DIRECTION OF SIGHT DRAWING NUMBER SHEET NUMBER		PARTITION TAG WALL DESIGNATION
	DETAIL CUT DRAWING NUMBER SHEET NUMBER		DOOR TAG DOOR NUMBER
	DETAIL CALLOUT DRAWING NUMBER SHEET NUMBER		WINDOW TAG WINDOW DESIGNATION
	INTERIOR ELEVATION DRAWING NUMBER DIRECTION OF SIGHT SHEET NUMBER		ELEVATION MARKER HEIGHT
			NORTH ARROW TRUE NORTH PLAN NORTH

100% CONSTRUCTION DRAWINGS

CONSULTANTS: Revisions: _____ Date _____		ARCHITECT FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	Drawing Title ABBREVIATIONS, SYMBOLS, LEGENDS AND ARCHITECTURE GENERAL NOTES	Project Title EHRM TRAINING AND ADMIN SPACE SUPPORT	Project Number 437-21-225 Building Number 9
			FULLY SPRINKLED	Location FARGO, ND	Drawing Number G0.01 Dwg. 2 of 41
			Date 01/11/2022	Checked JL	Drawn TC

Office of Construction and Facilities Management
 Department of Veterans Affairs

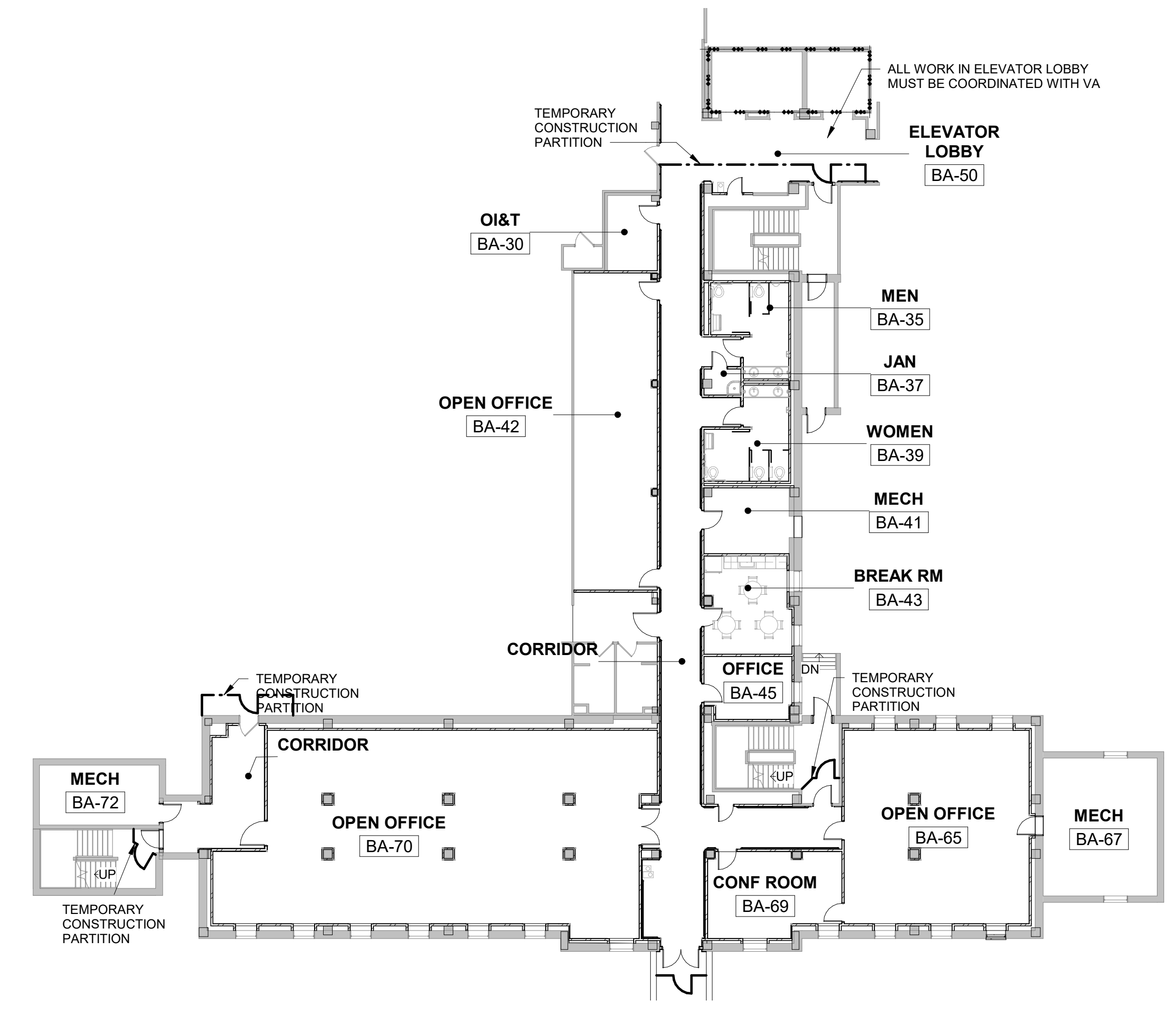
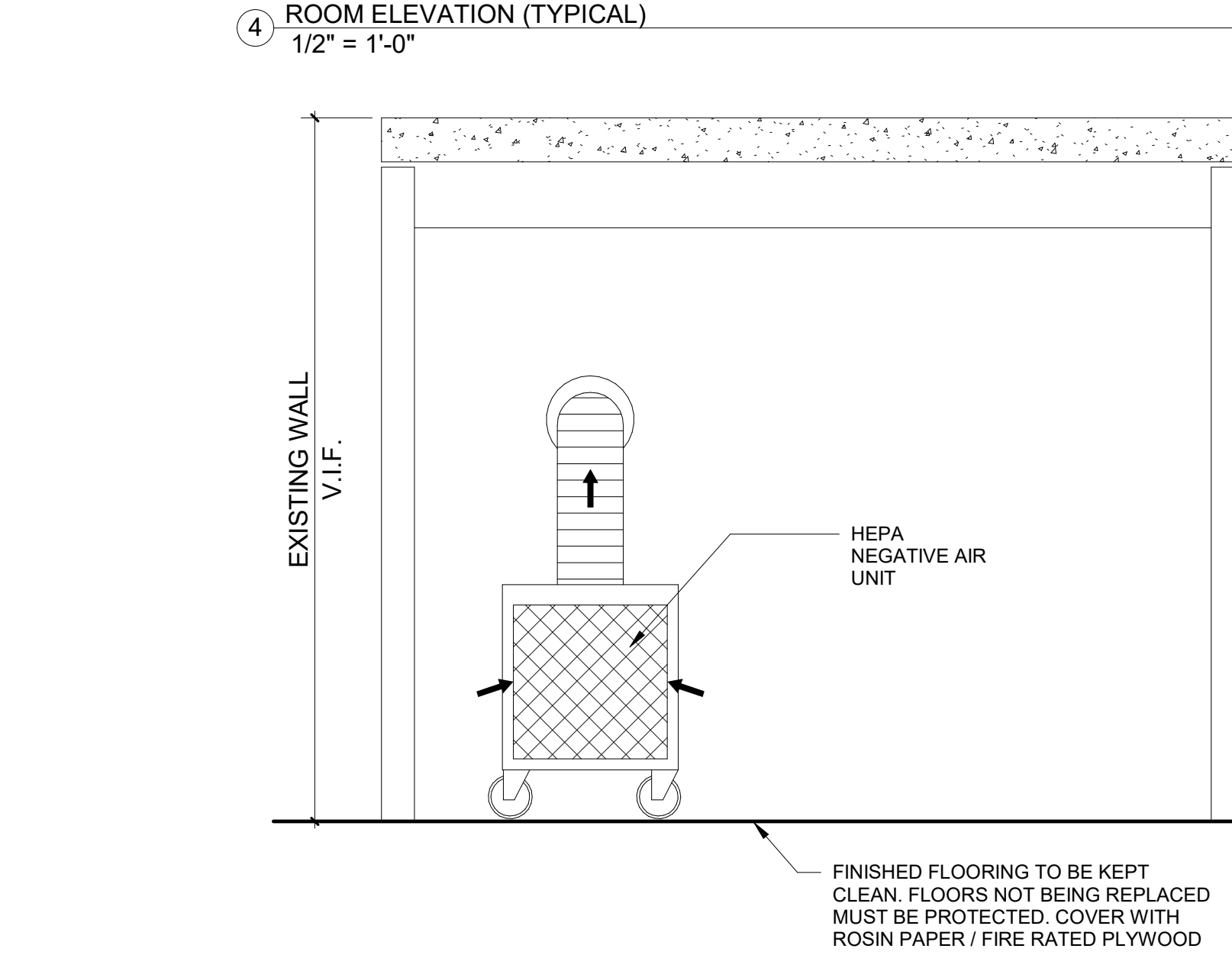
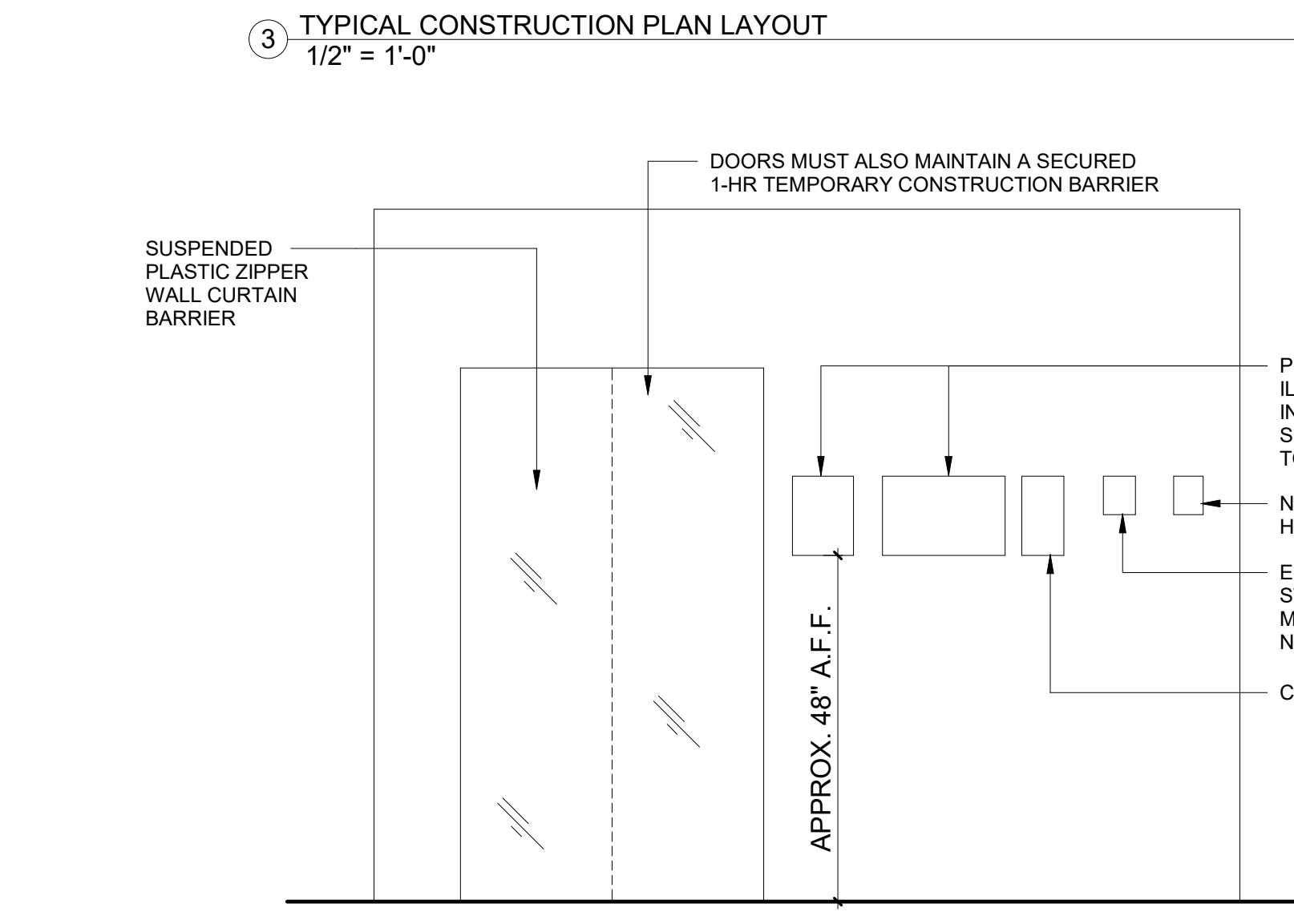
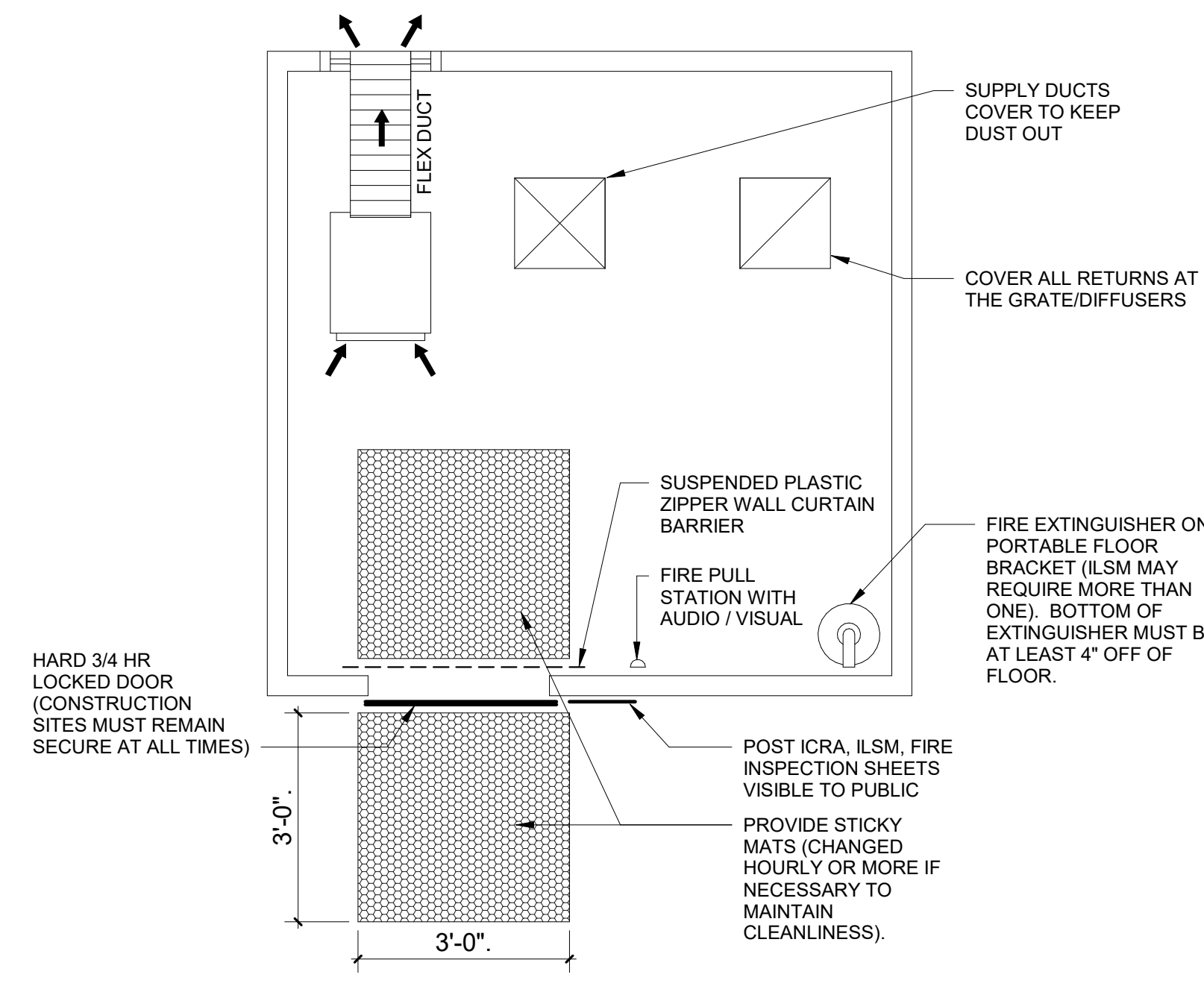
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TEMPORARY CONSTRUCTION BARRIER

1 HOUR SMOKE RATED TEMPORARY CONSTRUCTION PARTITION. PROVIDE AT AREAS ONLY REQUIRED BY IMMEDIATE WORK AND REMOVE WHEN NOT IN USE. EXTENT OF TEMPORARY PARTITION WALLS SHOULD BE MINIMIZED TO ONLY PROVIDE THE NECESSARY CONTAINMENT AND LIMITED CONTRACTOR ACCESS. CONTRACTOR SHALL VERIFY PRIOR TO BIDDING AS TO THE CONDITION OF ANY EXISTING WALLS TO BE USED AS THE BARRIER. VERIFY THAT WALLS ARE CONSTRUCTED TO DECK AND SEALED TIGHT AGAINST THE PASSAGE OF SMOKE.

INFECTION CONTROL NOTES - CLASS IV CONSTRUCTION:

- A. THE ONE-HOUR FIRE-RATED BARRIERS SHALL BE CONSTRUCTED PRIOR TO BEGINNING OTHER WORK.
- B. FIRE PROTECTION SYSTEMS SHALL REMAIN FUNCTIONAL.
- C. PROVIDE FIRE EXTINGUISHERS IN CONSTRUCTION AREA. REVIEW WITH COR AND VA SAFETY GROUP.
- D. CONTRACTOR SHALL PROVIDE FIRE WATCH FOR ALL HOT WORK ACTIVITIES AND WHEN FIRE ALARM OR SPRINKLER SYSTEMS ARE IMACTED MORE THAN 4 HOURS IN A 24 HOUR PERIOD.
- E. MAINTAIN NEGATIVE AIR PRESSURE IN CONSTRUCTION AREA AT ALL TIMES (24/7), WHETHER OCCUPIED OR NOT, THROUGHOUT DURATION OF PROJECT USING HEPA EQUIPPED AIR FILTRATION UNITS (0.01" WC WITH ALARM).
- F. MAINTAIN EXIT LIGHTS IN CONSTRUCTION AREA.
- G. CONSTRUCTION AREA SHALL REMAIN ISOLATED FROM THE OTHER AREAS OF THE MEDICAL CENTER; NO RETURN AIR OR EXHAUST SHALL PASS INTO THE AREAS OUTSIDE THE CONSTRUCTION AREA.
- H. REDIRECT ALL MEDICAL CENTER PERSONNEL, PATIENTS, AND VISITORS SO THEY DO NOT EXIT THROUGH THE CONSTRUCTION AREA. PROVIDE SIGNS ON DOORS INTO THE CONSTRUCTION AREA THAT READ: "CONSTRUCTION AREA DO NOT ENTER".
- I. GENERAL CONTRACTOR SHALL MAINTAIN DAILY LOGS AND ACQUIRE A HOT WORK PERMIT WHEN NEEDED FROM ENGINEERING.
- J. TACKY MATS SHALL BE PLACED AT ALL DOORS INTO THE CONSTRUCTION AREA AND SHALL BE REPLACED HOURLY OR SOONER IF NEEDED.
- K. MAINTAIN A CLEAN AND ORDERLY CONSTRUCTION AREA TO PREVENT CONTAMINATION OF EXISTING DUCT SYSTEMS.
- L. OBTAIN INFECTION CONTROL PERMIT PRIOR TO BEGINNING WORK.
- M. ISOLATE HVAC SYSTEM WITHIN CONSTRUCTION AREA TO PREVENT CONTAMINATION OF EXISTING DUCT SYSTEM.
- N. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, ETC. TO SEAL AREA FROM NON-WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXITING OR BEFORE CONSTRUCTION BEGINS).
- O. AFTER COMPLETION OF WORK AND BETWEEN PHASES: VACUUM CONSTRUCTION AREA WITH HEPA FILTERED VACUUMS. WET MOP WITH DISINFECTANT, REMOVE CONSTRUCTION BARRIERS (UPON APPROVAL), PATCH OR REPAIR ANY DAMAGE FROM CONSTRUCTION BARRIER REMOVAL, AND REMOVE ISOLATION OF HVAC SYSTEM. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED.
- P. SEAL ALL HOLES, PUNCTURES, AND PENETRATIONS FROM PIPES AND/OR CONDUITS APPROPRIATELY AND IMMEDIATELY TO MAINTAIN DUCT PROTECTION AND NEGATIVE AIR PRESSURE.
- Q. CONSTRUCT ANTEROOM ENTRANCES TO CONSTRUCTION AREAS AND REQUIRE ALL CONSTRUCTION PERSONNEL TO PASS THROUGH THIS ROOM TO BE VACUUMED WITH A HEPA VACUUM CLEANER PRIOR TO LEAVING THE SITE OR THEY CAN WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE WORK SITE.
 - Q.A. CONSTRUCTION WORKERS WILL NOT BE ENTERING ANY OCCUPIED VA SPACES.
 - Q.B. DIRECT ACCESS TO OUT THROUGH ANTEROOM/ENTRANCES.
- R. ALL PERSONNEL ENTERING WORK SITE (ONLY IF ENTERING VA SPACE) ARE REQUIRED TO WEAR SHOE COVERING. CONSTRUCTION BARRIERS SHALL NOT BE REMOVED UNTIL PROJECT IS COMPLETED AND INSPECTION BY VA SAFETY PERSONNEL, INFECTION CONTROL GROUP, AND COR.
- T. REMOVE BARRIERS MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID.
- U. ALL TEMPORARY CONSTRUCTION BARRIERS SHALL BE 1-HR RATED, AND DOORS SHALL REMAIN TAPED SHUT.



INFECTION CONTROL RISK ASSESSMENT

STEP ONE: TYPE D
USING THE FOLLOWING TABLE, IDENTIFY THE TYPE OF CONSTRUCTION PROJECT ACTIVITY (TYPE A-D)

TYPE A	INSPECTION AND NON-INVASIVE ACTIVITIES. INCLUDES, BUT IS NOT LIMITED TO: - REMOVAL OF CEILING TILES FOR VISUAL INSPECTION ONLY, E.G., LIMITED TO 1 TILE PER 50 SQUARE FEET. - PAINTING (BUT NOT SANDING). - WALL COVERING, ELECTRICAL TRIM WORK, MINOR PLUMBING, AND ACTIVITIES WHICH DO NOT GENERATE DUST OR REQUIRE CUTTING OF WALLS OR ACCESS TO CEILING OTHER THAN FOR VISUAL INSPECTION.
TYPE B	SMALL SCALE, SHORT DURATION ACTIVITIES WHICH CREATE MINIMAL DUST INCLUDES, BUT IS NOT LIMITED TO: - INSTALLATION OF TELEPHONE AND COMPUTER CABLING. - ACCESS TO CHASE SPACE. - CUTTING OF WALLS OR CEILING WHERE DUST MIGRATION CAN BE CONTROLLED.
TYPE C	WORK THAT GENERATES A MODERATE TO HIGH LEVEL OF DUST OR REQUIRES DEMOLITION OR REMOVAL OF ANY FIXED BUILDING COMPONENTS OR ASSEMBLIES. INCLUDES, BUT IS NOT LIMITED TO: - SANDING OF WALLS FOR PAINTING OR WALL COVERING. - REMOVAL OF FLOOR COVERINGS, CEILING TILES AND CASEWORK. - NEW WALL CONSTRUCTION. - MINOR DUCT WORK OR ELECTRICAL WORK ABOVE CEILING. - MAJOR CABLING ACTIVITIES. - ANY ACTIVITY WHICH CANNOT BE COMPLETED WITHIN A SINGLE WORK SHIFT.
TYPE D	MAJOR DEMOLITION AND CONSTRUCTION PROJECTS INCLUDES, BUT IS NOT LIMITED TO: - ACTIVITIES WHICH REQUIRE CONSECUTIVE WORK SHIFTS - REQUIRES HEAVY DEMOLITION ON REMOVAL OF A COMPLETE CABLING SYSTEM - NEW CONSTRUCTION

STEP TWO: HIGHEST RISK
USING THE FOLLOWING TABLE, IDENTIFY THE PATIENT RISK GROUPS THAT WILL BE AFFECTED. IF MORE THAN ONE RISK GROUP WILL BE AFFECTED, SELECT THE HIGHER RISK GROUP

LOW RISK	MEDIUM RISK	HIGH RISK	HIGHEST RISK
OFFICE AREA	CARDIOLOGY ECHO/CARDIOGRAPHY ENDOSCOPY NUCLEAR MEDICINE PHYSICAL THERAPY RADIOLOGY / MRI RESPIRATORY THERAPY	EMERGENCY ROOM LABOR AND DELIVERY LABORATORIES (SPECIMEN) MEDICAL UNITS NEWBORN NURSERY OUTPATIENT SURGERY PHARMACY POST ANESTHESIA CARE UNIT SURGICAL UNITS	ANY AREA CARING FOR IMMUNOCOMPROMISED PATIENTS BURN UNITS CARDIAC CATH LAB CENTRAL STERILE SUPPLY INTENSIVE CARE UNIT NEGATIVE PRESSURE ISOLATION ROOMS ONCOLOGY OPERATING ROOMS INCLUDING G SECTION ROOMS

STEP THREE:
MATCH THE PATIENT RISK GROUP (LOW, MEDIUM, HIGH, HIGHEST) WITH THE PLANNED ... CONSTRUCTION PROJECT TYPE (A, B, C, D) ON THE FOLLOWING MATRIX, TO FIND THE ... CLASS OF PRECAUTIONS (I, II, III OR IV) OR LEVEL OF INFECTION CONTROL ACTIVITIES REQUIRED. CLASS I - IV OR COLOR-CODED PRECAUTIONS ARE DELINEATED ON THE FOLLOWING PAGE. IC MATRIX - CLASS OF PRECAUTIONS: CONSTRUCTION PROJECT BY PATIENT RISK

CONSTRUCTION PROJECT TYPE

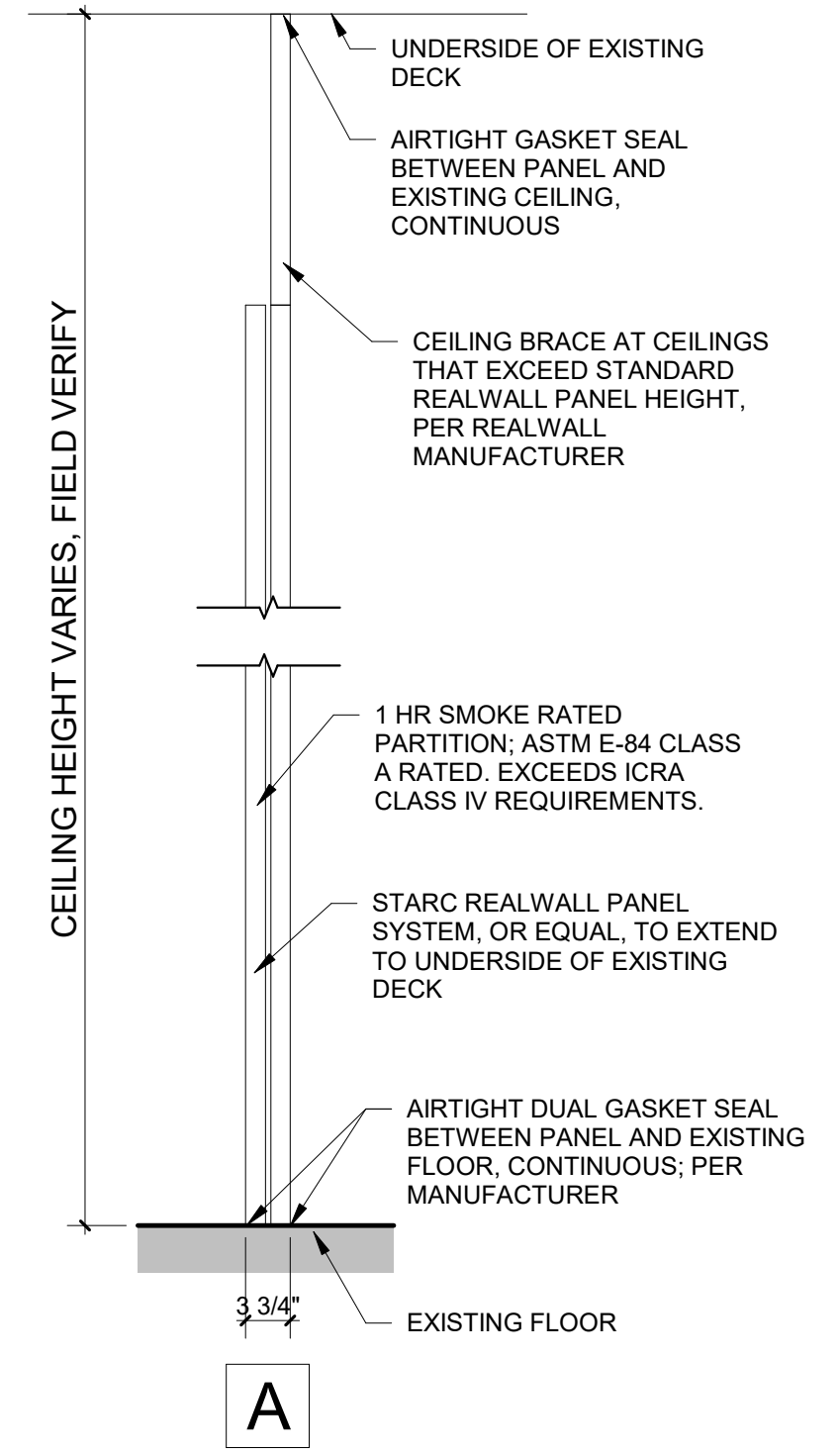
PATIENT RISK GROUP	TYPE A	TYPE B	TYPE C	TYPE D
LOW RISK GROUP	I	II	II	III / IV
MEDIUM RISK GROUP	I	II	III	IV
HIGH RISK GROUP	I	II	III / IV	IV
HIGHEST RISK GROUP	II	III / IV	III / IV	IV

NOTE: INFECTION CONTROL APPROVAL WILL BE REQUIRED WHEN THE CONSTRUCTION ACTIVITY AND RISK LEVEL INDICATE THAT CLASS III OR CLASS IV CONTROL PROCEDURES ARE NECESSARY.

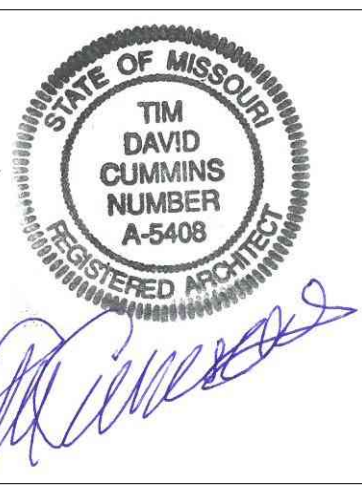
STEP THREE: CLASS IV

DESCRIPTION OF REQUIRED INFECTION CONTROL PRECAUTIONS BY CLASS	DURING CONSTRUCTION PROJECT	UPON COMPLETION OF PROJECT
CLASS I	1. EXECUTE WORK BY METHODS TO MINIMIZE RAISING DUST FROM CONSTRUCTION OPERATIONS. 2. IMMEDIATELY REPLACE A CEILING TILE DISPLACED FOR VISUAL INSPECTION.	1. CLEAN WORK AREA UPON COMPLETION OF TASK.
CLASS II	1. PROVIDE ACTIVE MEANS TO PREVENT AIRBORNE DUST FROM DISPERSING INTO ATMOSPHERE. 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING. 3. SEAL UNUSED DOORS WITH DUCT TAPE. 4. BLOCK OFF AND SEAL AIR VENTS. 5. PLACE DUST MAT AT ENTRANCE AND EXIT OF WORK AREA. 6. REMOVE OR ISOLATE HVAC SYSTEM IN AREAS WHERE WORK IS BEING PERFORMED.	1. WIPE WORK SURFACES WITH CLEANER / DISINFECTANT. 2. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. 3. WET MOP AND / OR VACUUM WITH HEPA VACUUM BEFORE LEAVING WORK AREA. 4. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED.
CLASS III	1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM. 2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS. 3. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. 5. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID.	1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETED PROJECT IS INSPECTED BY THE OWNER'S SAFETY DEPARTMENT AND INFECTION PREVENTION AND CONTROL DEPARTMENT AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPT. 2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. 3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS. 4. WET MOP AREA WITH CLEANER / DISINFECTANT. 5. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED.
CLASS IV	1. ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM. 2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS. 3. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES. 5. CONSTRUCT ANTEROOM AND REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN BE VACUUMED USING A HEPA VACUUM CLEANER BEFORE LEAVING WORK SITE OR THEY CAN WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE. 6. ALL PERSONNEL ENTERING THE WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK AREA.	1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETED PROJECT IS INSPECTED BY THE OWNER'S SAFETY DEPARTMENT AND INFECTION PREVENTION AND CONTROL DEPARTMENT AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPT. 2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. 3. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN COVERED CONTAINERS. 4. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID. 5. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS. 6. WET MOP AREA WITH CLEANER / DISINFECTANT. 7. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED.

1 ICRA SCHEDULE
1/4" = 1'-0"



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Drawing Title
INFECTION CONTROL RISK ASSESSMENT

FULLY SPRINKLED

Project Title
EHRM TRAINING AND ADMIN SPACE SUPPORT

Project Number
437-21-225

Building Number
9

Location
FARGO, ND

Date
01/11/2022

Checked
JL

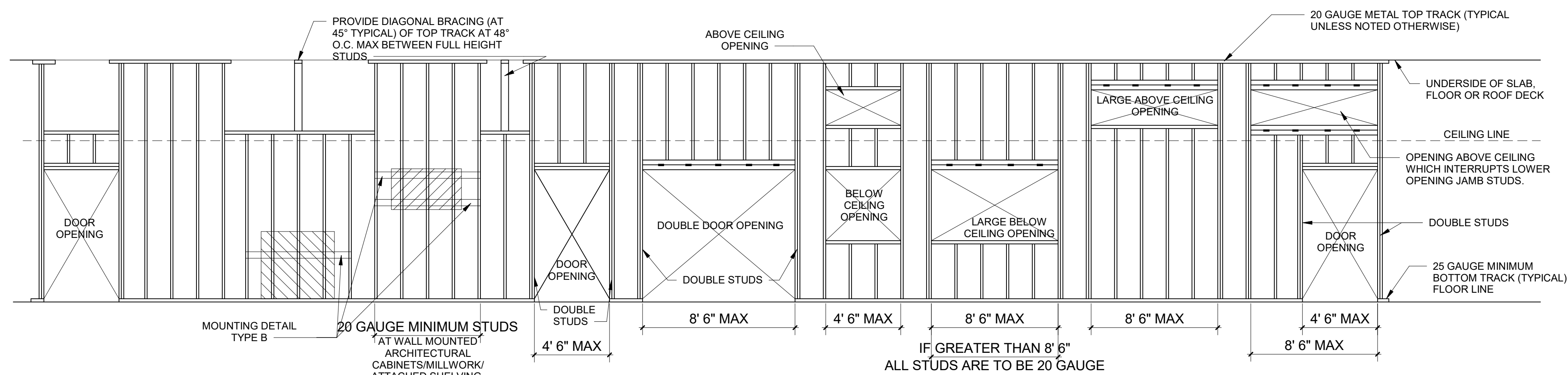
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Drawing Number
G0.02

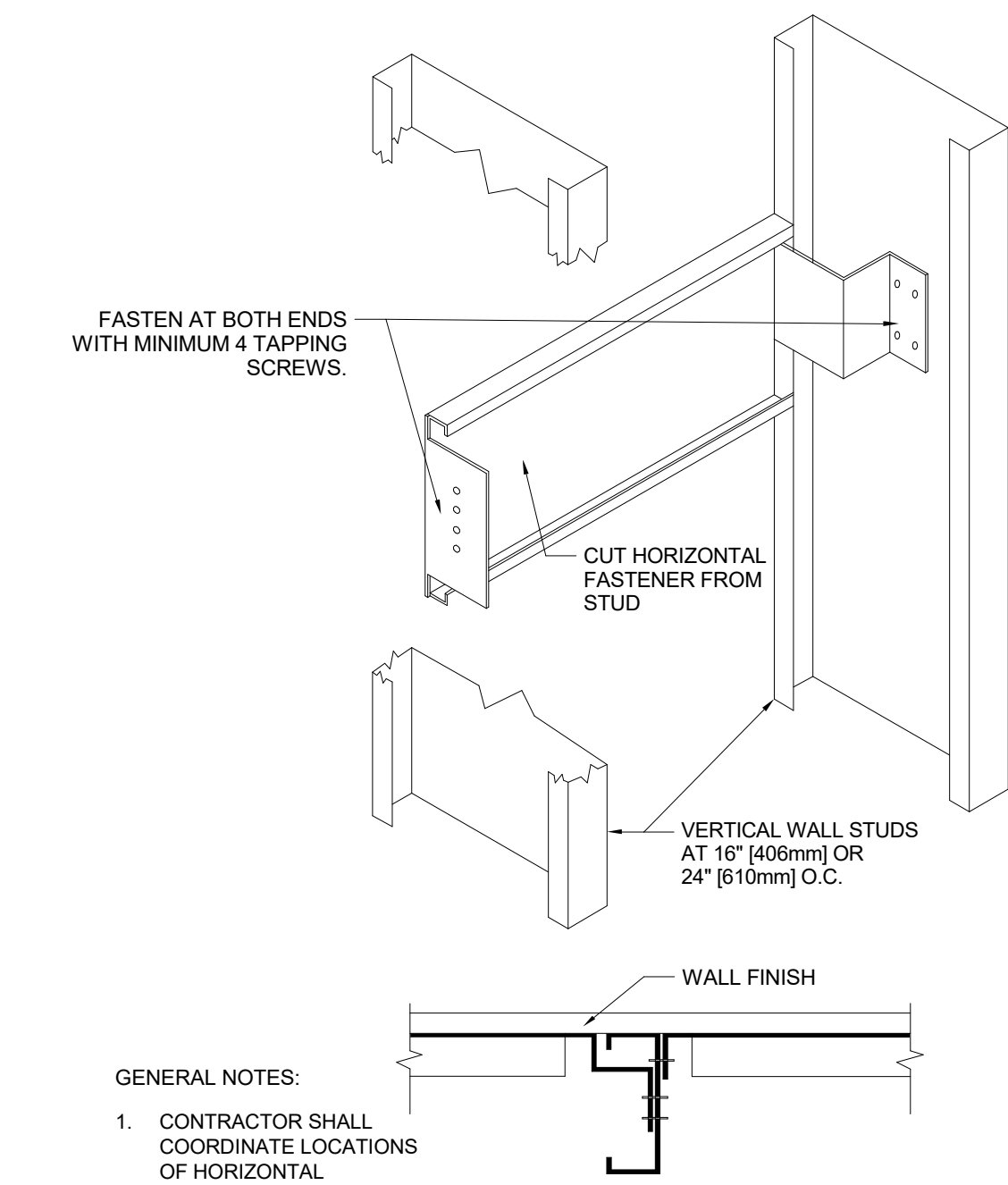
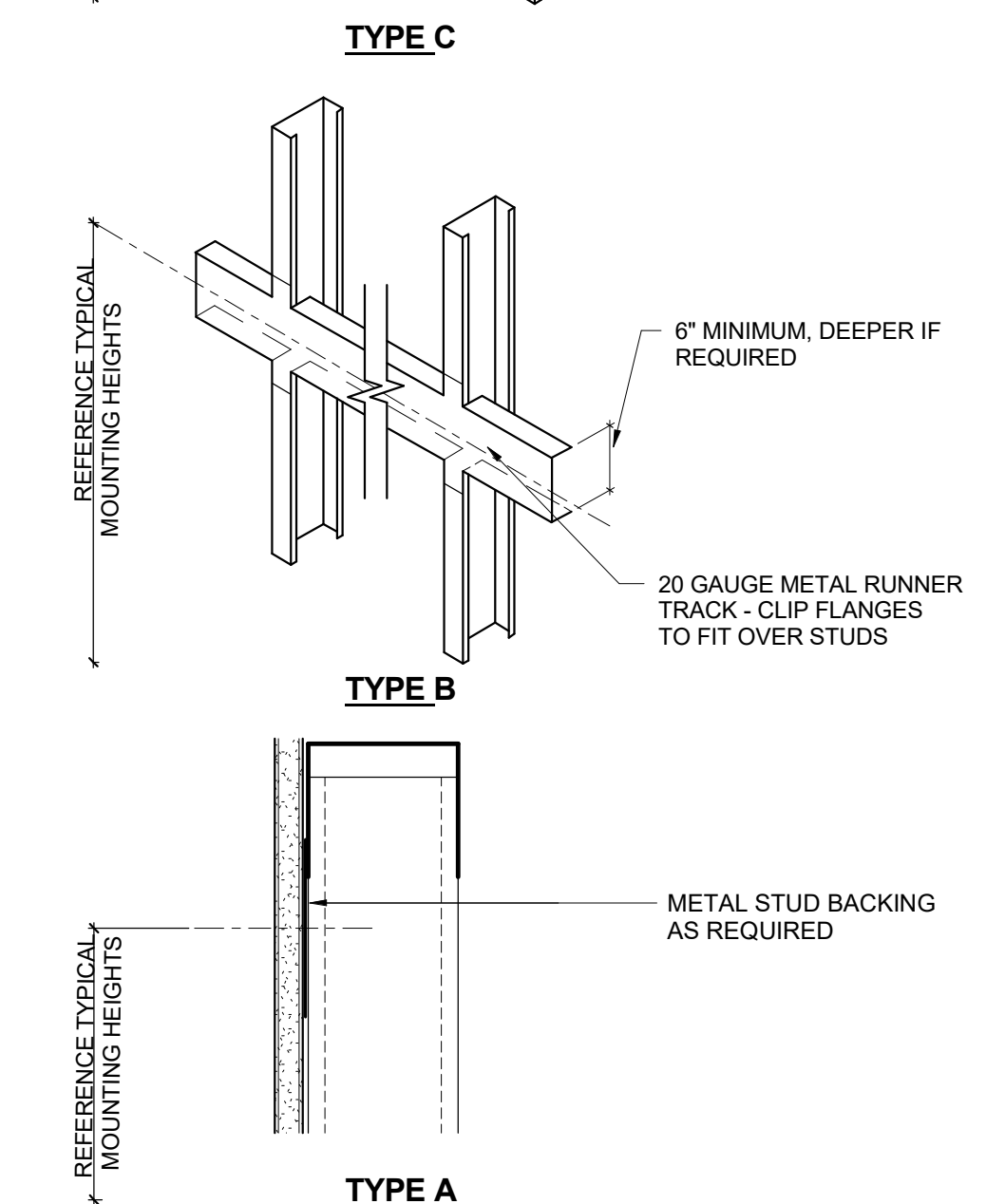
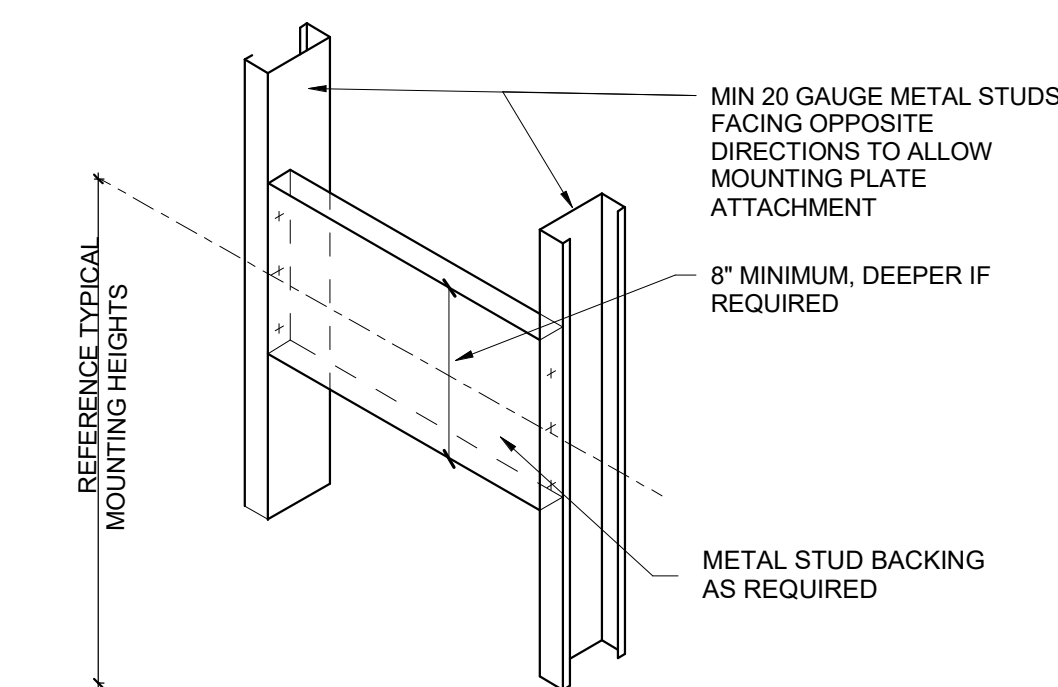
Dwg. 3 of 41

Office of Construction and Facilities Management
Department of Veterans Affairs

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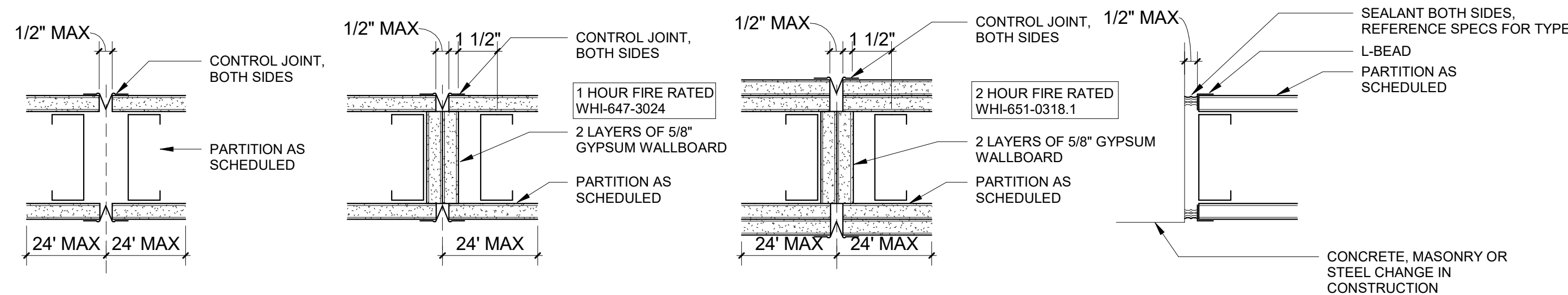
- NOTES:**
1. ALL STUDS ARE SPACED 16" OC MAXIMUM.
 2. ALL STUDS SHALL BE "C" STUDS WITH 1/4" RETURN FLANGE MINIMUM.
 3. CABINETS, COUNTERS, SHELVEYS OR DOUBLE STUDS AT SIDES OF OPENING SHALL NOT BE CUT FOR DUCT WORK OR ANY OTHER MECHANICAL SYSTEMS. PROVIDE PARTITION BRACING AT ALL ASSEMBLIES OVER 16'-0" IN HEIGHT, UNLESS NOTED OTHERWISE.
 4. DOUBLE STUDS AT SIDES OF OPENING SHALL NOT BE CUT FOR DUCT WORK OR ANY OTHER MECHANICAL SYSTEMS. PROVIDE PARTITION BRACING AT ALL ASSEMBLIES OVER 16'-0" IN HEIGHT, UNLESS NOTED OTHERWISE.
 5. PROVIDE PARTITION BRACING AT ALL ASSEMBLIES OVER 16'-0" IN HEIGHT, UNLESS NOTED OTHERWISE.



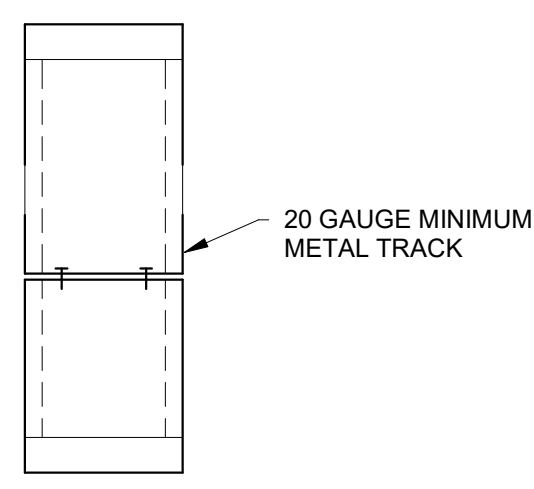
1 TYPICAL INTERIOR PARTITION FRAMING
1/4" = 1'-0"

ADDITIONAL NOTES:

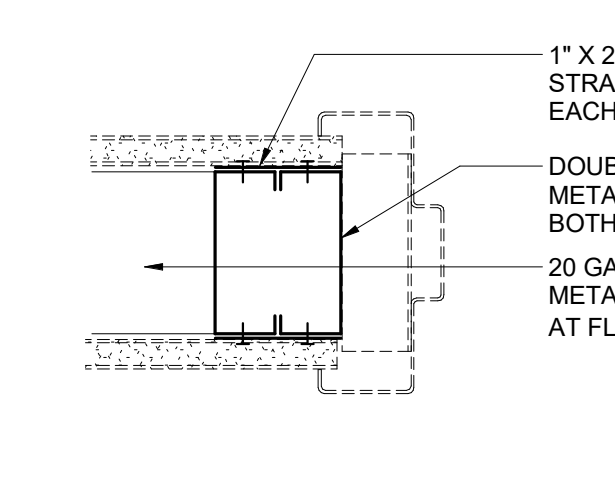
1. ALL PARTITIONS SHALL BE SEALED TO STRUCTURE TO SUCCESSFULLY "LIMIT THE PASSAGE OF SMOKE". CONDITIONS INDICATED TO SHOW DESIGN INTENT, AND NOT INTENDED TO BE PROPRIETARY. CONTRACTOR MAY EMPLOY SIMILAR UL-APPROVED CONTROL JOINTS DESIGNS THAT ARE APPROPRIATE FOR THE SPECIFIC CONDITION. JOINTS TO BE SIZED TO ACCOMMODATE MOVEMENT CAPABILITIES OF FIRESTOP ASSEMBLY. SEE WALL TYPES AND PLAN FOR LOCATIONS OF RATED WALLS.



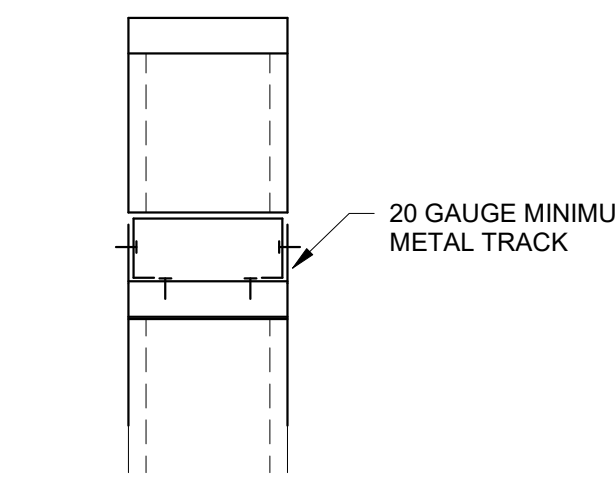
2 GYPSUM WALLBOARD CONTROL JOINT DETAILS
3" = 1'-0"



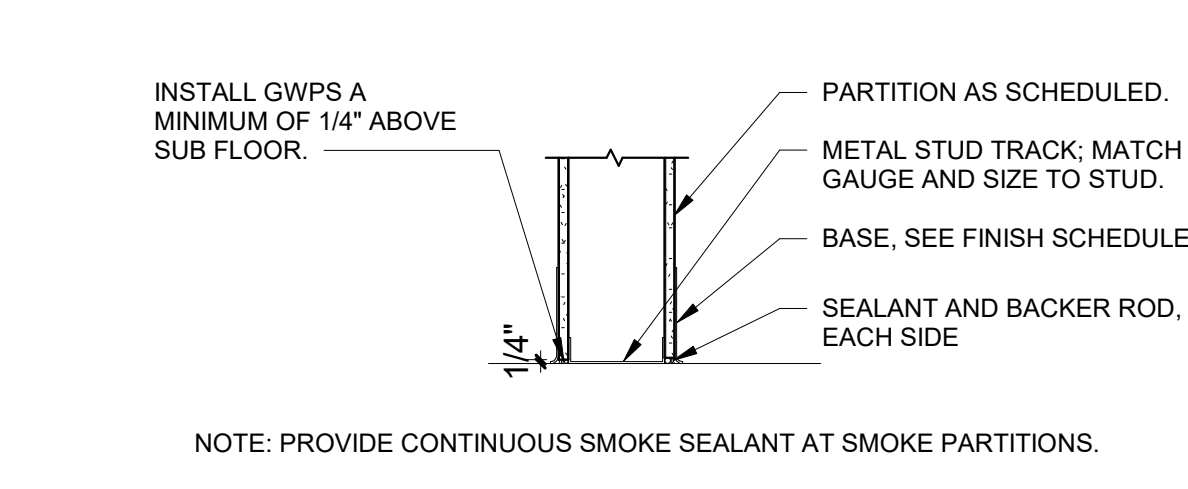
3 OPEN HEADER
1" = 1'-0"



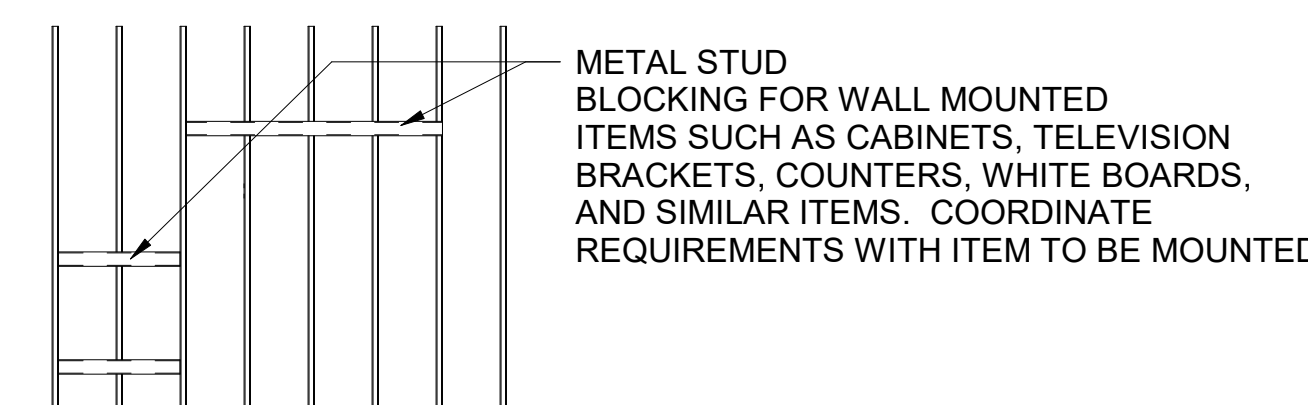
4 DOOR OPENING JAMB STUDS
1" = 1'-0"



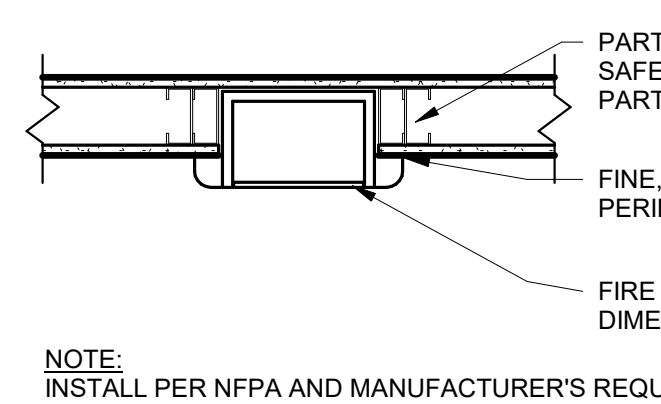
5 DOOR OPENING HEADER
1" = 1'-0"



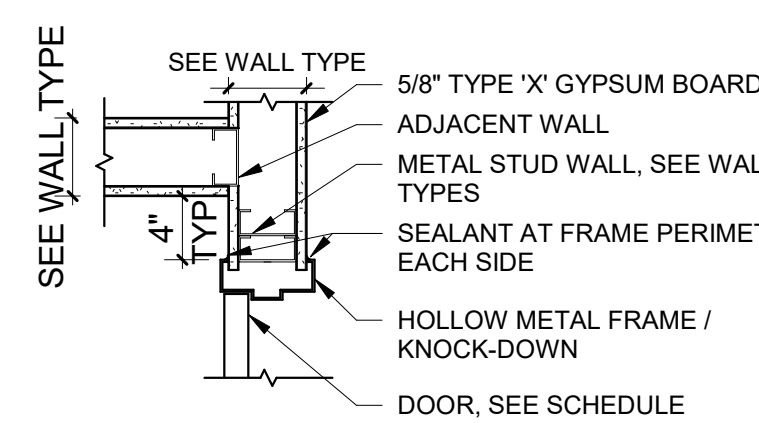
6 SMOKE PARTITION - WALL DETAILS
1" = 1'-0"



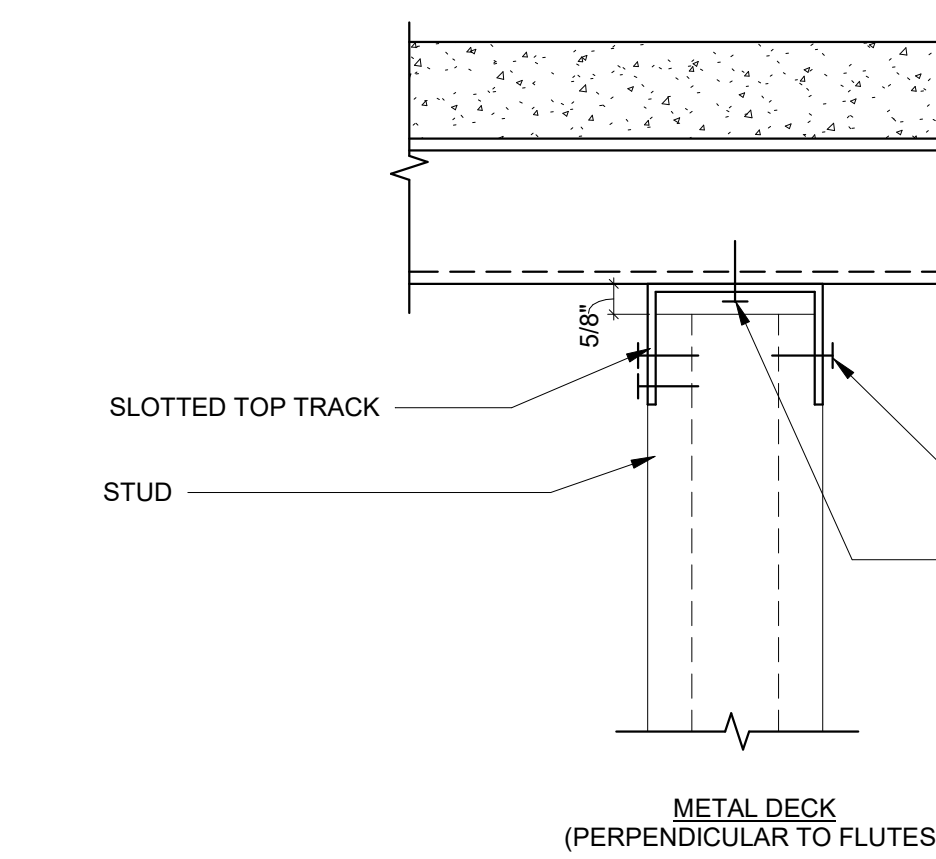
8 FRAMING ELEVATION
1/4" = 1'-0"



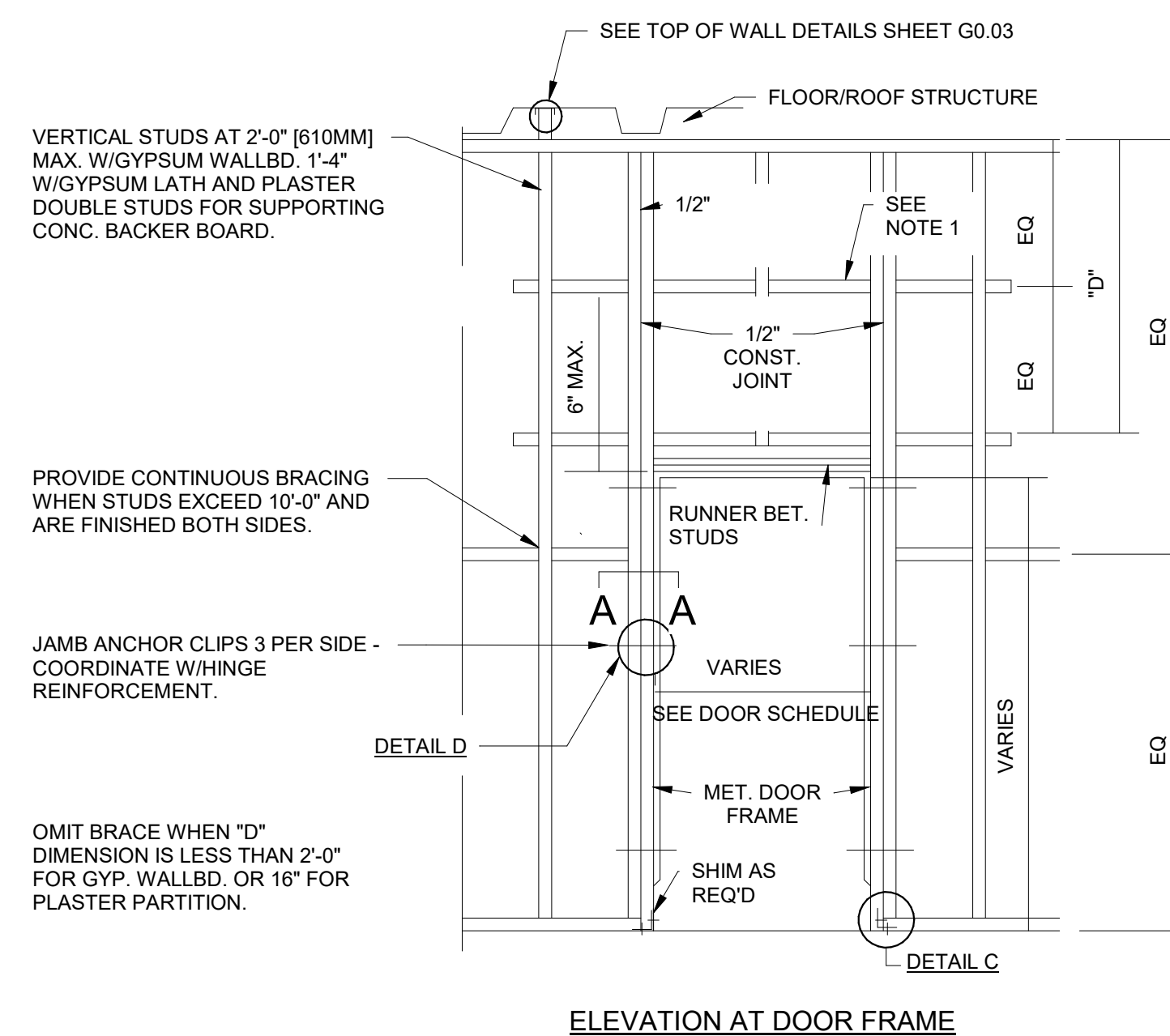
9 FIRE EXTINGUISHER CABINET SP METAL STUD
1" = 1'-0"



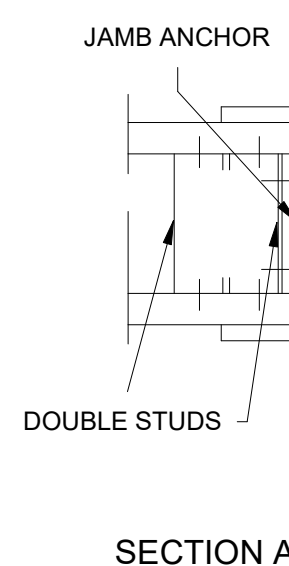
10 DOOR DETAIL TYPE
1" = 1'-0"



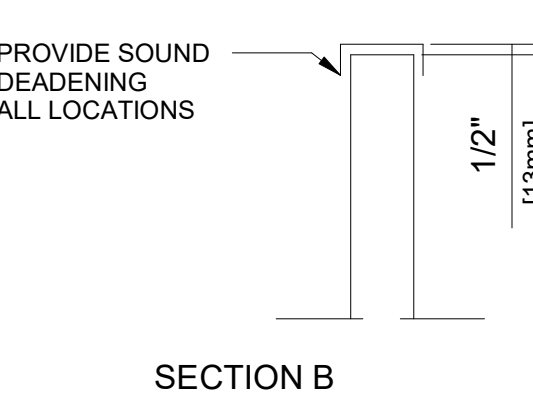
14 HEAD OF WALL DETAILS
1" = 1'-0"



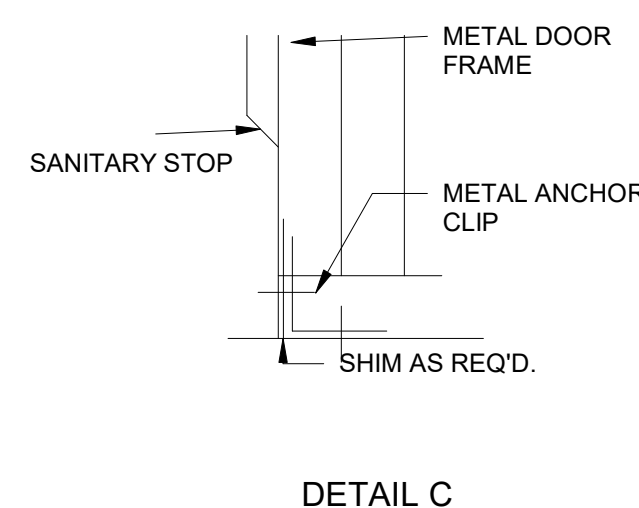
12 PARTITION FRAMING DETAILS
3/8" = 1'-0"



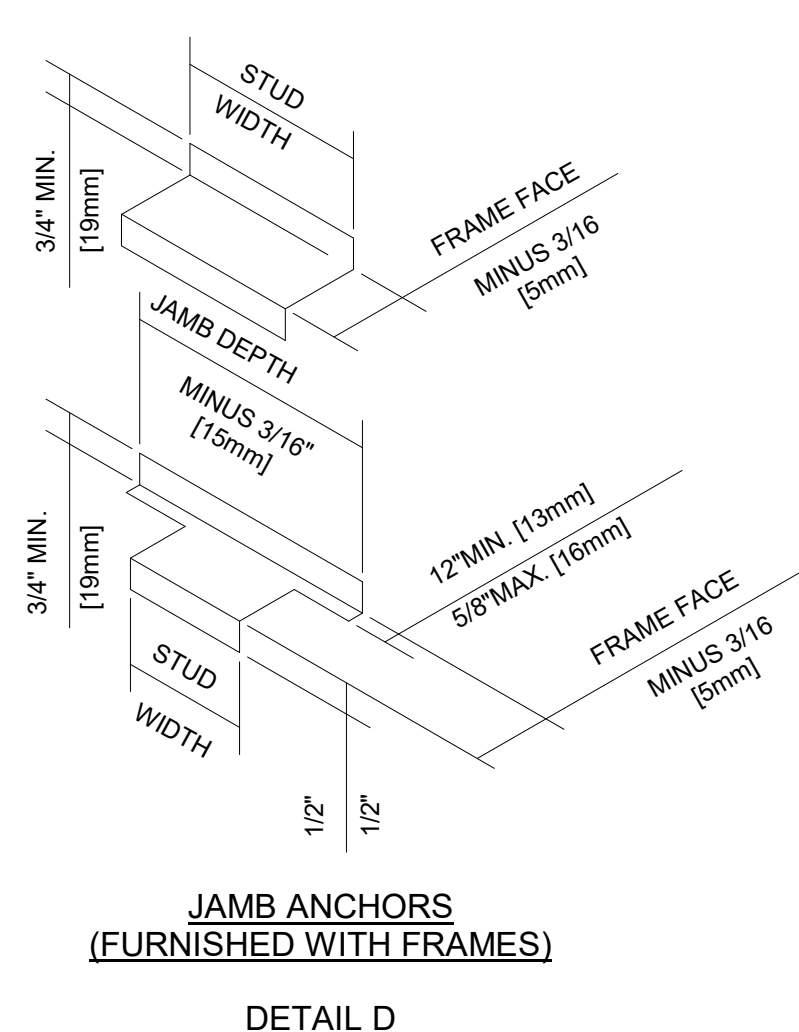
SECTION A



SECTION B

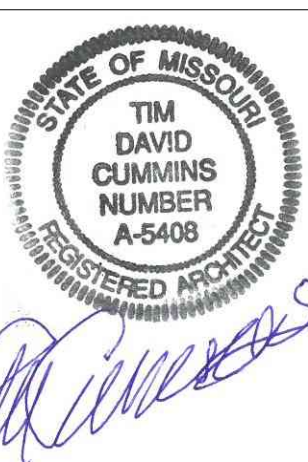


DETAIL C



DETAIL D

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Drawing Title
PARTITION FRAMING DETAILS

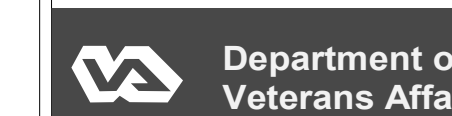
FULLY SPRINKLED

Project Title
EHRM TRAINING AND ADMIN SPACE SUPPORT

Location
FARGO, ND
Date
01/11/2022

Project Number
437-21-225
Building Number
9
Drawing Number
G0.03
Dwg. 4 of 41

Office of
Construction
and Facilities
Management



100% CONSTRUCTION DRAWINGS

LIFE SAFETY NOTES:

- FOR EXIT LIGHTS AND EMERGENCY LIGHTING, SEE ELECTRICAL LIGHTING DRAWINGS (E SERIES).
- ALL TEMPORARY CONSTRUCTION BARRIERS SHALL BE 1-HR RATED, AND DOORS SHALL REMAIN TAPED SHUT

LIFE SAFETY SYMBOLS:

- EXIT DOOR TAG
- 0 PROVIDED CLEAR DOOR/STAIR WIDTH (INCHES)
 - 0 PROVIDED OCCUPANT LOAD CAPACITY (NO. OF PEOPLE)
 - 0 MAX OCCUPANT LOAD CAPACITY (NO. OF PEOPLE)
- FEC FIRE EXTINGUISHER IN CABINET, RECESSED
- LINE TYPES FOR MEANS OF EGRESS:
- TRAVEL DISTANCE TD #
 - COMMON PATH CP #
 - EXIT DISCHARGE

MEANS OF EGRESS ARRANGEMENT DISTANCE SCHEDULE - BUILDING SUMMARY

EGRESS PATH ID	PROVIDED TRAVEL DISTANCE	MAXIMUM DISTANCE PERMITTED
TD-1	110 FT	300'-0"
TD-2	85 FT	300'-0"
TD-3	90 FT	300'-0"
TD-4	75 FT	300'-0"

MEANS OF EGRESS WIDTH CAPACITY

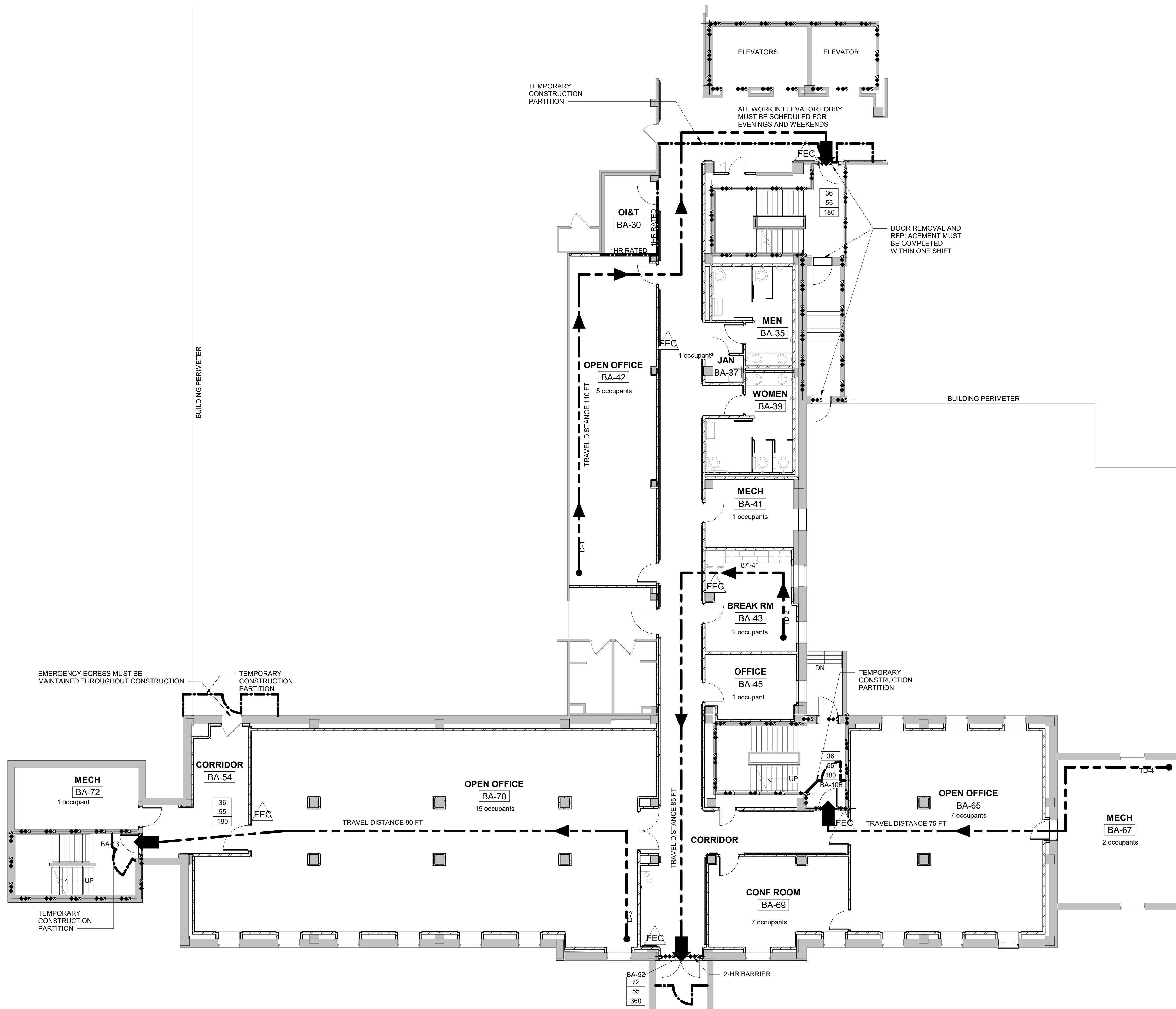
DOOR NUMBER	EGRESS CAPACITY FACTOR	OCCUPANT LOAD MAXIMUM CAPACITY
BA-9A	0.2	180
BA-52	0.2	180
BA-13	0.2	360
BA-10B	0.2	180

LIFE SAFETY ZONE SIZE: 22,306 SF

BUILDING CODE SUMMARY
2021 INTERNATIONAL BUILDING CODE
2021 N.F.P.A. 101 LIFE SAFETY CODE

PROJECT NAME: EHRM TRAINING AND ADMIN SPACE SUPPORT
A/E PROJECT NO.: 437-21-225
PREPARED BY: TIM CUMMINS
DATE: 01/07/2022

- APPLICABLE CODES/STANDARDS:
 - A. VA DIRECTIVES, DESIGN MANUALS, MASTER SPECIFICATIONS, VA NATIONAL CAD STANDARD APPLICATION GUIDE, AND OTHER GUIDANCE ON THE TECHNICAL INFORMATION LIBRARY (TIL) (HTTP://WWW.CFM.VA.GOV/TIL)
 - a. ARCHITECTURAL (AUG 2, 2014); ASBESTOS ABATEMENT (JULY 2011); ELECTRICAL (DEC 2015); FIRE PROTECTION (DEC 2016) HVAC (MAR 2011); INTERIOR DESIGN (MAY 2008); LIGHTING DESIGN (DEC 2015); PHYSICAL SECURITY (JAN 2015); PLUMBING (NOV 2014); SIGNAGE (OCT 2013)
 - b. PG-16-14 ROOM FINISH, DOOR HARDWARE SCHEDULE
 - c. PG-18-12 PHARMACY SERVICES DESIGN GUIDE
 - d. PG-18-9 SPACE PLANNING CRITERIA - 266; PHARMACY SERVICES
 - B. INTERNATIONAL BUILDING CODE IBC (2018)
 - C. NFPA 1 - FIRE CODE (2018)
 - D. NFPA 101 - LIFE SAFETY CODE (LSC) - (2018)
 - E. NFPA 220 - STANDARDS ON TYPES OF BUILDING CONSTRUCTION - (2018)
 - F. NFPA 10 - STANDARD FOR PORTABLE FIRE EXTINGUISHERS - (2018)
 - G. NFPA 241 - STANDARD FOR SAFEGUARDING CONSTRUCTION (2019)
 - H. REFER TO FIRE PROTECTION/LIFE SAFETY/ACCESSIBILITY CODE REVIEW FOR ADDITIONAL CODES & STANDARDS.
 - I. NFPA 13 - STANDARDS FOR THE INSTALLATION OF SPRINKLER SYSTEMS (2019)
- OCCUPANCY GROUP (SECTION 304) - GROUP B OCCUPANCY (NFPA 101 CHAPTER 38 - NEW BUSINESS OCCUPANCY).
- OCCUPANCY CLASSIFICATION:
 - A. NFPA 101 (CHAPTER 38) - NEW BUSINESS OCCUPANCY - BASEMENT
 - B. NFPA 101 (CHAPTER 39) - EXISTING BUSINESS OCCUPANCY - BASEMENT
- TYPE OF CONSTRUCTION:
 - A. NFPA 220 (TABLE 4.1.1) - TYPE I (332)
- FIRE RESISTANCE OF EXTERIOR WALLS (SECTION 602.1, TABLE 602) - NO RATING REQUIRED
- ALLOWABLE BUILDING AREA: UNLIMITED
- ALLOWABLE STORES/HEIGHT: UNLIMITED IF BUILDING IS FULLY SPRINKLED
 - A. ACTUAL STORES/HEIGHT: 4 STORIES
- OCCUPANCY SEPARATIONS:
 - A. IBC (SECTIONS 508 & 508.4) - FIRE BARRIERS - N.R. NON-SEPARATED USES AS PER SECTION 508.3 INCIDENTAL USE AREAS AS PER TABLE 509. WHEN INCIDENTAL USE AREAS ARE SPRINKLED, THE AREA IS TO BE SEPARATED BY WALLS TO RESIST THE PASSAGE OF SMOKE (508.4.2)
 - B. IBC SECTION (SECTION 508.2.5) - FIRE SEPARATION NOT REQUIRED WHERE MECHANICAL ROOMS ARE REQUIRED WITH AUTOMATIC SPRINKLER SYSTEM.
- TYPE OF CONSTRUCTION - FIRE-RESISTIVE REQUIREMENTS (NFPA 220 TABLE 4.1.1)
 - A. EXTERIOR WALLS - BEARING = NA
 - B. INTERIOR WALLS - BEARING = NA
 - C. EXTERIOR WALLS - NON-BEARING = 0 HOURS
 - D. INTERIOR WALLS - NON-BEARING = 0 HOURS
 - E. STRUCTURAL FRAME = 3 HOURS
 - F. FLOORS/FLOOR-CEILINGS = 2 HOURS
 - G. ROOFS/ROOF-CEILINGS = 2 HOURS
 - H. ROOF CONSTRUCTION-INCLUDING SECONDARY FRAMING: = 1 1/2 HOURS
 - I. VERTICAL OPENING (SHAFTS) = 2 HOUR
- FIRE-RESISTANT MATERIALS AND CONSTRUCTION (CHAPTER 7) (L.S.C. 8.2.3)
 - A. FIRE RESISTIVE ASSEMBLIES AS PER CHAPTER 7 - SMOKE PARTITIONS, SECTION 710 (L.S.C. SECTION 8.4)
- FIRE PROTECTION REQUIREMENTS:
 - A. BUILDING IS CURRENTLY FULLY SPRINKLERED WITH AN AUTOMATIC STANDPIPE SYSTEM AND WILL REMAIN SO UPON COMPLETION OF THE PROJECT
 - B. CABINETS WITH EXTINGUISHERS ARE SHOWN ON DRAWINGS.
 - C. NFPA 101 (8.5.5.2, 8.7.12.1)
 - D. NFPA 10 (TABLE 6.2.1.1) - MECHANICAL ROOMS AND LARGE STORAGE ROOMS SHALL BE PROTECTED UTILIZING ORDINARY EXTINGUISHERS PLACEMENT FOR CLASS A HAZARD. A MAXIMUM TRAVEL DISTANCE TO FIRE EXTINGUISHER OF 75 FEET.
- MEANS OF EGRESS/EXITING:
 - A. EXISTING MEANS OF EGRESS TO THREE EXISTING STAIRWAYS WILL BE MAINTAINED AS IS.
 - TRAVEL DISTANCE TO EXITS:
 - a. BUSINESS OCCUPANCY - NFPA 101 (38.2.6.2.1) - MAX ALLOWED 300FT. PROVIDED: 110FT
 - MEANS OF EGRESS WIDTH CAPACITY:
 - a. NFPA 101 (TABLE 7.3.3.1)
 - b. 0.2 INCHES/OCCUPANT FOR DOORS IN BUILDINGS THAT ARE FULLY SPRINKLERED.
 - c. 0.3 INCHES/OCCUPANT FOR STAIRWAYS IN BUILDINGS THAT ARE FULLY SPRINKLERED.
 - MEANS OF EGRESS ILLUMINATION:
 - a. NFPA 101 (7.8) - REQUIRE BY CHAPTER 18 & 38, PROVIDE IN ACCORDANCE WITH 7.8
 - EMERGENCY LIGHTING
 - a. NFPA 101 (7.9) - REQUIRED BY CHAPTER 18 & 38, PROVIDE IN ACCORDANCE WITH 7.9.
- OCCUPANT LOAD:
 - A. NFPA 101 (TABLE 7.3.1.2) - BUSINESS USE: 150 SQ. FT. /PERSON GROSS FLOOR AREA STORAGE USE: 300 SQ. FT. / PERSON GROSS FLOOR AREA
 - B. OCCUPANT LOAD CALCULATIONS SEE CODE REVIEW PLAN.
- EXIT EGRESS WIDTH SECTION:
 - A. MINIMUM WIDTH:
 - a. NFPA 101 (7.3.4.1 (2)) - NOT LESS THAN 36 FOR ANY MEANS OF EGRESS.
 - b. NFPA 101 (7.2.1.2.3.2) - NOT LESS THAN 32" DOOR CLEAR WIDTH FOR DOORS IN PATH OF EGRESS.
 - B. NFPA 101 (TABLE 7.3.3.1) MEANS OF EGRESS WIDTH CAPACITY
 - EXIT BD-17A = MAX OCCUPANT LOAD SHALL BE 400 PERSONS: 400 X .2 = 80'
 - EXIT CO-01 = MAX OCCUPANT LOAD SHALL BE 400 PERSONS: 400 X .2 = 80'
 - EXIT BD-109A = MAX OCCUPANT LOAD SHALL BE 170 PERSONS: 170 X .2 = 34'
 - STAIR ID-200 = MAX OCCUPANT LOAD SHALL BE 153 PERSONS: 153 X .3 = 46'



1 LIFE SAFETY PLAN
1/8" = 1'-0"

CODE PLAN LEGEND

- FIRE WALL 2HR RATED
- FIRE WALL 1HR RATED
- EGRESS ROUTE

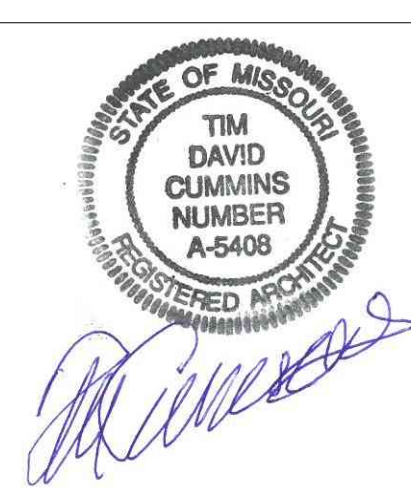
100% CONSTRUCTION DRAWINGS

Revisions:

Revisions:	Date

CONSULTANTS:

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Drawing Title: LIFE SAFETY PLAN

FULLY SPRINKLED

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT

Project Number: 437-21-225

Building Number: 9

Location: FARGO, ND

Date: 01/11/2022

Checked: JL

Drawn: TC

Drawing Number: G1.00

Dwg. 5 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

GENERAL NOTES:

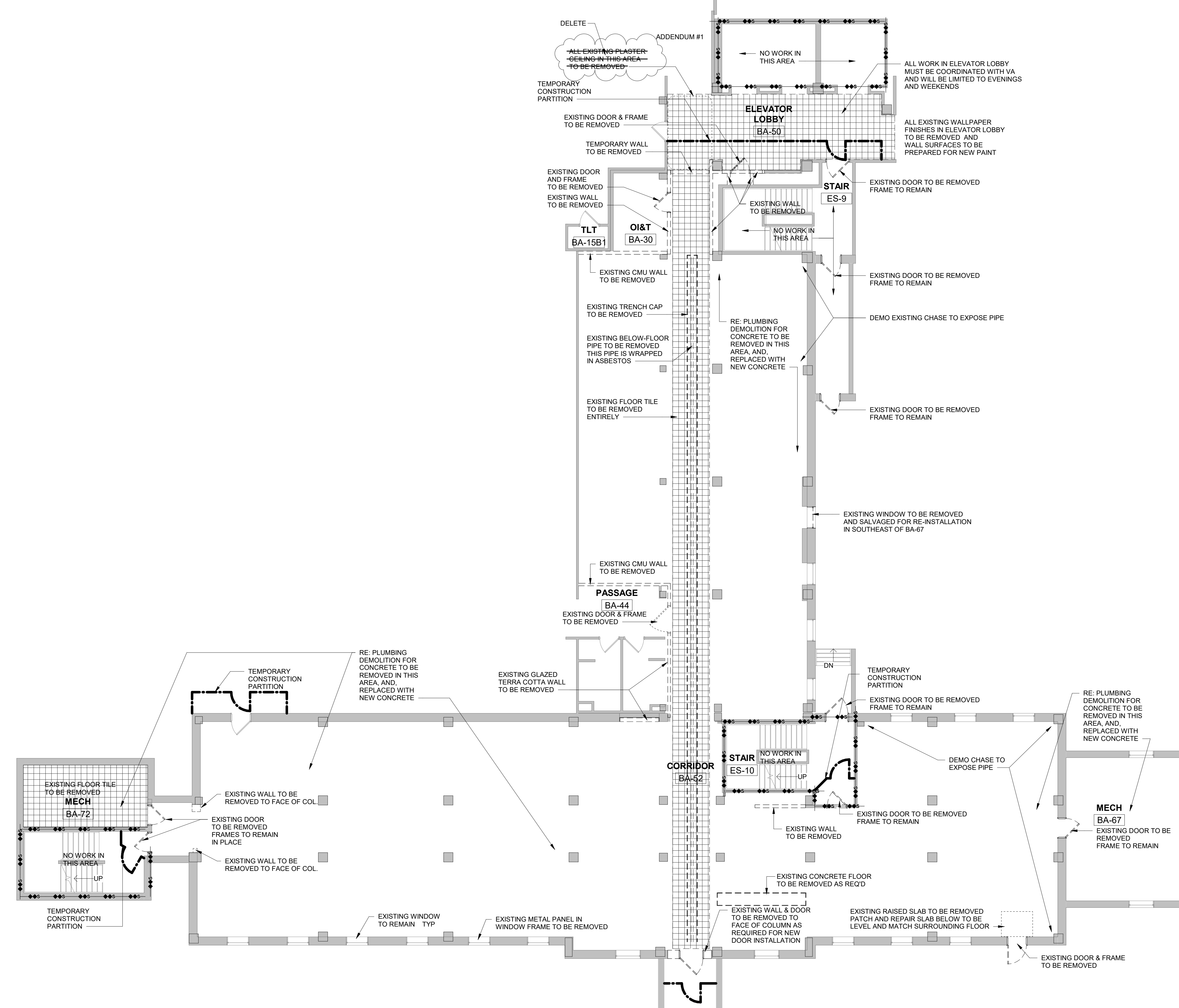
1. SHEET SIZE FOR PROPER SCALE IS 30X42.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VISIT THE PROJECT AND VERIFY EXISTING CONDITIONS/DIMENSIONS AND PROPOSED CONDITIONS. COORDINATE DEMOLITION BETWEEN ALL TRADES. NOTIFY A/E IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES.
3. WALL PARTITIONS EXTEND TO THE UNDERSIDE OF DECK AND DIMENSIONS.
4. SEE ENLARGED AREA PLANS FOR WALL TYPE INDICATIONS AND DIMENSIONS.
5. SEE CODE PLAN FOR CODE INFORMATION.
6. SEE DIMENSION PLAN FOR DIMENSIONS AND WALL TYPES.
7. EXISTING DOORS SHOW AT 45 DEGREE ANGLE FOR CLARITY WITH THE EXCEPTION OF TOILET PARTITIONS.
8. EXISTING WALL SHADED FOR CLARITY.

DEMOLITION LEGEND:

- AREA OF WORK NOT IN THE SCOPE. EXISTING TO REMAIN.
- ITEMS TO BE DEMOLISHED
- EXISTING TRENCH CAP TO BE REMOVED
- FLOOR TILE TO BE REMOVED

SHEET SPECIFIC NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VISIT THE PROJECT AND VERIFY EXISTING CONDITIONS/DIMENSIONS AND PROPOSED CONDITIONS.
2. THE DEMOLITION PLAN INDICATES GENERAL INFORMATION AND INTENT. THE CONTRACTOR SHALL COORDINATE DEMOLITION WITH NEW CONSTRUCTION TO ENSURE QUALITY OF FINAL PRODUCT.
3. DASHED LINES INDICATE EXTENT OF DEMOLITION.
4. GENERAL CONTRACTOR SHALL COORDINATE DEMOLITION BETWEEN ALL TRADES. NOTIFY A/E IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES.
5. ALL DEMOLITION AND REMODEL WORK MUST BE CLOSELY COORDINATED WITH THE COR.
6. THE GENERAL CONTRACTOR SHALL INSPECT AND FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK, INCLUDING ELEMENTS SUBJECT TO DAMAGE OR MOVEMENT DURING DEMOLITION, CUTTING OR PATCHING. MATERIAL PRODUCT FROM DEMOLITION SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR WITH THE EXCEPTION OF SPECIFIED ITEMS DESIGNATED EITHER IN THE PLANS OR VERBALLY REQUESTED BY THE (COR) TO BE RETAINED BY THE VA. VA MAINTAINS FIRST RIGHT OF SALVAGE.
7. OFFSITE DISPOSAL OF THE DEMOLISHED ITEMS IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DISPOSED OF LAWFULLY.
8. DEMOLITION MATERIALS SHALL BE REMOVED FROM SITE ON A DAILY BASIS. COORDINATE WITH THE COR THE IDENTIFICATION AND TRANSFER OF ANY ITEMS THAT NEED TO BE SALVAGED.
9. VERIFY LOCATION OF EXISTING UTILITY LINES PRIOR TO STARTING DEMOLITION. MAY NOT BE LIMITED TO UTILITIES SHOWN ON ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL PLANS. REFER TO THESE DRAWINGS FOR ADDITIONAL INFORMATION.
10. UPON ENCOUNTERING UNFORESEEN CONDITIONS DURING REMODEL WORK, THE CONTRACTOR SHALL NOTIFY THE (COR) BEFORE PROCEEDING.
11. COORDINATE DEMOLITION SHOWN ON THIS SHEET WITH DEMOLITION SHOWN ON MECHANICAL, PLUMBING, AND ELECTRICAL DEMOLITION DRAWINGS. CREATE PENETRATIONS AS REQUIRED FOR NEW CONSTRUCTION ON MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
12. THE CONTRACTOR SHALL PROTECT EXISTING CONSTRUCTION TO REMAIN. DAMAGE TO EXISTING CONSTRUCTION SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION.
13. ERECT AND MAINTAIN TEMPORARY PARTITIONS AND ENCLOSURES FOR EXTERIOR OPENINGS TO PREVENT THE TRANSMISSION OF DUST, ODOR, AND NOISE AND MAINTAIN WEATHER TIGHT CONDITIONS.
14. PROVIDE TEMPORARY MECHANICAL EXHAUST SYSTEMS TO MAINTAIN A NEGATIVE PRESSURE WITHIN CONSTRUCTION ZONES.
15. AT INTERSECTIONS OF REMOVED WALLS WITH WALL TO REMAIN, REPAIR REMAINING WALLS TO MATCH ADJACENT FINISHED WALLS OR BETTER.
16. REFER TO HAZARDOUS ABATEMENT SPECIFICATIONS FOR REMOVAL OF HAZARDOUS MATERIALS.
17. CONTRACTOR SHALL PROVIDE TEMPORARY SEAL AT ALL DOOR AND WALL OPENINGS AT PERIMETER WALLS DURING DEMOLITION WORK TO PROTECT ADJACENT AREAS FROM DUST INTRUSION.
18. SOLID SHADED (GRAY) REGIONS DEPICT EXISTING CONSTRUCTION TO REMAIN.
19. SEE MECHANICAL, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR OTHER DEMOLITION WORK.
20. REMOVE ALL UNUSED UTILITIES AND CAP. COORDINATE WITH PROPOSED NEW CONSTRUCTION CONDITIONS.
21. CONTRACTOR SHALL PROTECT ADJACENT ROOMS FROM DAMAGE DURING CONSTRUCTION. RESTORE ALL DAMAGE TO ORIGINAL CONDITION.
22. ALL INFILL AND PATCHWORK SHALL MATCH ADJACENT SURFACES, IE. WALL, CEILINGS, FLOORS, ETC. COORDINATE WITH NEW FINISHES WHERE REQUIRED. SEE FINISH SCHEDULE FOR DISTURBED/DAMAGED BY DEMOLITION AND NEW CONSTRUCTION.
23. STAIRWAY DOORS ARE TO BE REPLACED (EXISTING FRAMES TO REMAIN IN PLACE). EACH EXISTING DOOR MUST BE REMOVED AND THE NEW DOOR INSTALLED AND FULLY FUNCTIONAL WITHIN ONE WORK SHIFT.
24. ALL TEMPORARY CONSTRUCTION BARRIERS SHALL BE 1-HR RATED, AND DOORS SHALL REMAIN TAPED SHUT.



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

100% CONSTRUCTION DRAWINGS

CONSULTANTS:

ARCHITECT

FOURFRONT DESIGN, INC.
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Drawing Title
DEMOLITION PLAN

Project Title
EHRM TRAINING AND ADMIN
SPACE SUPPORT

Project Number
437-21-225
Building Number
9

Office of
Construction
and Facilities
Management

FULLY SPRINKLED

Location
FARGO, ND

Drawing Number
AD1.00

Date
01/11/2022

Checked
JL

Drawn
TC

Dwg. 6 of 41



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GENERAL NOTES:

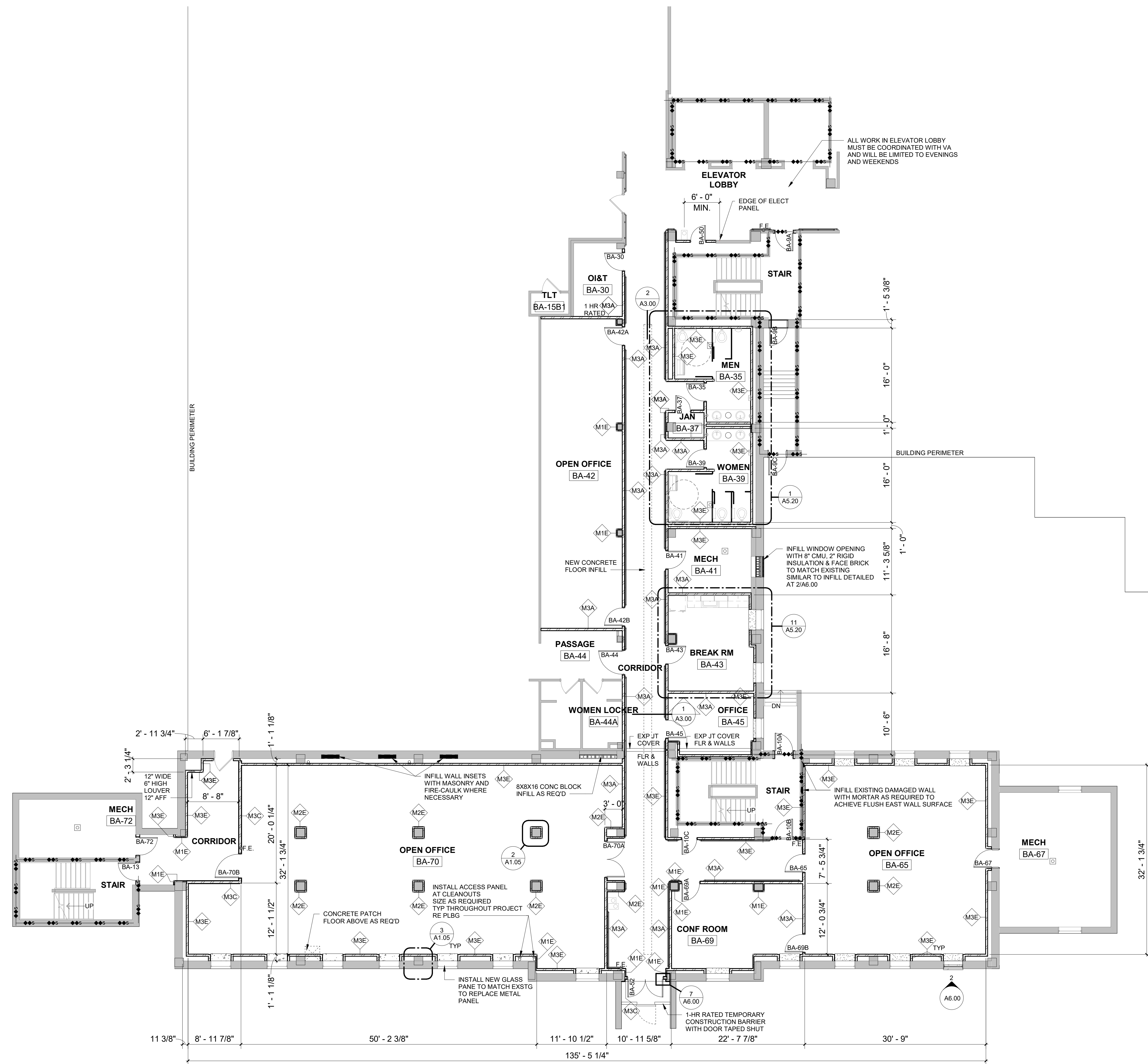
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- WALL PARTITIONS EXTEND TO THE UNDERSIDE OF DECK. SEE ENLARGED AREA PLANS FOR WALL TYPE INDICATIONS AND DIMENSIONS.
- SEE CODE PLAN FOR CODE INFORMATION.
- SEE DIMENSION PLAN FOR DIMENSIONS AND WALL TYPES. EXISTING DOORS SHOW AT 45 DEGREE ANGLE FOR CLARITY WITH THE EXCEPTION OF TOILET PARTITIONS.
- EXISTING WALL SHADED FOR CLARITY.

SHEET SPECIFIC NOTES:

- ALL DIMENSIONS ARE FACE OF STUD OR FACE OF MASONRY UNLESS NOTED OTHERWISE.
- OPENINGS ARE DIMENSIONED TO FRAME WIDTH. CONTRACTOR TO COORDINATE ROUGH OPENING DIMENSIONS AS REQUIRED.
- FIRESTOPPING IS REQUIRED AT ALL PENETRATIONS THROUGH RATED WALLS, FLOORS, AND CEILINGS, INCLUDING NEW, ABANDONED, EXISTING, ETC.
- SPRAY-PAINT WALL TAG ABOVE CEILING AT ALL RATED WALLS:
1-HR RATED
2-HR RATED
- ALL TEMPORARY CONSTRUCTION BARRIERS SHALL BE 1-HR RATED, AND DOORS SHALL REMAIN TAPED SHUT.

FLOOR PLAN LEGEND:

- AREA OF WORK NOT IN THE SCOPE. EXISTING TO REMAIN.
- FLOOR DRAIN



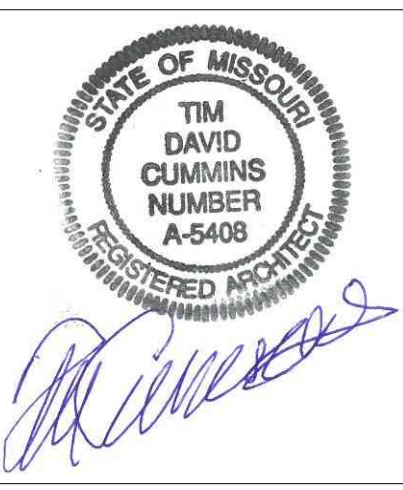
1 FLOOR PLAN
1/8" = 1'-0"

100% CONSTRUCTION DRAWINGS

17/2022 10:21:40 AM
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one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
six inches = one foot
eight inches = one foot
ten inches = one foot
twelve inches = one foot

Revisions:	Date

CONSULTANTS:



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Drawing Title
FLOOR PLAN
 FULLY SPRINKLED

Project Title
EHRM TRAINING AND ADMIN SPACE SUPPORT

Project Number
 437-21-225

Building Number
9

Location
 FARGO, ND

Date
 01/11/2022

Checked
 JL

Drawn
 TC

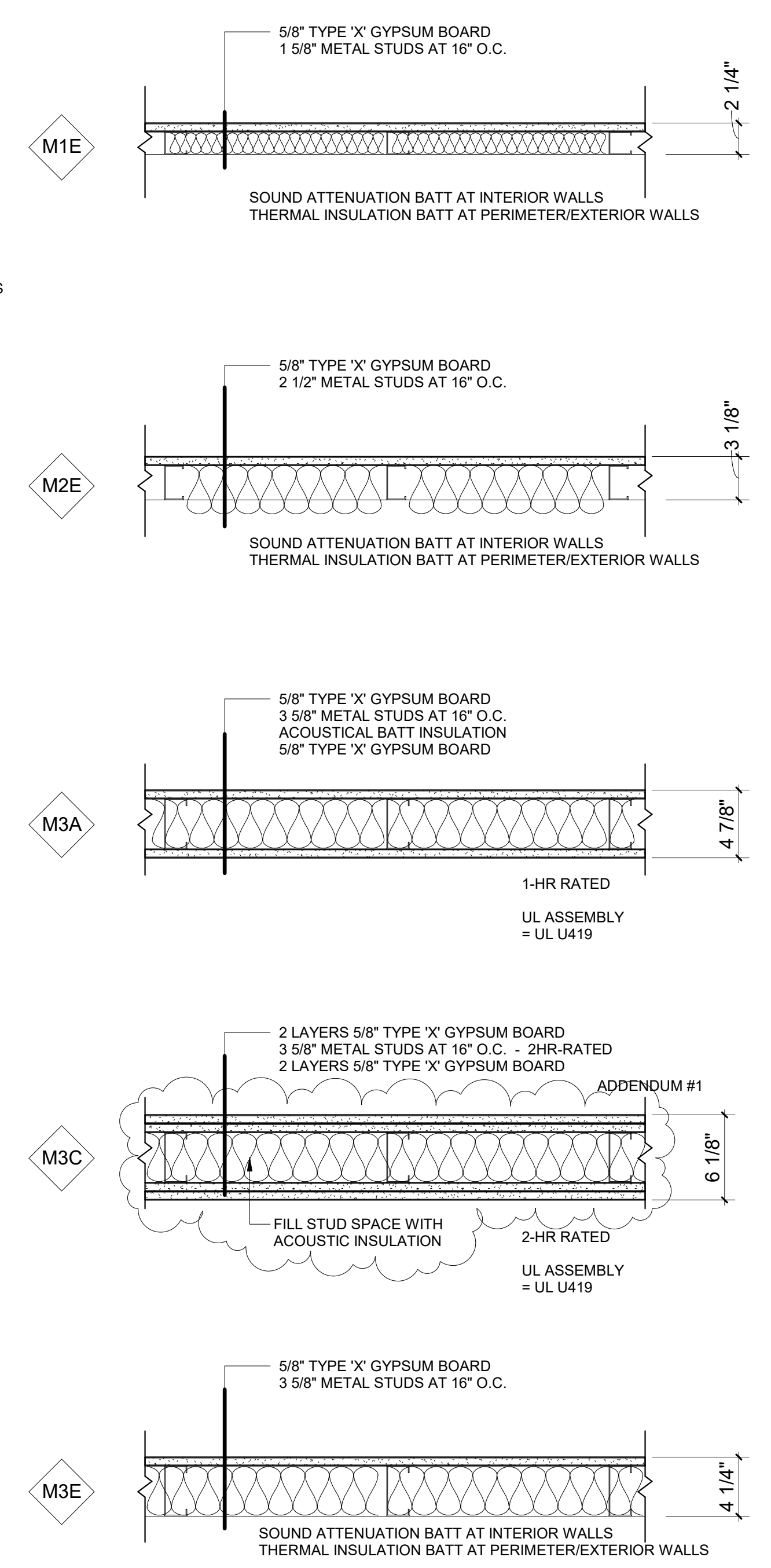
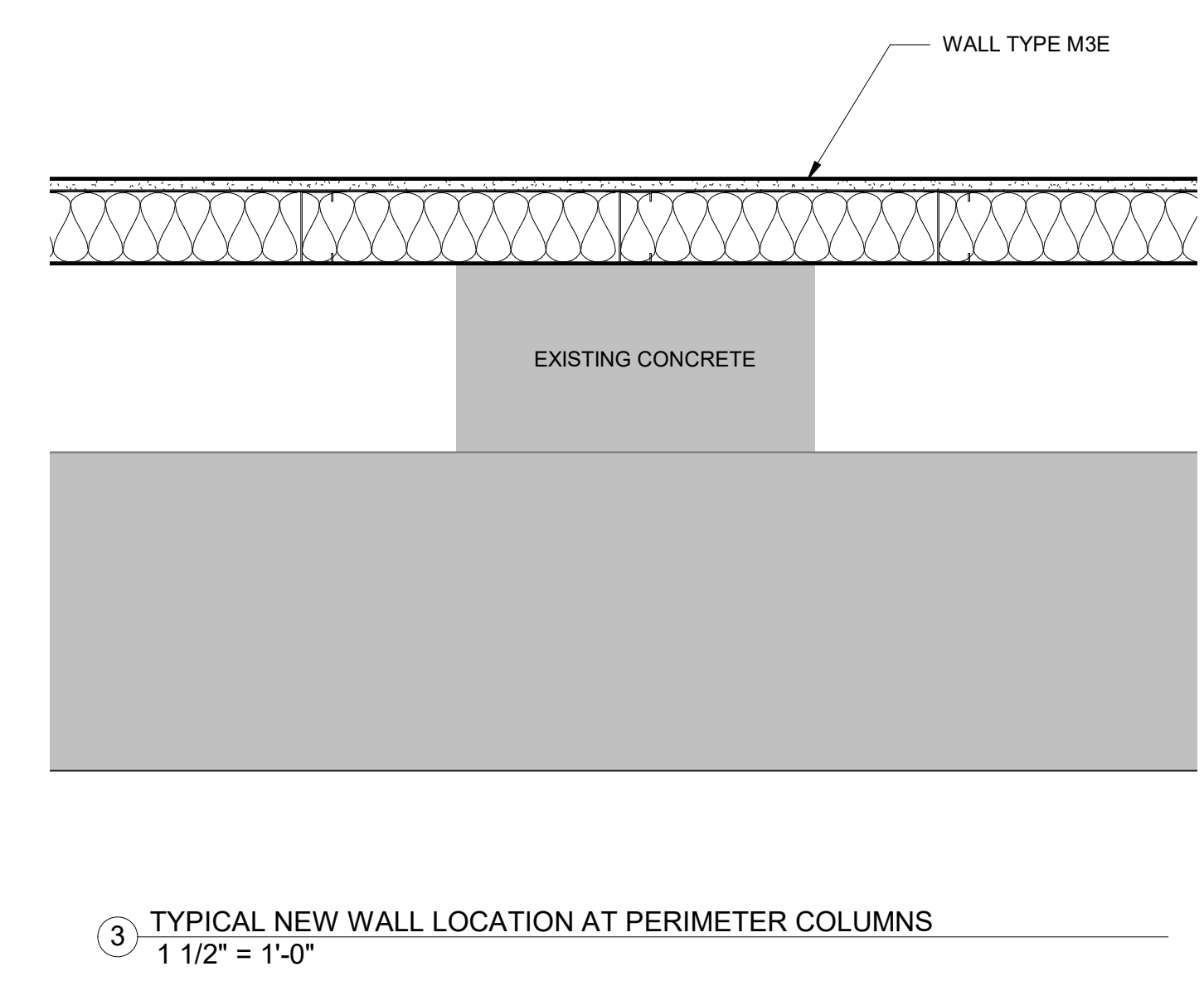
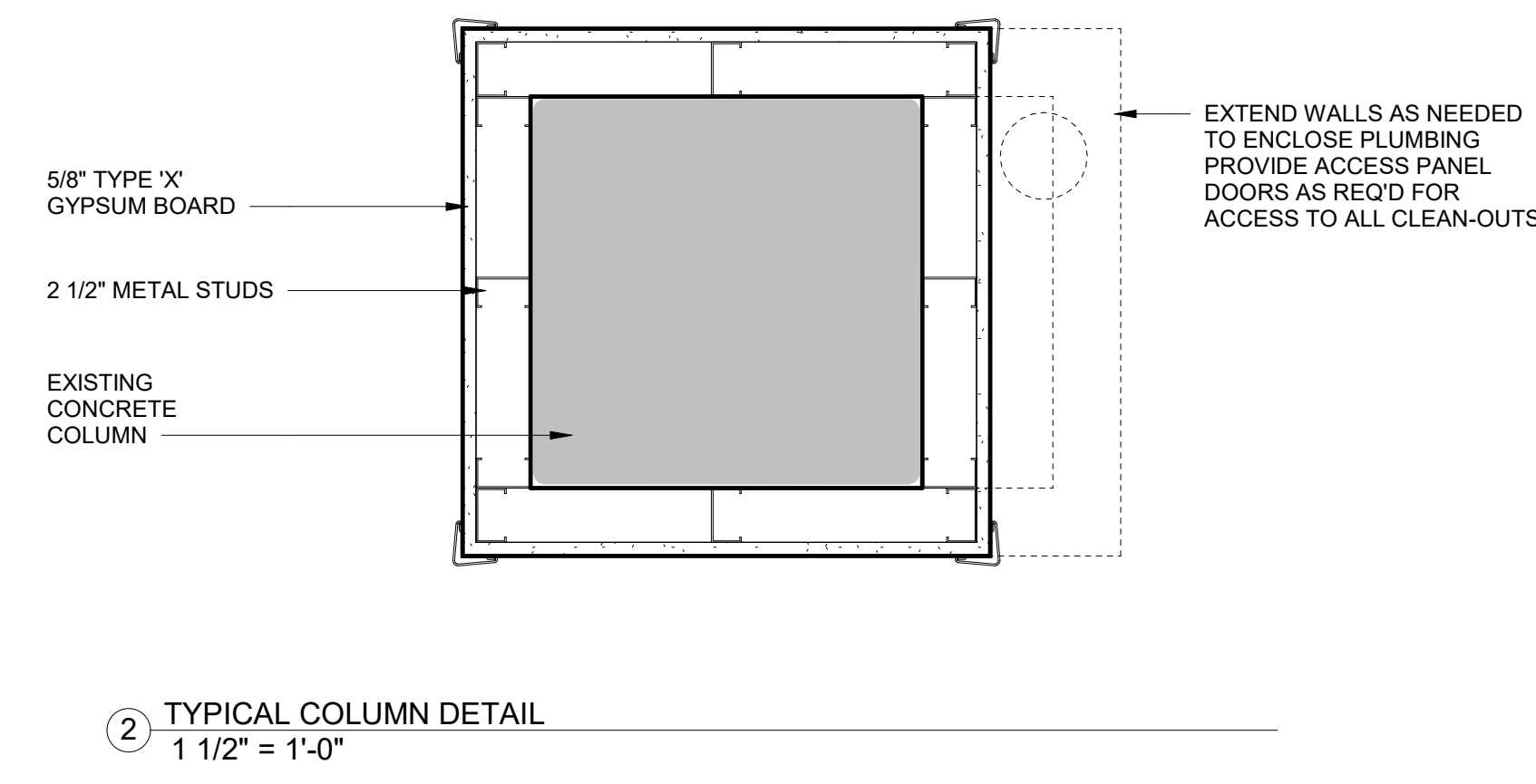
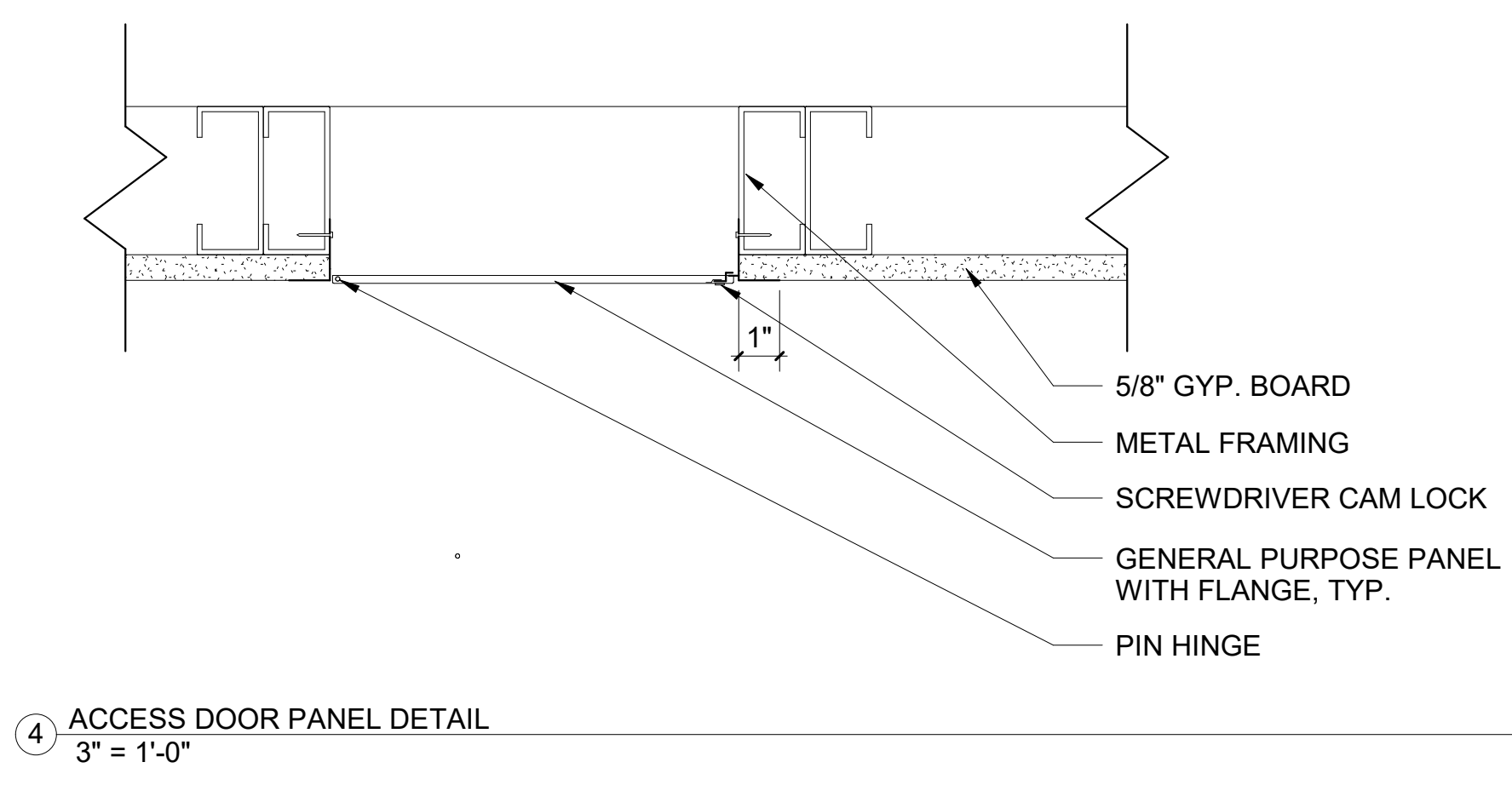
Drawing Number
A1.00

Dwg. 7 of 41

Office of
 Construction
 and Facilities
 Management

Department of
 Veterans Affairs

4/19/2022 11:05 PM
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 one quarter inch = one foot
 three eighths inch = one foot
 one half inch = one foot
 three quarters inch = one foot
 one inch = one foot
 one and one half inches = one foot
 two inches = one foot
 three inches = one foot
 four inches = one foot
 six inches = one foot
 one foot = one foot



GENERAL NOTE:
ALL WALLS TO BE BUILT FROM FLOOR TO STRUCTURAL DECK ABOVE

- GENERAL NOTES:**
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 - WALL PARTITIONS EXTEND TO THE UNDERSIDE OF DECK. SEE ENLARGED AREA PLANS FOR WALL TYPE INDICATIONS AND DIMENSIONS.
 - SEE CODE PLAN FOR CODE INFORMATION.
 - SEE DIMENSION PLAN FOR DIMENSIONS AND WALL TYPES. EXISTING DOORS SHOW AT 45 DEGREE ANGLE FOR CLARITY WITH THE EXCEPTION OF TOILET PARTITIONS.
 - EXISTING WALL SHADED FOR CLARITY.

Revisions:	Date

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Drawing Title
WALL TYPES AND PLAN DETAILS

FULLY SPRINKLED

Project Title EHRM TRAINING AND ADMIN SPACE SUPPORT		Project Number 437-21-225
Location FARGO, ND		Building Number 9
Date 01/11/2022	Checked JL	Drawn TC
Drawing Number A1.05		Dwg. 8 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

100% CONSTRUCTION DRAWINGS

GENERAL NOTES:

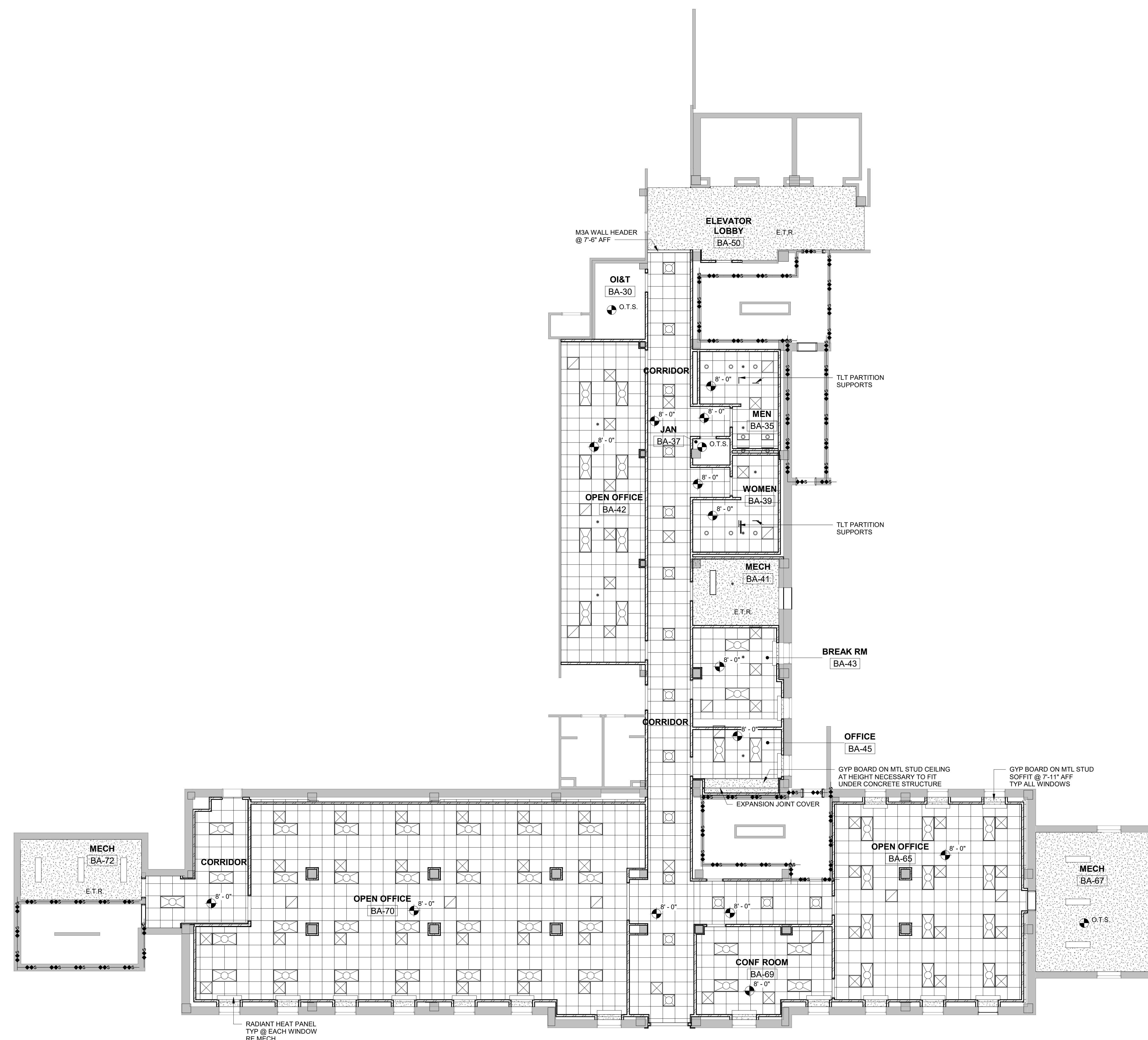
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7. EXISTING WALL SHADED FOR CLARITY.
- 8.

SHEET SPECIFIC NOTES:

1. CEILING FIXTURES SHOWN FOR REFERENCE ONLY. SEE MECHANICAL/ELECTRICAL DRAWINGS.
2. REFER TO A1.05 FOR PARTITION TYPES.
3. SPRAY APPLIED FIREPROOFING AT ALL EXPOSED STEEL STRUCTURE, INCLUDING UNDERSIDE OF OVERHEAD METAL DECK. NOT SHOWN IN REFLECTED CEILING PLAN FOR CLARITY. SEE DETAILS.
4. ALL LAY-IN ACOUSTICAL TILE CEILINGS SHALL BE AT 8'-0" ABOVE FINISHED FLOOR. IF THIS IS NOT POSSIBLE IN SOME SPACES, THE CEILING SHALL BE AS HIGH AS POSSIBLE.
5. AT SPACES OPEN TO STRUCTURE ABOVE, PAINT EXPOSED STRUCTURE AND DECK ABOVE, WHITE.

REFLECTED CEILING LEGEND:

- GYPSUM BOARD - PAINTED, SEE FINISH SCHEDULE, AND SPECIFICATIONS
- ACOUSTICAL CEILING TILE
- HEIGHT CEILING HEIGHT
- OPEN TO STRUCTURE ABOVE
- 2X4 CEILING LIGHT FIXTURE
- 2X2 CEILING LIGHT FIXTURE
- 4' SURFACE MOUNTED LIGHT FIXTURE
- 6" RECESSED CAN LIGHT FIXTURE
- HVAC DIFFUSER
- HVAC RETURN DUCT
- AREA OF WORK NOT IN THE SCOPE. EXISTING TO REMAIN.
- FIRE SPRINKLER HEAD
- EXISTING TO REMAIN



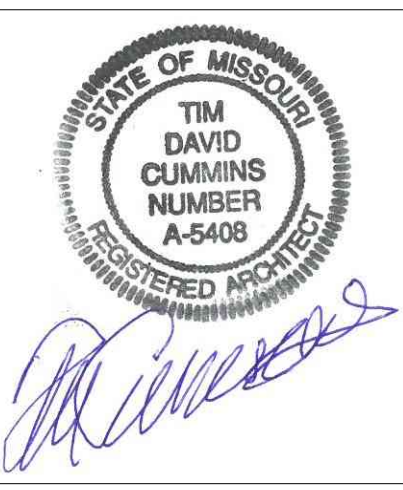
1 REFLECTED CEILING PLAN
1/8" = 1'-0"

100% CONSTRUCTION DRAWINGS

17/2022 10:24:42 AM
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Drawing Title
REFLECTED CEILING PLAN
 FULLY SPRINKLED

Project Title
EHRM TRAINING AND ADMIN SPACE SUPPORT
 Location
 FARGO, ND
 Date
 01/11/2022
 Checked
 JL
 Drawn
 TC

Project Number
 437-21-225
 Building Number
9
 Drawing Number
A1.10
 Dwg. 9 of 41

Office of Construction and Facilities Management
 Department of Veterans Affairs

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	WALLS				CEILING FINISH	COMMENTS
				NORTH	EAST	SOUTH	WEST		
BA-15B1	TLT	-	-	-	-	SEE COMMENTS	-	-	PATCH AND REPAIR SOUTH WALL AS NEEDED
BA-30	OI&T	EXISTING	-	EXISTING	P-2	P-2	EXISTING	-	3/4" FIRE RATED PLYWOOD ON EAST AND SOUTH WALLS
BA-35	MEN	PT-1	PT-COVE	P-1/PT-2/PT-3	P-1/PT-2/PT-3	P-1/PT-2/PT-3	P-1/PT-2/PT-3	GYP/P-2	6" BAND OF PT-3 TO START AT 54" AFF, PT-2 TO 66" AFF WITH SCHLUTER ALUMINUM BULLNOSE ABOVE, SEE SHEET A5.20
BA-37	JAN	QT-1	QT-COVE	P-2/FRP	P-2/FRP	P-2/FRP	P-2/FRP	GYP/P-2	FRP TO 48" AFF
BA-39	WOMEN	PT-1	PT-COVE	P-1/PT-2/PT-3	P-1/PT-2/PT-3	P-1/PT-2/PT-3	P-1/PT-2/PT-3	ACT-1	6" BAND OF PT-3 TO START AT 54" AFF, PT-2 TO 66" AFF WITH SCHLUTER ALUMINUM BULLNOSE ABOVE, SEE SHEET A5.20
BA-41	MECH	CS	RB-1	P-1	P-1	P-1	P-1	P-2	
BA-42	OPEN OFFICE	CPT-1	RB-1	P-1	P-1	P-1	P-3	ACT-1	
BA-43	BREAK RM	LVT-1	RB-1	P-1	P-1	P-3	P-1	ACT-1	
BA-44	PASSAGE	EXISTING	EXISTING/RB-1	P-1	P-1	EXISTING	EXISTING	EXISTING	NEW RB-1 ON NORTH AND EAST WALLS ONLY
BA-44A	WOMEN LOCKER	EXISTING	EXISTING	EXISTING	PT	EXISTING	EXISTING	EXISTING	MATCH EXISTING TILE AND TILE BASE ON EAST WALL
BA-45	OFFICE	CPT-1	RB-1	P-3	P-1	P-1	P-1	ACT-1	
BA-50	ELEVATOR LOBBY	LVT-1	RB-1	P-3	P-1	P-1	P-1	-	REMOVE EXISTING WALLCOVERING, PATCH AND REPAIR WALL SURFACE AS NEEDED
BA-52	CORRIDOR	LVT-1	RB-1	P-1	P-1	P-1	P-1	ACT-1	
BA-54	CORRIDOR	LVT-1	RB-1	P-1	P-1	P-1	P-1	ACT-1	
BA-65	OPEN OFFICE	LVT-1	RB-1	P-3	P-1	P-3	P-1	ACT-1	
BA-67	MECH	CS	RB-1	P-2	P-2	P-2	P-2	P-2	
BA-69	CONF ROOM	CPT-1	RB-1	P-1	P-1	P-3	P-1	ACT-1	
BA-70	OPEN OFFICE	LVT-1	RB-1	P-3	P-1	P-3	P-1	ACT-1	
BA-72	MECH	CS	RB-1	P-2	P-2	P-2	P-2	P-2	
ES-9	STAIR	-	-	-	-	-	-	-	
ES-10	STAIR	-	-	-	-	-	-	-	
ES-13	STAIR	-	-	-	-	-	-	-	

ROOM FINISH SCHEDULE LEGEND:

MATERIAL DESCRIPTION:

ACT-1	ACOUSTIC CEILING TILE
CS	CONCRETE, SEALED
CPT-1	CARPET TILE
EXP	EXPOSED
FRP	FIBERGLASS REINFORCED PANEL
GWB	GYP/PT-1
LVT-1	LUXURY VINYL PLANK TILE
P-1	PAINT 1, BALANCED BEIGE
P-2	PAINT 2, PURE WHITE
P-3	PAINT 3, MAGNETIC GRAY
PLAM-1	PLASTIC LAMINATE
PT-1	PORCELAIN TILE, FLOOR
PT-2	PORCELAIN TILE, WALL
PT-3	MOSAIC ACCENT TILE
PT-COVE	PT COVE BASE
QT-1	QUARRY TILE
QT-COVE	QUARRY TILE COVE BASE
RB-1	RESILIENT BASE
SDT-1	STATIC DISSIPATIVE VINYL TILE
SS-1	SOLID SURFACE COUNTERTOPS

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- EXISTING WALL SHADED FOR CLARITY.

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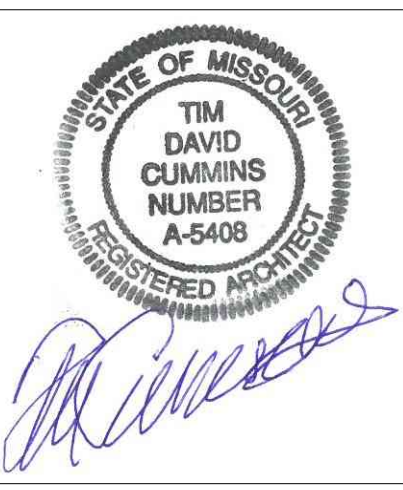
- SEE WALL PROTECTION PLAN, SHEET A5.15, FOR SPECIFIC LOCATIONS OF WALL PANELS, CORNER GUARDS, BUMPER RAILS AND HANDRAILS.
- PORCELAIN TILE AND QUARRY TILE APPLICATION OVER CONCRETE BACKER BOARD, SEE SPECIFICATIONS.

one and one half inches = one foot
 three quarters inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot

100% CONSTRUCTION DRAWINGS

Revisions:	Date

CONSULTANTS:



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Drawing Title
ROOM FINISH SCHEDULE
 FULLY SPRINKLED

Project Title
EHRM TRAINING AND ADMIN SPACE SUPPORT

Project Number
 437-21-225

Building Number
9

Location
FARGO, ND

Date
 01/11/2022

Checked
 JL

Drawn
 MD

Dwg. 11 of 41

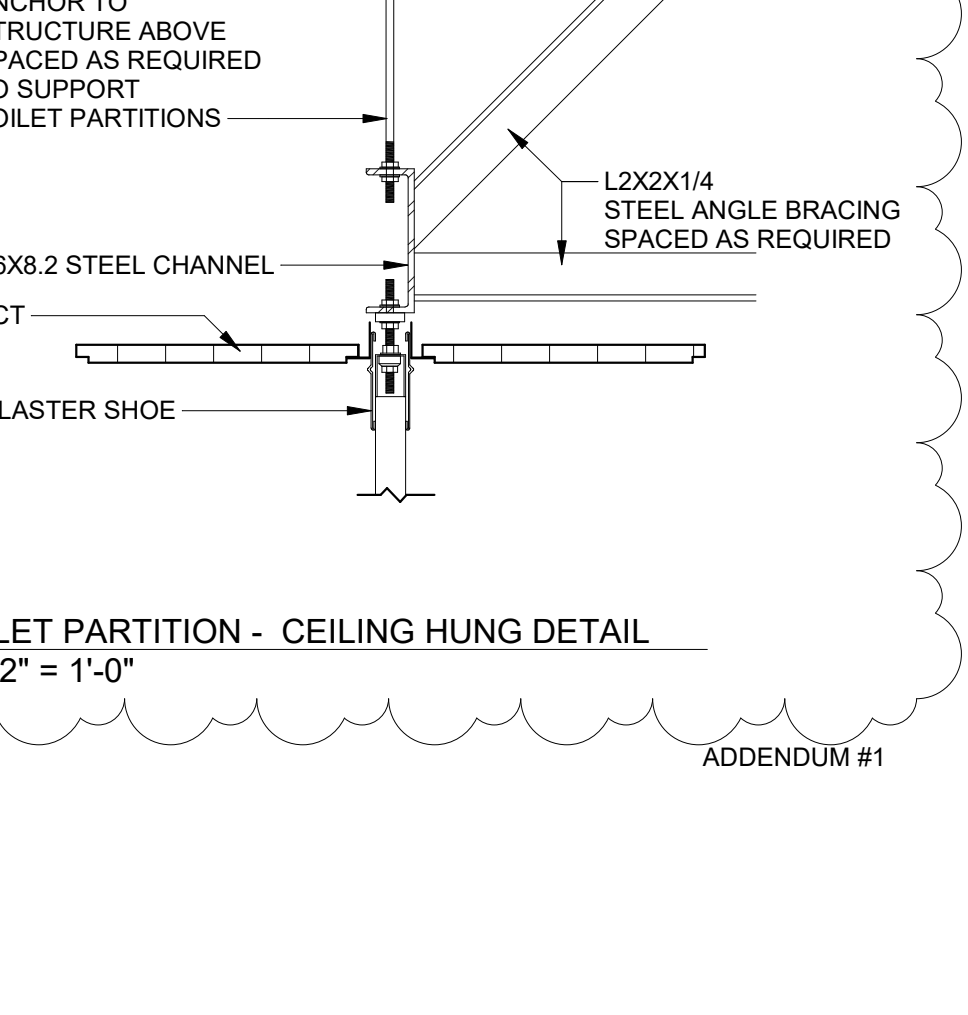
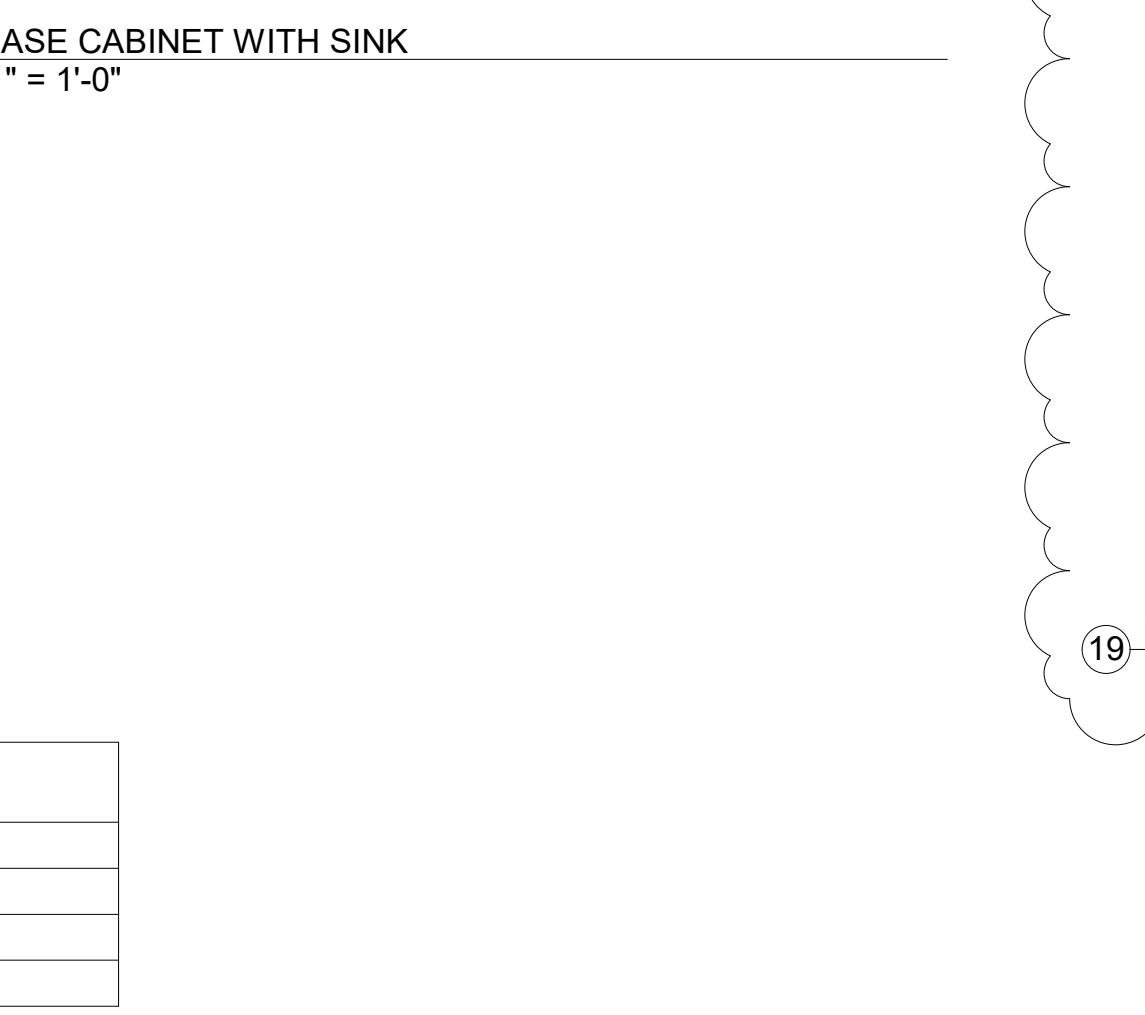
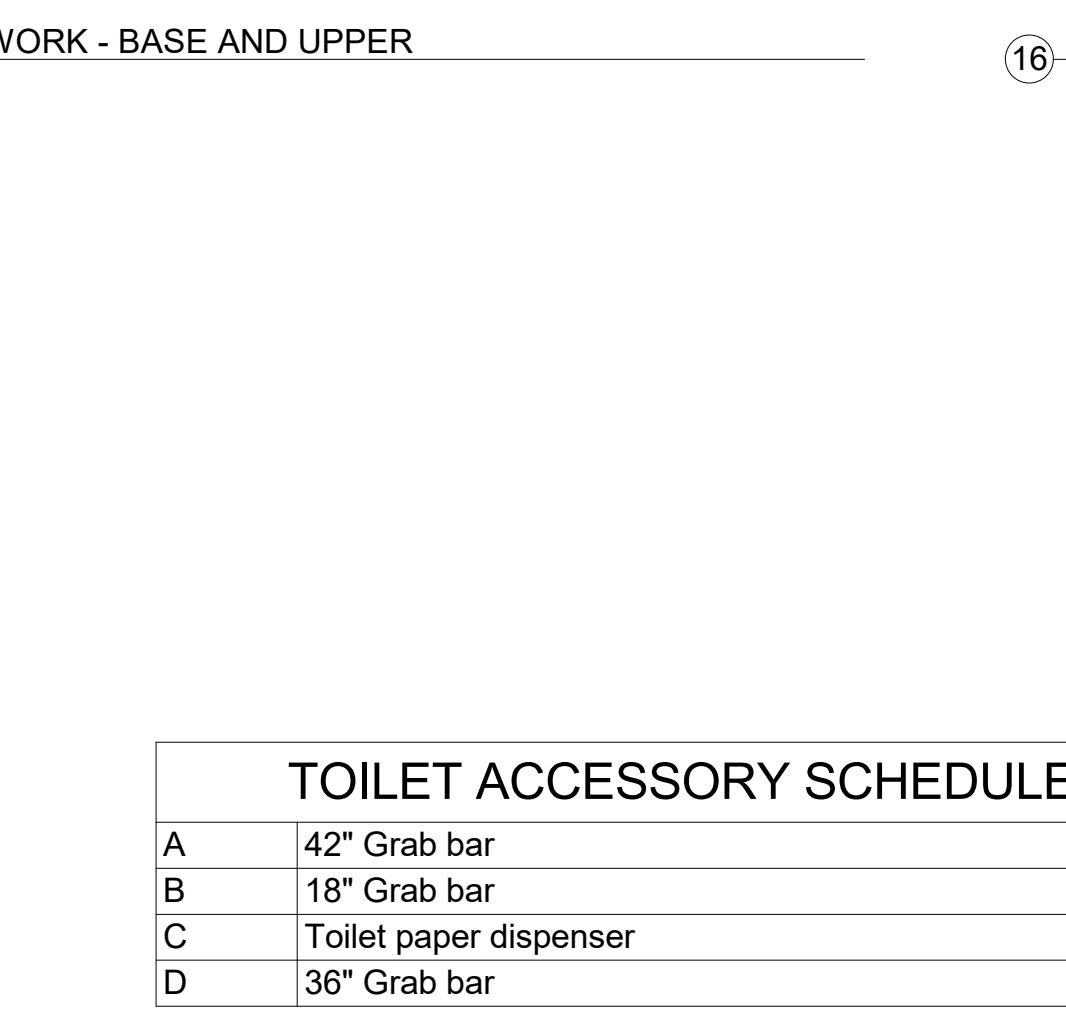
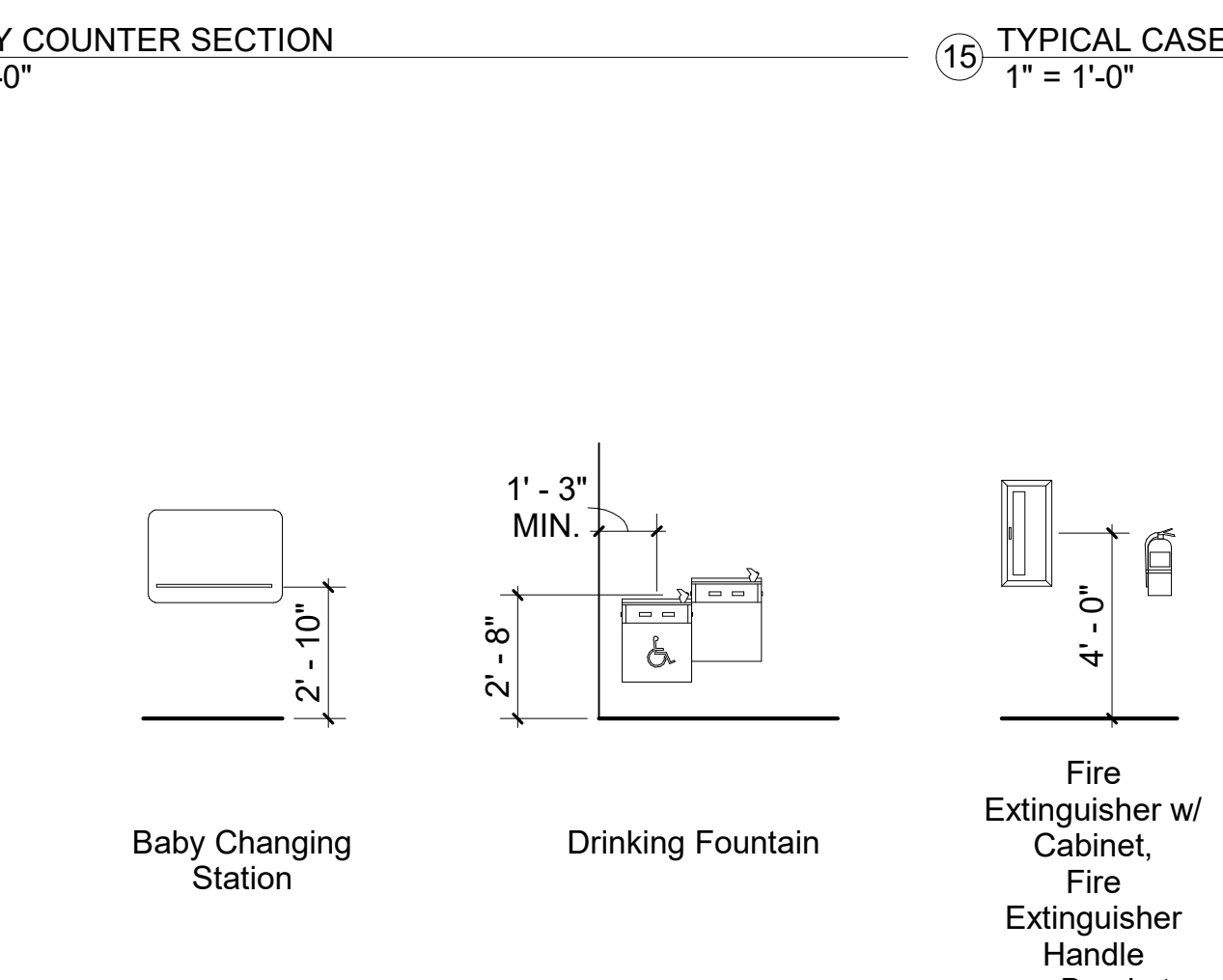
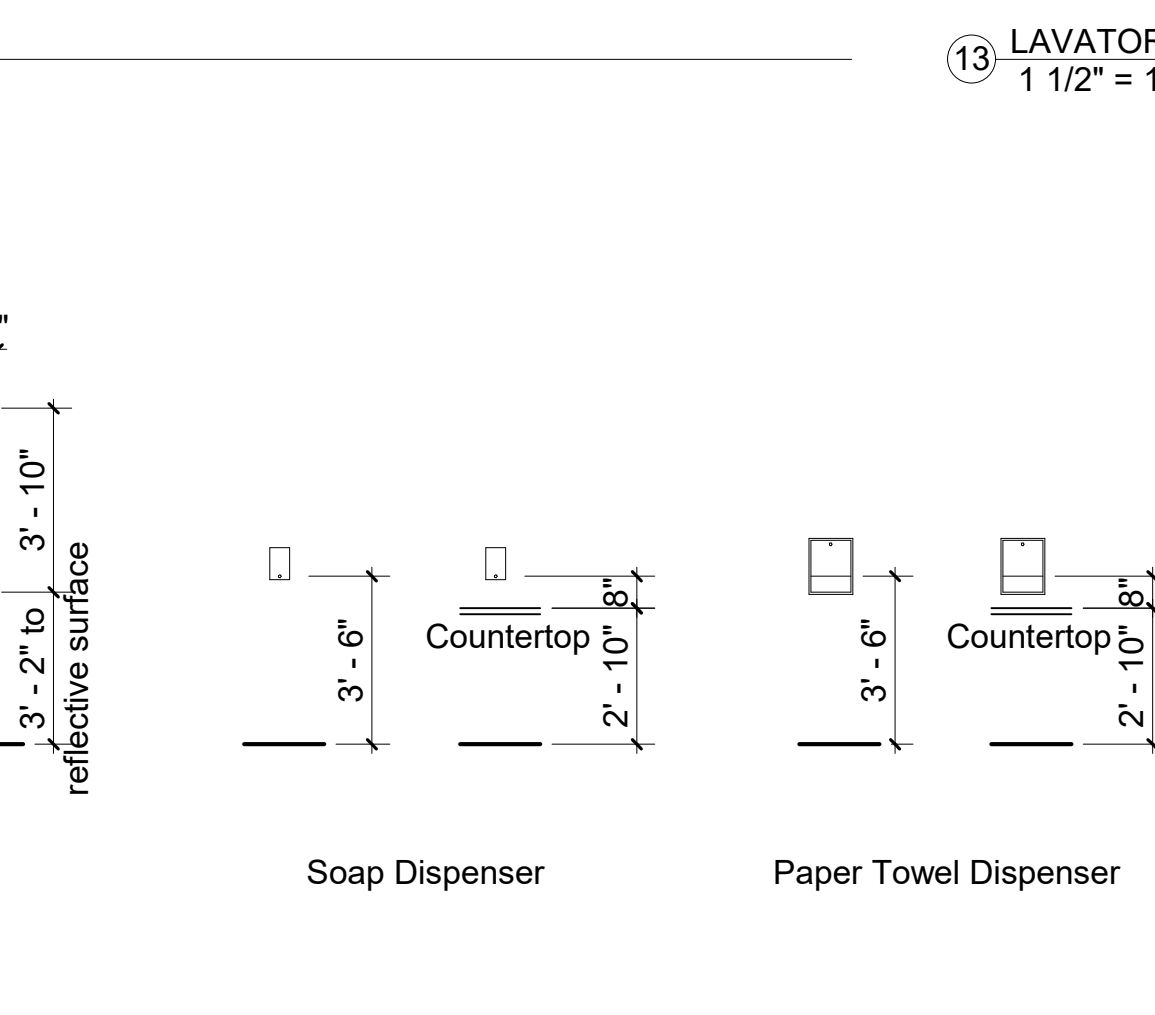
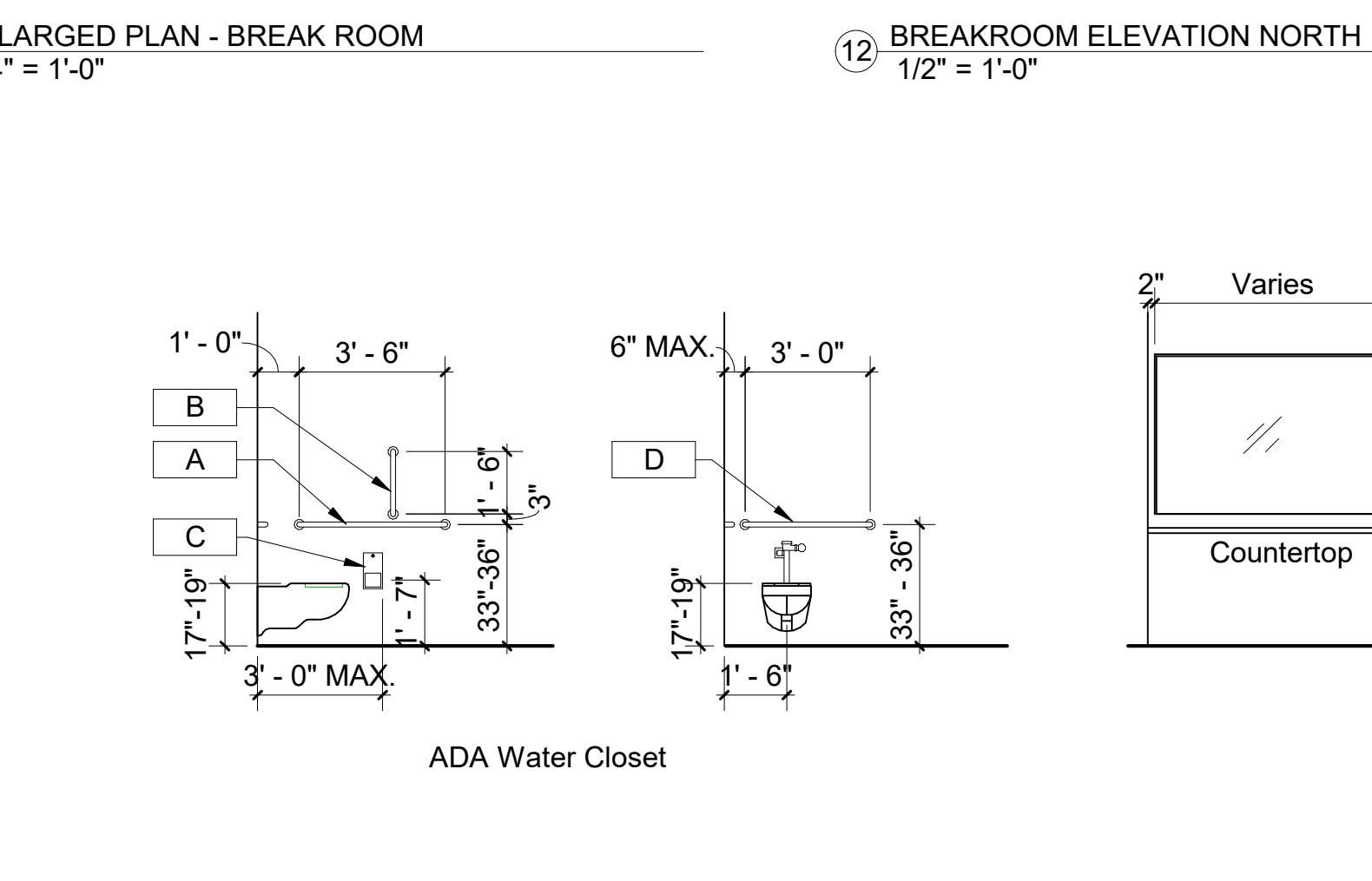
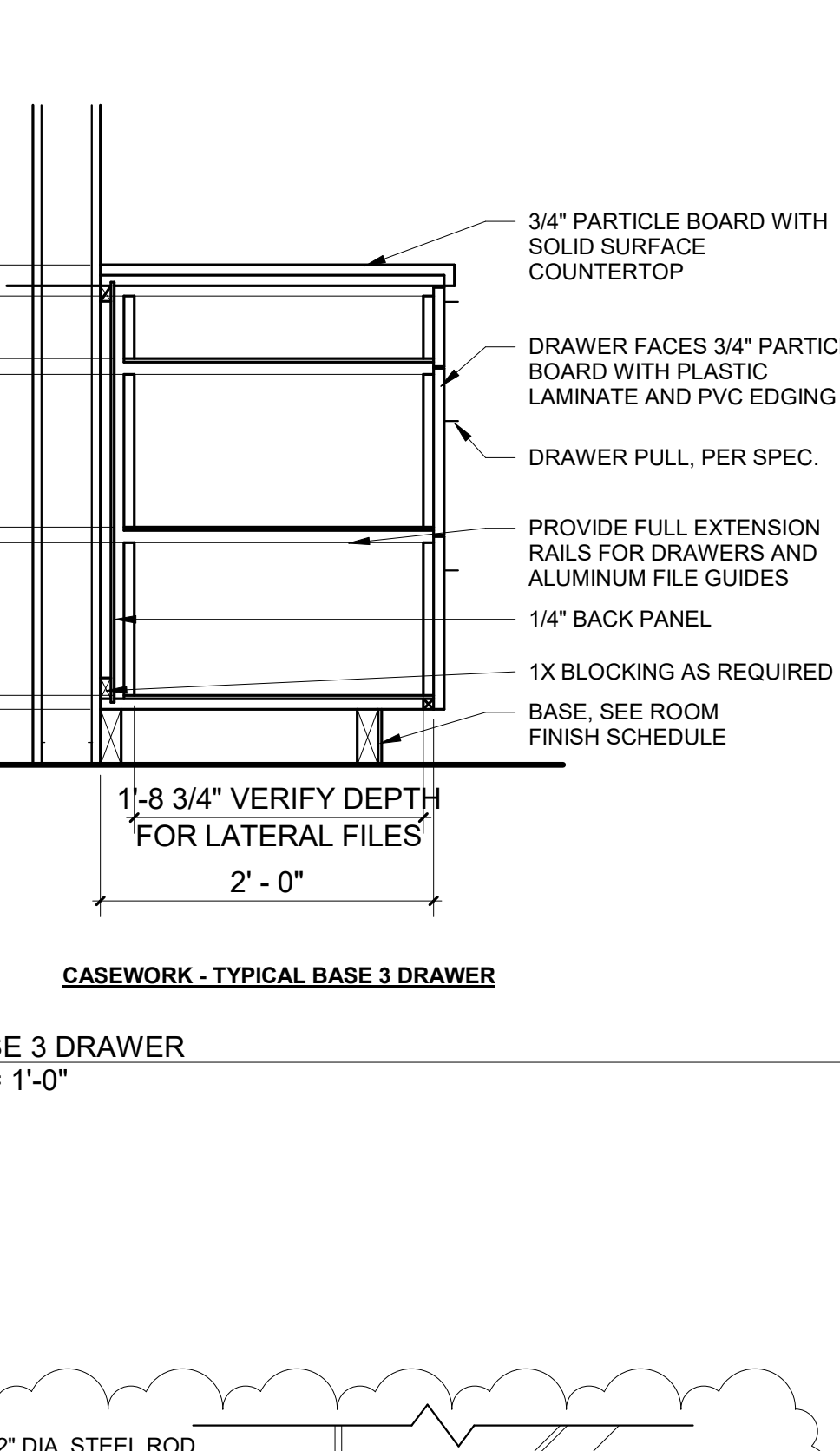
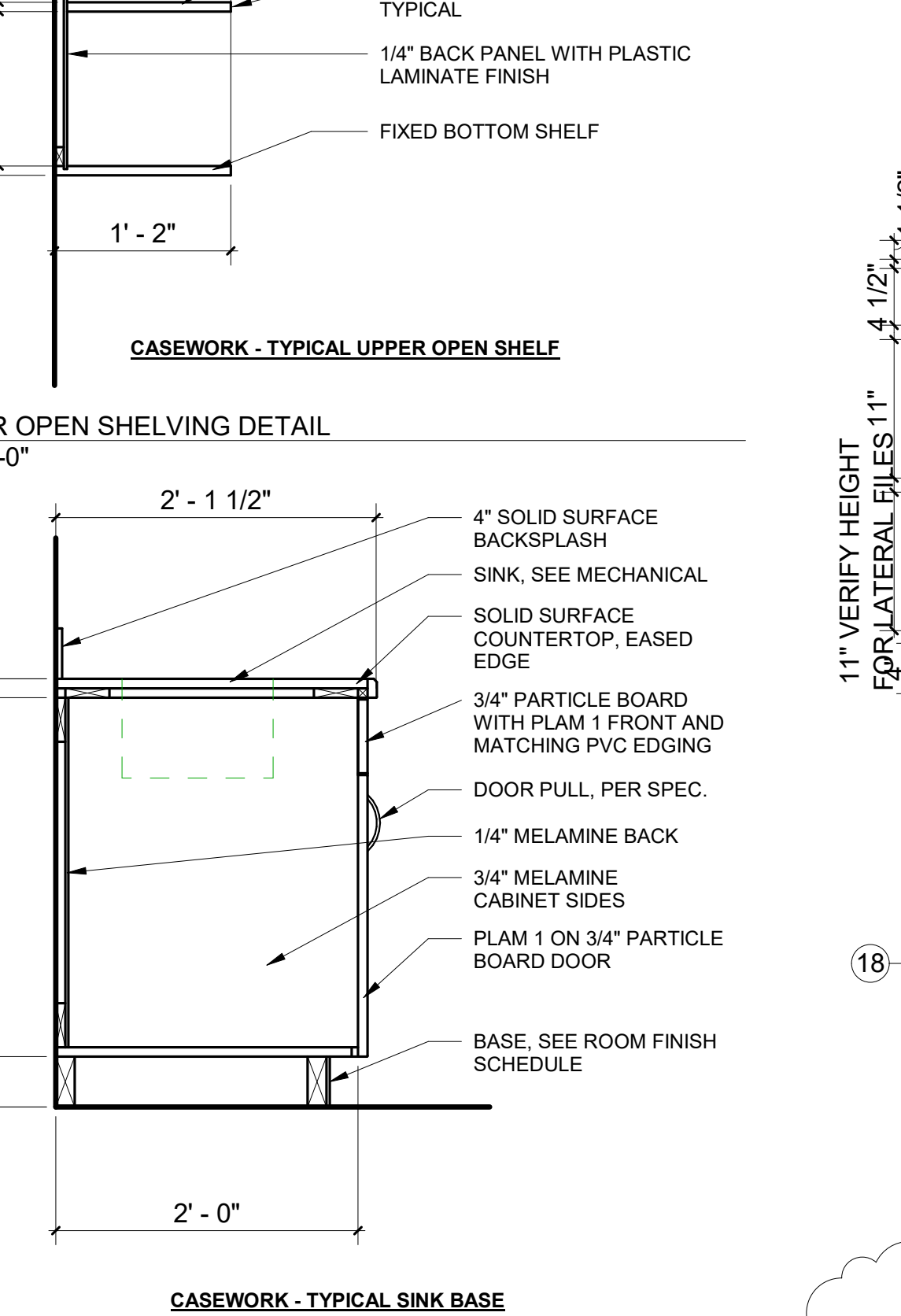
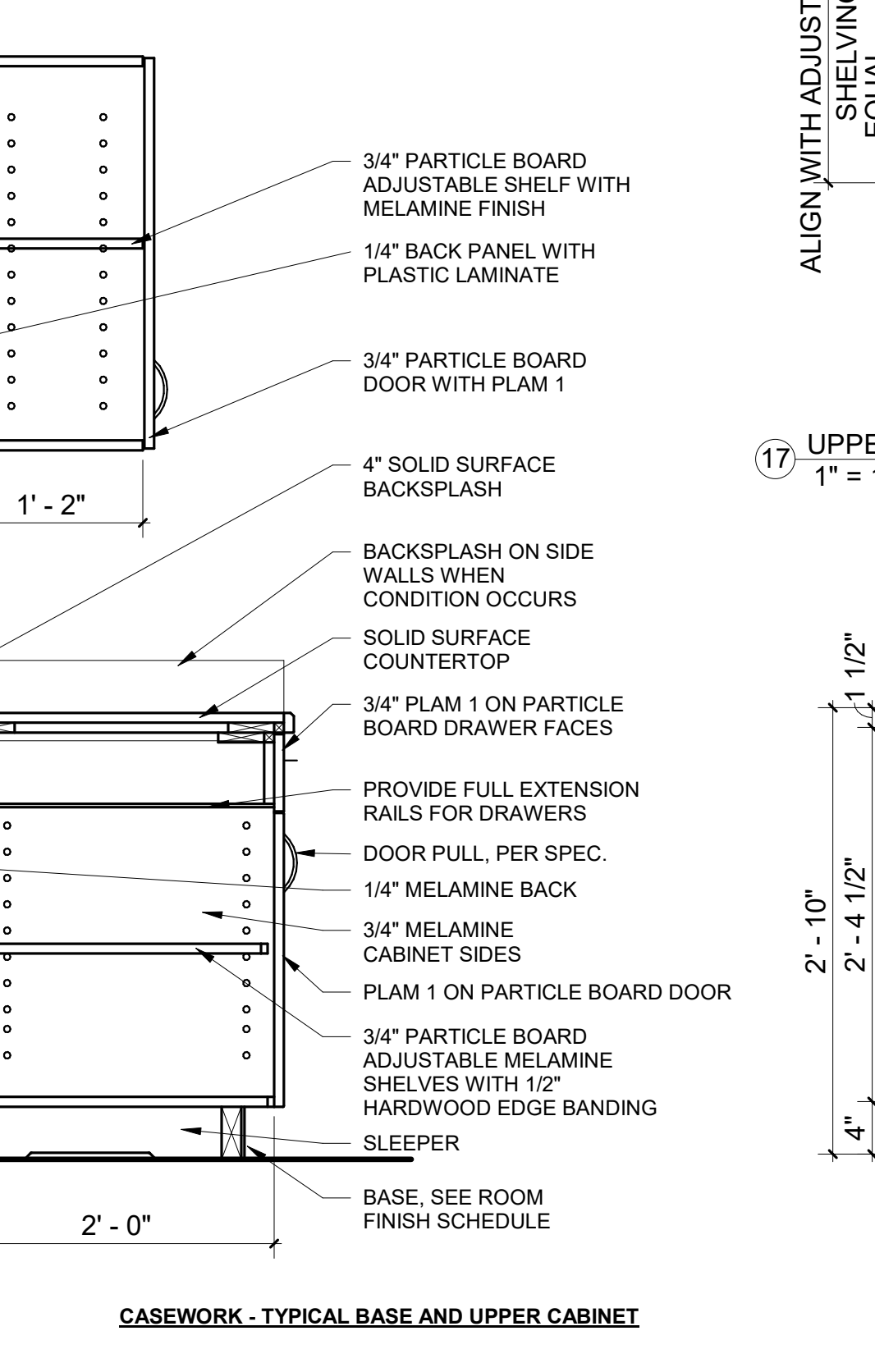
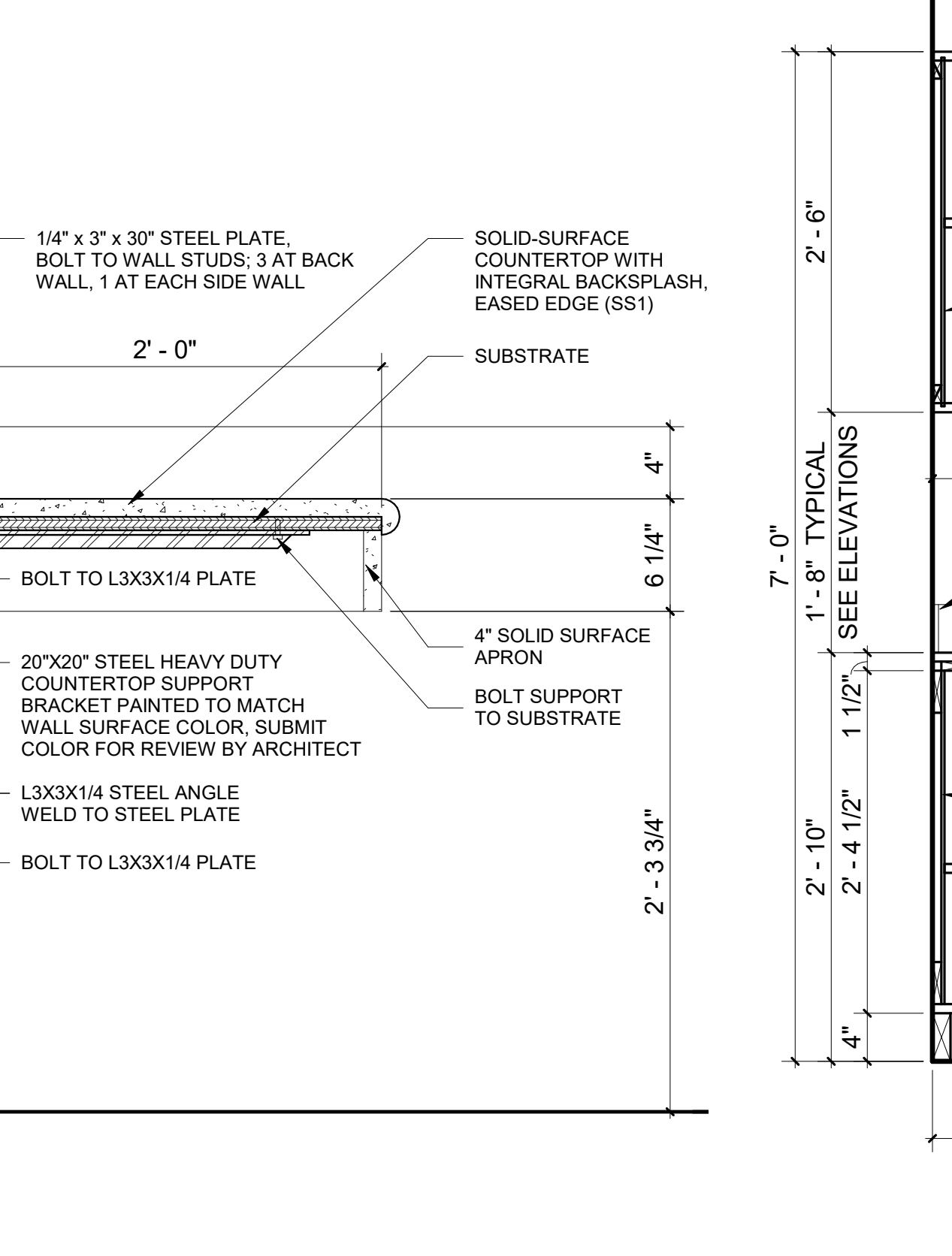
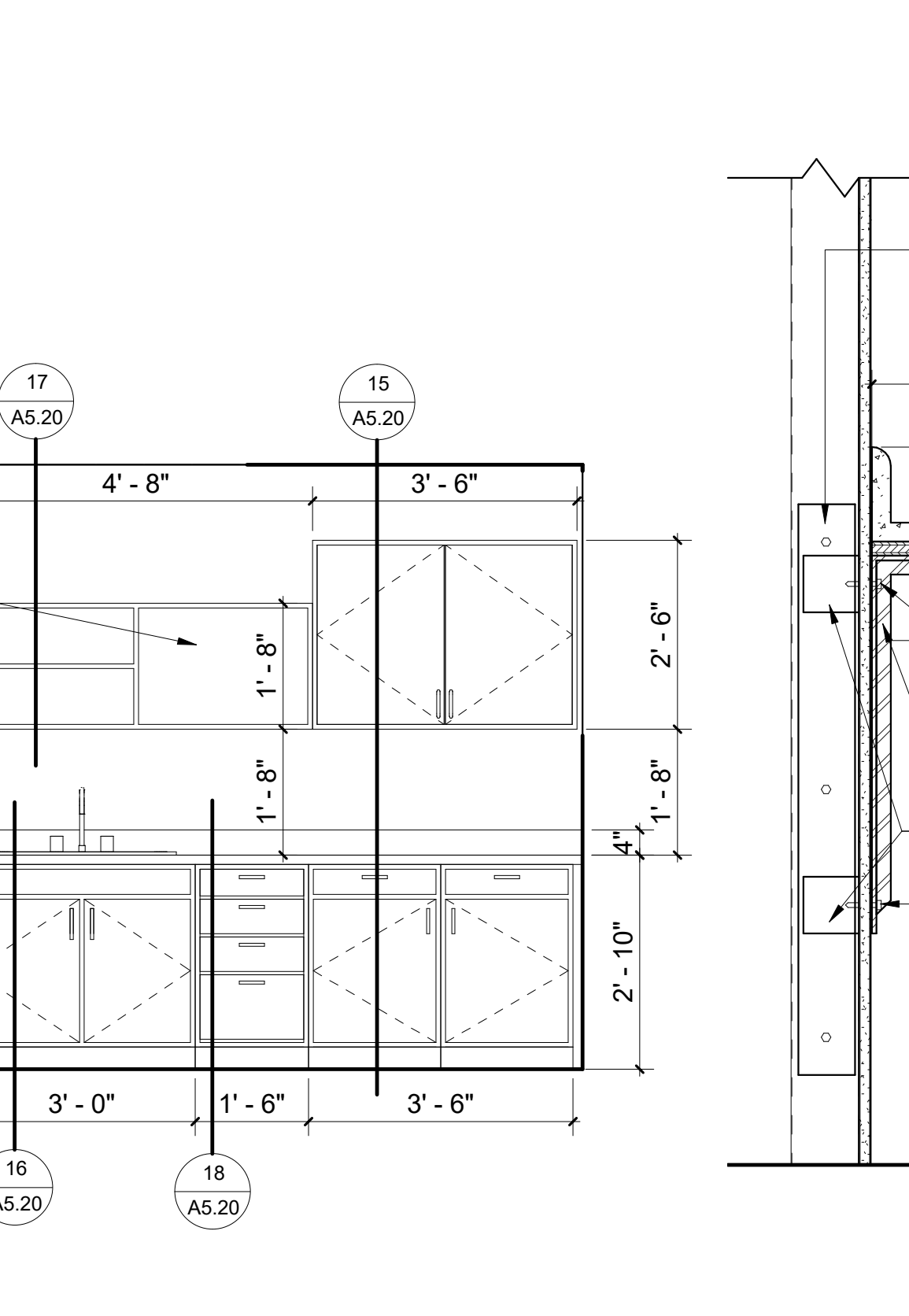
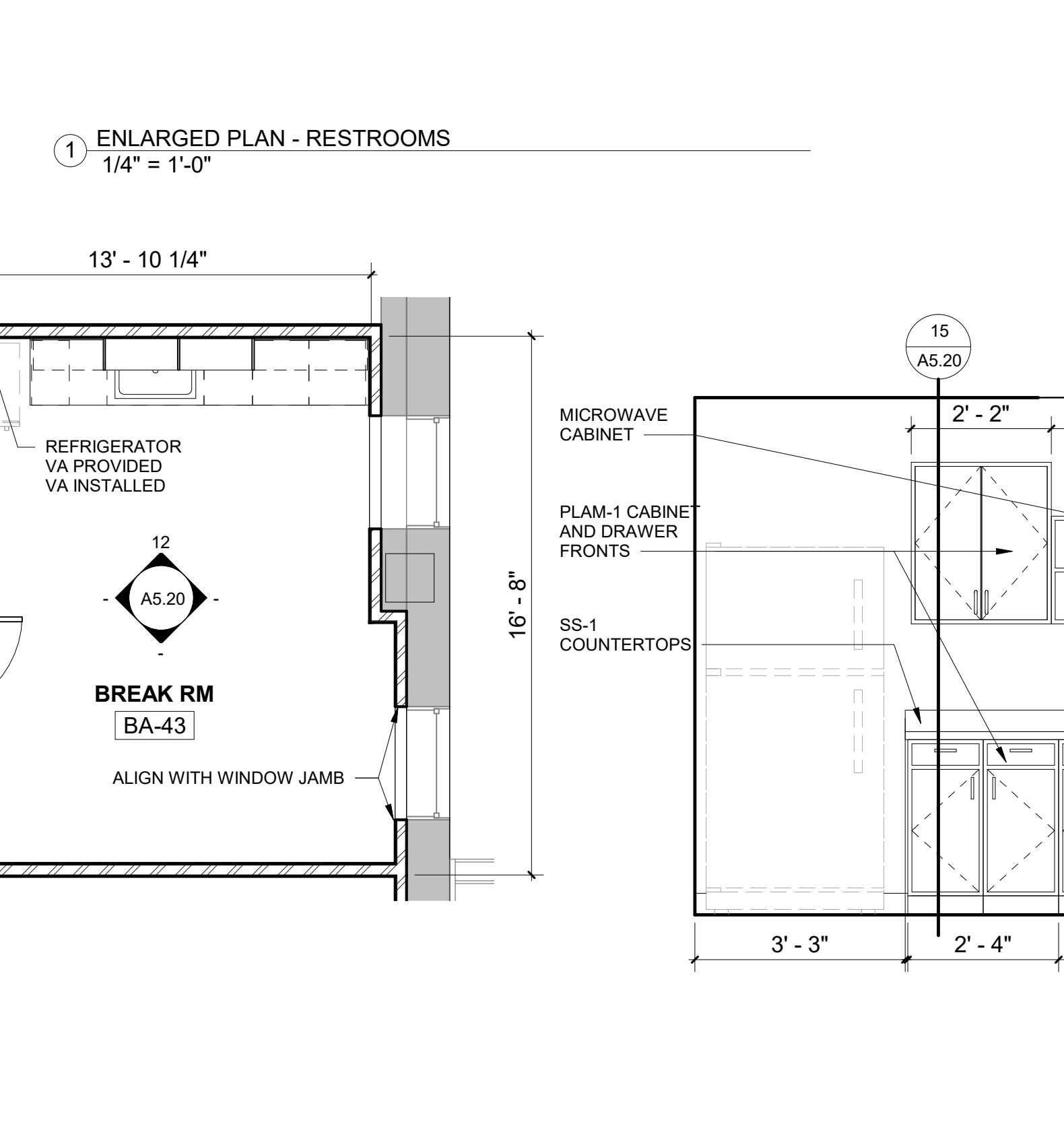
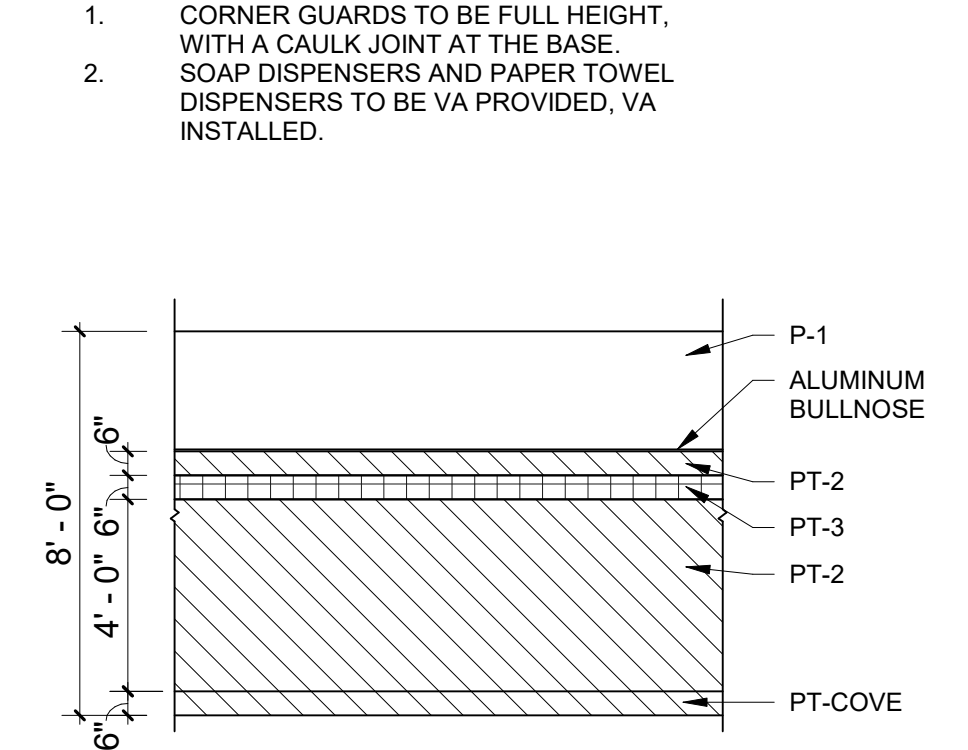
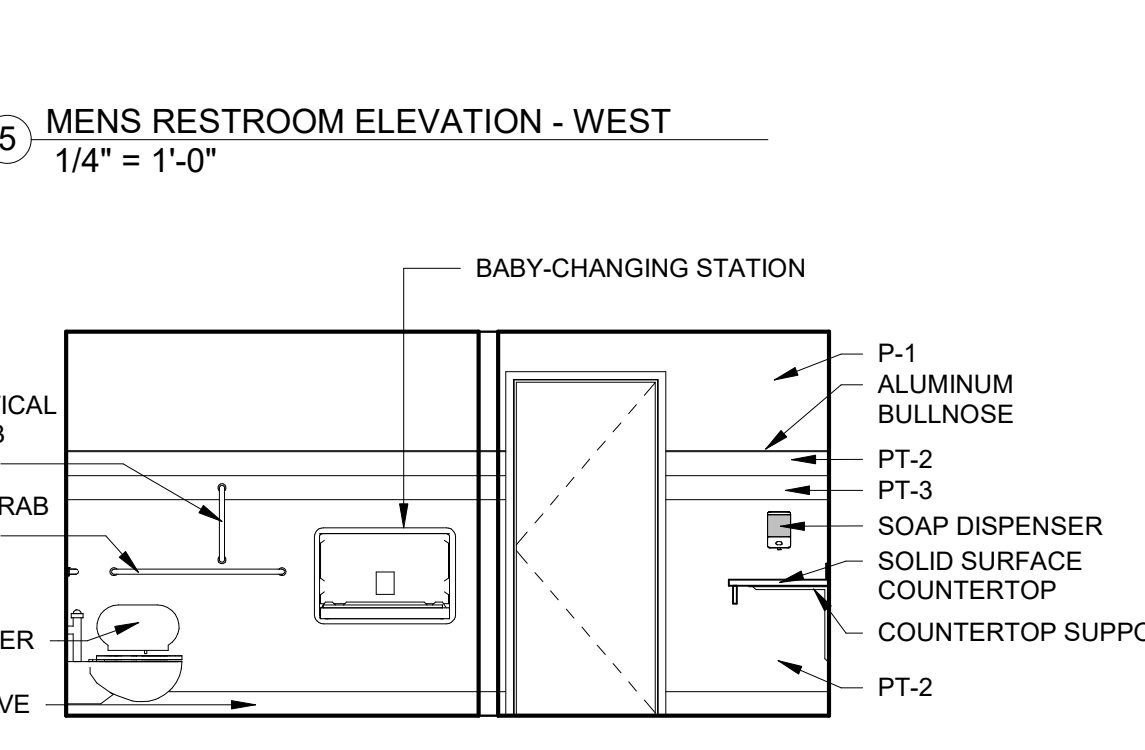
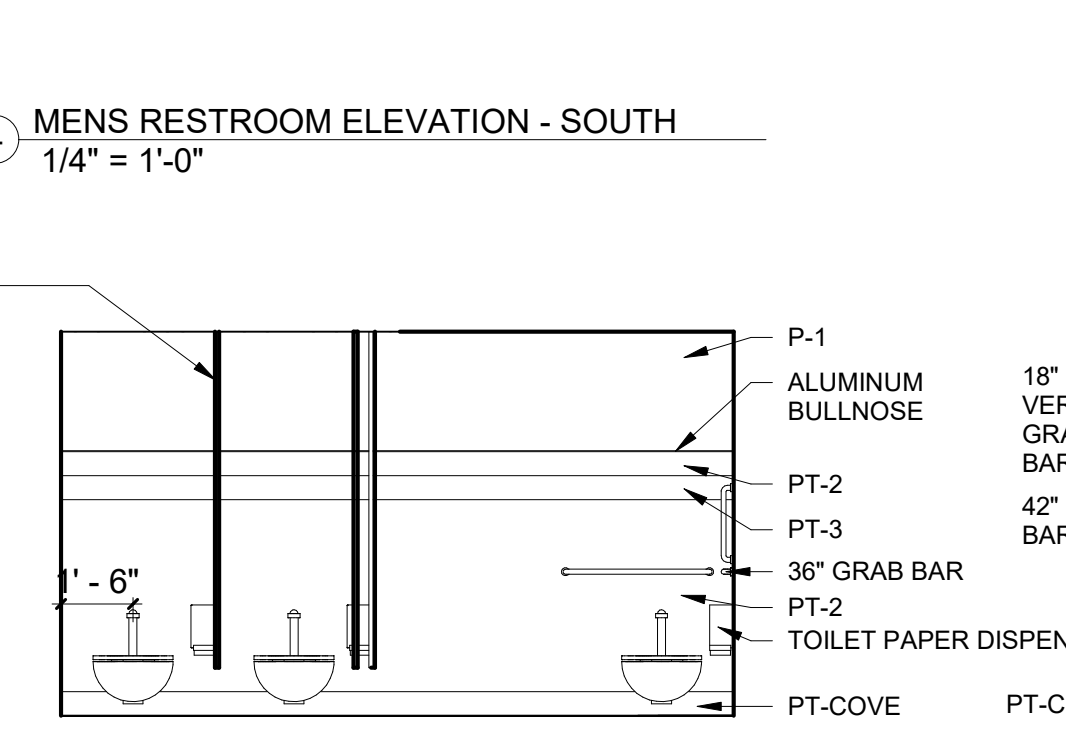
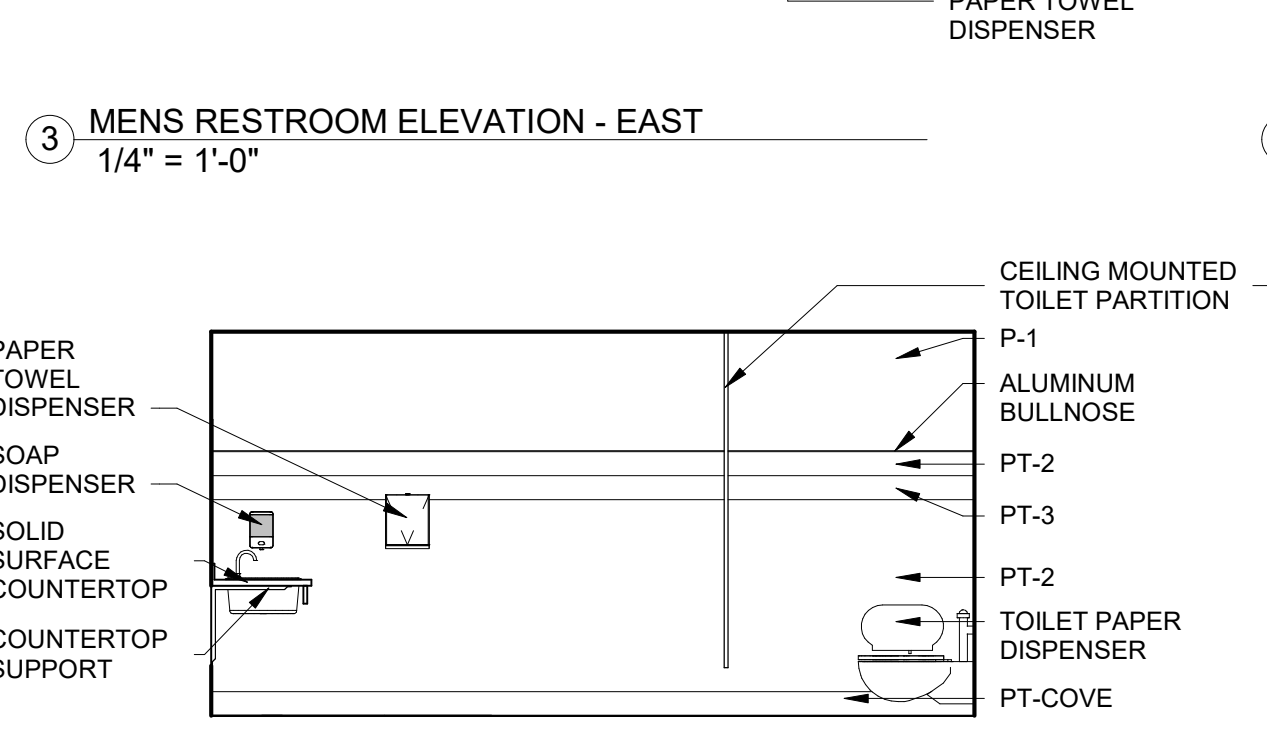
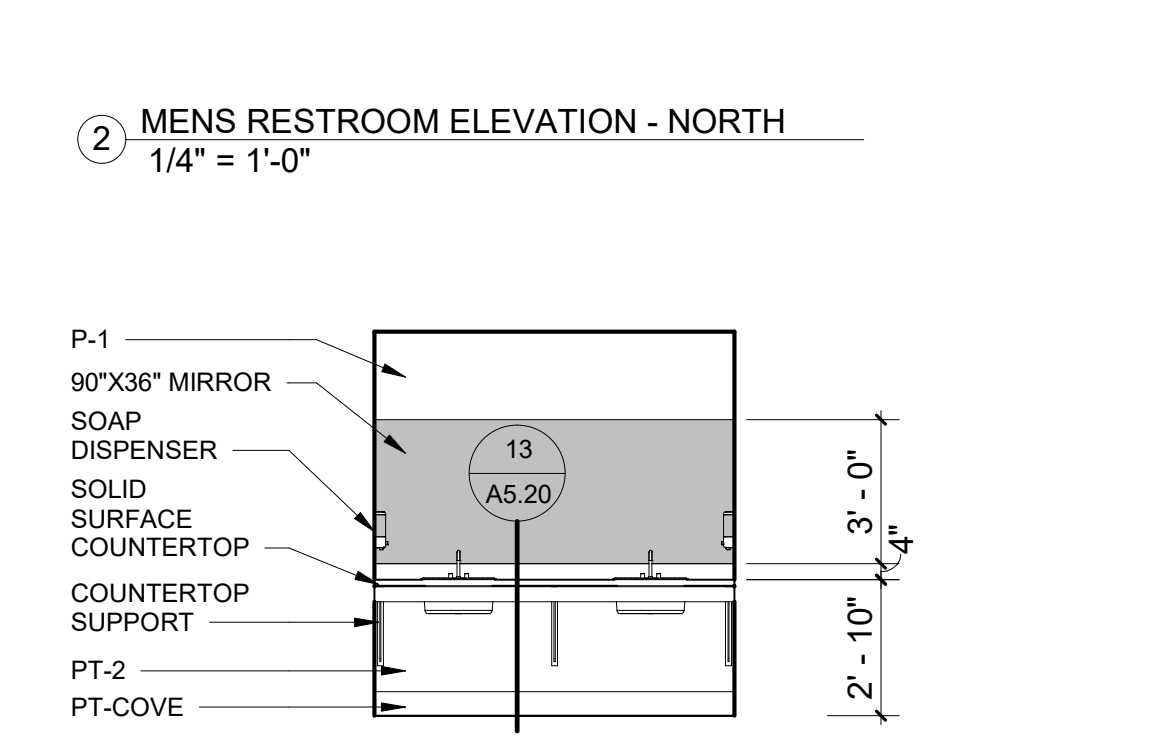
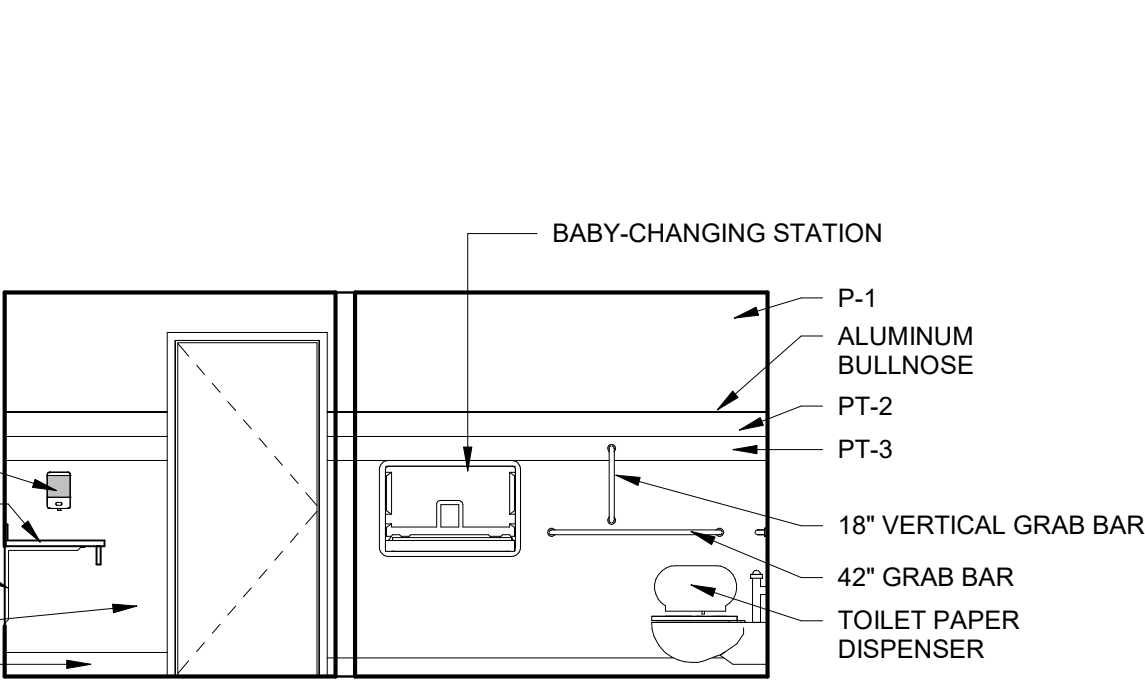
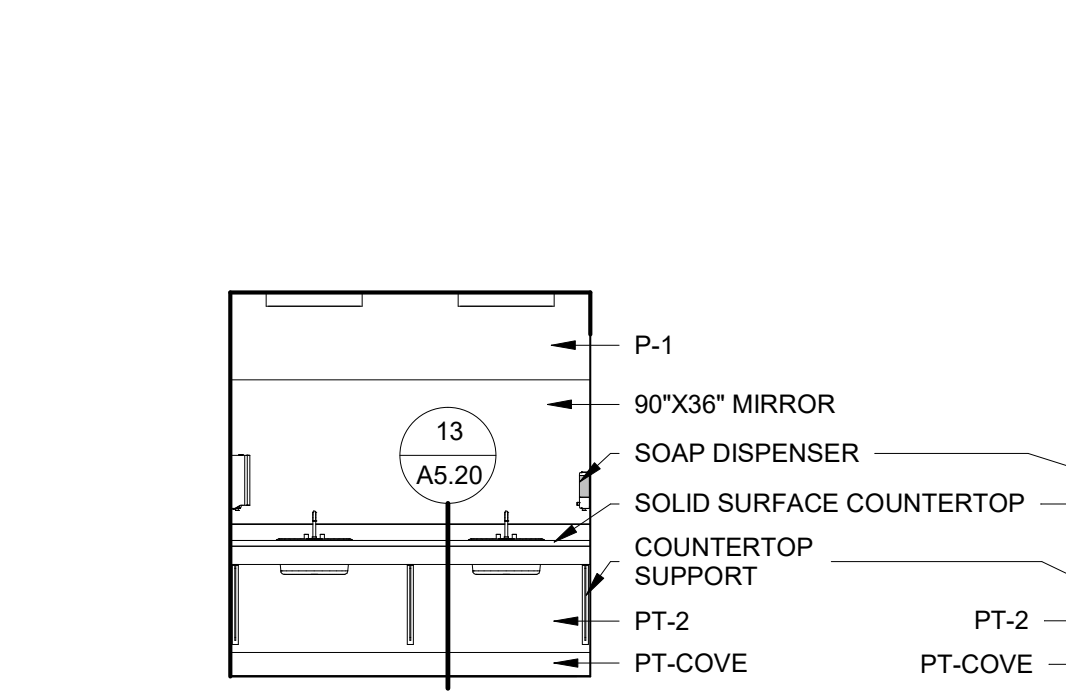
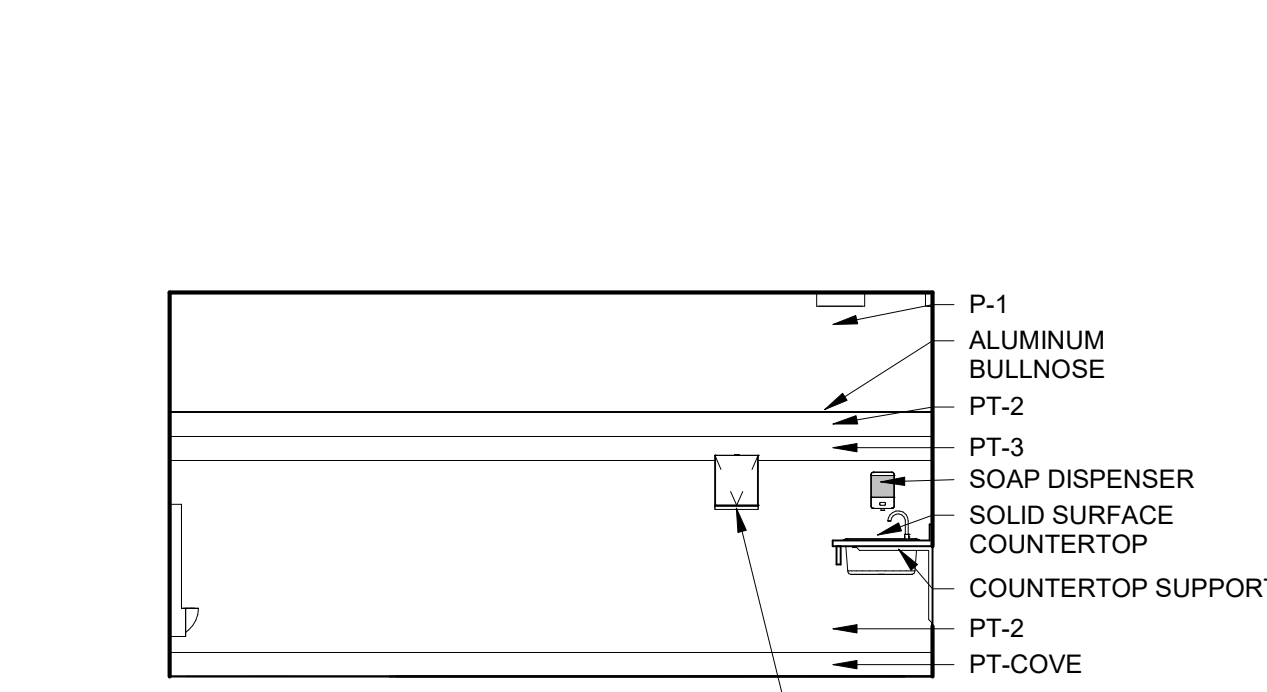
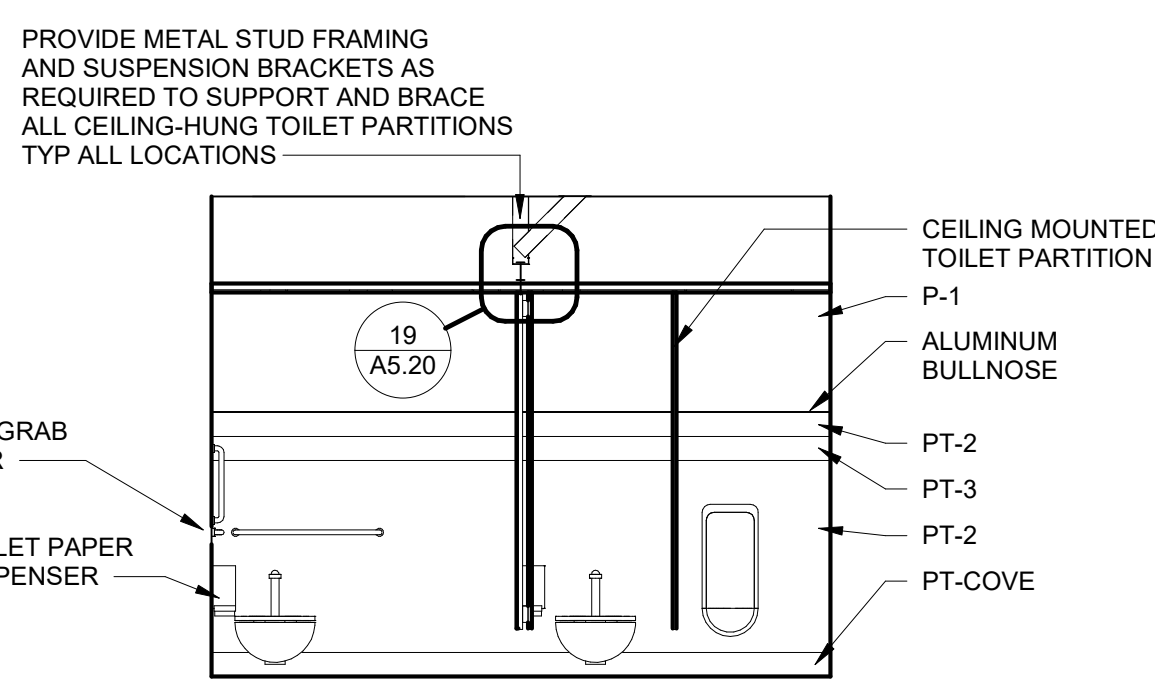
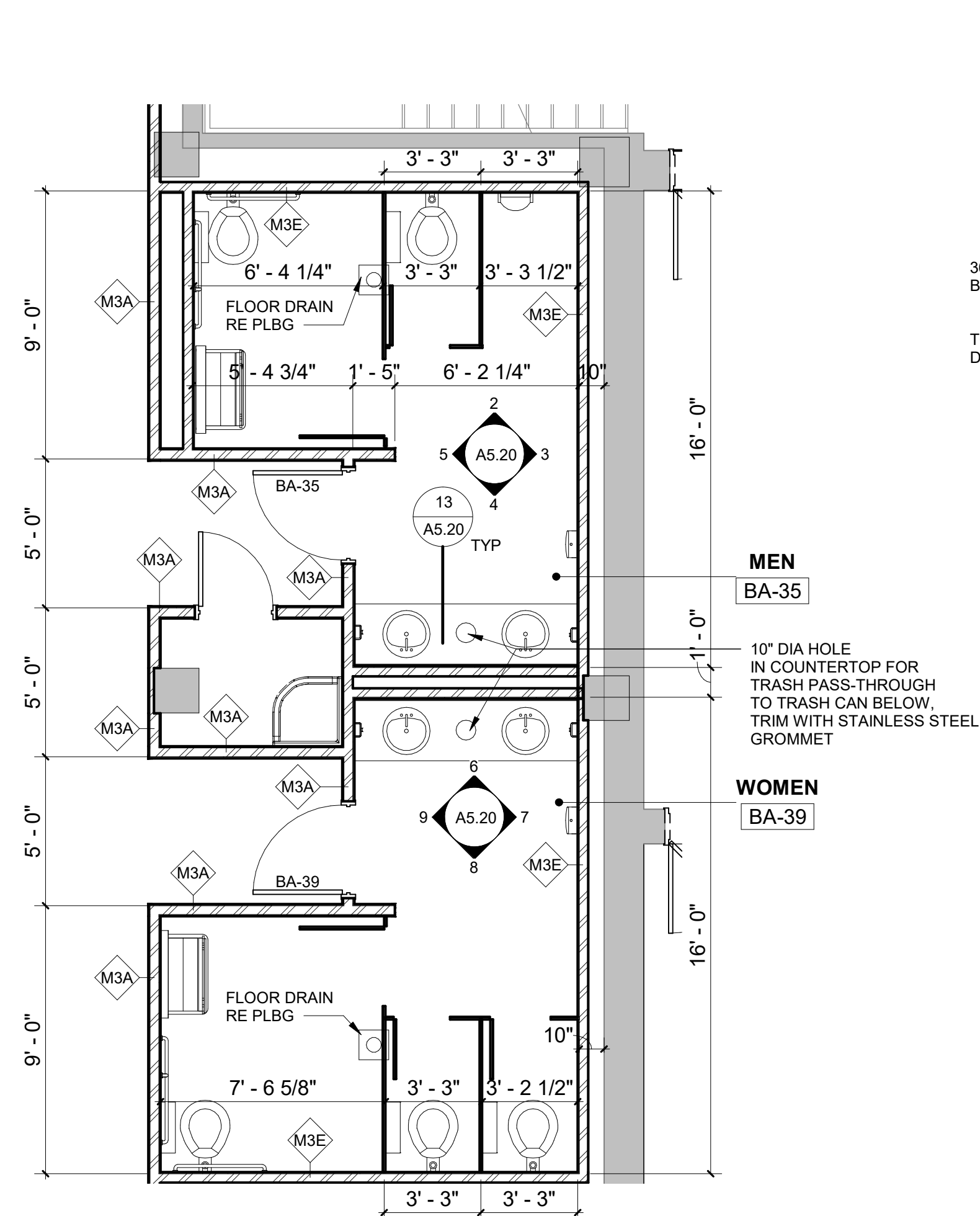
Office of Construction and Facilities Management
 Department of Veterans Affairs

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6. EXISTING WALL SHADED FOR CLARITY.

SHEET SPECIFIC NOTES:

1. CORNER GUARDS TO BE FULL HEIGHT, WITH A CAULK JOINT AT THE BASE.
2. SOAP DISPENSERS AND PAPER TOWEL DISPENSERS TO BE VA PROVIDED, VA INSTALLED.



TOILET ACCESSORY SCHEDULE

A	42" Grab bar
B	18" Grab bar
C	Toilet paper dispenser
D	36" Grab bar

100% CONSTRUCTION DRAWINGS

<p>Revisions: _____ Date _____</p>		<p>CONSULTANTS:</p>		<p>ARCHITECT</p> <p>FOURFRONT DESIGN INC.</p> <p>517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701 PH: (605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM</p>		<p>Drawing Title</p> <p>ENLARGED PLANS AND INTERIOR ELEVATIONS</p>		<p>Project Title</p> <p>EHRM TRAINING AND ADMIN SPACE SUPPORT</p>		<p>Project Number</p> <p>437-21-225</p>		<p>Office of Construction and Facilities Management</p>	
						<p>FULLY SPRINKLED</p>		<p>Location</p> <p>FARGO, ND</p>		<p>Building Number</p> <p>9</p>		<p>Department of Veterans Affairs</p>	
								<p>Date</p> <p>01/11/2022</p>		<p>Checked</p> <p>JL</p>		<p>Drawn</p> <p>MD</p>	
										<p>Drawing Number</p> <p>A5.20</p>		<p>Dwg. 14 of 41</p>	

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30X42. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VISIT THE PROJECT AND VERIFY EXISTING CONDITIONS/DIMENSIONS AND PROPOSED CONDITIONS. COORDINATE DEMOLITION BETWEEN ALL TRADES. NOTIFY A/E IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES.
2. WALL PARTITIONS EXTEND TO THE UNDERSIDE OF DECK. SEE ENLARGED AREA PLANS FOR WALL TYPE INDICATIONS AND DIMENSIONS.
3. SEE CODE PLAN FOR CODE INFORMATION.
4. SEE DIMENSION PLAN FOR DIMENSIONS AND WALL TYPES.
5. EXISTING DOORS SHOW AT 45 DEGREE ANGLE FOR CLARITY WITH THE EXCEPTION OF TOILET PARTITIONS.
6. EXISTING WALL SHADED FOR CLARITY.

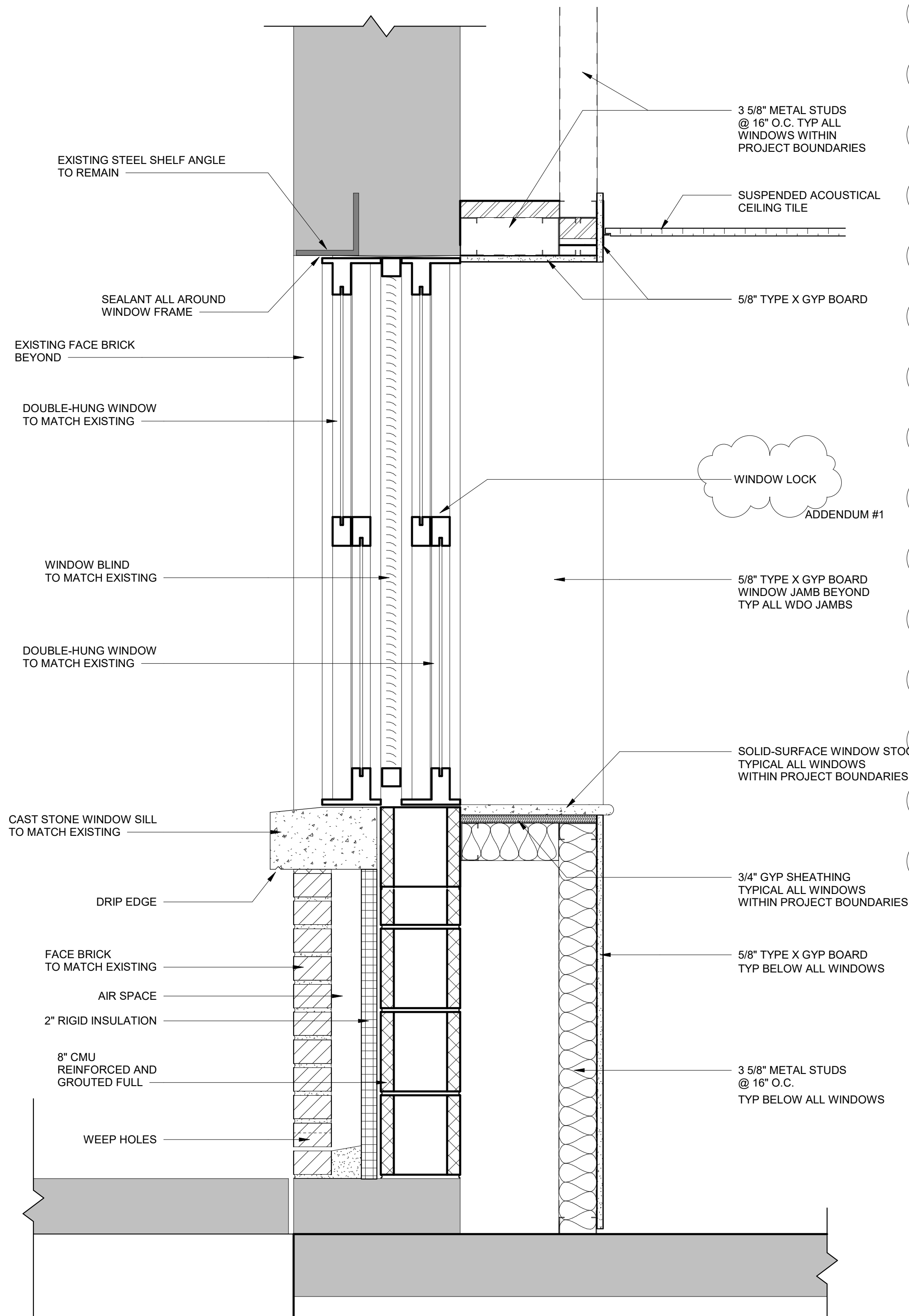
DOOR LEGEND:

- HM HOLLOW METAL
- HM-F HOLLOW METAL - FLUSH FULL
- WD-F WOOD - FLUSH FULL
- EXIST EXISTING TO REMAIN

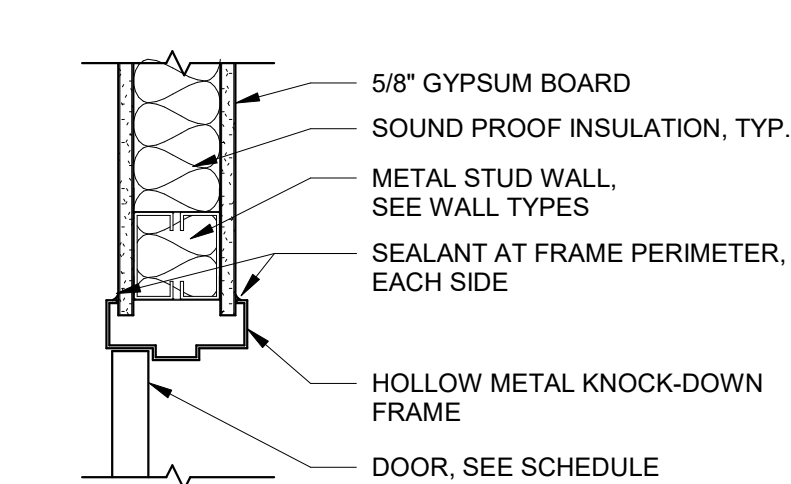
DOOR SCHEDULE

DOOR NUMBER	ROOM NAME	FIRE RATING	WIDTH	HEIGHT	PANEL TYPE	FRAME TYPE	GLAZING TYPE	HARDWARE GROUP	COMMENTS	HEAD	JAMB	SILL
BA-9A	ELEVATOR LOBBY	1.5 HR	3' - 0"	7' - 0"	HM-F	EXIST	90 MIN FIRE-RATED	2	ADD 34"W x 36"H, 16GA STAINLESS STEEL KICK PLATE TO EACH SIDE OF DOOR PANEL BASE			
BA-9B	STAIR	1.5 HR	3' - 0"	7' - 0"	HM-F	EXIST	90 MIN FIRE-RATED	2	ADD 34"W x 36"H, 16GA STAINLESS STEEL KICK PLATE TO EACH SIDE OF DOOR PANEL BASE			
BA-9C	STAIR	1.5 HR	3' - 0"	7' - 0"	HM-F	EXIST	90 MIN FIRE-RATED	2	ADD 34"W x 12"H, CLEAR ACRYLIC KICK PLATE TO EACH SIDE OF DOOR PANEL BASE			
BA-10A	STAIR	1.5 HR	3' - 0"	7' - 0"	HM-F	EXIST	90 MIN FIRE-RATED	2	ADD 34"W x 12"H, CLEAR ACRYLIC KICK PLATE TO EACH SIDE OF DOOR PANEL BASE			
BA-10B	STAIR	1.5 HR	3' - 0"	7' - 0"	HM-F	EXIST	90 MIN FIRE-RATED	2	ADD 34"W x 36"H, 16GA STAINLESS STEEL KICK PLATE TO EACH SIDE OF DOOR PANEL BASE			
BA-10C	CORRIDOR	-	2' - 6"	7' - 0"	WD-F	HM-001		4	ADD 34"W x 12"H, CLEAR ACRYLIC KICK PLATE TO EACH SIDE OF DOOR PANEL BASE	3/A6.00	5/A6.00	
BA-13	STAIR	1.5 HR	3' - 0"	7' - 0"	HM-F	EXIST	90 MIN FIRE-RATED	2	ADD 34"W x 36"H, 16GA STAINLESS STEEL KICK PLATE TO EACH SIDE OF DOOR PANEL BASE	4/A6.00	6/A6.00	
BA-30	OI&T	3/4 HR	3' - 0"	7' - 6"	WD-F	HM-001		3		3/A6.00	5/A6.00	
BA-35	MEN	-	3' - 0"	7' - 0"	WD-F	HM-001		16	ADD 34"W x 12"H, CLEAR ACRYLIC KICK PLATE TO EACH SIDE OF DOOR PANEL BASE. UNDERCUT DOOR 1 INCH.	3/A6.00	5/A6.00	
BA-37	JANITOR	-	2' - 6"	7' - 0"	HM-F	HM-001		4	ADD 28"W x 12"H, CLEAR ACRYLIC KICK PLATE TO EACH SIDE OF DOOR PANEL BASE	3/A6.00	5/A6.00	
BA-39	WOMEN	-	3' - 0"	7' - 0"	WD-F	HM-001		16	ADD 34"W x 36"H, 16GA STAINLESS STEEL KICK PLATE TO EACH SIDE OF DOOR PANEL BASE. UNDERCUT DOOR 1 INCH.	3/A6.00	5/A6.00	
BA-41	MECH	-	3' - 0"	7' - 0"	HM-F	HM-001		5	ADD 34"W x 36"H, 16GA STAINLESS STEEL KICK PLATE TO EACH SIDE OF DOOR PANEL BASE	3/A6.00	5/A6.00	
BA-42A	OPEN OFFICE	-	3' - 0"	7' - 0"	WD-F	HM-001		12		3/A6.00	5/A6.00	
BA-42B	OPEN OFFICE	-	3' - 0"	7' - 0"	WD-F	HM-001		12		3/A6.00	5/A6.00	
BA-43	BREAK RM	-	3' - 0"	7' - 0"	WD-F	HM-001		15		3/A6.00	5/A6.00	
BA-44	CORRIDOR	-	4' - 0"	7' - 0"	HM-F	HM-001		7	ADD 46"W x 12"H, CLEAR ACRYLIC KICK PLATE TO EACH SIDE OF DOOR PANEL BASE	3/A6.00	5/A6.00	
BA-45	OFFICE	-	3' - 0"	7' - 0"	WD-F	HM-001		11		3/A6.00	5/A6.00	
BA-50	ELEVATOR LOBBY	-	2' - 6"	7' - 0"	WD-F	HM-001		4		3/A6.00	5/A6.00	
BA-52	CORRIDOR	1.5 HR	6' - 0"	7' - 0"	HM-F	HM-001		1	ADD 34"W x 12"H, CLEAR ACRYLIC KICK PLATE TO EACH SIDE OF DOOR PANEL BASE	4/A6.00	6/A6.00	
BA-65	OPEN OFFICE	-	3' - 0"	7' - 0"	WD-F	HM-001		13		3/A6.00	5/A6.00	
BA-67	MECH	-	3' - 0"	7' - 0"	HM-F	EXIST		6	ADD 34"W x 12"H, CLEAR ACRYLIC KICK PLATE TO EACH SIDE OF DOOR PANEL BASE	3/A6.00	5/A6.00	
BA-69A	CONF ROOM	-	3' - 0"	7' - 0"	WD-F	HM-001		8		3/A6.00	5/A6.00	
BA-69B	OPEN OFFICE	-	3' - 0"	7' - 0"	WD-F	HM-001		9		3/A6.00	5/A6.00	
BA-70A	OPEN OFFICE	-	6' - 0"	7' - 0"	WD-F	HM-001		10		3/A6.00	5/A6.00	
BA-70B	OPEN OFFICE	-	4' - 0"	7' - 0"	HM-F	HM-001		14		3/A6.00	5/A6.00	
BA-72	MECH	-	3' - 0"	7' - 0"	HM-F	EXIST		6	ADD 34"W x 36"H, 16GA STAINLESS STEEL KICK PLATE TO EACH SIDE OF DOOR PANEL BASE	3/A6.00	5/A6.00	

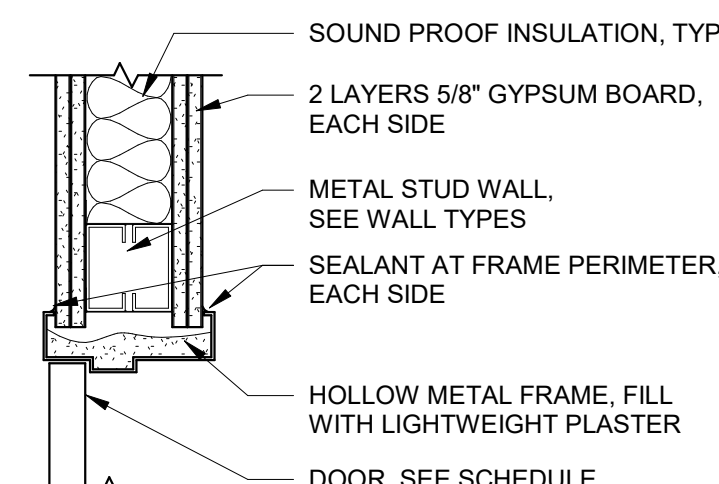
ADDENDUM #1



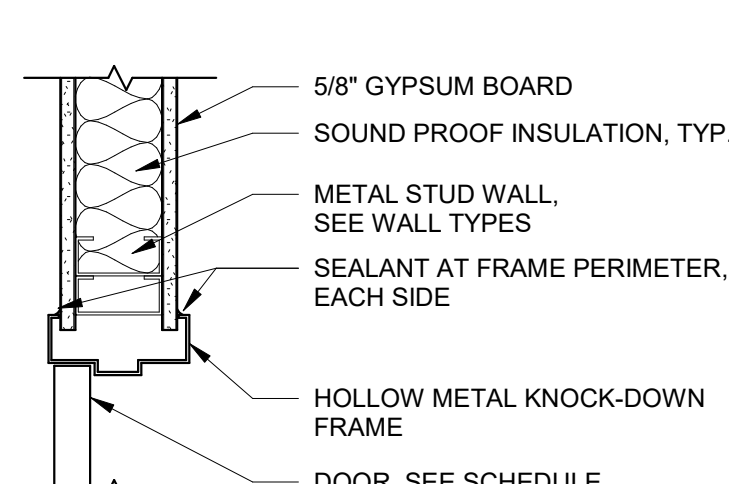
1 NEW WINDOW SECTION
1 1/2" = 1'-0"



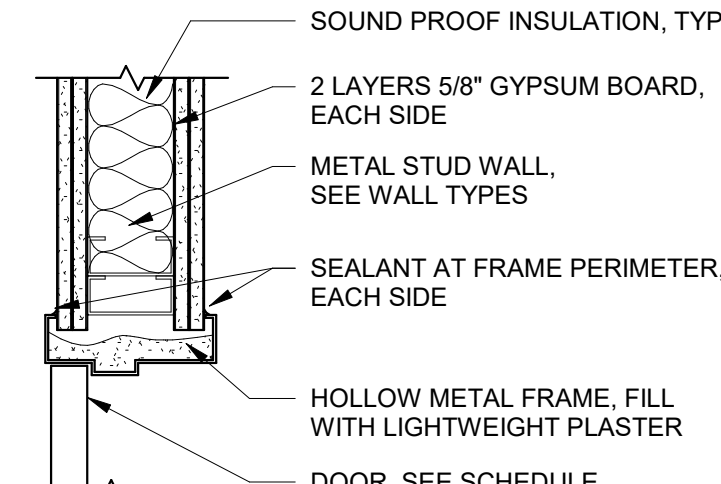
3 DOOR HEAD DETAIL, TYPICAL
1 1/2" = 1'-0"



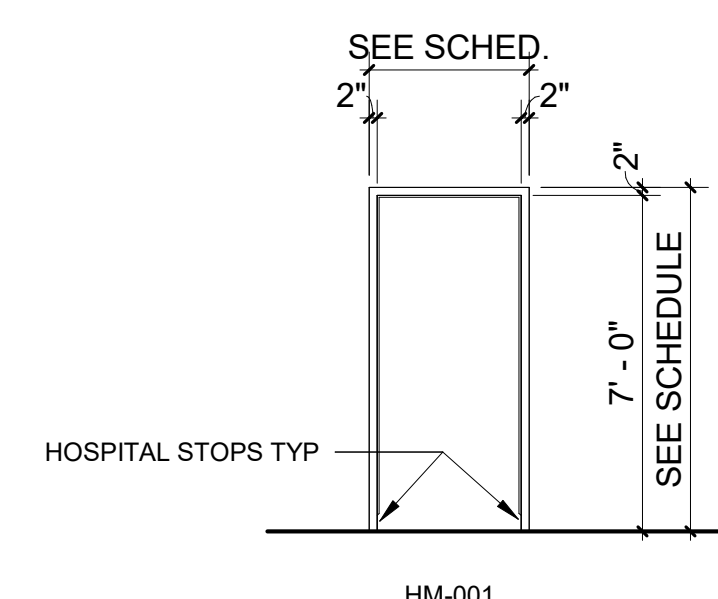
4 DOOR HEAD @ 2 HR RATED WALL
1 1/2" = 1'-0"



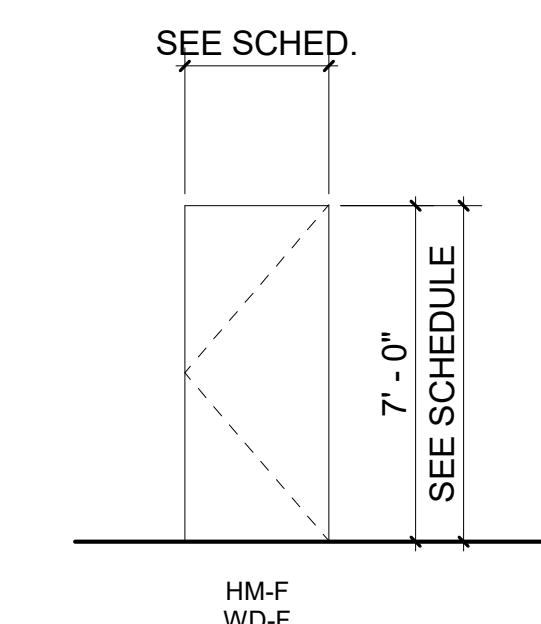
5 DOOR JAMB DETAIL, TYPICAL
1 1/2" = 1'-0"



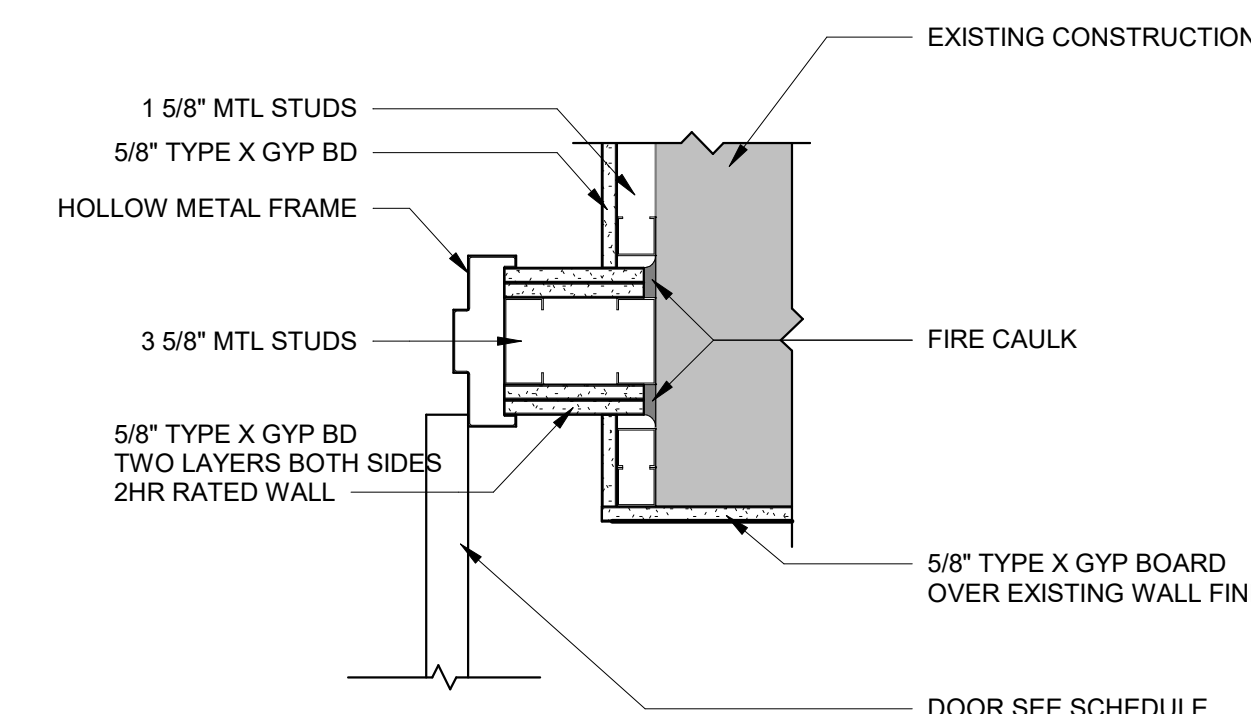
6 DOOR JAMB @ 2 HR RATED WALL
1 1/2" = 1'-0"



DOOR FRAME ELEVATIONS
1/4" = 1'-0"



DOOR PANEL ELEVATIONS
1/4" = 1'-0"



7 2HR WALL AT SOUTH DOOR
1 1/2" = 1'-0"

2 NEW WINDOW ELEVATION
3/4" = 1'-0"

100% CONSTRUCTION DRAWINGS

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Drawing Title
DOOR SCHEDULE, ELEVATIONS AND
DETAILS

FULLY SPRINKLED

Project Title
EHRM TRAINING AND ADMIN
SPACE SUPPORT

Location
FARGO, ND

Date
01/11/2022

Checked
JL

Drawn
TC

Project Number
437-21-225

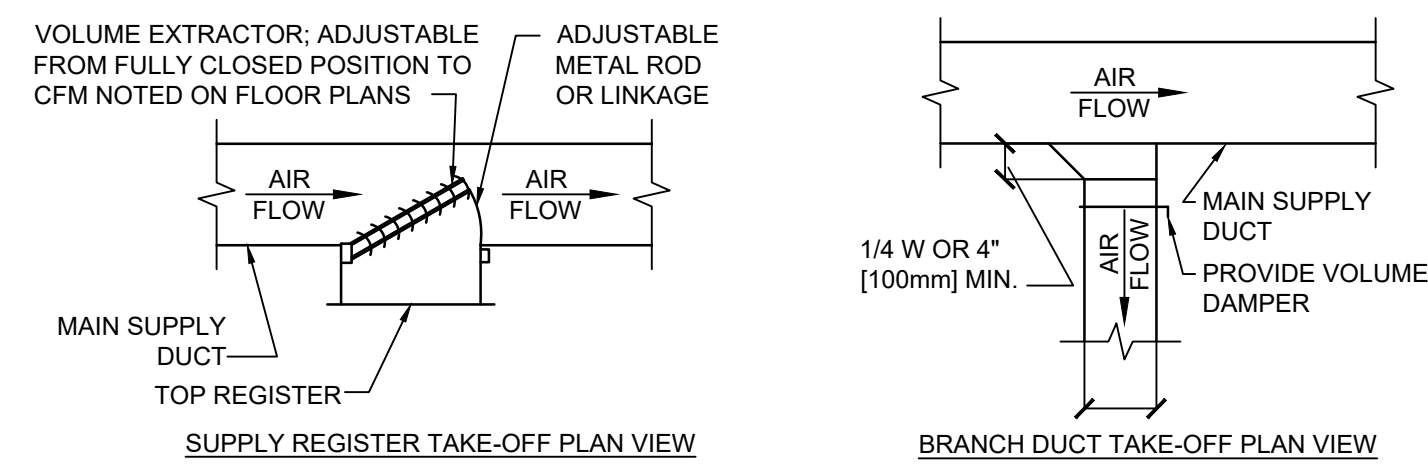
Building Number
9

Drawing Number
A6.00

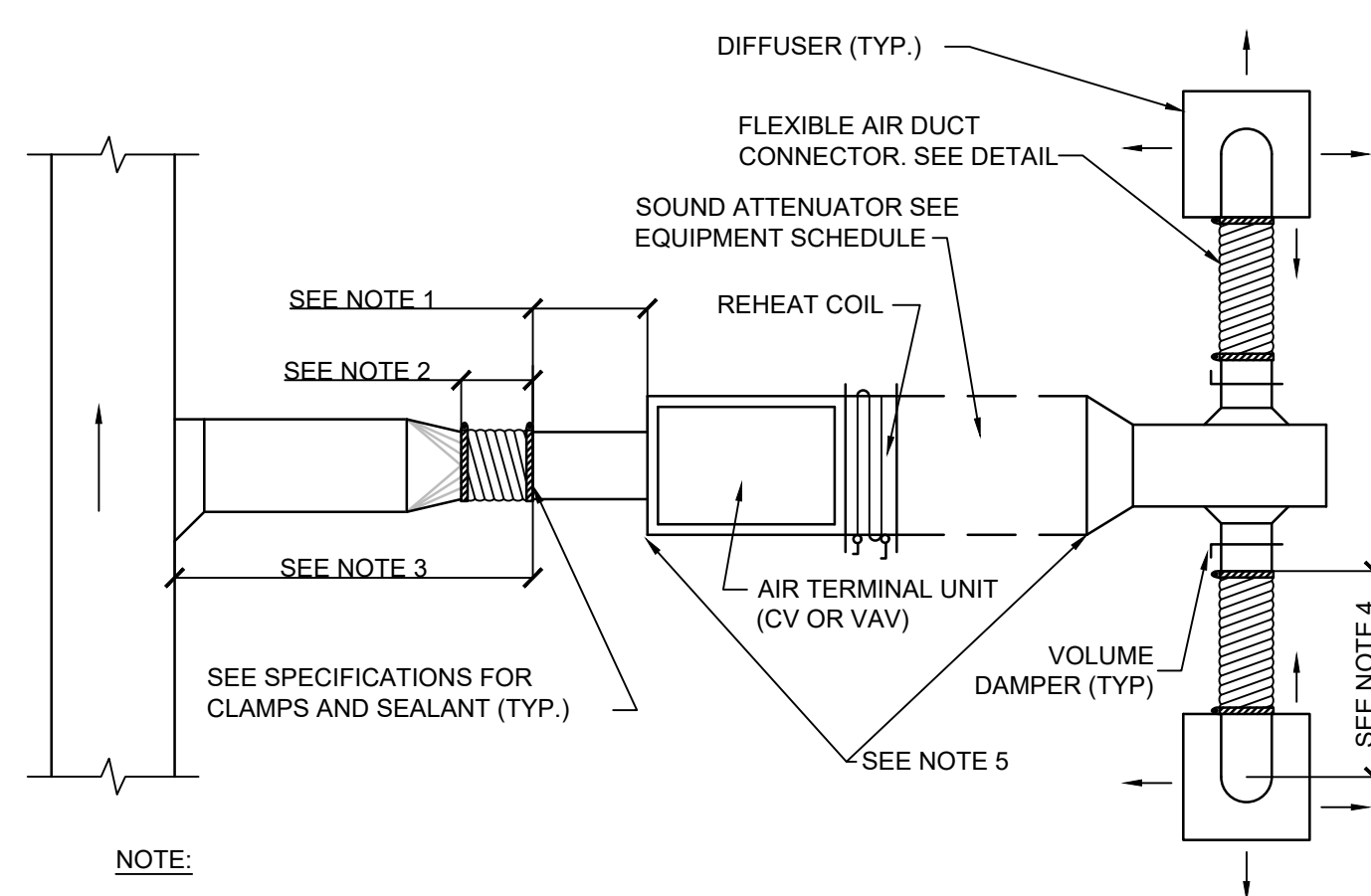
Dwg. 16 of 41

Office of
Construction
and Facilities
Management

Department of
Veterans Affairs



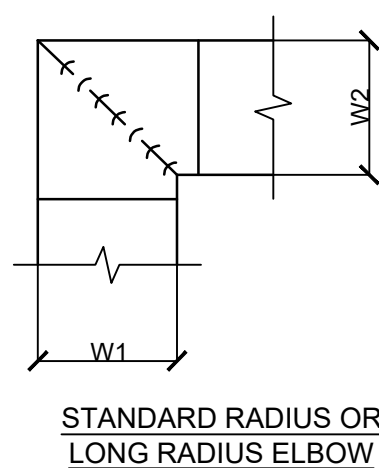
11 SUPPLY DUCT TAKEOFF DETAILS
SCALE: NTS



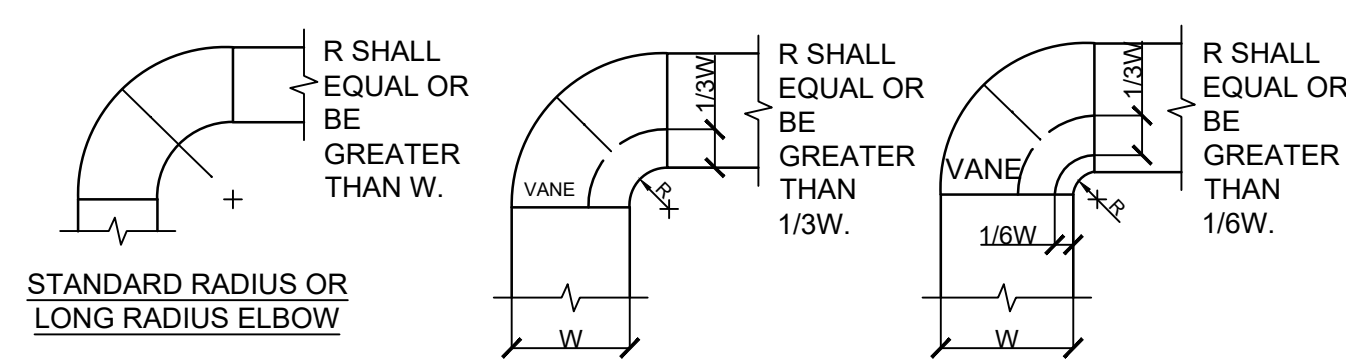
NOTE:

- RIGID STRAIGHT TERMINAL UNIT INLET LENGTH SHALL BE A MINIMUM OF 3 TIMES THE DIAMETER OF INLET.
- A FLEXIBLE AIR DUCT CONNECTOR IS NOT MANDATORY FOR INLET TO THIS BOX, BUT ALLOWED TO ACCOMMODATE MINOR OFFSETS. MAXIMUM LENGTH 3'-0" (900mm).
- A BRANCH DUCT SERVING AN INDIVIDUAL BOX MAY BE THE SAME SIZE AS THE BOX INLET, PROVIDED THE EQUIVALENT LENGTH OF THE BRANCH DUCT, AS SHOWN, DOES NOT EXCEED 10 FEET (3 METERS). FOR LONGER LENGTHS, INCREASE THE DUCT SIZE AND PROVIDE A DUCT TRANSITION TO MAINTAIN THE DUCT STATIC PRESSURE DROP AT OR BELOW 0.27/100' (1.64Pa/m).
- FLEXIBLE AIR DUCT CONNECTORS, WHEN USED FROM TERMINAL UNIT SUPPLY AIR DUCT TO DIFFUSER, SHALL NOT EXCEED 5'-0" (1500mm). USE RIGID ELBOWS FOR CHANGE OF DIRECTION GREATER THAN 45°.
- COMPONENT ARRANGEMENT MAY VARY BY MANUFACTURER. PROVIDE INSULATION W/VAPOR BARRIER FOR CONNECTING DUCT SECTIONS.

13 AIR TERMINAL UNIT DUCT CONNECTION DETAIL
SCALE: NTS



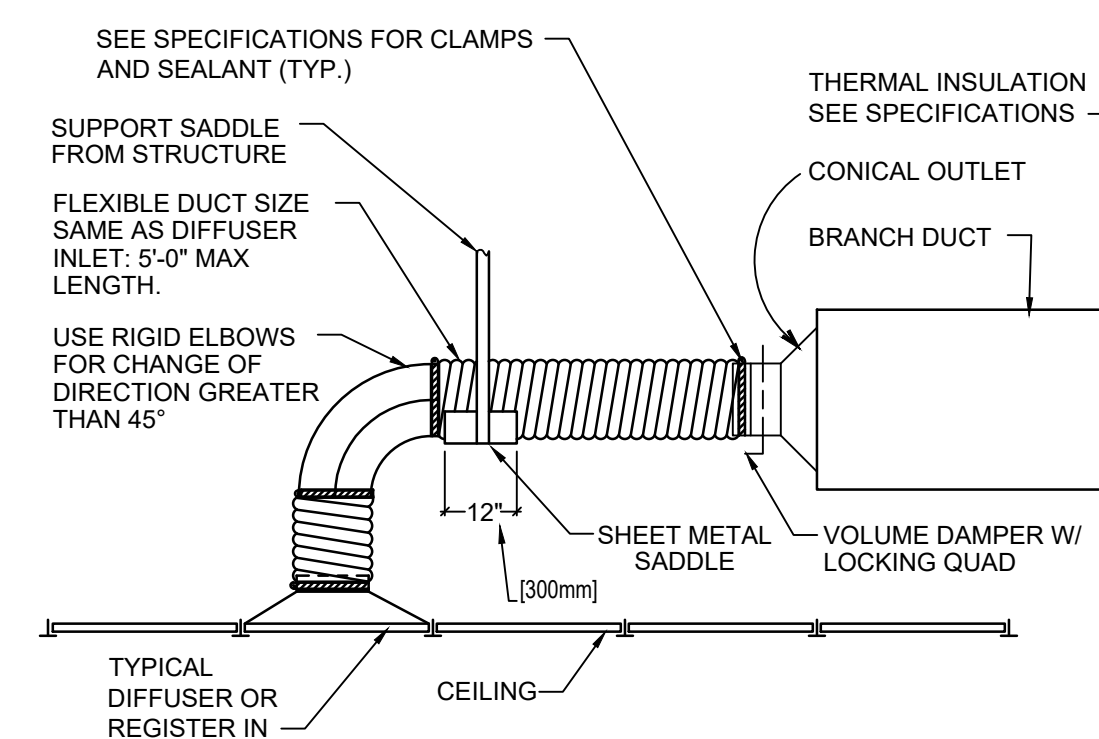
STANDARD RADIUS OR LONG RADIUS ELBOW



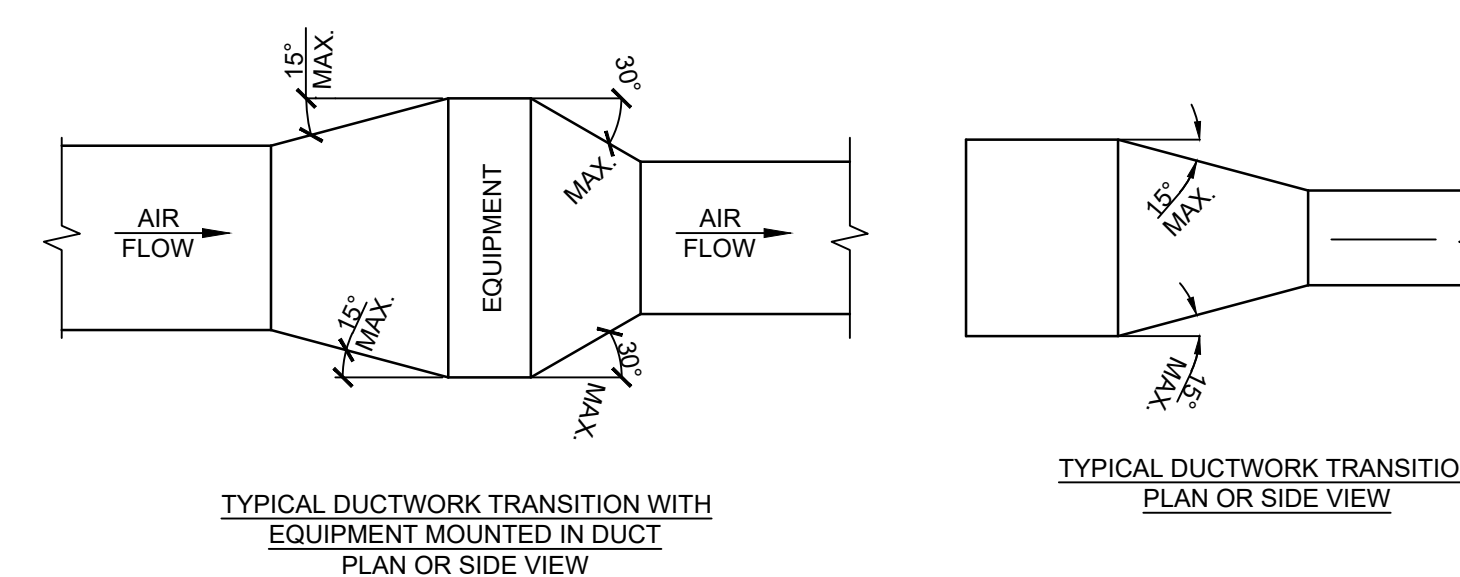
NOTE:

- THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
- ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

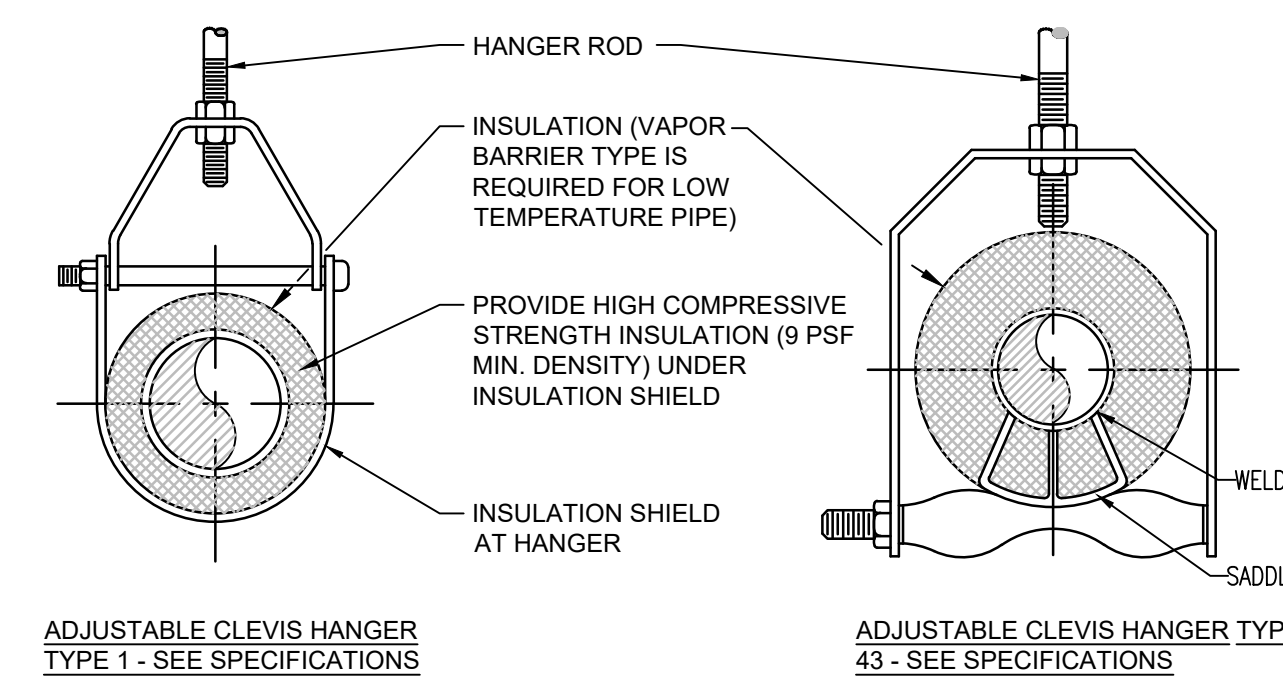
8 DUCTWORK ELBOW DETAILS
SCALE: NTS



12 FLEXIBLE AIR DUCT CONNECTOR DETAIL
SCALE: NTS

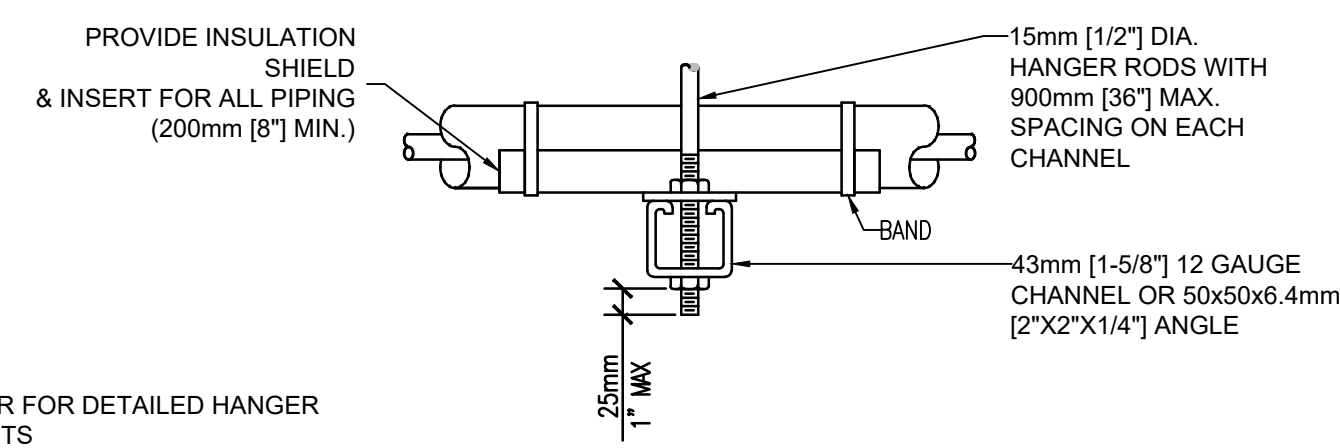


9 DUCTWORK TRANSITIONS W/ EQUIPMENT IN DUCT DETAILS
SCALE: NTS



ADJUSTABLE CLEVIS HANGER TYPE 1 - SEE SPECIFICATIONS

ADJUSTABLE CLEVIS HANGER TYPE 43 - SEE SPECIFICATIONS

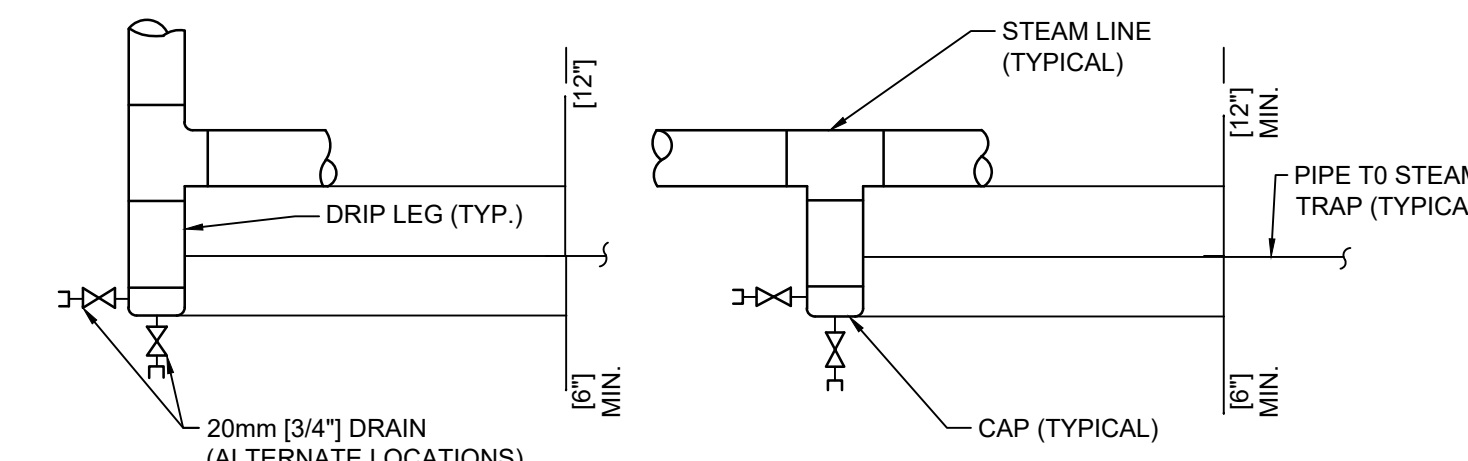


SIDE VIEW TRAPEZE HANGER FOR UP TO 453KG (1000 LB.) UNIFORM LOAD

NOM SIZE		MAXIMUM PIPE/TUBING SUPPORT SPACING																	
mm (IN)	THRU/20 (THRU/2)	25 (1)	32 (1 1/2)	40 (1 5/8)	50 (2)	65 (2 5/8)	75 (3)	100 (4)	125 (5)	150 (6)	200 (8)	250 (10)	300 (12)	350 (14)	400 (16)	450 (18)	500 (20)	600 (24)	
PIPE	mm (FT)	2100 (7)	2100 (7)	2100 (7)	2700 (9)	3000 (10)	3400 (11)	3700 (12)	4100 (14)	4600 (15)	5200 (17)	5800 (19)	6700 (22)	7000 (23)	7600 (25)	8200 (27)	8500 (28)	9100 (30)	9600 (32)
TUBING	mm (FT)	1500 (5)	1800 (6)	2100 (7)	2400 (8)	2700 (9)	3000 (10)	3700 (12)	4000 (13)	4100 (14)	4600 (16)	-	-	-	-	-	-	-	-

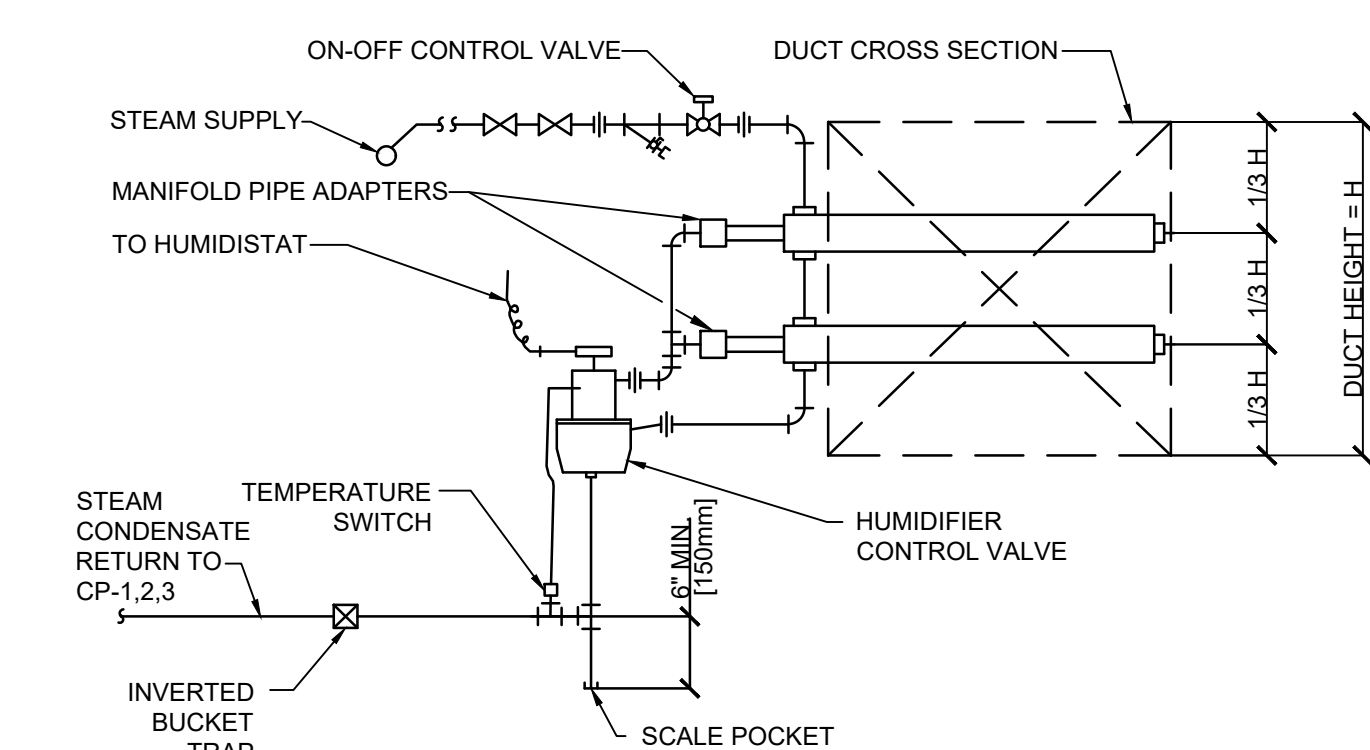
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.

1 PIPE HANGER DETAIL
SCALE: NTS



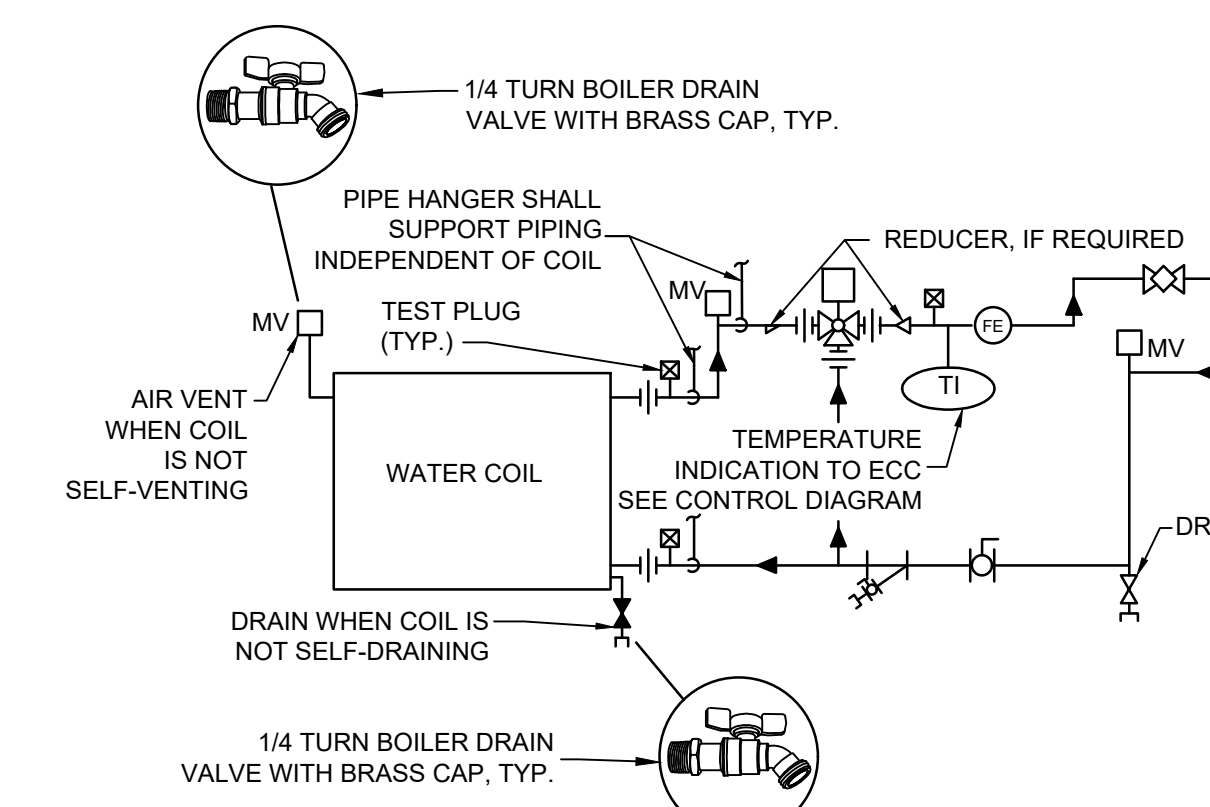
STEAM LINE DRIFT POCKET

3 STEAM TRAP ASSEMBLY DETAIL
SCALE: NTS



NOTE: SEE MANUFACTURER'S PIPING RECOMMENDATIONS FOR FINAL LAYOUT

7 STEAM HUMIDIFIER PIPING DETAIL
SCALE: NTS



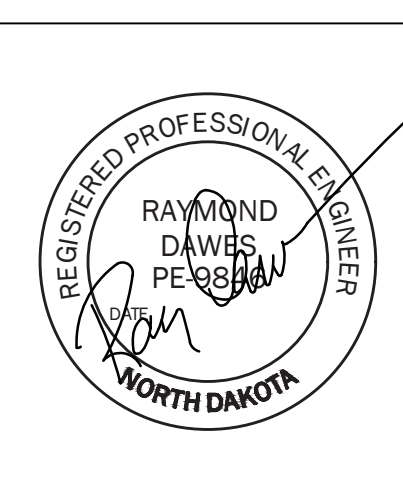
- NOTE:
- WHEN COIL IS INCLUDED IN CASING MOUNTED ON VIBRATION ISOLATORS THE FIRST 2 HANGERS FOR EACH PIPE SHALL BE SPRING & NEOPRENE TYPE. TYPE "H" FOR 100mm (4") PIPE & SMALLER. TYPE "H-P" FOR 125mm (5") PIPE & LARGER.
 - PIPING SHALL BE INSTALLED IN SUCH MANNER THAT IT WILL NOT BLOCK THE SWING OR USE OF ACCESS DOORS OR PANELS; NEITHER SHALL IT BLOCK THE SERVICING OF FILTERS, VALVES, OR EQUIPMENT.
 - THE FLOW ELEMENT MAY BE INSTALLED IN THE SUPPLY PIPING IF THE REQUIRED MINIMUM UPSTREAM AND DOWNSTREAM DIMENSIONS CANNOT BE OBTAINED IN THE RETURN PIPING.

14 AHU WATER COIL PIPING CONNECTIONS DETAIL
SCALE: NTS

100% CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:



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Drawing Title
MECHANICAL DETAILS
 BUILDING IS FULLY SPRINKLED

Project Title
FARGO EHRM TRAINING AND ADMIN

Project Number
 437-21-225

Building Number
9

Location
FARGO, ND

Date
 01/11/2022

Checked
 RD

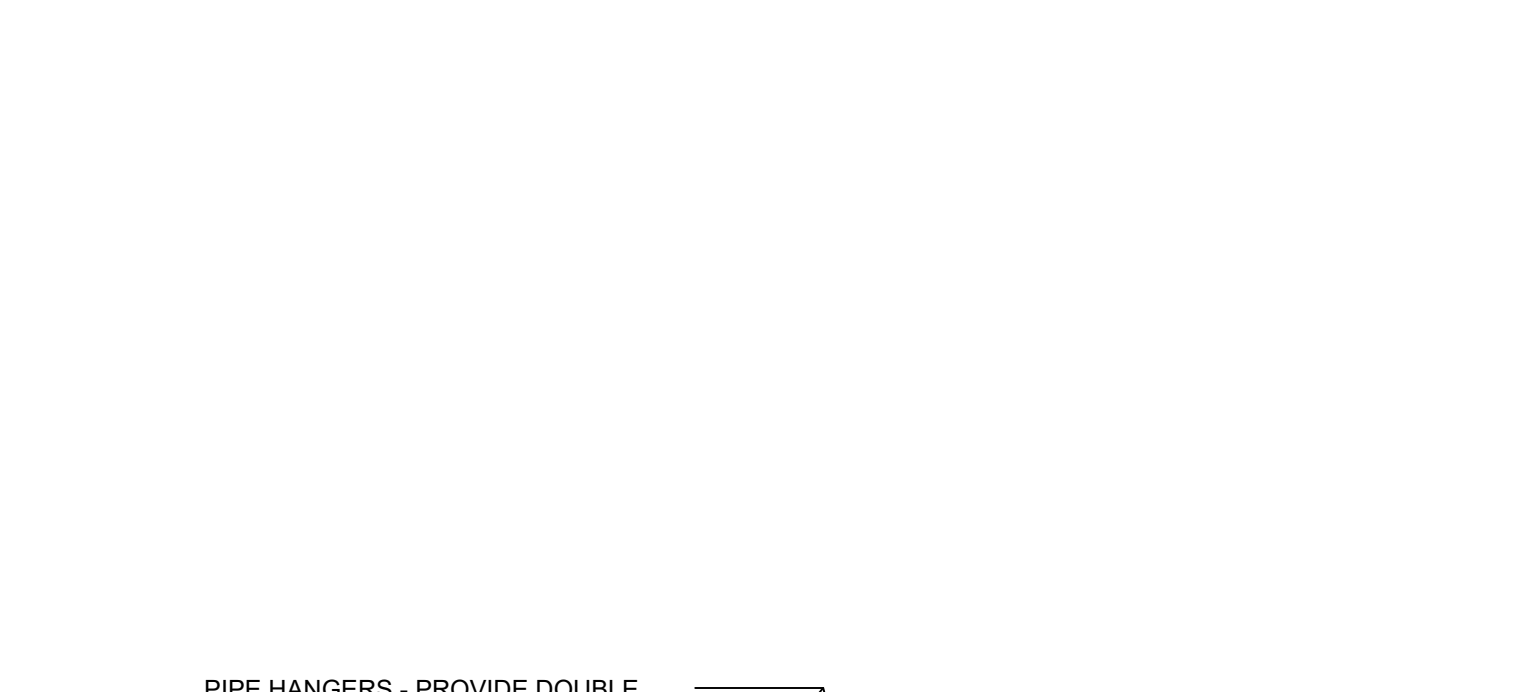
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Drawing Number
M0.01

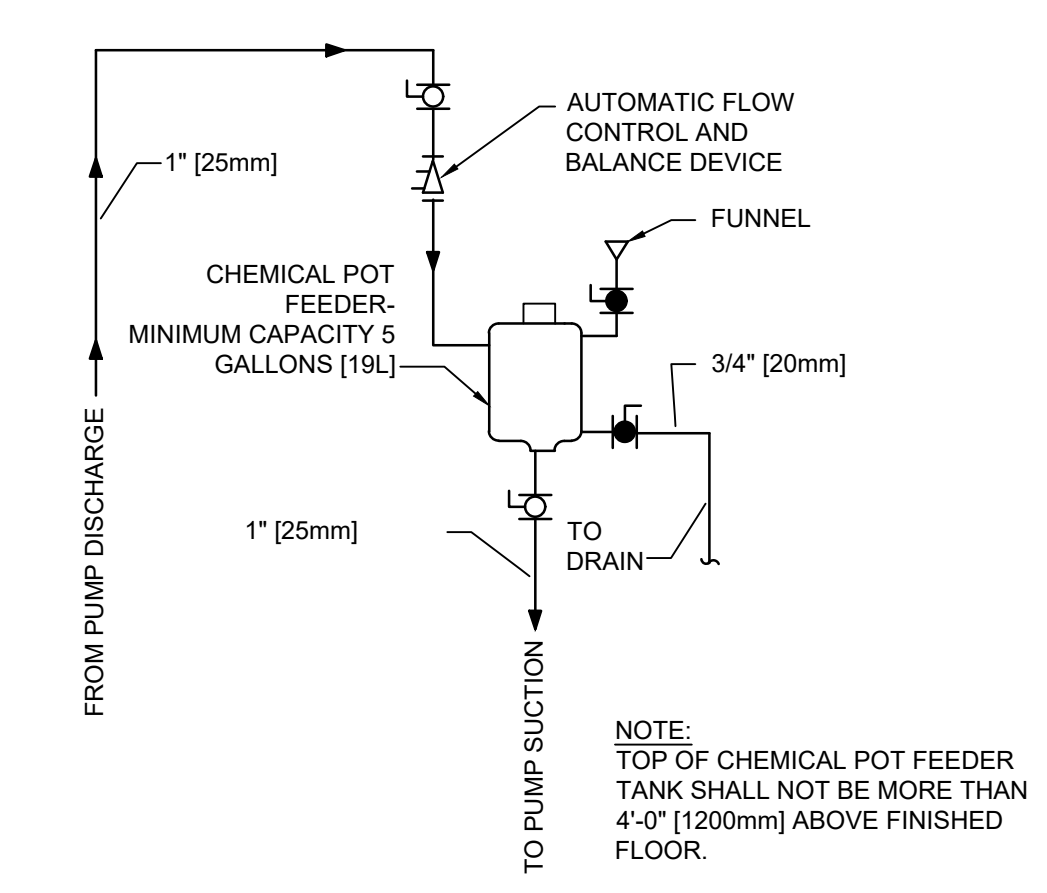
Dwg. 18 of 41

Office of Construction and Facilities Management
 Department of Veterans Affairs

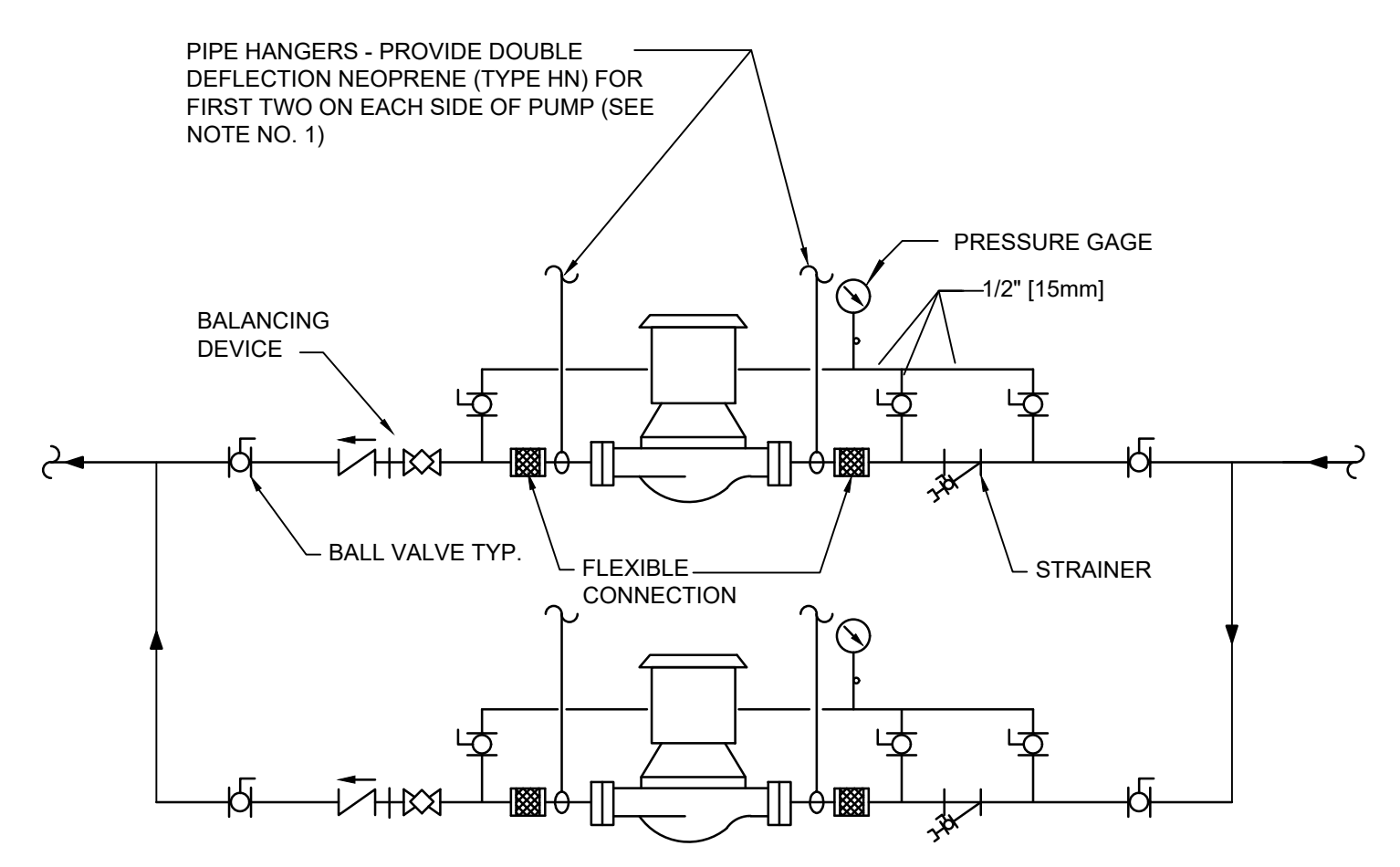
one and one half inches = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



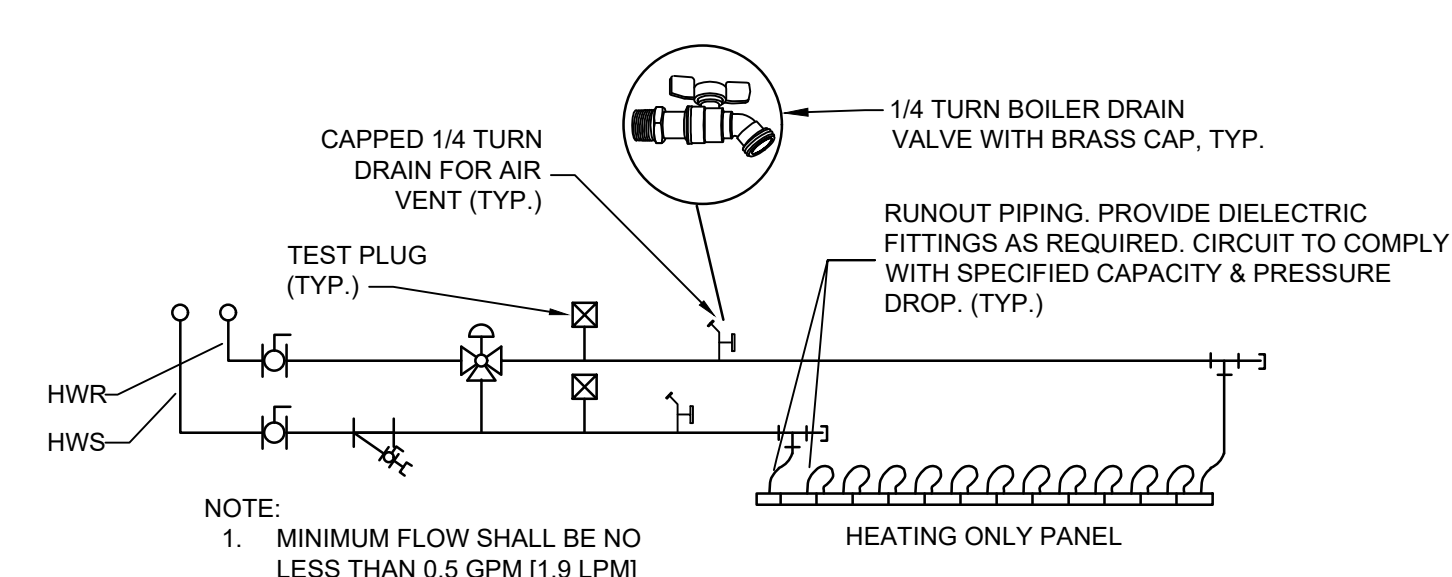
2. TERMINAL UNIT WATER COIL DETAIL
 SCALE: NTS



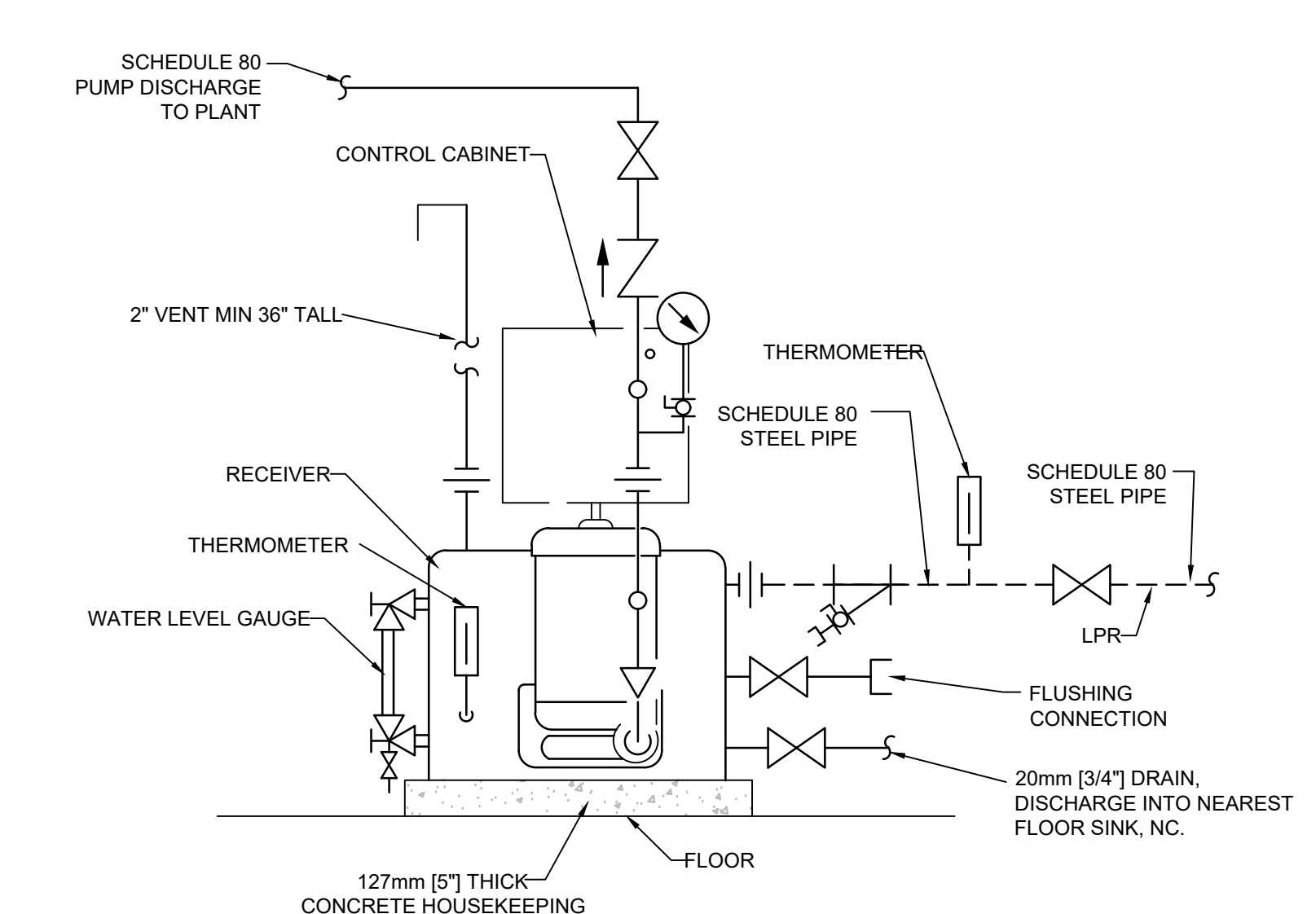
3. WATER TREATMENT POT FEEDER DETAIL
 SCALE: NTS



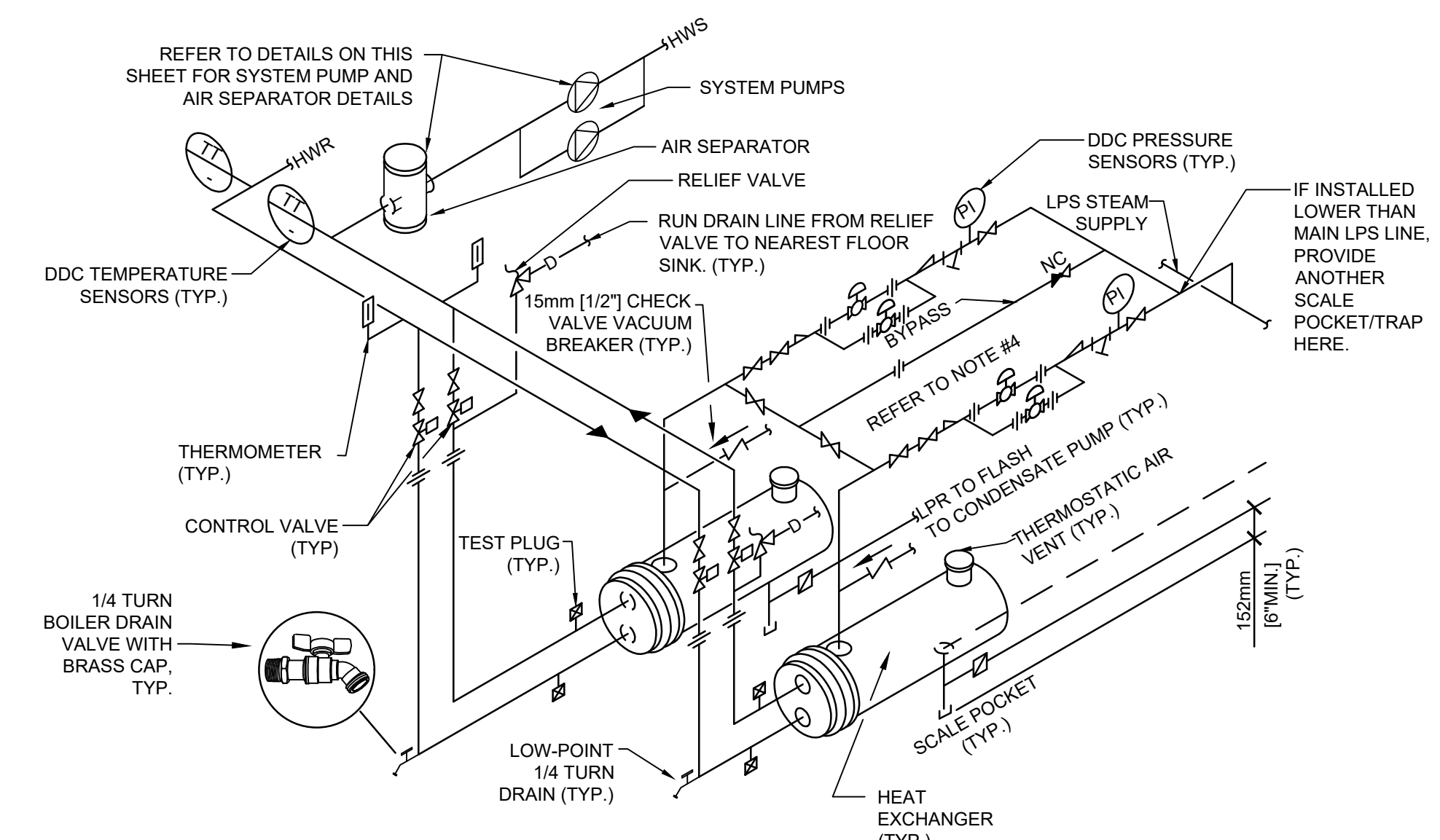
1. IN-LINE PUMP CONNECTIONS DETAIL
 SCALE: NTS



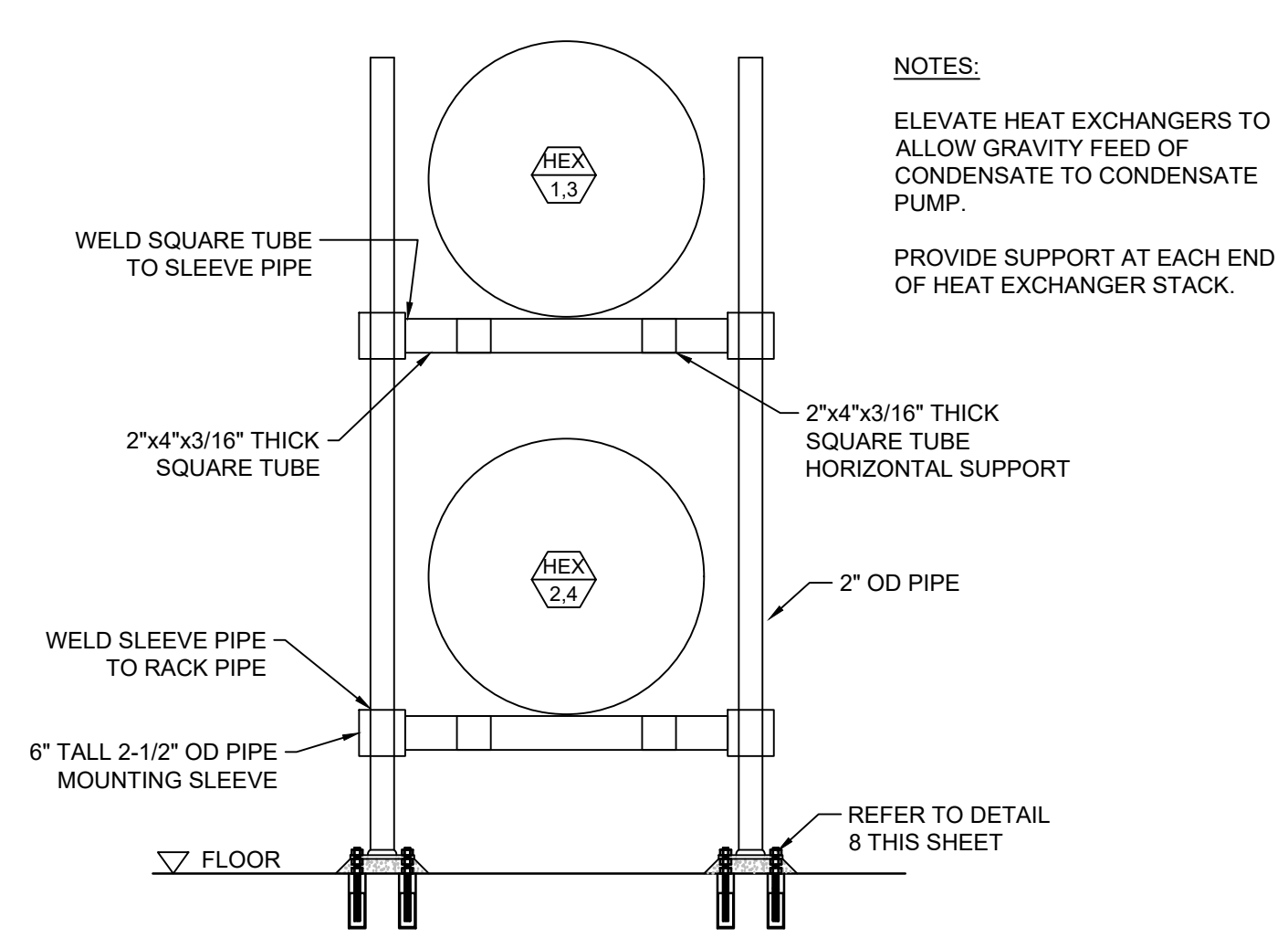
4. CEILING RADIANT PANEL PIPING DETAIL
 SCALE: NTS



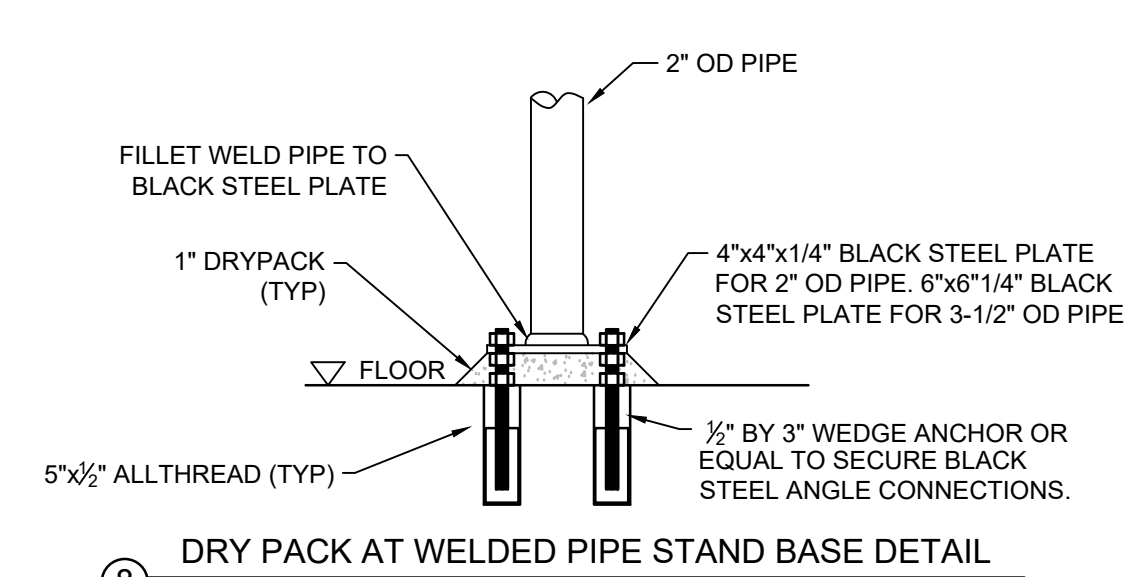
5. CONDENSATE PUMP DETAIL
 SCALE: NTS



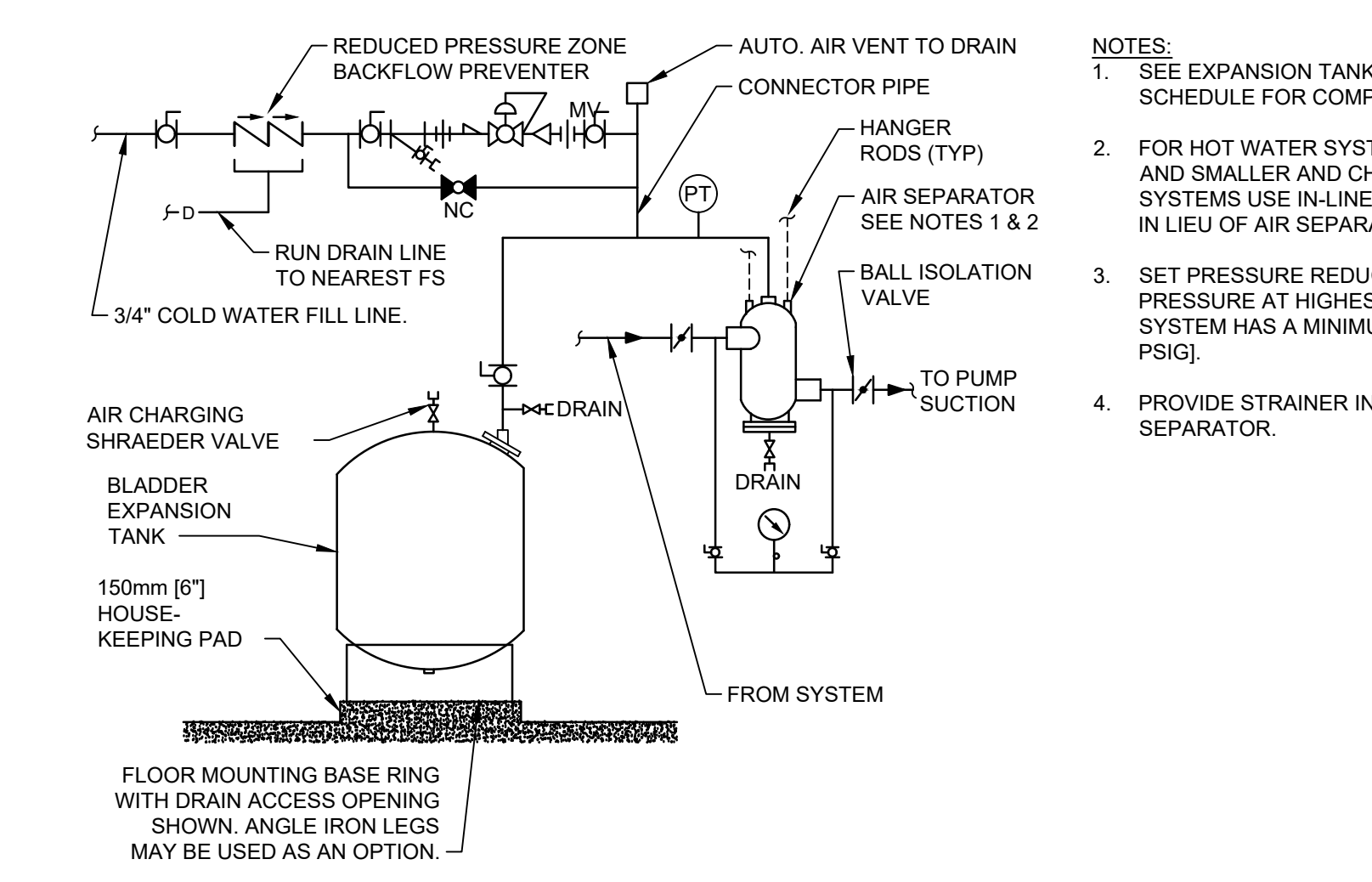
7. STEAM TO HOT WATER HEAT EXCHANGER DETAIL
 SCALE: NTS



6. DRY PACK AT WELDED PIPE STAND BASE DETAIL
 SCALE: NTS



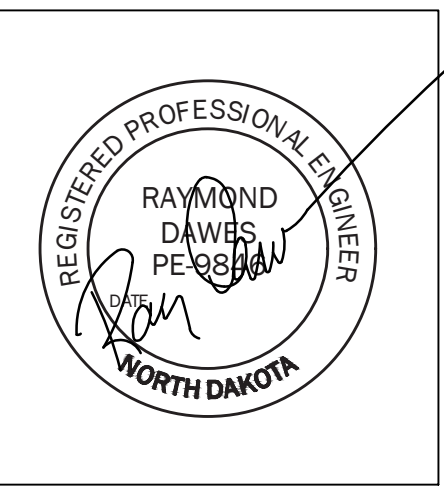
8. DRY PACK AT WELDED PIPE STAND BASE DETAIL
 SCALE: NTS



9. AIR SEPARATOR/EXPANSION TANK DETAIL
 SCALE: NTS

Revisions:	Date:

CONSULTANTS:



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Drawing Title
 MECHANICAL DETAILS
 BUILDING IS FULLY SPRINKLED

Project Title
 FARGO EHRM TRAINING AND ADMIN
 Location
 FARGO, ND
 Project Number
 437-21-225
 Building Number
 9
 Drawing Number
 M0.02
 Dwg. 19 of 41

Office of Construction and Facilities Management
 Department of Veterans Affairs

100% CONSTRUCTION DOCUMENTS

LOUVER SCHEDULE						
EQUIP TAG	SERVICE	WIDTH	HEIGHT	DEPTH	MATERIAL	NOTES
LV-1	RELIEF AIR	36"	30"	6"	ALUM BIRD	NAILOR EHH-601 1,2,3
LV-2	RELIEF AIR	28"	28"	6"	ALUM BIRD	NAILOR EHH-601 1,2,3
LV-3	RELIEF AIR	24"	24"	6"	ALUM BIRD	NAILOR EHH-601 1,2,3
LV-4	OUTSIDE AIR	24"	24"	6"	ALUM BIRD	NAILOR EHH-601 1,2,3

NOTES:

- PROVIDE WITH FLANGED FRAME. PROVIDE ANODIZED COLOR.
- FINAL SELECTION OF COLOR BY ARCHITECT.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.

HYDRONIC AIR CURTAIN SCHEDULE							
EQUIP TAG	SERVICE	CFM	RPM	W	W	H	NOTES
AC-1	AIR SEAL	0.5	5.0	955	0.7	160	54 SCHWANKAIR 2066WH 1,2,3,4,5

NOTES:

- PROVIDE WITH FACTORY DOOR SWITCH.
- PROVIDE WITH FACTORY MODBUS MODULE FOR BMS CONTROL.
- PROVIDE WITH FACTORY EPROM MODULE TO MODULATE HEAT AND AIR FLOW.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.
- PROVIDE BACNET INTEGRATION MODULE AND EXPOSE ALL POINTS FOR TEMPERATURE CONTROL. CONTRACTOR TO INTEGRATE ALTERNATIVELY COORDINATE WITH TEMPERATURE CONTROL CONTRACTOR TO PROVIDE SEPARATE PARALLEL CONTROLLER.

VERTICAL WALL HYDRONIC UNIT HEATER SCHEDULE							
EQUIP TAG	SERVICE	CFM	NOMINAL CMR	FLA	ELECTRICAL	MANUFACTURER & MODEL	NOTES
UH-1	HALLWAY HEAT	0.5	12.2	350	1.0	120V/160	ENGINEERED COMFORT 41VS-Z-1ROWWH 1,2,3

NOTES:

- PROVIDE WITH FACTORY PROPORTIONAL ECM FAN MOTOR.
- PROVIDE WITH FACTORY 1 ROW HOT WATER COIL.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.

PUMP SCHEDULE								
EQUIP TAG	SERVICE	LOCATION	CFM	FL HEAD	BAR	W	H	NOTES
P-1,2	RADIANT HEAT	MECH BA-35	9.5	20	1-1/4"	35	1/6"	- 120-1-60 1.4 GRUNDFOS APHA2 26-99F 1,2,3,4
P-3,4	VAV_AHU HEAT	MECH BA-65A	55	115	2"	35	3"	- 208-3-60 9.1 GRUNDFOS CRE 10-4-A-BN-A 1,2,3,4
CP-1,2,3	COND RETURN	MECH ROOMS	6	15	2"	NA	1/3"	- 120-1-60 8.5 SHIPCO 40DC 4,5

NOTES:

- PROVIDE WITH FLANGES SELECTED BY INSTALLING CONTRACTOR.
- INSTALL PER MANUFACTURERS INSTRUCTIONS.
- CONTRACTOR SHALL SET PUMP TO ENABLE ON ANY ZONE DEMAND CALL FOR HEAT.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.
- PROVIDE WITH FACTORY CONTROL PANEL.

EXPANSION TANK SCHEDULE									
EQUIP TAG	MFR	MODEL	TYPE	TANK VOLUME (GAL)	TANK ACCEPT (GAL)	HEIGHT (IN)	DIAMETER (IN)	WEIGHT (LBS)	NOTES
ET-1	TACO	CBX84-125	BLADDER	22	12	39	16	150	1
ET-2	TACO	CBX170-125	BLADDER	45	24	44	20	240	1

NOTES:

- MANUFACTURER IS BASIS OF DESIGN. OTHER MANUFACTURERS ALLOWED.

AIR SEPARATOR SCHEDULE								
EQUIP TAG	MFR	MODEL	SYSTEM	CONNECTION SIZE (IN)	FLOW (GPM)	HEIGHT (IN)	DIAMETER (IN)	NOTES
AS-1	TACO	49-100	HOT WATER	1	9.5	6	5	
AS-2	TACO	49Q25AUT-125	HOT WATER	2.5	55	17	10	

NOTES:

- MANUFACTURER IS BASIS OF DESIGN. OTHER MANUFACTURERS ALLOWED.

STEAM TO HOT WATER HEAT EXCHANGER SCHEDULE									
EQUIP TAG	SERVICE	LOCATION	CFM	FL HEAD	BAR	W	H	NOTES	
HEX-1,2	RADIANT HEAT	MECH BA-37	55	160	180	95K	100	3.2	ARMSTRONG WS-0402-200-1 1,2,3,4,5
HEX-3,4	VAV_AHU HEAT	MECH BA-65A	9.5	160	180	526K	530	14.8	ARMSTRONG WS-0603-200-1 1,2,3,4,5

NOTES:

- PROVIDE VACUUM BREAKER.
- PROVIDE WITH MANUFACTURERS STAND AND RACK.
- SET RELIEF VALVE AT 15PSI.
- PROVIDE WITH ALL EQUIPMENT SHOWN ON M-0.01.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.

GRILLE/REGISTER/DIFFUSER SCHEDULE								
EQUIP TAG	REGISTER TYPE	LOCATION	CFM	FL HEAD	BAR	W	H	NOTES
SD-1	VARIABLE	CEILING SUPPLY DIFFUSER LAY-IN				NAILOR ARNS-L-O	WHITE	1,2,3
RG-1	20" X 20"	CEILING LOUVERED RETURN GRILLE LAY-IN				NAILOR 5145H-24x24-L-O	WHITE	2,3
EG-1	20" X 20"	CEILING LOUVERED RETURN GRILLE LAY-IN				NAILOR 5145H-24x24-L-O	WHITE	2,3

NOTES:

- REFER TO PLANS FOR NECK SIZE. TO MATCH DUCT SIZE SERVING DIFFUSER.
- Ø IN MODEL REFERS TO OPPOSED BLADE DAMPER.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.

FAN SCHEDULE								
EQUIP TAG	SERVICE	LOCATION	CFM	FL HEAD	BAR	W	H	NOTES
EF-1	EXHAUST (ONLINE)	RESTROOM CEILING	560	0.30	0.63	75	5.4	120-1-60 GREENHECK SQ-100-VG 1,2,3

NOTES:

- PROVIDE WITH DISCONNECT, BACKDRAFT DAMPER, SPEED CONTROL, AND VIBRATION ISOL HANGING KIT.
- ANY ONE OF 3 OCCUPANCY SENSORS IN BA-31, BA-33, OR BA-35 TO ENABLE FAN.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.

AIR HANDLING UNIT SCHEDULE																												
EQUIP TAG	SERVICE	LOCATION	CFM	FL HEAD	BAR	W	H	DEPTH	WEIGHT	WATER	WATER	WATER	WATER	WATER	NOTES													
AHU-19	H/C/V	BA-70A	300	3600	1.00	3	154	80	53	45	55	33	4	120	45	76	180	150	8.4	5	3600	69.4	208-3-60	28.8	36	50	TRANE CSAA010	1,2,3,4,5,6
AHU-90	H/C/V	BA-65A	230	2000	1.00	5	86	80	53	45	55	18.6	120	45	76	180	150	8.4	5	2000	38.6	208-3-60	28.8	36	50	TRANE CSAA006	1,2,3,4,5,6	
AHU-91	H/C/V	BA-35	420	1200	1.00	3	152	80	53	45	55	11.2	50	45	63	180	150	3.5	5	1200	12.1	208-3-60	19.4	24	30	TRANE CSAA010	1,2,3,4,5,6	

NOTES:

- PROVIDE WITH FULL ECONOMIZER MIXING SECTION WITH DAMPERS, AND STEAM HUMIDIFIER SECTION.
- PROVIDE WITH WITH VFD AND FUSED DISCONNECT.
- PROVIDE WITH INTERIOR ENCLOSURE, TOP SUPPLY AND MIXING SECTION, AND FLOOR MOUNT OPTION.
- PROVIDE WITH SUPPLY AND RETURN AIR STREAM SMOKE DETECTORS.
- PROVIDE WITH MERV 8 PRE-FILTER, MERV 11 SECOND PRE-FILTER, AND MERV 15 PRIMARY FILTER.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.

PLUMBING FIXTURE SCHEDULE										
EQUIP TAG	SERVICE	LOCATION	TYPE	SIZE	DEPTH	W	H	DIAMETER	NOTES	WATER
P-420	APPROX. 19" DIAMETER SELF-RIMMING COUNTERTOP LAVATORY. VITREOUS CHINA			2"	2"	2"	2"	2"	2	
P-420	HARDWIRED SENSOR FAUCET. CHROME PLATE GOOSENECK 4" ABOVE RIM LEVEL								1	
P-528	DECK MOUNTED FAUCET W/ 4" WRIST BLADES. CHROME PLATE GOOSENECK WITH 8" REACH 6" ABOVE DECK.			2"	2"	2"	2"	2"	2	
P-528	FLOOR MOUNTED CORNER TERRAZZO SERVICE SINK. APPROX 28"x28" W/ 6" DROP FRONT								1	
P-502	WALL MOUNTED COMBINATION FAUCET WITH INTEGRAL CHECKS/TOPS, HOSE THREADS, VACUUM BREAKER, AND PAIL HOOK.			3"	2"	2"	2"	2"	2	
P-103	WALL HUNG TOILET. ELONGATED BOWL W/ HARDWIRED 1/2 GAL/FLUSH SIPHON JET FLUSH VALVE			3"	2"	1"			2	
P-201	WALL HUNG URINAL. INTEGRAL TRAP AND BACK OUTLET 0.5 GAL/FLUSH SIPHON JET FLUSH VALVE			2"	2"	1/2"			2	
P-609	ELECTRIC WATER COOLER. DUAL HEIGHT STAINLESS STEEL FOUNTAIN WITH BOTTLE FILLER.			2"	2"	1/2"			2	
FD-C	MEDIUM DUTY FLOOR DRAIN. CAST IRON BODY, NICKEL BRONZE STRAINER. ROUND OR SQUARE, MIN 6" WIDTH OR DIAMETER			3"	2"					
FD-S	FLOOR SINK. 304 SS, 12" SQUARE AND 8" DEEP. HEAVY DUTY NON-TILTING GRATE W/ INTERNAL DOME STRAINER.			3"	2"					

NOTES:

- PROVIDE ADA OFFSET TRAP ASSEMBLY WITH INSULATION KIT.
- COORDINATE COLOR OF FIXTURE DURING SUBMITTAL PROCESS. ARCHITECT TO SELECT COLORS.

OVERHEAD RADIANT PANEL SCHEDULE									
EQUIP TAG	PANEL SIZE	CFM	FL HEAD	BAR	W	H	DIAMETER	NOTES	WATER
RAD-1	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-2	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-3	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-4	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-5	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-6	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-7	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-8	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-9	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-10	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-11	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-12								NOT USED	
RAD-13	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-14	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-15	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-16	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-17	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-18	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4
RAD-19	12"x48"	980	180	0.5				ZEHNDER RITTLING LINEAR RADIANT PANEL	1,2,3,4

NOTES:

- TO BE MOUNTED IN LAY-IN CEILING FRAME. MODIFY CEILING PANEL TO ACCOMMODATE.
- PROVIDE WITH SOVS AND CONTROL VALVE.
- SUPPORT PANEL AS PER MANUFACTURERS WRITTEN INSTRUCTIONS.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.

VARIABLE AIR VOLUME BOX SCHEDULE													
EQUIP TAG	PANEL SIZE	CFM	FL HEAD	BAR	W	H	DIAMETER	NOTES	WATER				
VAV-1	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-2	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-3	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-4	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-5	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-6	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-7	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-8	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-9	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-10	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-11	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-12	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-13	6	280	0.23	60	132.3	12.2K	180	165	1.74	TRANE VCVF	1,2,3,4		
VAV-14	6	270	0.22	60	134.2	11.8K	180	165	1.62	TRANE VCVF	1,2,3,4		
VAV-15	6	270	0.22	60	134.2	11.8K	180	165	1.62	TRANE VCVF	1,2,3,4		
VAV-16	6	270	0.22	60	134.2	11.8K	180	165	1.62	TRANE VCVF	1,2,3,4		
VAV-17	6	270	0.22	60	134.2	11.8K	180	165	1.62	TRANE VCVF	1,2,3,4		
VAV-18	6	270	0.22	60	134.2	11.8K	180	165	1.62	TRANE VCVF	1,2,3,4		
VAV-19	6	270	0.22	60	134.2	11.8K	180	165	1.62	TRANE VCVF	1,2,3,4		
VAV-20	6	360	0.36	60	135.9	15.8K	180	172.5	4.5	TRANE VCVF	1,2,3,4		
VAV-21	4	180	0.08	60	135.6	7.0K	180	156	0.61	TRANE VCVF	1,2,3,4		
VAV-22	4	150	0.06	60	135.6	7.0K	180	156	0.61	TRANE VCVF	1,2,3,4		
VAV-23	6	600	0.60	60	136.1	26.4K	180	161.2	2.95	TRANE VCVF	1,2,3,4		
VAV-24	6	240	0.24	60	135.6	10.5K	180	162.2	1.24	TRANE VCVF	1,2,3,4		
VAV-25	6	350	0.34	60	136.2	15.4	180	172	4.1	TRANE VCVF	1,2,3,4		
VAV-26	6	350	0.34	60	136.2	15.4	180	172	4.1	TRANE VCVF	1,2,3,4		
VAV-27	6	350	0.34	60	136.2	15.4	180	172	4.1	TRANE VCVF	1,2,3,4		

NOTES:

- PROVIDE WITH FACTORY DISCONNECT AND ELECTRIC ACTUATOR.
- DDC CONTROL (CONTROLLER BY TC CONTRACTOR).
- PROVIDE WITH SPRING VIBRATION ISOLATION AND ALL-THREAD HANGING RODS.
- SHOWN AS BASIS OF DESIGN, APPROVED EQUAL ALLOWED.

CONSULTANTS:

ARCHITECT-ENGINEER



FOURFRONT DESIGN, INC.
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Drawing Title

MECHANICAL SCHEDULES

BUILDING IS FULLY SPRINKLED

Project Title

FARGO EHRM TRAINING AND ADMIN

Location

FARGO, ND

Project Number

437-21-225

Building Number

9

Drawing Number

MO.03

Dwg. 20 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

100% CONSTRUCTION DOCUMENTS

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one eighth inch = one foot

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one quarter inch = one foot

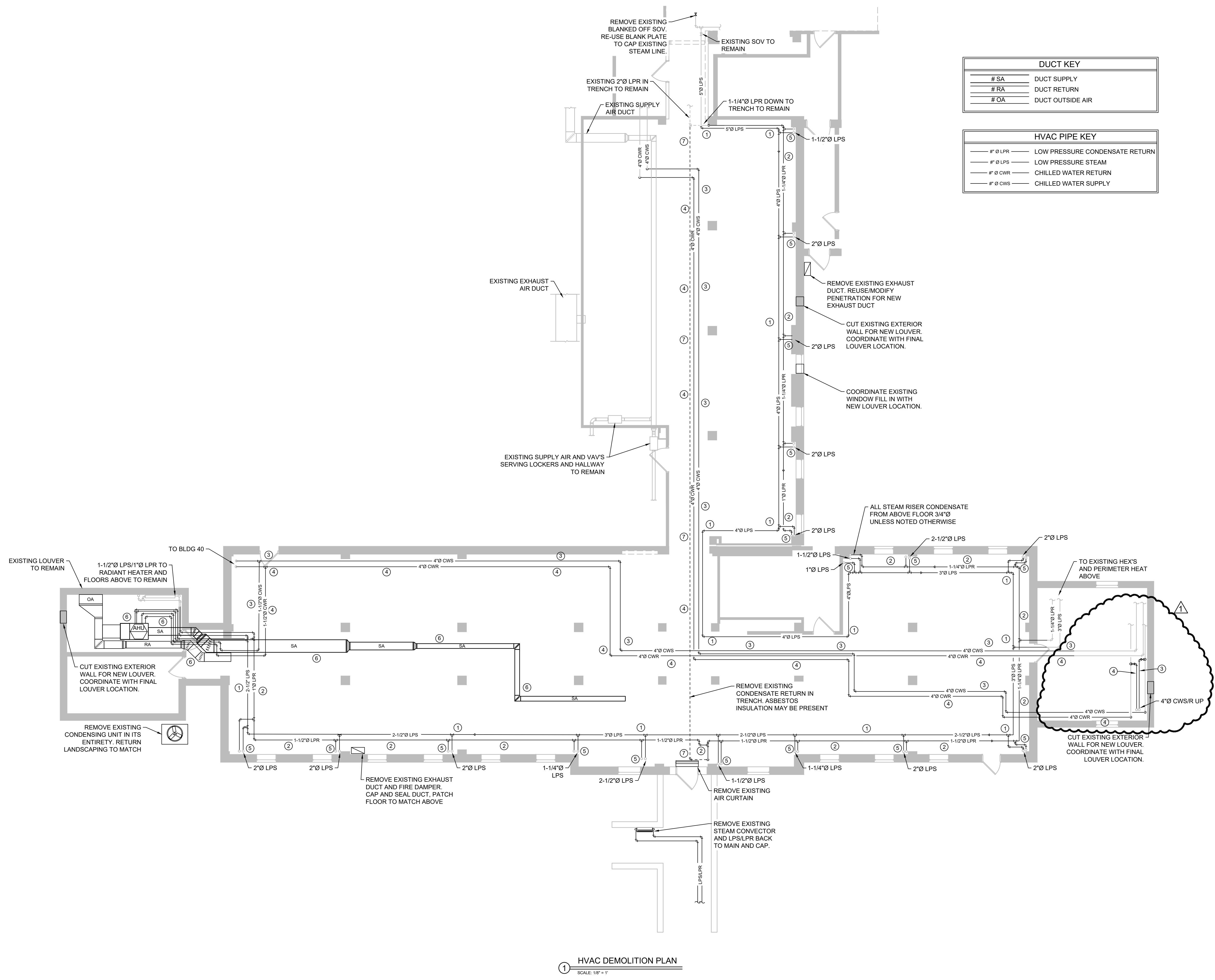
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one half inch = one foot

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three eighths inch = one foot

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one inch = one foot

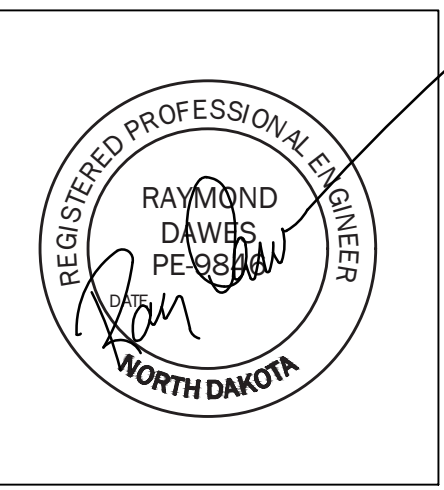
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one and one half inches = one foot

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14/12
15/12
one and three quarters inches = one foot



REVISION #1: BIDDING #1 REVISION	04/27/2022
Revisions:	Date

CONSULTANTS:



ARCHITECT-ENGINEER

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FOURFRONT DESIGN, INC.

Drawing Title:
HVAC DEMOLITION PLAN

Project Title:
100% CONSTRUCTION DOCUMENTS
FARGO EHRM TRAINING AND ADMIN

Location:
FARGO, ND

Date:
01/11/2022

Checked:
RD

Drawn:
PM

Project Number	437-21-225
Building Number	9
Drawing Number	MD1.00
Dwg. 21 of 41	

Office of Construction and Facilities Management

Department of Veterans Affairs

5/26/2021 3:54:42 PM

one eighth inch = one foot

one quarter inch = one foot

three eighths inch = one foot

one half inch = one foot

one inch = one foot

three quarters inch = one foot

one and one half inches = one foot

two inches = one foot

three and one half inches = one foot

five inches = one foot

seven and one half inches = one foot

ten inches = one foot

one and one half inches = one foot

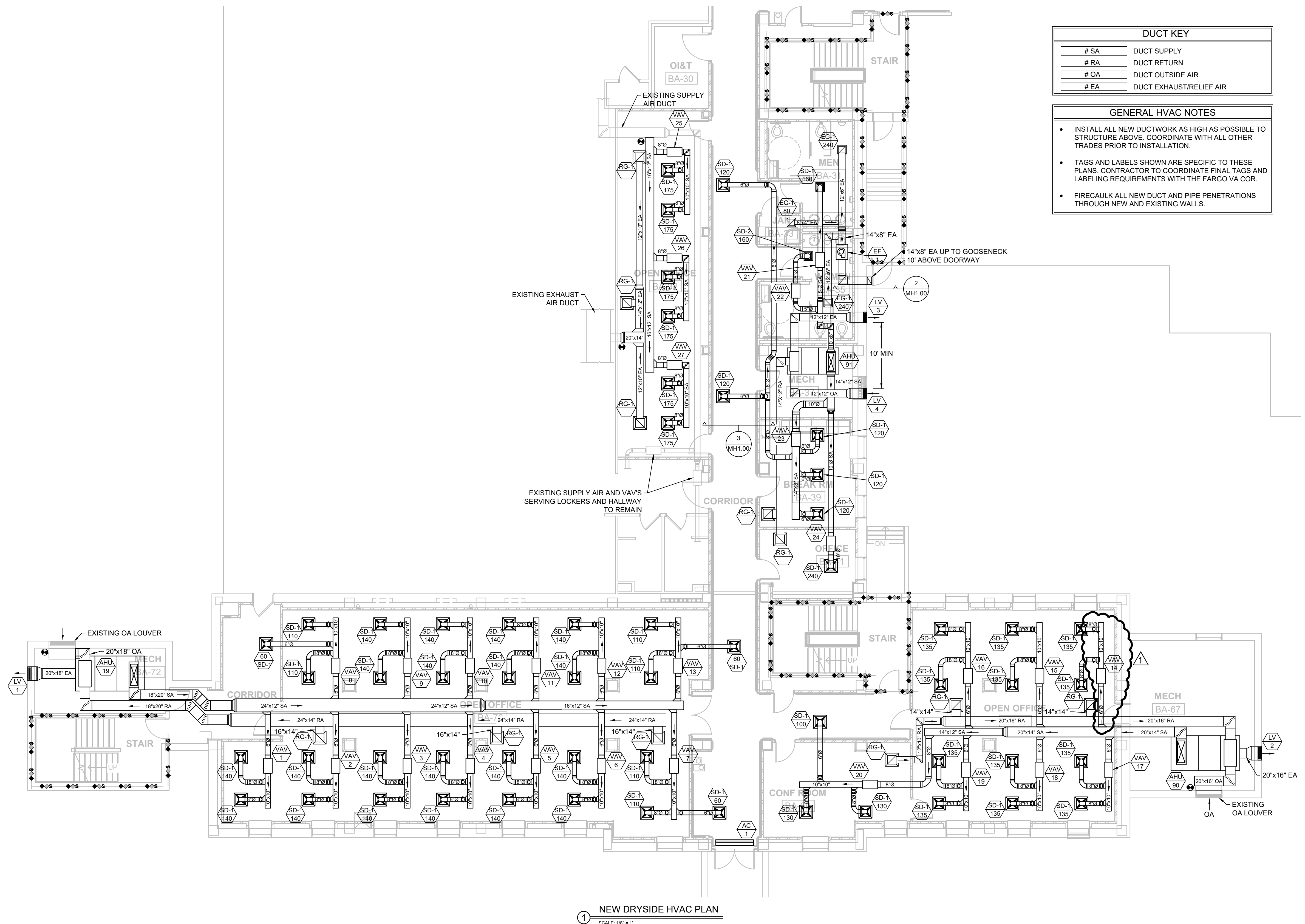
two inches = one foot

three and one half inches = one foot

five inches = one foot

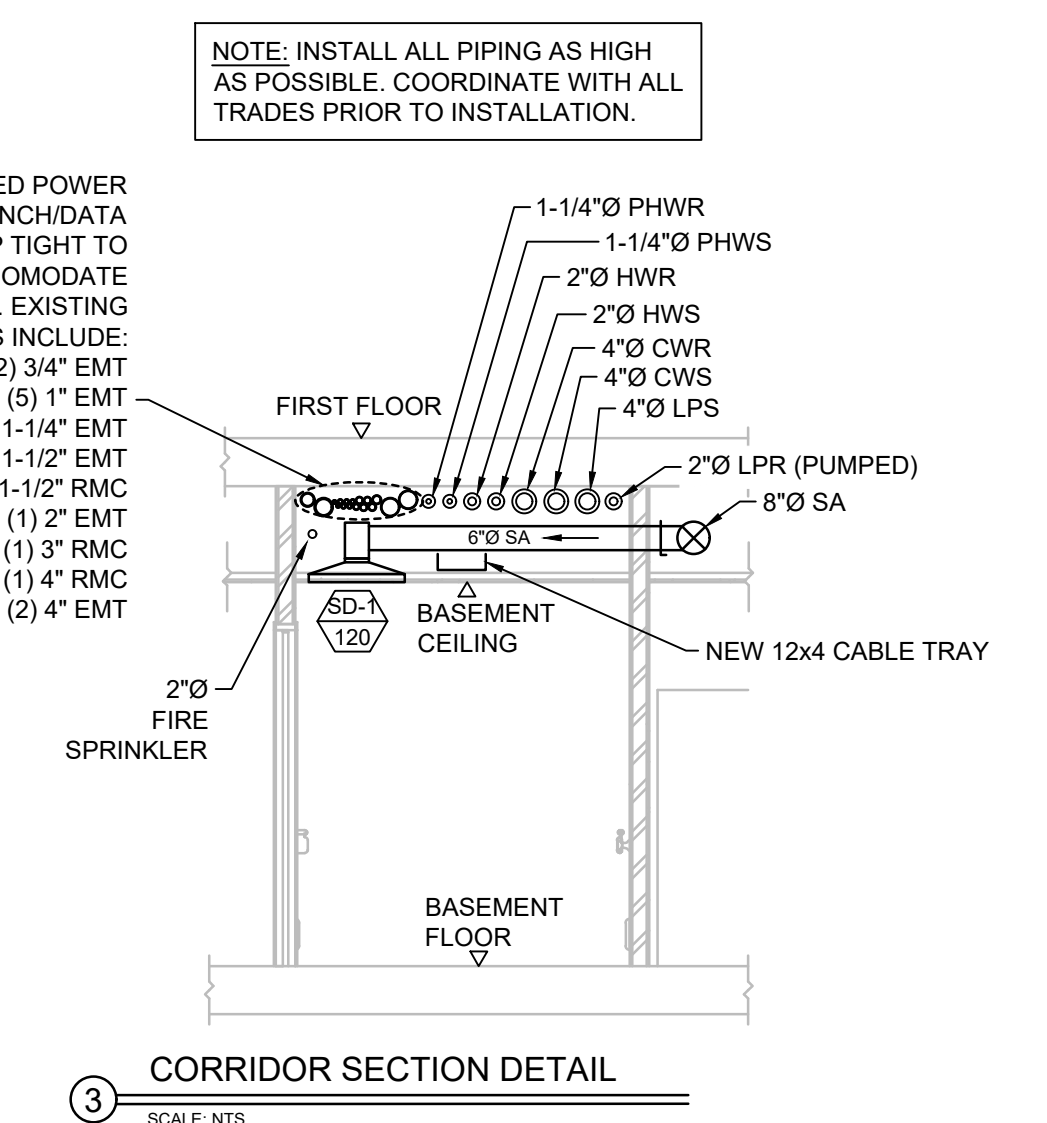
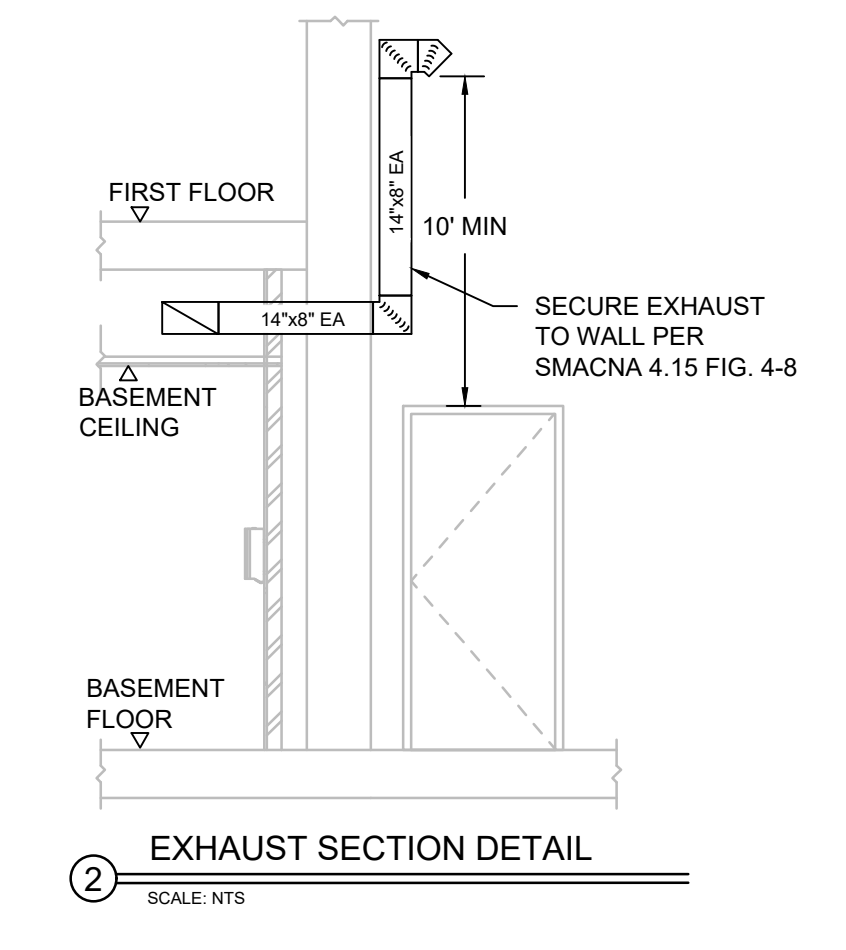
seven and one half inches = one foot

ten inches = one foot



DUCT KEY	
# SA	DUCT SUPPLY
# RA	DUCT RETURN
# OA	DUCT OUTSIDE AIR
# EA	DUCT EXHAUST/RELIEF AIR

GENERAL HVAC NOTES	
•	INSTALL ALL NEW DUCTWORK AS HIGH AS POSSIBLE TO STRUCTURE ABOVE. COORDINATE WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
•	TAGS AND LABELS SHOWN ARE SPECIFIC TO THESE PLANS. CONTRACTOR TO COORDINATE FINAL TAGS AND LABELING REQUIREMENTS WITH THE FARGO VA COR.
•	FIRECAULK ALL NEW DUCT AND PIPE PENETRATIONS THROUGH NEW AND EXISTING WALLS.




100% CONSTRUCTION DOCUMENTS

REVISION #1: BIDDING #1 REVISION	04/27/2022
Revisions:	Date

CONSULTANTS:

ARCHITECT-ENGINEER



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Drawing Title	NEW DRYSIDE HVAC PLAN
Project Title	FARGO EHRM TRAINING AND ADMIN
Location	FARGO, ND
Date	01/11/2022
Checked	RD
Drawn	PM

Project Number	437-21-225
Building Number	9
Drawing Number	MH1.00
Dwg. 22 of 41	

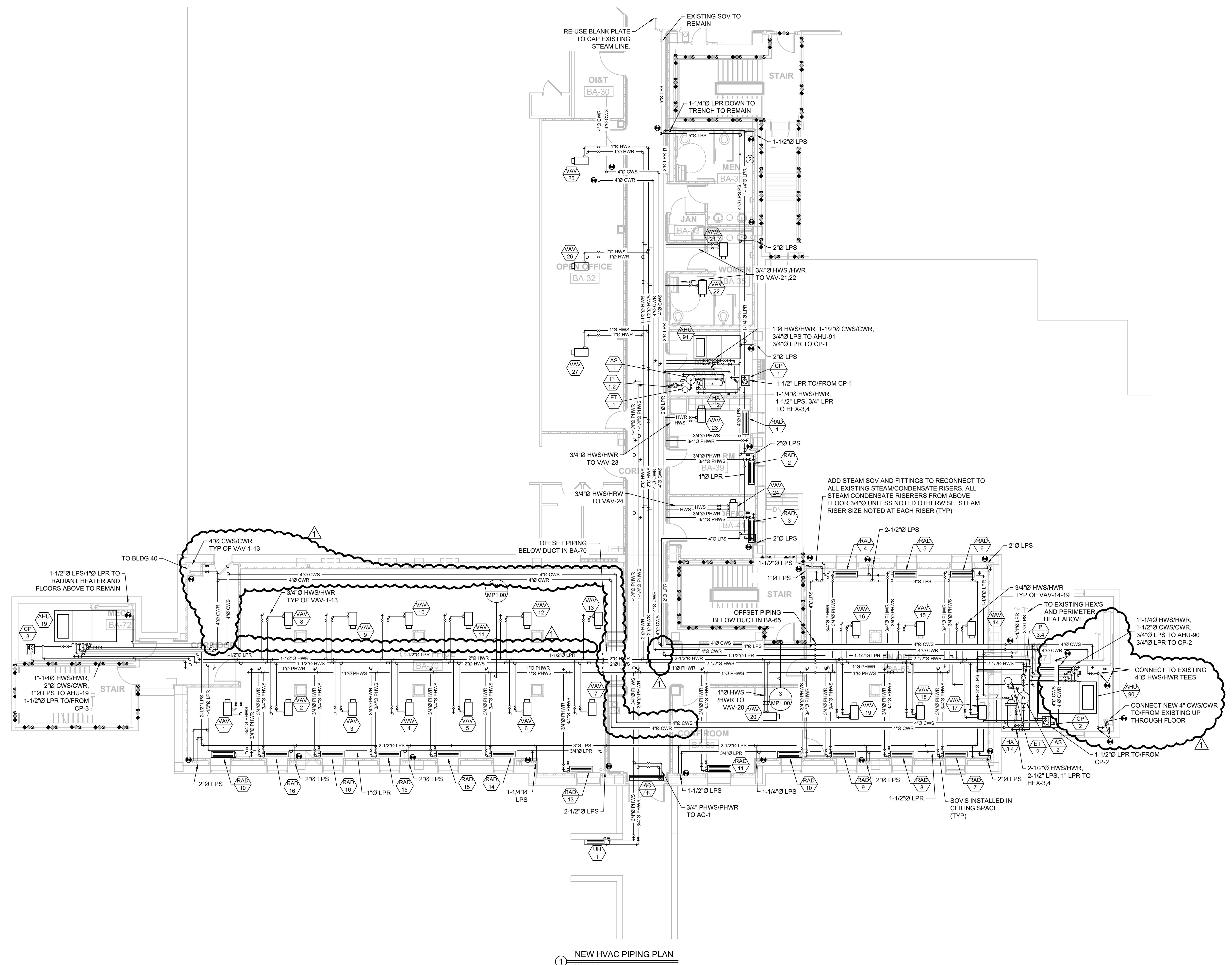
Office of
Construction
and Facilities
Management

Department of
Veterans Affairs

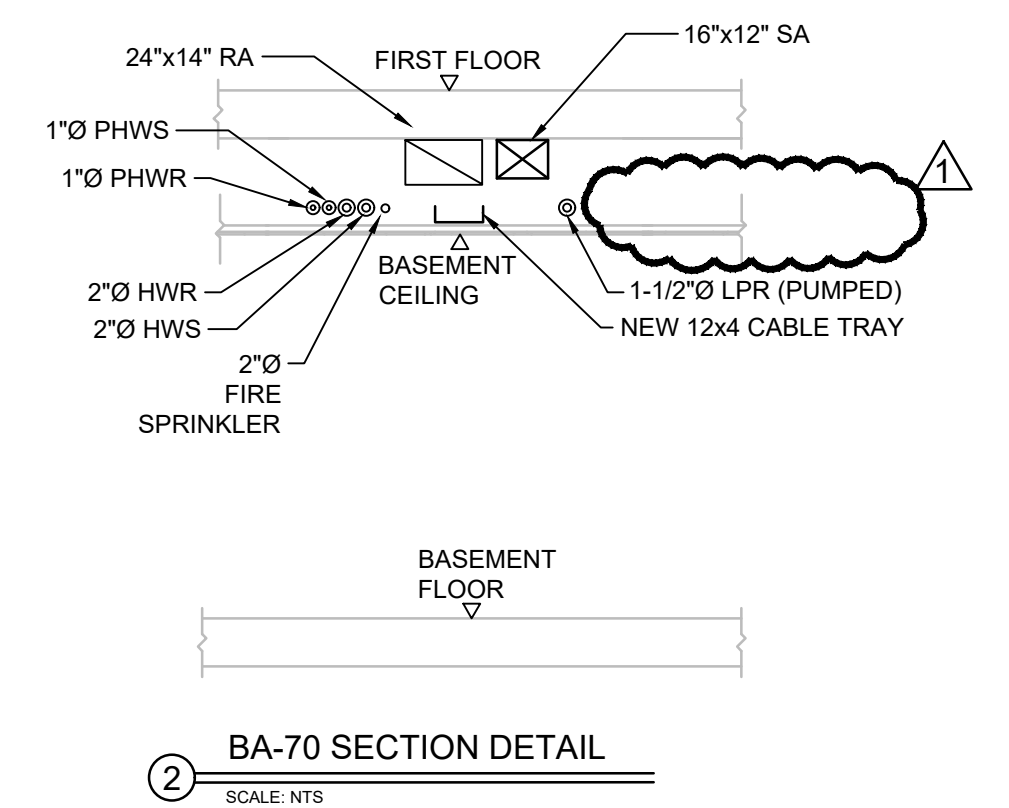
one and one half inches = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot

HVAC PIPE KEY	
	LPR LOW PRESSURE CONDENSATE RETURN
	LPS LOW PRESSURE STEAM
	CWR CHILLED WATER RETURN
	CWS CHILLED WATER SUPPLY
	HWS HYDRONIC HOT WATER SUPPLY
	HWR HYDRONIC HOT WATER RETURN
	PHWS PERIMETER HYDRONIC HOT WATER SUPPLY
	PHWR PERIMETER HYDRONIC HOT WATER RETURN

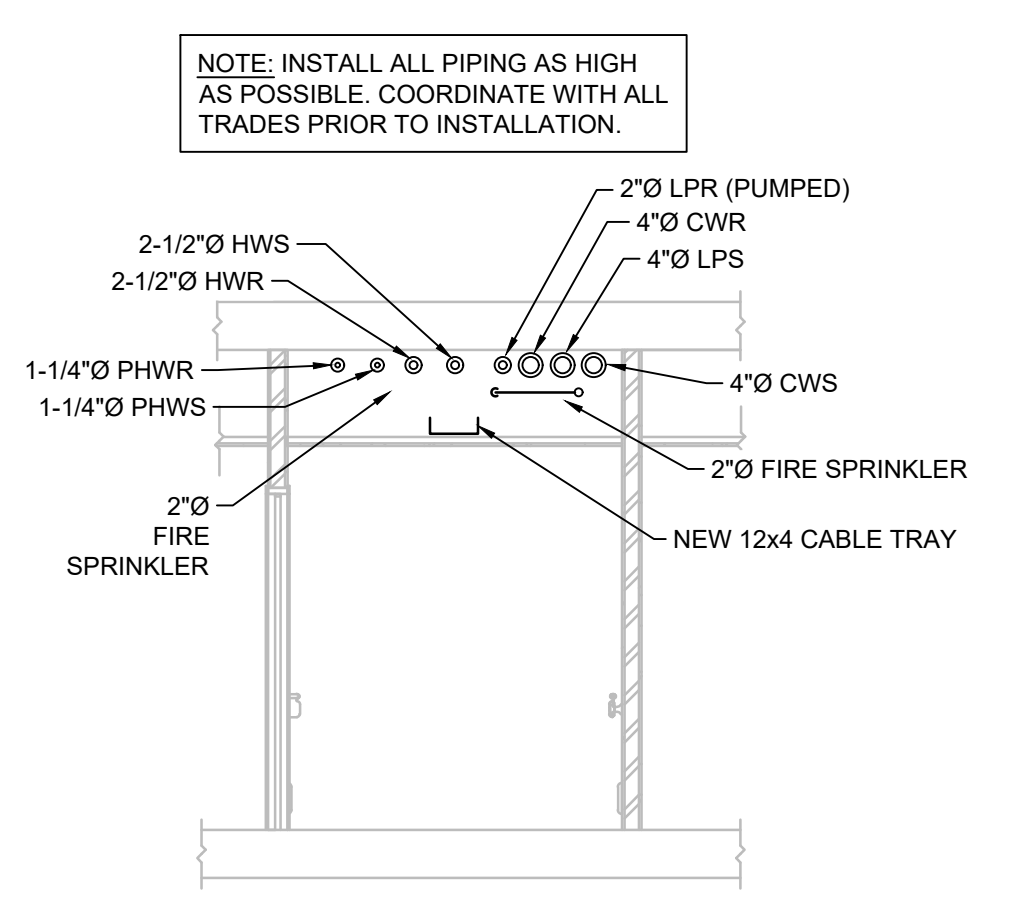
- GENERAL MECHANICAL NOTES**
- INSTALL NEW 4" CHILLED WATER PIPING PRIOR TO DEMOLITION OF EXISTING TO MINIMIZE DOWNTIME OF THE CHILLED WATER SYSTEM PRIOR TO THE SWITCHOVER TO THE NEW PIPING. CONTRACTOR TO COORDINATE ALL SHUTDOWNS WITH THE COR AND VA STAFF.
 - INSTALL ALL NEW STEAM, CONDENSATE, CHILLED WATER, AND HYDRONIC HOT WATER PIPING AS HIGH AS POSSIBLE TO STRUCTURE ABOVE. INSTALL BELOW DUCT WHERE NEEDED FOR ACCESS TO THE PIPE. COORDINATE WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
 - TAGS AND LABELS SHOWN ARE SPECIFIC TO THESE PLANS. CONTRACTOR TO COORDINATE FINAL TAGS AND LABELING REQUIREMENTS WITH THE FARGO VA COR.
 - PROVIDE DOUBLE ISOLATION VALVES ON ALL STEAM SERVED EQUIPMENT.
 - DOUBLE ISOLATION VALVES ON ALL END EQUIPMENT REQUIRED.
 - FIRECAULK ALL NEW DUCT AND PIPE PENETRATIONS THROUGH NEW AND EXISTING WALLS.



1 NEW HVAC PIPING PLAN
 SCALE 1/8" = 1'



2 BA-70 SECTION DETAIL
 SCALE NTS

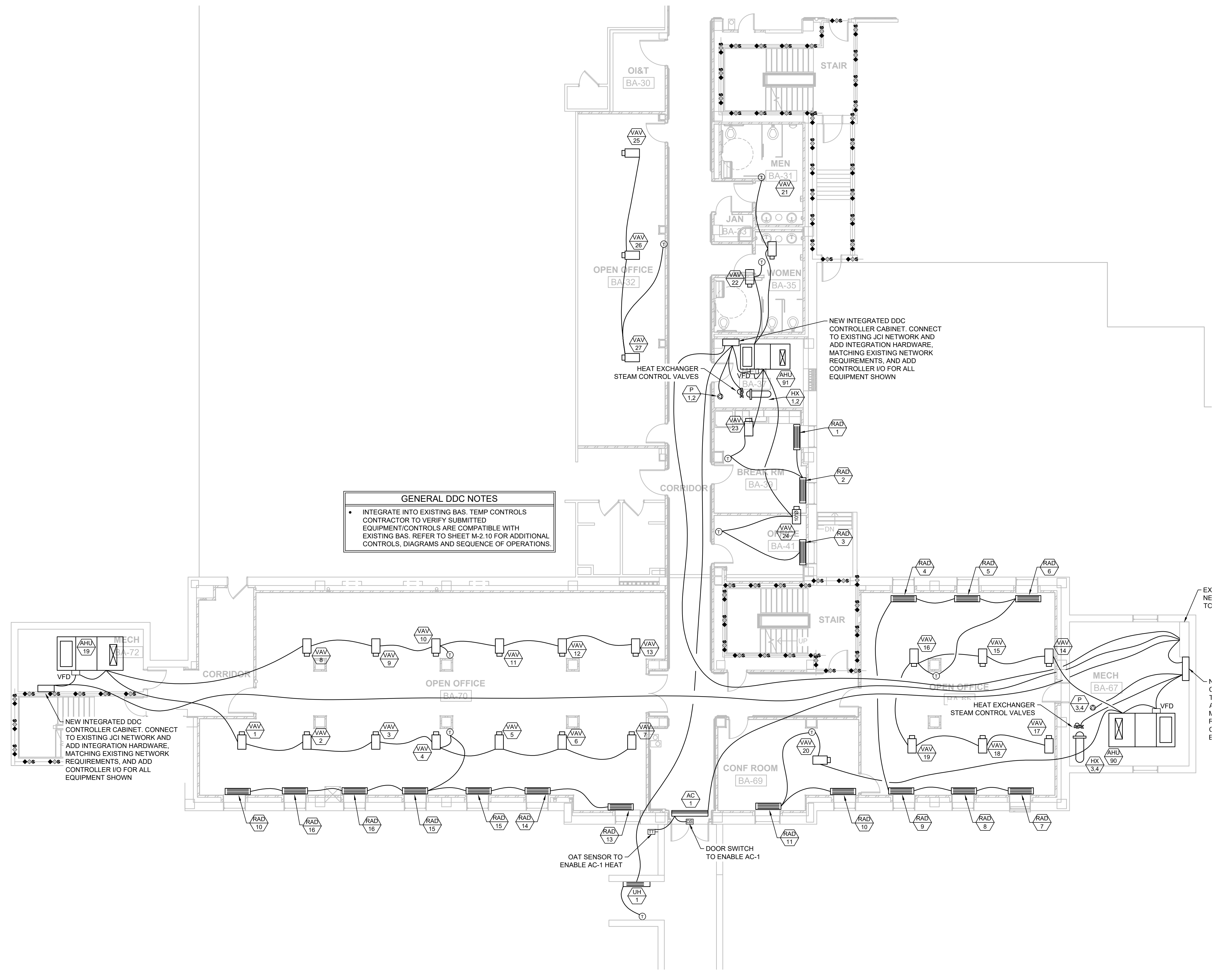


3 CORRIDOR SECTION DETAIL
 SCALE 1/8" = 1'

100% CONSTRUCTION DOCUMENTS

REVISION #1: BIDDING #1 REVISION 04/27/2022 CONSULTANTS:		ARCHITECT-ENGINEER FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA BR70(605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	Drawing Title NEW HVAC PIPING PLAN BUILDING IS FULLY SPRINKLED	Project Title FARGO EHRM TRAINING AND ADMIN Location FARGO, ND Date 01/11/2022 Checked RD Drawn PM	Project Number 437-21-225 Building Number 9 Drawing Number MP1.00 Dwg. 23 of 41	Office of Construction and Facilities Management
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one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot



1 HVAC DDC PLAN
 SCALE: 1/8" = 1'-0"

100% CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:



ARCHITECT-ENGINEER

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Drawing Title
 HVAC DDC PLAN

BUILDING IS FULLY SPRINKLED

Project Title
FARGO EHRM TRAINING AND ADMIN

Project Number
 437-21-225

Building Number
9

Location
FARGO, ND

Date
 01/11/2022

Checked
 RD

Drawn
 PM

Drawing Number
M2.00

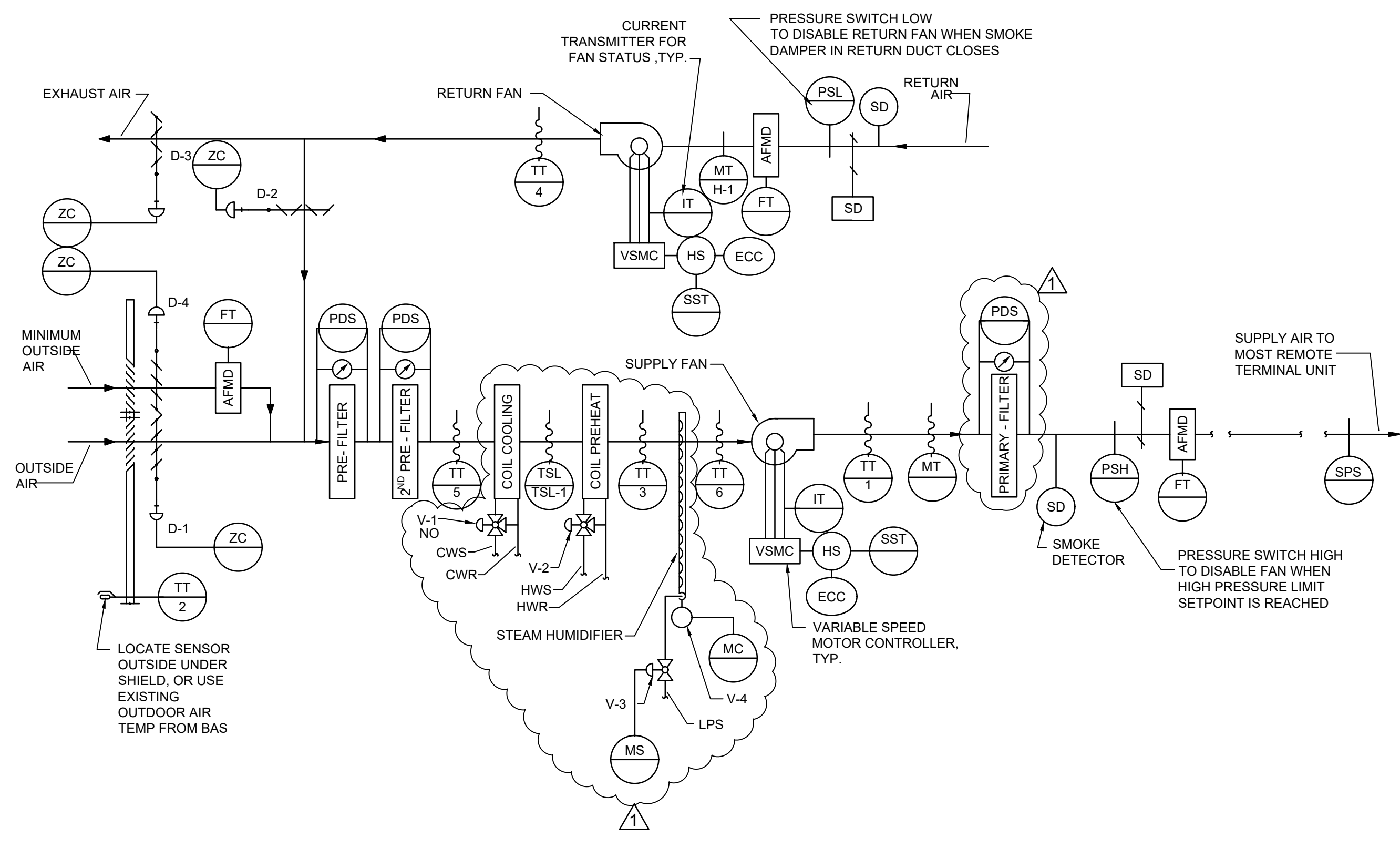
Dwg. 24 of 41

Office of Construction and Facilities Management

Department of Veterans Affairs

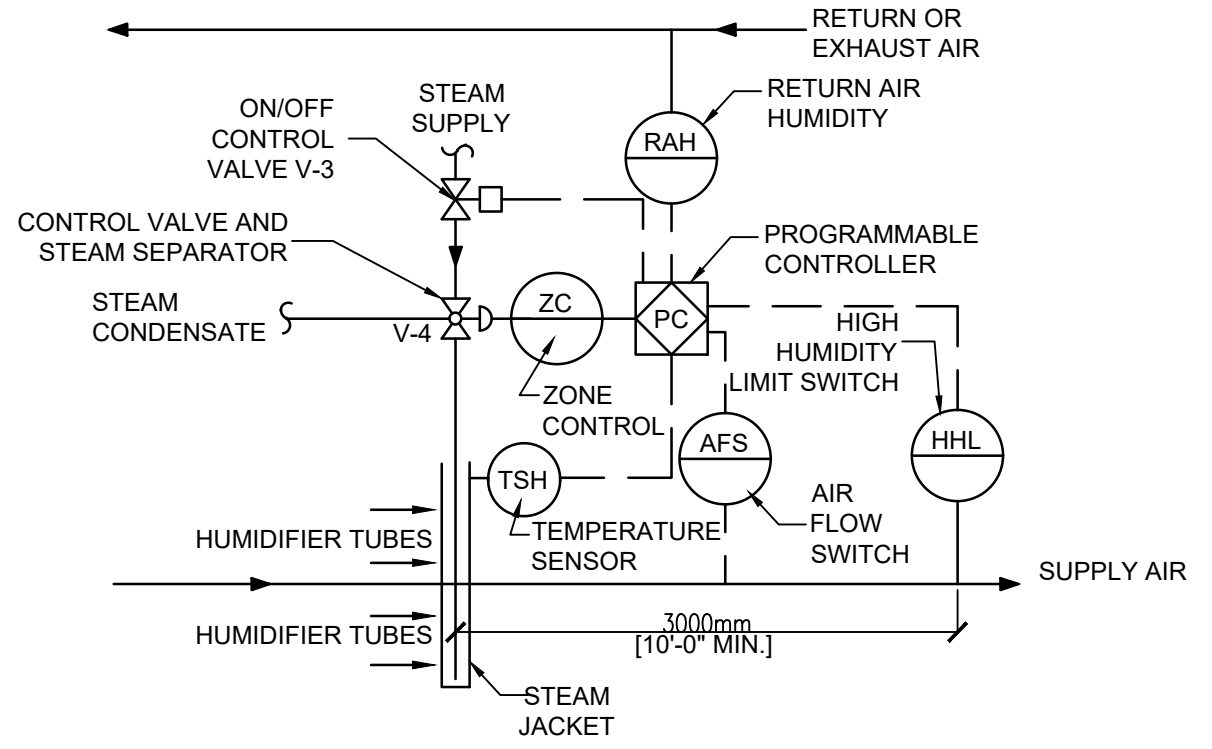
SEQUENCE OF OPERATION FOR VARIABLE AIR VOLUME AIR HANDLING UNIT WITH MINIMUM OUTSIDE AIR (AHU-19,90.91)

CONTROLS SYMBOLS		CONTROLS SYMBOLS	
(T)	ROOM THERMOSTAT/TRANSMITTER - WALL MOUNT	(PSH)	PRESSURE SWITCH HIGH
(M)	ROOM HUMIDISTAT (MOISTURE)/TRANSMITTER - WALL MOUNT	(PSL)	PRESSURE SWITCH LOW
(TT)	TEMPERATURE TRANSMITTER	(EPT)	ELECTRONIC TO PNEUMATIC TRANSDUCER
(TT)	TEMPERATURE TRANSMITTER, AVERAGING ELEMENT	(AT _{CO2})	CARBON DIOXIDE TRANSMITTER
(MT)	MOISTURE (HUMIDITY) TRANSMITTER	(AT _{CO})	CARBON MONOXIDE TRANSMITTER
(PT)	PRESSURE TRANSMITTER	(AT _{OC})	OCCUPANCY SENSOR
(SPS)	STATIC PRESSURE SENSOR	(LTCP)	LOCAL TEMPERATURE CONTROL PANEL
(FT)	FLOW TRANSMITTER	(HVAC)	HVAC CONTROL PANEL
(IT)	CURRENT TRANSMITTER	(VSMC)	VARIABLE SPEED MOTOR CONTROLLER
(CT)	CONDUCTIVITY TRANSMITTER	(PC)	PROGRAMMABLE CONTROLLER
(SD)	SMOKE DETECTOR	(ECC)	INTEGRATE CONTROL POINT ON REMOTE GRAPHICS WORKSTATION AT ENERGY CENTER
(PDT)	PRESSURE DIFFERENTIAL TRANSMITTER	(TC)	TEMPERATURE CONTROLLER. SEE SEQUENCE OF OPERATION
(PDS)	PRESSURE DIFFERENTIAL SWITCH	(PC)	PRESSURE CONTROLLER. SEE SEQUENCE OF OPERATION
(HS)	HAND SWITCH (HAND-OFF-AUTO SWITCH)	(SC)	SPEED CONTROLLER. SEE SEQUENCE OF OPERATION
(ZC)	VALVE OR DAMPER POSITION CONTROLLER	(FC)	FLOW CONTROLLER. SEE SEQUENCE OF OPERATION
(KR)	LOCAL RECORDING TIME CLOCK (RUNTIME)	(FSH)	FLOW SWITCH HIGH
(TSL)	TEMPERATURE SWITCH, LOW (FREEZE/STAT)	(FSL)	FLOW SWITCH LOW
(TSH)	TEMPERATURE SWITCH, HIGH (FREEZE/STAT)	(KC)	TIME CLOCK CONTROLLING EQUIPMENT ON A SCHEDULE
(LC)	LEVEL CONTROLLER	(AFMD)	AIRFLOW MEASUREMENT DEVICE
(LT)	LEVEL TRANSMITTER		



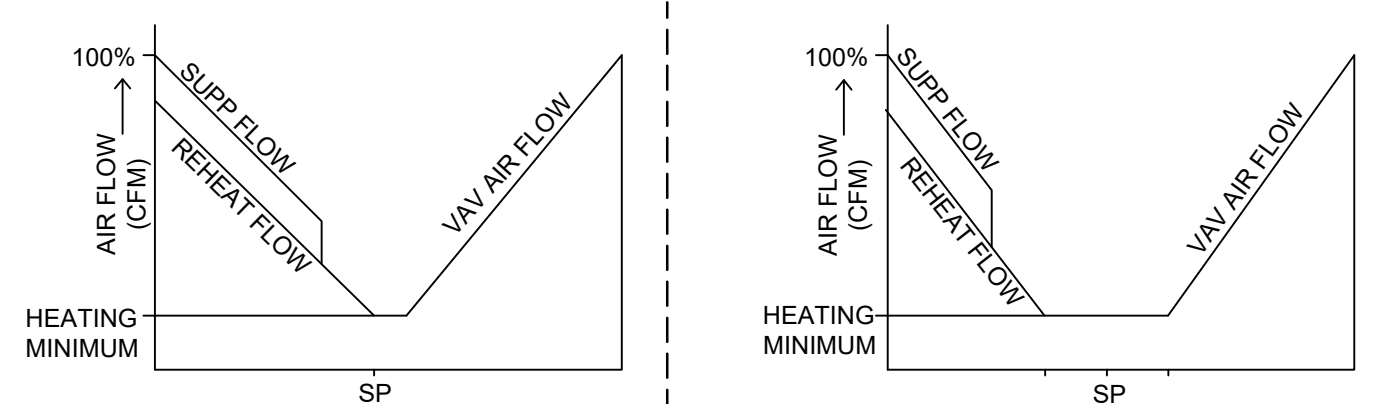
- GENERAL**
 - UNIT IS NORMALLY STARTED AND STOPPED REMOTELY AT THE ECC. H-O-A SWITCH SHALL BE KEPT IN THE "AUTO" POSITION. "HAND" AND "OFF" POSITIONS SHALL BE USED ONLY FOR MAINTENANCE. WHEN THE UNIT IS "OFF" D-1, D-3, SHALL BE FULLY CLOSED. WHEN THE UNIT IS "ON" D-1, SD-1 AND SD-2 SHALL BE FULLY OPEN. D-2 AND D-3 SHALL MODULATE IN ACCORDANCE WITH THE FOLLOWING SEQUENCE.
- TEMPERATURE CONTROL**
 - SUPPLY AIR TEMPERATURE, SENSED BY TT-1, SHALL BE MAINTAINED AT SETPOINT VIA DIGITAL CONTROL PANEL BY MODULATING V-1 OR D-2 AND D-3 OR V-2 IN SEQUENCE.
 - WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS ABOVE 75°F (ADJ) (23.3°C) THE DIGITAL CONTROL PANEL SHALL PREVENT THE MODULATION OF D-2 AND D-3 AND SHALL ASSUME THE MINIMUM OUTSIDE AIR POSITION (D-2 FULLY OPENED AND D-3 FULLY CLOSED). THE DIGITAL CONTROL PANEL SHALL MODULATE V-1 TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.
 - WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS BETWEEN 65°F (18.3°C) AND THE SUPPLY AIR TEMPERATURE SENSED BY TT-1, DAMPER D-2 SHALL MODULATE TO MAINTAIN THE SCHEDULED SUPPLY AIR TEMPERATURE. IF D-2 IS OPEN AND D-3 IS CLOSED TO MINIMUM OUTSIDE AIR, V-2 SHALL MODULATE OPEN TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.
 - WHEN THE TEMPERATURE OF THE OUTSIDE AIR, SENSED BY TT-2, IS BELOW THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1, DAMPERS D1, D-2 AND D-3 SHALL MODULATE TO MAINTAIN THE SCHEDULED SUPPLY AIR TEMPERATURE. IF D-2 IS OPEN AND D-3 IS CLOSED TO MINIMUM OUTSIDE AIR, V-2 SHALL MODULATE OPEN TO MAINTAIN THE SUPPLY AIR TEMPERATURE, SENSED BY TT-1.
- AIR FLOW CONTROL**
 - THE SUPPLY AIR FLOW SHALL BE CONTROLLED BY THE DIGITAL CONTROL PANEL MODULATING THE SUPPLY FAN VARIABLE SPEED MOTOR CONTROLLER TO MAINTAIN 1.0" (25mm) OF DUCT STATIC PRESSURE (FIELD ADJUSTABLE), SENSED BY SPS-1. RESET STATIC PRESSURE BASED ON ACTUAL BUILDING LOAD BY POLLING ALL AIR TERMINAL UNITS.
 - THE DIGITAL CONTROL PANEL, USING TOTAL SUPPLY AIR AND RETURN AIR FLOW SIGNALS, SHALL RESET THE RETURN AIR FAN VSMC TO MAINTAIN A CONSTANT AIR FLOW DIFFERENCE BETWEEN THE SUPPLY AIR AND THE RETURN AIR EQUAL TO MINIMUM OUTSIDE AIR.
 - USING HIGH PRESSURE SENSOR SPS-2 LOCATED AT THE SUPPLY FAN DISCHARGE, SHALL PREVENT THE SUPPLY FAN FROM DEVELOPING OVER 3" (75mm) OF STATIC PRESSURE (FIELD ADJUSTABLE). IF STATIC PRESSURE AT SPS-2 DOES EXCEED 3" (75mm) THE SUPPLY AIR FAN SHALL STOP. SPS-2 SHALL BE HARDWIRED TO THE SUPPLY FAN VSMC AND UNIT SHALL BE SHUTDOWN IN HAND/AUTO OR BYPASS MODE. SPS-2 WILL REQUIRE MANUAL RESET AT THE DEVICE.
- HUMIDITY CONTROL**
 - WHEN THE DIGITAL CONTROL PANEL IS NOT CALLING FOR HUMIDITY, SENSED BY RETURN AIR HUMIDITY H-1, 2-WAY "ON/OFF" CONTROL VALVE V-3 SHALL REMAIN CLOSED. WHEN THE DIGITAL CONTROL PANEL IS CALLING FOR HUMIDITY, V-3 SHALL REMAIN OPEN.
 - RETURN AIR HUMIDITY SHALL BE MAINTAINED AT SETPOINT OF 35% RH (ADJ) VIA DIGITAL CONTROL PANEL BY MODULATING CONTROL VALVE V-4 TO MAINTAIN THE DESIRED HUMIDITY. THE DCP SHALL OVERRIDE THIS CONTROL TO MAINTAIN HUMIDITY OF 80% AS SENSED BY H-2. DCP SHALL CLOSE VALVE V-3 WHENEVER THE SUPPLY FAN IS OFF. VALVE V-4 SHALL BE INTERLOCKED WITH A TEMPERATURE SWITCH TO KEEP THE HUMIDIFIER OFF UNTIL CONDENSATE TEMPERATURE APPROACHES STEAM TEMPERATURE.
- FREEZE PROTECTION**
 - IF THE AIR TEMPERATURE AS SENSED BY TT-3 FALLS BELOW 45°F (7°C), AN ALARM SIGNAL SHALL INDICATE AT THE DCP AND ECC. IF THIS TEMPERATURE FALLS BELOW 40°F (4°C), AS SENSED BY THE TSL, THE HEATING COIL SHALL OPEN TO FULL AND A CRITICAL ALARM SHALL INDICATE AT THE DIGITAL CONTROL PANEL AND ECC.
- AUTOMATIC SHUTDOWN/RESTART**
 - WHEN SMOKE IS DETECTED BY DUCT SMOKE DETECTOR, SD, THE SUPPLY AND RETURN FANS SHALL SHUT OFF AND AN ALARM SIGNAL SHALL BE TRANSMITTED TO THE FIRE ALARM SYSTEM.
 - EXHAUST FANS SERVING AREA OF THE SUPPLY FAN SHALL CONTINUE TO RUN. SUPPLY AND RETURN FANS SHALL REMAIN OPEN AND DAMPERS SHALL OPEN WHEN FIRE ALARM CIRCUIT IS RESET.
- VFD FAILURE CONSTANT SPEED OPERATION**
 - UPON FAILURE OF THE VFD, THE SUPPLY AND RETURN FANS SHALL BE STARTED/STOPPED MANUALLY AT THE DIGITAL CONTROL PANEL OR THE ECC THROUGH THE BY-PASS STARTER. FANS SHALL THEN BE OPERATED AT CONSTANT SPEED.

1 VARIABLE AIR VOLUME AIR HANDLING UNIT CONTROL DIAGRAM



STEAM HUMIDIFIER CONTROL NOTES:
 RETURN (OR EXHAUST) AIR HUMIDITY SHALL BE MONITORED. ON A CALL FOR HUMIDIFICATION, HUMIDIFIER VALVE V-1 SHALL MODULATE TO MAINTAIN THE RETURN (OR EXHAUST) AIR HUMIDITY SET POINT TO 30% (ADJUSTABLE). PRIOR TO ACTIVATION OF V-4, THE ON/OFF CONTROL VALVE V-3 SHALL BE ENABLED THROUGH ECC AND JACKET TEMPERATURE SENSED BY TSH SHALL BE WARM ENOUGH TO PREVENT CONDENSATION. THE HIGH LIMIT HUMIDITY SENSOR, LOCATED IN THE SUPPLY AIR DUCT 3000MM (10 FEET) AWAY FROM THE HUMIDIFIER SHALL DISABLE THE HUMIDIFIER AND GIVE AN ALARM SIGNAL TO THE ECC. IF THE SUPPLY AIR HUMIDITY EXCEEDS 80% RH (ADJUSTABLE), THE AIRFLOW SWITCH SHALL PROVE AIRFLOW BEFORE HUMIDITY CONTROLS ARE ACTIVATED.

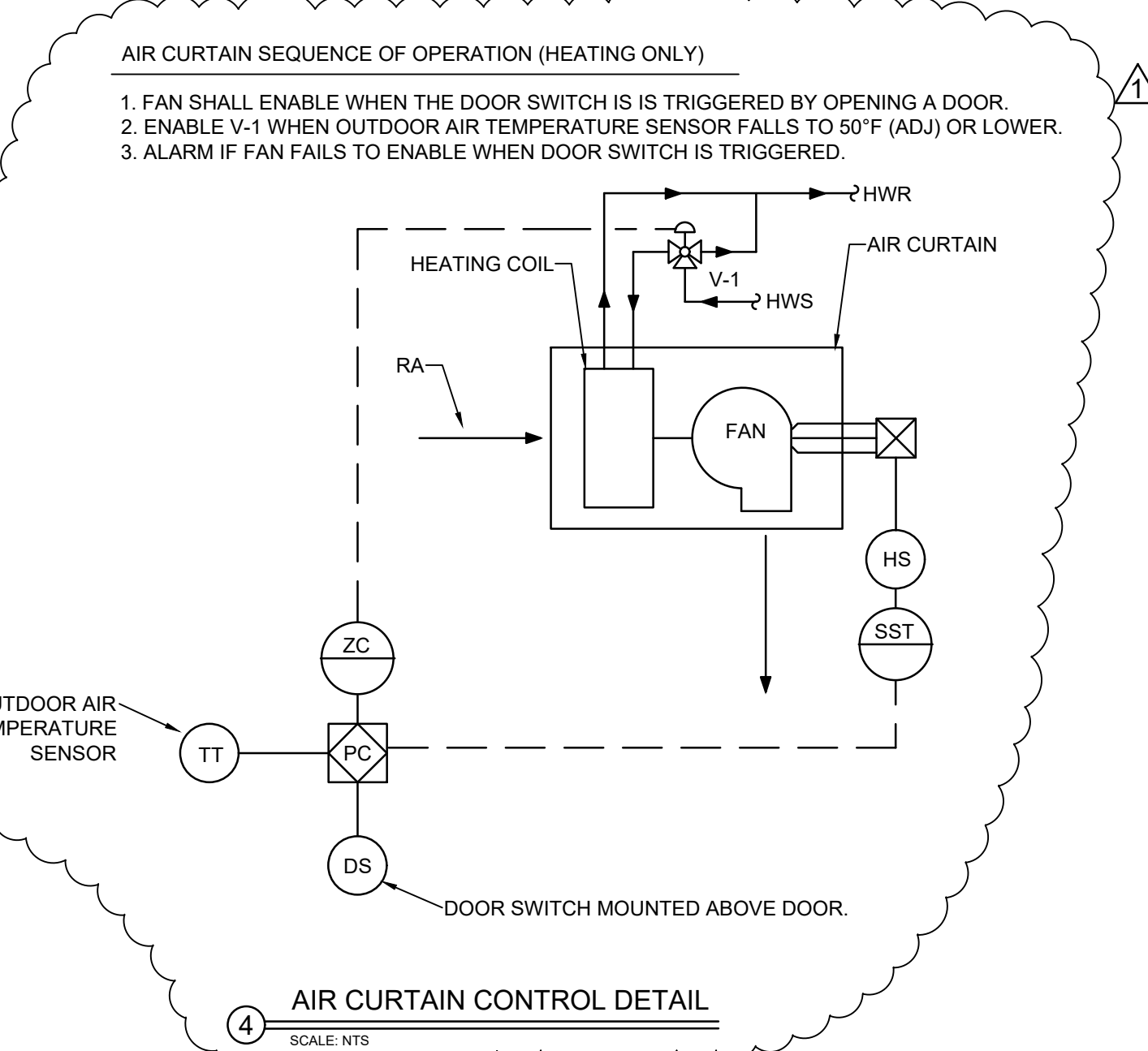
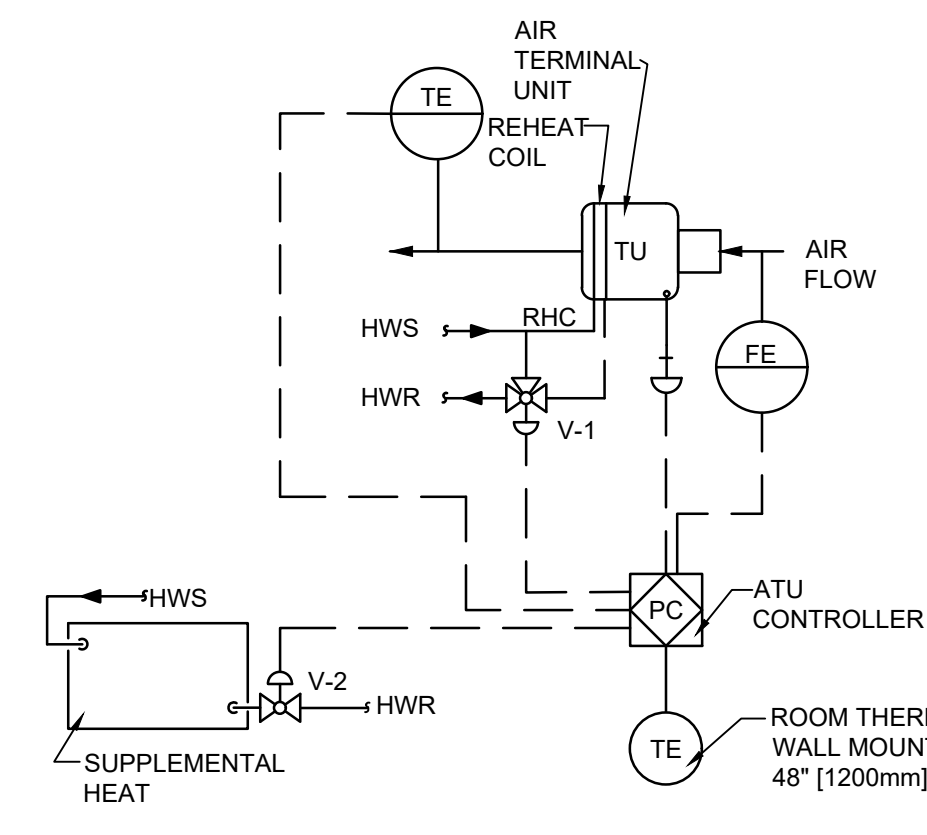
2 STEAM HUMIDIFIER CONTROL DETAIL



- VAV BOX CONTROL SEQUENCE**
- UPON FALL IN SPACE TEMPERATURE THE VAV DAMPER WILL MODULATE TO MINIMUM POSITION.
 - UPON FURTHER DROP IN SPACE TEMPERATURE VALVE V-1 WILL MODULATE TO MAINTAIN SET POINT ± 5° F. THE ADJUSTABLE TOLERANCE OF ± 5° F HAS BEEN SELECTED TO PREVENT VALVE HUNTING.
 - VALVE V-2 SHALL BE ENABLED WHEN OUTSIDE AIR FALLS BELOW 40° F (ADJ) AND VALVE V-1 HAS BEEN MODULATED OPEN ABOVE 30% (ADJ). VALVE V-2 SHALL MAINTAIN SET POINT ± 5° F. THE ADJUSTABLE TOLERANCE OF ± 5° F HAS BEEN SELECTED TO PREVENT VALVE HUNTING. THE REVERSE SHALL OCCUR ON A RISE IN SPACE TEMPERATURE.
 - VALVE V-2 SHALL BE ENABLED WHEN OUTSIDE AIR FALLS BELOW 40° F (ADJ) AND VALVE V-1 HAS BEEN MODULATED OPEN ABOVE 30% (ADJ). VALVE V-2 SHALL MAINTAIN SET POINT ± 5° F. THE ADJUSTABLE TOLERANCE OF ± 5° F HAS BEEN SELECTED TO PREVENT VALVE HUNTING.
 - THE REVERSE SHALL OCCUR ON THE RISE IN SPACE TEMPERATURE.

WITH SUPPLEMENTAL HEATING

3 VAV TERMINAL UNIT CONTROL DETAIL



- AIR CURTAIN SEQUENCE OF OPERATION (HEATING ONLY)**
- FAN SHALL ENABLE WHEN THE DOOR SWITCH IS TRIGGERED BY OPENING A DOOR.
 - ENABLE V-1 WHEN OUTDOOR AIR TEMPERATURE SENSOR FALLS TO 50°F (ADJ) OR LOWER.
 - ALARM IF FAN FAILS TO ENABLE WHEN DOOR SWITCH IS TRIGGERED.

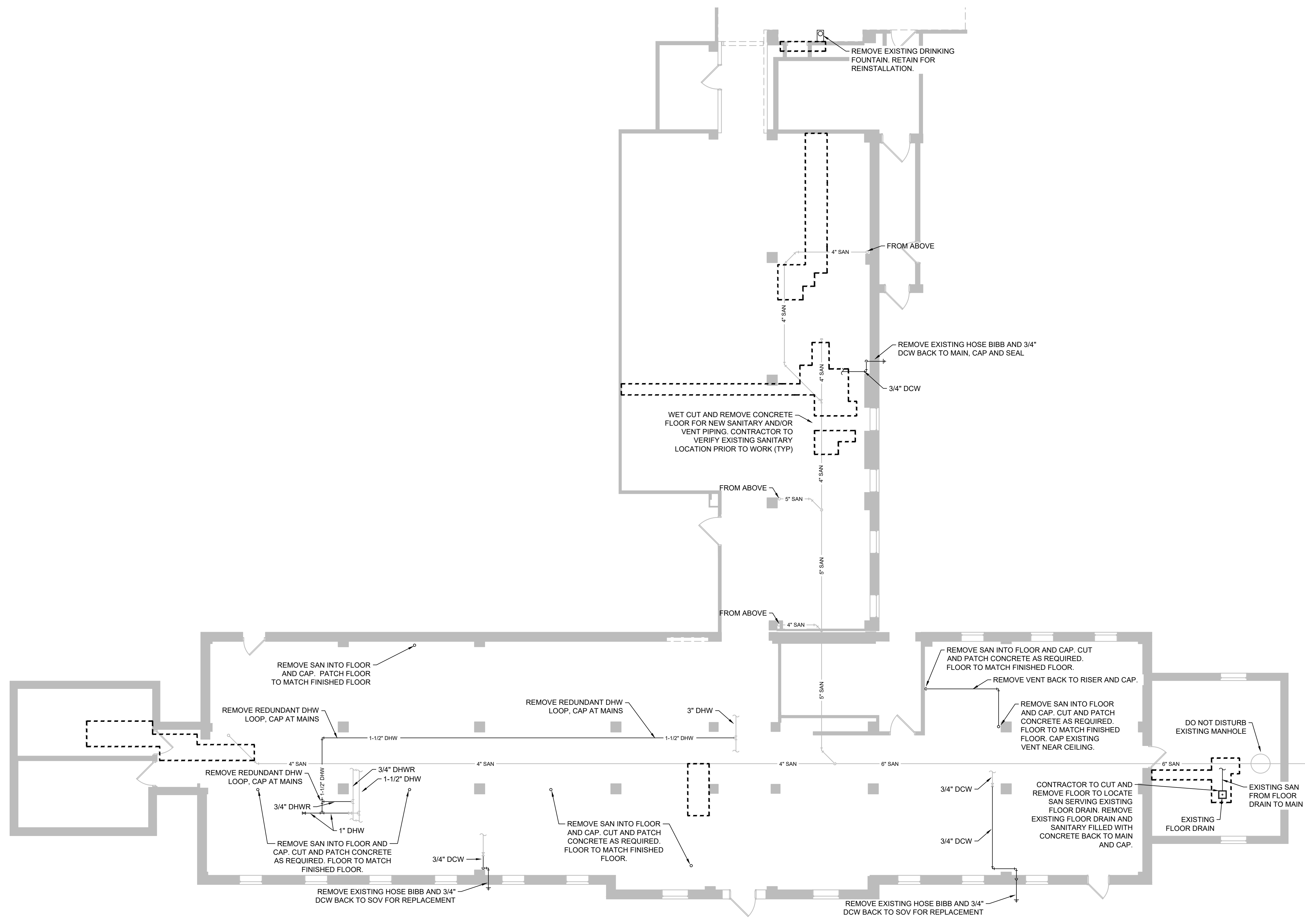
SYSTEM COMPONENT	POINT ID	SYSTEM LEGEND	SYSTEM OUTPUTS		SYSTEM INPUTS		SYSTEM SOFTWARE/CONTROL		PAGE:
			BINARY	ANALOG	BINARY	ANALOG	ALARM PROCESSING	APPLICATION/FUNCTION	
SYSTEM									
VAV AIR HANDLER									
Return air Temperature	AI-1	RAT							
Return Air Humidity	AI-2	RAH							
Return Air Flow (cfm)	AI-3	RAF							
Mixed Air Temperature	AI-4	MA-T							
Pre-Heat Temperature	AI-5	PHT							
Cooling Coil Temperature	AI-6	CCT							
Discharge Air Temperature	AI-7	DAT							
Discharge Static Pressure	AI-8	DASP							
Discharge Air Humidity	AI-9	DAH							
Supply Air Flow (cfm)	AI-10	SAF							
OUTSIDE AIR TEMPERATURE	AI-11	OAT							
RETURN LOW PRESSURE	BI-1	RLP							
RETURN FAN STATUS	BI-2	RF-ST5							
SUPPLY FAN STATUS	BI-3	SF-ST5							
MIXED AIR LOW LIMIT	BI-4	TSL-1							
STATIC PRESSURE HIGH LIMIT	BI-5	SPS-2							
HUMIDITY HIGH LIMIT	BI-6	HHL							
SUPPLY FAN VSMC ALARM	BI-7	SF-ALA							
RETURN FAN VSMC ALARM	BI-8	RF-ALA							
RETURN FAN VSMC	AO-1	RF-SPD							FULL COMMUNICATION
SUPPLY FAN VSMC	AO-2	SF-SPD							FULL COMMUNICATION
OUTSIDE AIR DAMPER	AO-3	OAD							
RETURN AIR DAMPER	AO-4	RAD							
EXHAUST AIR DAMPER	AO-5	EAD							
MINIMUM OUTSIDE AIR DAMPER	AO-7	MIN-OAD							
PRE-HEAT VALVE V-2	AO-8	PHT-V1							
COILING VALVE V-1	AO-9	CLV-V1							
STEAM HUMIDIFIER VALVE V-4	AO-10	HUM-V4							
RETURN FAN START/STOP	BO-1	RF-SST							
SUPPLY FAN START/STOP	BO-2	SF-SST							
STEAM ISOLATION VALVE V-3	BO-3	HUM-ISO-V3							

100% CONSTRUCTION DOCUMENTS

REVISION #1: BIDDING #1 REVISION 04/27/2022 CONSULTANTS:	ARCHITECT-ENGINEER FOURFRONT DESIGN, INC. 517 7TH STREET RAPID CITY, SOUTH DAKOTA 57701(605) 342-9470 FAX: (605) 342-2377 WWW.FOURFRONTDESIGN.COM	Drawing Title HVAC CONTROL DETAILS	Project Title FARGO EHRM TRAINING AND ADMIN	Project Number 437-21-225	Office of Construction and Facilities Management
Revisions:	REGISTERED PROFESSIONAL ENGINEER RAYMOND DAWES PE 5438 NORTH DAKOTA	BUILDING IS FULLY SPRINKLED	Location FARGO, ND	Building Number 9	Department of Veterans Affairs
Date	Date 01/11/2022	Checked RD	Drawn PM	Drawing Number M2.10	Dwg. 25 of 41

5/24/2021 3:54:42 PM

one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot

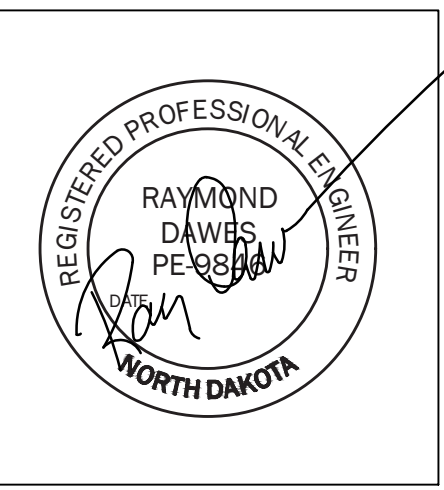


1 PLUMBING DEMOLITION PLAN
 SCALE: 1/8" = 1'

100% CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:



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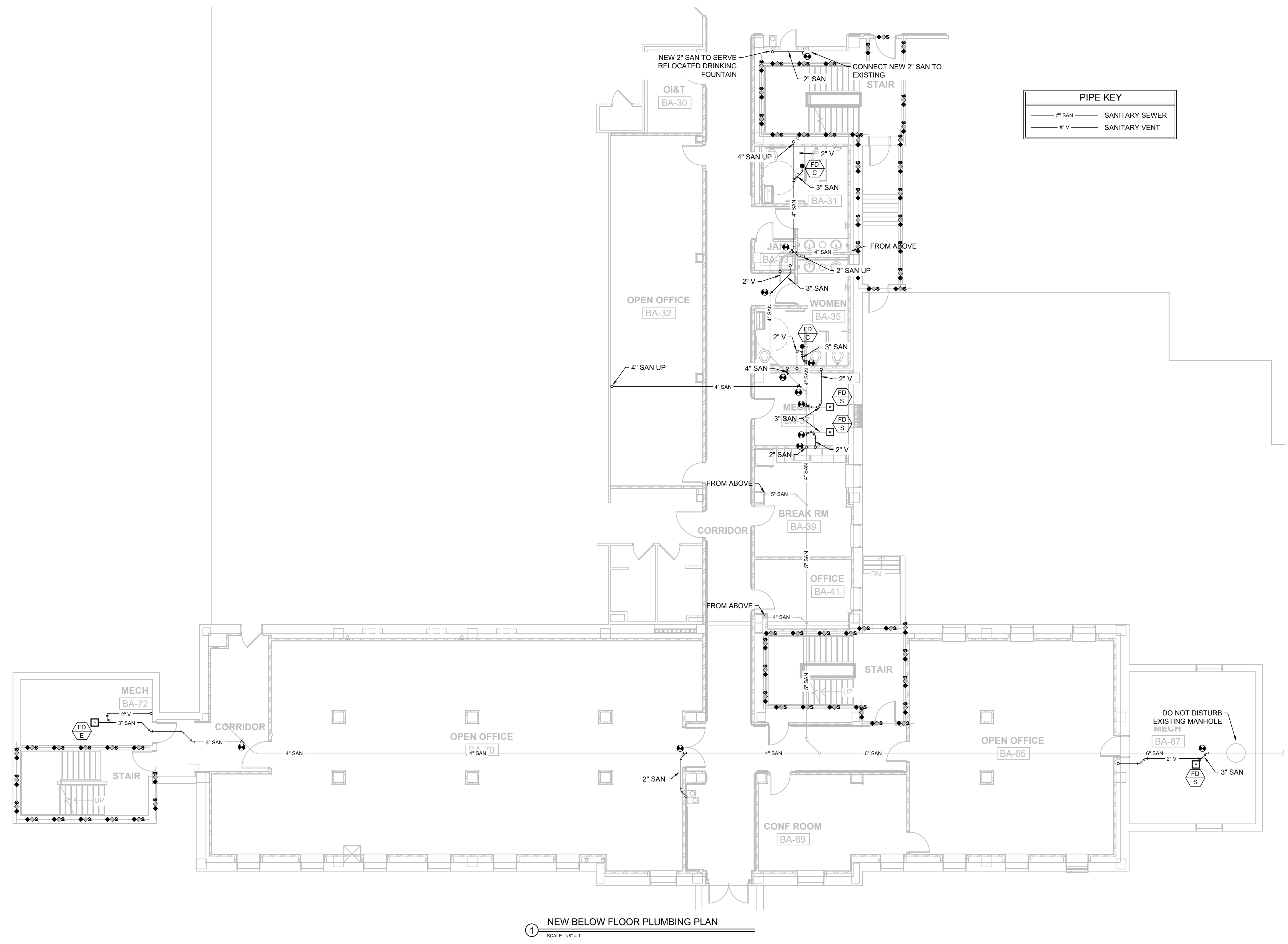
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PLUMBING DEMOLITION PLAN
 BUILDING IS FULLY SPRINKLED

Project Title
FARGO EHRM TRAINING AND ADMIN
 Location
FARGO, ND
 Date
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 Checked
 RD
 Drawn
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Project Number
 437-21-225
 Building Number
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 Drawing Number
PD1.00
 Dwg. 26 of 41

Office of Construction and Facilities Management
 Department of Veterans Affairs

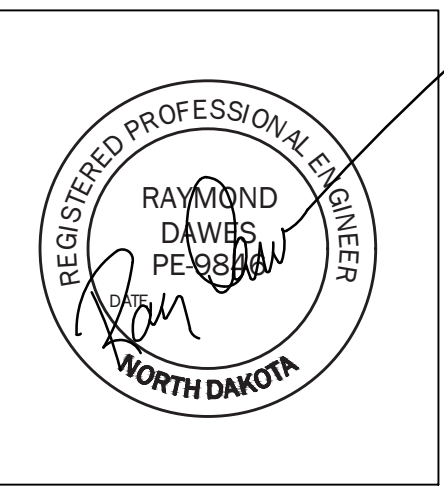
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 eleven inches = one foot
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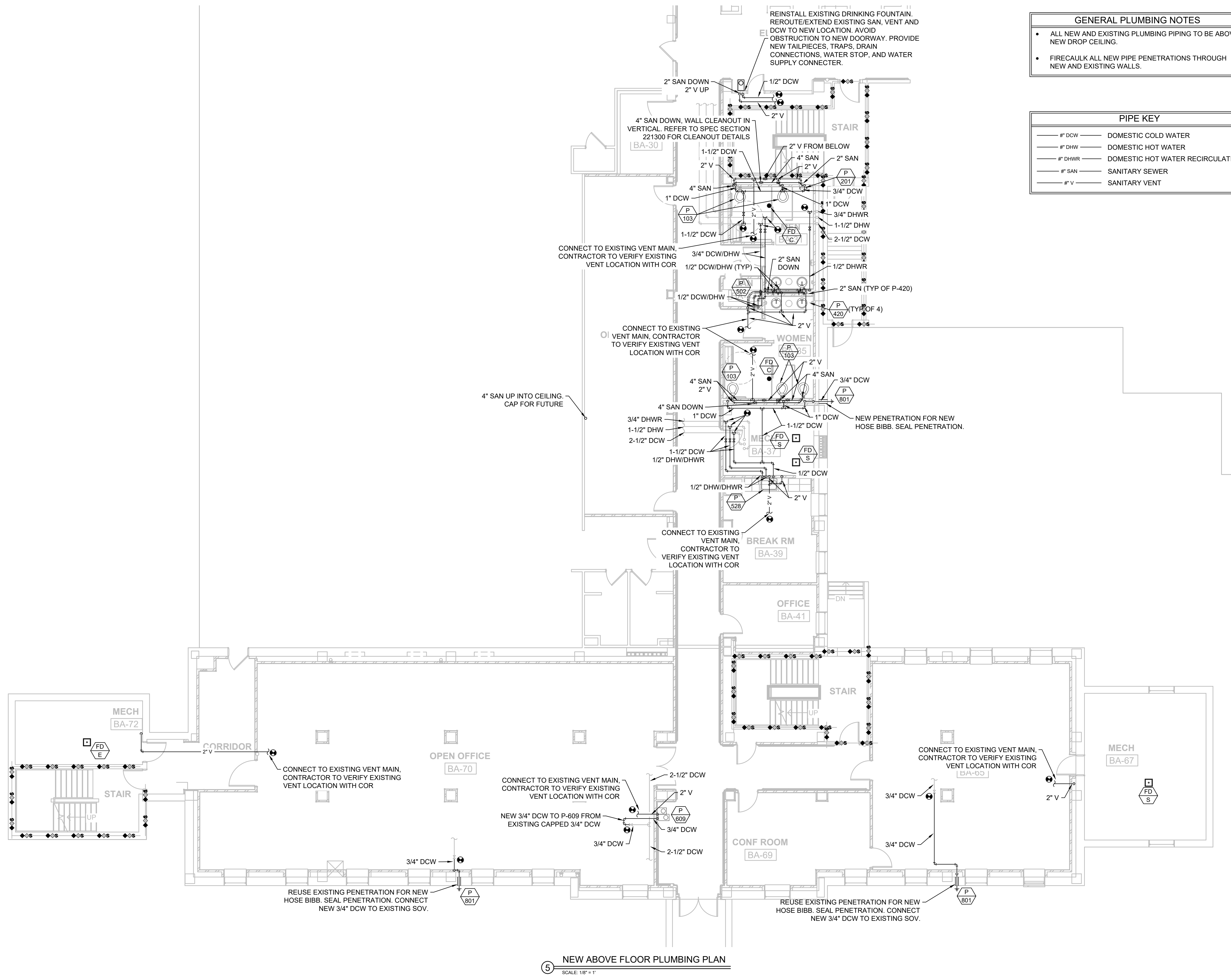
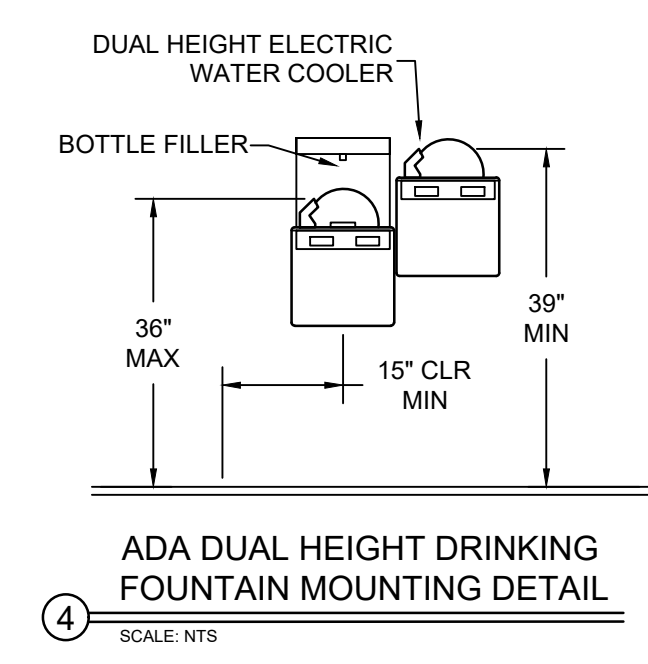
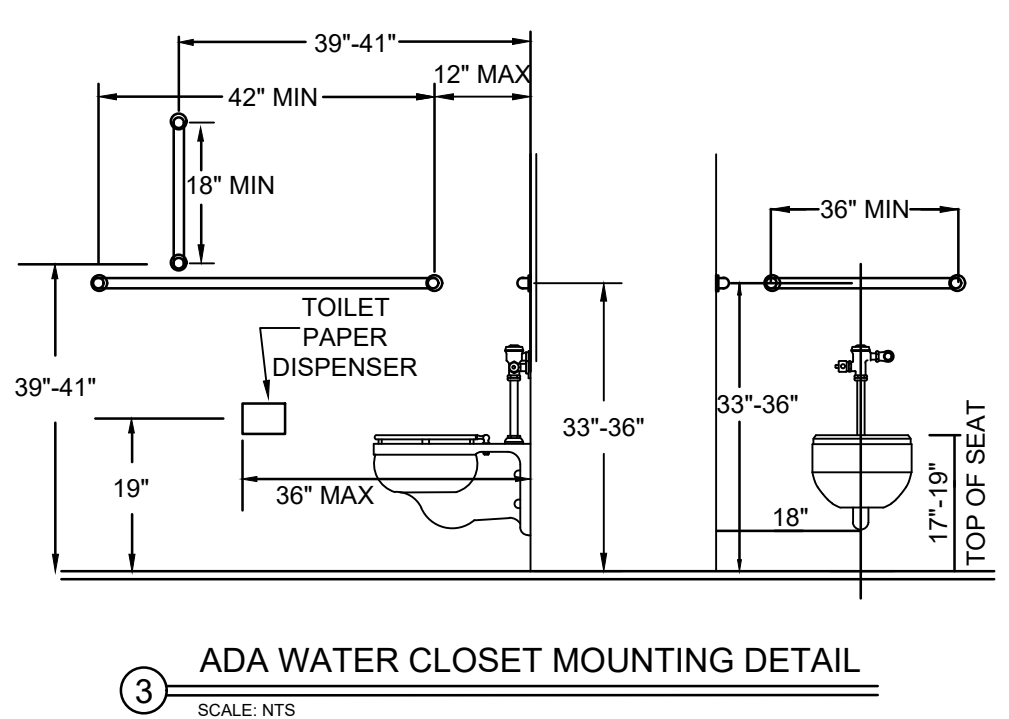
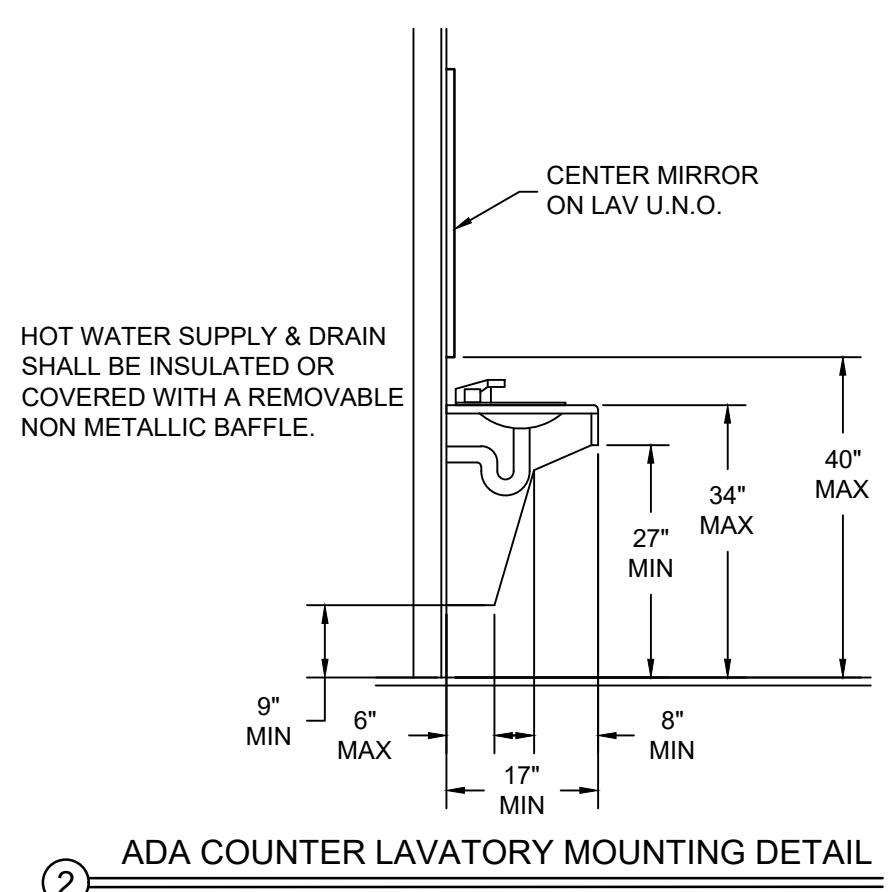
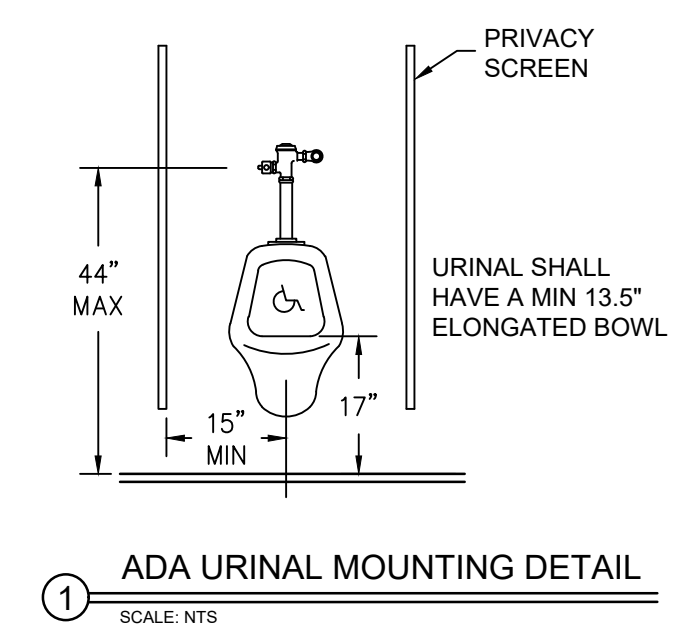
ARCHITECT-ENGINEER
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Drawing Title
NEW BELOW FLOOR PLUMBING PLAN
 BUILDING IS FULLY SPRINKLED

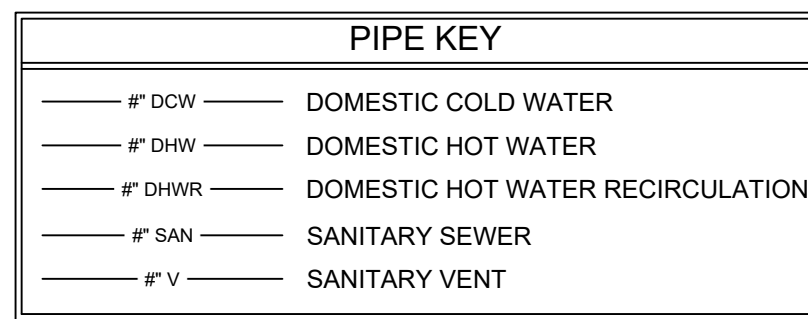
Project Title
FARGO EHRM TRAINING AND ADMIN
 Location
FARGO, ND
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 01/11/2022
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 PM

Project Number
 437-21-225
 Building Number
9
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P1.00
 Dwg. 27 of 41

Office of Construction and Facilities Management
 Department of Veterans Affairs



- GENERAL PLUMBING NOTES**
- ALL NEW AND EXISTING PLUMBING PIPING TO BE ABOVE NEW DROP CEILING.
 - FIRECAULK ALL NEW PIPE PENETRATIONS THROUGH NEW AND EXISTING WALLS.



100% CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:



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Drawing Title

NEW ABOVE FLOOR PLUMBING PLAN AND DETAILS

BUILDING IS FULLY SPRINKLED

Project Title

FARGO EHRM TRAINING AND ADMIN

Project Number

437-21-225

Building Number

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Drawing Number

P1.10

Dwg. 28 of 41

Office of Construction and Facilities Management

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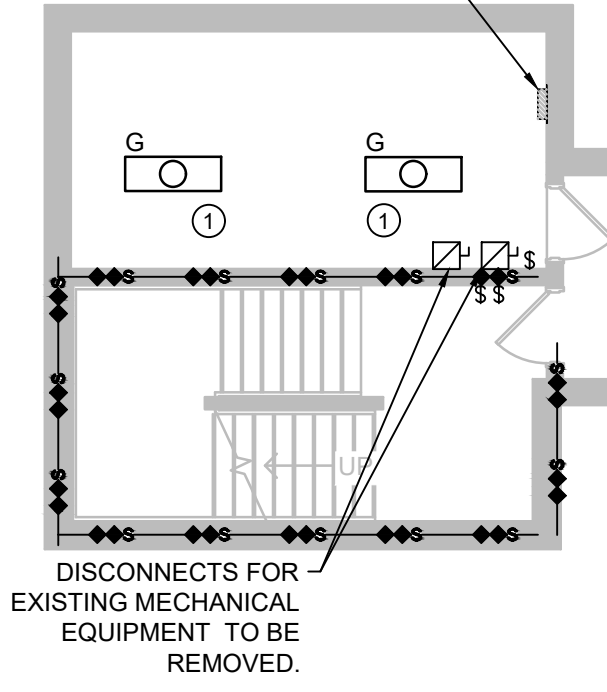
- KEYED ELECTRICAL NOTES**
- ① REMOVE EXISTING LUMINAIRE AND ASSOCIATED WIRING IN ITS ENTIRETY.
 - ② REMOVE EXISTING LUMINAIRE. MAINTAIN EXISTING POWER AND CONDUIT AND PREPARE FOR REUSE.
 - ③ REMOVE EXISTING EXIT LIGHT. MAINTAIN EXISTING POWER AND CONDUIT AND PREPARE FOR REUSE.
 - ④ REMOVE EXISTING RECEPTACLE AND CONNECTED WIRING FOR POWER TO EXISTING WATER FOUNTAIN IN ITS ENTIRETY.

CONTRACTOR TO PROVIDE MULTIPLE JUNCTION BOXES IN CEILING FOR THE RELOCATION OF EXISTING UTILITIES TO A NEW 8' CEILING HEIGHT. CONTRACTOR TO PROVIDE 1400 KW PORTABLE TEMPORARY GENERATOR AND TEMPORARY ELECTRICAL PANEL TO FEED ALL DOWNSTREAM POWER DURING CONDUIT RELOCATION.

CONTRACTOR TO VERIFY ALL EXISTING DOWNSTREAM REQUIREMENTS. CONDUCTORS OF SEPARATE POWER SYSTEMS (DIFFERENT VOLTAGES OR EMERGENCY SYSTEMS) SHALL NOT BE INSTALLED IN THE SAME JUNCTION BOX.

GENERATOR WILL NOT BE REQUIRED TO BE IN OPERATION FROM FRIDAY AT 5:00 PM UNTIL THE FOLLOWING MONDAY AT 7:00 AM.

CONTRACTOR TO DISCONNECT POWER AS NEEDED TO EXISTING DDC CONTROL PANEL AND PREPARE TO RECONNECT POWER TO NEW DDC CONTROLLER FOR NEW AIR HANDLING UNIT.



- REMOVE EXISTING CONDUIT AND CONDUCTORS AND PREPARE FOR REUSE IN NEW LOCATION. EXISTING CONDUITS INCLUDE:
- (2) 3/4" EMT
 - (2) 1" EMT
 - (1) 1-1/4" EMT
 - (3) 1-1/2" EMT
 - (1) 1-1/2" RMC
 - (1) 2" EMT
 - (1) 3" RMC
 - (1) 4" RMC
 - (2) 4" EMT

EXISTING TEMPORARY POWER RECEPTACLE AND ASSOCIATED WIRING TO BE REMOVED IN ITS ENTIRETY.

CONTRACTOR TO PROVIDE PORTABLE, SELF-SUPPORTING UNISTRUT RACK FOR MOUNTING OF TEMPORARY POWER PANEL OR DISCONNECTS. FEED TEMPORARY PANEL/DISCONNECTS FROM PORTABLE GENERATOR AND FEED OUT TO EXISTING WIRES TO BE RELOCATED TO MAINTAIN POWER DURING RELOCATION.

CONTRACTOR TO PROVIDE MULTIPLE JUNCTION BOXES IN CEILING FOR THE RELOCATION OF EXISTING UTILITIES TO A NEW 8' CEILING HEIGHT. CONTRACTOR TO PROVIDE 1400 KW PORTABLE TEMPORARY GENERATOR AND TEMPORARY ELECTRICAL PANEL TO FEED ALL DOWNSTREAM POWER DURING CONDUIT RELOCATION.

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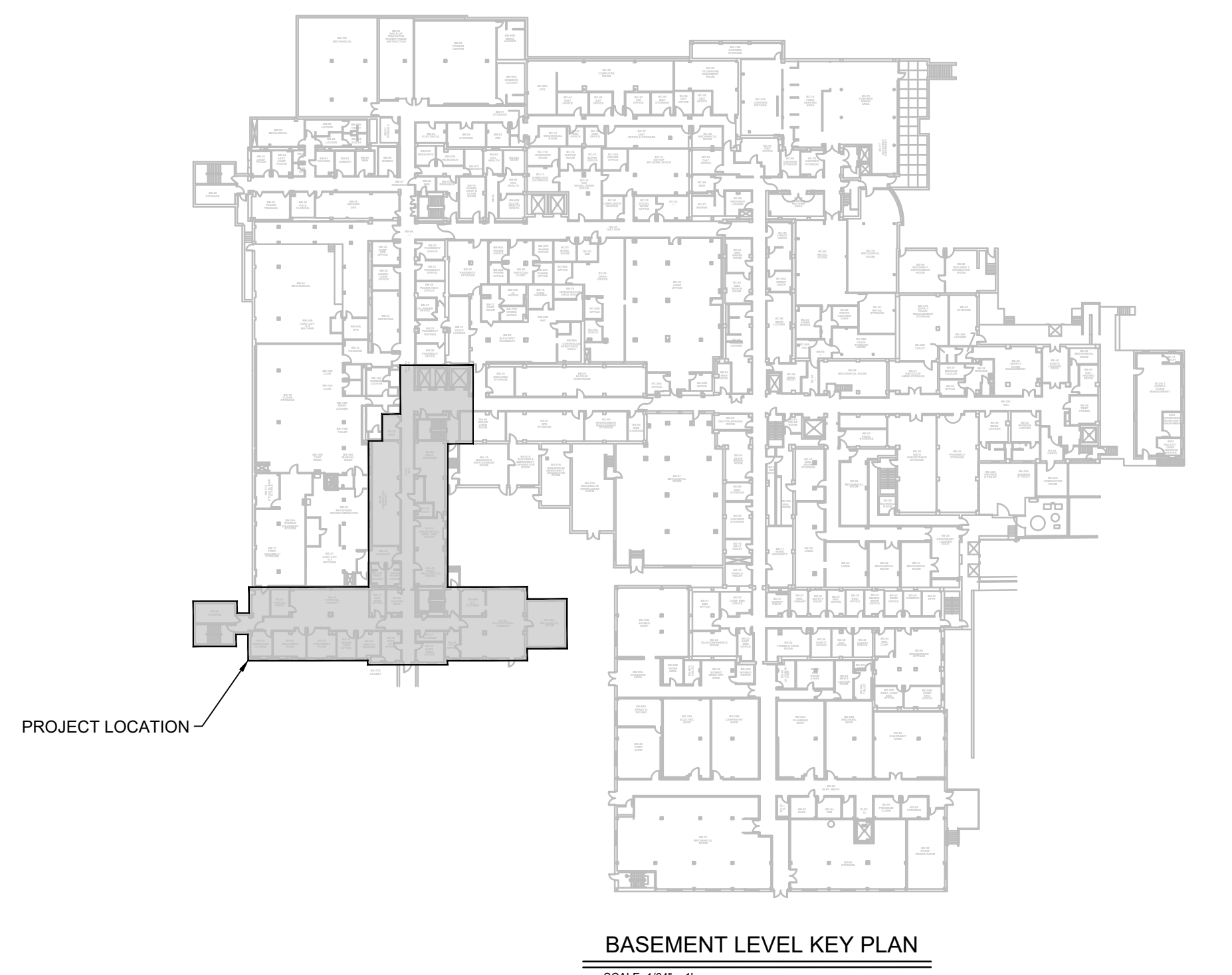
GENERATOR WILL NOT BE REQUIRED TO BE IN OPERATION FROM FRIDAY AT 5:00 PM UNTIL THE FOLLOWING MONDAY AT 7:00 AM.

CONTRACTOR TO CUT AND DEMO CONCRETE FLOOR AND PREPARE FOR INSTALLATION OF CONDUIT FOR DATA AND POWER FLOOR BOXES.

EXISTING CONDUIT AND CABLE TRAY TO REMAIN ON CONCRETE FLOOR.

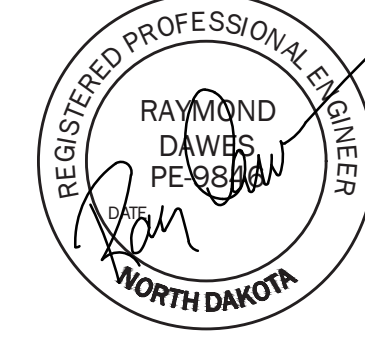
REMOVE EXISTING SINGLE MAGNETIC DOOR HOLD, TEMPORARILY BLIND OF JUNCTION BOX AND MAINTAIN CONNECTIONS FOR POWER AND FIRE ALARM SIGNAL FOR REUSE.

1 BASEMENT LEVEL DEMOLITION PLAN
SCALE: 1/8" = 1'



CONSULTANTS:

ARCHITECT-ENGINEER



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Drawing Title
BASEMENT LEVEL ELECTRICAL DEMOLITION PLAN

Approved: Project Director
FULLY SPRINKLED

Project Title
FARGO EHRM TRAINING AND ADMIN

Date
01/11/2022

Checked
RD

Drawn
JS/WW

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Dwg. 33 of 41

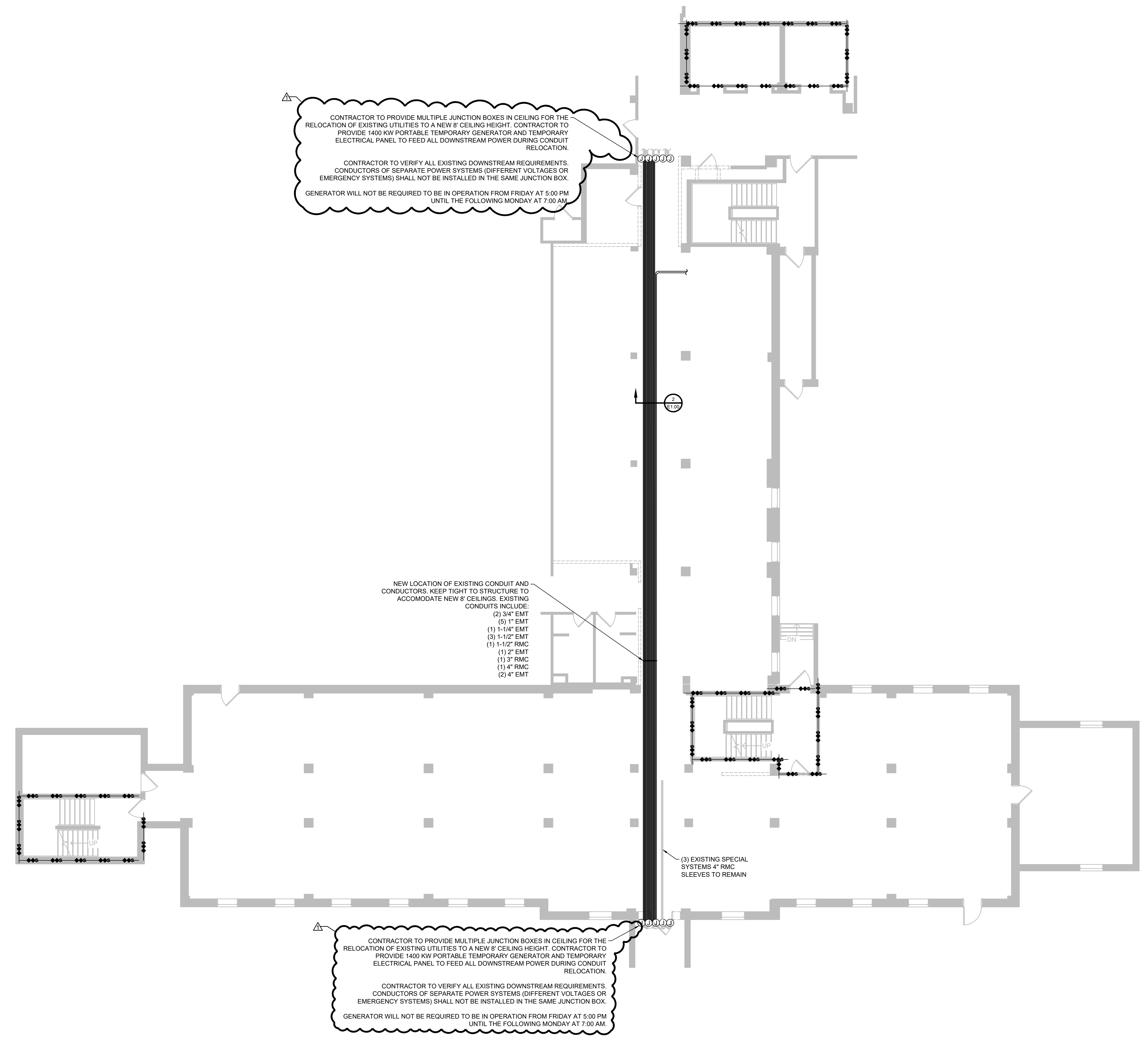
Office of Construction and Facilities Management



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CONTRACTOR TO PROVIDE MULTIPLE JUNCTION BOXES IN CEILING FOR THE RELOCATION OF EXISTING UTILITIES TO A NEW 8' CEILING HEIGHT. CONTRACTOR TO PROVIDE 1400 KW PORTABLE TEMPORARY GENERATOR AND TEMPORARY ELECTRICAL PANEL TO FEED ALL DOWNSTREAM POWER DURING CONDUIT RELOCATION.

CONTRACTOR TO VERIFY ALL EXISTING DOWNSTREAM REQUIREMENTS. CONDUCTORS OF SEPARATE POWER SYSTEMS (DIFFERENT VOLTAGES OR EMERGENCY SYSTEMS) SHALL NOT BE INSTALLED IN THE SAME JUNCTION BOX.

GENERATOR WILL NOT BE REQUIRED TO BE IN OPERATION FROM FRIDAY AT 5:00 PM UNTIL THE FOLLOWING MONDAY AT 7:00 AM.

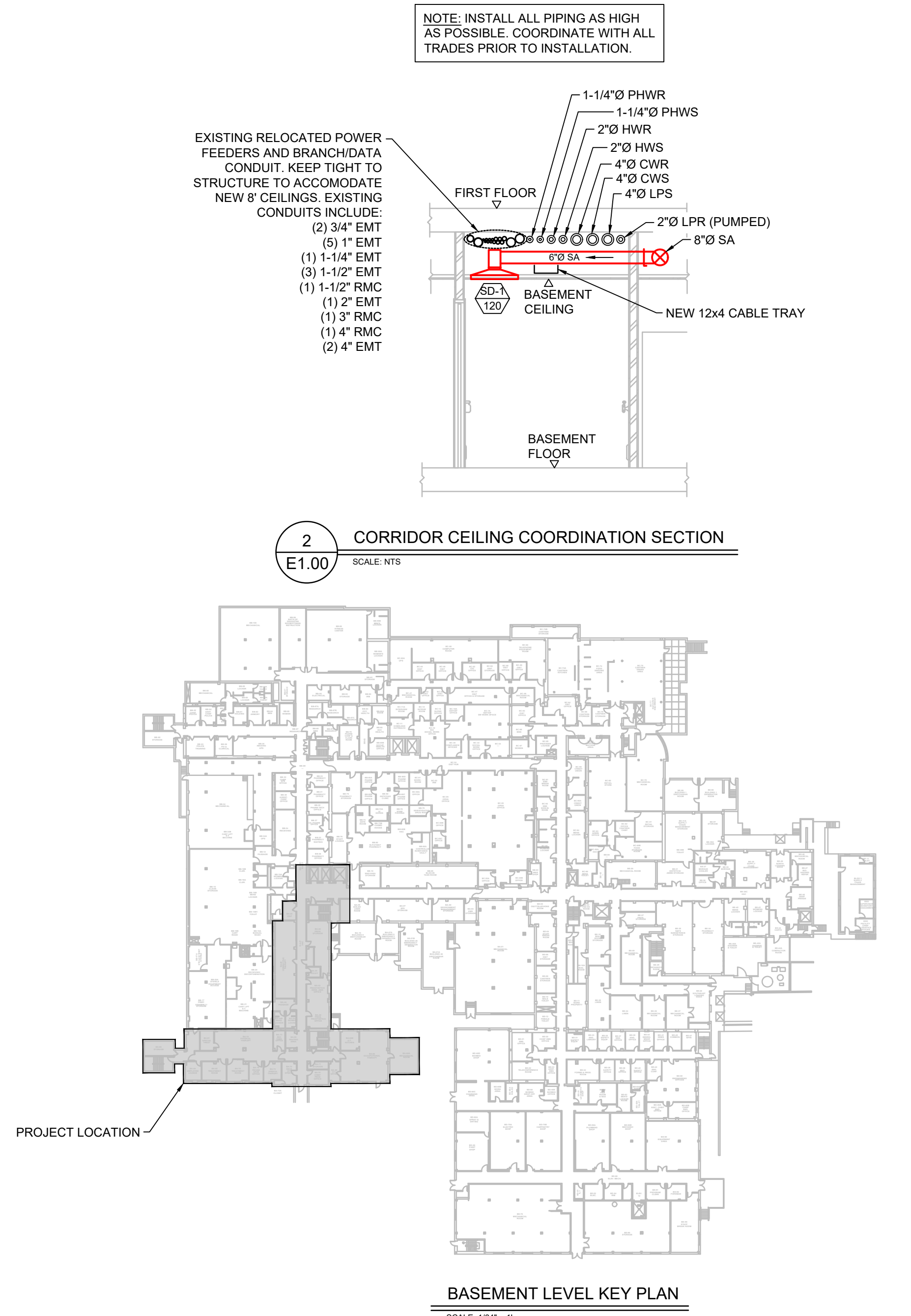
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GENERATOR WILL NOT BE REQUIRED TO BE IN OPERATION FROM FRIDAY AT 5:00 PM UNTIL THE FOLLOWING MONDAY AT 7:00 AM.

- NEW LOCATION OF EXISTING CONDUIT AND CONDUCTORS. KEEP TIGHT TO STRUCTURE TO ACCOMMODATE NEW 8' CEILINGS. EXISTING CONDUITS INCLUDE:
- (2) 3/4" EMT
 - (5) 1" EMT
 - (1) 1-1/4" EMT
 - (3) 1-1/2" EMT
 - (1) 1-1/2" RMC
 - (1) 2" EMT
 - (1) 3" RMC
 - (1) 4" RMC
 - (2) 4" EMT

1 BASEMENT LEVEL POWER FEEDER AND BRANCH/ DATA CONDUIT RELOCATION
 SCALE: 1/8" = 1'



2 CORRIDOR CEILING COORDINATION SECTION
 SCALE: NTS

BASEMENT LEVEL KEY PLAN
 SCALE: 1/8" = 1'

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ADDENDUM #1	04/25/2022
Revisions:	Date

CONSULTANTS:

REGISTERED PROFESSIONAL ENGINEER
 RAYMOND DAWES
 PE 058841
 NORTH DAKOTA

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Drawing Title
BASEMENT LEVEL POWER FEEDER AND BRANCH/ DATA CONDUIT RELOCATION

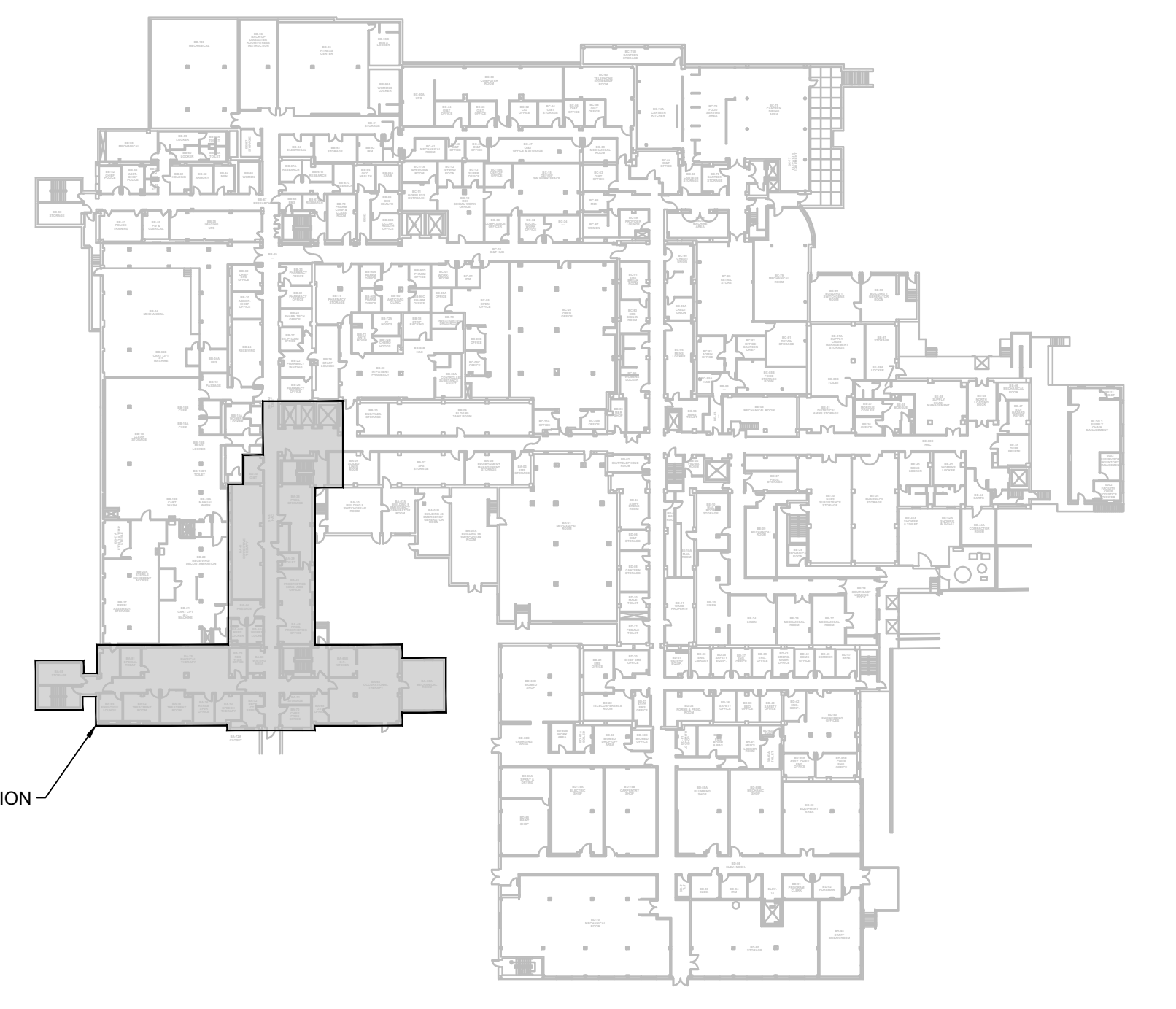
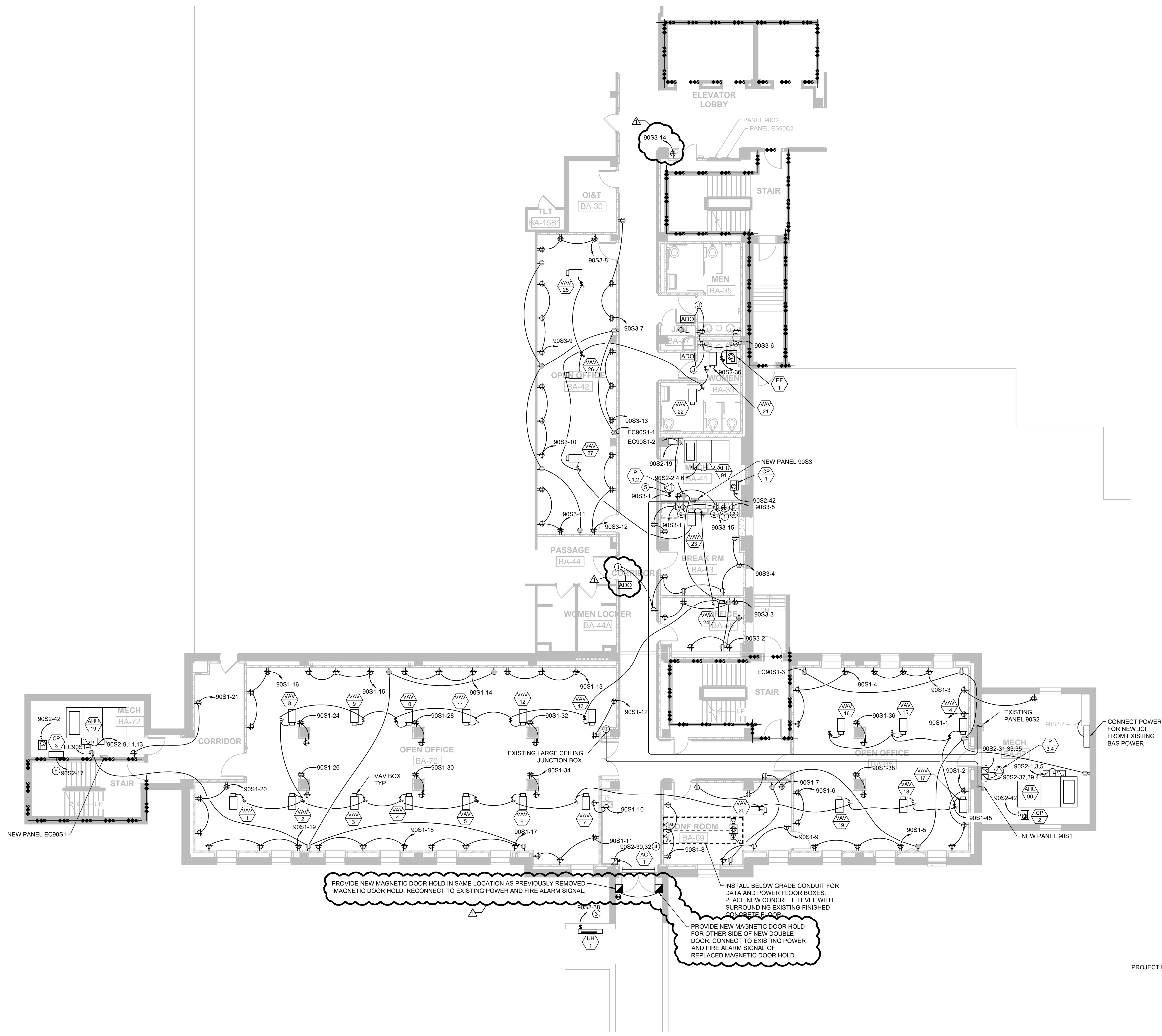
Approved: Project Director
FULLY SPRINKLED

Project Title FARGO EHRM TRAINING AND ADMIN	Project Number 437-21-225
Location FARGO, ND	Building Number 9
Date 01/11/2022	Checked RD
Drawn JS/WW	Drawing Number E1.00
Dwg. 34 of 41	

Office of Construction and Facilities Management

Department of Veterans Affairs

- KEYED ELECTRICAL NOTES**
- ① DEDICATED RECEPTACLE FOR MICROWAVE AT 60" AFF.
 - ② INSTALL RECEPTACLE AT 6" ABOVE FINISHED COUNTER.
 - ③ CONNECT HOME RUN TO EXISTING SPARE 20 AMP SINGLE POLE BREAKER IN PANEL 90S2.
 - ④ CONNECT HOME RUN TO EXISTING 20 AMP SPARE 2 POLE BREAKER IN PANEL 90S2.
 - ⑤ PROVIDE SEPERATE FUSESTAT FOR EACH PUMP AND HOMERUN TOGETHER, SINGLE PUMP AND FUSESTAT SHOWN FOR CLARITY ONLY.
 - ⑥ POWER FOR NEW JCI. REFER TO MECHANICAL.



1 BASEMENT LEVEL POWER PLAN
SCALE: 1/8" = 1'-0"

BASEMENT LEVEL KEY PLAN
SCALE: 1/8" = 1'-0"

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Drawing Title
BASEMENT LEVEL POWER PLAN

Approved: Project Director
FULLY SPRINKLED

Project Title
FARGO EHRM TRAINING AND ADMIN

Project Number
437-21-225

Building Number
9

Location
FARGO, ND

Date
01/11/2022

Checked
RD

Drawn
JS/WW

Drawing Number
E1.01

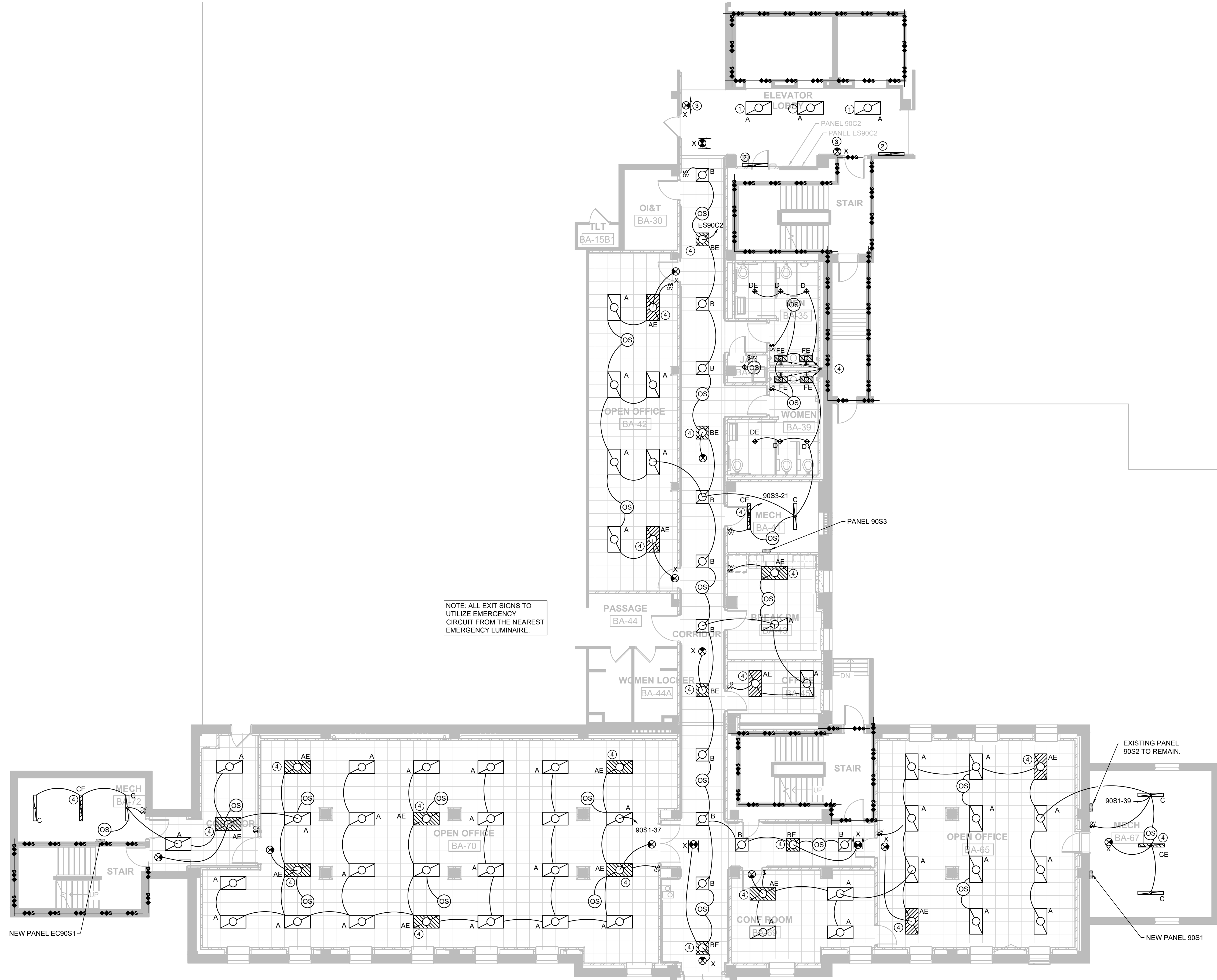
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- KEYED ELECTRICAL NOTES**
- INSTALL NEW LUMINAIRE IN SAME LOCATION AS PREVIOUS FIXTURE USING CABLE MOUNTING KIT C/FROMBY SC5F-KIT. REUSE EXISTING CONDUIT, POWER. TIE INTO EXISTING LIGHTING CONTROLS.
 - INSTALL NEW LUMINAIRE IN SAME LOCATION AS PREVIOUS FIXTURE. REUSE EXISTING CONDUIT & POWER. TIE INTO EXISTING LIGHTING CONTROLS.
 - INSTALL NEW EXIT LIGHT IN SAME LOCATION AS PREVIOUS FIXTURE. REUSE EXISTING POWER AND CONDUIT.
 - CONNECT ALL EMERGENCY LUMINAIRES TO BOTH NORMAL POWER SHOWN AND EMERGENCY HOMERUN TO SPARE 20 AMP BREAKER IN PANEL ESS0-C2 WITH BODINE GTDU SWITCHED BYPASS UNIT (OR EQUAL). REFER TO DETAIL 9/E0.03



1 BASEMENT LEVEL LIGHTING PLAN
E200 SCALE: 1/8" = 1'-0"

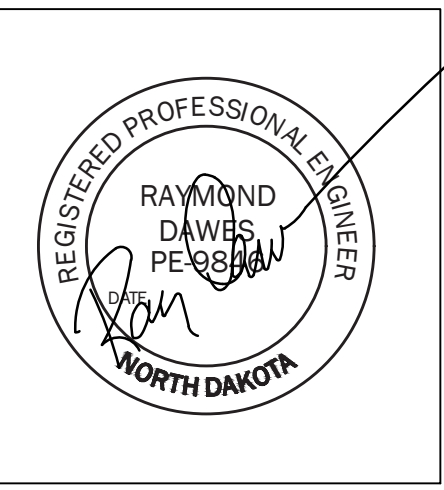


BASEMENT LEVEL KEY PLAN
SCALE: 1/4" = 1'-0"

5/24/2021 3:54:42 PM
one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
five inches = one foot
six inches = one foot
seven inches = one foot
eight inches = one foot
nine inches = one foot
ten inches = one foot
eleven inches = one foot
twelve inches = one foot

Revisions:	Date

CONSULTANTS:



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Drawing Title
BASEMENT LEVEL LIGHTING PLAN

Approved: Project Director
FULLY SPRINKLED

Project Title
FARGO EHRM TRAINING AND ADMIN

Location
FARGO, ND

Date
01/11/2022

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RD

Drawn
JS/WW

Project Number
437-21-225

Building Number
9

Drawing Number
E2.00

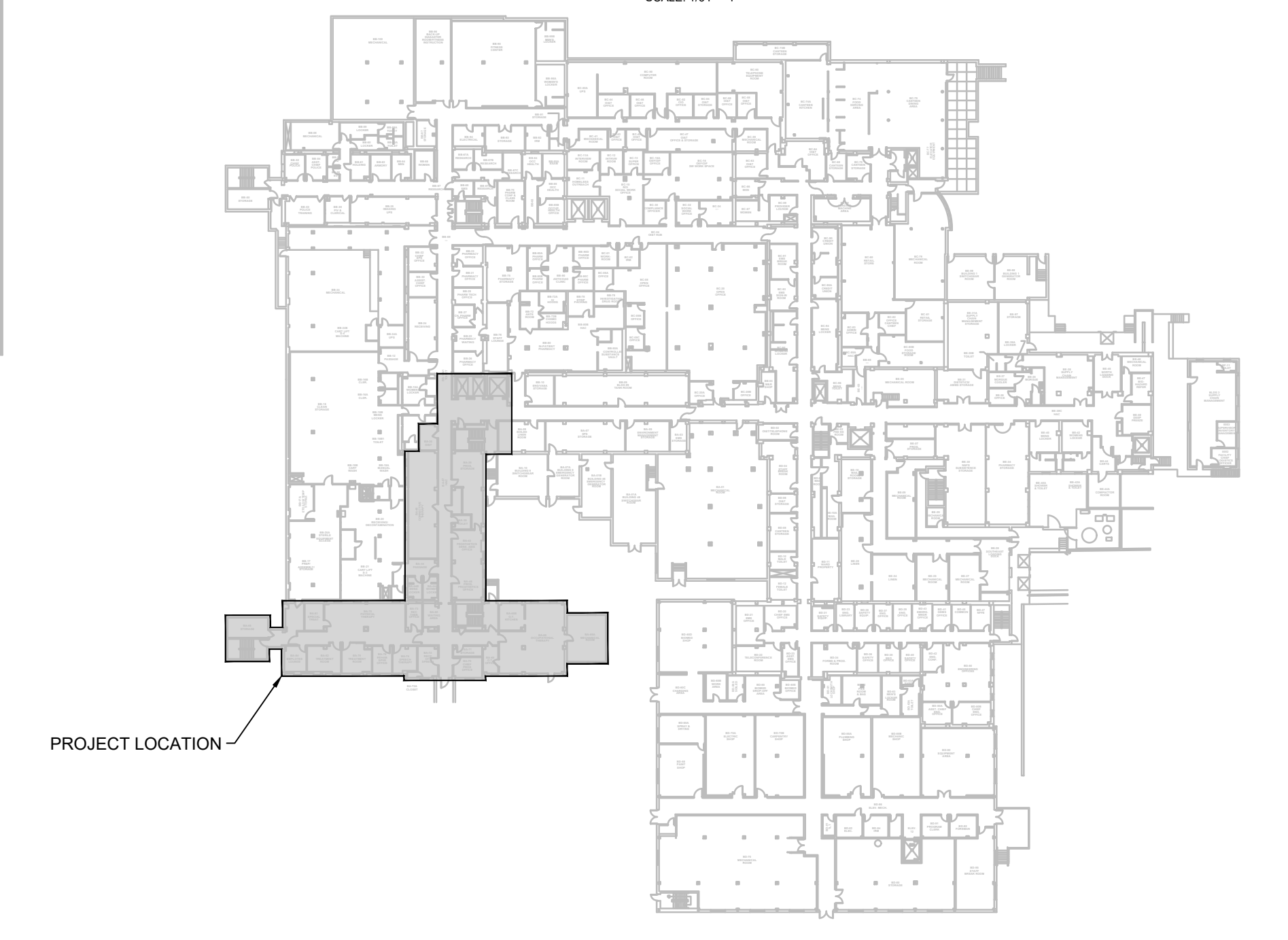
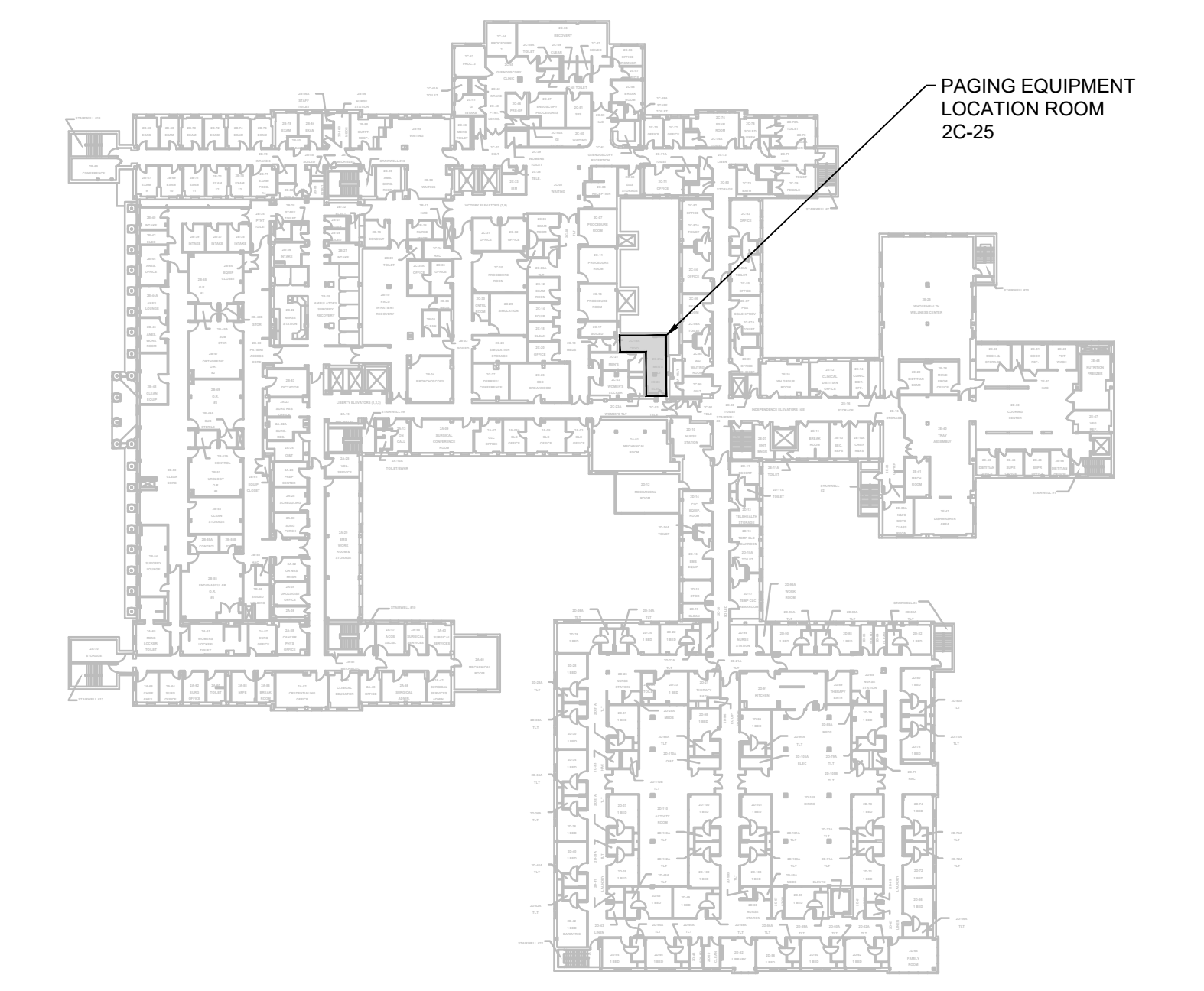
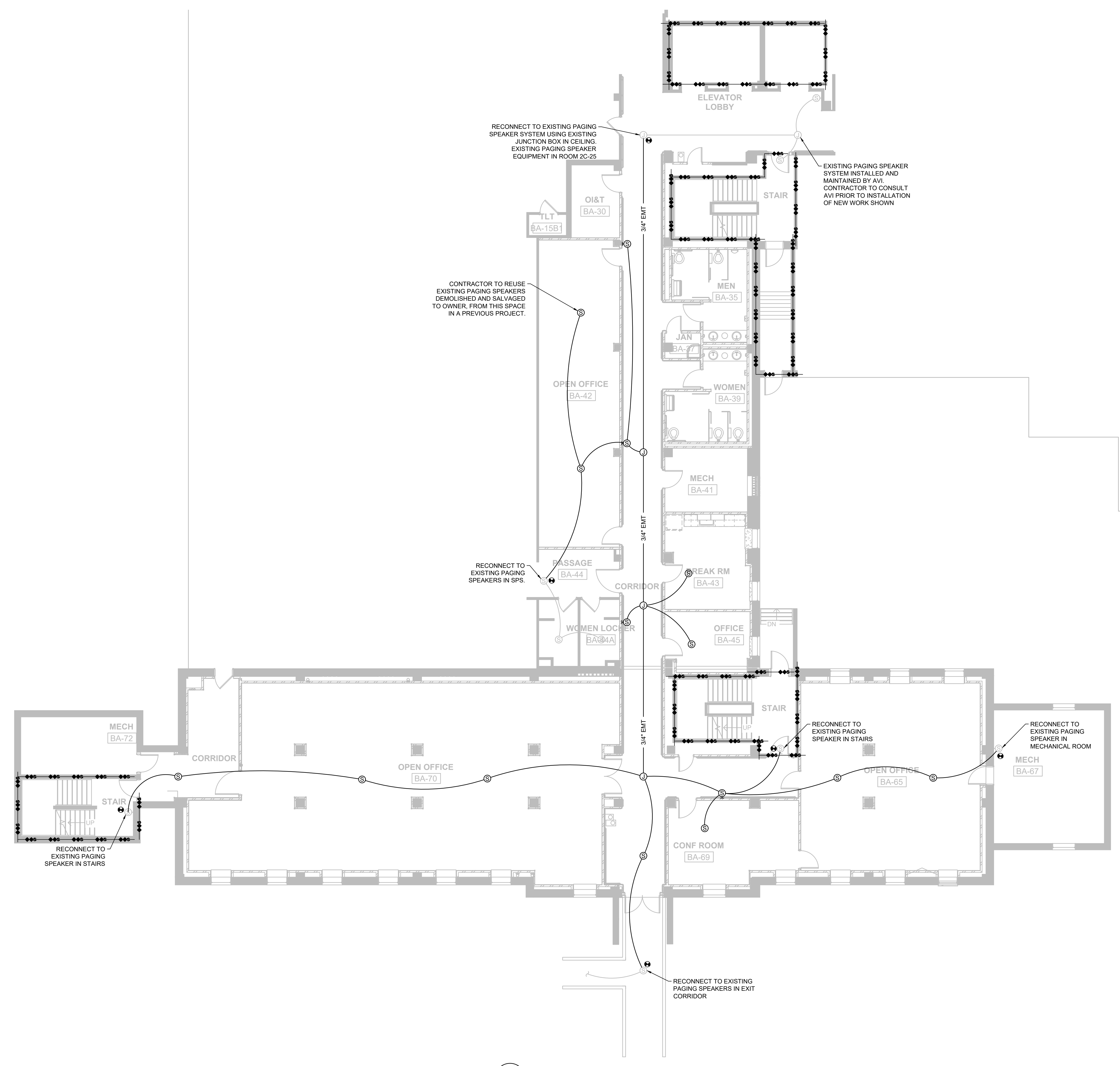
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 one half inch = one foot
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 six inches = one foot
 seven inches = one foot
 eight inches = one foot
 nine inches = one foot
 ten inches = one foot
 eleven inches = one foot
 twelve inches = one foot




1 BASEMENT LEVEL PAGING SPEAKERS PLAN
 SCALE: 1/8" = 1'-0"

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CONSULTANTS:

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Drawing Title
BASEMENT PAGING SPEAKERS PLAN
 Approved: Project Director
FULLY SPRINKLED

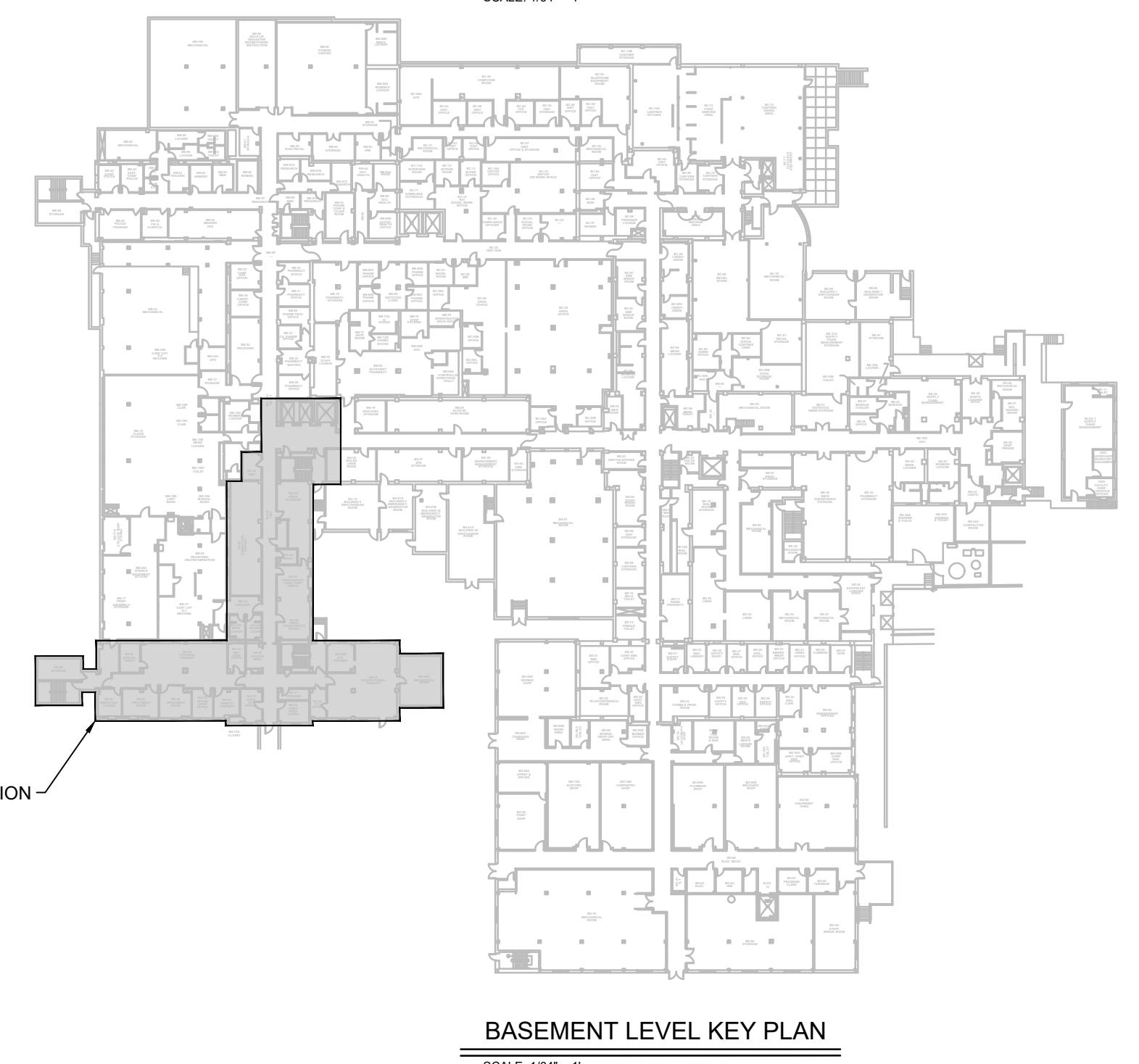
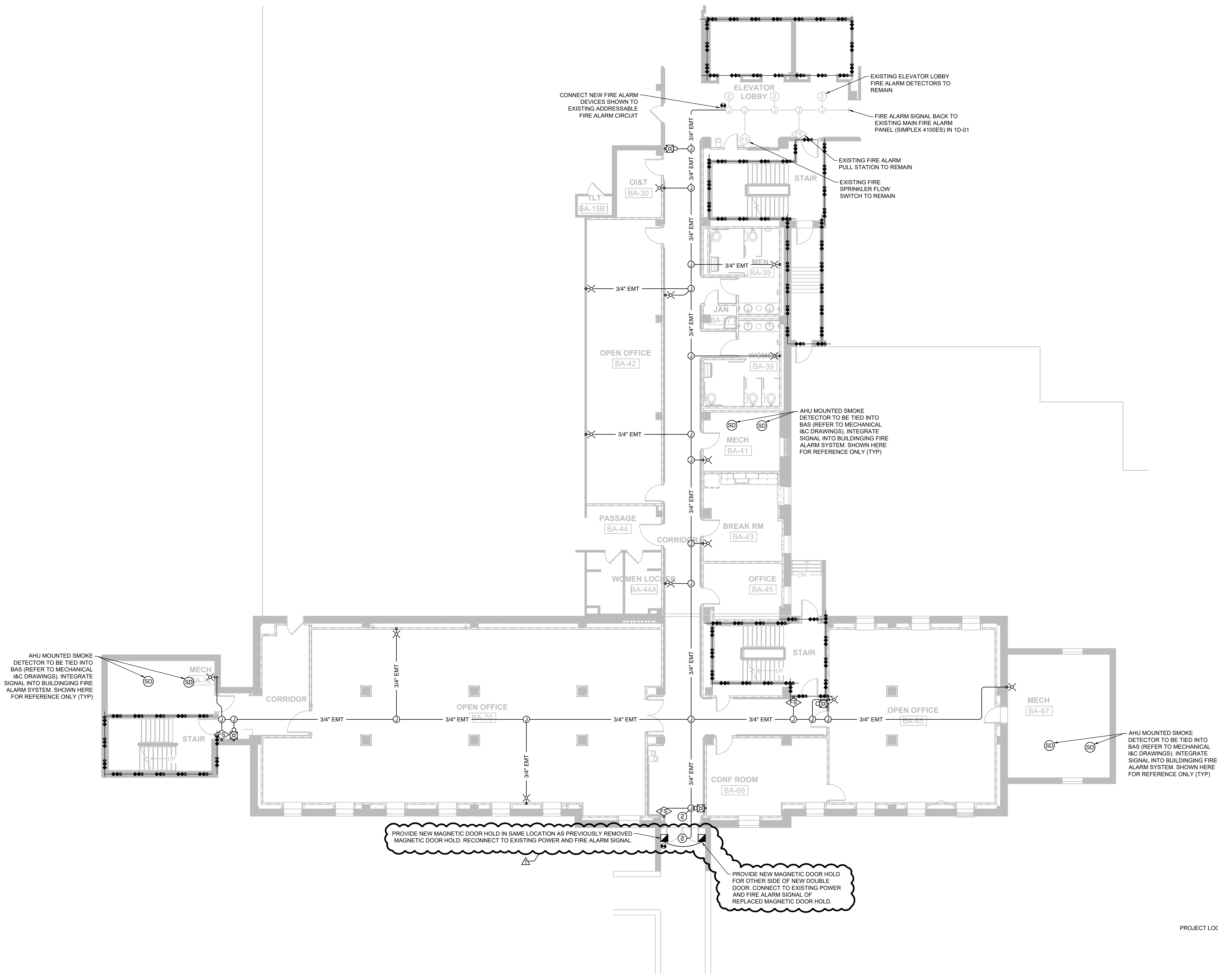
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E3.01
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LEGEND	
SYMBOL	DESCRIPTION
FIRE ALARM	
	ALARM, LAMP LIGHT, SIGNAL LIGHT, STROBE - WALL MOUNT
	FIRE ALARM AUDIO DEVICE WITH STROBE
	FIRE ALARM STATION, MANUAL PULL
	FIRE SPRINKLER FLOW SWITCH
	DETECTOR, SMOKE DETECTOR
	MAGNETIC DOOR HOLDER
	DUCT MOUNTED SMOKE DETECTOR
(E)	DENOTES EXISTING EQUIPMENT

FIRE ALARM NOTE
 FIRE ALARM SHOP DRAWING SHOWS THE MINIMUM REQUIREMENTS FOR A NEW FIRE ALARM MEETING IBC VERSION 2021 THAT IS FULLY SPRINKLED, AND THE VA FIRE DESIGN MANUAL. IT WILL BE THE REQUIREMENT OF THE CONTRACTOR TO PROVIDE A DEFERRED SUBMITTAL FOR A COMPLETE CODE COMPLIANT PLAN AND INSTALLATION SUBJECT TO INSPECTION AND APPROVAL BY COR.

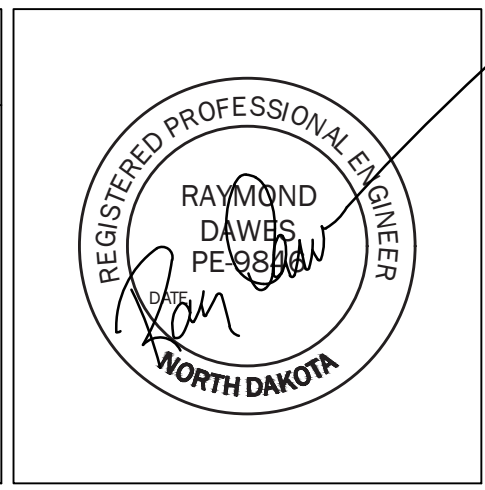


1 BASEMENT LEVEL FIRE ALARM PROTECTION PLAN
 FA-000 SCALE: 1/8" = 1'-0"

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ADDENDUM #1	Date
	04/25/2022
Revisions:	Date

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Drawing Title
BASEMENT FIRE ALARM PROTECTION PLAN

Approved: Project Director
FULLY SPRINKLED

Project Title
FARGO EHRM TRAINING AND ADMIN

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FARGO, ND

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Building Number
9

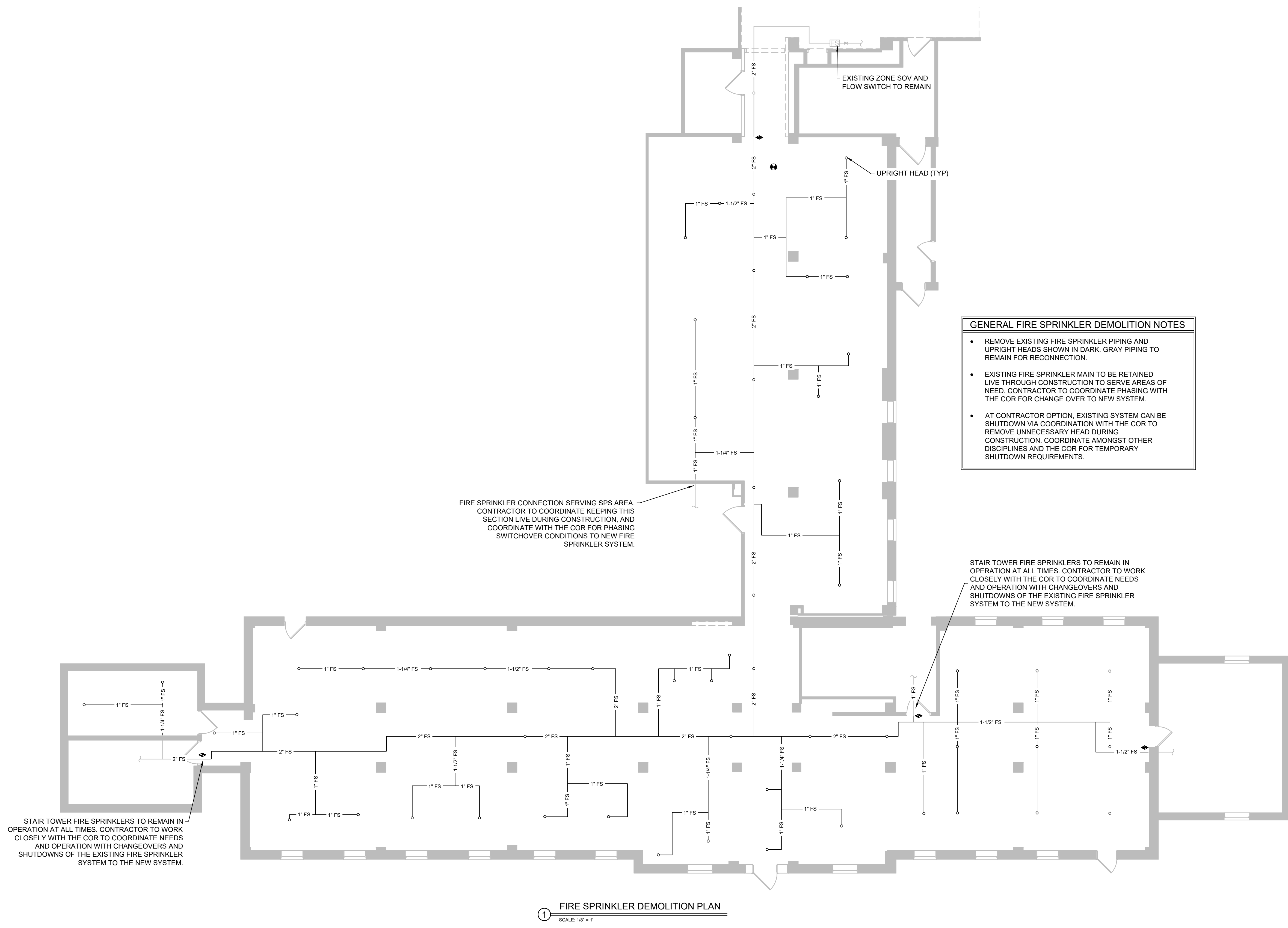
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SHEET INDEX		
SHEET #	PAGE #	SHEET TITLE
FS1.00	40	FIRE SPRINKLER DEMOLITION PLAN
FS1.10	41	NEW FIRE SPRINKLER PLAN

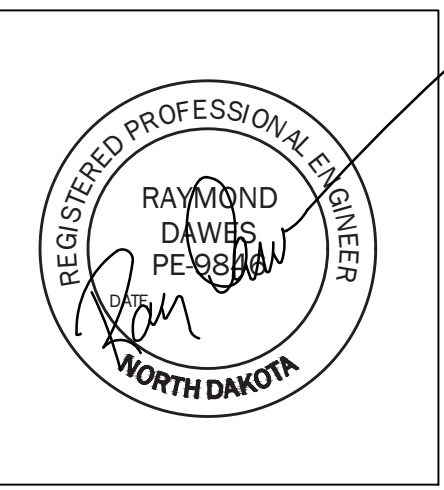
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FOURFRONT DESIGN INC.

Drawing Title

FIRE SPRINKLER DEMOLITION PLAN

BUILDING IS FULLY SPRINKLED

Project Title

FARGO EHRM TRAINING AND ADMIN

Location

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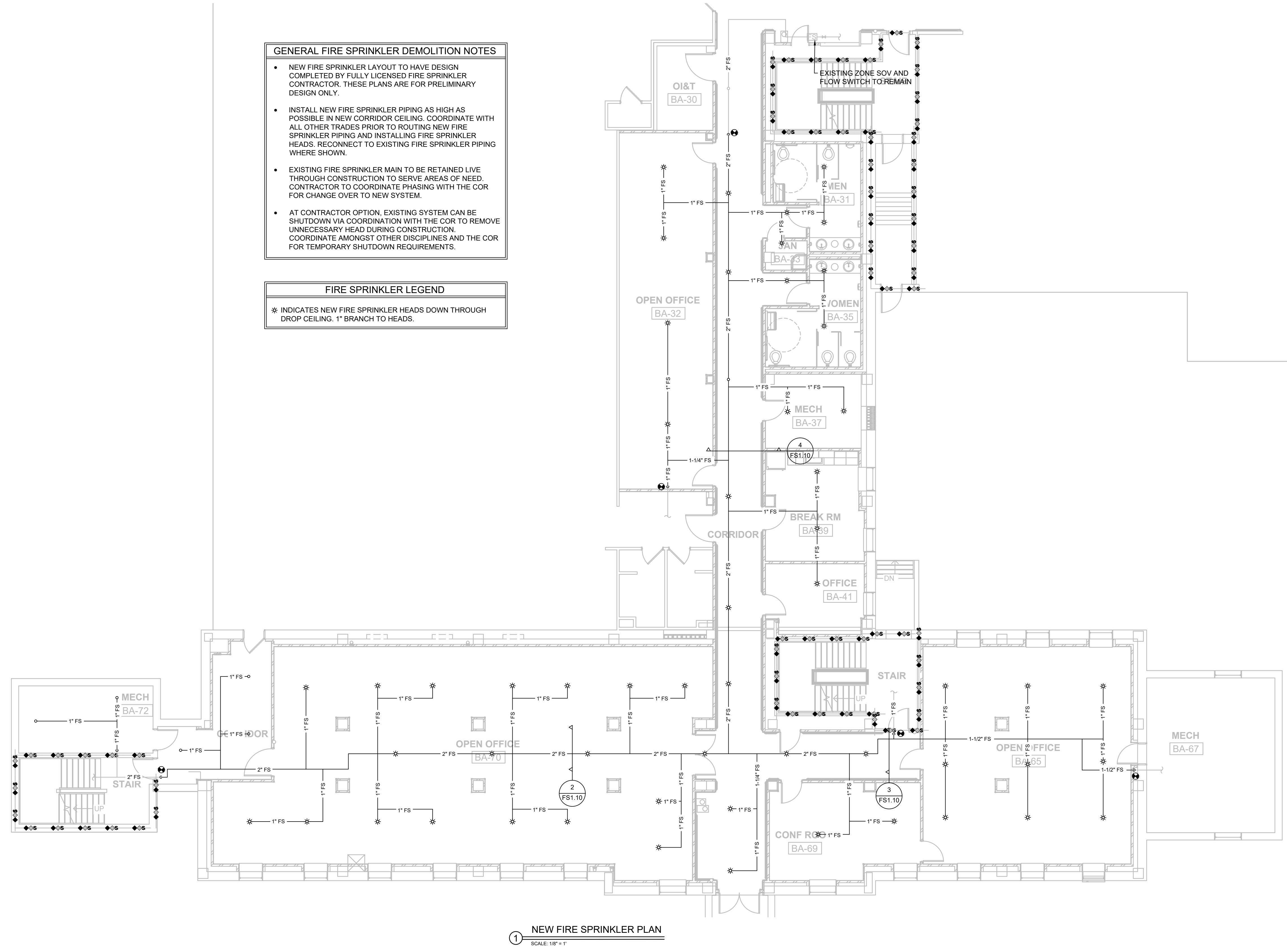
FS-1.00

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one and one half inches = one foot
 three quarters inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot
 one sixteenth inch = one foot

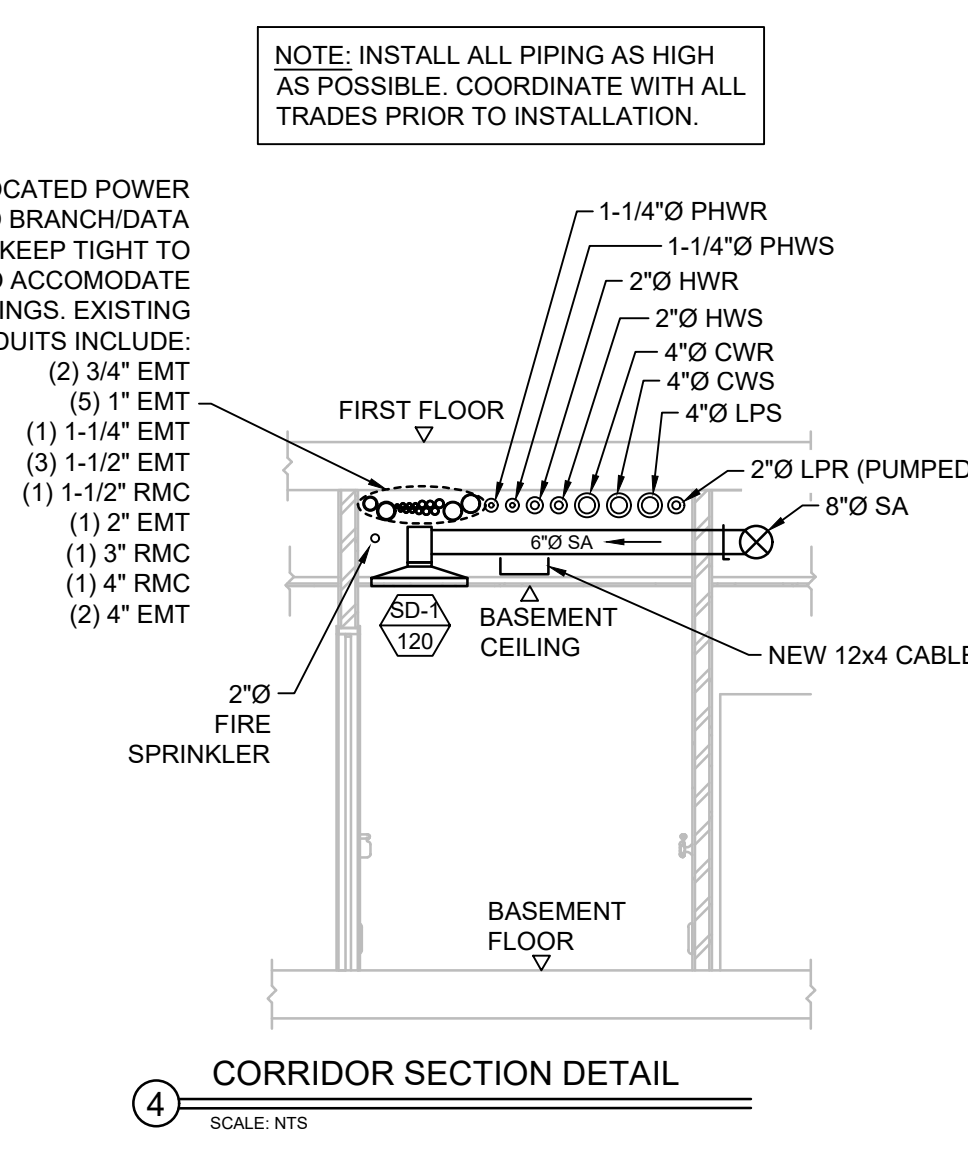
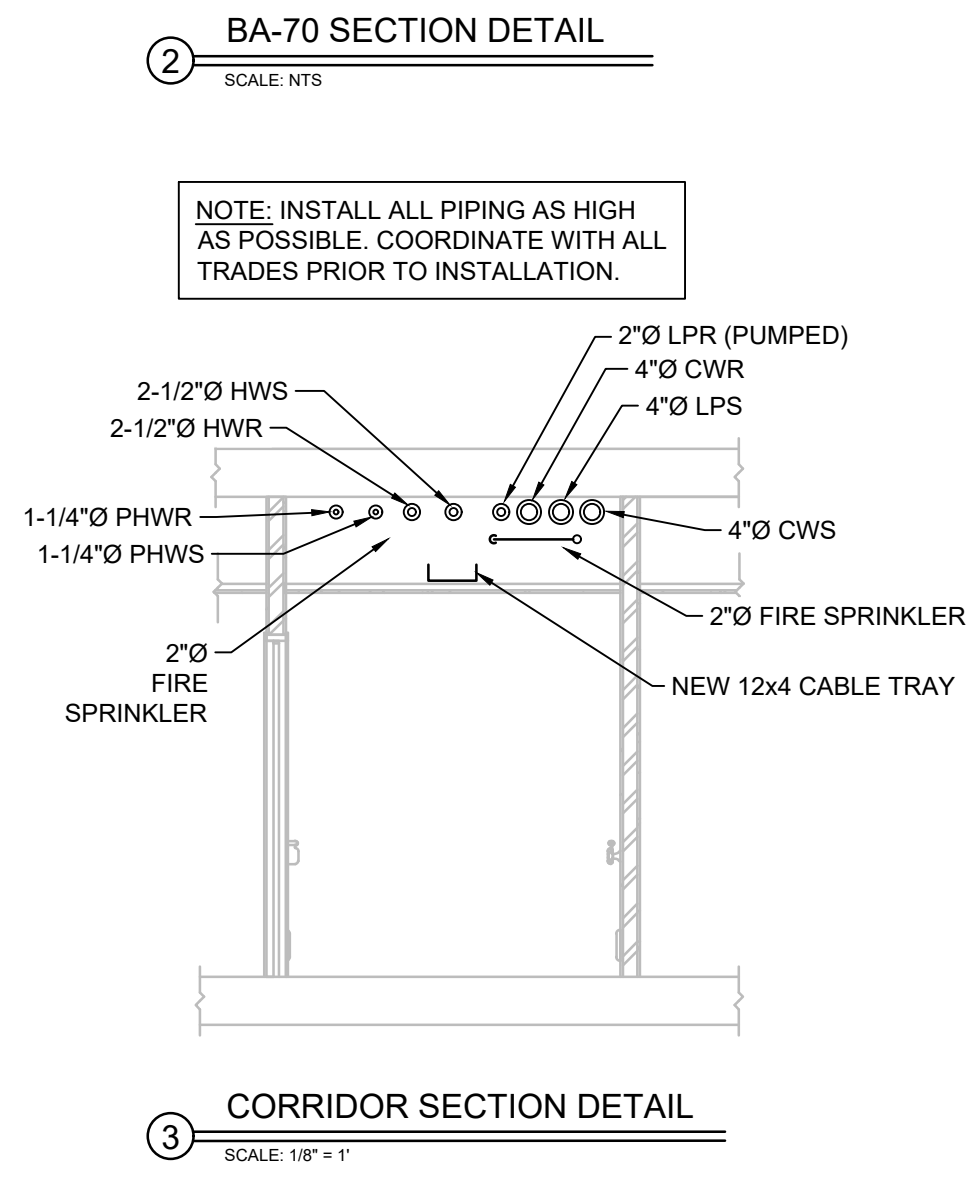
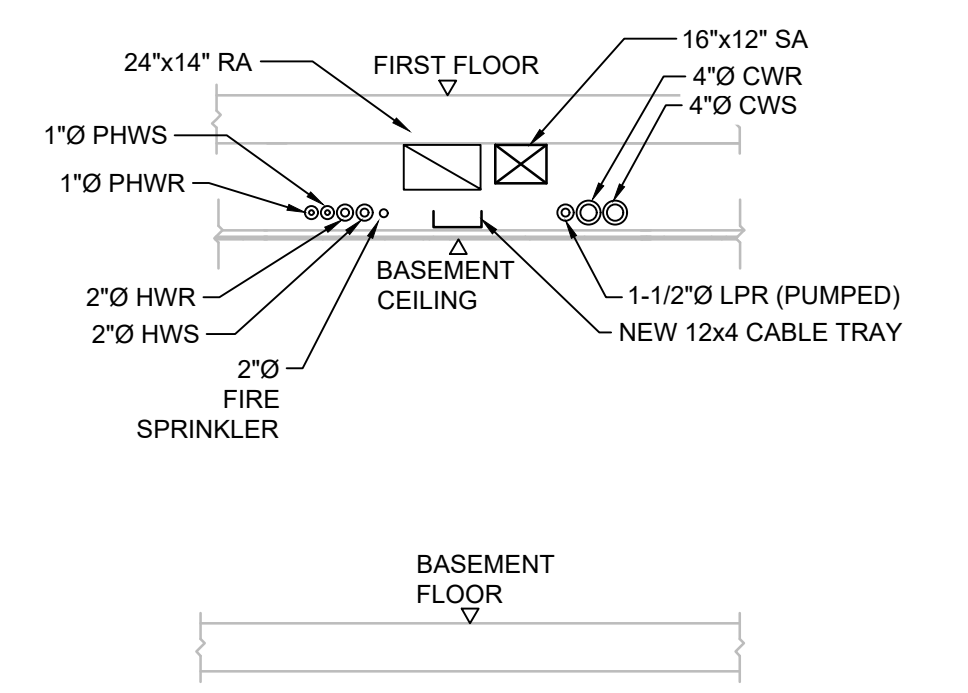


GENERAL FIRE SPRINKLER DEMOLITION NOTES

- NEW FIRE SPRINKLER LAYOUT TO HAVE DESIGN COMPLETED BY FULLY LICENSED FIRE SPRINKLER CONTRACTOR. THESE PLANS ARE FOR PRELIMINARY DESIGN ONLY.
- INSTALL NEW FIRE SPRINKLER PIPING AS HIGH AS POSSIBLE IN NEW CORRIDOR CEILING. COORDINATE WITH ALL OTHER TRADES PRIOR TO ROUTING NEW FIRE SPRINKLER PIPING AND INSTALLING FIRE SPRINKLER HEADS. RECONNECT TO EXISTING FIRE SPRINKLER PIPING WHERE SHOWN.
- EXISTING FIRE SPRINKLER MAIN TO BE RETAINED LIVE THROUGH CONSTRUCTION TO SERVE AREAS OF NEED. CONTRACTOR TO COORDINATE PHASING WITH THE COR FOR CHANGE OVER TO NEW SYSTEM.
- AT CONTRACTOR OPTION, EXISTING SYSTEM CAN BE SHUTDOWN VIA COORDINATION WITH THE COR TO REMOVE UNNECESSARY HEAD DURING CONSTRUCTION. COORDINATE AMONGST OTHER DISCIPLINES AND THE COR FOR TEMPORARY SHUTDOWN REQUIREMENTS.

FIRE SPRINKLER LEGEND

* INDICATES NEW FIRE SPRINKLER HEADS DOWN THROUGH DROP CEILING. 1" BRANCH TO HEADS.



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Drawing Title
NEW FIRE SPRINKLER PLAN

BUILDING IS FULLY SPRINKLED

Project Title
FARGO EHRM TRAINING AND ADMIN

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