

CONSTRUCTION		
#	DATE	DESCRIPTION

DATE: MARCH 2024

SHEET TITLE:
SITE PLAN

A1.1

PROJECT TEAM

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NORTH BEND SCHOOL DISTRICT
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SHEET INDEX

ARCHITECTURE	
A1.1	SITE PLAN
A2.1	ENLARGED DEMO PLAN
A2.2	ENLARGED FLOOR PLAN
A5.1	SECTIONS & DETAILS
A6.1	INTERIOR ELEVATIONS & SCHEDULES

PLUMBING	
P1.0	PLUMBING COVER SHEET
P2.1	PLUMBING FLOOR PLANS
P3.1	PLUMBING ISOMETRIC DIAGRAM
P4.1	PLUMBING SPECS

MECHANICAL	
M1.0	MECHANICAL COVER SHEET
M2.1	MECHANICAL FLOOR PLANS
M3.1	MECHANICAL SPECS

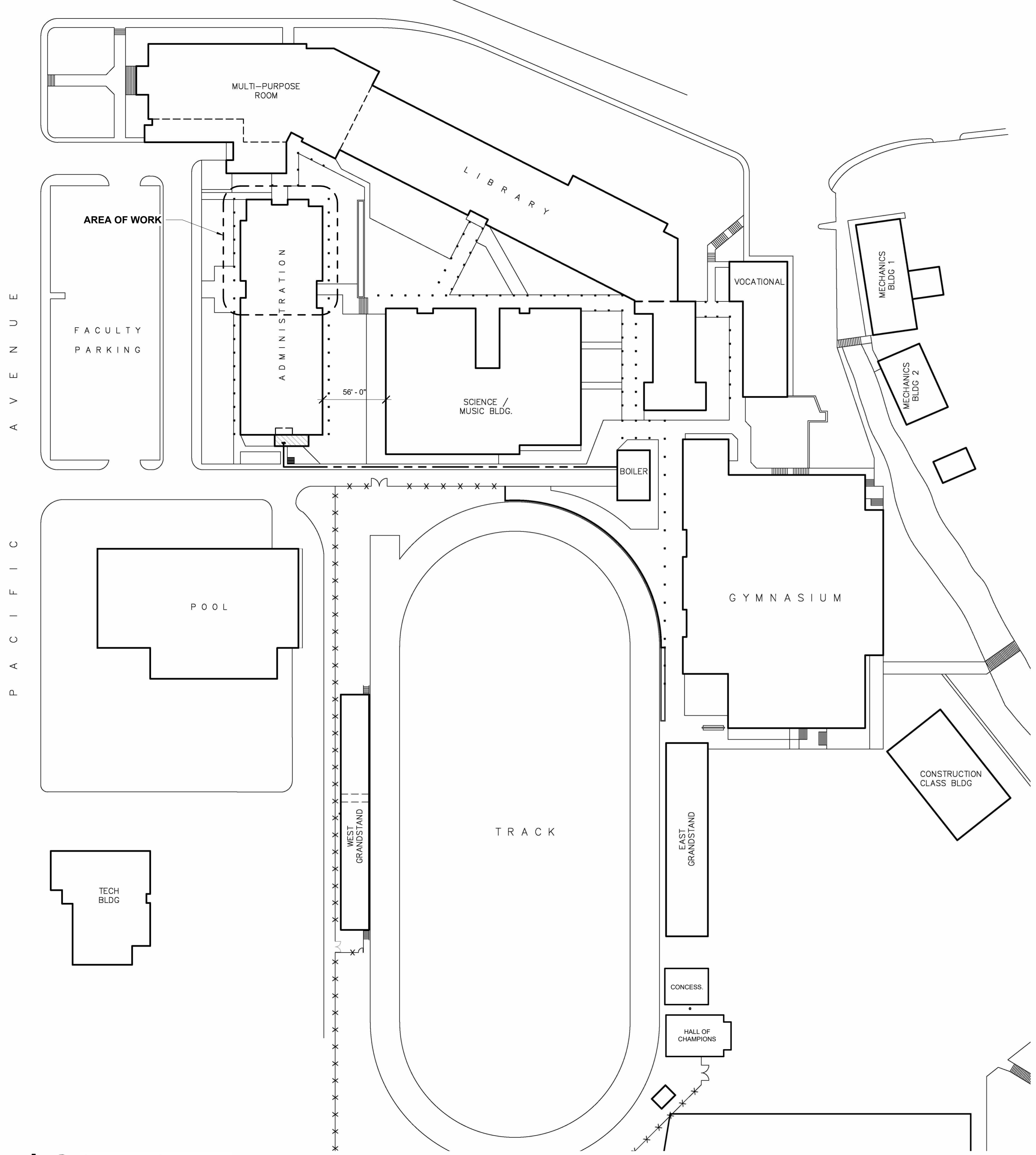
ELECTRICAL	
E1	ELECTRICAL PLAN

CODE SUMMARY

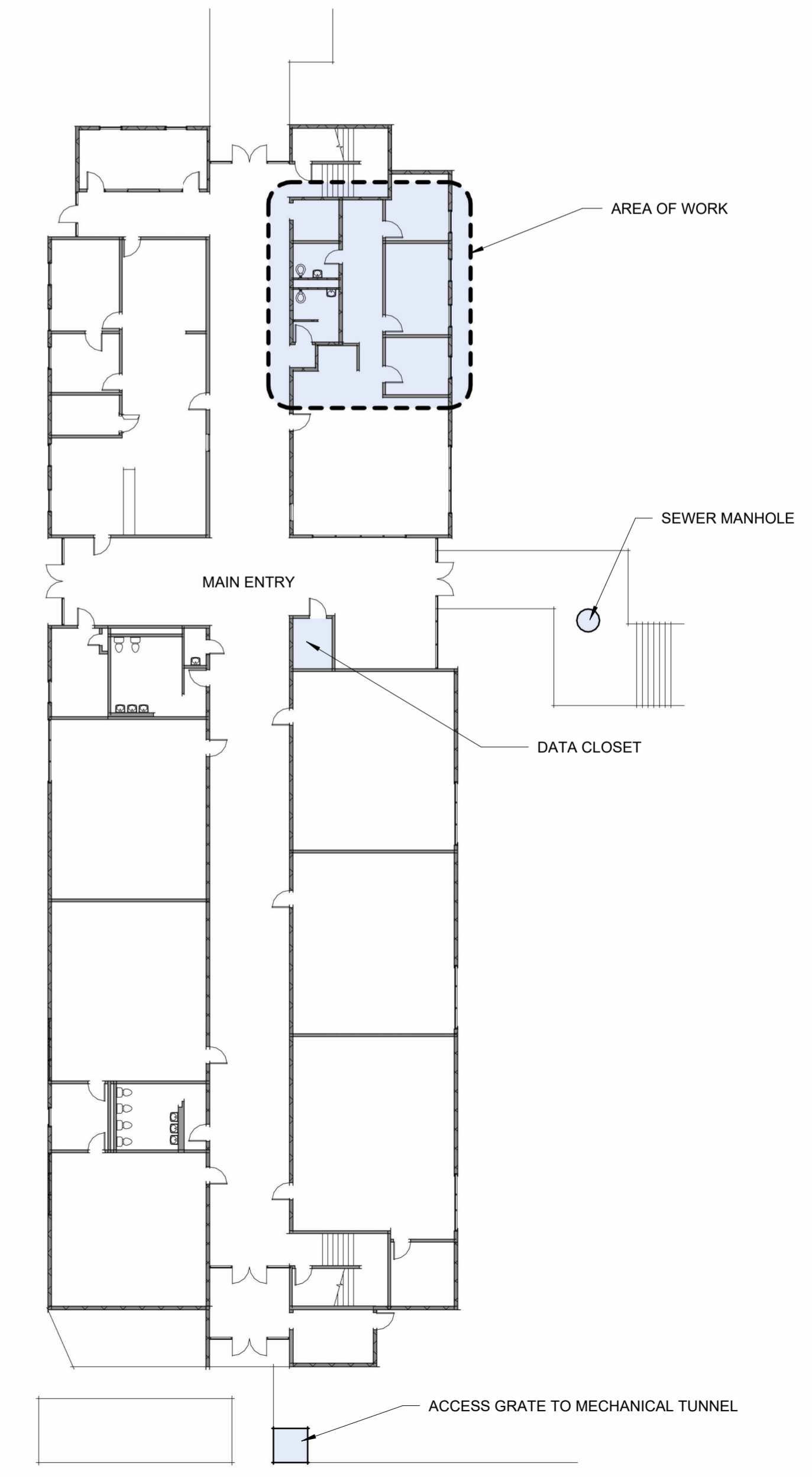
OCCUPANCY: GROUP E

CONSTRUCTION: TYPE V-B, UNSPRINKLERED
ALLOWABLE AREA: 16,825 SQ. FT.
(9,500 SQ. FT. + 7,125 SQ. FT. FRONTAGE INCREASE, PER 506.2.1)
ACTUAL AREA: 14,750 SQ. FT. (NO CHANGE)

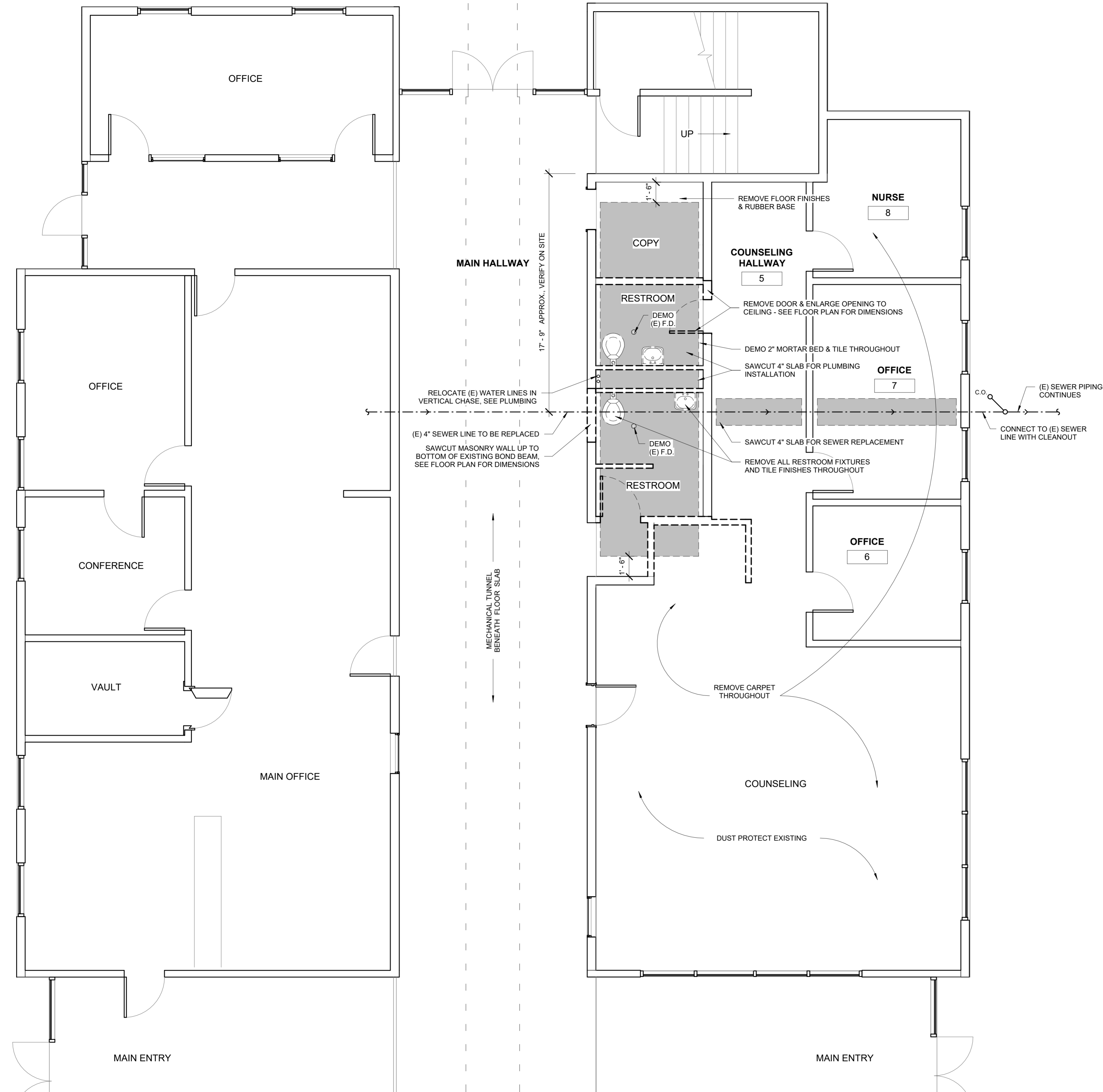
CORRIDOR: ASSUME RATED, PROVIDE 20 MIN. RATED DOORS



1 2 OVERALL SITE PLAN
1" = 50'-0"



1 OVERALL FLOOR PLAN - ADMIN. BUILDING
1" = 20'-0"

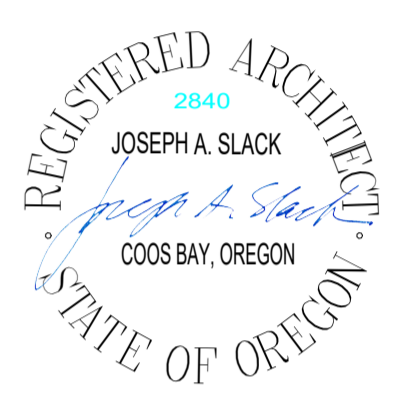


GENERAL NOTES - DEMO PLANS

- A. SEE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL RESPECTIVE DEMO.
- B. FIELD VERIFY LOCATION OF SEWER AND WATER LINES BEFORE BEGINNING WORK.
- C. DEMO COMPLETELY ALL FIXTURES IN AREA OF WORK, U.N.O.
- D. PROTECT ALL EXISTING FINISHES FROM DAMAGE. IF "EXISTING TO REMAIN" FINISHES MUST BE REMOVED, BRING IT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING.
- E. PROTECT EXISTING SPACES OUTSIDE OF WORK AREA FROM DUST MIGRATION.
- F. ALIGN MASONRY SAWCUTS WITH CMU BLOCK JOINTS - SEE INTERIOR ELEVATIONS FOR FURTHER INFORMATION. IF FIELD DIMENSIONS DIFFER FROM PLANS, NOTIFY THE ARCHITECT BEFORE PROCEEDING.



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PROJECT NO.: 24-005
NORTH BEND HS RESTROOM REMODEL
NORTH BEND SCHOOL DISTRICT
2323 PACIFIC ST, NORTH BEND, OR 97459

CONSTRUCTION

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SHEET TITLE:
ENLARGED DEMO PLAN

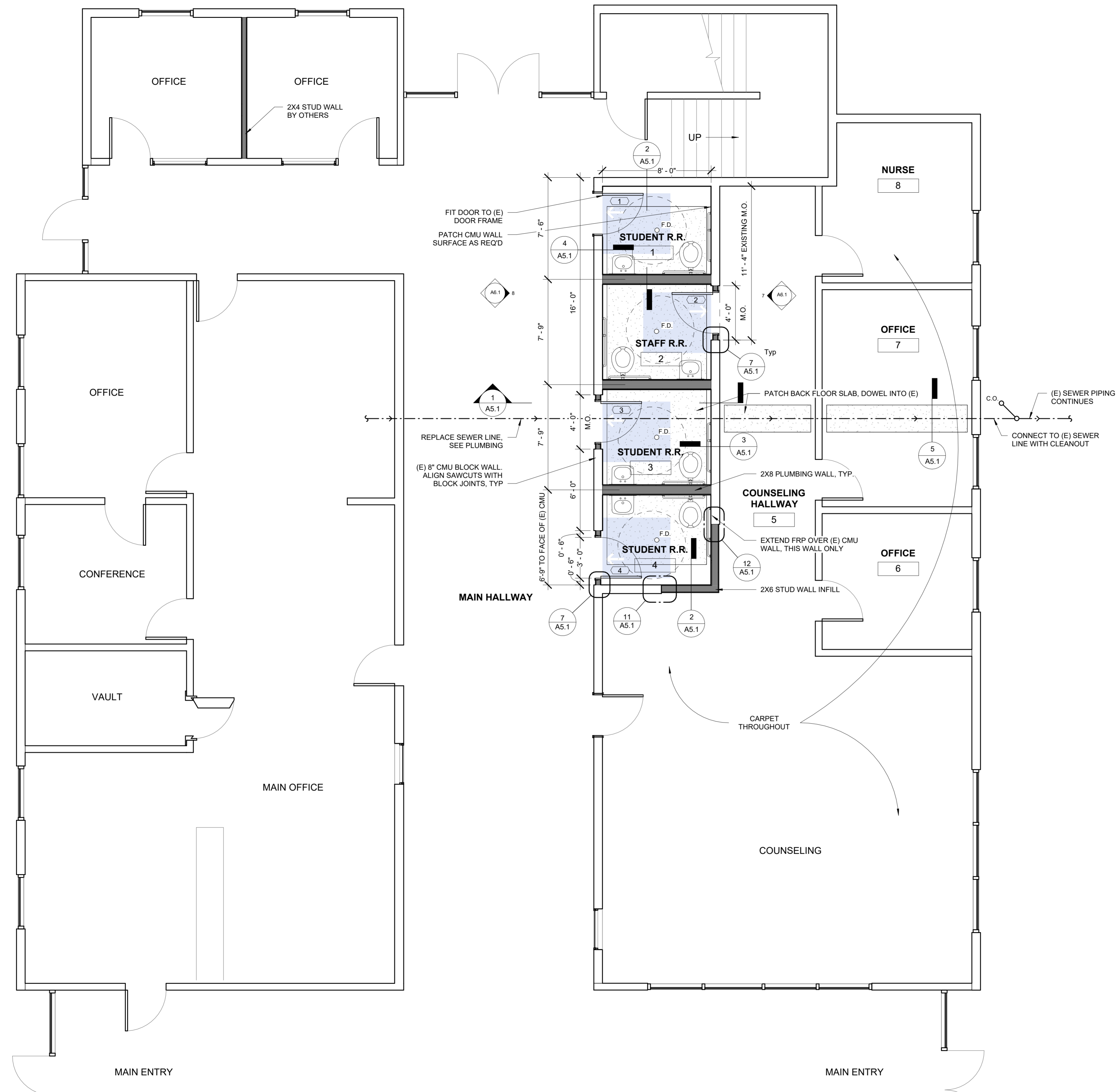
A2.1

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LEGEND

- EXISTING WALL TO BE REMOVED
- EXISTING WALL TO REMAIN
- - - - - SEWER LINE LOCATION

1 ENLARGED DEMO PLAN
1/4" = 1'-0"

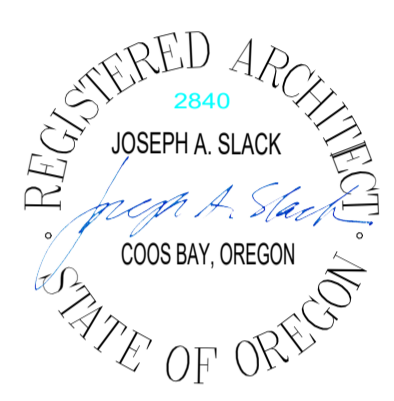


GENERAL NOTES - FLOOR PLANS

- A. SEE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATION AND EXTENT OF WORK.
- B. FOR PLUMBING FIXTURES AND MOUNTED ACCESSORIES, SEE INT. ELEVATIONS. INSTALL BLOCKING AS REQUIRED FOR MOUNTING OF WALL HUNG ITEMS OR EQUIPMENT.
- C. PROVIDE 5/8" WATER RESISTANT GYPSUM AT AREAS SO REQUIRED BY CODE TO RECEIVE IT.
- D. PROTECT ALL EXISTING FINISHES FROM DAMAGE.
- E. REPAIR PATCHED SURFACES THAT ARE DAMAGED, LIFTED, DISCOLORED, OR SHOWING OTHER IMPERFECTIONS DUE TO DEMO OR NEW WORK. IF DEFECTS ARE DUE TO CONDITION OF SUBSTRATE, REPAIR SUBSTRATE PRIOR TO REPAIRING FINISH. PATCH AND PAINT FINISHES TO MATCH U.N.O.
- F. WHERE A CLEAR DIMENSION OR OPENING IS REQUIRED OR NOTED, MEASURE DIMENSION TO FACE OF FINISH.
- G. PROTECT EXISTING SPACES OUTSIDE OF WORK AREA FROM DUST MIGRATION.



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SHEET TITLE:
ENLARGED FLOOR PLAN

A2.2

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

LEGEND

	EXISTING TO REMAIN
	CMU WALL, MATCH EXISTING
	STUD WALL

CONSTRUCTION

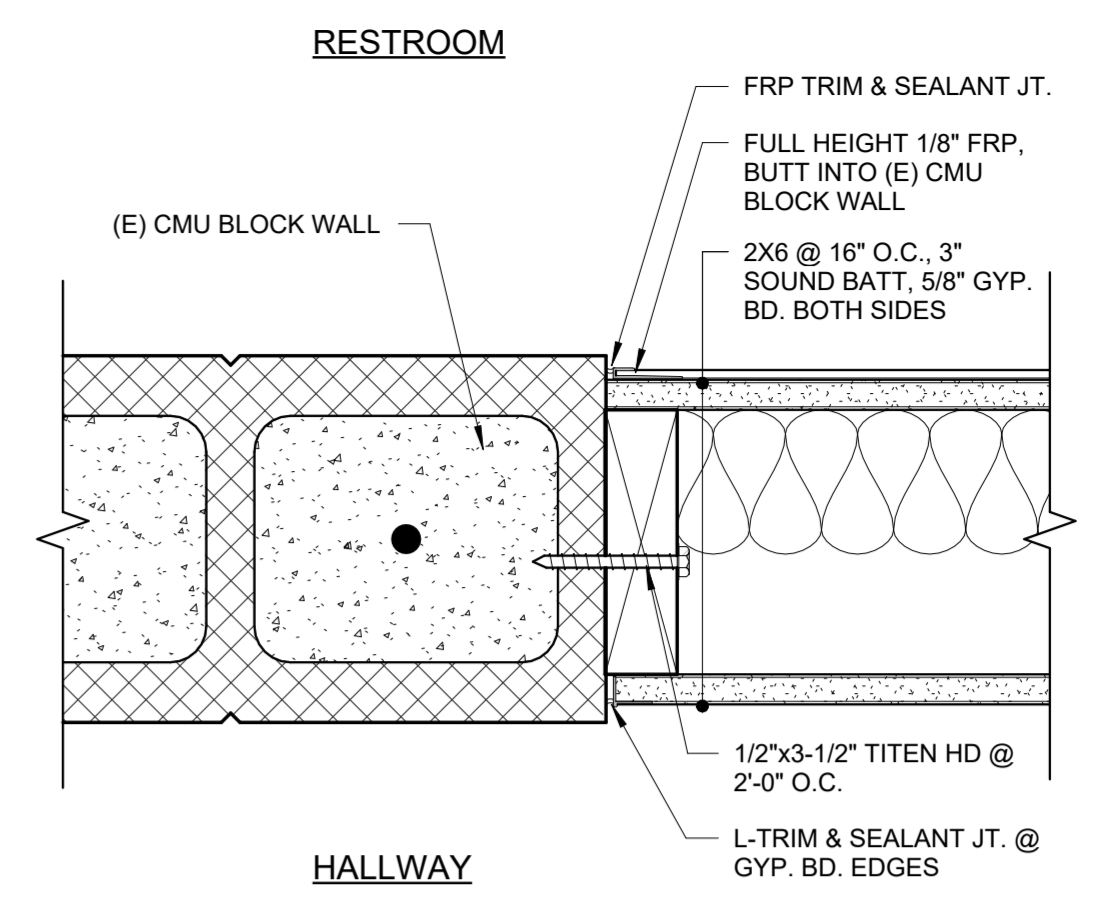
REVISIONS:

#	DATE	DESCRIPTION

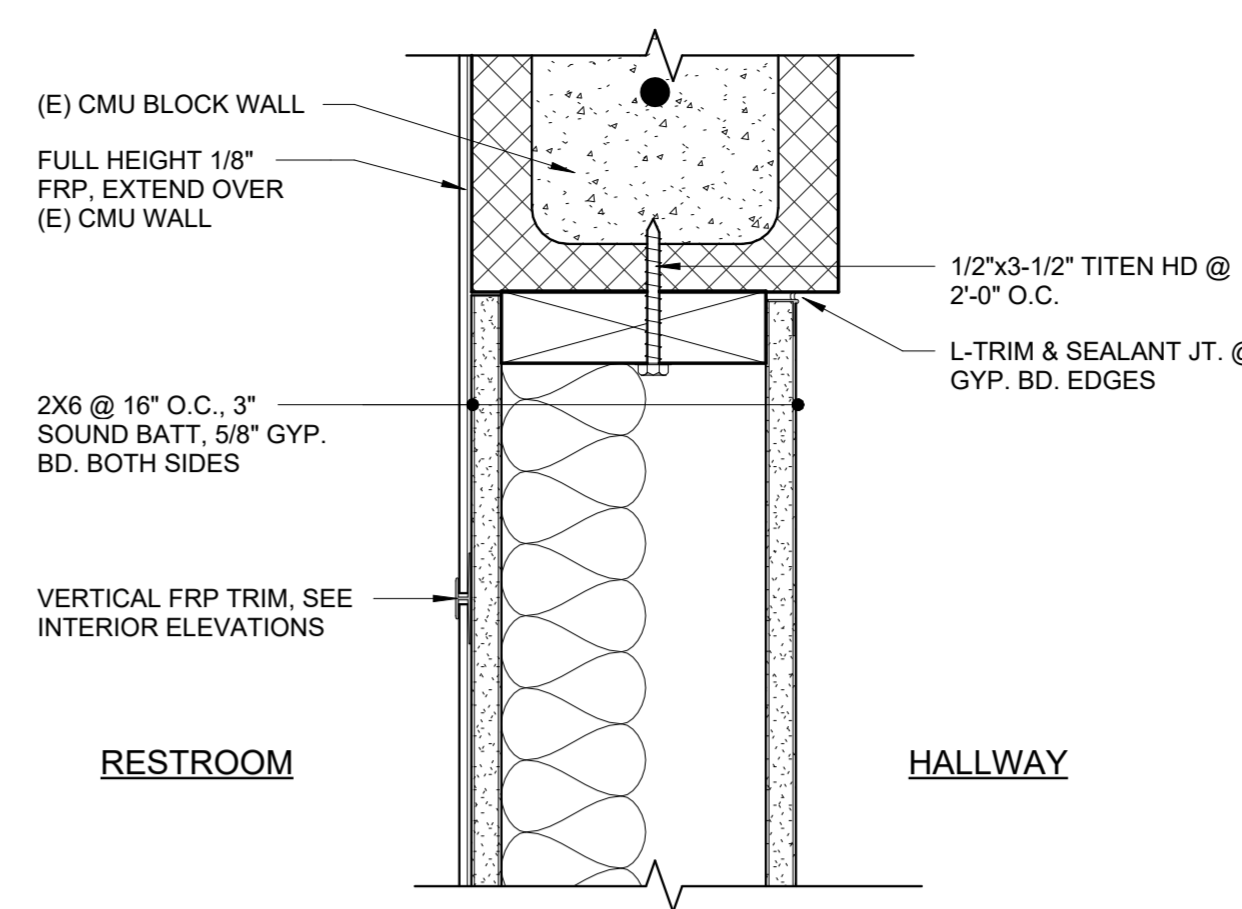
DATE: MARCH 2024

SHEET TITLE:
SECTIONS & DETAILS

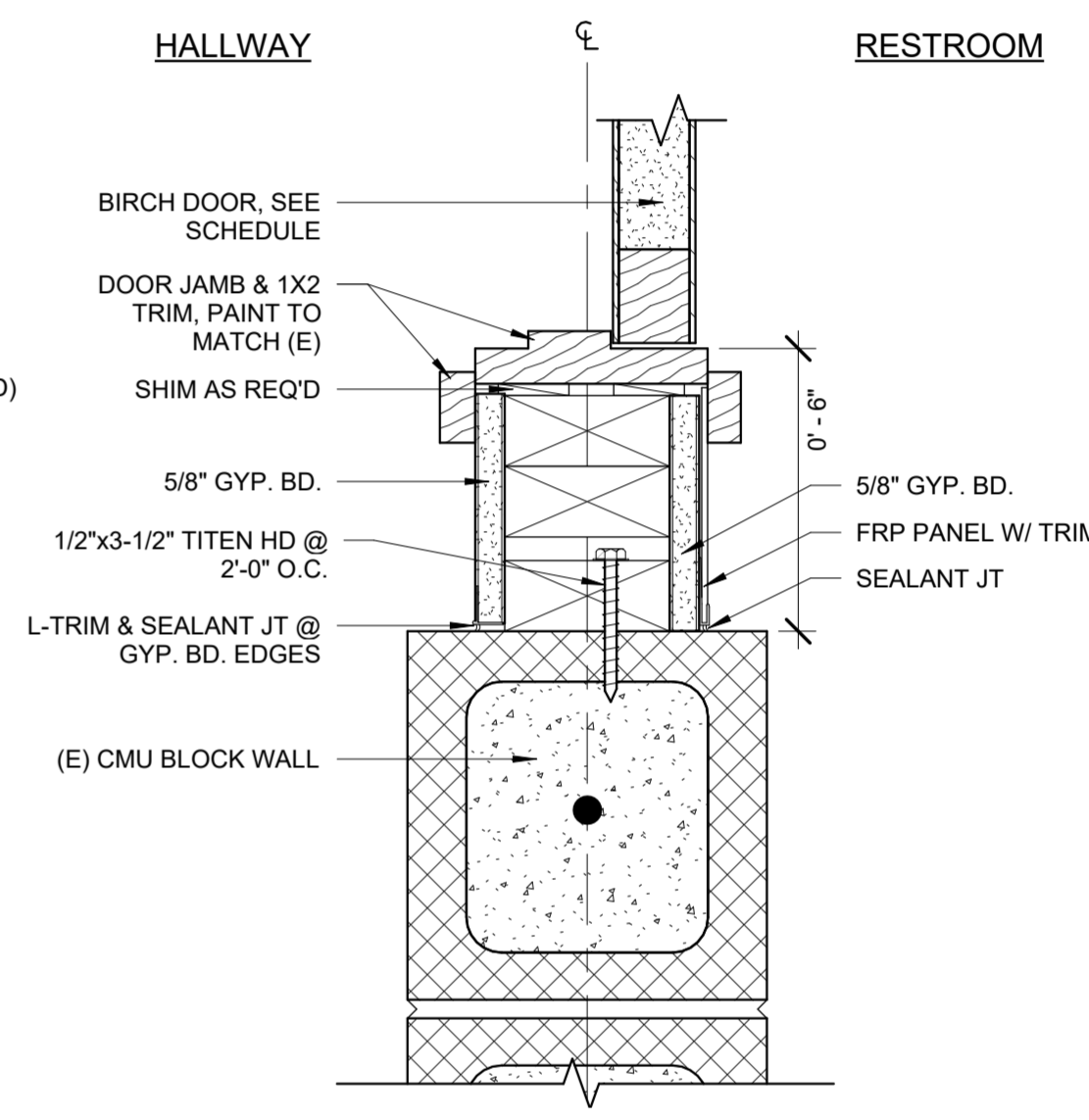
A5.1



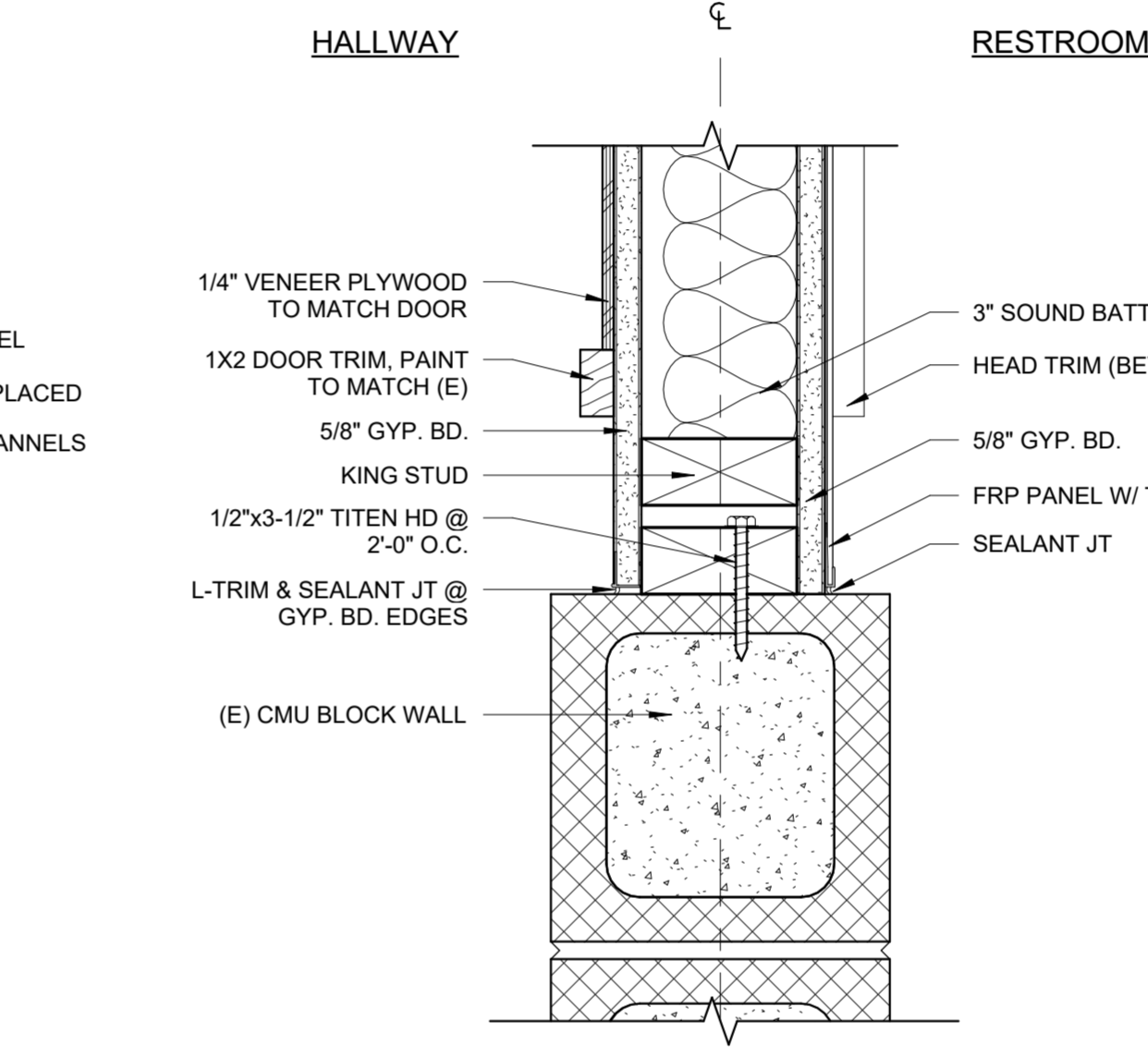
11 STUD WALL INFILL @ (E) CMU WALL
3" = 1'-0"



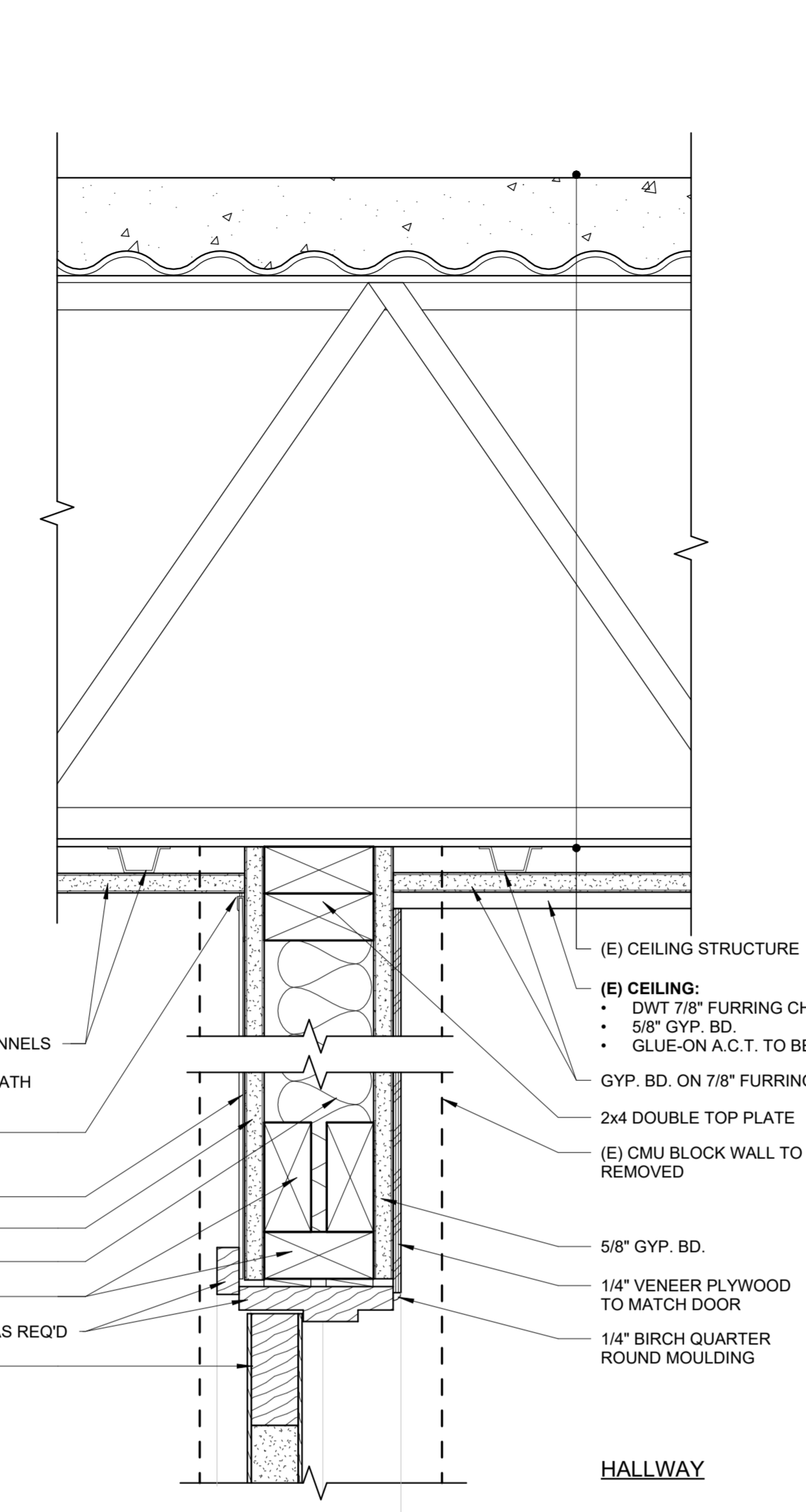
12 STUD WALL INFILL @ (E) CMU WALL
3" = 1'-0"



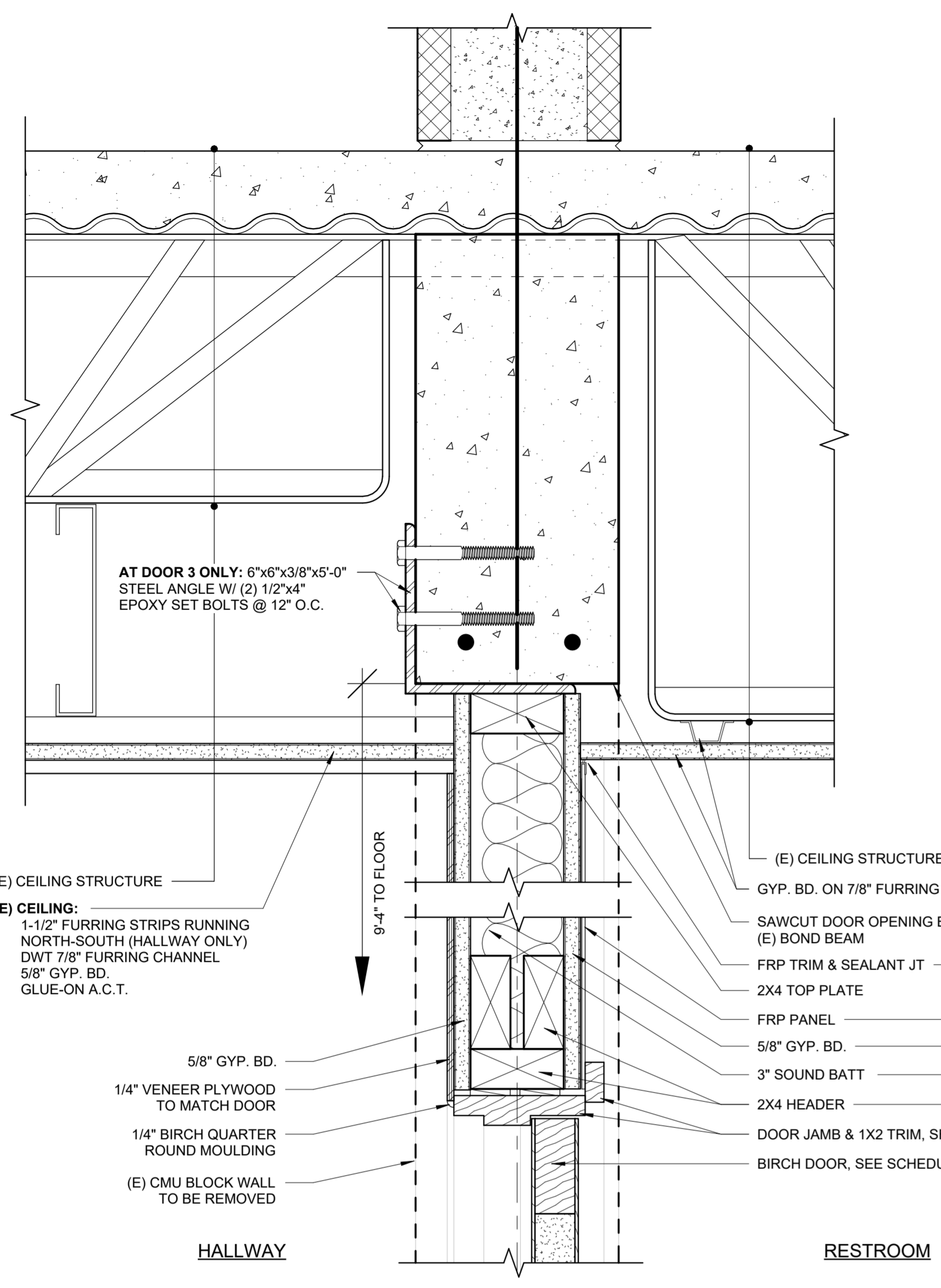
7 DOOR JAMB @ (E) CMU WALL
3" = 1'-0"



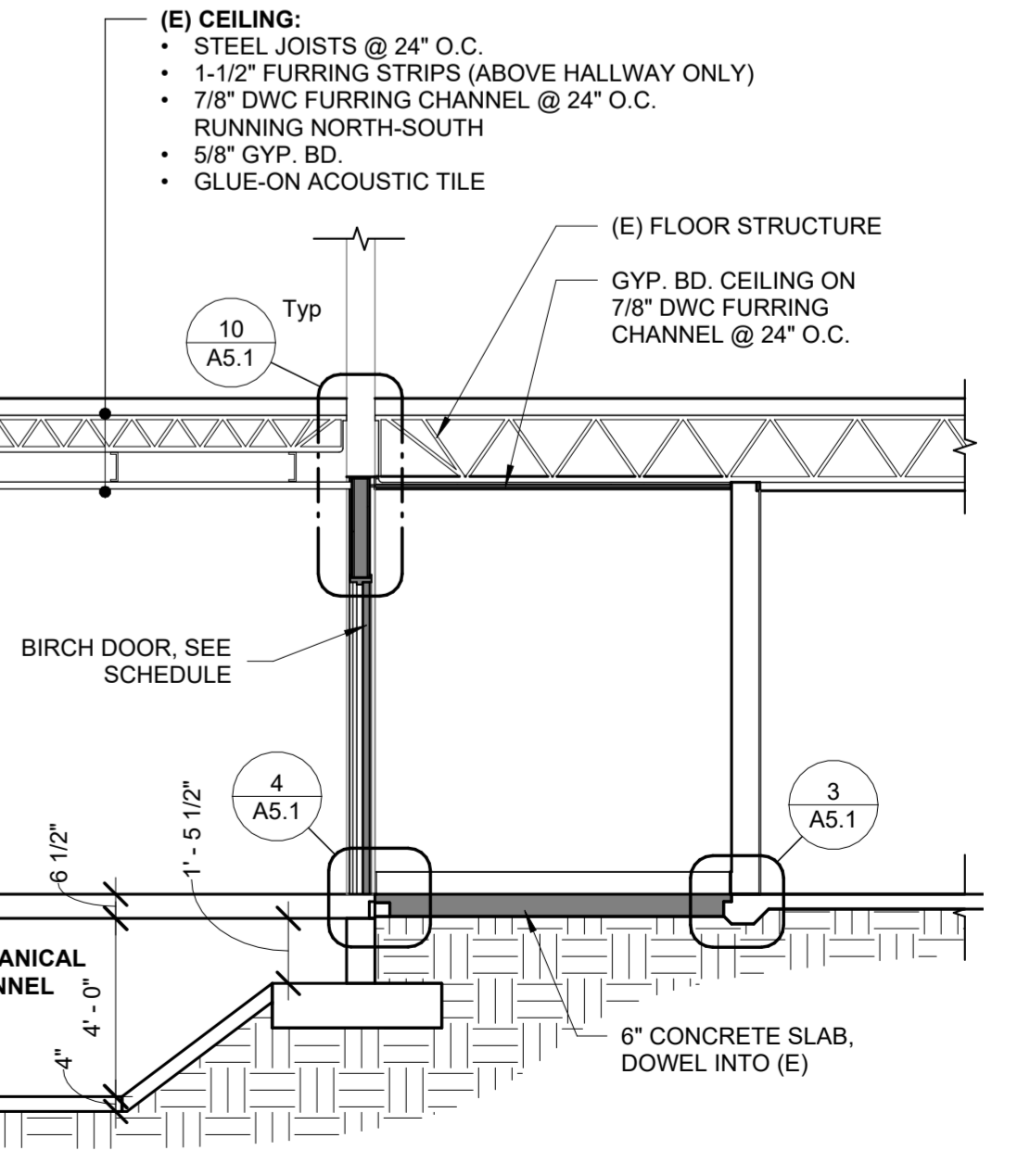
8 JAMB TRANSOM @ (E) CMU WALL
3" = 1'-0"



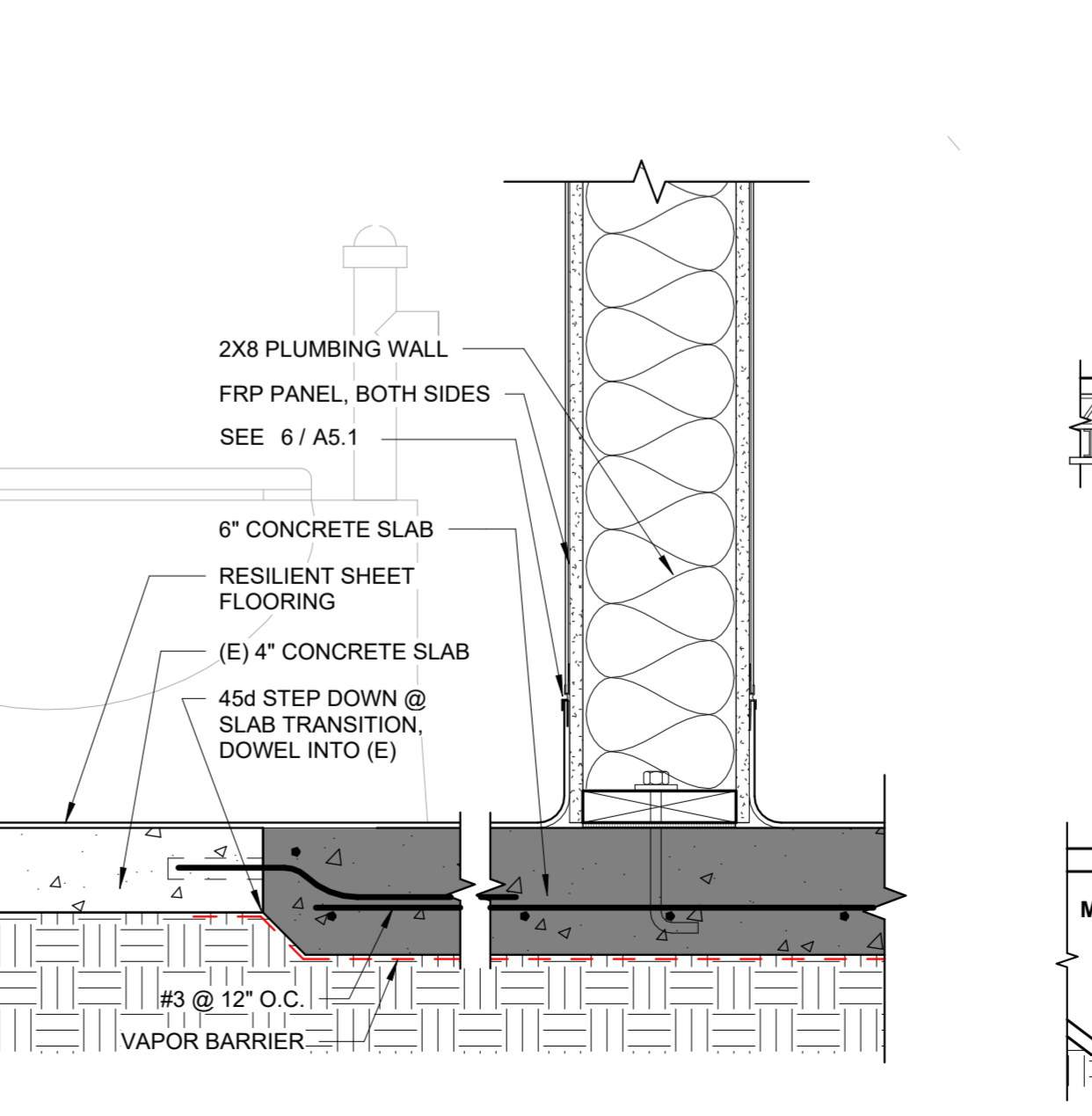
9 DOOR HEAD @ DOOR 2
3" = 1'-0"



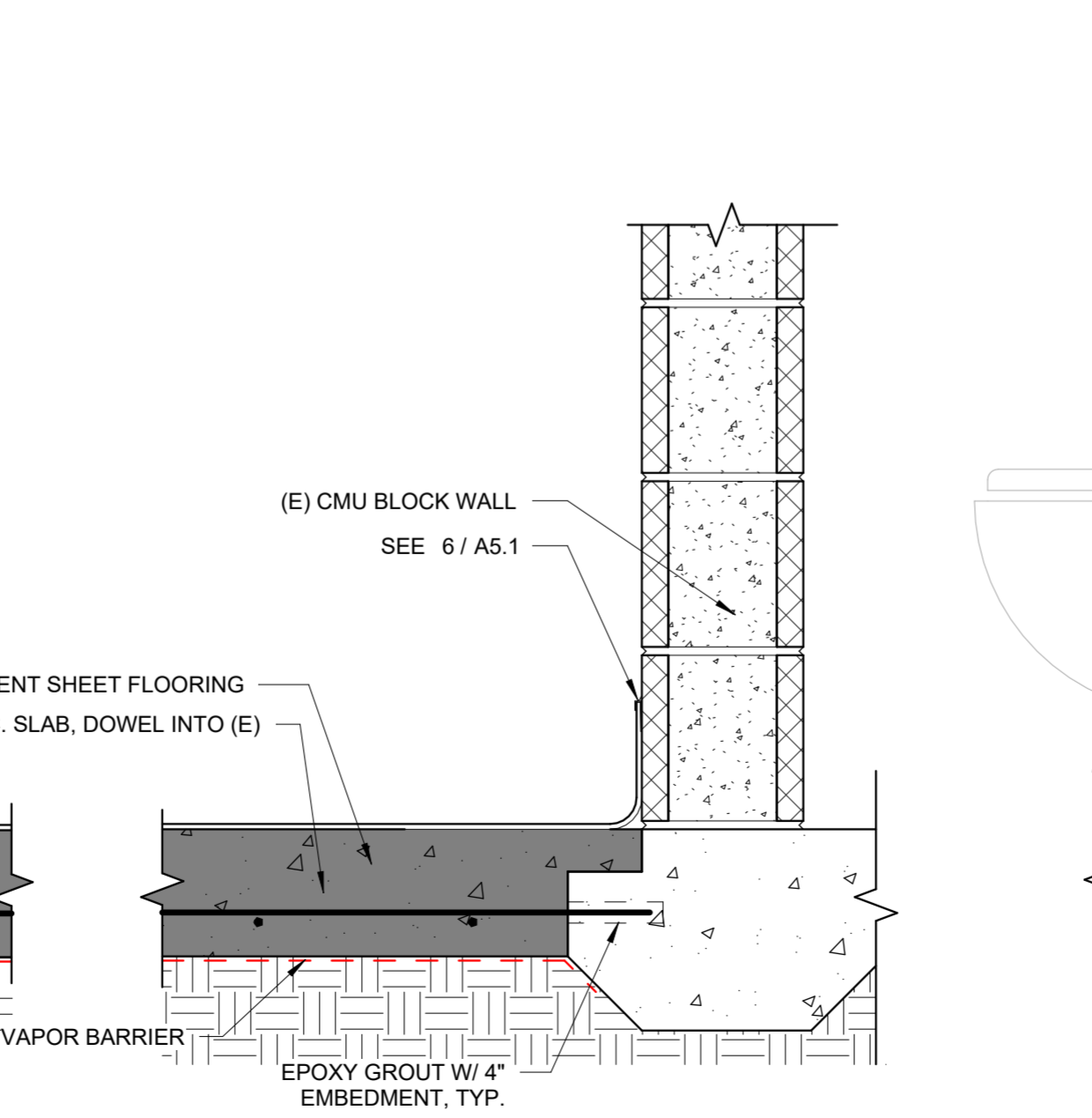
10 DOOR HEAD @ EXISTING CMU WALL
3" = 1'-0"



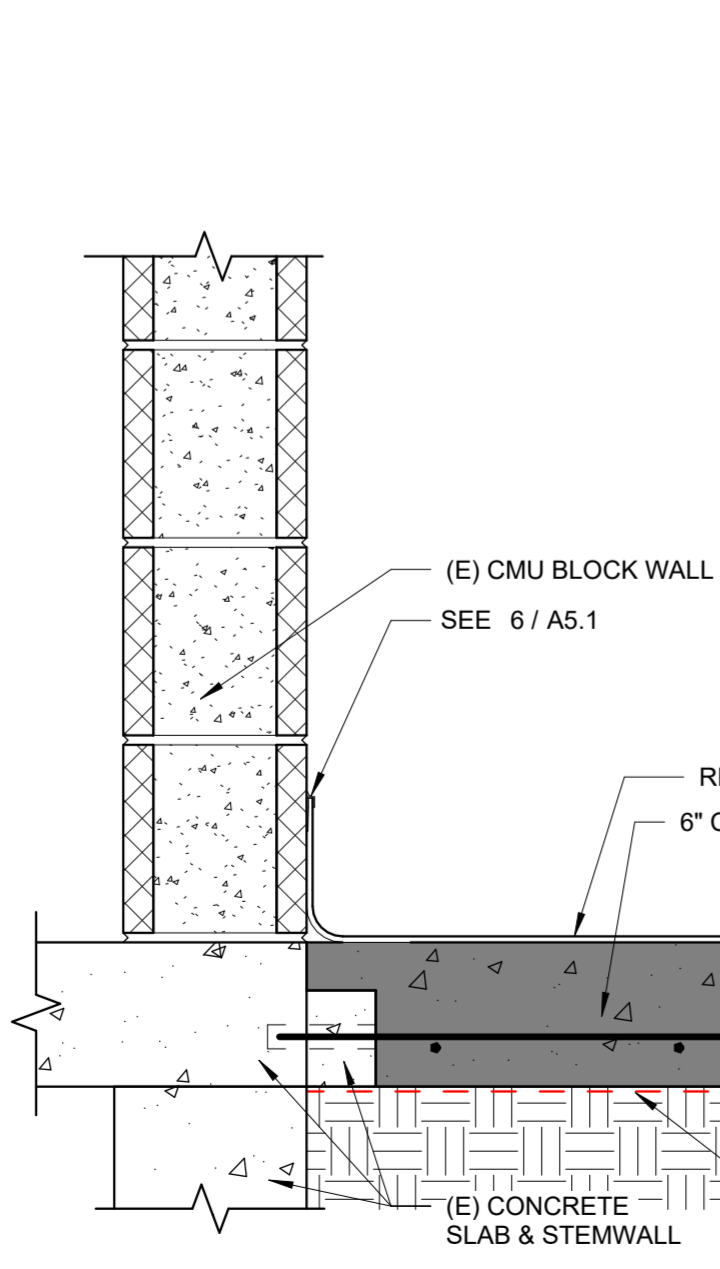
1 SECTION THROUGH RESTROOMS
1/4" = 1'-0"



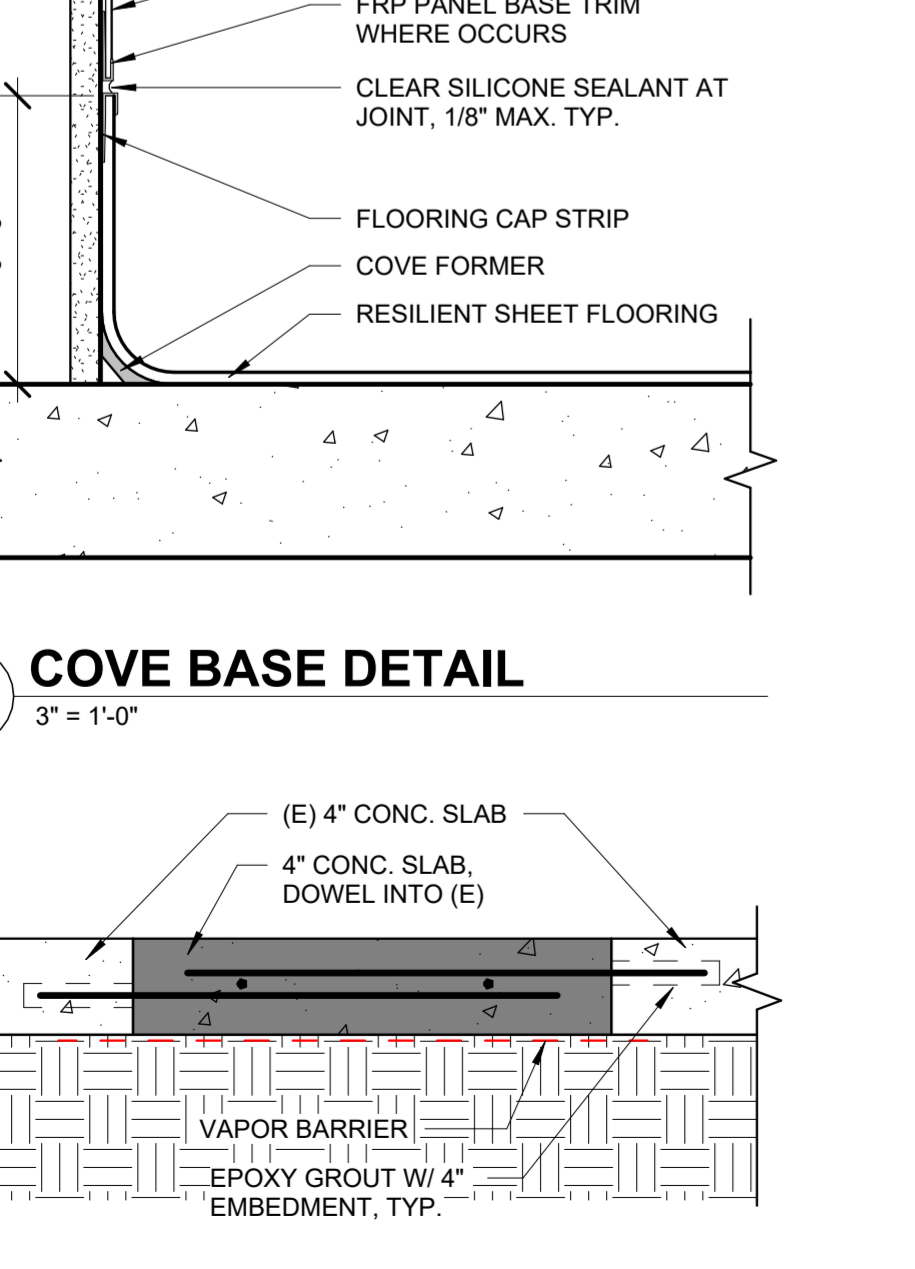
2 SLAB INFILL @ NORTH EDGE
1 1/2" = 1'-0"



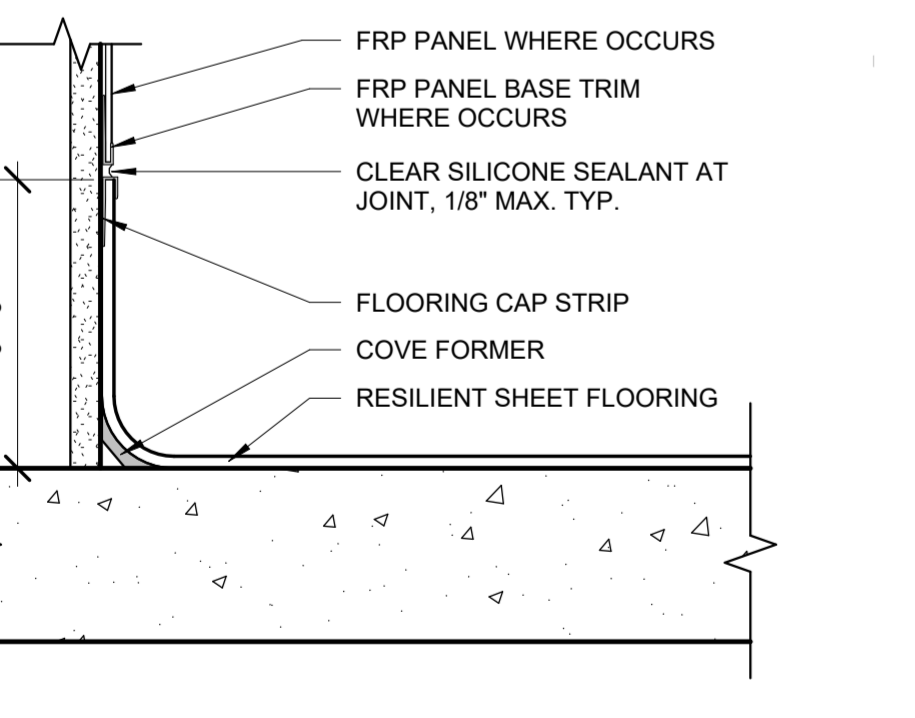
3 SLAB INFILL @ EAST WALL
1 1/2" = 1'-0"



4 SLAB INFILL @ WEST WALL
1 1/2" = 1'-0"



5 SLAB PATCH @ SEWER
1 1/2" = 1'-0"



6 COVE BASE DETAIL
3" = 1'-0"

FINISH LIST

BASIS OF DESIGN LEGEND:
FINISH TAG
PRODUCT TYPE
MANUFACTURE
STYLE
COLOR

ACT-1
 ACOUSTICAL CEILING TILE
 (SEE SPECIFICATION)
 1X1

P-1
 INTERIOR PAINT
 (SEE SPECIFICATION)

RS-1
 RESILIENT SHEET FLOORING
 (SEE SPECIFICATION)

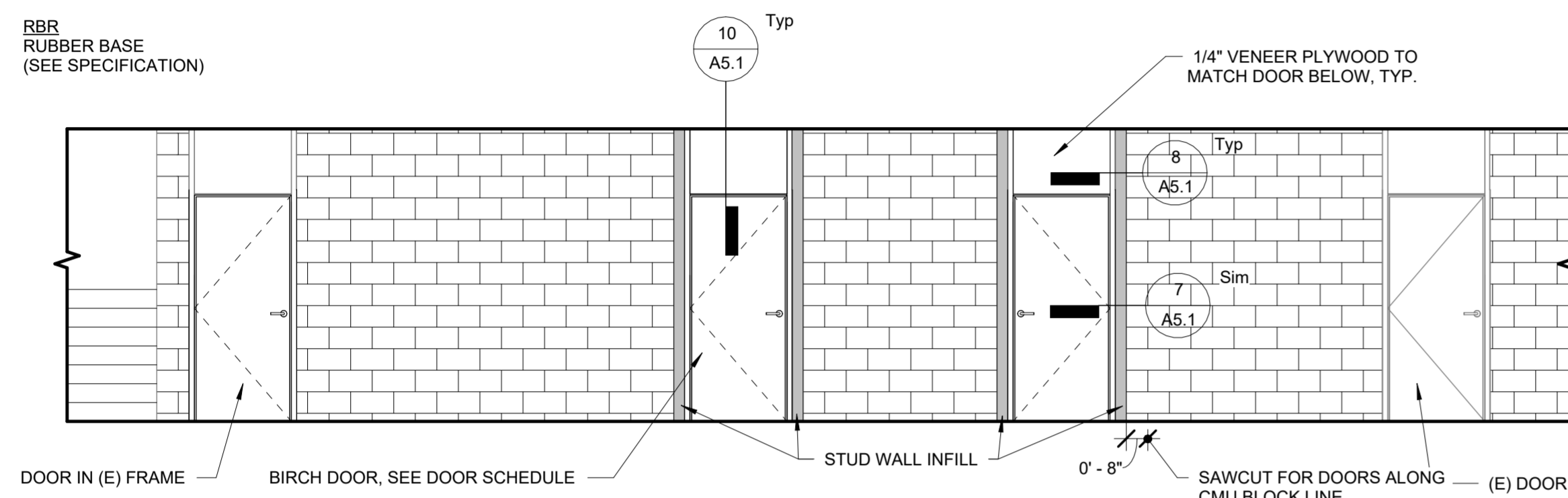
WP-1
 FRP - FIBER REINFORCED PANELS
 (SEE SPECIFICATION)

CPT
 CARPET
 (SEE SPECIFICATION)

RBR
 RUBBER BASE
 (SEE SPECIFICATION)

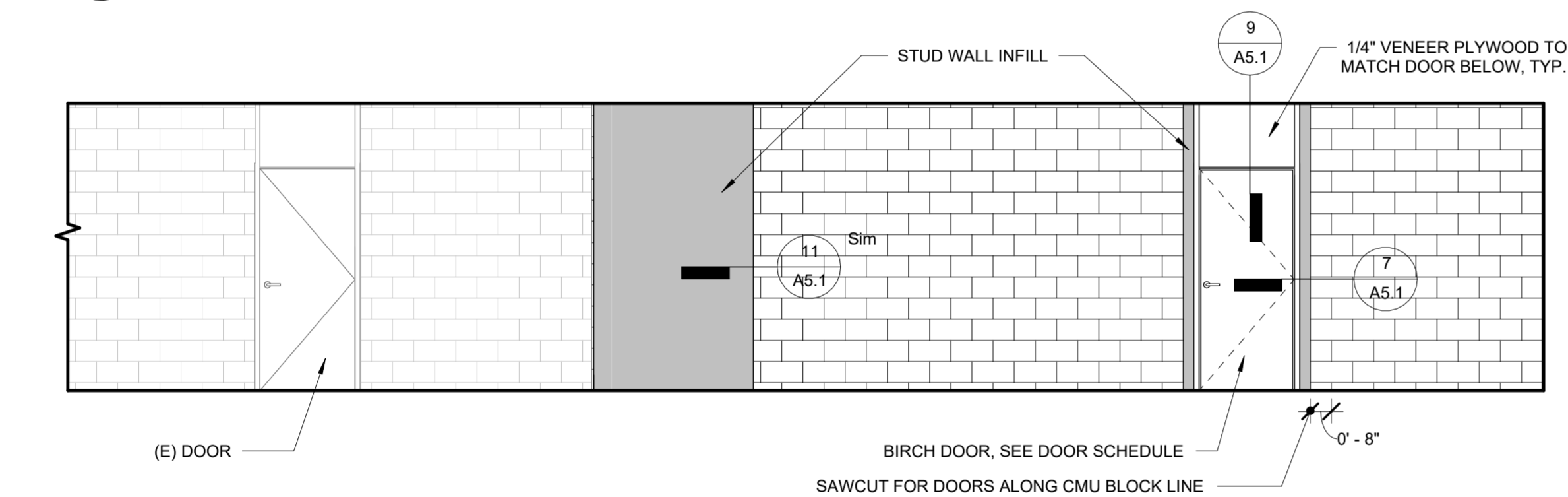
ROOM FINISH SCHEDULE									
NO.	ROOM NAME	FLOOR FINISH	BASE	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	CEILING	NOTES
1	MAIN HALLWAY	-	-	-	P-1	-	-	A.C.T.	PATCH, MATCH EXISTING
2	STUDENT R.R.	RS-1	COVE	WP-1	(E) CMU, P-1	WP-1	(E) CMU, P-1	P-2, GYP.	
3	STAFF R.R.	RS-1	COVE	WP-1	(E) CMU, P-1	WP-1	(E) CMU, P-1	P-2, GYP.	
4	STUDENT R.R.	RS-1	COVE	WP-1	(E) CMU, P-1	WP-1, (E) CMU	(E) CMU, P-1	P-2, GYP.	
5	COUNSELING HALLWAY	CPT	RBR	P-1	-	-	P-1	A.C.T.	ALIGN WITH EXISTING CEILING GRID
6	OFFICE	CPT	RBR	-	-	-	-	-	
7	OFFICE	CPT	RBR	-	-	-	-	-	
8	NURSE	CPT	RBR	-	-	-	-	-	

DOOR SCHEDULE											
DOOR NO.	ROOM NAME	SIZE (WxH)	TYPE	DOOR MATERIAL	FRAME MATERIAL	HARDWARE GROUP	Details			RATING	NOTES
							Head	Jamb	Transom		
1	STUDENT R.R.	3'-0" X 7'-0"	8	WD	WD	HW-5	-	-	-	20 MIN	EXISTING FRAME
2	STAFF R.R.	3'-0" X 7'-0"	8	WD	WD	HW-5	10	6	7	20 MIN	
3	STUDENT R.R.	3'-0" X 7'-0"	8	WD	WD	HW-5	11	6	7	20 MIN	
4	STUDENT R.R.	3'-0" X 7'-0"	8	WD	WD	HW-5	11	6	7	20 MIN	



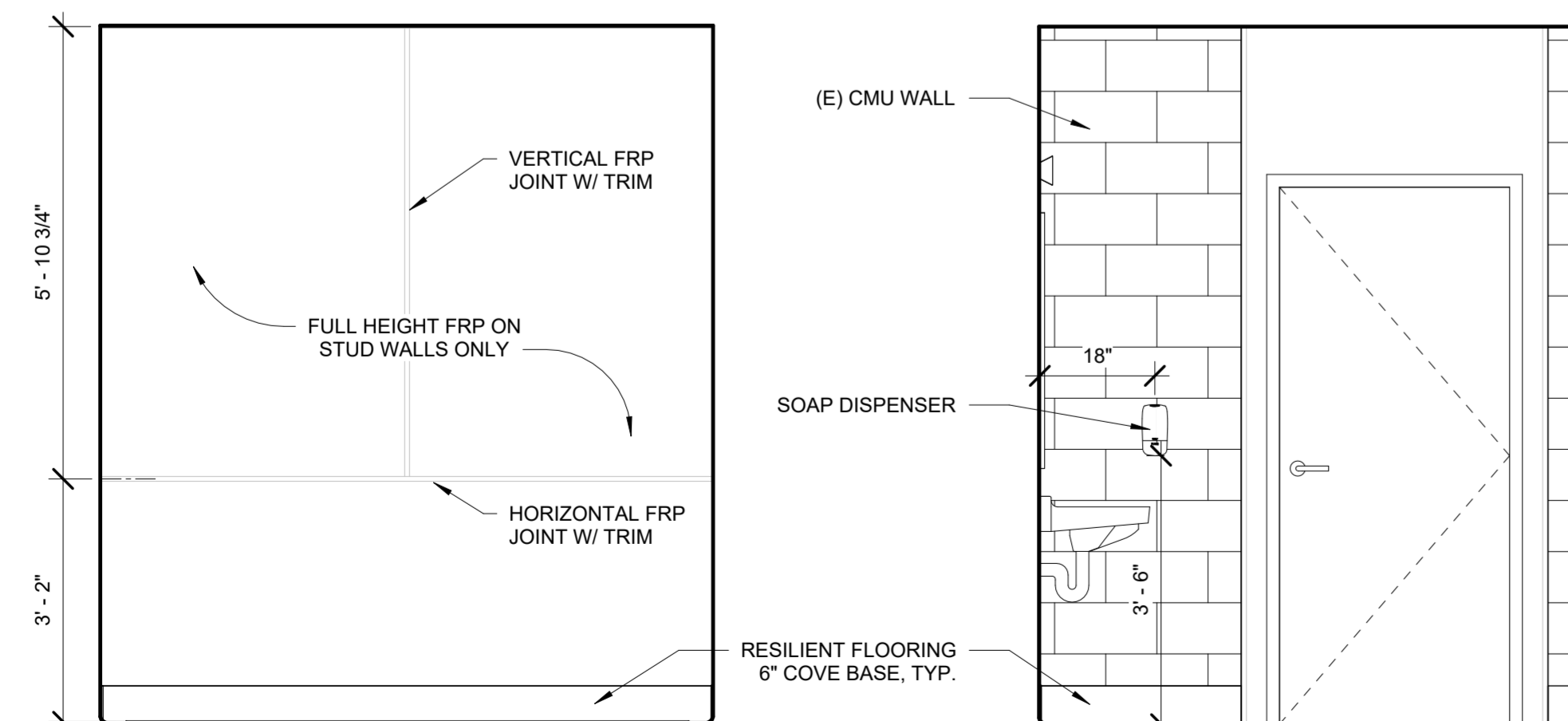
8 MAIN HALLWAY ELEVATION

1/4" = 1'-0"



7 OFFICE HALL ELEVATION

1/4" = 1'-0"

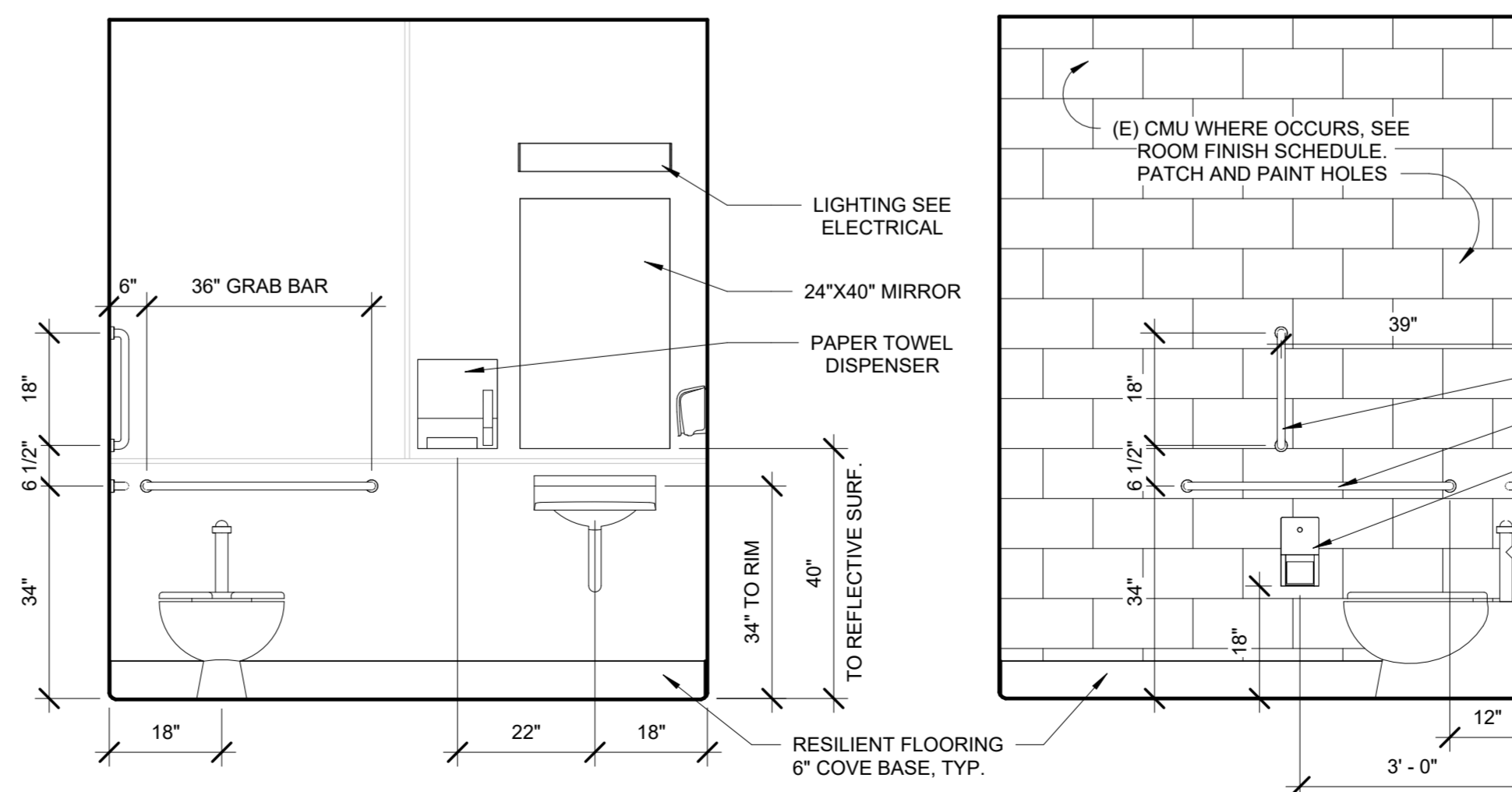


5 ADA NORTH, TYP.

1/2" = 1'-0"

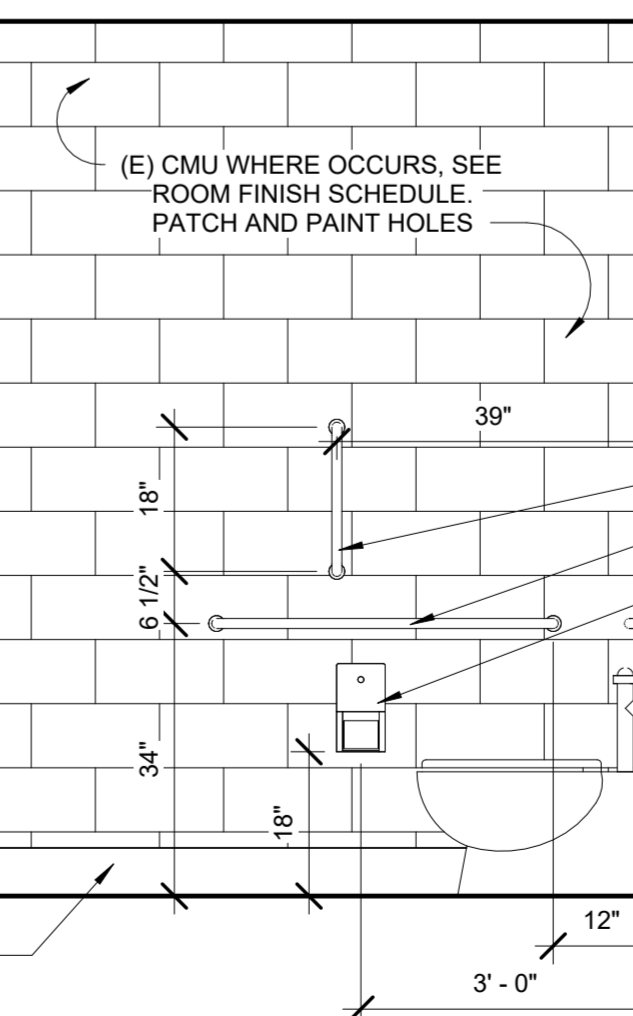
4 ADA WEST, TYP.

1/2" = 1'-0"



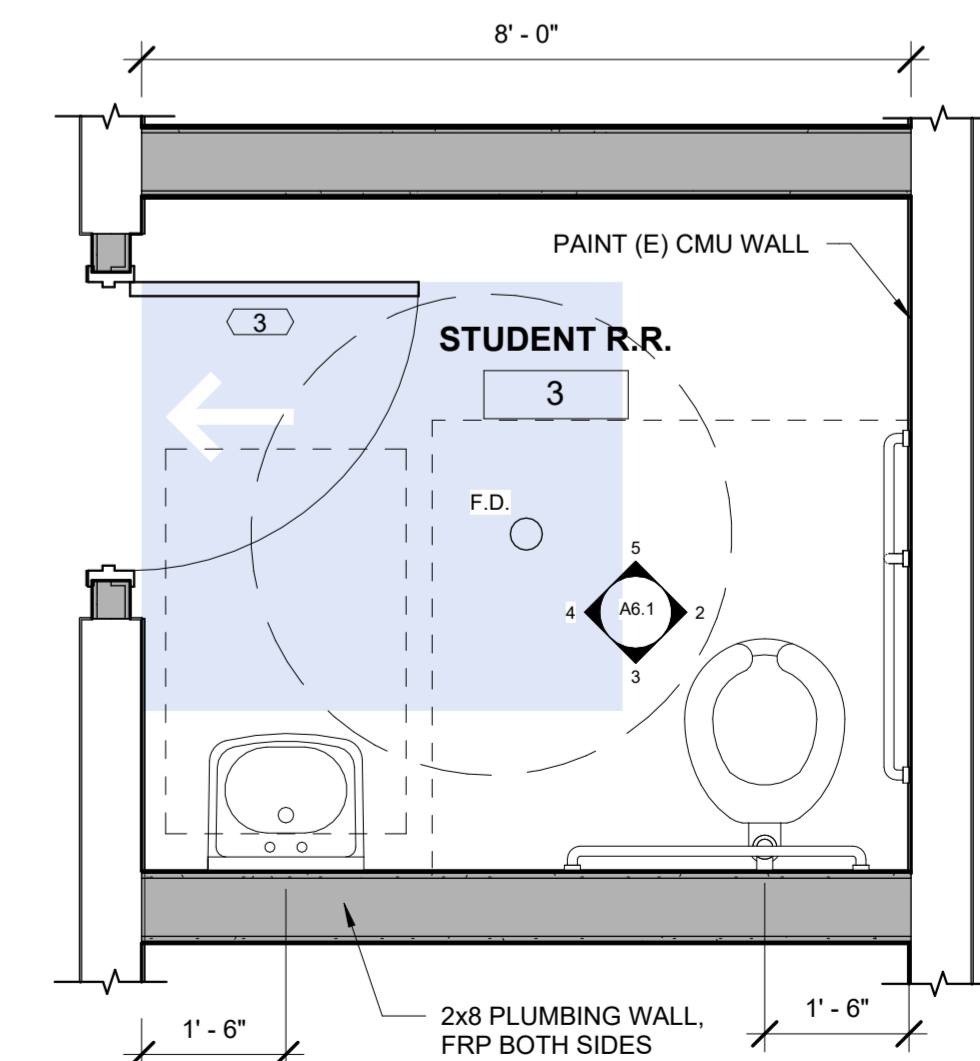
3 ADA SOUTH, TYP.

1/2" = 1'-0"



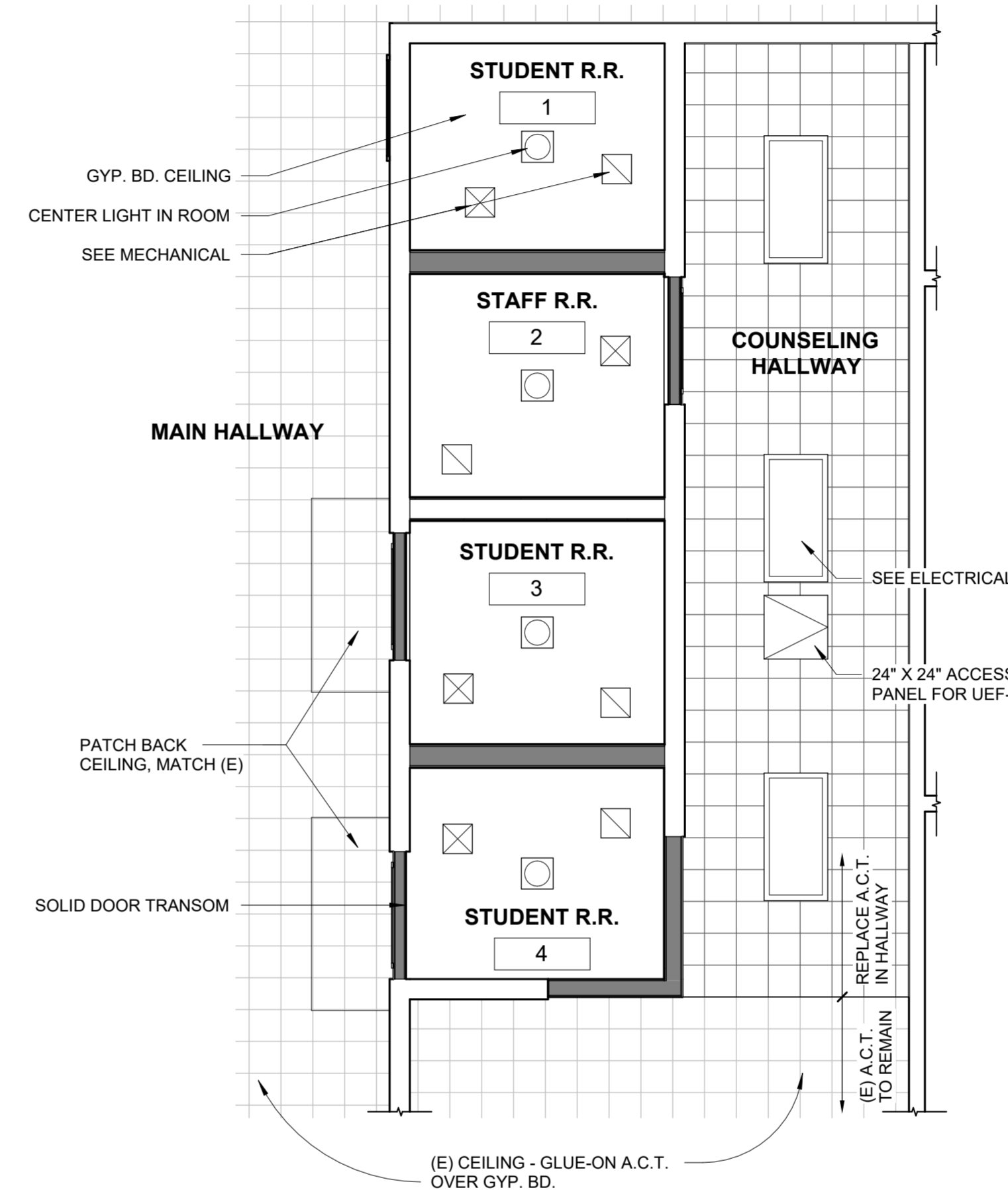
2 ADA EAST, TYP.

1/2" = 1'-0"



1 ADA TOILET, TYP.

1/2" = 1'-0"



6 REFLECTED CEILING PLAN AT RESTROOMS

1/4" = 1'-0"

GENERAL NOTES - RCP

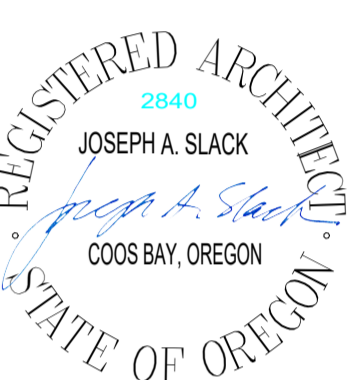
- A. SEE MECHANICAL, ELECTRICAL, AND PLUMBING DIAGRAMS FOR ADDITIONAL CEILING INFORMATION.
- B. PROTECT FROM DAMAGE EXISTING TO REMAIN ADHERED ACOUSTICAL CEILING TILE.
- C. PATCH AND PAINT FINISHES TO MATCH U.N.O.
- D. WHERE NEW CEILINGS ARE SHOW, DEMO EXISTING CEILINGS.
- E. CENTER LIGHTS AND FIXTURES AS SHOWN.

CEILING LEGEND

- EXISTING WALL TO REMAIN
- STUD WALL
- SUPPLY AIR, SEE MECHANICAL
- EXHAUST FAN, SEE MECHANICAL
- RECESSED LIGHT, SEE ELECTRICAL
- PANEL LIGHT, SEE ELECTRICAL



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SHEET TITLE:
INTERIOR ELEVATIONS & SCHEDULES

A6.1

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PLUMBING LEGEND

AFF	----	ABOVE FINISHED FLOOR	----- - - - -	CW	----	CW - COLD WATER
ARCH	----	ARCHITECTURAL	----- - - - -	HW	----	HW - HOT WATER
B.G.	----	BELOW GRADE	----- - - - -	HWR	----	HWR - HOT WATER RECIRC
BTU	----	BRITISH THERMAL UNIT	----- - - - -	(E)CW	----	(E)CW - EXISTING COLD WATER
CAP.	----	CAPACITY	----- - - - -	(E)HW	----	(E)HW - EXISTING HOT WATER
C.I.	----	CAST IRON	----- - - - -	(E)HWR	----	(E)HWR - EXISTING HOT WATER RECIRC
CO	----	CLEANOUT	----- - - - -	W	----	W - SANITARY WASTE
COMP.	----	COMPARTMENT	----- - - - -	(E)W	----	(E)W - SANITARY WASTE
CONT.	----	CONTINUATION	----- - - - -	V	----	V - SANITARY VENT
CU.	----	CUBIC	----- - - - -	(E)V	----	(E) - EXISTING SANITARY VENT
DF	----	DRINKING FOUNTAIN				
DI	----	DEIONIZED (WATER)				
DIA.	----	DIAMETER				
(E)	----	EXISTING				
ELEV.	----	ELEVATION				
EWC	----	ELECTRIC WATER COOLER				
FD	----	FLOOR DRAIN				
FDG	----	FIRE DEPARTMENT CONNECTION				
F.F.	----	FINISH FLOOR				
FLG.	----	FLANGE				
FT	----	FOOT / FEET				
G	----	GAS				
GA.	----	GAUGE				
GALV.	----	GALVANIZED				
GPM	----	GALLONS PER MINUTE				
G.V.	----	GATE VALVE				
HP	----	HORSEPOWER				
HR.	----	HOUR				
I.E.	----	INVERT ELEVATION				
KW	----	KILOWATT				
LAV	----	LAVATORY				
LBS	----	POUNDS				
MAX.	----	MAXIMUM				
MBH	----	THOUSANDS OF BTUs PER HOUR				
MIN.	----	MINIMUM				
M.J.	----	MECHANICAL JOINT				
(N)	----	NEW CONSTRUCTION				
N.I.M.	----	NOT IN MECHANICAL				
OS&Y	----	OUTSIDE STEM & YOKE				
PROT.	----	PROTECTION				
PRV	----	PRESSURE REDUCING VALVE				
PSI, PSIG	----	POUNDS PER SQUARE INCH				
P/T	----	PRESSURE / TEMPERATURE				
(R)	----	RELOCATION				
RD	----	RAIN DRAIN / STORM DRAIN				
REQ'D	----	REQUIRED				
RPBP	----	REDUCED PRESSURE BACKFLOW PREVENTER				
RPM	----	REVOLUTIONS PER MINUTE				
TYP.	----	TYPICAL				
UG	----	UNDER GROUND				
UR	----	URINAL				
VL	----	VENTED LINE				
VTR	----	VENT THROUGH ROOF				
WC	----	WATER CLOSET				
WCO	----	WALL CLEANOUT				

	----	DETAIL CALLOUT		----	BALL VALVE
	----	EQUIPMENT MARK# TAG		----	GATE VALVE
	----	FIXTURE TAG		----	BUTTERFLY VALVE
	----	KEYNOTE		----	CHECK VALVE
	----	CONNECT TO EXISTING		OR	BALANCE VALVE
	----	CLEANOUT		----	UNION
	----	CAP		----	PRESSURE/TEMP RELIEF VALVE
	----	TEE		----	GAS PRESSURE REGULATING VALVE
	OR	ELBOW		----	DOUBLE CHECK ASSEMBLY
	OR	TOP CONNECTION			
	----	BOTTOM CONNECTION			
	----	PIPE TURNED UP, PIPE TURNED DOWN			

PLUMBING GENERAL NOTES

- A. THE DRAWINGS ARE DIAGRAMMATIC. PROVIDE ALL MATERIAL (NEW AND UNDAMAGED) AND LABOR FOR A COMPLETE AND OPERABLE SYSTEM. VERIFY ALL BUILDING MEASUREMENTS DIMENSIONS AND EQUIPMENT LOCATIONS BEFORE PROCEEDING WITH ANY OF THE WORK.
- B. REFER TO THE PLUMBING SPECIFICATIONS FOR MATERIALS, EQUIPMENT, AND ADDITIONAL CONSTRUCTION INSTRUCTIONS NOT COVERED BY THESE PLANS.
- C. VERIFY THE EXISTING EQUIPMENT, PIPES, VALVES LOCATIONS AND SIZES THAT ARE SHOWN ON THESE PLANS AND REPORT ALL DISCREPANCIES BACK TO ENGINEER FOR EVALUATION PRIOR TO PROCEEDING WITH WORK.
- D. ALL INSTALLATIONS SHALL COMPLY WITH APPLICABLE FEDERAL AND STATE CODES INCLUDING 2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC) INCLUDING APPENDIX N FOR OREGON FIRE CODE REGULATIONS, 2023 OREGON PLUMBING SPECIALTY CODE (OPSC), 2022 OREGON MECHANICAL SPECIALTY CODE (OMSC), 2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESC)-BASED ON ASHRAE 90.1-2019, AND NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). WHERE TWO CODES DIFFER THE MORE STRICT OF THE TWO SHALL BE FOLLOWED.
- E. ALL PIPES, EXITING, ENTERING OR PASSING THROUGH ANY RATED FIRE WALL OR OCCUPANCY SEPARATION SHALL HAVE FIRE BLOCKING.
- F. ALL NON-PRESSURIZED DRAIN, WASTE, AND VENT PIPES ARE TO HAVE A MINIMUM SLOPE OF 1/4" PER FOOT UNLESS OTHERWISE NOTED.
- G. ALL PIPING INVERTS OR ELEVATIONS ARE MEASURED TO BOTTOM OF PIPE (BOP), UNLESS OTHERWISE IDENTIFIED.
- H. ALL POTABLE WATER SYSTEM PIPING AND EQUIPMENT ARE TO BE FLUSHED AND DISINFECTED PRIOR TO COMMISSIONING AND USE, AS PER CLEANING AND COMMISSIONING REQUIREMENTS OUTLINED IN OREGON PLUMBING SPECIALTY CODE & SPECIFICATIONS.
- I. VENT PER CODE AND AS SHOWN ON DRAWINGS.
- J. ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AT AN APPROVED LOCATION. TRENCHES FOR PIPING SHALL BE SHORED AND WIDE ENOUGH FOR PROPER INSTALLATION.
- K. PROVIDE CLEANOUTS WHERE INDICATED AND PER CODE. NOT ALL CODE REQUIRED CLEANOUTS ARE SHOWN ON DRAWINGS.
- L. PRIME FLOOR DRAINS/SINKS PER CODE.
- M. PROVIDE DIELECTRIC FITTINGS AT DISSIMILAR METALS PIPE CONNECTIONS.
- N. VERIFY ALL ELECTRICAL REQUIREMENTS BEFORE ORDERING EQUIPMENT.
- O. INSTALL ALL EQUIPMENT PER MANUFACTURERS' INSTRUCTIONS.
- P. CONTRACTOR TO PROVIDE ACCESS DOORS WHERE REQUIRED BY CODE.
- Q. CONTRACTOR TO FLASH AND COUNTER-FLASH NEW VENT THRU ROOF WATER TIGHT.
- R. DRAINAGE CONNECTIONS SHALL NOT BE MADE INTO A DRAINAGE PIPING SYSTEM WITHIN 8 FT OF ANY VERTICAL TO HORIZONTAL CHANGE OF DIRECTION OF A STACK CONTAINING A SUDS-PRODUCING FIXTURE.
EXCEPTION: STACKS RECEIVING THE DISCHARGE FROM LESS THEN 3 STORIES OF PLUMBING FIXTURES
- S. HEAT TRACE (FREEZE PROTECTION) ALL PIPING SUBJECTED TO FREEZING CONDITIONS. ALL HEAT TRACED PIPE TO BE INSULATED AND LABELED.
- T. HEAT TRACE WASTE TRAPS, INSULATE WASTE PIPING EXPOSED TO FREEZING CONDITIONS
- U. ROUTE ALL HVAC UNIT CONDENSATE DRAINS TO AN APPROVED LOCATION (OPTIONS LISTED BELOW)
 .. ROUTE TO CLOTHES WASHER BOX VIA TOP DISCHARGE - IPS WATER TITE MODEL W8900 OR EQUAL.
 .. ROUTE ALL CONDENSATES DOWN IN WALLS IN COMMON DRAIN SYSTEM AND ROUTE TO HUB DRAINS - CONTRACTOR TO SIZE DRAIN SYSTEM BASED ON NUMBER OF CONNECTED UNITS.
 .. PROVIDE CONDENSATE PUMPS ON ALL UNITS THAT ARE NOT GRAVITY DRAINED.
- V. ROUTE VENTS FROM FLOOR DRAINS/SINKS BELOW SLAB AND UP ON/IN A WALL TO VENT STACKS ABOVE. (ROUTE INDIVIDUAL VENTS UNTIL ABOVE FLOOD LINE OF FIXTURE).

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	QTY	MANUFACTURER	MODEL #	W	V	CW	HW	DESCRIPTION
WC-1	WATER CLOSET	4	KOHLER	K-96057	4"	2"	1"	--	FLOOR MOUNT, ELONGATED BOWL, ADA
	FLUSH VALVE	4	MOEN	8310					1.6 GPF, BATTERY POWERED, SENSOR ACTIVATED
LV-1	LAVATORY	4	KOHLER	K-2032	1-1/2"	1-1/2"	1/2"	1/2"	WALL MOUNT, CONCEALED ARM CARRIER, FOLLOW ADA INSTALLATION
	LAVATORY FAUCET	4	MOEN	CA8301					CHROME FINISH, SINGLE HANDLE, BATTERY-POWERED SENSOR, ADA, INSTALL WITH ASSE 1070 MIXING VALVE & MCGUIRE QUARTER TURN ANGLE STOPS LFVB2-02
	LAVATORY DRAIN	4	MCGUIRE	155A					POLISHED CHROME, CAST BRASS, OPEN GRID P.O. PLUG
FD-1	FLOOR DRAIN	4	SIoux CHIEF	842-3PNR	3"	VL	--	--	ROUND NICKEL BRONZE/BRASS, PVC ADAPTER

SCOPE OF WORK

- DEMO EXISTING PLUMBING FIXTURES, FLOOR DRAINS, ASSOCIATED PIPING, AND A SECTION OF MAIN WASTE PIPE.
- ADD NEW PLUMBING FIXTURES, FLOOR DRAINS, AND PIPING.

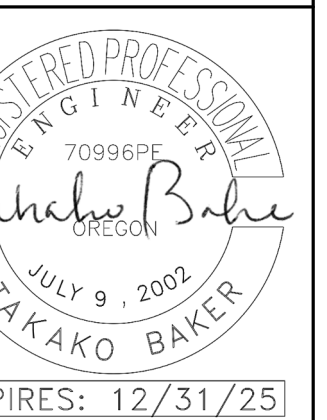
PLUMBING DRAWING INDEX

SHEET NUMBER	SHEET NAME
P1.0	PLUMBING COVER SHEET
P2.1	PLUMBING FLOOR PLANS
P3.1	PLUMBING ISOMETRIC DIAGRAM
P4.1	PLUMBING SPECS

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PROJECT NO.: 24-005
NORTH BEND HS RESTROOM REMODEL
NORTH BEND SCHOOL DISTRICT
2323 PACIFIC ST. NORTH BEND, OR 97459

PERMIT SET

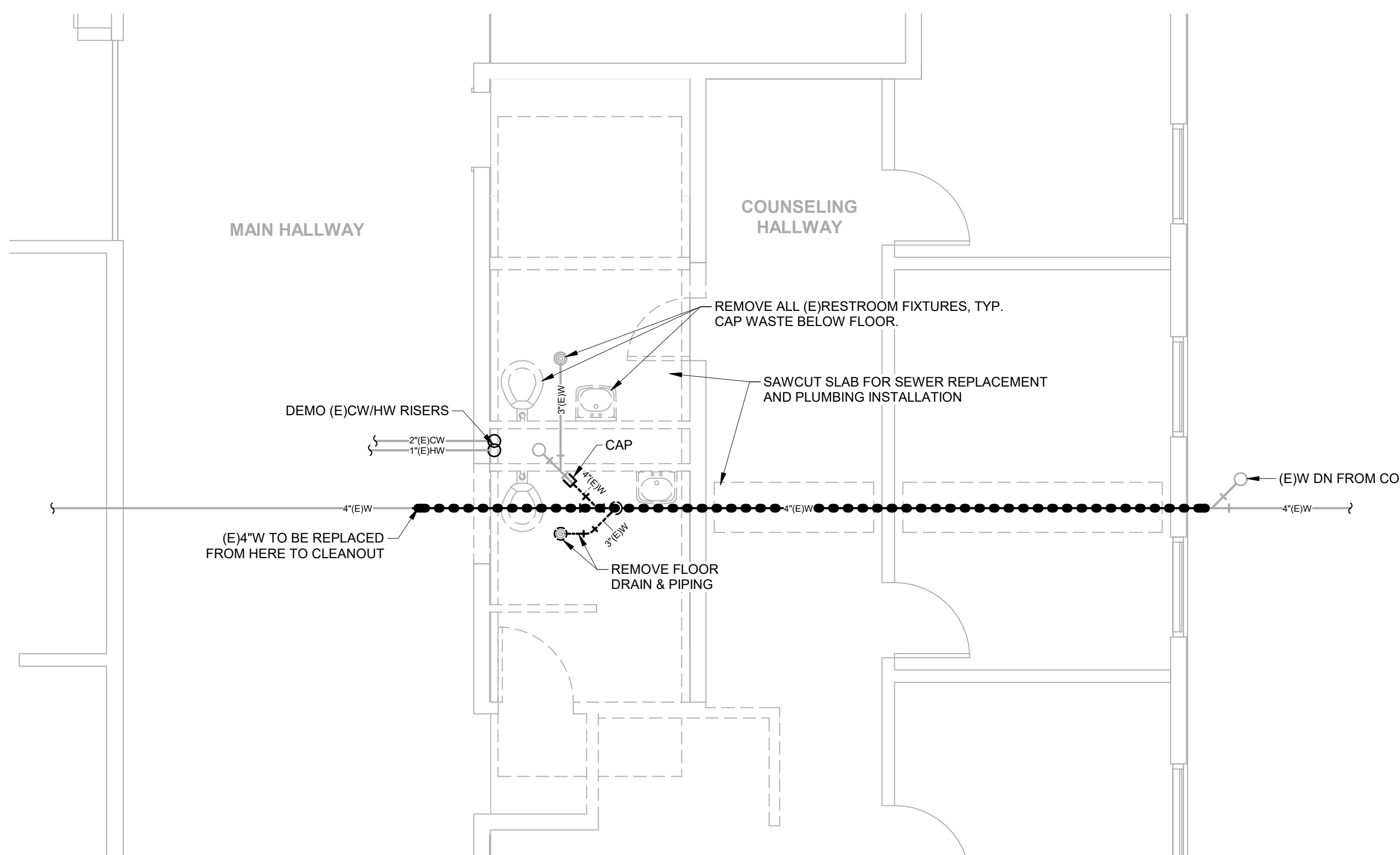
REVISIONS:
DATE DESCRIPTION

DATE: MAR 2024

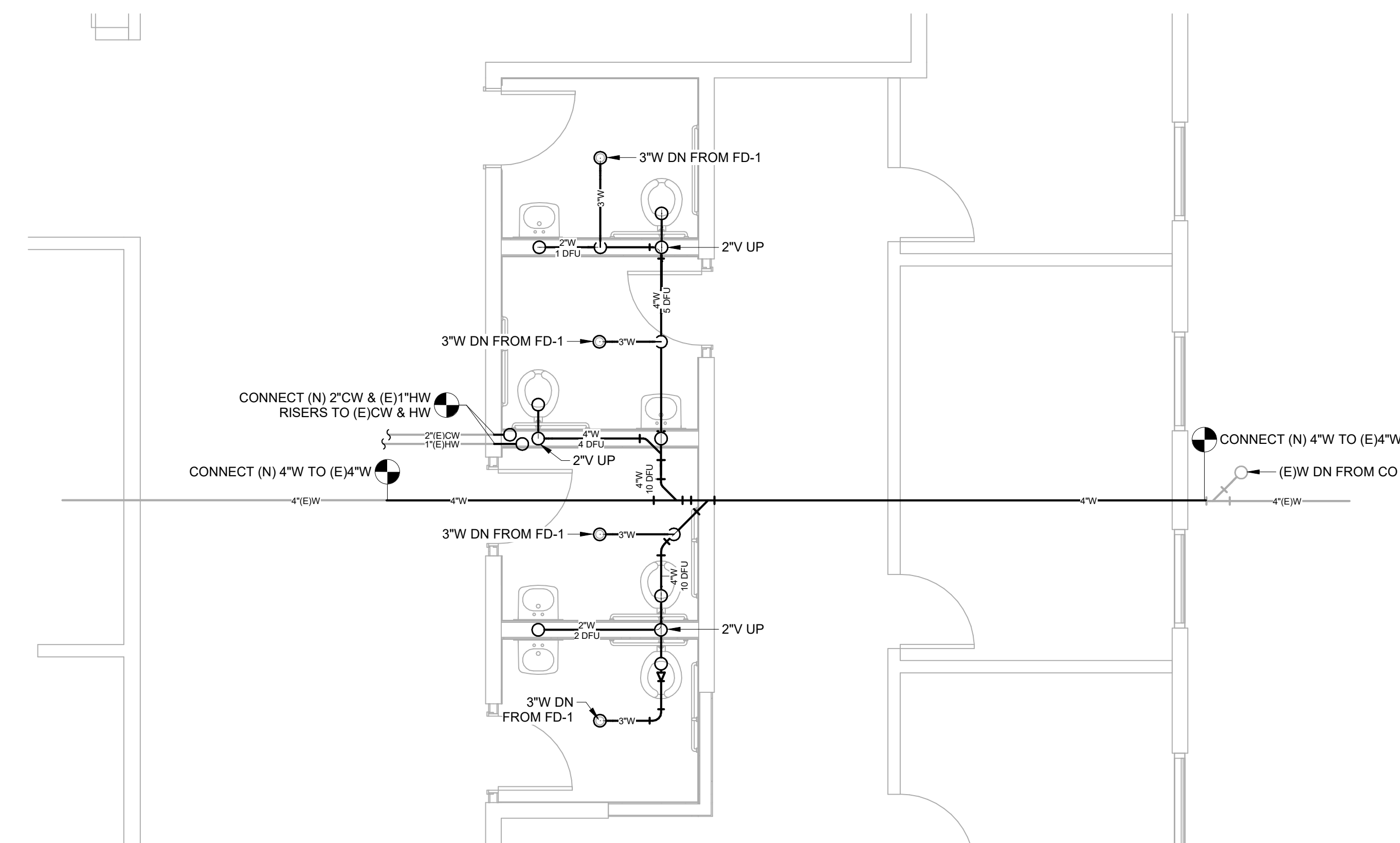
SHEET TITLE:
PLUMBING COVER SHEET

P1.0

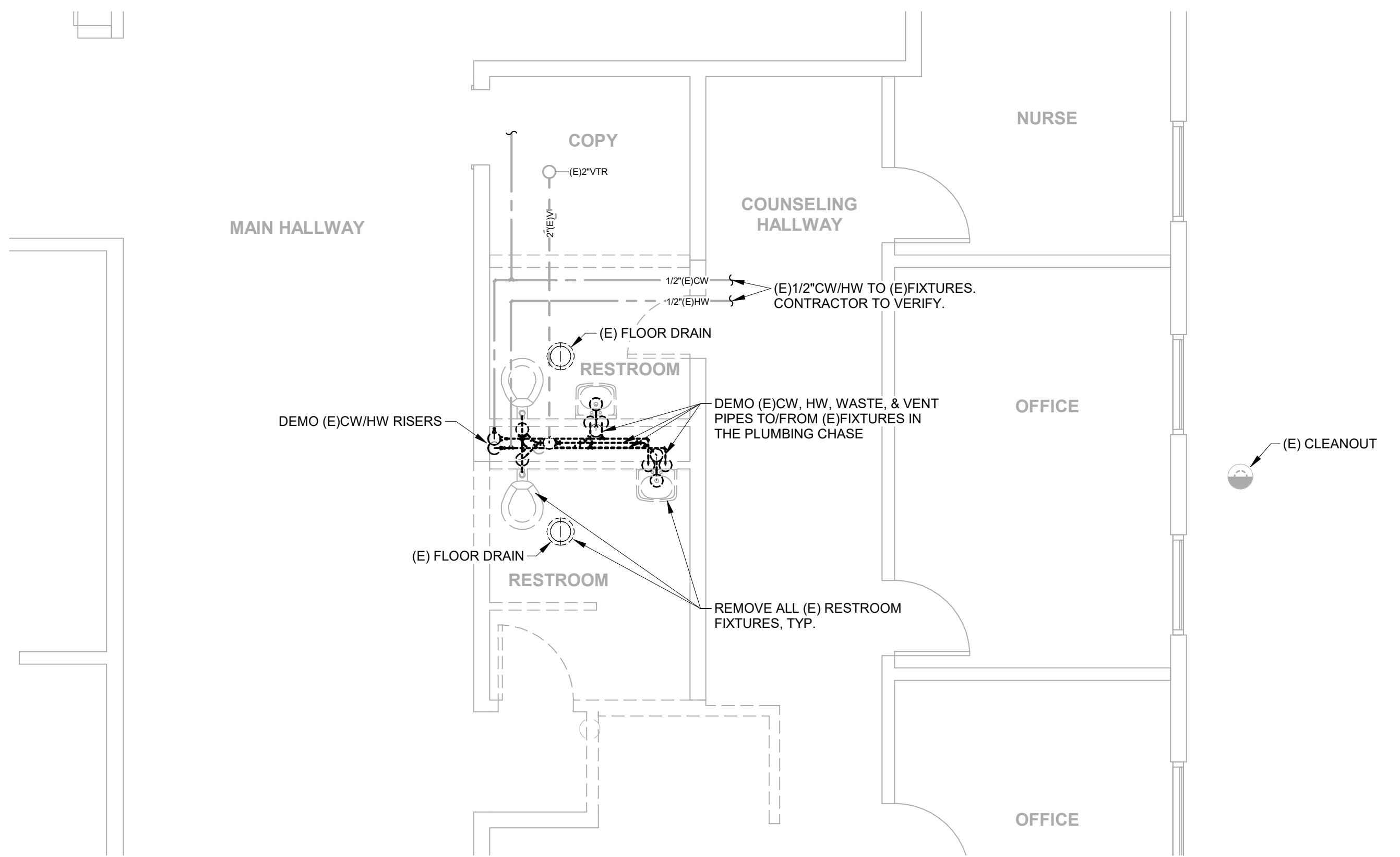
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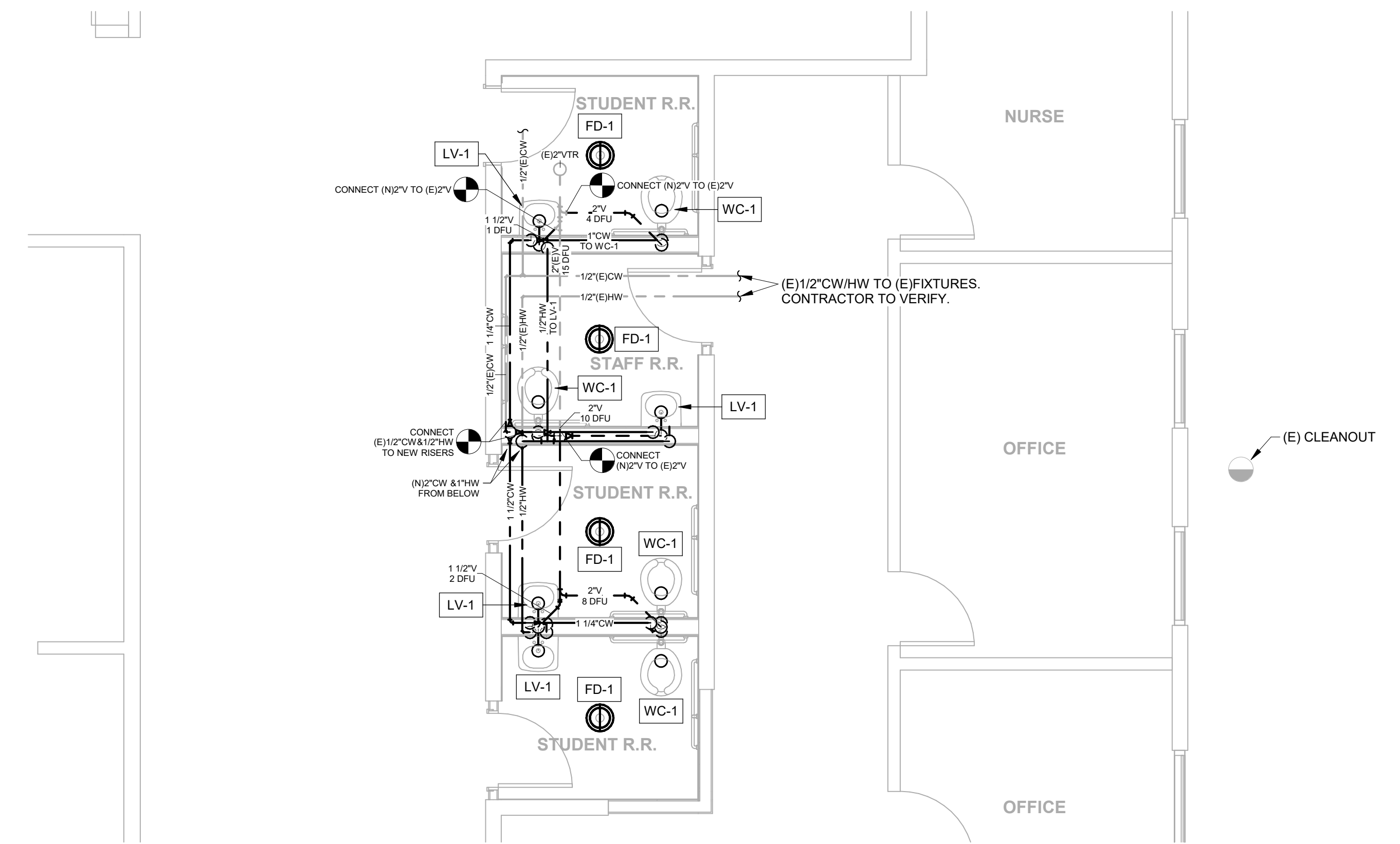
1 PLUMBING ENLARGED RESTROOMS UNDERSLAB PLAN - DEMO
1/4" = 1'-0"



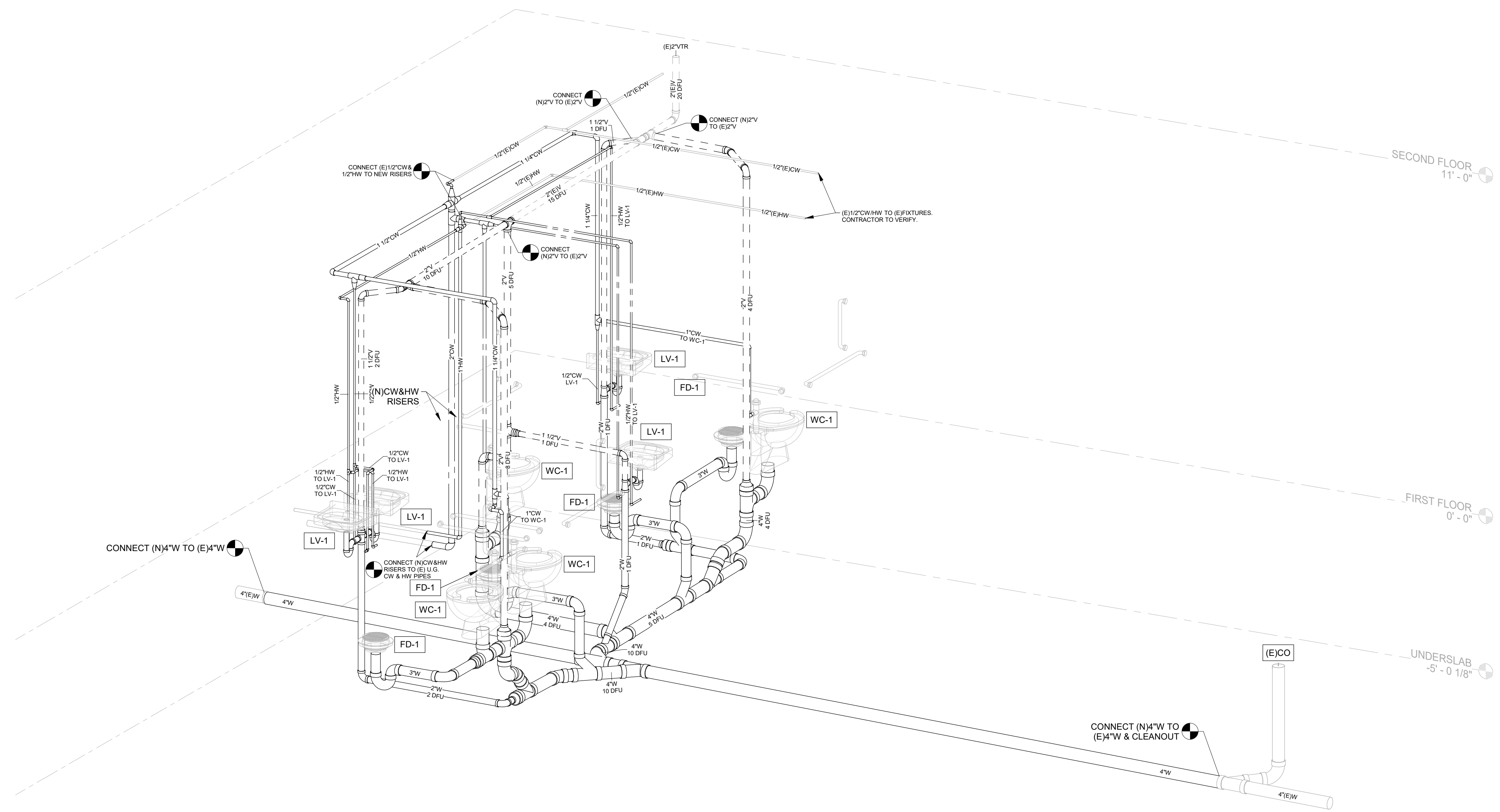
2 PLUMBING UNDERSLAB RESTROOMS ENLARGED PLAN
1/4" = 1'-0"



3 PLUMBING ENLARGED RESTROOMS FLOOR PLAN - DEMO
1/4" = 1'-0"



4 PLUMBING ENLARGED RESTROOMS FLOOR PLAN
1/4" = 1'-0"



1 PLUMBING ISOMETRIC DIAGRAM

PROJECT NO.: 24-005
NORTH BEND HS RESTROOM REMODEL
NORTH BEND SCHOOL DISTRICT
2323 PACIFIC ST. NORTH BEND, OR 97459

PERMIT SET

REVISIONS:

#	DATE	DESCRIPTION

DATE: MAR 2024

SHEET TITLE:
PLUMBING ISOMETRIC DIAGRAM

P3.1

PLUMBING SPECIFICATIONS

PART 1 - GENERAL

1.1 QUALITY ASSURANCE

- A. Codes and Standards: Comply with the provisions of the following codes, standards and specifications, except where more stringent requirements are shown or specified.
1. Current State of Oregon Plumbing Specialty Code.
- C. Field Measurements: Take prior to preparation of shop drawings and fabrication, where possible.

PART 2 - PRODUCTS

2.1 PIPING MATERIALS

- A. Cast Iron Soil Pipe:
1. Application: 2" and larger, sanitary waste, plumbing vent and rain drain.
 2. Pipe: Hubless cast iron soil pipe, CISPI 301.
 3. Fittings:
 - a. Hubless Cast Iron Fittings: CISPI 301 clamping bands.
 - b. Couplings Underground: Clamp-All Corp. Hi-Torq 125, Husky SD4000, Mission Heavy Weight, or approved substitute.
 - c. Couplings to Steel or Plastic: Fernco "LowFlex" or approved.
- B. Copper Pipe and Tube:
1. Application: Domestic hot and cold water and priming lines
 2. Pipe: ASTM B88.
 - a. Above Ground Domestic Water: Type L hard temper copper with soldered joints.
 - b. Underground Domestic Water and Priming Lines: Type L soft annealed with no joints or type K hard tempered copper with silver soldered joints.
 3. Fittings: Wrought copper solder-joint fittings, ANSI B16.22.
- D. Plastic Pipe - Drainage:
1. Poly(vinyl chloride) (ASTM D1784) (PVC) solid core plastic drain, waste and vent pipe (ASTM D2665 and D1785) and fittings (ASTM D2665) (DWV).
 2. Fittings: Provide fittings of the type indicated, matching piping manufacture. Where not otherwise indicated, provide fittings produced and recommended for the service indicated by the piping manufacturer.

G. Plastic Pipe:

1. Application:
 - a. Above grade domestic water.
 - b. Priming lines if approved by owner/landlord.
2. Pipe:
 - a. Cross-linked polyethylene (PEX) tubing manufactured by PEX-a or Engel Method for Water Service: Tested/listed to ASTM E84, ASTM F876 and F877, and CSA B137.5 listed certified to NSF standards 14 and 61. Rated for 100 PSI at 180° F. Wirsbo AQUAPEX or approved.
3. Fittings: ASTM F1960 cold expansion fittings. Provide fittings of the type matching piping manufacture and recommended by the piping manufacturer for the service indicated

2.3 MISCELLANEOUS PIPING MATERIALS/PRODUCTS

- A. Hangers: Provide factory-fabricated piping support systems including hangers, supports, clamps, hanger rod, inserts, supports, etc. Provide materials which are zinc plated or factory painted to prevent corrosion. Provide seismic restraints in accordance with code requirements.
- B. Valves: Provide factory fabricated valves of the type, body material, and pressure class indicated and service indicated. Where possible, provide valves from a single manufacturer.
1. Install valves where required for proper operation of piping and equipment, including valves in branch lines where necessary to isolate sections of piping.
 2. Locate valves in accessible spaces (or behind access panels) and so that separate support can be provided when necessary.
 3. Install valves with stems pointed up, in the vertical position where possible, but in no case with stems pointed downward from a horizontal plane.
 4. Valve Access: Provide access panels to all valves installed behind walls, in furring or otherwise inaccessible.

2.5 PIPING INSULATION

- A. Insulation Manufacturers: Manville, Knauf, Armstrong, Owens-Corning, Pittsburgh Corning, Pabco, IMCOA or CertainTeed. Manville products listed unless indicated otherwise.
- B. Interior Piping Systems 40 to 850 Degrees F: Glass fiber preformed pipe insulation with a minimum K-value of 0.23 at 75 degrees F, a minimum density of 3.5 pounds per cubic foot within all-service vapor barrier jacket, vinyl or pre-sized finish and pressure sensitive seal. Manville "Micro-Lok."
- C. PVC Protective Jacketing and Fitting Covers: CEEL-CO "Ceel-Tite 100 Series" with precut fitting fiberglass insulation.

2.7 PLUMBING FIXTURES

- A. Stops: Furnish stop valves for all fixtures.
- B. Fixture Traps: Exposed fixture tailpieces, traps, and wastes shall be chrome plated seamless brass tube with deep or box style escutcheons as required to conceal rough piping. Concealed traps may be smooth tubular plastic.
- C. Lavatory Tempering Valve: The lavatory tempering valve shall be certified per ASSE 1070 at 0.25 GPM and CSA standards and shall have a lead free certified brass or copper alloy body with corrosion resistant internal components. It shall include integral checks with screens to prevent backflow and to filter debris from entering the valve. Temperature adjustment shall be made using an Allen wrench and a locknut or locking cap on the bonnet to prevent unauthorized or accidental temperature adjustment. Valve shall be tested to provide at least 1.5 GPM at no more than 5 PSI pressure drop. Temperature range shall be at least 85-115° F. Valve shall be Acorn model ST70, Powers LFLM495, or approved equal.
- D. Provide handicap piping protector kit on all exposed accessible fixture traps and supplies.
- E. Fixtures
1. Refer to Plumbing Fixture Schedule.

PLUMBING SPECIFICATIONS (CON'T)

PART 3 - EXECUTION

3.1 INSTALLATION

- B. Anchorage: Anchor and/or brace all mechanical equipment, piping and ductwork to resist displacement due to seismic action, include snubbers on equipment mounted on spring isolators.
- C. Drip Pans: Provide drip pans under all domestic water heaters. Fabricate pans of galvanized steel, 2" deep. Extend 3/4" drain to approved point of disposal.
- D. Trap priming: Prime all traps serving floor drains, floor sinks, trench drains, interior catch basins, and similar fixtures as required by code.

3.6 PIPE INSTALLATION

- B. Piping Runs: Locate piping runs, except as otherwise indicated, vertically and horizontally (pitched to drain) and avoid diagonal runs wherever possible. Orient horizontal runs parallel with walls and column lines. If not otherwise indicated, run piping in the shortest route which does not obstruct usable space or block access for servicing the building and its equipment. Hold piping close to walls, overhead construction, columns and other structural and permanent-enclosure elements of the building. Wherever possible in finished and occupied spaces, conceal piping from view. Do not encase horizontal runs in solid partitions.

3.7 PIPING JOINTS

- A. General: Provide joints of the type indicated in each piping system, and where piping and joint as manufactured form a system, utilize only that manufacturer's material.
- B. Cast Iron "No-Hub": All joints in accordance with the Cast Iron Soil Pipe Institute pamphlet No. 100 "Installation Suggestions for 'No-Hub' Pipe and Fittings."
- C. Solder Copper Tube and Fitting Joints: In accordance with recognized industry practice. Cut tube ends squarely, ream to full inside diameter, and clean outside of tube ends and inside of fittings. Apply solder flux to joint areas of both tubes and fittings. Insert tube full depth into fitting, and solder in a manner which will draw solder full depth and circumference of joint. Wipe excess solder from joint before it hardens. "T-Drill" field-formed tees may be utilized where the main is at least two pipe sizes larger than the branch.
- D. Braze Copper Tube and Fitting Joints: Where indicated, in accordance with ANSI B31. Pass a slow stream of dry nitrogen gas through the tubing at all times while brazing to eliminate formation of copper oxide.
- E. Plastic Pipe/Tube Joints: Comply with manufacturer's instructions and recommendations, and with applicable industry standards:
1. Heat Joining of Thermoplastic Pipe: ASTM D-2657.
 2. Making Solvent-Cemented Joints: ASTM D-2865 and ASTM F-402.

H. Line Grades:

1. Drainage Lines: Run at maximum possible grade and in no case less than 1/8" per foot within building.
2. Vents: Pitch for drainage 1/4" per 10'.
3. Water: Pitch to low points and install hose bib drains. 3' minimum depth of ground cover for all lines outside building unless otherwise noted.

I. Unions and Flanges: At all equipment to permit dismantling and elsewhere as consistent with good installation practice.

J. Expansion: Provide loops, swing joints, anchors, runouts and spring pieces to prevent damage to piping or equipment.

3.9 PIPING INSULATION

- A. Domestic Water Piping:
1. Insulate with glass fiber pipe covering, 1" thick for cold water piping and for 1" and smaller hot water piping; 1-1/2" for 1-1/4" and larger hot water piping.
 2. Insulate hot water return piping same as cold water piping.
 3. Insulate all water piping exposed to outside weather and freezing temperatures with 1" thickness of glass fiber pipe covering with weather-proof metal jacket. Apply insulation after heat cable is installed.
- C. Pipe Fittings: Insulate and finish all fittings including valve bodies, bonnets, unions, flanges and expansion joints with precut fiberglass insulation and preformed PVC covers sealed to adjacent insulation jacket for continuous vapor barrier covering over all fittings.
- D. Piping Insulation Lap Seams and Butt Joints: Install insulation jacket in accordance with manufacturer's recommendation. Where jacket joint and lap seams have not adhered, remove affected section of insulation and reinstall or, when accepted by the Architect, apply lap sealing adhesive in accordance with manufacturer's instructions.

3.10 FIXTURE INSTALLATION AND CONNECTION

- A. All exposed fixture hardware and piping shall be plated with polished chrome unless otherwise directed in these specifications.
- B. All fixtures in contact with finished walls and floors shall be caulked with waterproof, white, non-hardening sealant which will not crack, shrink or change color with age.
- C. All fixtures and component parts shall conform to governing codes.
- D. All fixtures shall be securely mounted level and plumb or as recommended by the manufacturer. Mount fixtures intended to be accessible to the handicapped at the dimensions required by code.
- E. Shock Arrestors: Install at the end of mains, on water closet and urinal headers, ahead of quick closing and solenoid operated valves, etc.

3.11 CLEANING

- A. Domestic Water System: Flush with clean water to eliminate grease, cuttings and foreign matter; run water until clear and free of oil. Chlorinate domestic water as per procedure outlined by Code.
- B. Waste and Storm Drainage System:
1. Remove construction debris from cleanouts, drains, strainers, baskets, traps, etc., and leave same accessible and operable.
 2. Clear the interior of sewer piping of dirt and other superfluous material as the work progresses. Place plugs in the end of uncompleted piping at the end of the day or whenever work stops.
 3. Before final acceptance of completed sewer system, flush and clean the entire system with water. Trap and remove solid material obtained from flushing and cleaning from the new system. Do not allow debris to enter the existing sewer system.

3.12 TEST

- A. General:
1. Minimum duration of two hours or longer, as directed for all tests. Furnish report of test observation signed by qualified inspector. Make all tests before applying insulation, backfilling, or otherwise concealing piping or connecting fixtures or equipment. Where part of the system must be tested to avoid concealment before the entire system is complete, test that portion separately, same as for entire system.
 2. Test in accordance with the requirements of the State Plumbing Inspector and local authorities.
- D. Drainage and Vent Piping:
1. Hydrostatic test by filling to highest point, but not less than 10' water column on major horizontal portion for 8 hours without leakage.
- E. Water Piping:
1. Hydrostatic pressure of 125 psig without loss for four hours. In addition, piping shall be tested in accordance with applicable code requirements.

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PROJECT NO.: 24-005
NORTH BEND HS RESTROOM REMODEL
NORTH BEND SCHOOL DISTRICT
2323 PACIFIC ST. NORTH BEND, OR 97459

PERMIT SET

REVISIONS:
DATE DESCRIPTION

DATE: MAR 2024

SHEET TITLE:
PLUMBING SPECS

P4.1

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MECHANICAL LEGEND

	--- SUPPLY AIR DIFFUSER	AFF	ABOVE FINISH FLOOR
	--- RETURN AIR GRILLE	AHU	AIR HANDLING UNIT
	--- EXHAUST AIR GRILLE	B.D.	BOTTOM OF DUCT
	--- PERFORATED RETURN AIR PANEL	BHP	BRAKE HORSEPOWER
	--- DIRECTIONAL AIR FLOW	BTU	BRITISH THERMAL UNITS
	--- MANUAL VOLUME DAMPER	CFM	CUBIC FEET PER MINUTE
	--- SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	CONN.	CONNECTION
	--- RETURN AIR DUCT UP & DOWN	CONT.	CONTINUATION
	--- EXHAUST AIR DUCT UP & DOWN	CW	DOMESTIC COLD WATER
	--- SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	DB	DRY BULB TEMPERATURE
	--- RETURN AIR DUCT UP & DOWN	DIA.	DIAMETER
	--- EXHAUST AIR DUCT UP & DOWN	DIST.	DISTRIBUTION
	--- SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	EA	EXHAUST AIR
	--- RETURN AIR DUCT UP & DOWN	EDB	ENTERING DRY BULB TEMPERATURE
	--- EXHAUST AIR DUCT UP & DOWN	EWB	ENTERING WET BULB TEMPERATURE
	--- SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	EVT	ENTERING WATER TEMPERATURE
	--- RETURN AIR DUCT UP & DOWN	FF	FINISH FLOOR
	--- EXHAUST AIR DUCT UP & DOWN	FF	FINISH FLOOR
	--- VAV TERMINAL UNIT	FF	FINISH FLOOR
	--- VVT TERMINAL UNIT	FF	FINISH FLOOR
	--- EXISTING	FF	FINISH FLOOR
	--- CONNECT TO EXISTING	FF	FINISH FLOOR
	--- THERMOSTAT OR TEMP. SENSOR	FF	FINISH FLOOR
	--- NOTE	FF	FINISH FLOOR
	--- EQUIPMENT DESIGNATOR	FF	FINISH FLOOR
	--- BALL VALVE	FF	FINISH FLOOR
	--- GATE VALVE	FF	FINISH FLOOR
	--- CHECK VALVE	FF	FINISH FLOOR
	--- BALANCING VALVE	FF	FINISH FLOOR
	--- THERMOMETER	FF	FINISH FLOOR
	--- DIRECTION OF FLOW	FF	FINISH FLOOR
	--- PUMP	FF	FINISH FLOOR
	--- STRAINER	FF	FINISH FLOOR
	--- PRESSURE GAUGE	FF	FINISH FLOOR
	--- PETE'S PLUG	FF	FINISH FLOOR
	--- DOUBLE CHECK ASSEMBLY	FF	FINISH FLOOR
	--- PRESSURE REDUCING VALVE	FF	FINISH FLOOR
	--- UNION	FF	FINISH FLOOR
	--- 2-WAY CONTROL VALVE	FF	FINISH FLOOR
	--- 3-WAY CONTROL VALVE	FF	FINISH FLOOR
	--- CAP	FF	FINISH FLOOR
	--- SMOKE DETECTOR	FF	FINISH FLOOR
	--- MOTORIZED DAMPER	FF	FINISH FLOOR

PIPING ABBREVIATIONS

(E)	EXISTING
(D)	DEMOLISH
COND	CONDENSATE
G	GAS
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
R	REFRIGERANT
RAD	RADON

GENERAL NOTES

- THE DRAWINGS ARE DIAGRAMMATIC. PROVIDE ALL MATERIAL (NEW AND UNDATED) AND LABOR FOR A COMPLETE AND OPERABLE SYSTEM. VERIFY ALL BUILDING MEASUREMENTS DIMENSIONS AND EQUIPMENT LOCATIONS BEFORE PROCEEDING WITH ANY OF THE WORK.
- ALL INSTALLATIONS SHALL COMPLY WITH APPLICABLE FEDERAL AND STATE CODES INCLUDING, 2019 OREGON STRUCTURAL SPECIALTY CODE (OSSC), 2019 OREGON MECHANICAL SPECIALTY CODE (OMSC), 2019 OREGON ZERO ENERGY READY COMMERCIAL CODE (OZERCC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), WHERE TWO CODES DIFFER THE MORE STRICT OF THE TWO SHALL BE FOLLOWED.
- OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES HAVING JURISDICTION. SUBMIT ALL CERTIFICATES PRIOR TO ACCEPTANCE.
- COORDINATE WITH OTHER CRAFTS AS REQUIRED TO COMPLETE WORK IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.
- PROVIDE OWNER INSTRUCTION BY QUALIFIED PERSONNEL ON EQUIPMENT AND SYSTEMS AT OWNER'S REQUEST.
- CONTRACTOR TO PROVIDE TESTING, ADJUSTING AND BALANCING REPORT FOR THE AREAS AFFECTED BY THE REMODEL FOR ENGINEER'S REVIEW. SEE SPECS FOR ADDITIONAL TAB REQ'T.
- CONTRACTOR TO PROVIDE HVAC AS-BUILT DRAWINGS AND OPERATION AND MAINTENANCE MANUALS WITHIN 90 DAYS OF SYSTEM ACCEPTANCE.
- CONTRACTOR TO TEXT HVAC CONTROL SYSTEM TO ENSURE PROPER OPERATION, CALIBRATION AND ADJUSTMENT OF CONTROLS.

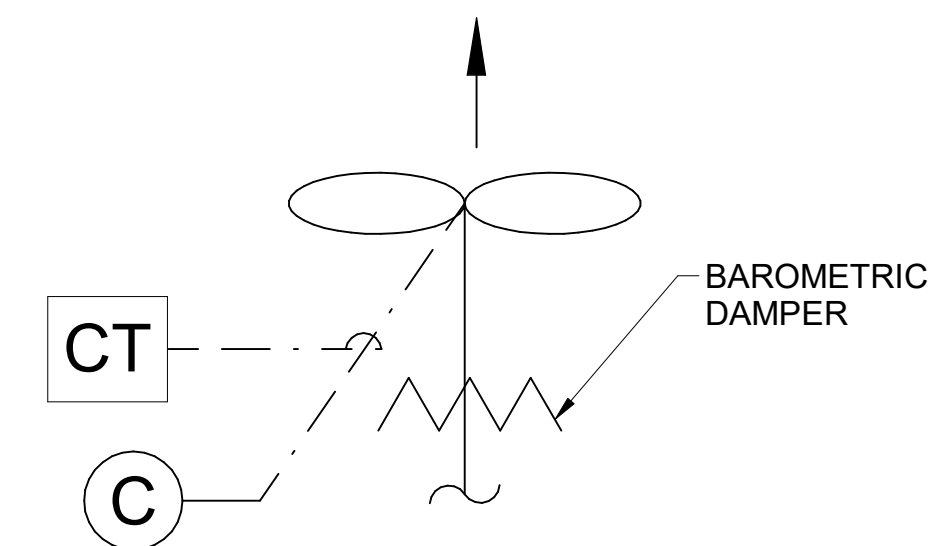
CONTROLS FOR GENERAL EXHAUST FAN, EACH

POINT DESCRIPTION	INPUT		OUTPUT		ALARM
	DIGITAL	ANALOG	DIGITAL	ANALOG	
EXHAUST FAN START/STOP			X		
EXHAUST FAN STATUS				X	
POINTS ARE EXISTING FOR THE REMOVED FAN. SEQUENCE OF OPERATION TO REMAIN.					

EXHAUST FAN SCHEDULE

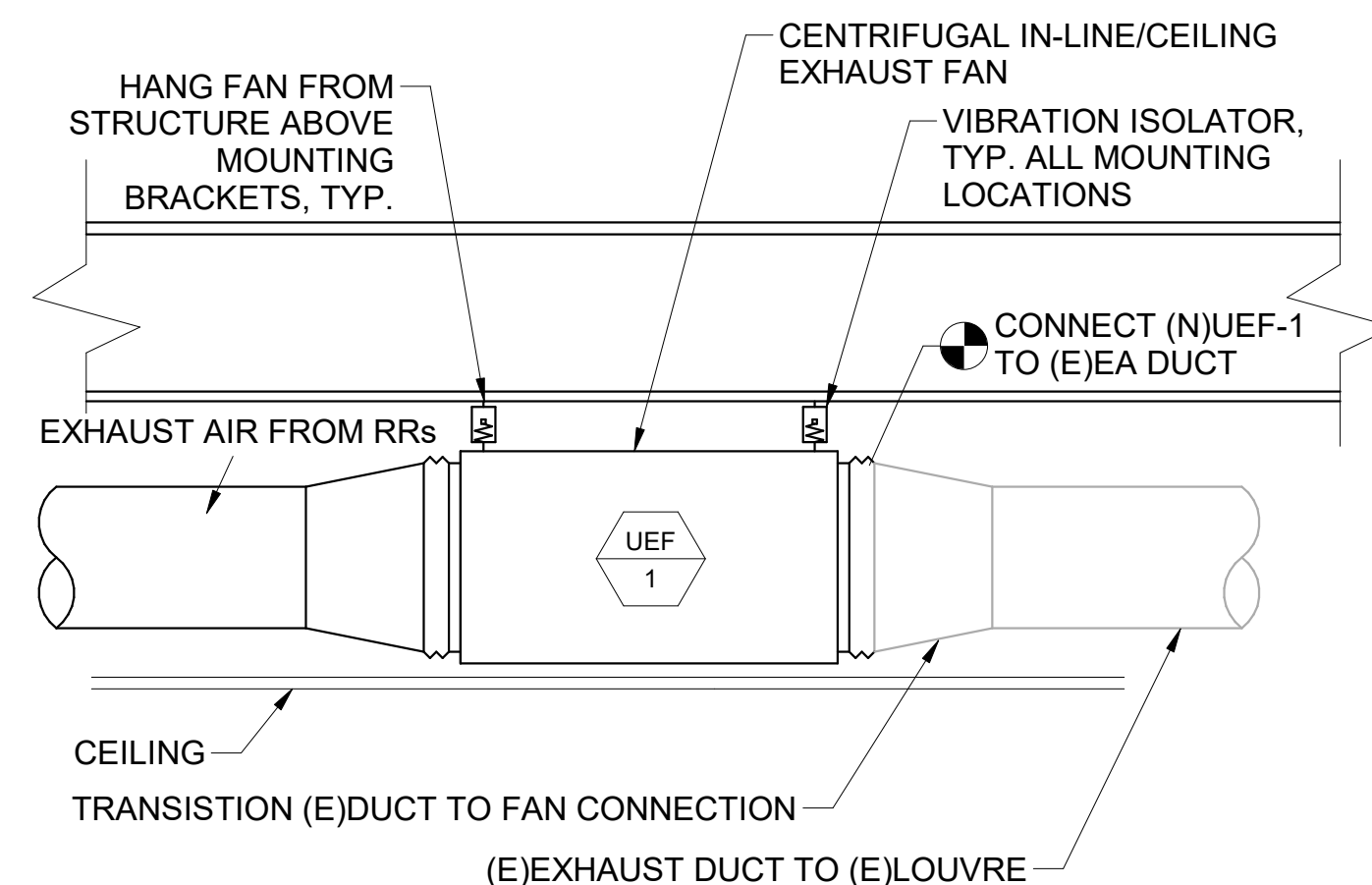
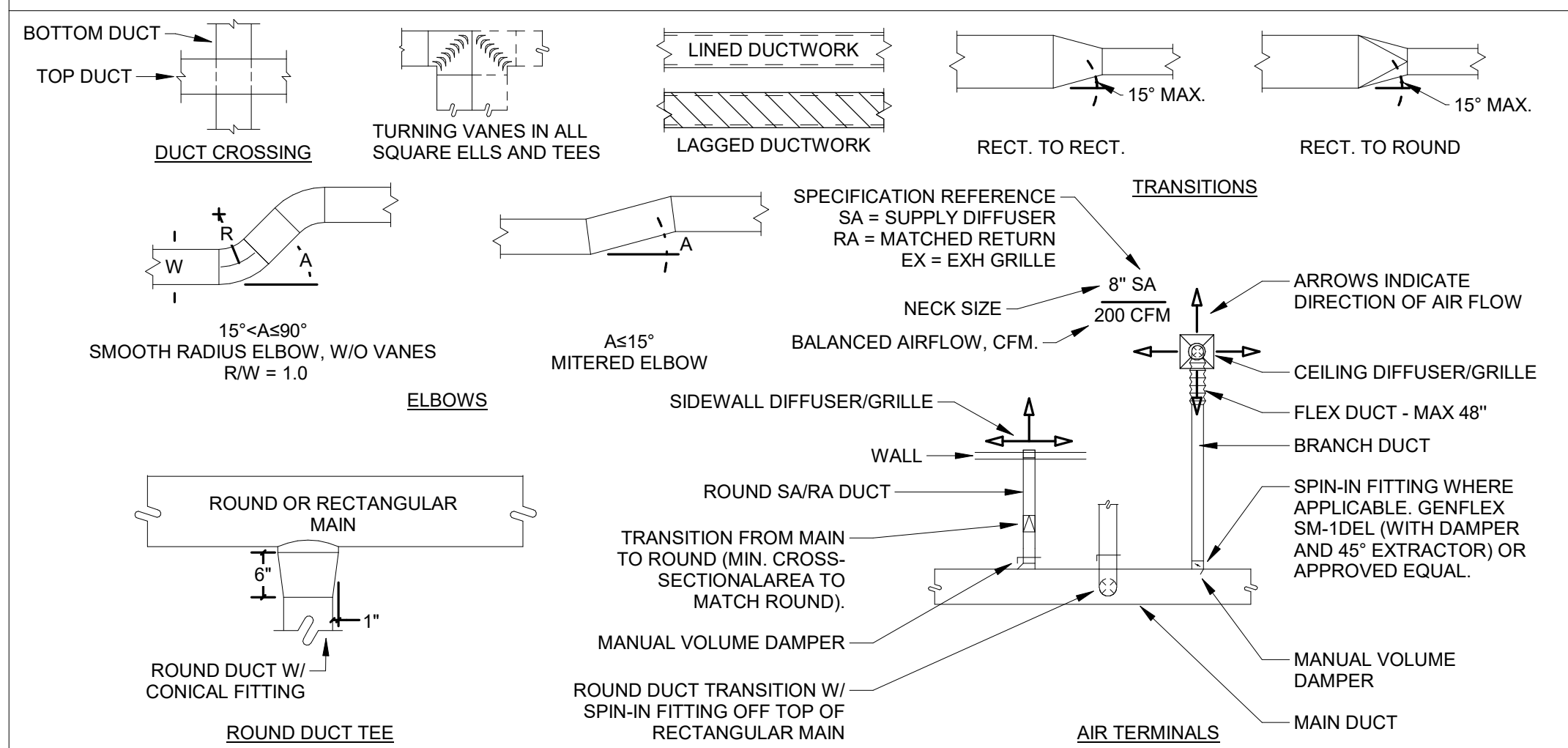
TAG	AREA SERVED	MODEL	DRIVE TYPE	CFM	TOTAL EXTERNAL SP	FAN RPM	BHP	HP	V/C/P	SONES (INLET)	NOTES
UEF-1	RESTROOMS	CSP-A390-VG	Direct	300	0.500	1,356	0.10	1/15	115/60/1	2.5	1, 2

- NOTES**
- BACKDRAFT DAMPER, GRAVITY OPERATED
 - CONNECT TO (E)DDC.



3 DETAIL - GENERAL EXHAUST FAN CONTROL DIAGRAM
1/4" = 1'-0"

AIR DISTRIBUTION DETAILS



1 DETAIL - EXHAUST FAN

MECHANICAL DRAWING INDEX

SHEET NUMBER	SHEET NAME
M1.0	MECHANICAL COVER SHEET
M2.1	MECHANICAL FLOOR PLANS
M3.1	MECHANICAL SPECS

PERMIT SET

REVISIONS:	#	DATE	DESCRIPTION

DATE: MAR 2024

SHEET TITLE:
MECHANICAL COVER SHEET

M1.0

PERMIT SET

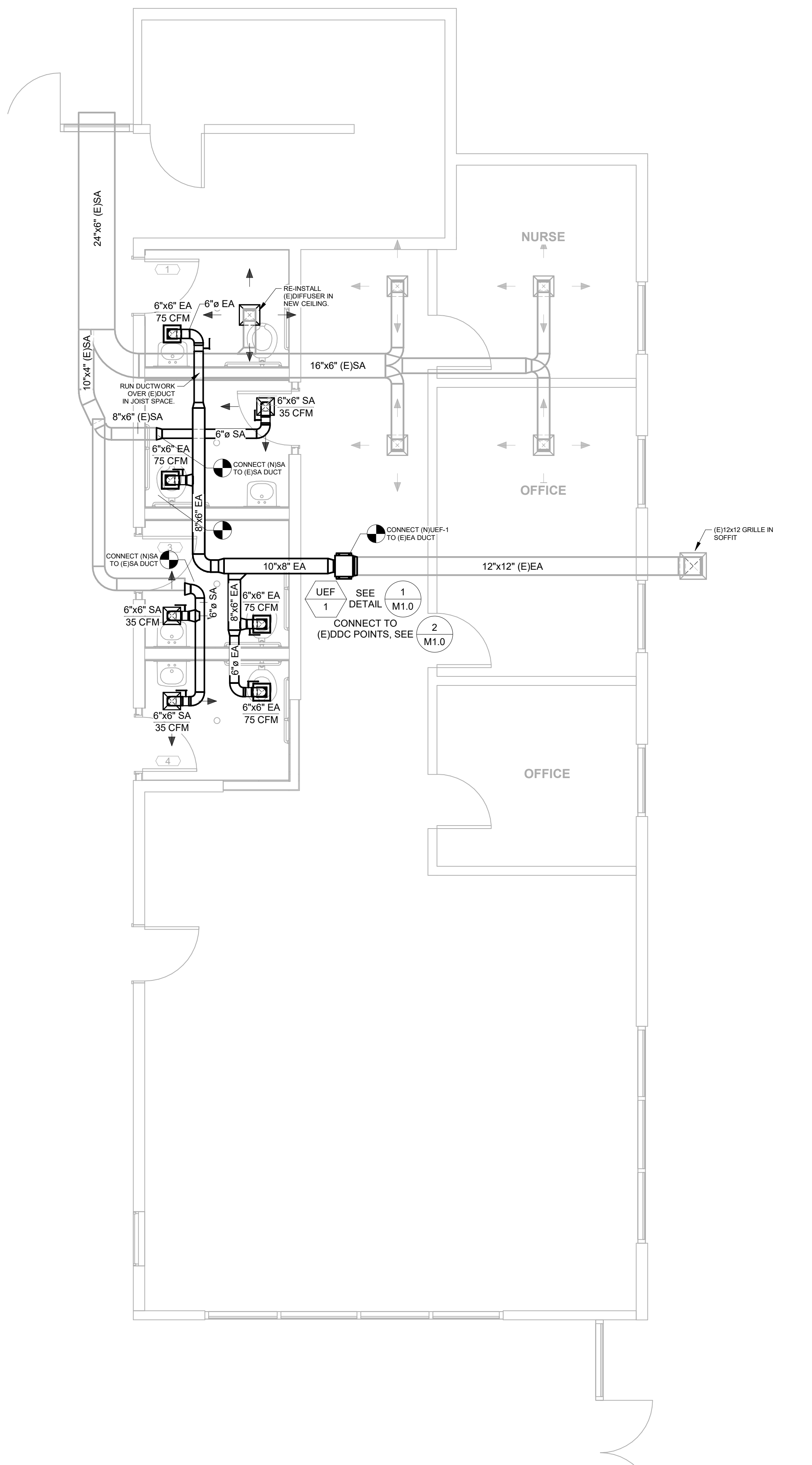
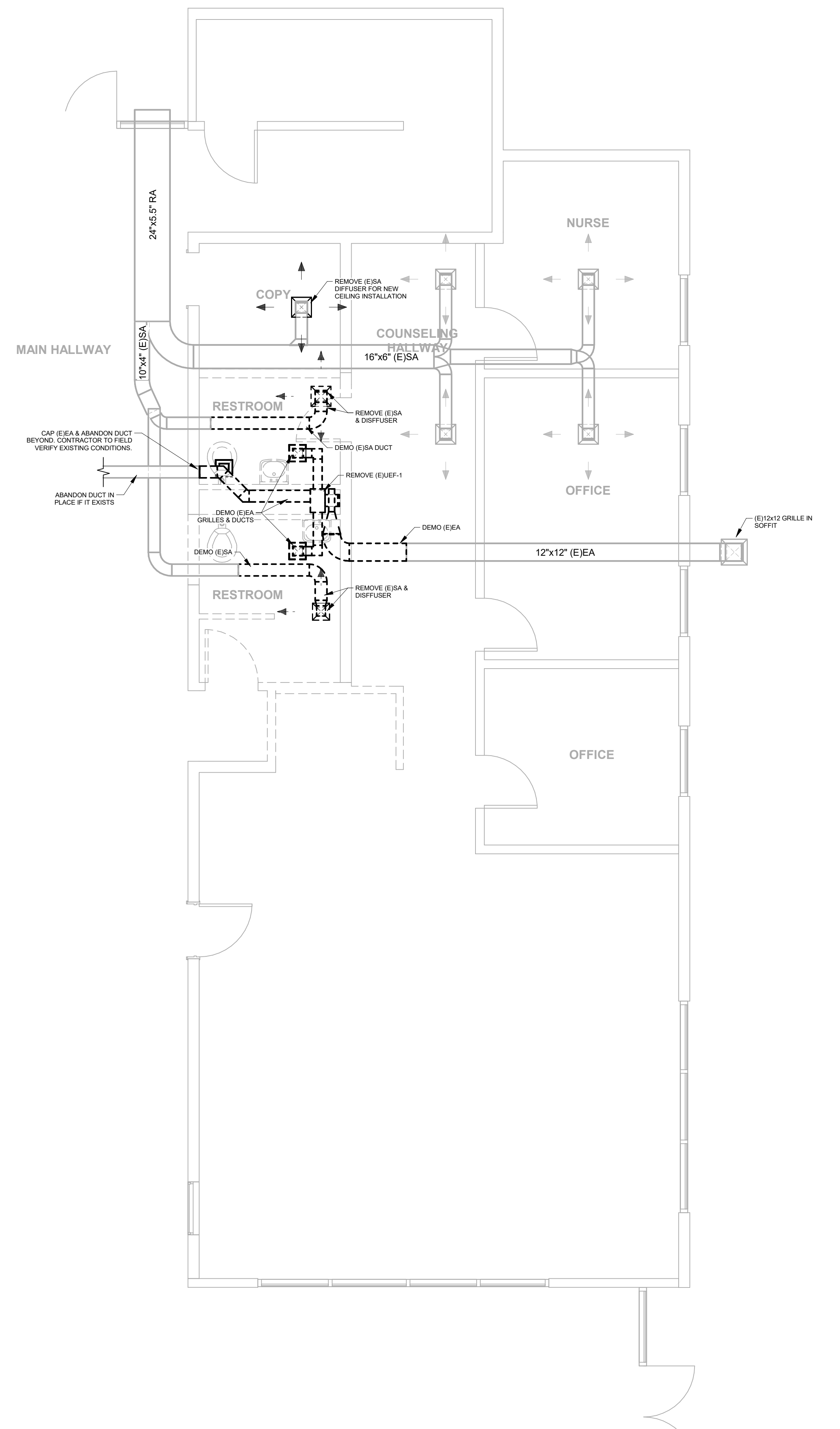
REVISIONS:

#	DATE	DESCRIPTION

DATE: MAR 2024

SHEET TITLE:
MECHANICAL FLOOR PLANS

M2.1





PROJECT NO.: 24-005
NORTH BEND HS RESTROOM REMODEL
NORTH BEND SCHOOL DISTRICT
2323 PACIFIC ST. NORTH BEND, OR 97459

PERMIT SET

REVISIONS:
DATE DESCRIPTION

DATE: MAR 2024

SHEET TITLE:
**MECHANICAL
SPECS**

M3.1

HVAC SPECIFICATIONS

PART 1 - GENERAL

1.1 QUALITY ASSURANCE

A. Codes and Standards: Comply with the provisions of the following codes, standards and specifications, except where more stringent requirements are shown or specified.

1. State of Oregon Structural Specialty Code.
2. State of Oregon Mechanical Specialty Code.
3. State of Oregon Plumbing Specialty Code.
4. State of Oregon Energy Efficiency Code.

PART 2 - PRODUCTS

2.2 MISCELLANEOUS PIPING MATERIALS/PRODUCTS

A. Supports and Anchors: Provide pipe and equipment hanger, support, anchors and related items for complete anchor, hanger and support systems. Install hangers, supports, clamps, and attachments to support piping and equipment properly from the building structure. Use no wire or perforated metal to support piping, and no supports from other piping or equipment. For exposed continuous pipe runs, install hangers and supports of the same type and style as installed for adjacent similar piping.

2.5 EQUIPMENT

A. Fans

1. Fan shall be equal to the make and model(s) indicated and shall be located as shown on drawings. Fans shall be Greenheck, Loren Cook, or Greenheck..

B. Fans

1. Fan shall be equal to the make and model indicated on the equipment schedule and shall be located as shown on drawings. Fans shall be Greenheck, Loren Cook, or Twin City.

2.6 SHEET METAL

A. Quality Assurance: Comply with requirements of the Oregon State Mechanical Specialty Code. Galvanized steel sheet metal except where otherwise indicated. Metal gauges, joints and reinforcement in accordance with SMACNA tables and recommendations.

C. Duct Sealing Tapes: Provide UL listed ductwork sealing mastic or tape systems.

D. Manual Volume Dampers:

1. Construct of material two gauges heavier than duct in which installed; single plate up to 12" wide; multiple over 12" wide. Hem both edges 1/2" and flange sides 1/2". Use Young, Duro-Dyne or approved damper accessories.
2. Location of all volume dampers is not necessarily shown on Drawings; minimum required is one in each supply, return or exhaust main and one in each branch.

2.7 GRILLES, REGISTERS AND DIFFUSERS

A. Description: Provide grilles, registers and diffusers as shown on the Drawings.

B. Finishes:

1. Match Existing.

C. Supply: Perforated Face Modular Core Diffusers: Price PDMC, or equivalent Titus, Kruger. P

D. Return and/or Exhaust Register: Price PDDR, or equivalent Titus, Kruger.

2.8 DUCTWORK INSULATION

A. Interior Above Grade Ductwork: Glass fiber formaldehyde-free blanket with "FSK" facing containing less than 0.1% by weight deca-PDE fire retardant, k value = 0.31 at 75 deg. F, 0.2 perms, and UL 25/50 surface burning rating. Johns Manville "MicroLite."

HVAC SPECIFICATIONS (CON'T)

PART 3 - EXECUTION

3.1 INSTALLATION

A. Locating and Positioning Equipment: Observe all Codes and Regulations and good common practice in locating and installing mechanical equipment and material so that completed installation presents the least possible hazard. Maintain adequate clearances for repair and service to all equipment. Installation of any equipment with less than minimum clearances shall not be accepted.

B. Anchorage: Anchor and/or brace all mechanical equipment, piping and ductwork to resist displacement due to seismic action, include snubbers on equipment mounted on spring isolators.

3.6 PROTECTION

A. Protect all work and materials against loss or damage. Close all pipe openings with caps or plugs. At final completion, thoroughly clean and deliver all work and equipment in an unblemished new condition. Keep all motors and bearings in watertight and dust proof covers during entire course of installation.

3.7 CUTTING AND PATCHING

A. Do all necessary cutting and patching of existing building and yard surfaces required for completion of the mechanical work. Patch to match finish and color of adjacent surfaces. Coordinate work in remodel and new areas to avoid cutting of new finished surfaces.

3.11 AIR HANDLING EQUIPMENT INSTALLATION

A. General: Install ductwork as shown on Drawings. Comply with the manufacturer's recommendations for installation connection and start-up.

B. Equipment Access Panels: Locate free of all obstructions such as ceiling bars, electrical conduit, lights, ductwork, etc.

3.12 INSTALLATION OF GRILLES, REGISTERS AND DIFFUSERS

A. Size and air handling characteristics shall be as shown on the Drawings.

B. Locate, arrange, and install grilles, registers and diffusers as shown on the Drawings. Locate registers in tee-bar ceilings with diffusers centered on the tile unless indicated otherwise.

3.13 DUCTWORK INSTALLATION

A. Support: Install ductwork with 1" wide cradle hangers not more than 8' c/c; attach to available building construction as per good practices for materials involved.

B. Fan and Air Handling Unit Flexible Connections: Install neoprene impregnated fiberglass connections in ductwork at all rotating equipment. Ventglass, Duro-Dyne or approved.

C. Elbows and Fittings: Construct elbows with throat radius equal to duct width in plane of turn or make them square and provide double wall, air foil turning vanes.

D. Fittings: Make transitions and take-offs as shown on Drawings. Provide volume dampers and splitter dampers as indicated on Drawings and as specified.

F. Manual Volume Dampers: Location of all volume dampers are not necessarily shown on the Drawings. Provide a minimum of one volume damper in each supply, return or exhaust branch. Install dampers in fiberglass ductwork (where fiberglass ductwork is allowed) with galvanized sheet metal sleeves of sheet metal gauges required for metal duct systems of the same dimensions.

3.14 DUCTWORK INSULATION

A. Ductwork: Insulate the following:

1. All supply ductwork.
2. All supply and return ductwork in systems routed in unconditioned spaces or exposed to the outside conditions.
3. All outside air intake ducts.
4. All ductwork required to be insulated by code.

B. Insulation Thickness: Select board and blanket insulation of thickness required to provide the following installed R-value.

1. All heating or cooling system supply and return ducts located on the exterior of the insulated building envelope, including ventilated attics, and all outside air intake ducts, R-8.
2. All heating and cooling system supply and return ducts located in unconditioned spaces within the building insulation envelope, R-5.
3. All heating and cooling system supply ducts located in conditioned spaces and where exposed in unfinished spaces or concealed from view in finished spaces, R-3.3. Exposed ductwork in finished spaces shall not be externally insulated.

C. Fittings: Wire and duct adhesive as required. To prevent sagging on all rectangular or square ducts over 24" wide, install Gramweld or equal welding pins on the bottom. Maximum spacing 18" on center in both directions.

D. Installation: Applied with butt joints, all seams sealed with vapor seal mastic or taped with 2" wide vapor-proof pressure sensitive tape. Seal all penetrations with vapor barrier adhesive.

3.15 TEST

A. General:

1. Minimum duration of two hours or longer, as directed for all tests. Furnish report of test observation signed by qualified inspector. Make all tests before applying insulation, backfilling, or otherwise concealing piping or connecting fixtures or equipment. Where part of the system must be tested to avoid concealment before the entire system is complete, test that portion separately, same as for entire system.
3. Observe each test section for leakage at end of test period. Test fails if leakage is observed or if pressure drop exceeds 5% of test pressure.

3.17 BALANCING

A. Balancing of the Heating, Ventilating and Air Conditioning systems shall be done by a firm established in the State of Oregon providing this service and shall have the Architect's approval.

B. Provide the following minimum data:

1. HVAC unit nameplate data, CFM, entering and leaving air on both heating and cooling, electrical power consumption data, etc.
2. Grille, register and diffuser CFM.

3.17 CONTROLS

A. Contractor shall be responsible for installation of all LV and Line Voltage Wiring and Conduit Required to Operate the HVAC equipment. Wiring shall be installed in accordance with latest edition of NEC.

ELECTRICAL SYMBOL SCHEDULE

SYMBOLS	DESCRIPTION	NOTES
	METER, TYPE AS NOTED	
	GROUND	
	NEUTRAL BUS	
	MOTOR	
	EQUIPMENT NUMBER (SEE EQUIPMENT SCHEDULE)	
	NON-FUSED DISCONNECT SWITCH	
	FUSED DISCONNECT SWITCH (FUSES SIZED PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS UNO)	
	BRANCH CIRCUIT PANELBOARD	
	BRANCH CIRCUIT INSTALLED CONCEALED FROM FINISH SPACES. PROVIDE GROUND CONDUCTOR AS INDICATED IN PANEL SCHEDULE. GROUND CONDUCTOR NOT INCLUDED IN HASH MARK INDICATION.	
	BRANCH CIRCUIT OPEN RUN TO PANEL. HASH MARK INDICATES NUMBER OF CONDUCTORS. PROVIDE GROUND CONDUCTOR AS INDICATED IN PANEL SCHEDULE. GROUND CONDUCTOR NOT INCLUDED IN HASH MARK INDICATION.	
	JUNCTION BOX, 4" SQUARE UNLESS OTHERWISE NOTED	

SYMBOLS	RECEPTACLES	NOTES
	WHEN ADDED TO A SYMBOL, INDICATES OUTLET MOUNTED WITH BOTTOM OF OUTLET AT 2" ABOVE COUNTER TOP OR BACK SPLASH UNO.	
	DUPLEX CONVENIENCE OUTLET	+ 18"
	GFI DUPLEX CONVENIENCE OUTLET	+ 18"
	DOUBLE DUPLEX CONVENIENCE OUTLET	+ 18"

SYMBOLS	RECEPTACLES	NOTES
	DATA: 2 CABLE DROPS	+ 18"

SYMBOLS	RECEPTACLES	NOTES
	WHEN ADDED TO LIGHT FIXTURE SYMBOL, INDICATES WALL OR BRACKET MOUNTED LIGHT FIXTURE SURFACE OR PENDANT MOUNTED LIGHT FIXTURE OUTLET. (NUMBER INDICATES CIRCUIT, CAPITAL LETTER INDICATES FIXTURE TYPE, LOWER CASE LETTER INDICATES SWITCHING CONTROL, TYPICAL FOR ALL LIGHT FIXTURES)	
	RECESSED CEILING LIGHT FIXTURE	
	FLUORESCENT LIGHT FIXTURE	
	FLUORESCENT STRIP LIGHT FIXTURE	
	SINGLE FACE EXIT SIGN WITH NUMBER OF DIRECTIONAL ARROWS AS SHOWN, CEILING MOUNTED. SOLID QUADRANT INDICATES FACE.	
	SINGLE POLE LIGHT SWITCH	+ 46"
	THREE WAY LIGHT SWITCH	+ 46"
	MOTOR RATED SWITCH	+ 46"
	OCCUPANCY SENSOR - C-CEILING W-HALL MOUNTED	
	PHOTOELECTRIC SWITCH	

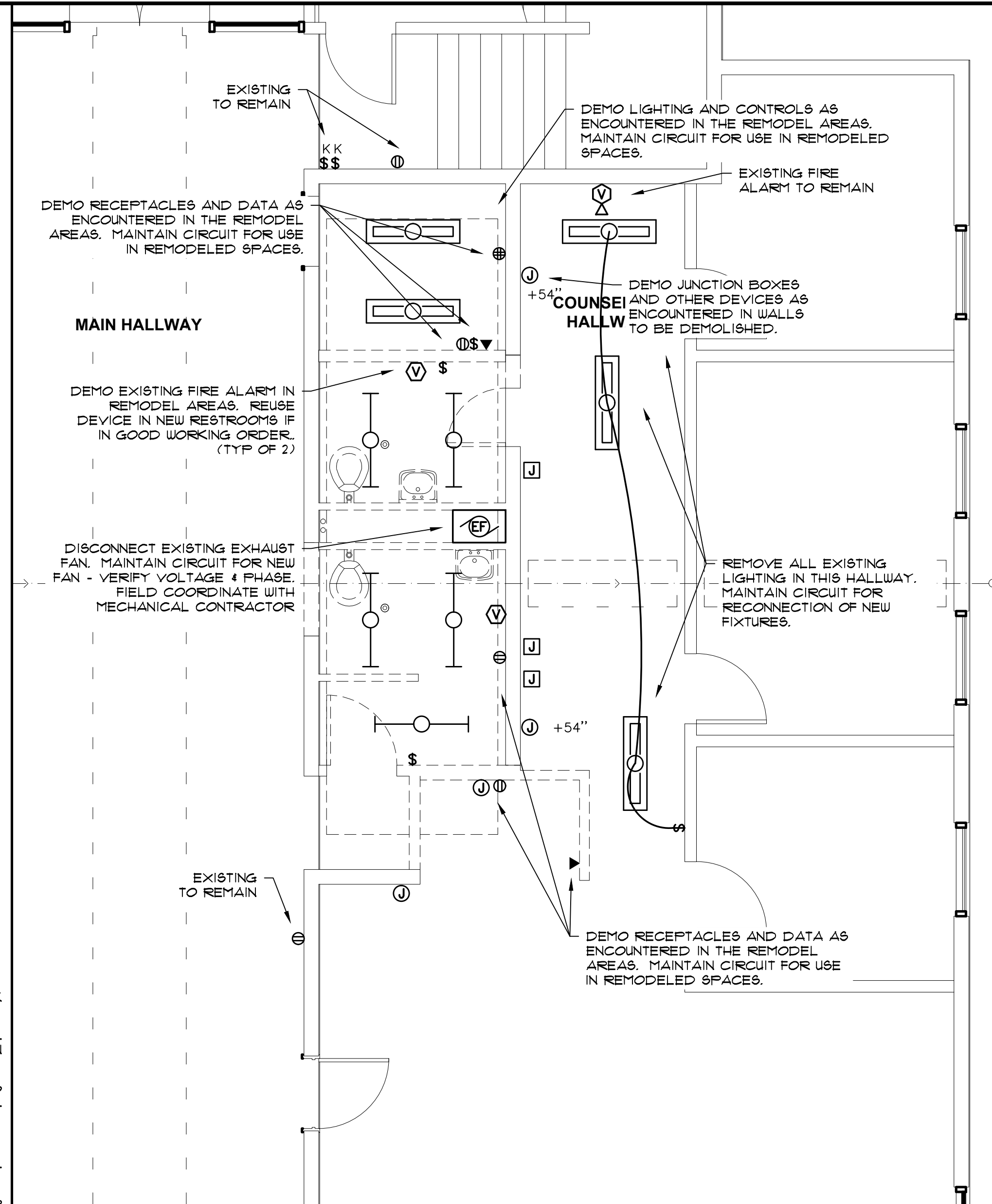
SYMBOLS	FIRE ALARM	NOTES
	MANUAL PULL STATION	+ 44"
	COMBINATION VISUAL / AUDIBLE ALARM	+ 80" AFTB
	VISUAL STROBE ALARM	+ 80" AFTB
	PHOTOELECTRIC SMOKE DETECTOR (CEILING MOUNTED UNO)	
	IONIZATION SMOKE DETECTOR (CEILING MOUNTED UNO)	
	MAGNETIC DOOR HOLDER	
	HEAT DETECTOR (CEILING MOUNTED, 18" UNO)	

ELECTRICAL SPECIFICATION

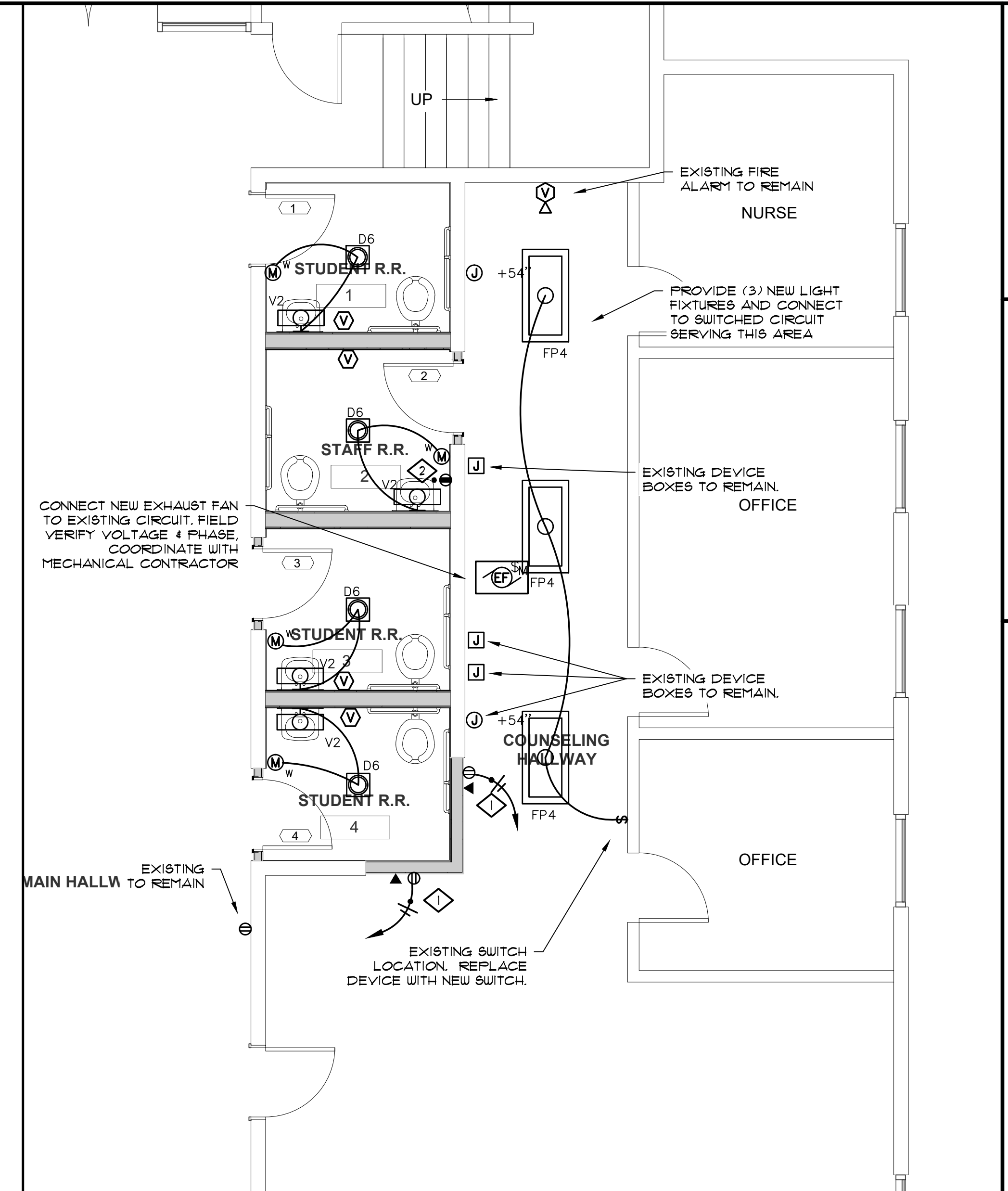
GENERAL PROVISIONS

- FURNISH LABOR, SUPERVISION, PERMITS, MATERIALS AND EQUIPMENT TO COMPLETE THE WORK REQUIRED IN PLANS AND BY THE CONTRACT DOCUMENTS.
- ALL WORK SHALL CONFORM TO NATIONAL ELECTRIC CODE STANDARDS, OREGON ELECTRICAL SPECIALTY CODE AND ALL CODES, RULES, AND REGULATIONS CURRENT OR LATEST EDITION ADOPTED BY AUTHORITIES HAVING JURISDICTION AT TIME OF PERMIT.
- PROVIDE ALL REQUIRED CONDUITS, JUNCTION BOXES, SWITCHES, WIRE, RECEPTACLES, OUTLETS (DATA, TELEPHONE, TELEVISION), PANEL BOARDS, ETC., TO PROVIDE FULLY OPERATIONAL POWER, HEATING/COOLING, LIGHTING, DATA, AND COMMUNICATION SYSTEMS.
- ELECTRICAL SUBMITTALS:
 - SUBMIT MANUFACTURER'S DATA AND SHOP DRAWINGS AS REQUIRED UNDER GENERAL CONDITIONS.
 - SUBMITTALS SHALL BE INCORPORATED INTO A SINGLE SUBMISSION. MULTIPLE SUBMISSIONS ARE NOT ACCEPTABLE.
 - SPECIFIC MODEL NUMBERS SHALL BE INDICATED RATHER THAN GENERAL MANUFACTURER LINES.
- OPERATION AND MAINTENANCE (O&M) MANUALS: PROVIDE ALL ELECTRICAL EQUIPMENT AND CONTROL INFORMATION. THE PURPOSE OF THIS MANUAL IS TO PROVIDE ONE COMPREHENSIVE DOCUMENT THAT ILLUSTRATES AND DESCRIBES ALL THE ELECTRICAL EQUIPMENT AND CONTROL SYSTEMS
 - PROVIDE GENERAL AND SUB-CONTRACTOR'S NAME, CONTACT PERSON, AND TELEPHONE/FAX NUMBERS.
 - O&M MANUAL SHALL INCLUDE WARRANTY INFORMATION AND ANY EQUIPMENT DOCUMENTATION.
- PROJECT RECORD DOCUMENTS (AS-BUILTS):
 - MAINTAIN AT THE SITE ONE COMPLETE SET OF FULL-SIZED ORIGINAL PRINTS FOR RECORDING INSTALLED CONDITIONS (AS-BUILTS). KEEP RECORD DRAWINGS CLEAN, UNDATED AND UP TO DATE AS WORK PROGRESSES. ACCURATELY INDICATE ELECTRICAL WORK AS ACTUALLY INSTALLED WITH INDICATIONS OF ALL DEVIATIONS, ADDITIONS AND OMISSIONS IN RED INK. LOCATE ALL BURIED EXTERIOR RACEWAYS OR CABLES BY ACTUAL DIMENSIONS FROM WALLS, CENTER-LINES OR FIXED POINTS OF REFERENCE.
 - THE PURPOSE OF THESE RECORD DRAWINGS IS TO PROVIDE THE ENGINEER WITH AN EASY TO READ, COMPLETE RECORD OF THE INSTALLATION SO THAT AT THE END OF THE PROJECT THE ENGINEER CAN REVISE THE ORIGINAL CONTRACT DRAWINGS TO REPRESENT THE ACTUAL INSTALLATION. COLOR-CODED AND HIGHLIGHTED NOTES SHALL BE USED IF THESE WOULD MAKE THE RECORD DRAWINGS EASIER TO READ.
 - AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL FURNISH THE ENGINEER THIS ORIGINAL SET OF MARKED-UP DRAWINGS. FINAL PAYMENT TO THE CONTRACTOR WILL NOT BE AUTHORIZED UNTIL THESE DRAWINGS HAVE BEEN SUBMITTED TO AND ACCEPTED BY THE ENGINEER.
- BASIC MATERIALS
 - ALL WIRE TO BE MC CABLE OR CONDUIT AS ALLOWED BY CODE.
 - PROVIDE JUNCTION BOX AND WIRING FOR ALL LIGHT FIXTURES SHOWN ON PLANS. SEE FIXTURE SCHEDULE ON PLANS.
 - SWITCHES, RECEPTACLES, CABLE AND PHONE RECEPTACLES AND OTHER DEVICES AND CONTROLS SHALL BE COMMERCIAL GRADE. COLOR: IVORY OR AS OTHERWISE SELECTED BY ARCHITECT.
 - PROVIDE GROUND-FAULT CIRCUIT INTERRUPTER (GFCI OR GFI) AT EXTERIOR LOCATIONS, SINK COUNTERS, AND WHERE NOTED ON DRAWINGS AND REQUIRED BY CODE. PROTECT BY INDIVIDUAL DEVICE OR GFCI BREAKER AS PRACTICAL FOR APPLICATION.
 - FIRE ALARM: TEST EXISTING FIRE ALARM STROBES IN RESTROOMS TO VERIFY THAT THEY FUNCTION PROPERLY AND ARE SUITABLE FOR REUSE. RELOCATE (2) EXISTING DEVICES THAT ARE SUITABLE FOR REUSE AS INDICATED. PROVIDE (2) NEW DEVICES - MATCH EXISTING STROBES. CONNECT RELOCATED AND NEW STROBES TO EXISTING FIRE ALARM PANEL PER MANUFACTURER'S REQUIREMENTS.

END OF SECTION



1 DEMOLITION PLAN
E1 SCALE: 1/4" = 1'-0"



2 POWER & LIGHTING PLAN
E1 SCALE: 1/4" = 1'-0"

DEMOLITION NOTES

- EXISTING ELECTRICAL PLANS ARE AVAILABLE, HOWEVER, THERE HAVE BEEN REMODEL(S) IN THIS AREA. CONTRACTOR SHOULD FAMILIARIZE THEMSELVES WITH THE FACILITY AND THE EXISTING CONDITIONS PRIOR TO COMMENCING DEMOLITION.
- WORK SHOWN ON PLAN IS BASED ON AVAILABLE INFORMATION AT THE TIME OF DESIGN. CONTRACTOR IS TO FIELD VERIFY AND COORDINATE PROJECT REQUIREMENTS WITH EXISTING CONDITIONS.
- REUSE OF EXISTING CONDUIT AND CONDUCTORS IS PERMITTED SO LONG THAT ALL EXISTING COMPONENTS PLANNED FOR REUSE ARE IN GOOD OPERATING CONDITION. UNSUITABLE ITEMS SHALL NOT BE REUSED.
- WIRING WHICH SERVES USABLE EXISTING OUTLETS SHALL BE REROUTED AND RESTORED CLEAR OF CONSTRUCTION. MAINTAIN ELECTRICAL CONTINUITY OF EXISTING SYSTEM. REPAIR AND RECONDITION ASSOCIATED SURFACES TO MATCH ADJACENT SURFACES. VERIFY EXACT LOCATIONS IN THE FIELD.
- UNLESS NOTED OTHERWISE, ALL EQUIPMENT AND DEVICES SHOWN ON THE DEMOLITION PLAN ARE TO BE DISCONNECTED AND REMOVED. WITH THE EXCEPTION OF WIRING TO BE REUSED DURING NEW INSTALLATION, REMOVE ALL UNUSED WIRING AND CONDUIT BACK TO PANEL OR ORIGIN. WIRING WHICH SERVES USABLE EXISTING LIGHTING AND POWER OUTLETS SHALL BE REROUTED AND RESTORED CLEAR OF CONSTRUCTION. MAINTAIN ELECTRICAL CONTINUITY OF EXISTING SYSTEM.
- DISCONNECT AND REMOVE ELECTRICAL CONNECTION AND ASSOCIATED WIRING TO EXISTING MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO DEMOLITION. VERIFY EXACT LOCATION IN THE FIELD.

SHEET NOTES

- FIRE ALARM: TEST EXISTING FIRE ALARM STROBES IN RESTROOMS TO VERIFY THAT THEY FUNCTION PROPERLY AND ARE SUITABLE FOR REUSE. RELOCATE (2) EXISTING DEVICES THAT ARE SUITABLE FOR REUSE AS INDICATED. PROVIDE (2) NEW DEVICES - MATCH EXISTING STROBES. CONNECT RELOCATED AND NEW STROBES TO EXISTING FIRE ALARM PANEL PER MANUFACTURER'S REQUIREMENTS.
- RESTROOM LIGHTING: CONNECT NEW LIGHT FIXTURES TO EXISTING LIGHTING CIRCUIT SERVING THIS AREA. NEW LOAD IS LESS THAN PREVIOUS LOAD. PROVIDE WALLBOX MOTION CONTROL FOR RESTROOMS.
- HALLWAY LIGHTING: REMOVE EXISTING HALLWAY LIGHT FIXTURES. RELOCATE JUNCTION BOXES TO ACCOMMODATE NEW LIGHTING LAYOUT. CONNECT NEW FIXTURES TO EXISTING LIGHTING CIRCUIT SERVING THIS AREA. REPLACE EXISTING SWITCH AND COVER PLATE.
- DATA: ROUTE NEW DATA CABLES TO OWNER'S DATA RACK OR PATCH PANEL. FIELD COORDINATE INSTALLATION WITH OWNER'S IT DEPARTMENT.

KEYED NOTES

- CONNECT RECEPTACLE TO DEDICATED CIRCUIT MADE AVAILABLE DURING DEMOLITION. FIELD COORDINATE REQUIREMENTS. UPDATE PANEL SCHEDULE.
- STAFF TOILET RECEPTACLE: CONNECT TO EXISTING RECEPTACLE CIRCUIT MADE AVAILABLE DURING DEMOLITION. FIELD COORDINATE REQUIREMENTS.

LIGHT FIXTURE SCHEDULE

	2-FOOT VANITY. TERON VICEROY VCY-24-SLT-L12.0-LT-UNIV-FWH-35K OR APPROVED EQUAL (12 WATTS)
	6-INCH LED RECESSED DOWNLIGHT. LITHONIA LDN6 ALO2 SSW1(35K) LOGAR LD MVOLT OR APPROVED EQUAL. (12 WATTS)
	2x4 LED FLAT PANEL. LITHONIA CPANL 2X4 ALO6 SSW7 M2 OR APPROVED EQUAL. (SET TO 35K, 4000 LUMENS, 36 WATTS)

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EXPIRES 12-31-24

PROJECT NO.: 24.005
NORTH BEND HS RESTROOM REMODEL
NORTH BEND SCHOOL DISTRICT
2323 PACIFIC ST., NORTH BEND, OR 97459

CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

DATE: MARCH 2024

SHEET TITLE:

ELECTRICAL PLAN

E1

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