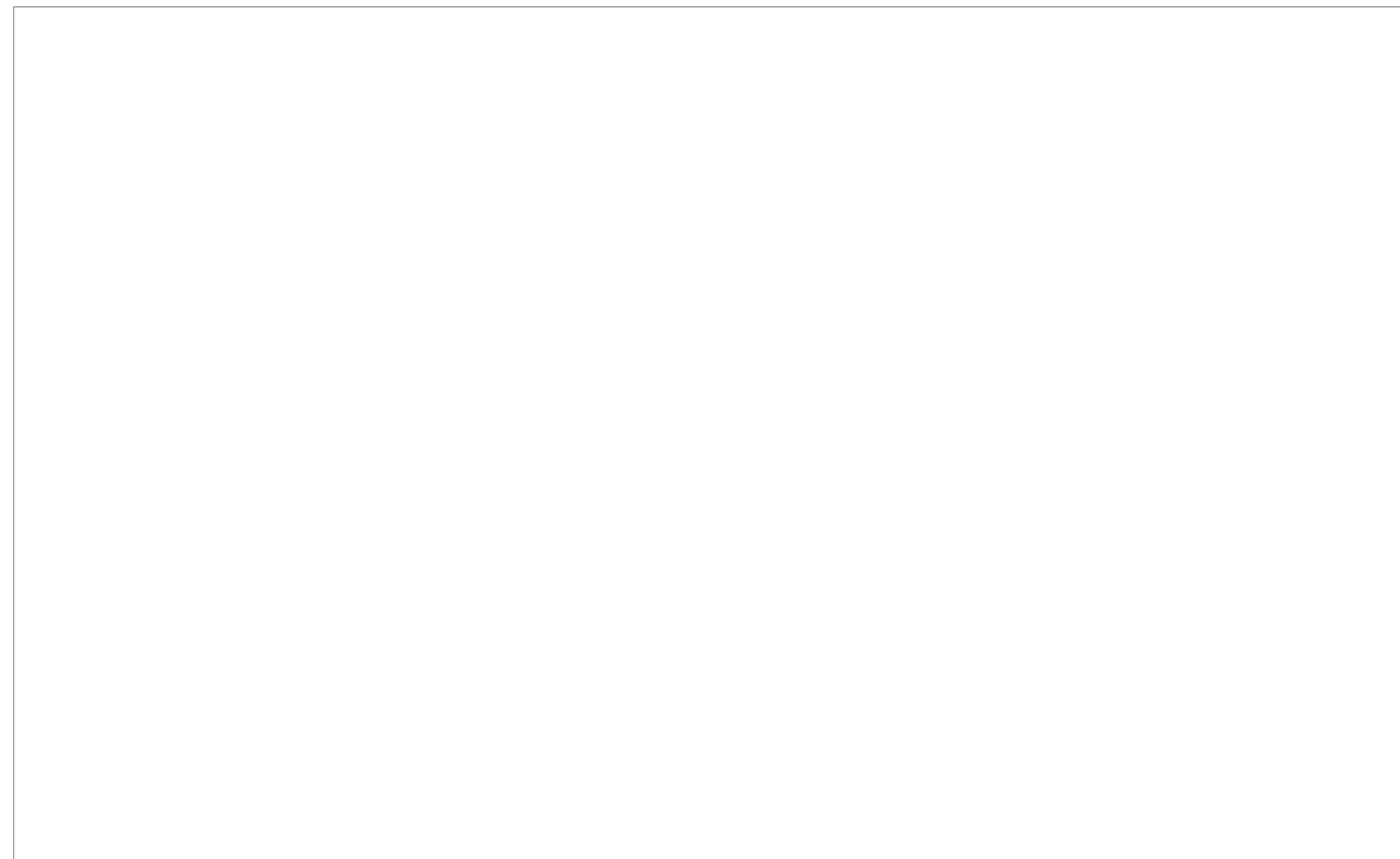
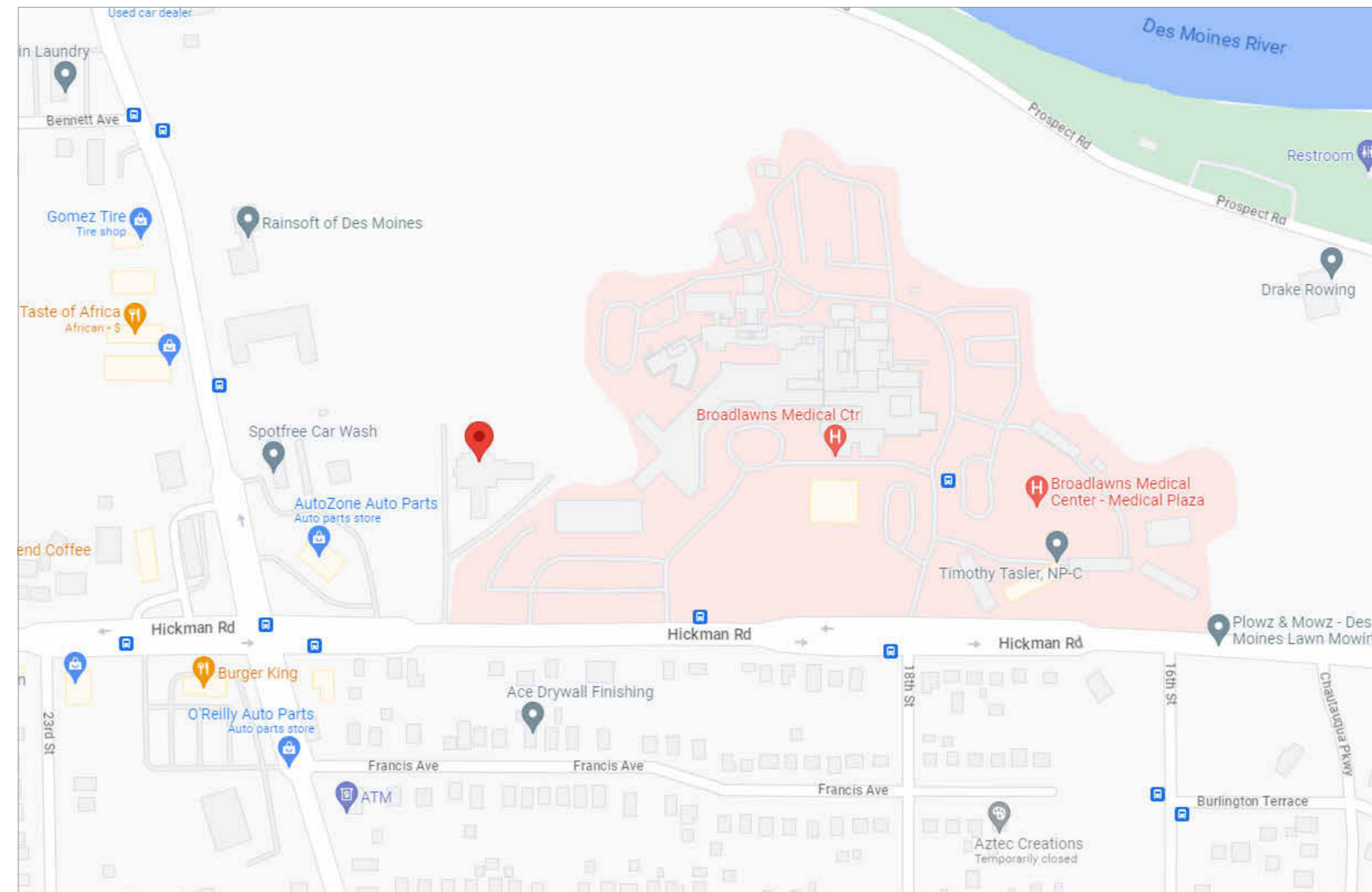


CONSTRUCTION LIMITS MAP



LOCATION MAP



DRAWING INDEX

GENERAL DRAWINGS	
SHEET NUMBER	SHEET NAME
G001	GENERAL DRAWING INFORMATION & SCHEDULES
G002	LIFE SAFETY AND CODE SUMMARY
ARCHITECTURAL DRAWINGS	
SHEET NUMBER	SHEET NAME
A101	FLOOR PLANS & INTERIOR ELEVATIONS
A102	DETAILS
MECHANICAL DRAWINGS	
SHEET NUMBER	SHEET NAME
M000	MECHANICAL GENERAL NOTES & SYMBOLS
MD101	MECHANICAL DEMOLITION
M101	MECHANICAL HVAC OVERALL PLAN
M301	MECHANICAL DETAILS
M501	MECHANICAL SCHEDULES
PLUMBING DRAWINGS	
SHEET NUMBER	SHEET NAME
PD101	PLUMBING DEMOLITION
P101	ENLARGED PLUMBING PLANS
P301	PLUMBING DETAILS
P501	PLUMBING SCHEDULES
ELECTRICAL DRAWINGS	
SHEET NUMBER	SHEET NAME
E000	ELECTRICAL GENERAL NOTES & SYMBOLS
E101	ELECTRICAL OVERALL PLAN
E102	ELECTRICAL PLANS
E201	ELECTRICAL DETAILS AND SCHEDULES

9344.00 - DOC DSM 5JD FRESH START WOMEN'S CENTER RR REMODEL RFB 934400-01

1917 HICKMAN ROAD, DES MOINES, IA 50314



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I hereby certify these plans and specifications were prepared by me or under my direct personal supervision and that I am a duly licensed professional architect under the laws of the state of Iowa.

Signature: _____

Name: Joseph T. Feldmann

Iowa Registration No: 06905 Renewal Date: 6/30/2024

Sheets covered by this seal: A & G Series

I hereby certify this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the state of Iowa.

Signature: _____

Name: Jacob C. Cuntliffe

Iowa Registration No: 20857 Renewal Date: 12/31/2023

Sheets covered by this seal: M & P Series

I hereby certify this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the state of Iowa.

Signature: _____

Name: Andrew J. Versluys

Iowa Registration No: P26463 Renewal Date: 12/31/2024

Sheets covered by this seal: E Series

ARCHITECT

OPN ARCHITECTS
100 COURT AVENUE
DES MOINES, IA 50309

CONSTRUCTION MANAGER

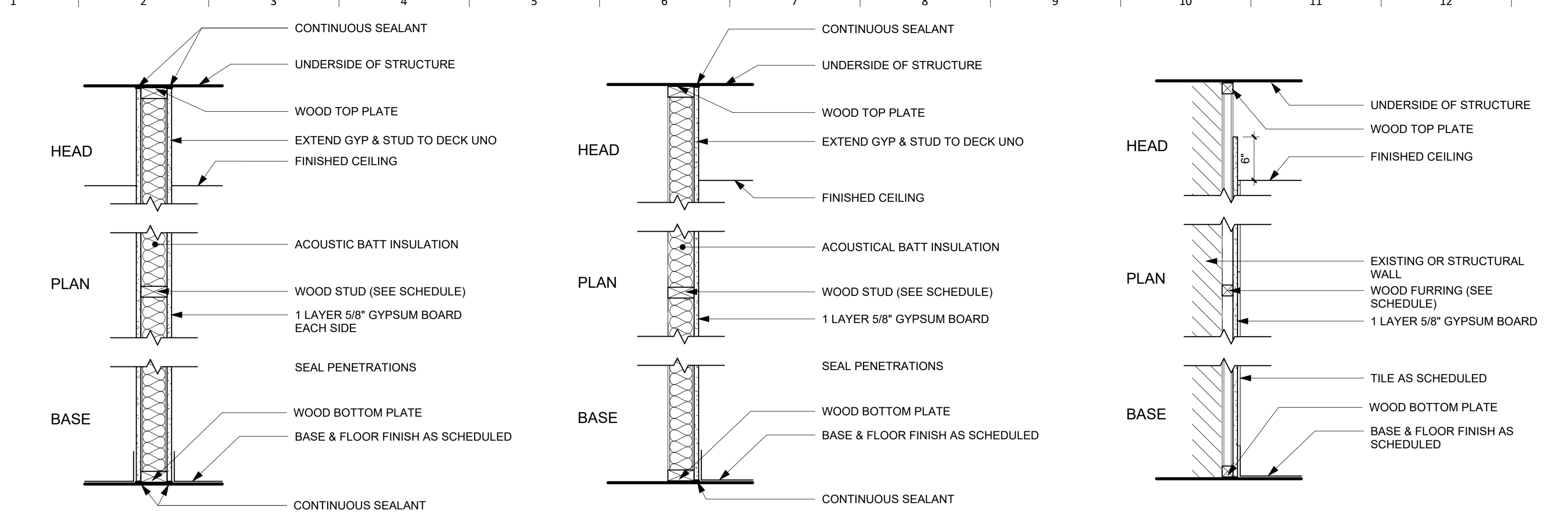
SAMUELS GROUP
2929 WESTOWN PARKWAY
WEST DES MOINES, IA 50266

MECHANICAL ENGINEER

KCL ENGINEERING
300 4TH STREET
WEST DES MOINES, IA 50265

ELECTRICAL ENGINEER

KCL ENGINEERING
300 4TH STREET
WEST DES MOINES, IA 50265



A1 WOOD FRAMED PARTITION
NON RATED / NON-LOAD BEARING

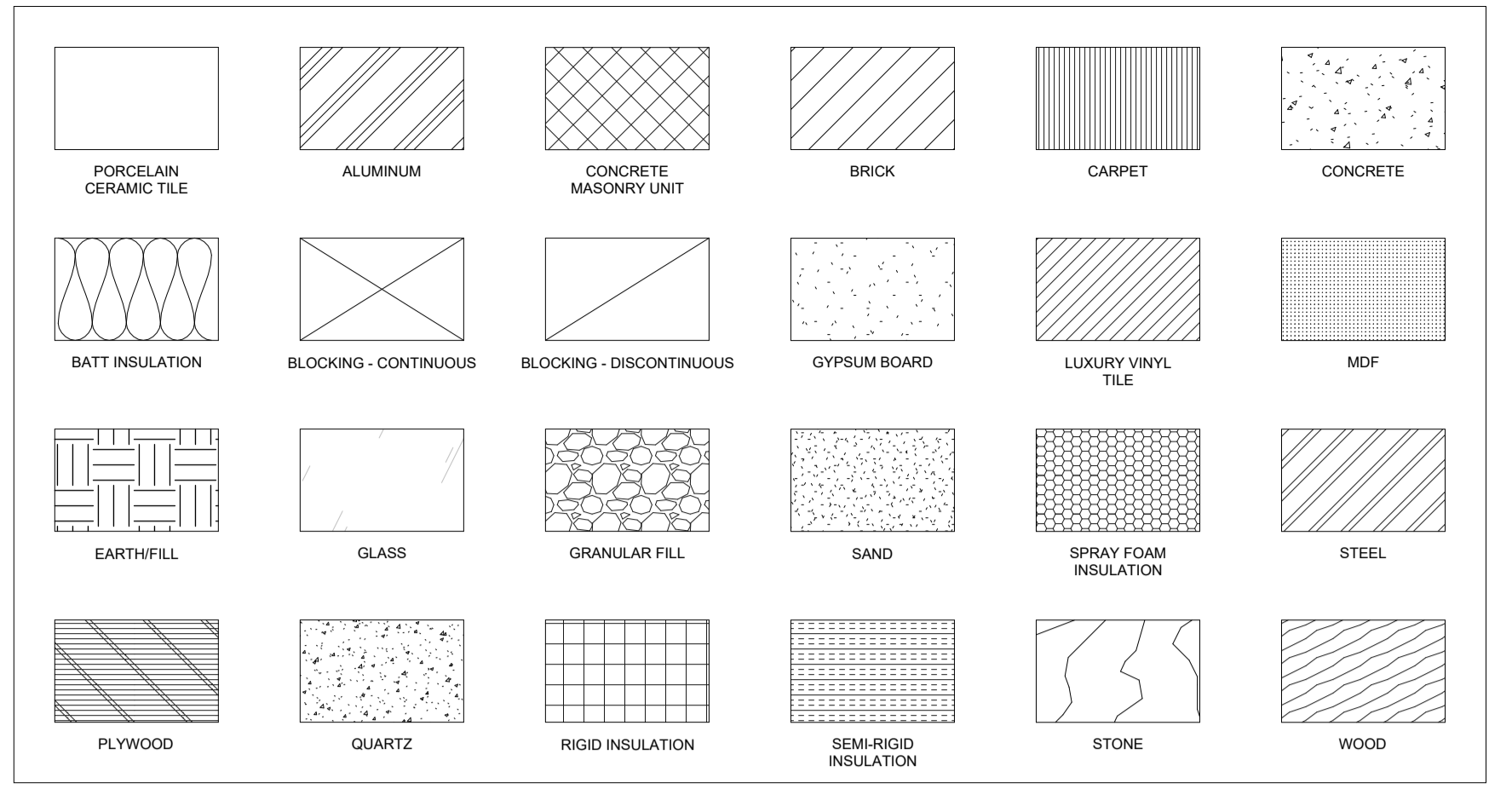
WIDTH	STUD SIZE	UL DESIGN NUMBER
3 3/4"	2 1/2"	N/A
4 3/4"	3 1/2"	N/A
4 3/4"	3 1/2"	U411

A2 WOOD FRAMED PARTITION
NON RATED / NON-LOAD BEARING

WIDTH	STUD SIZE	UL DESIGN NUMBER
4 3/4"	3 1/2"	N/A

C1 WOOD FURRING
NON RATED / NON-LOAD BEARING

WIDTH	STUD SIZE	UL DESIGN NUMBER
1 1/8"	1/2"	N/A
1 3/8"	3/4"	N/A
2 1/8"	1 1/2"	N/A



GENERAL INFORMATION - STANDARD ARCHITECTURAL MATERIAL DEFINITIONS

WALL TYPE NOTES

- REFER TO FLOOR PLANS FOR PARTITION TYPE LOCATIONS.
- REELS ARE TYPE A1, UNLESS NOTED OTHERWISE.
- WOOD BLOCKING CONCEALED BY GYPSUM BOARD DOES NOT NEED TO BE FIRE TREATED.

PARTITION TYPE AND SYMBOL LEGEND

GENERAL NOTES

- IDENTIFICATION AND/OR ABATEMENT OF HAZARDOUS MATERIALS IS NOT PART OF THIS SCOPE OF WORK. IF ASBESTOS OR OTHER HAZARDOUS MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY.
- REMOVE LOOSE PAINT AND MISCELLANEOUS HANGING OBJECTS FROM WALLS AND CEILINGS AT ALL AREAS TO RECEIVE FINISHES.
- OPENING IN THE EXISTING STRUCTURE SMALLER THAN 12" IN ANY DIRECTION ARE NOT IDENTIFIED ON THESE DRAWINGS. SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROTECTING OPENINGS SMALLER THAN 12" AS REQUIRED FOR INSTALLATION OF THEIR WORK.
- OPENINGS IN THE EXISTING STRUCTURE SHALL NOT BE MADE WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
- PATCH AND REPAIR ALL EXISTING FLOOR SLABS AND WALL SURFACES DAMAGED FROM DEMOLITION OR PRIOR USE.
- PATCH ALL AREAS OF ELECTRICAL AND MECHANICAL DEMOLITION THAT WILL NOT BE REUSED.
- CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE DRAWINGS AND THE EXISTING CONDITIONS, NOTIFY THE ARCHITECT BEFORE PROCEEDING.
- DO NOT REMOVE ANY ITEMS WHICH JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. HIDDEN ELEMENTS OR DETERIORATED ELEMENTS ARE ENCOUNTERED, NOTIFY THE ARCHITECT IMMEDIATELY.
- EXISTING BUILDING IS TO REMAIN WEATHER-TIGHT DURING ALL DEMOLITION ACTIVITIES.
- REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL DEMOLITION OF OTHER DISCIPLINES.
- PROTECT ALL ADJACENT AREAS AND ITEMS "TO REMAIN" DURING DEMOLITION/CONSTRUCTION. REPAIR/REPLACE ALL ITEMS DAMAGED DURING CONSTRUCTION.
- EXISTING BUILDING CONDITIONS SHOWN ON THESE DRAWINGS ARE DERIVED FROM DRAWINGS OF THE ORIGINAL BUILDING AND FROM LIMITED FIELD OBSERVATION.
- INDICATED EXISTING BUILDING CONDITIONS ARE ASSUMED TO BE REPRESENTATIVE OF THE ACTUAL CONSTRUCTION OF THE BUILDING. LOCAL CONDITIONS MAY VARY.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADDITIONAL MEANS OF EGRESS AS NEEDED AS A RESULT OF CONSTRUCTION SEQUENCING AND/OR REGULATORY REQUIREMENTS.

STANDARD SYMBOLS

OFFICE ROOM NAME
2A15 ROOM NUMBER

ROOM IDENTIFICATION

DOOR NUMBER
XXXX-A
DEMOLITION
EXISTING

DOOR IDENTIFICATION

CEILING TYPE
CEILING HEIGHT
10' - 0" AFF

CEILING IDENTIFICATION

PARTITION TYPE
MODIFICATION
RATING
SIZE

WALL IDENTIFICATION

ELEVATION NUMBER
A201
DARKENED AREA
DENOTES ELEVATION DRAWING
SHEET NUMBER

ELEVATION REFERENCE

DETAIL NUMBER
A101
SIM
SIMOPP TAG
SHEET NUMBER

PLAN DETAIL REFERENCE

DETAIL NUMBER
A101
SIM
SIMOPP TAG
SHEET NUMBER

DETAIL REFERENCE

DARKENED AREA
DENOTES DIRECTION OF SECTION CUT
SECTION NUMBER
A321
SHEET NUMBER

SECTION REFERENCE

NORTH DIRECTION
REFERENCE
DRAWING NUMBER
DRAWING TITLE
DRAWING SCALE
1/8" = 1'-0"

VIEW TITLE

KEYNOTE
REFERENCE NUMBER
ARROW POINTS TO REFERENCED OBJECT
00 00 A1

KEYNOTE REFERENCE

GRID REFERENCE
A
B

STRUCTURAL GRID

4'-0" 4'-0"

DIMENSIONS

FACE OF FINISH TO FACE OF FINISH
05
ITC

DRAWING REVISION

REVISION NUMBER
05
ITC

STANDARD ABBREVIATIONS

#	NUMBER	ALUMINUM COMPOSITE METAL
ACM		
ACP		ACOUSTICAL CEILING PANEL
AFP		ABOVE FINISH FLOOR
AFB		ACOUSTIC WALL PANEL
BAS		BUILDING AUTOMATION SYSTEM
BC		BOTTOM OF CURB
BEM		BENCH MARK
BCC		BACK OF CURB
BOS		BOTTOM OF STEEL
BOW		BOTTOM OF WALL
BR		BUMPER GUARD/BUMPER RAIL
BRG		BEARING
BS		BOTTOM OF STAIR
C		CHANNEL
CC		CUBICLE CURTAIN
CCFI		CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CG		CORNER GUARD
CD		CAST-IN-PLACE
CJ		CONTROL JOINT
CK		CORK FLOORING
CL		CENTER LINE
CLG		CEILING
CLL		CONSTRUCTION LIMITS LINE
CMU		CONCRETE MASONRY UNIT
CO		CLEANOUT
CONC		CONCRETE
CONC		CONTINUOUS
CPT		CARPET
CRK		CORK
CRK		DEMOLISH / DEMOLITION
DF		DRINKING FOUNTAIN
DIA		DIAMETER
DN		DOWN
DS		DOWNSPOUT
EC		ELECTRICAL CONTRACTOR
EIFS		EXTERIOR INSULATION FINISH SYSTEM
EJ		EXPANSION JOINT
EL		ELECTRICAL
ELEV		ELEVATION
EF		EPOXY FLOORING
EPT		EPOXY PAINT
EQ		EQUAL
EW		ELECTRIC WATER COOLER
EX		EXISTING
FAF		FLUID APPLIED FLOORING
FD		FLOOR DRAIN
FF		FACTORY FINISH
FFE		FINISHED FLOOR ELEVATION
FOF		FACE OF CURB
FOF		FACE OF FINISH
FOG		FACE OF GLAZING
FRP		FIBER REINFORCED PANEL
GA		GAUGE
GALV		GALVANIZED
GC		GENERAL CONTRACTOR
GHM		GALVANIZED HOLLOW METAL
GL		GLASS
GT		GROUT
GWB		GYPSUM WALL BOARD
GYP		GYPSUM
HORZ		HORIZONTAL
HM		HOLLOW METAL
HT		HEIGHT
HVAC		HEATING/VENTILATING/AIR CONDITIONING
ID		INSIDE DIAMETER
L		ANGLE
LB/LBS		POUND / POUNDS
LVT		LUXURY VINYL TILE
MAX		MAXIMUM
MB		MARKERBOARD
MC		MECHANICAL CONTRACTOR
MDF		MEDIUM DENSITY FIBERBOARD
MFR		MANUFACTURERS
MH		MANHOLE
MIL		MIL THICKNESS
MIN		MINIMUM
MO		MASONRY OPENING
NIC		NOT IN CONTRACT
NTS		NOT TO SCALE
OC		ON CENTER
OD		OUTSIDE DIAMETER
OCFI		OWNER FURNISHED CONTRACTOR
OFOI		OWNER FURNISHED OWNER
INSTALLED		INSTALLED
ORD		OVERHEAD
OH		OVERFLOW ROOF DRAIN
OTS		OPEN TO STRUCTURE
PCT		PORCELAIN CERAMIC TILE
PLT		PLATE
PLAM		PLASTIC LAMINATE
PVC		POLYMER PANEL
PVC		POLY VINYL CHLORIDE
PT		PAINT
QT		QUARTZ
RAD		RADIUS
RAF		RESILIENT ATHLETIC FLOORING
RB		RESILIENT BASE
RD		ROOF DRAIN
RES		RESIN
REV		REVISION
RO		ROUGH OPENING
ROW		RIGHT-OF-WAY
RSF		RESILIENT SHEET FLOORING
RST		RESILIENT STAIR TREAD
RTF		RESILIENT TILE FLOORING
RUB		RUBBER
SC		SEALED CONCRETE
SF		SQUARE FEET
SIM		SIMILAR
SS		SOLID SURFACE
STN		STONE
STL		STAINLESS STEEL
SUSP		SUSPENDED
T		TILE
T&G		TONGUE AND GROOVE
TG		TEMPERED GLASS
TOC		TOP OF CURB
TOM		TOP OF MASONRY
TOS		TOP OF SLAB / TOP OF STEEL
TOW		TOP OF WALL
TP		TOILET PARTITION
TPF		TACKABLE PANEL FABRIC
TRZ		TERRAZZO
TS		TOP OF STAIR
TYP		TYPICAL
UL		UNDERWRITERS LABORATORIES, INC.
UNO		UNLESS NOTED OTHERWISE
VERT		VERTICAL
VF		VERIFY IN FIELD
WB		WALL BASE
WC		WALL COVERING
W		WITH
W/O		WITHOUT
WD		WOOD
WGH		WALL GUARD HANDRAIL
WM		WALK-OFF MAT
WP		WALL PROTECTION
WT		WINDOW TREATMENT
WWF		WELDED WIRE FABRIC

DOOR SCHEDULE

DOOR NUMBER	PANEL QUANTITY	PANEL TYPE	PANEL				FRAME			FIRE RATING	REMARKS	HARDWARE SET
			WIDTH	HEIGHT	PANEL MATERIAL	PANEL FINISH	FRAME TYPE	MATERIAL	FINISH			
D01	1	F	3'-0"	7'-0"	WD	ST-1	1.0	HM	EPT-3	45 MIN		1
D02	1	F	3'-0"	7'-0"	WD	ST-1	1.0	HM	EPT-3	45 MIN		1

ROOM FINISH SCHEDULE

ROOM NAME	FLOOR		WALL FINISH				CEILING FINISH
	FINISH	BASE	NORTH	EAST	SOUTH	WEST	
Level 1 NORTH SHOWER ROOM	FAE-1	FAE-1	T-1 / EPT-1	T-1 / EPT-1	T-1 / EPT-1	T-1 / EPT-1	EPT-2
SOUTH SHOWER ROOM	FAE-1	FAE-1	T-1 / EPT-1	T-1 / EPT-1	T-1 / EPT-1	T-1 / EPT-1	EPT-2

DOOR HARDWARE SET 1.0:

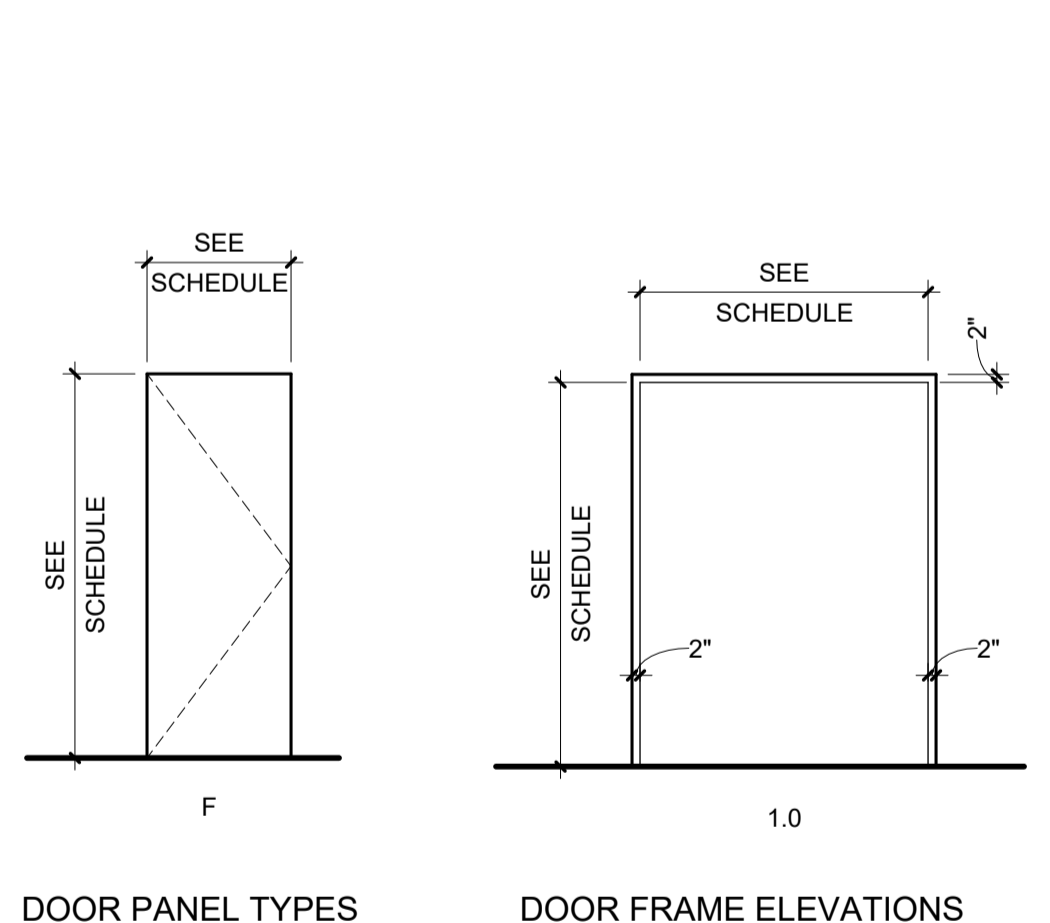
ITEM:	MODEL:	FINISH:	MANUFACTURER:
3 EA HINGE FULL MORTISE, HVY WT	5BB1HW 4-1/2" x 4-1/2"	652	IVES
1 EA MORTISE CLASSROOM LCKST	L9070 R 06A	626	SCHLAGE
1 EA CONSTRUCTION CORE	23-030C2K 50-231	-	SCHLAGE
1 EA SURFACE CLOSER	4040XP-REGARM	689	LCN CLOSERS
1 EA KICK PLATE	PUSH SIDE MOUNT CLOSER 8400 B-C S 107534"	US32D	IVES
1 EA WALL STOP	WS406CCV	630	IVES
1 EA SILENCER	608-RKW	-	ROCKWOOD
1 EA THRESHOLD	272	SN	PEMKO
1 EA SMOKE GASKETS	S88	BL	PEMKO

NOTES: 1. CORE PROVIDED BY CONTRACTOR, KEYPED BY OWNER

DOOR HARDWARE MANUFACTURER BASIS OF DESIGN:

- Hinges: Ives (IV)
- Mortise Locks: Schlage (SC)
- Cylinders: Schlage (SC), 6 pin interchangeable cores
- Cylinder Cores: See Note 1
- Closers: LCN, 4040 Series
- Drop Plates: LCN
- Protection Plates: Rockwood (RO)
- Gasketing: Pemko (PE)

LEGEND - HARDWARE SETS



INTERIOR FINISH SPECIFICATIONS

NOTE: SUBSTITUTIONS TO BE APPROVED BY ARCHITECT PRIOR TO BID

FLUID APPLIED EPOXY:

FAE-1 MANUFACTURER: DUR-A-FLEX HYBRID-FLEX EC
PRODUCT: OLIVE STONE W/ HIGH GLOSS GRI
COLOR: GLOSS GRI
APPLICATION: FLOORINGS, 6" COVE BASE

PAINT:

EPT-1 MANUFACTURER: SHERWIN WILLIAMS
COLOR: GRAY CLOUDS SW 7658
FINISH: EGGSHELL
APPLICATION: FIELD PAINT - U.N.O.

EPT-2 MANUFACTURER: SHERWIN WILLIAMS
COLOR: BRIGHT WHITE SW 7007
FINISH: FLAT
APPLICATION: CEILING PAINT

EPT-3 MANUFACTURER: SHERWIN WILLIAMS
COLOR: TO MATCH EXISTING
FINISH: TO MATCH EXISTING
APPLICATION: DOOR FRAMES

SHOWER CURTAINS:

CUR MANUFACTURER: CUBE CARE
STYLE: CORRECTIONAL
COLOR: ARCHITECT TO SELECT FROM MANUFACTURER'S FULL RANGE OF COLORS
APPLICATION: SHOWER STALLS

SOLID SURFACE:

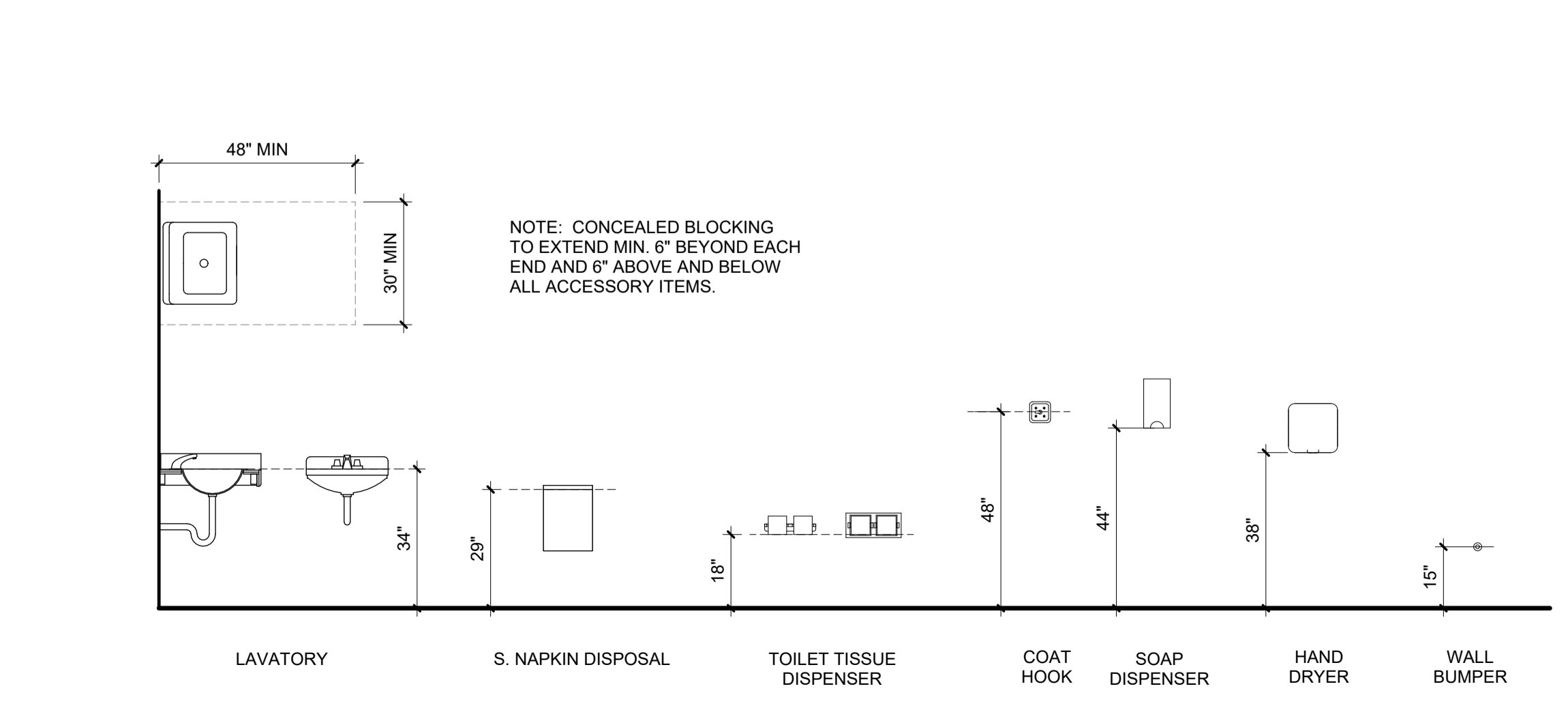
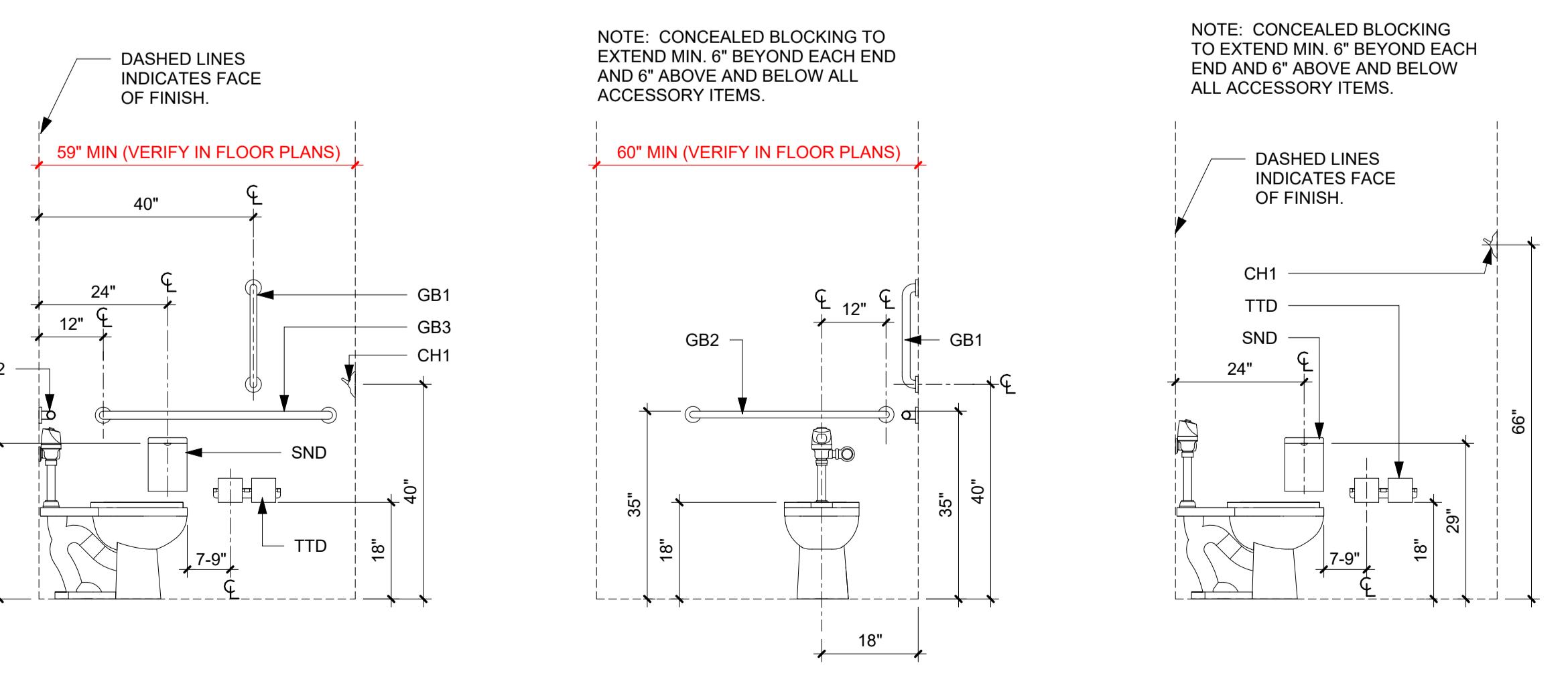
SS-1 MANUFACTURER: WILSONART
THICKNESS: 1/2"
COLOR: KIMBERLITE
APPLICATION: WALL CAP AT HALF WALL

TILE:

T-1 MANUFACTURER: BEST TILE
STYLE: LINK
SIZE: 24x48"
THICKNESS: 9 MM
COLOR: TIE
FINISH: MATTE
GROUT: ARCHITECT TO SELECT FROM MANUFACTURER'S FULL RANGE OF COLORS AS INDICATED IN DRAWINGS
RESTROOM WALLS: REFER TO ELEVATIONS FOR HEIGHT AND LOCATIONS
SCHLUTER QUADEC, U.N.O.

TOILET PARTITIONS:

TP-1 MANUFACTURER: SCRANTON PRODUCTS
STYLE: HINDY HINDERS
TEXTURE: ORANGE PIEL
COLOR: CHARCOAL GREY
FLOOR TO CEILING MOUNTED
APPLICATION: RESTROOM STALLS



GENERAL INFORMATION - RESTROOM ACCESSORIES

DESIGNATION	DESCRIPTION	PROVIDED BY
CH1	COAT HOOK	CFCI
CH2	COAT HOOK STRIP	CFCI
GB1	VERTICAL GRAB BAR	CFCI
GB2	REAR GRAB BAR	CFCI
GB3	SIDE GRAB BAR	CFCI
GB4	CONTINUOUS SHOWER GRAB BAR	CFCI
HD	HAND DRYER	CFCI
MR1	MIRROR - 18" x 36"	CFCI
SB	ADA SHOWER BENCH	CFCI
SD	SOAP DISPENSER	CFCI
SND	SANITARY NAPKIN DISPOSAL	CFCI
TTD	TOILET TISSUE DISPENSER	CFCI

- DOOR SCHEDULE NOTES**
- SEE FRAME PLANS AND INTERIOR ELEVATIONS FOR DIMENSIONAL SIZES WITH MATERIALS OF FRAMES.
 - PREPARE DOOR AND FRAME FOR PAINT - SAND DENTS AND SAND SCRATCHES SMOOTH.
 - PAINT HOLLOW METAL DOORS AND FRAMES EPT-1.

OPN ARCHITECTS

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Project
9344.00 - DOC DSM 5JD FRESH START WOMEN'S CENTER RW REMODEL RFP 934400-01
1917 HICKMAN ROAD
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Mechanical Engineer
KCLE ENGINEERING
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P. 515-724-7938

Electrical Engineer
KCLE ENGINEERING
300 4TH ST
WEST DES MOINES, IA 50265
P. 515-724-7938

Revision	Description	Date

Key Plan

Revision Description Date

OPN Project No.
23816000

Sheet Issue Date
BID SET

Sheet Name
GENERAL DRAWING INFORMATION & SCHEDULES

Sheet Number
G001

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APPLICABLE CODE INFORMATION

The project shall comply with the following codes:

- U 2018 International Building Code, including City of Des Moines, Iowa amendments.
- 2018 International Mechanical Code
- 2018 International Fire Code
- 2018 International Existing Building Code
- 2021 State Mechanical Code
- 2020 National Electrical Code
- 2020 Uniform Plumbing Code and the Iowa State Plumbing Code
- Iowa State Energy Code, 2018 International Energy Conservation Code
- Accessibility - Division 7 of Iowa State Building Code, Iowa State Accessibility Code, 2018 IBC and ANSI A117.1 - 2009 Edition
- T **Building Characteristics**
 - Project description: The project includes demolition, general construction, gypsum board, electrical, electrical safety/security, mechanical, HVAC, plumbing, site, full applied flooring, detention furnishings, hollow metal doors, and paint for the remodel of the North and South Shower Rooms at 59 Judicial District Fresh Start Women's Center, 1917 Hickman Road, Des Moines, IA 50314. Residents at Fresh Start is a correctional facility with controlled entrance, but free egress. The project will be a reconfiguration of the resident shower rooms to provide accessibility. The new layout includes the same number of fixtures as originally provided, but provides at least one accessible fixture of each type.
 - Fully Sprinkled: No
 - Fire Alarm: Yes - Equipped with emergency voice/alarm communication system
- S **IC Chapter 3 - Use and Occupancy Classification**
 - Occupancy Group: B, R-2 (Nonseparated occupancy use)
 - Total Beds: 48
- IBC Chapter 6 - Types of Construction**
 - Construction Classification: Type VA
- Table 601 Fire Resistance Rating Required**

Primary Structural Frame	1 HR
Bearing Walls	1 HR
Nonbearing Wall and Partition (Exterior)	0 HR
Nonbearing Wall and Partitions (Interior)	0 HR
Floor Construction and Secondary Members	1 HR
Roof Construction and Secondary Members	1 HR
- IBC Chapter 9 - Fire Protection Systems**

903 Automatic Sprinkler Systems	Not Required
906 Portable Fire Extinguishers	Required/Existing
- Q **IBC Chapter 10 - Means of Egress**
 - MEANS OF EGRESS:** SCOPE OF REMODEL WORK DOES NOT AFFECT EXIT LOADS OR EXIT ACCESS ELEMENT CONFIGURATION AND WILL REMAIN IN CURRENT CONFIGURATION.
 - 1004 Occupant Load (See Building Occupant Load Calculations for details)**

Residents (Bed Count)	48
-----------------------	----
- P **Iowa Administrative Code, Chapter 16, Division VII - Accessibility Requirements For Facilities Used by the General Public:**
 - Accessibility within the building will be maintained.

PLUMBING FIXTURE ANALYSIS OCCUPANCY LOAD CALCULATED USING 2018 INTERNATIONAL PLUMBING CODE												
BASED ON A TYPE R-2 OCCUPANCY - TABLE 2902.1, 2018 IPC - RESIDENTIAL OCCUPANCY												
	PROVIDED	MEN				WOMEN			UNISEX		DF	OCCUPANCY LOAD
		LAV	WC	WC/ URINALS	SWR	LAV	WC	SHWR	LAV	WC		
TOTAL RESIDENTS	REQUIRED	N/A	N/A	N/A	N/A	4.8	4.8	6	2*	2*	2	0 MEN / 48 WOMEN

NOTE: PLUMBING CALCULATIONS PROVIDED FOR RESIDENT OCCUPANTS ONLY. STAFF NOT INCLUDED IN RESTROOM CALCULATIONS SINCE THE REMODEL ONLY AFFECTS RESIDENT USE SPACES.
 * RESIDENTS HAVE FREE ACCESS TO THE PUBLIC RESTROOMS AT THE MAIN ENTRANCE LOBBY.

PLUMBING FIXTURE CALCULATORS:

OCCUPANCY TYPE - RESIDENTIAL
 WATER CLOSETS - 1 FIXTURES FOR EACH 10 (MEN AND WOMEN).
 URINALS - N/A
 LAVATORIES - 1 FIXTURES FOR EACH 10 (MEN AND WOMEN).
 SHOWERS - 1 FOR EACH 8 (MEN AND WOMEN).
 DRINKING FOUNTAINS - 1 FOR EACH 100 PERSONS (EXISTING TO REMAIN - NOT IN SCOPE)
 SERVICE SINK - 1 (EXISTING TO REMAIN - NOT IN SCOPE)

BUSINESS OCCUPANCY: PLUMBING FIXTURES REQUIRED BY BUSINESS OCCUPANCY ARE NOT IN SCOPE AND WILL REMAIN IN CURRENT CONFIGURATION.



LEVEL 1 OCCUPANCY PLAN
 1" = 10'-0"



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Key Plan

Revision Description Date

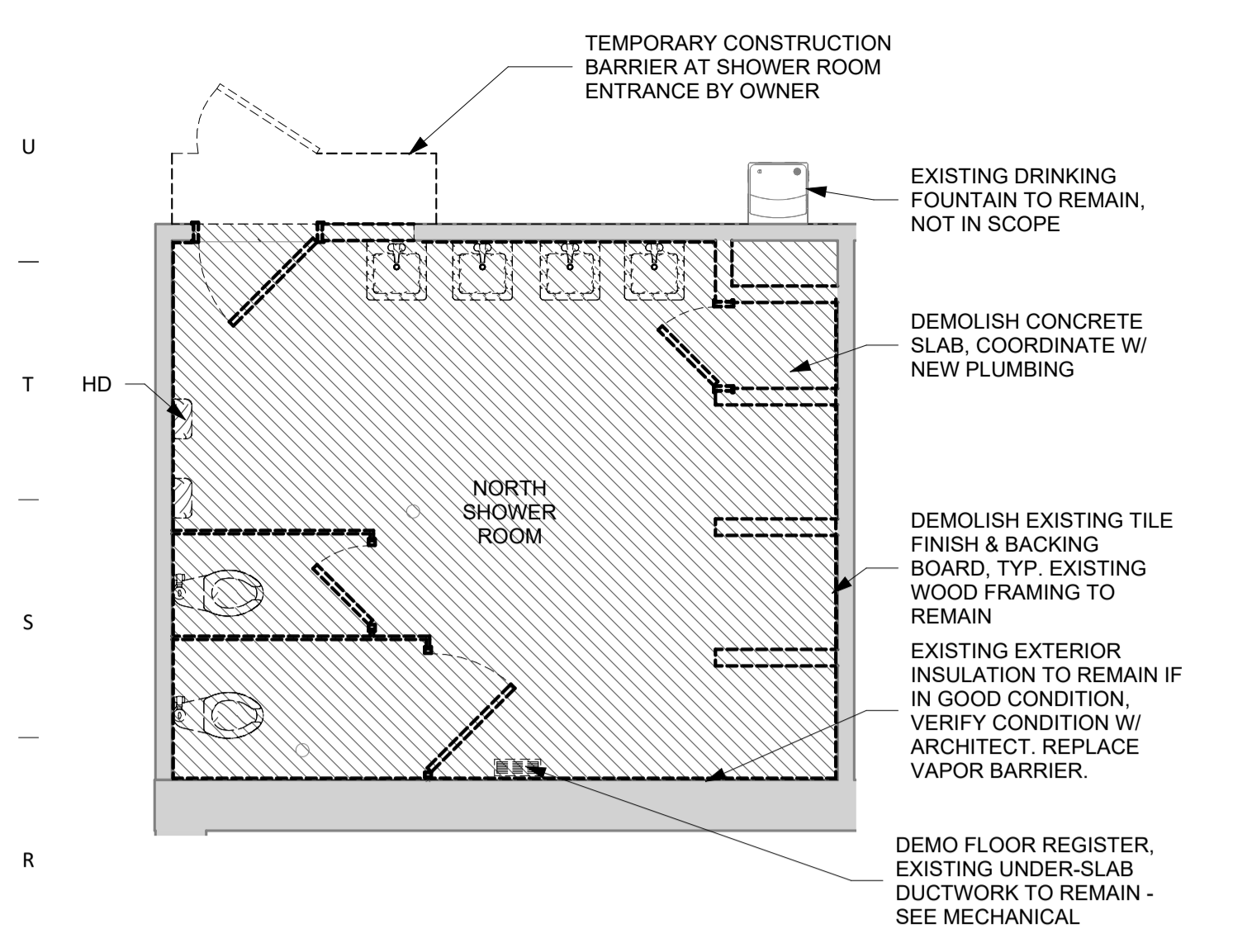
OPN Project No.
23816000

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BID SET 12/4/2023

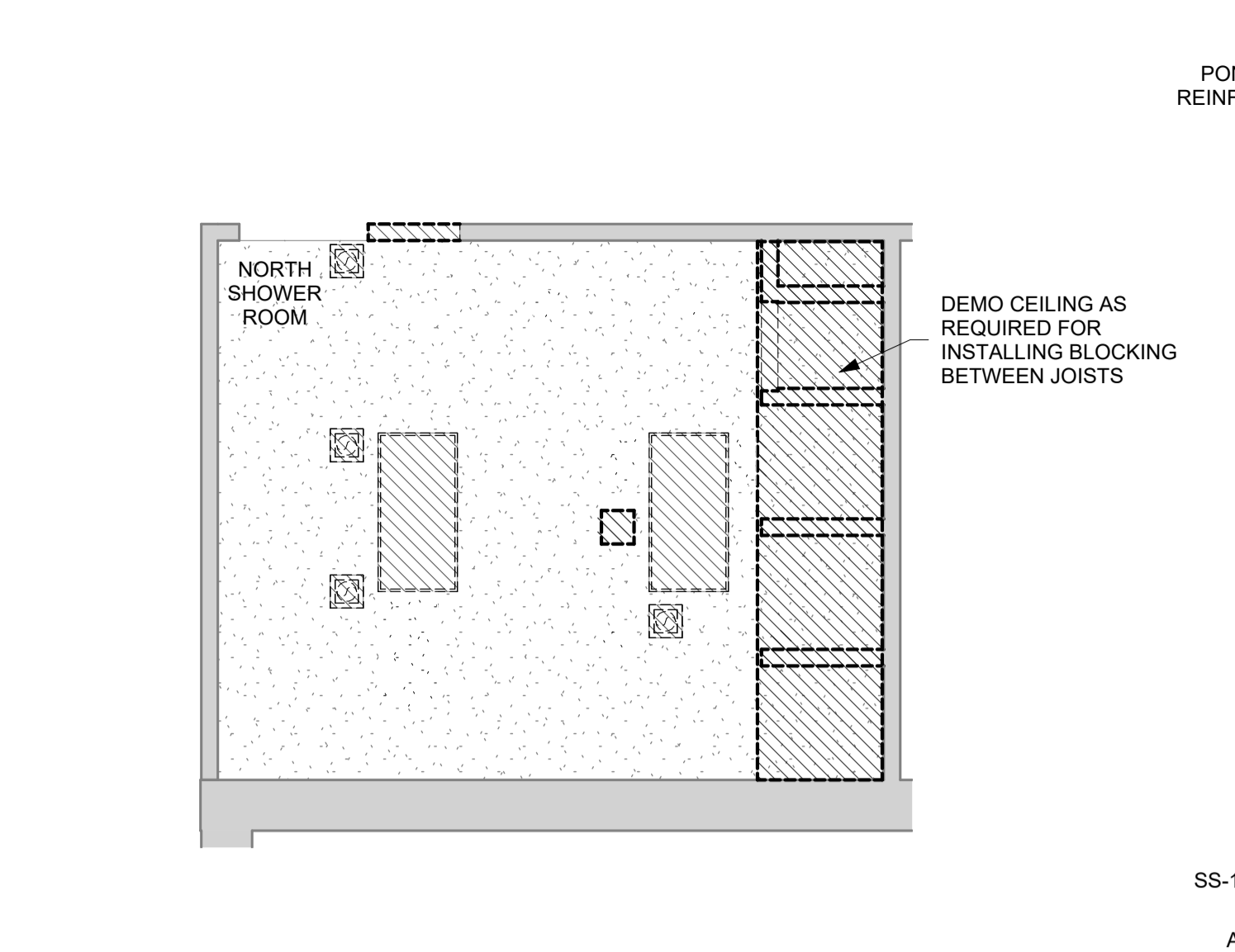
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LIFE SAFETY AND CODE SUMMARY

Sheet Number
G002

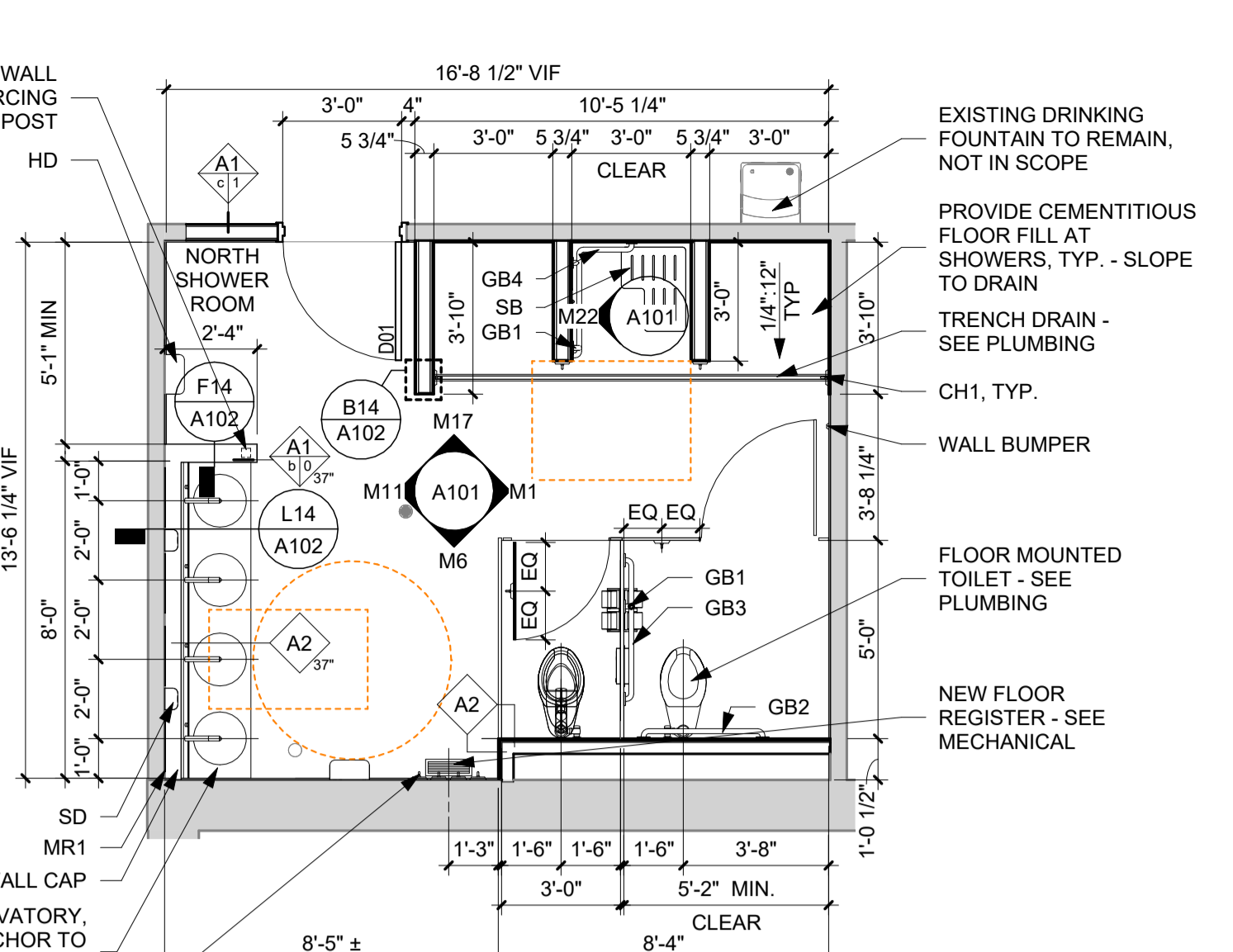
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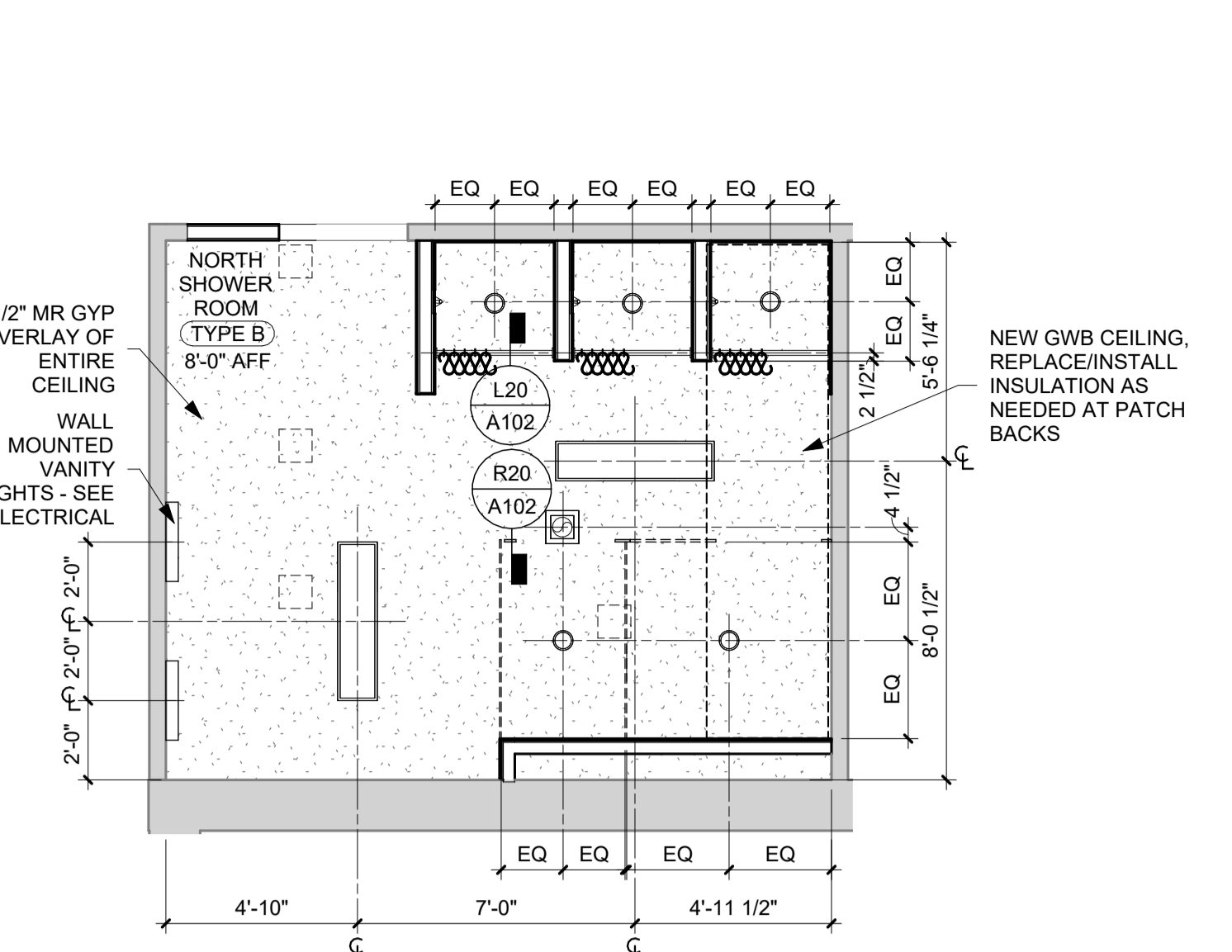
Q1 DEMOLITION FLOOR PLAN - NORTH SHOWER ROOM
1/4" = 1'-0"



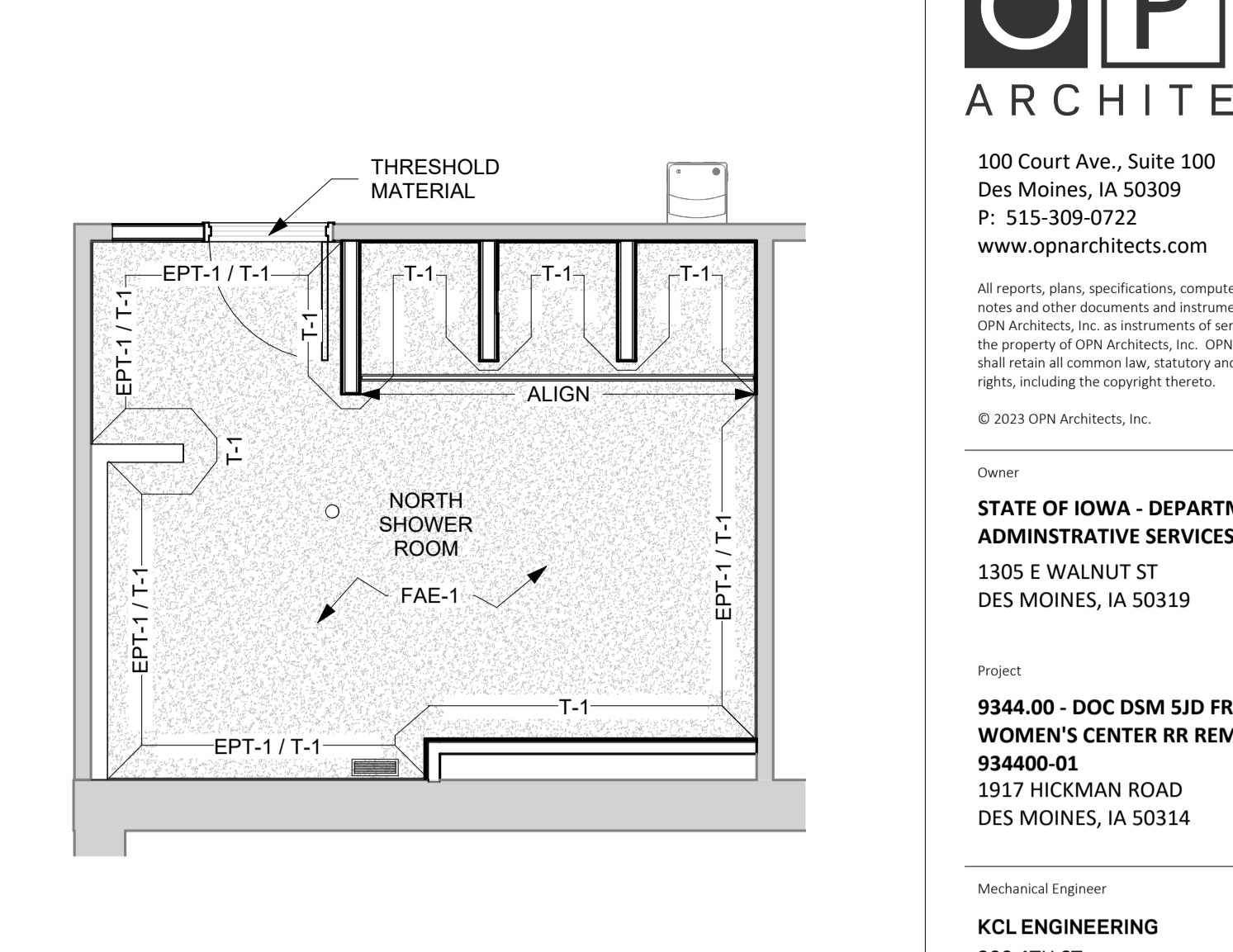
Q6 DEMOLITION REFLECTED CEILING PLAN - NORTH SHOWER ROOM
1/4" = 1'-0"



Q11 ENLARGED FLOOR PLAN - NORTH SHOWER ROOM
1/4" = 1'-0"

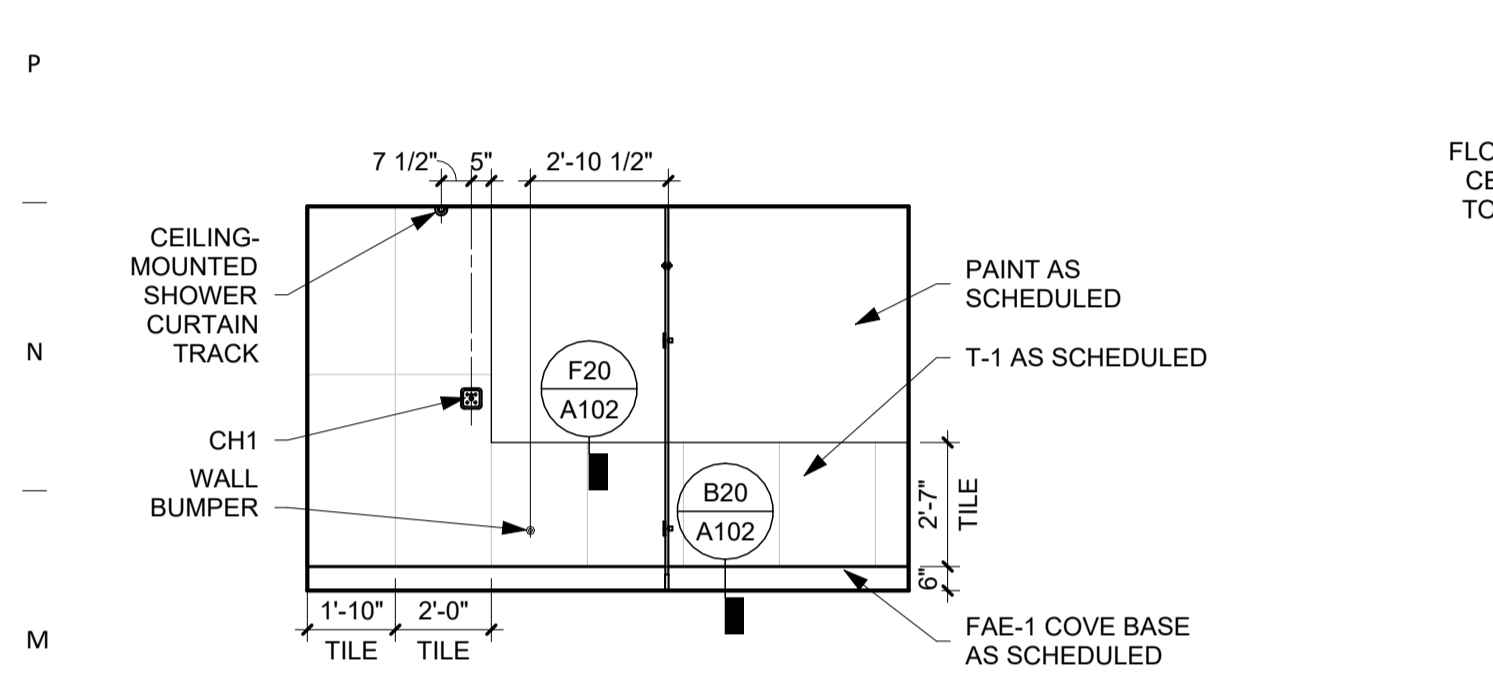


Q17 ENLARGED REFLECTED CEILING PLAN - NORTH SHOWER ROOM
1/4" = 1'-0"

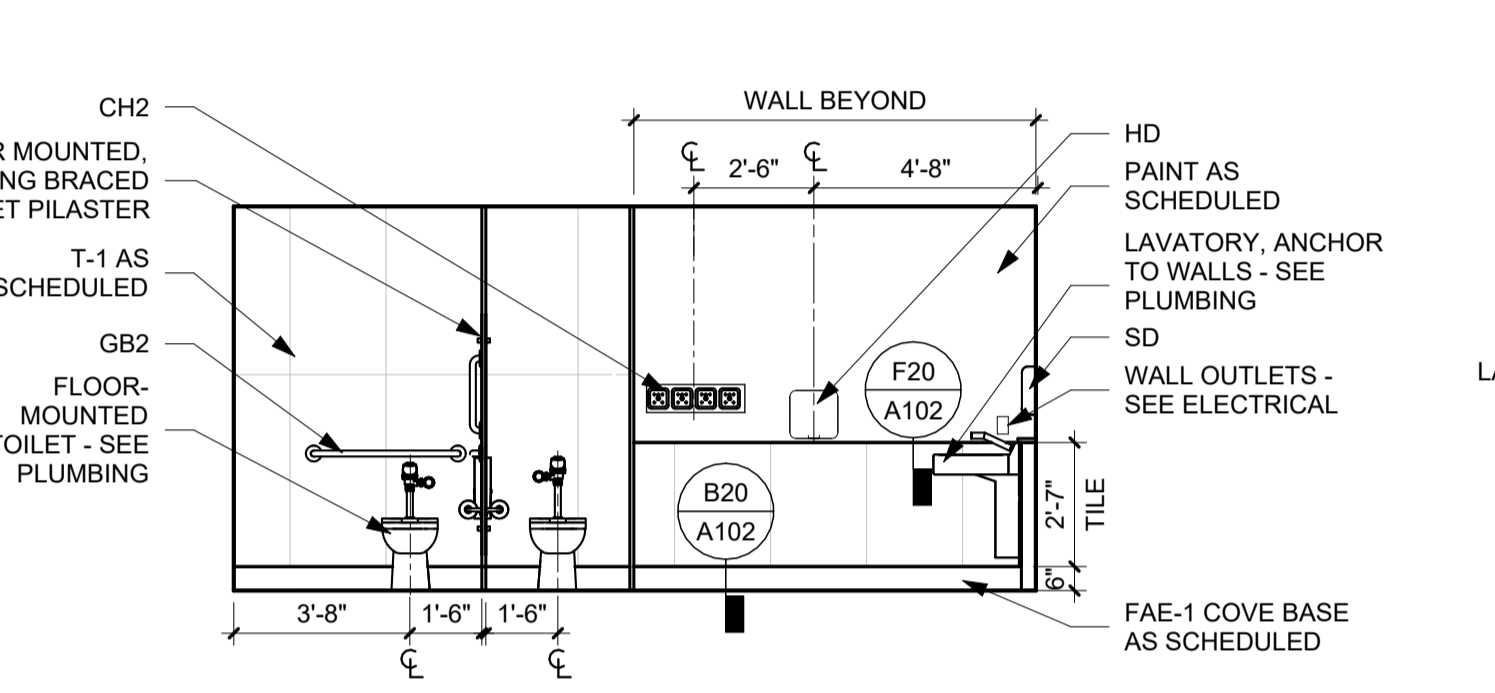


Q22 ENLARGED FINISH PLAN - NORTH SHOWER ROOM
1/4" = 1'-0"

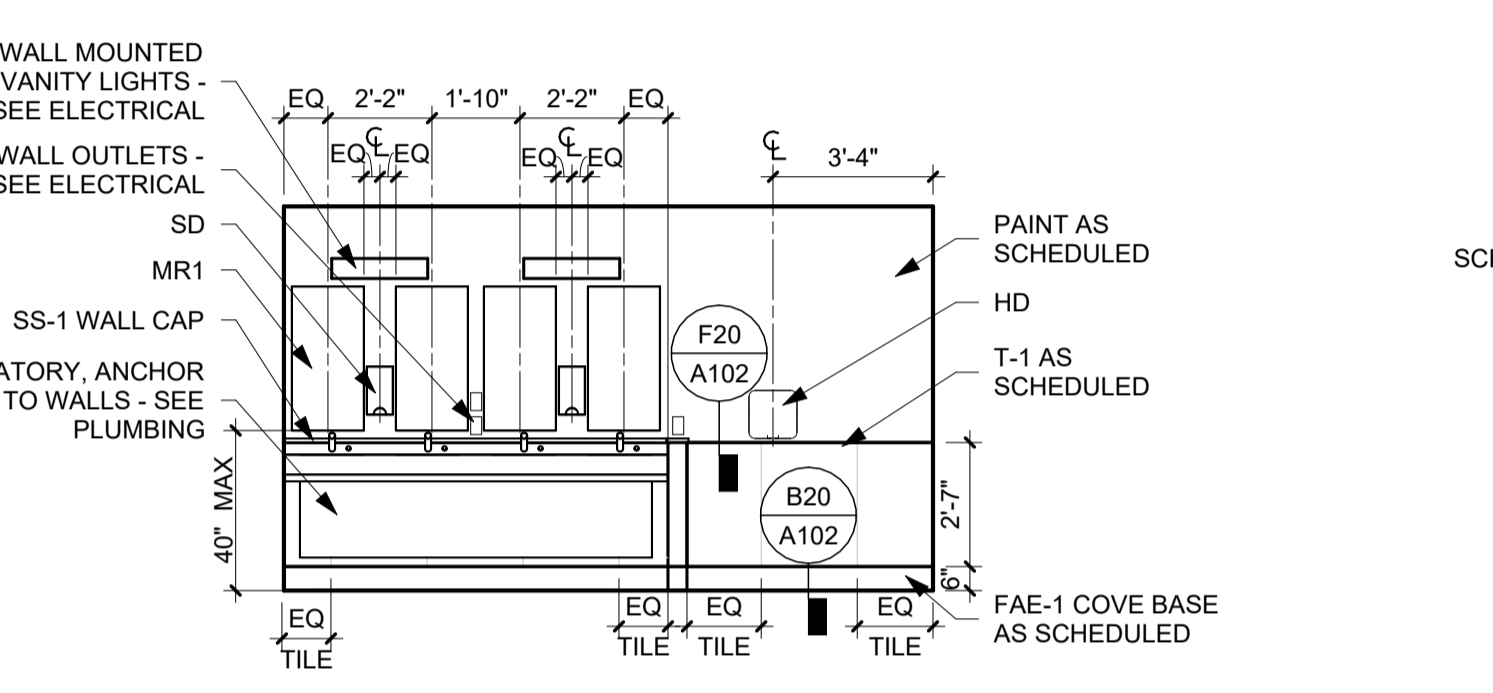
NOTE: BATHROOM ACCESSORIES AND FIXTURES OMITTED FROM VIEW FOR CLARITY



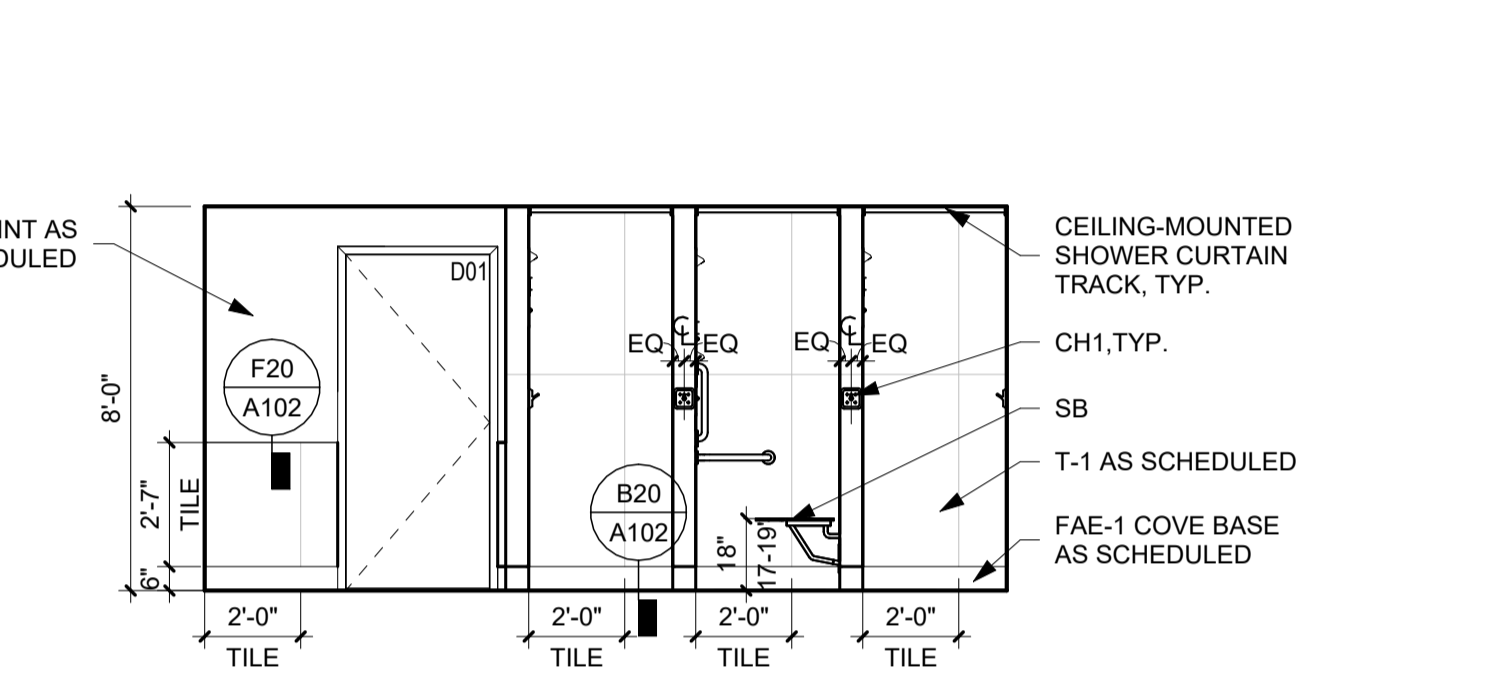
M1 INTERIOR ELEVATION - NORTH SHOWER ROOM - NORTH
1/4" = 1'-0"



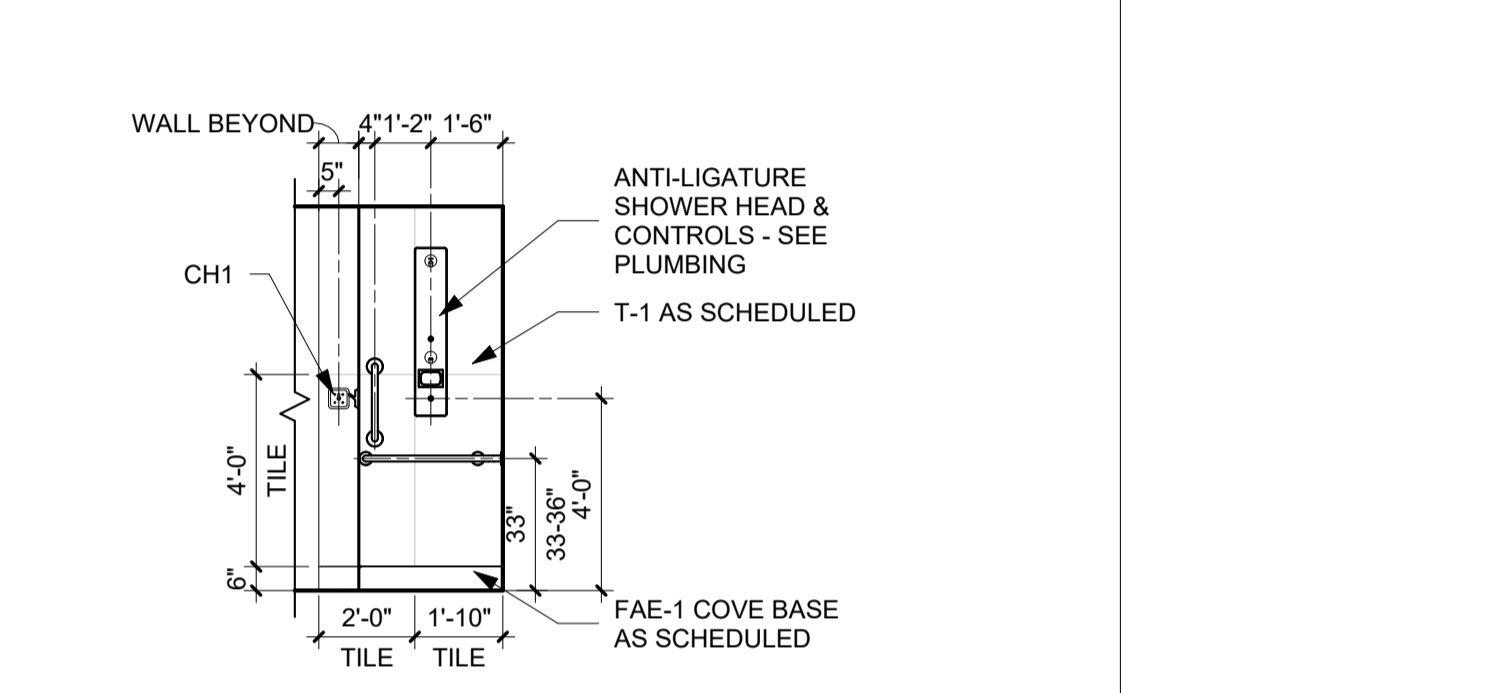
M6 INTERIOR ELEVATION - NORTH SHOWER ROOM - EAST
1/4" = 1'-0"



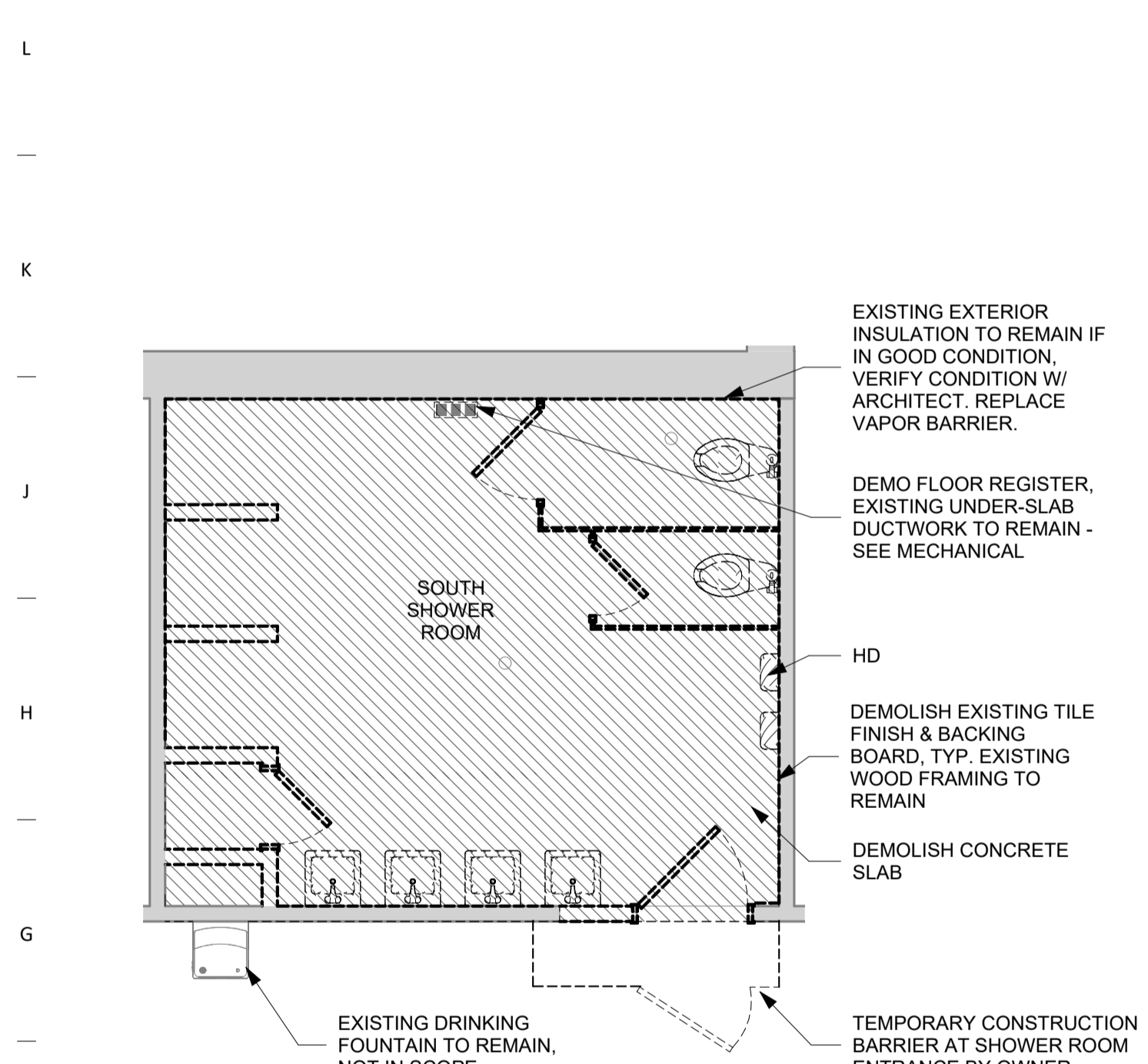
M11 INTERIOR ELEVATION - NORTH SHOWER ROOM - SOUTH
1/4" = 1'-0"



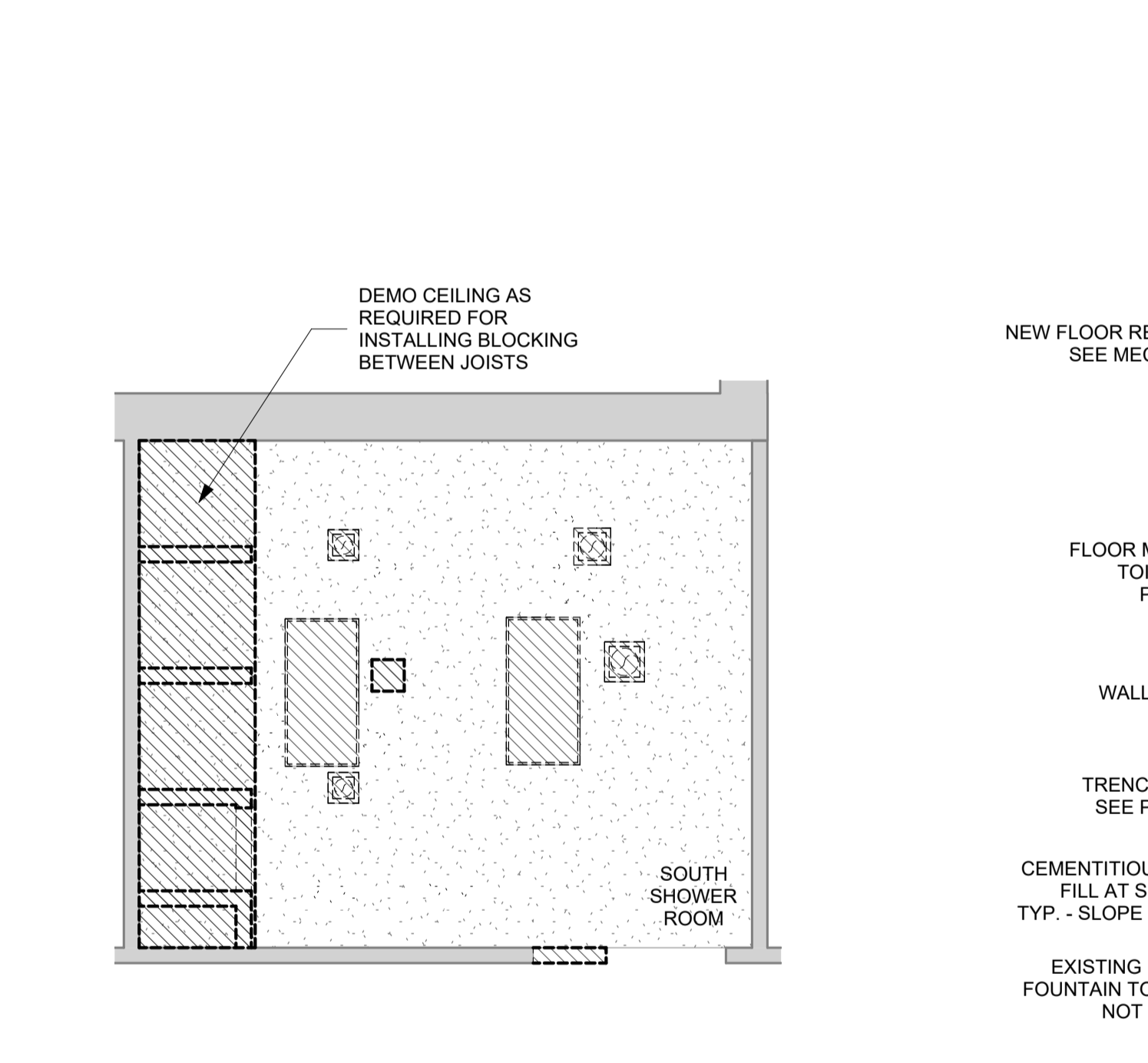
M17 INTERIOR ELEVATION - NORTH SHOWER ROOM - WEST
1/4" = 1'-0"



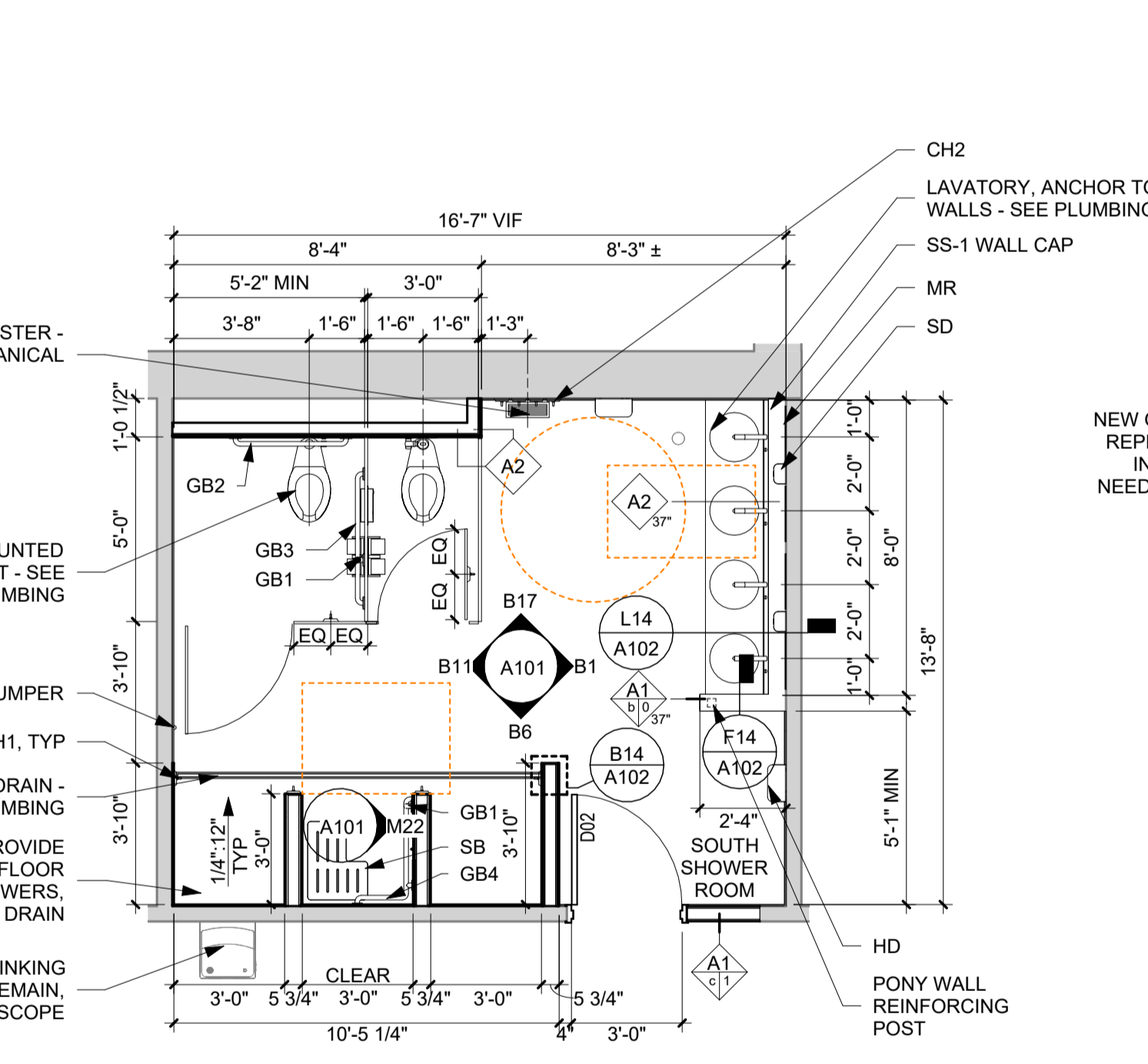
M22 INTERIOR ELEVATION - ADA SHOWER CONTROL WALL
1/4" = 1'-0"



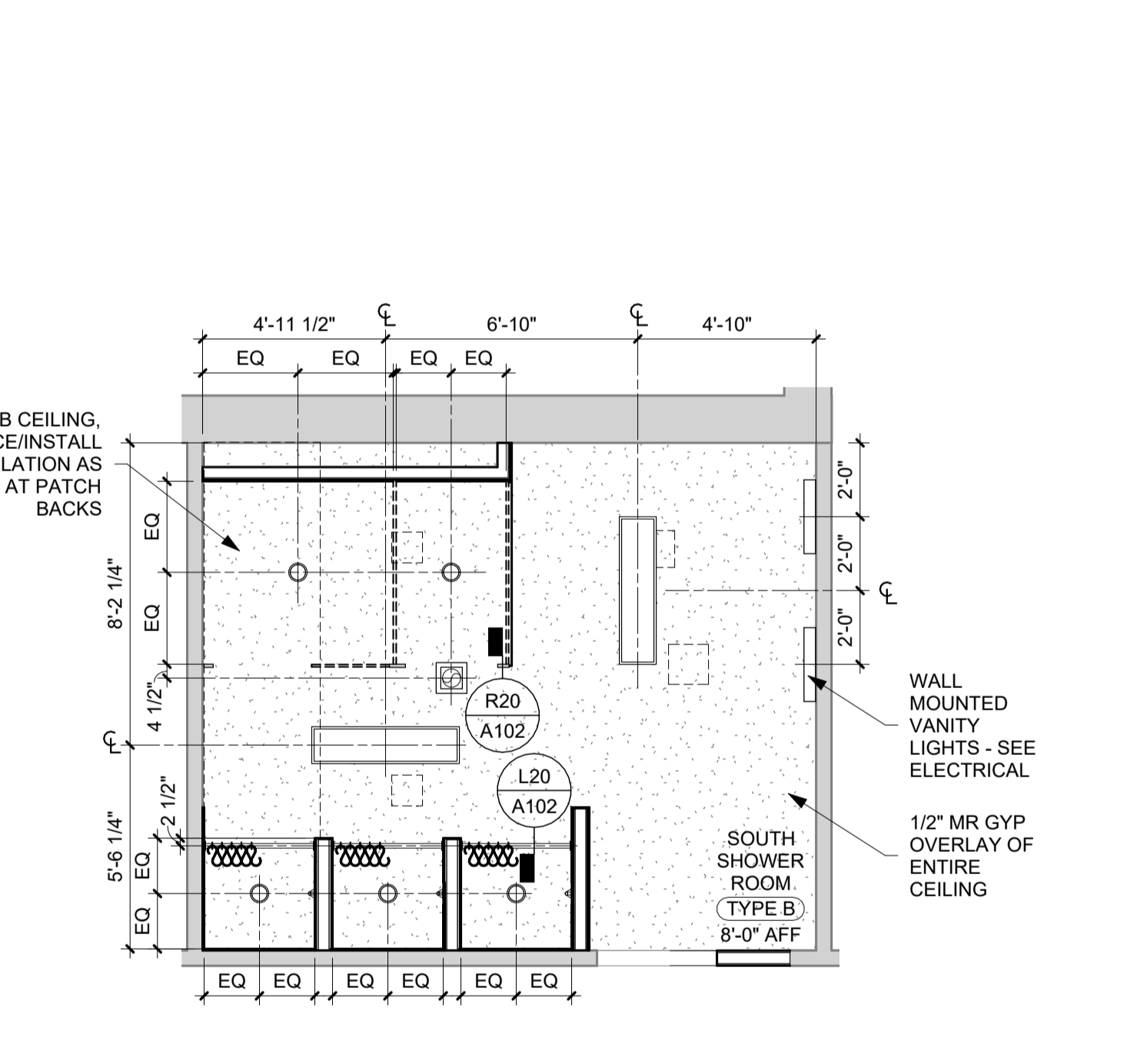
F1 DEMOLITION FLOOR PLAN - SOUTH SHOWER ROOM
1/4" = 1'-0"



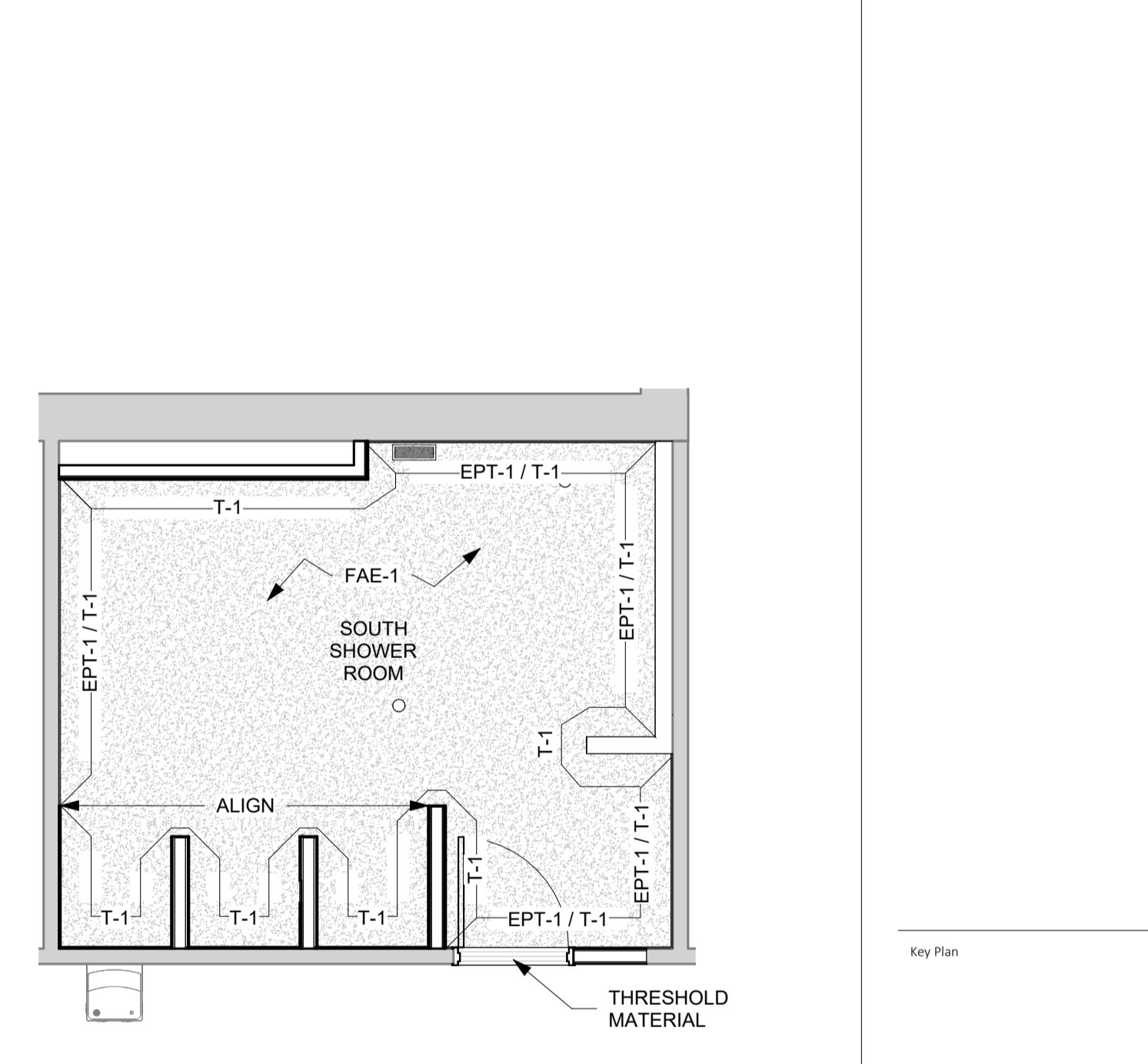
F6 DEMOLITION REFLECTED CEILING PLAN - SOUTH SHOWER ROOM
1/4" = 1'-0"



F11 ENLARGED FLOOR PLAN - SOUTH SHOWER ROOM
1/4" = 1'-0"

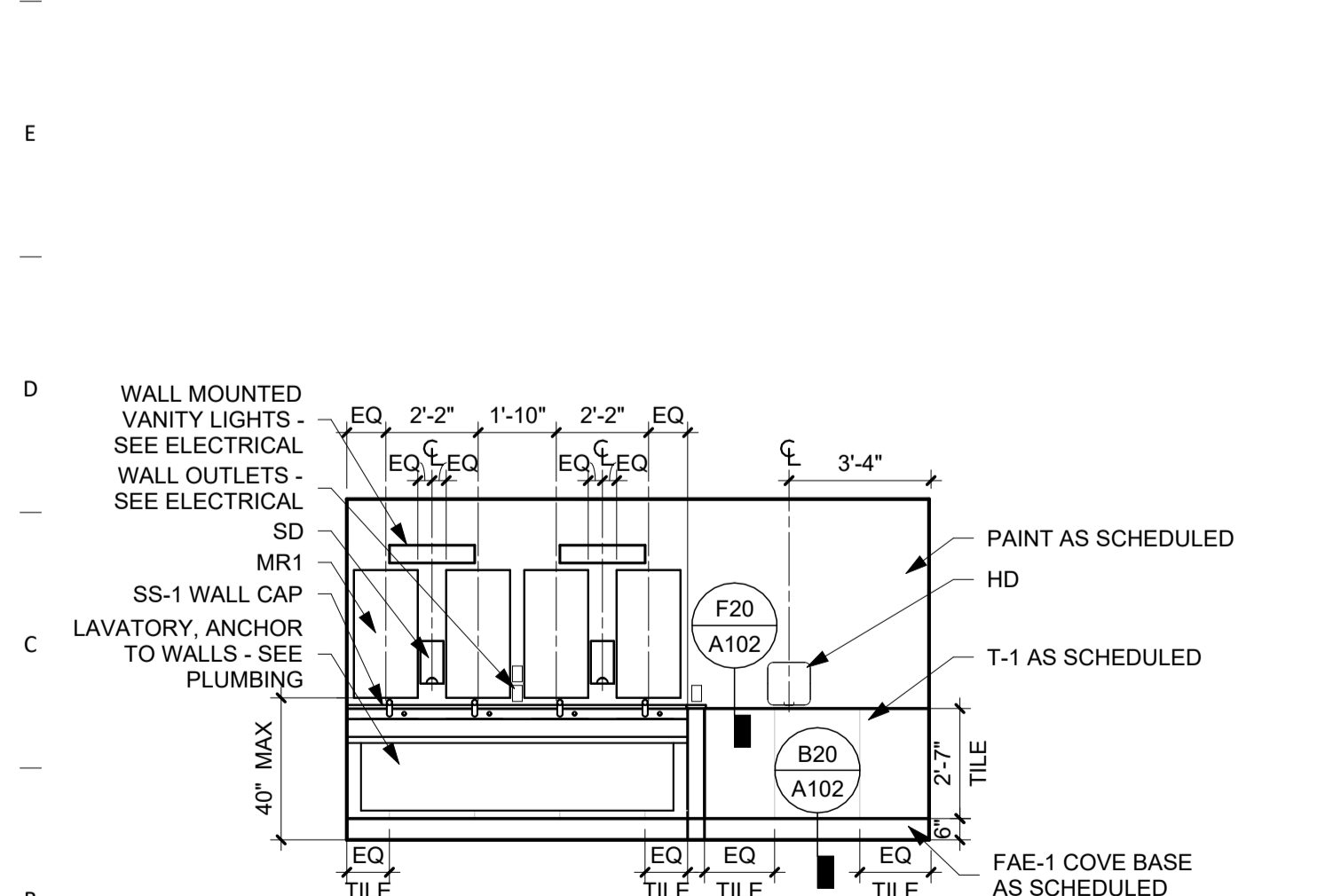


F17 ENLARGED REFLECTED CEILING PLAN - SOUTH SHOWER ROOM
1/4" = 1'-0"

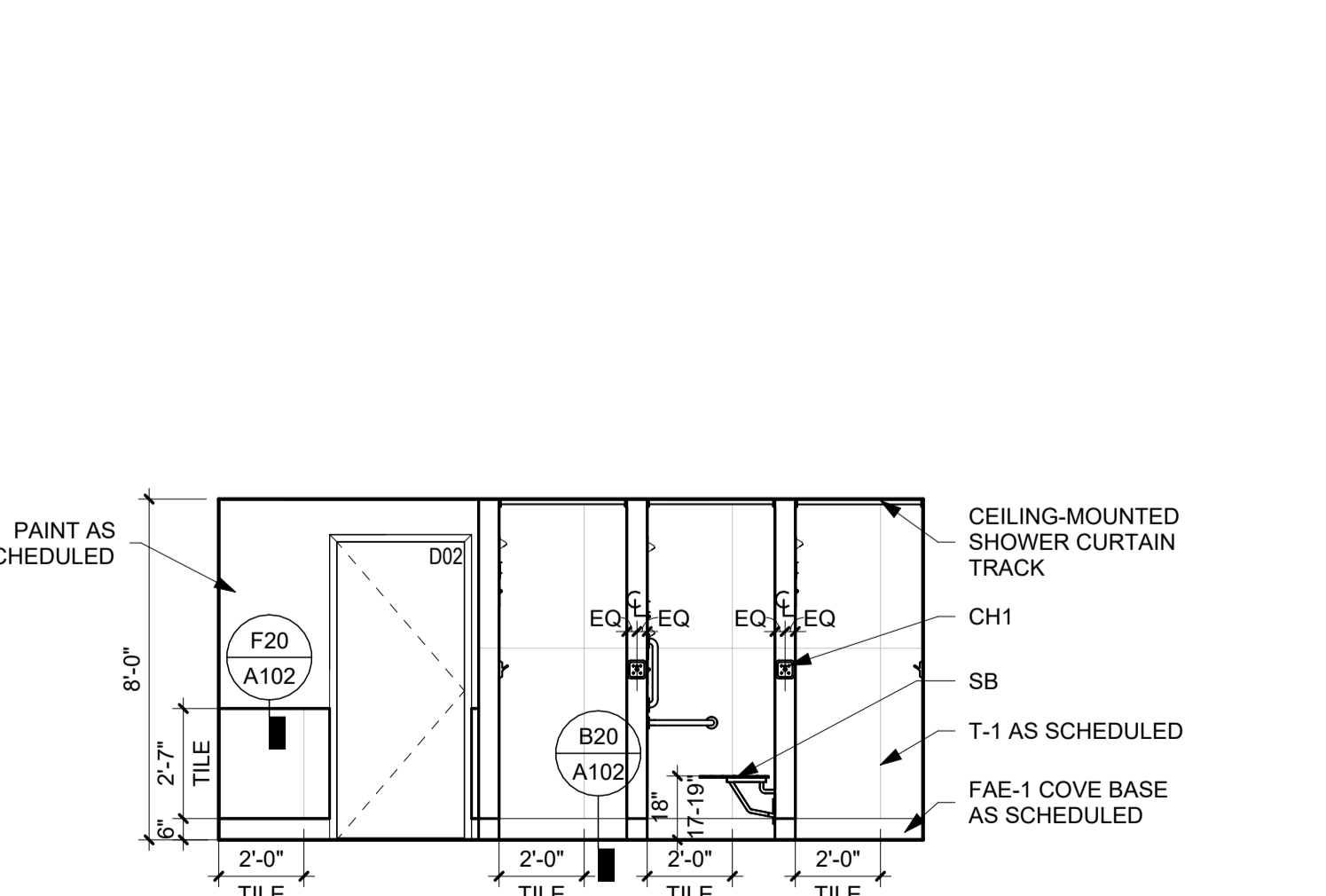


F22 ENLARGED FINISH PLAN - SOUTH SHOWER ROOM
1/4" = 1'-0"

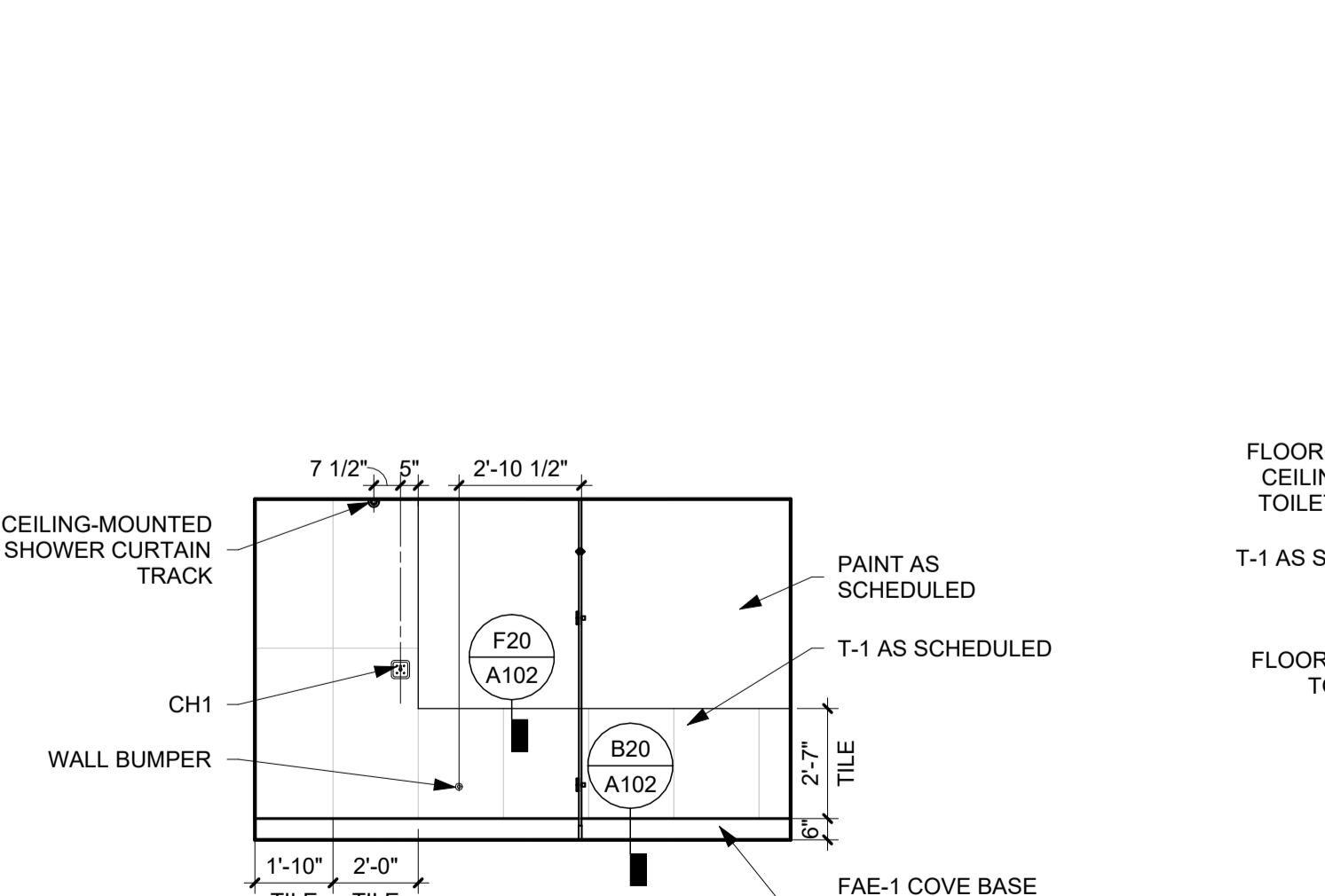
NOTE: BATHROOM ACCESSORIES AND FIXTURES OMITTED FROM VIEW FOR CLARITY



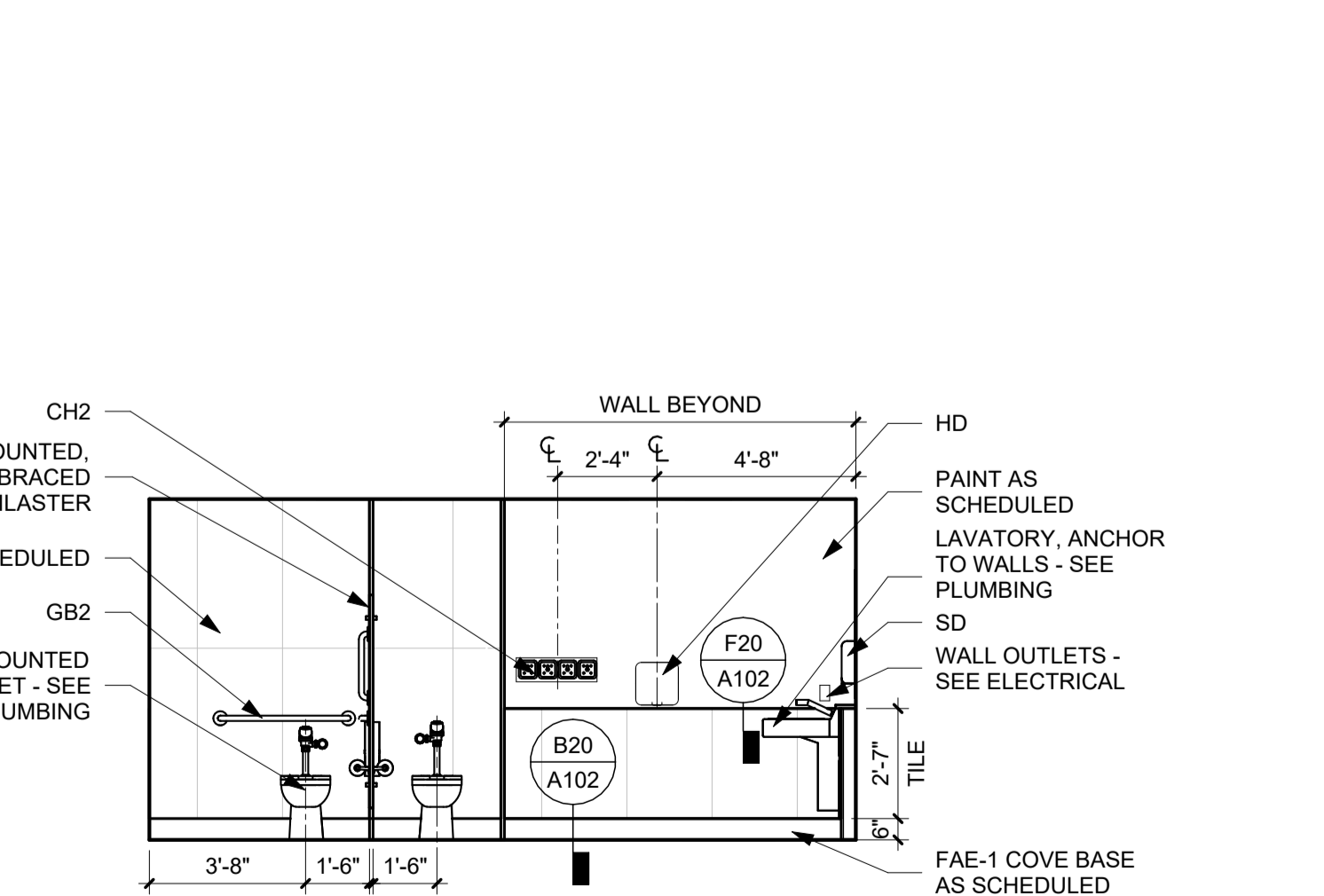
B1 INTERIOR ELEVATION - SOUTH SHOWER ROOM - NORTH
1/4" = 1'-0"



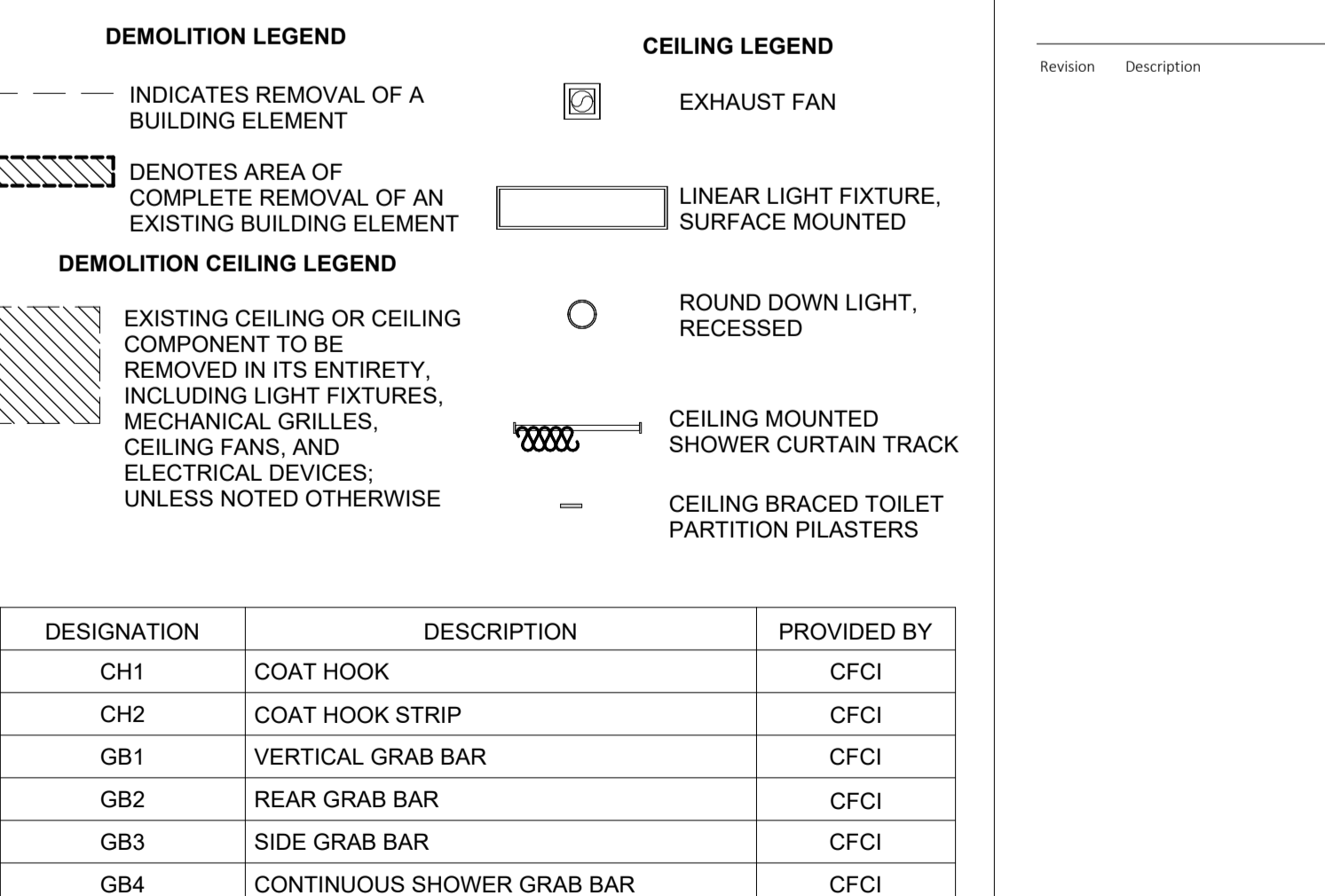
B6 INTERIOR ELEVATION - SOUTH SHOWER ROOM - EAST
1/4" = 1'-0"



B11 INTERIOR ELEVATION - SOUTH SHOWER ROOM - SOUTH
1/4" = 1'-0"



B17 INTERIOR ELEVATION - SOUTH SHOWER ROOM - WEST
1/4" = 1'-0"



B22 INTERIOR ELEVATION - ADA SHOWER CONTROL WALL
1/4" = 1'-0"

DESIGNATION	DESCRIPTION	PROVIDED BY
CH1	COAT HOOK	CFCI
CH2	COAT HOOK STRIP	CFCI
GB1	VERTICAL GRAB BAR	CFCI
GB2	REAR GRAB BAR	CFCI
GB3	SIDE GRAB BAR	CFCI
GB4	CONTINUOUS SHOWER GRAB BAR	CFCI
HD	HAND DRYER	CFCI
MR1	MIRROR - 18" x 36"	CFCI
SB	ADA SHOWER BENCH	CFCI
SD	SOAP DISPENSER	CFCI
SND	SANITARY NAPKIN DISPOSAL	CFCI
TTD	TOILET TISSUE DISPENSER	CFCI

GENERAL INFORMATION - RESTROOM ACCESSORIES

DESIGNATION	DESCRIPTION	PROVIDED BY
CH1	COAT HOOK	CFCI
CH2	COAT HOOK STRIP	CFCI
GB1	VERTICAL GRAB BAR	CFCI
GB2	REAR GRAB BAR	CFCI
GB3	SIDE GRAB BAR	CFCI
GB4	CONTINUOUS SHOWER GRAB BAR	CFCI
HD	HAND DRYER	CFCI
MR1	MIRROR - 18" x 36"	CFCI
SB	ADA SHOWER BENCH	CFCI
SD	SOAP DISPENSER	CFCI
SND	SANITARY NAPKIN DISPOSAL	CFCI
TTD	TOILET TISSUE DISPENSER	CFCI

DESIGNATION	DESCRIPTION	PROVIDED BY
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GB4	CONTINUOUS SHOWER GRAB BAR	CFCI
HD	HAND DRYER	CFCI
MR1	MIRROR - 18" x 36"	CFCI
SB	ADA SHOWER BENCH	CFCI
SD	SOAP DISPENSER	CFCI
SND	SANITARY NAPKIN DISPOSAL	CFCI
TTD	TOILET TISSUE DISPENSER	CFCI

Revision Description Date

OPN Project No. 23816000

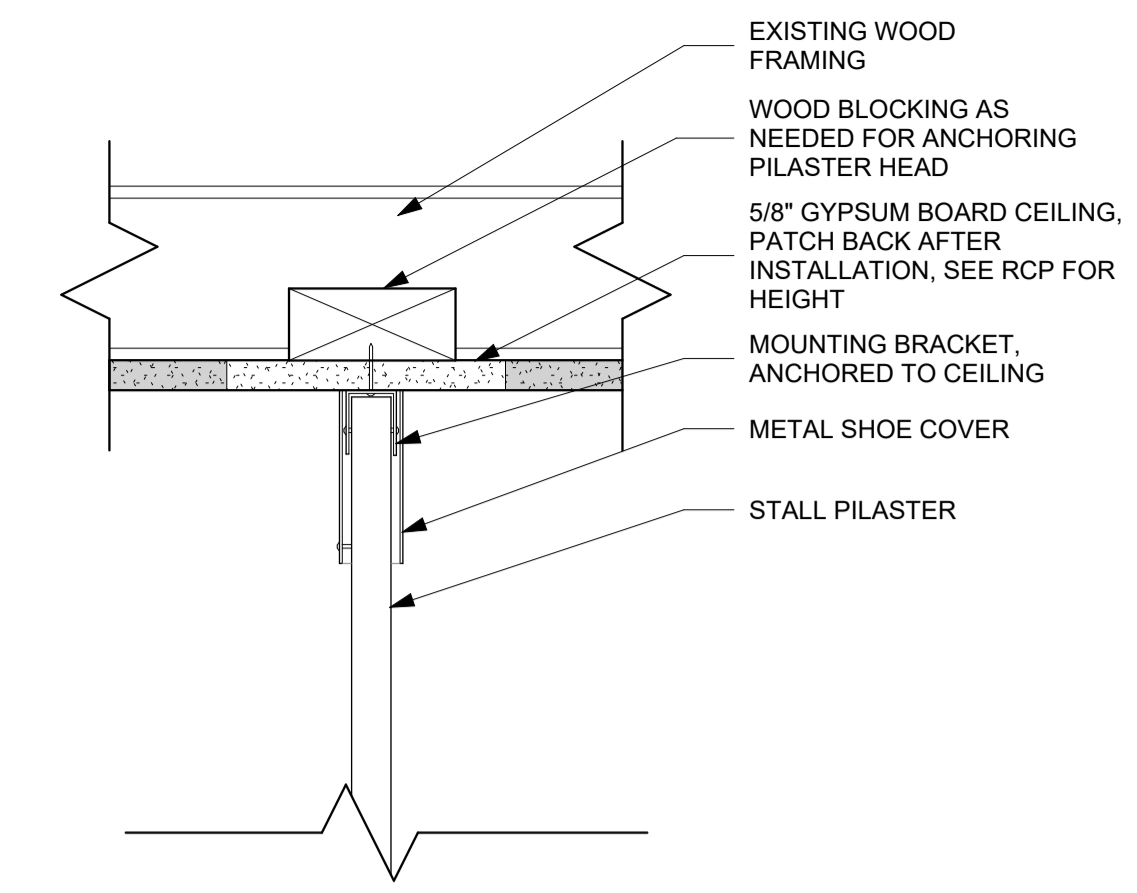
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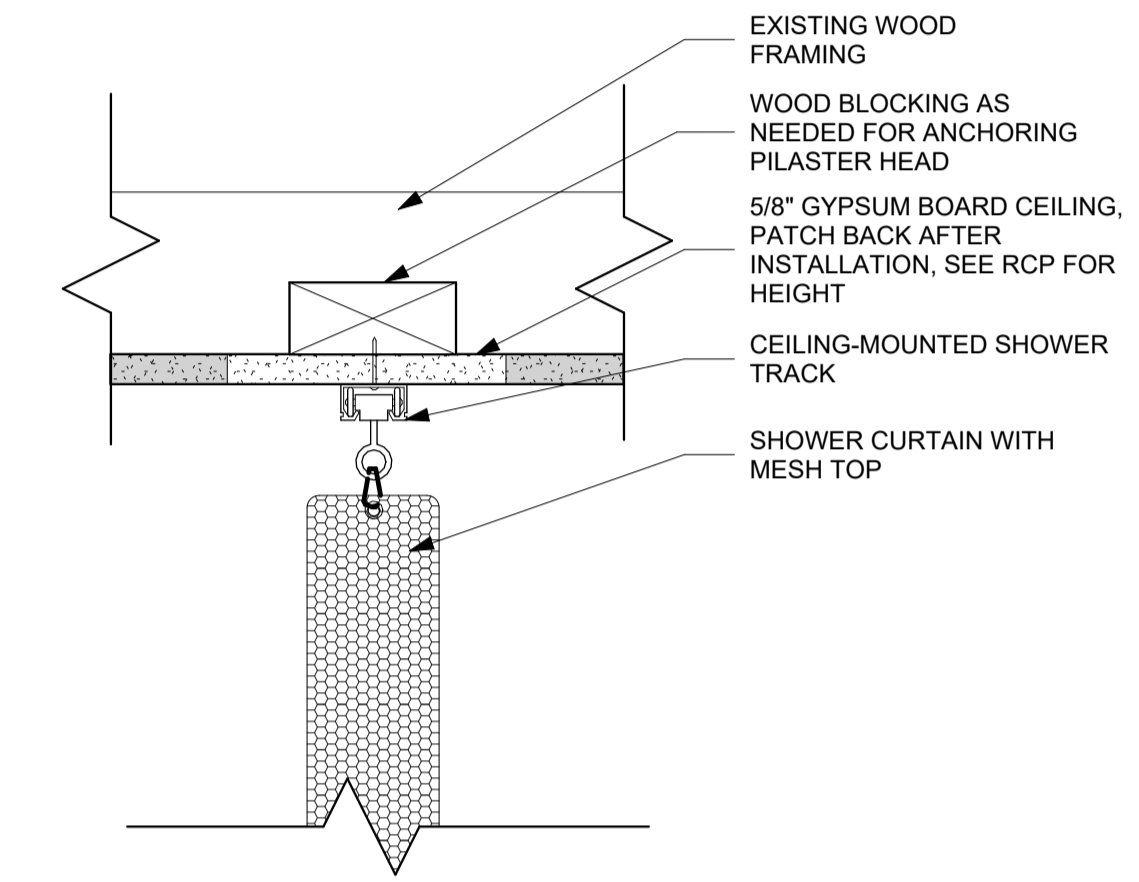
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FLOOR PLANS & INTERIOR ELEVATIONS

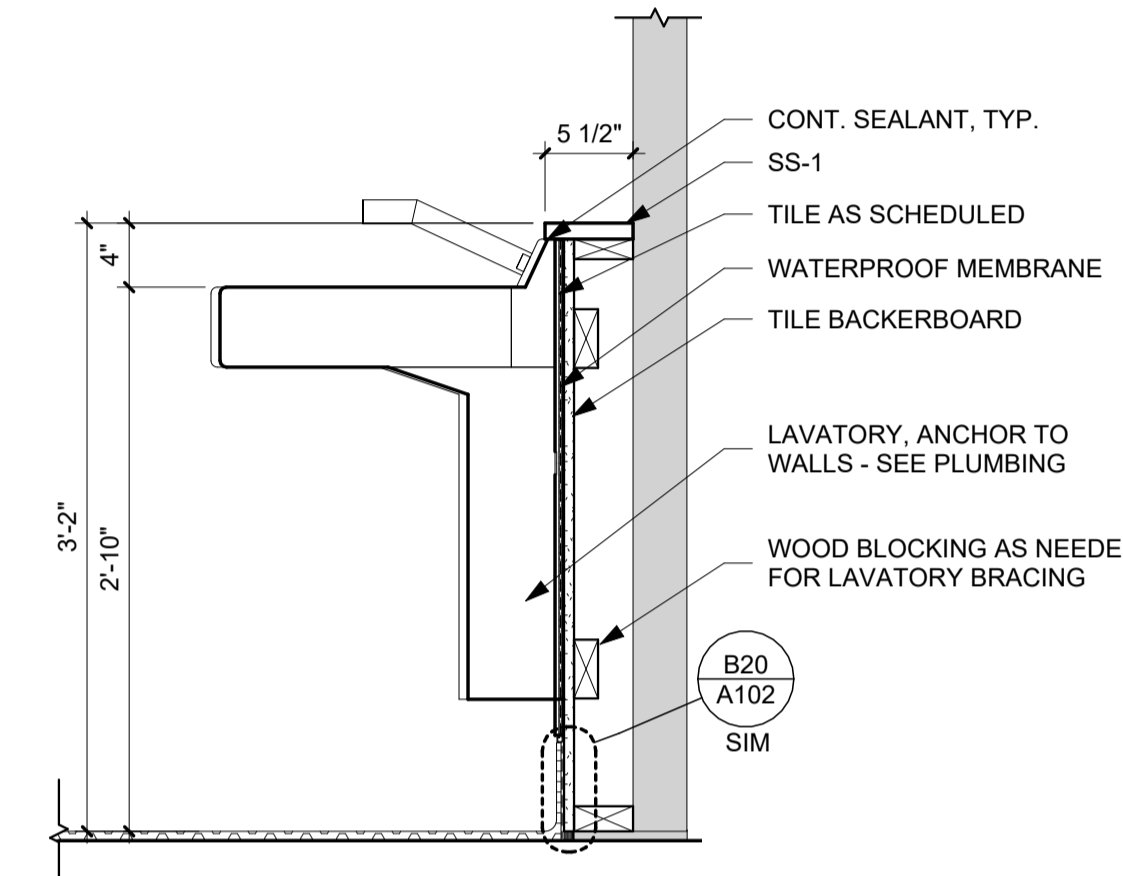
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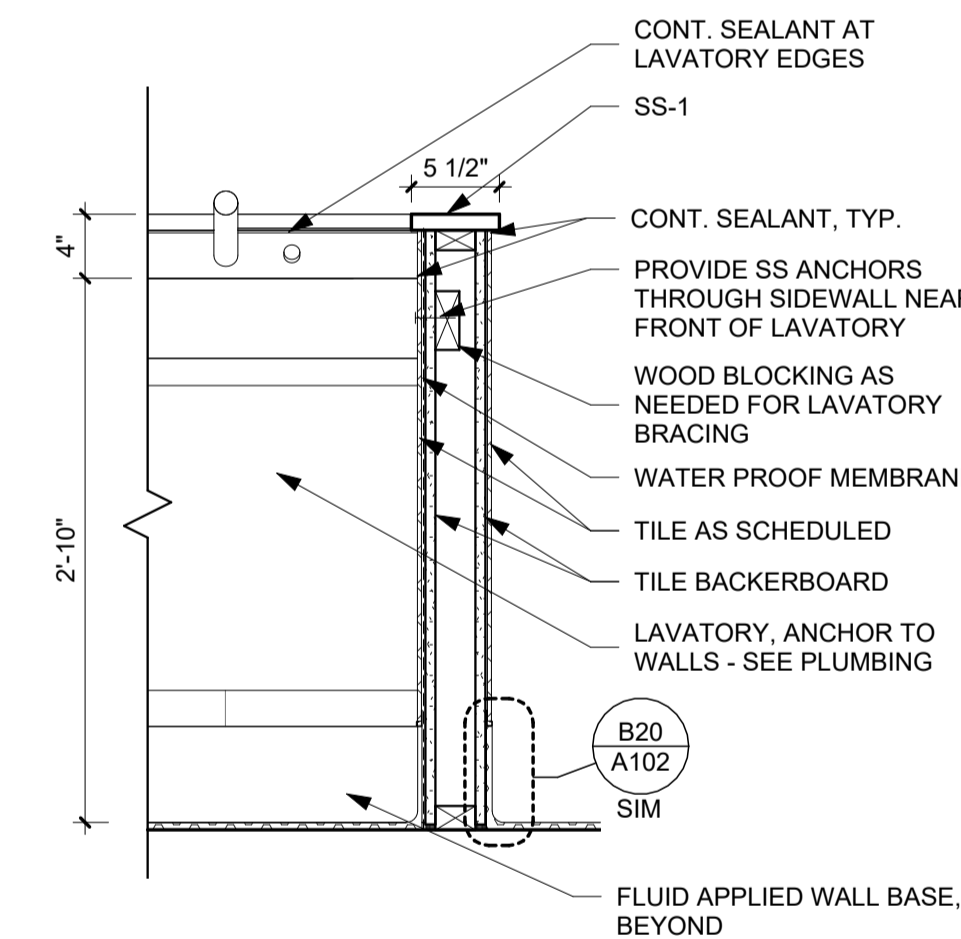
R20 SECTION DETAIL - STALL PILASTERS CEILING MOUNT
3" = 1'-0"



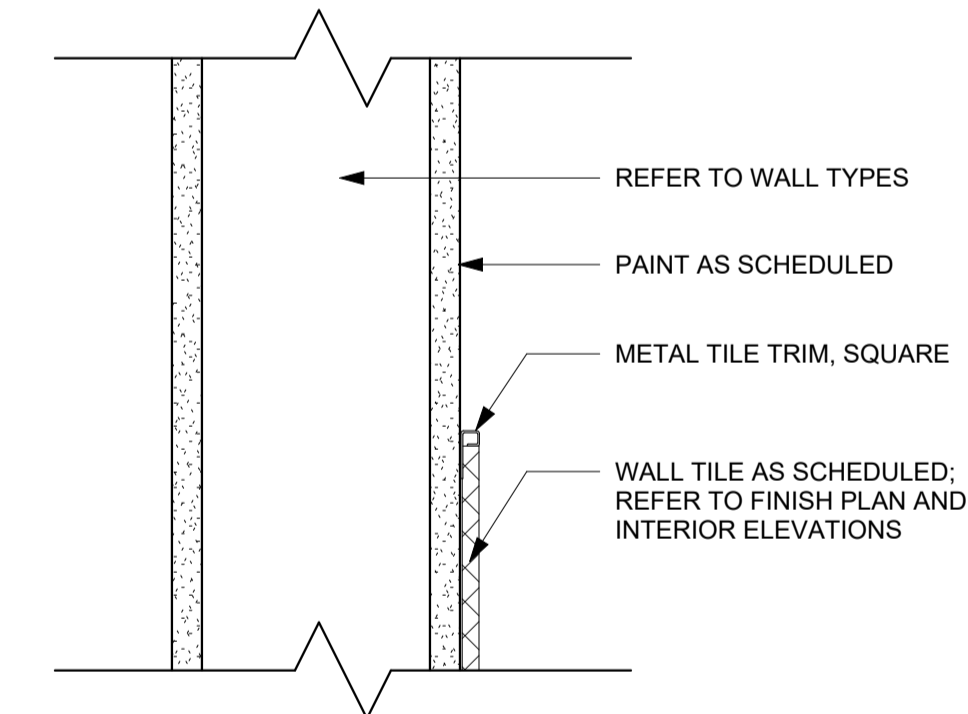
L20 SECTION DETAIL - CEILING MOUNTED SHOWER CURTAIN TRACK
3" = 1'-0"



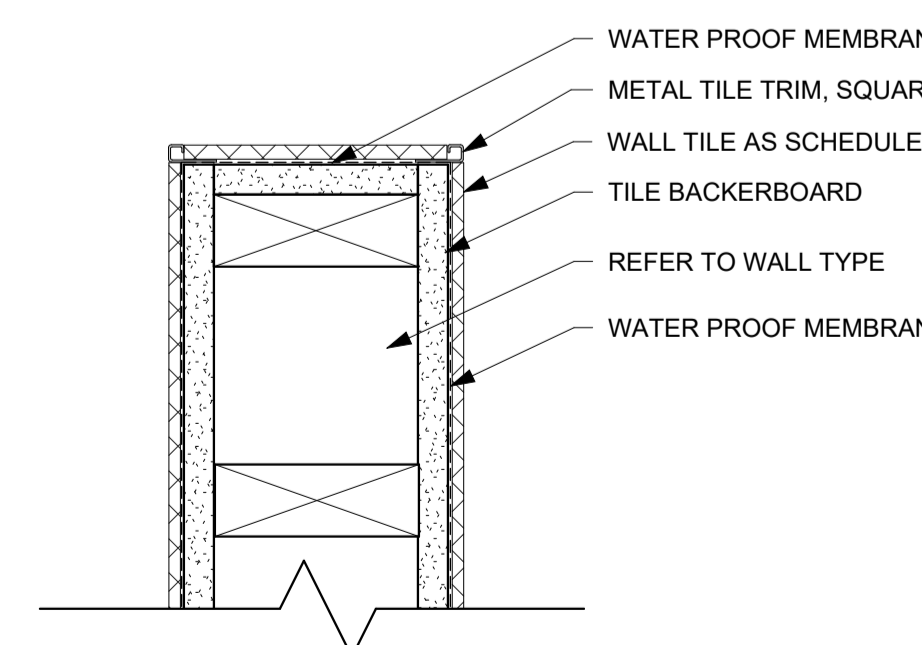
L14 SECTION DETAIL - LAVATORY ANCHORED @ BACKWALL
1" = 1'-0"



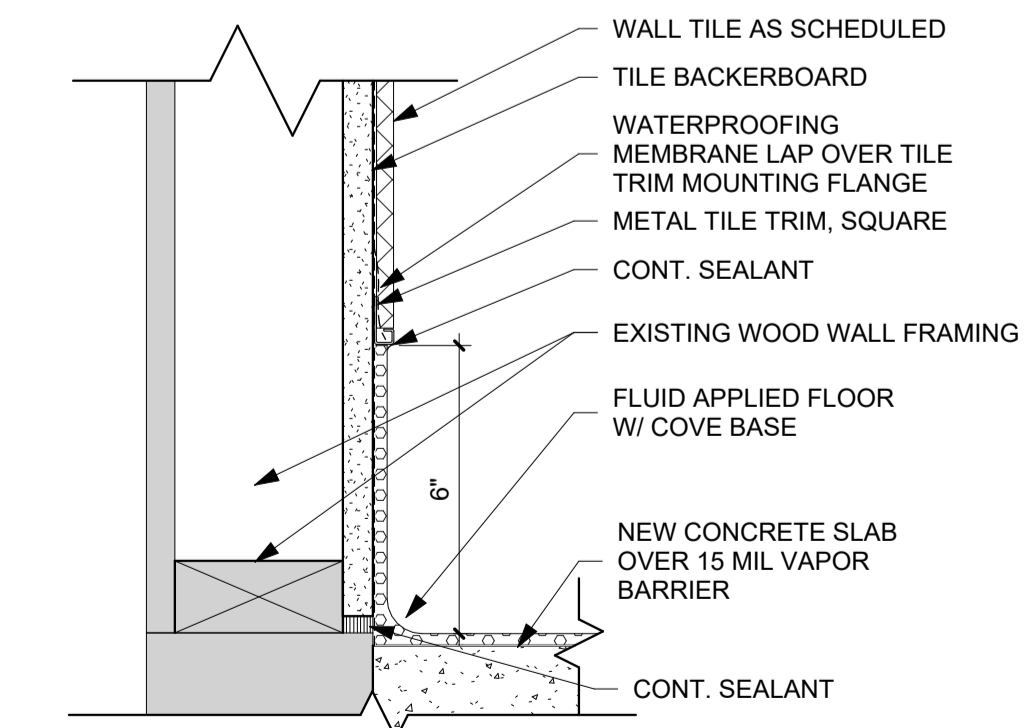
F14 SECTION DETAIL - LAVATORY ANCHORED @ SIDEWALL
1" = 1'-0"



F20 SECTION DETAIL - TILE TERMINATION TOP OF WAINSCOT
3" = 1'-0"



B14 PLAN DETAIL - EPOXY COVE BASE W/ FLASHING @ CORNER
3" = 1'-0"



B20 SECTION DETAIL - EPOXY COVE BASE WITH FLASHING
3" = 1'-0"

PLUMBING - NOTES

- 1. COORDINATE WORK WITH ALL OTHER TRADES AS DESCRIBED IN MECHANICAL GENERAL NOTE #1.
2. PROVIDE A COMPLETE PLUMBING SYSTEM INCLUDING PIPE, INSULATION, HANGERS, SUPPORTS, EQUIPMENT, WATER HEATERS, FIXTURES, MIXING VALVES, VALVES, ACCESSORIES AND SPECIALTIES. INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. SIZE AND INSTALL PLUMBING SYSTEM PER PLUMBING CODE. COMPLY WITH ALL LOCAL AND STATE CODES AND OWNER'S REQUIREMENTS.
3. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PLUMBING SYSTEM.
4. EXISTING PLUMBING DISTRIBUTION AND EQUIPMENT SHOWN ARE BASED ON NON-DESTRUCTIVE SITE OBSERVATION AND AS-BUILT DOCUMENTS PROVIDED BY THE OWNER. FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATING UNDER FLOOR PIPING AND PIPING CONCEALED IN BUILDING ASSEMBLIES WHERE WORK IS REQUIRED.
5. SEAL ALL WALL PIPE PENETRATIONS. PROVIDE THROUGH-PENETRATION FIRESTOPPING WHERE REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR WALL, FLOOR, AND CEILING ASSEMBLY RATINGS.
6. CONTINUE PIPE INSULATION THROUGH WALL, FLOOR, AND CEILING PENETRATIONS UNBROKEN, SEAL AROUND PIPE INSULATION AT PENETRATIONS.
7. VERIFY WITH ENGINEER FOR ANY FIXTURES NOT TAGGED OR PIPED PRIOR TO ANY WORK. CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING FIXTURES SHOWN ON ARCHITECTURAL DRAWINGS, TAGGED OR NOT TAGGED ON PLUMBING / MECHANICAL DRAWINGS UNLESS SPECIFICALLY NOTED AS EXCLUDED FROM SCOPE.

MECHANICAL ABBREVIATIONS

Table with 3 columns: Abbreviation, Description, Abbreviation, Description. Includes items like ABSOR (ABSORPTION), ACU (AIR CONDITIONING UNIT), AD (ACCESS DOOR OR AREA DRAIN), AFF (ABOVE FINISHED FLOOR), AFG (ABOVE FINISHED GRADE), AHU (AIR HANDLING UNIT), AV (AIR VENT), BOT (BOTTOM), BTU (BRITISH THERMAL UNIT), BTUH (BTU PER HOUR), BV (BALL VALVE), CA (COMPRESSED AIR), CB (CATCH BASIN), CENT (CENTRIFUGAL), CFM (CUBIC FEET PER MINUTE), CI (CAST IRON), CL (CENTER LINE), COND (CONDENSATE), CO (CLEAN OUT), CONC (CONCRETE), CONTR (CONTRACTOR), CP (CONDENSATE PUMP/CIRC. PUMP), CU (COPPER), CUH (CABINET UNIT HEATER), CWP (CIRCULATING WATER PUMP), DDC (DIRECT DIGITAL CONTROLS), DN (DOWN), DR (DRAIN), DS (DOWNSPOUT), EA (EXHAUST AIR), EAT (EXHAUST AIR TEMPERATURE), EC (ELECTRICAL CONTRACTOR), ED (ENTERING DRY BULB TEMPERATURE), EEW (EMERGENCY EYE WASH), EF (EXHAUST FAN), EJ (EXPANSION JOINT), EQUIP (EQUIPMENT), ESE (EMERGENCY SHOWER/EYEWASH), EST (EXTERNAL STATIC PRESSURE), EWB (ENTERING WET BULB TEMPERATURE), EWC (ELECTRIC WATER COOLER), EWT (ENTERING WATER TEMPERATURE), EX (EXISTING), EXH (EXHAUST), EXP (EXPANSION), FAI (FRESH AIR INTAKE), FCU (FAN COIL UNIT), FD (FLOOR DRAIN), FDC (FIRE DEPARTMENT CONNECTION), FLEX (FLEXIBLE), FLR (FLOOR), FPM (FEET PER MINUTE), FPS (FEET PER SECOND), FS (FLOOR SINK), FSEC (FOOD SERVICE EQUIPMENT CONSULTANT), FT (FINTUBE), FTG (FOOTING), GA (GALLON), GAL (GALLON), GALV (GALVANIZED), GC (GENERAL CONTRACTOR), GW (GREASE WASTE), GPH (GALLONS PER HOUR), GPM (GALLONS PER MINUTE), HR (HOUR), HTG (HEATING), HB (HOSE BIBB), IS (INTERNAL STATIC PRESSURE), JR (JANITOR RECEPTOR), LAV (LAVATORY), LD (LEAVING DRY BULB TEMPERATURE), LWT (LEAVING WATER TEMPERATURE), LWBT (LEAVING WET BULB TEMPERATURE), MB (MOP BASIN), MBH (1000 BTUH), MC (MECHANICAL CONTRACTOR), MECH (MECHANICAL), MH (MANHOLE), NTS (NOT TO SCALE), OA (OUTSIDE AIR), OD (OVERFLOW ROOF DRAIN), PL (PLUMBING CONTRACTOR), PSI (POUNDS PER SQUARE INCH), PRV (POWER ROOF VENTILATOR), PRV (PRESSURE REDUCING VALVE), PV (PRESSURE VENT), PVC (POLYVINYL CHLORIDE), RA (RETURN AIR), RD (ROOF DRAIN), RH (RELATIVE HUMIDITY), RTU (ROOF TOP UNIT), RV (RELIEF VALVE), RVT (ROOF VENT TERMINATION), SK (SINK), SA (SUPPLY AIR), SH (SHOWER), SO (STORM OVERFLOW), ST (STORM), TCC (TEMPERATURE CONTROL CONTRACTOR), TYP (TYPICAL), UH (UNIT HEATER), UR (URINAL), UV (UNIT VENTILATOR), VA (VENTILATION AIR), VTR (VENT THROUGH ROOF), WB (WALL BOX - CONDENSATE), WC (WATER CLOSET), WHA (WATER HAMMER ARRESTOR), WH (WATER HEATER).

PIPING LEGEND - PLUMBING

Table mapping line styles to plumbing components: AV (ACID VENT), AW (ACID WASTE), CA (COMPRESSED AIR), CW (DOMESTIC COLD WATER), HW (DOMESTIC HOT WATER), DSW (DOMESTIC SOFT WATER), GW (GREASE WASTE), G (NATURAL GAS), OV (NATURAL GAS VENT), NPCW (NON-POTABLE COLD WATER), NPHW (NON-POTABLE HOT WATER), NPSW (NON-POTABLE SOFT WATER), OSW (OIL / SAND WASTE), PA (PROCESSED AIR), LP (PROPANE), PD (PUMPED DISCHARGE), RHW (RECIRCULATING HOT WATER), SAN (SANITARY), ST (STORM), SO (STORM OVERFLOW), P (TRAP PRIMER), V (VENT).

PIPING LEGEND - FIRE PROTECTION

Table mapping line styles to fire protection components: FPD (FIRE PROTECTION DRY), FPP (FIRE PROTECTION PRE-ACTION), FPW (FIRE PROTECTION WET).

PIPE FITTINGS

Table mapping symbols to pipe fittings: SINGLE LINE (ELBOW, ELBOW - DOUBLE BRANCH, ELBOW - OUTLET DOWN, ELBOW - OUTLET UP, ELBOW - LONG RADIUS, ELBOW - SHORT RADIUS, 45° ELBOW, TEE - VENT, TEE - SANITARY, TEE - OUTLET DOWN, TEE - OUTLET UP, TEE - SIDE OUTLET DOWN, TEE - SIDE OUTLET UP, CROSS - VENT, CROSS - SANITARY, LATERAL, TEE - SINGLE SWEEP 'COMBO WYE', REDUCER - CONCENTRIC, REDUCER - ECCENTRIC, CAPPED CONNECTION, FLANGED CONNECTION) and DOUBLE LINE (ELBOW - DOUBLE BRANCH, ELBOW - OUTLET DOWN, ELBOW - OUTLET UP, ELBOW - LONG RADIUS, ELBOW - SHORT RADIUS, 45° ELBOW, TEE - VENT, TEE - SANITARY, TEE - OUTLET DOWN, TEE - OUTLET UP, TEE - SIDE OUTLET DOWN, TEE - SIDE OUTLET UP, CROSS - VENT, CROSS - SANITARY, LATERAL, TEE - SINGLE SWEEP 'COMBO WYE', REDUCER - CONCENTRIC, REDUCER - ECCENTRIC, CAPPED CONNECTION, FLANGED CONNECTION).

PLUMBING ACCESSORY LEGEND

Table mapping symbols to plumbing accessories: HB (HOSE BIBB), RH (ROOF HYDRANT), CO (CLEAN OUT), FCO (FLOOR CLEAN OUT), FD (FLOOR DRAIN), VTR (VENT THRU ROOF (# DENOTES PIPE DIAMETER)), RD / ORD (ROOF DRAIN / OVERFLOW ROOF DRAIN), CRD (COMBO ROOF/OVERFLOW DRAIN), LT (LAMB TONGUE), BACKFLOW PREVENTER, VALVE - BALL / SHUT-OFF.

NOTE: ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT



GENERAL NOTE:

UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN SHOWN BASED UPON INFORMATION OBTAINED FROM FIELD LOCATIONS BY UTILITY COMPANIES, AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS ALSO POSSIBLE THAT THERE MAY BE OTHER UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES IN EXISTENCE THAT ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF EACH INDIVIDUAL PARTY REFERENCING THIS PLAN TO DETERMINE THE EXACT LOCATION AND TYPE OF UNDERGROUND FACILITIES ON THE SITE. HAND EXCAVATE AT CRITICAL POINTS AS NECESSARY TO VERIFY LOCATIONS, SIZES, ELEVATIONS, FLOW LINES, ETC. IF A PROBLEM OR INTERFERENCE EXISTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING.

GENERAL SYMBOLS

Table mapping line styles to general symbols: EXISTING = HALFTONE LINEWORK, NEW = DARK LINEWORK, DEMO = DASHED DARK LINEWORK, BELOW GRADE = LONG DASHED DARK LINEWORK, NEW CONNECTION POINT, POINT OF DISCONNECT, KEYNOTE, EQUIPMENT IDENTIFICATION TAG, DETAIL DRAWING REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE, SECTION CUT REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE, INTERIOR ELEVATION DRAWING REFERENCE TAG.

H.V.A.C. / DUCTWORK SYMBOLS

Table mapping symbols to HVAC/ductwork components: RECT. RND. OVAL (SUPPLY (SA), OUTSIDE (OA), VENTILATION (VA) AIR DUCT (UP / DOWN / SECTION)), RETURN (RA) AIR DUCT (UP / DOWN / SECTION), EXHAUST (EA) AIR DUCT (UP / DOWN / SECTION), RECTANGULAR DUCT (WIDTH / HEIGHT / SYSTEM), ROUND DUCT (DIAMETER / SYSTEM), FLAT OVAL DUCT (WIDTH / HEIGHT / SYSTEM), SUPPLY DIFFUSER, SUPPLY REGISTER OR GRILLE, LINEAR SLOT DIFFUSER, RETURN REGISTER OR GRILLE, EXHAUST REGISTER OR GRILLE, DUCT ACCESS DOOR, DUCT END CAP, TURNING VANES, VAV TERMINAL UNIT, FLEXIBLE DUCTWORK, ELEVATION CHANGE (RISE OR DROP), HIGH EFF. TAKE OFF FITTING w/ VOLUME DAMPER, BACKDRAFT DAMPER, OPPOSED BLADE DAMPER, PARALLEL BLADE DAMPER, VOLUME DAMPER, FIRE DAMPER, SMOKE DAMPER, FIRE/SMOKE DAMPER, MOTORIZED ACTUATOR, THERMOSTAT, CARBON MONOXIDE SENSOR, HUMIDISTAT, SIDE WALL DIFFUSER, ROUND DIFFUSER, EXTERIOR LOUVER, FIXTURE IDENTIFICATION TAG, NECK SIZE / CFM.

PIPING LEGEND - MECHANICAL

Table mapping line styles to mechanical piping components: BD (BOILER BLOWDOWN), BF (BOILER FEED), CWR (CHILLED WATER RETURN), CWS (CHILLED WATER SUPPLY), CD (CONDENSATE DRAIN), PC (PUMPED CONDENSATE).

MECHANICAL - GENERAL NOTES

- 1. COORDINATE MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. BEGIN INSTALLATION AND ROUGH-IN AFTER COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION IS COMPLETE. COORDINATE BUILDING STRUCTURE, ARCHITECTURAL ASSEMBLIES, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR REWORK ASSOCIATED WITH FAILURE TO COORDINATE.
2. INCORPORATE MECHANICAL SPECIFICATIONS, DRAWINGS, STATE AND LOCAL CODES, AND OWNER STANDARDS INTO WORK.
3. WARNING - CALL 48 HOURS BEFORE YOU DIG: LAW REQUIRES ANYONE DOING ANY EXCAVATION, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. ONE CALL 811.
4. REFER TO ARCHITECTURAL SPECIFICATIONS FOR THROUGH-PENETRATION FIRESTOPPING AND TO ARCHITECTURAL CODE PLAN FOR FIRE RATED WALLS, FLOORS, AND CEILINGS. EACH TRADE IS RESPONSIBLE TO FIRESTOP PENETRATIONS THROUGH RATED ASSEMBLIES.
5. EACH TRADE IS RESPONSIBLE FOR MAKING PENETRATIONS WHERE REQUIRED IN EXISTING WALLS, FLOORS, CEILINGS, AND ROOFS. MAKE PENETRATIONS NEAT. PATCH, CONCEAL, OR CAULK OVERCUT.
6. COVER EXPOSED WALL PENETRATIONS WITH ESCUTCHEONS OR SHEET METAL AS APPROPRIATE.
7. CAULK ALL CONCEALED AND EXPOSED PIPING AND DUCT WALL PENETRATIONS TO PREVENT NOISE TRANSFER BETWEEN SPACES.
8. CREATE OPENINGS IN THE BUILDING THAT ARE REQUIRED TO REMOVE EXISTING ITEMS AND TO BRING IN NEW EQUIPMENT. PATCH ALL OPENINGS CREATED AND FINISHED WITH MATERIALS TO MATCH EXISTING CONDITIONS. INCLUDE THIS WORK IN BID.

MECHANICAL - DEMOLITION NOTES

- 1. MECHANICAL DEMOLITION DRAWINGS SHOWING EXISTING CONDITIONS HAVE BEEN PREPARED BASED ON NON-DESTRUCTIVE FIELD OBSERVATION AND AS-BUILT DRAWINGS PROVIDED BY THE OWNER. FIELD VERIFY EXISTING SYSTEMS BEFORE BEGINNING WORK. NOTIFY ARCHITECT/ENGINEER IF EXISTING CONDITIONS ARE MATERIALLY DIFFERENT THAN THOSE SHOWN ON THE PLANS.
2. BE FAMILIAR WITH EXISTING MECHANICAL SYSTEMS THAT WILL BE AFFECTED BY THE DEMOLITION WORK. OBTAIN PERMISSION FROM THE OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS THAT AFFECT AREAS BEYOND THE LIMITS OF THE IMMEDIATE DEMOLITION AREA. INFORM THE OWNER'S REPRESENTATIVE OF THE REASON FOR AND DURATION OF THE SHUT-DOWN, MINIMIZE IMPACT TO OTHER AREAS. PROCEED WITH THE SHUT-DOWN AFTER PERMISSION FROM THE OWNER IS GRANTED.
3. REMOVE PIPING, HANGERS, DUCTWORK, GRILLES, REGISTERS, DIFFUSERS, ETC. THAT ARE INDICATED TO BE REMOVED IN A TIMELY MANNER IN ACCORDANCE WITH THE GENERAL DEMOLITION SPECIFICATIONS. COORDINATE WITH THE OWNER AND OTHER CONTRACTORS.
4. UNLESS EQUIPMENT TO BE REMOVED IS NOTED AS OWNER'S SALVAGE, DISPOSE OF EQUIPMENT AND/OR MATERIALS INDICATED TO BE REMOVED PROMPTLY.
5. REMOVE ALL ABANDONED PIPING AND DUCTWORK THAT IS EXPOSED OR ACCESSIBLE WITHOUT WALL OR CEILING DEMOLITION. REFER TO ARCH PLANS FOR CEILINGS TO BE REMOVED.
6. REPAIR OR REPLACE TELECOMMUNICATIONS FACILITIES OR EQUIPMENT FOUND TO BE DAMAGED OR NON-FUNCTIONAL AFTER SUBSTANTIAL COMPLETION.

HVAC - NOTES

- 1. COORDINATE WORK WITH ALL OTHER TRADES AS DESCRIBED IN MECHANICAL GENERAL NOTE #1.
2. PROVIDE A COMPLETE HVAC SYSTEM, INCLUDING SUPPLY, RETURN, EXHAUST, AND VENTILATION DUCTWORK, MECHANICAL EQUIPMENT, SUPPORTS, HANGERS, DIFFUSERS, GRILLES, REGISTERS, AND ALL APPURTENANCES. INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. INSTALL SYSTEM TO MEET ALL CITY AND STATE CODES AND REQUIREMENTS.
3. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF DUCT SYSTEM. INDICATED DUCT LOCATIONS, CONFIGURATIONS, AND ARRANGEMENTS WERE USED TO SIZE DUCTS AND CALCULATE FRICTION LOSS FOR AIR HANDLING EQUIPMENT SIZING AND FOR OTHER DESIGN CONSIDERATIONS. INSTALL DUCT SYSTEMS AS INDICATED UNLESS DEVIATIONS TO LAYOUT ARE APPROVED BY ARCHITECT/ENGINEER.
4. ALL DUCT DIMENSIONS INDICATED ARE INTERIOR FREE AREA DUCT DIMENSIONS AND DO NOT INCLUDE INSULATION REQUIREMENTS.
5. SEAL ALL WALL AND FLOOR DUCT PENETRATIONS. PROVIDE FIRE CAULKING ASSEMBLIES FOR PENETRATIONS OF RATED ASSEMBLIES. REFER TO ARCHITECTURAL DRAWINGS FOR ASSEMBLY RATINGS.
6. CONTINUE DUCT AND PIPE INSULATION THROUGH WALLS, FLOORS, AND CEILING PENETRATIONS UNBROKEN, EXCEPT WHERE FIRE OR FIRE/SMOKE DAMPERS ARE INSTALLED IN DUCTWORK. SEAL AROUND DUCT INSULATION AT WALL PENETRATIONS.



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Owner: IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES

Project: SJD FRESH START WOMEN'S CENTER RESTROOM REMODEL 1517 HICKMAN ROAD DES MOINES, IA 50314

Mechanical Engineer: KCL ENGINEERING 300 4TH ST WEST DES MOINES, IA 50265 P. 515-724-7938

Electrical Engineer: KCL ENGINEERING 300 4TH ST WEST DES MOINES, IA 50265 P. 515-724-7938

Key Plan:

Revision Description Date

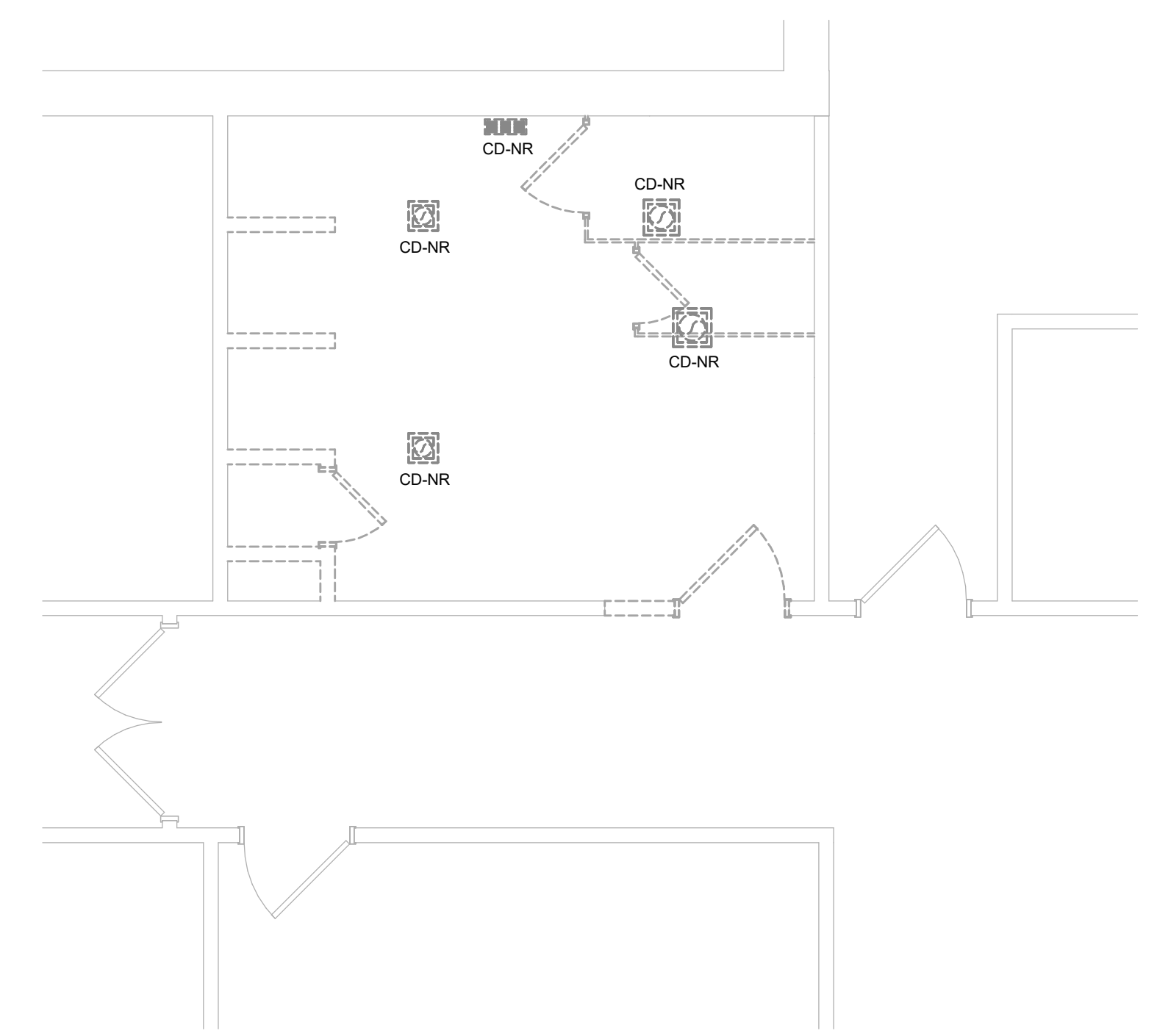
OPN Project No. 23816000

Sheet Issue Date 12/4/2023

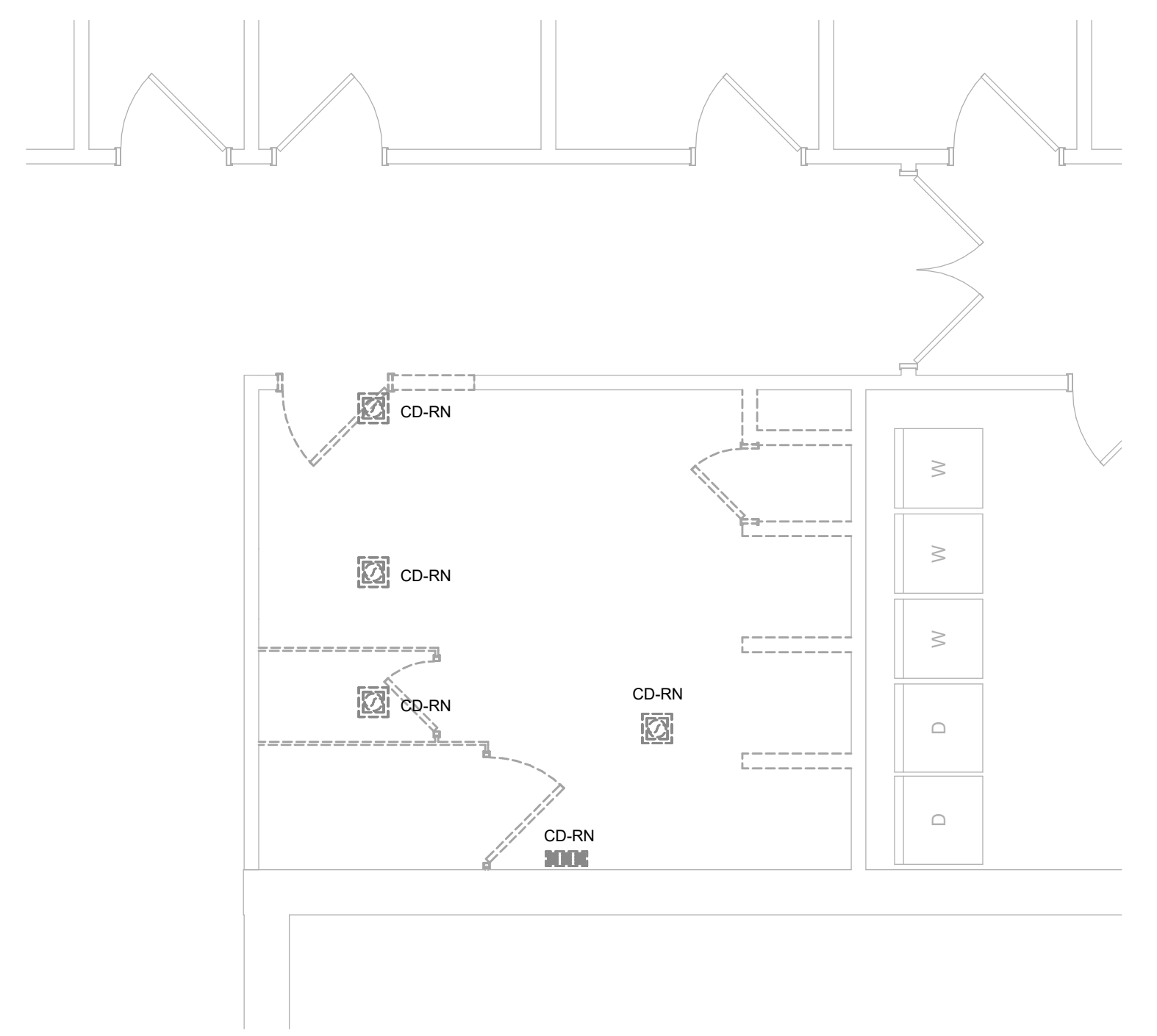
Sheet Name: MECHANICAL GENERAL NOTES & SYMBOLS

Sheet Number: M000

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2 MECHANICAL DEMOLITION PLAN - SOUTH RESTROOM
1/4" = 1'-0"



1 MECHANICAL DEMOLITION PLAN - NORTH RESTROOM
1/4" = 1'-0"

GENERAL NOTES:

- A. REFER TO M0.00 FOR GENERAL NOTES & SYMBOLS.
- B. PATCH WALLS, ROOFS, AND/OR FLOOR WHERE DUCTS, GRILLES, PIPES, OR EQUIPMENT ARE REMOVED. PAINT OR FINISH TO MATCH ORIGINAL CONSTRUCTION.
- C. [COORDINATE WITH OWNER AND ASBESTOS ABATEMENT CONTRACTOR FOR WORK IN AREAS CONTAINING ASBESTOS.]
- D. WHERE DUCTWORK IS REMOVED, REMOVE ALL ASSOCIATED SUPPORTS.
- E. WHERE EQUIPMENT IS REMOVED, REMOVE ALL ASSOCIATED SUPPORTS, DUCTWORK, PIPING, AND CONTROLS.
- F. WHERE CONTROLS ARE REMOVED, REMOVE ALL ASSOCIATED WIRING AND/OR PNEUMATIC TUBING. PATCH WALL OPENINGS AND PAINT OR FINISH TO MATCH ORIGINAL CONSTRUCTION. IN WALLS THAT CANNOT BE PATCHED, INSTALL STAINLESS STEEL COVER PLATE. ABANDON PNEUMATIC TUBING IN WALLS.
- G. ABBREVIATIONS:
 E - EXISTING ITEM TO REMAIN
 ER - NEW LOCATION OF EXISTING ITEM
 N - NEW ITEM IN EXISTING LOCATION
 R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
 RN - REPLACE EXISTING WITH NEW
 RR - EXISTING ITEM TO BE REMOVED AND RELOCATE

KEYNOTES #

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Key Plan

Revision	Description	Date

OPN Project No.
23816000

Sheet Issue Date
BID SET 12/4/2023

Sheet Name
MECHANICAL DEMOLITION

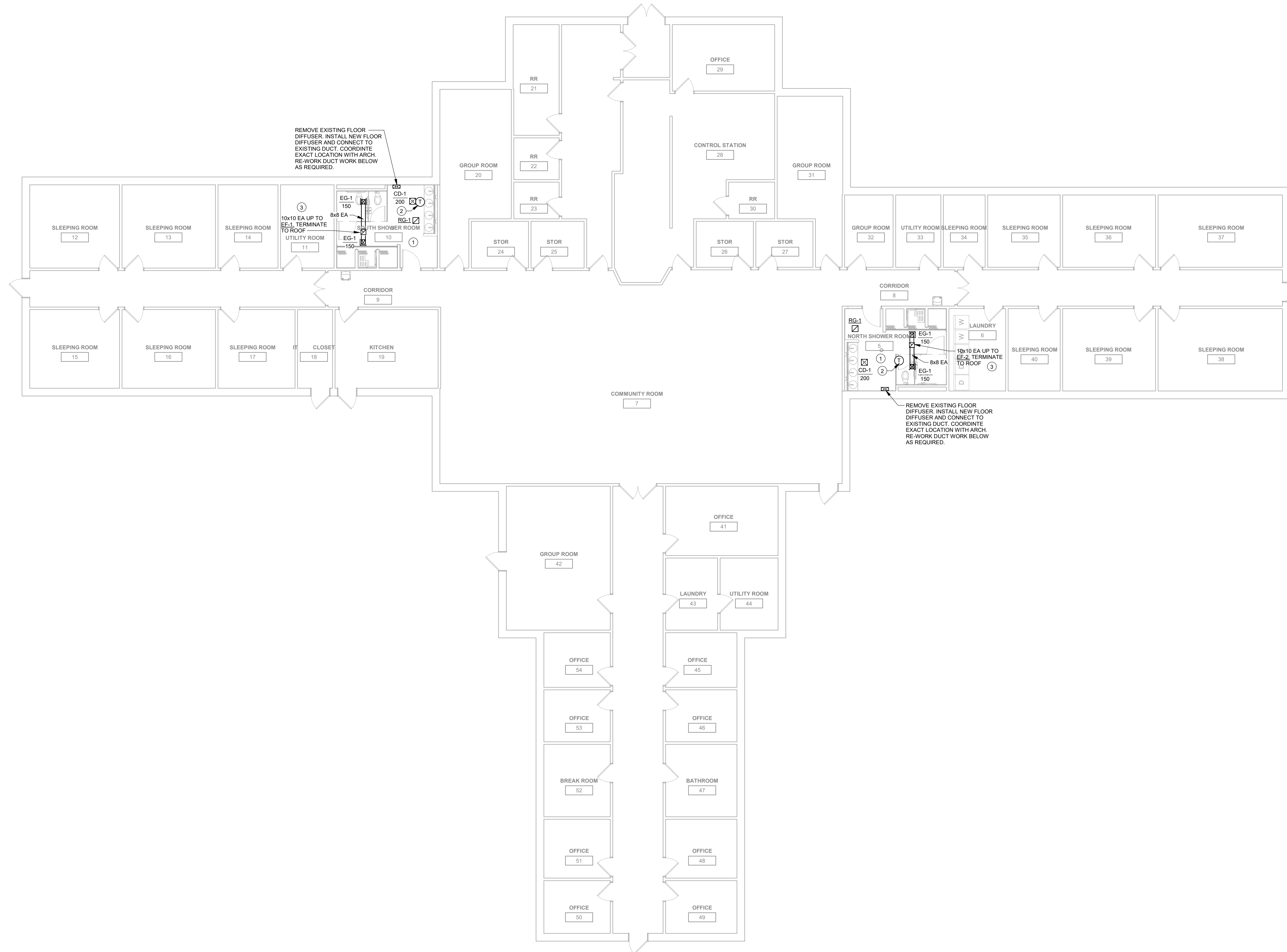
Sheet Number
MD101

GENERAL NOTES:

- A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.
- B. REFER TO M301 FOR MECHANICAL DETAILS.
- C. REFER TO M501 FOR MECHANICAL SCHEDULES.
- D. BRANCH DUCT SIZES TO AIR TERMINALS SHALL MATCH NECK SIZE OF GRILLE, REGISTER, OR DIFFUSER UNLESS NOTED OTHERWISE.
- E. MAXIMUM FLEXIBLE DUCT LENGTH TO DIFFUSERS SHALL BE 60", WITH MAXIMUM OF ONE 90 DEGREE ELBOW.

KEYNOTES #

- 1 REMOVE EXISTING GRILLES AND DIFFUSERS. CONNECT NEW GRILLES AND DIFFUSERS TO EXISTING DUCT. INSULATE ANY NEW DUCT AND REPAIR ANY EXISTING DAMAGE (TYP.)
- 2 RE-INSTALL EXISTING TEMPERATURE CEILING SENSOR.
- 3 PROVIDE 1-HR FIRE DAMPER AT HORIZONTAL RATED ASSEMBLY. RATED ASSEMBLY TO BE DETERMINED DURING CONSTRUCTION. EITHER CEILING OR LID ABOVE CEILING.



Key Plan

Revision Description Date

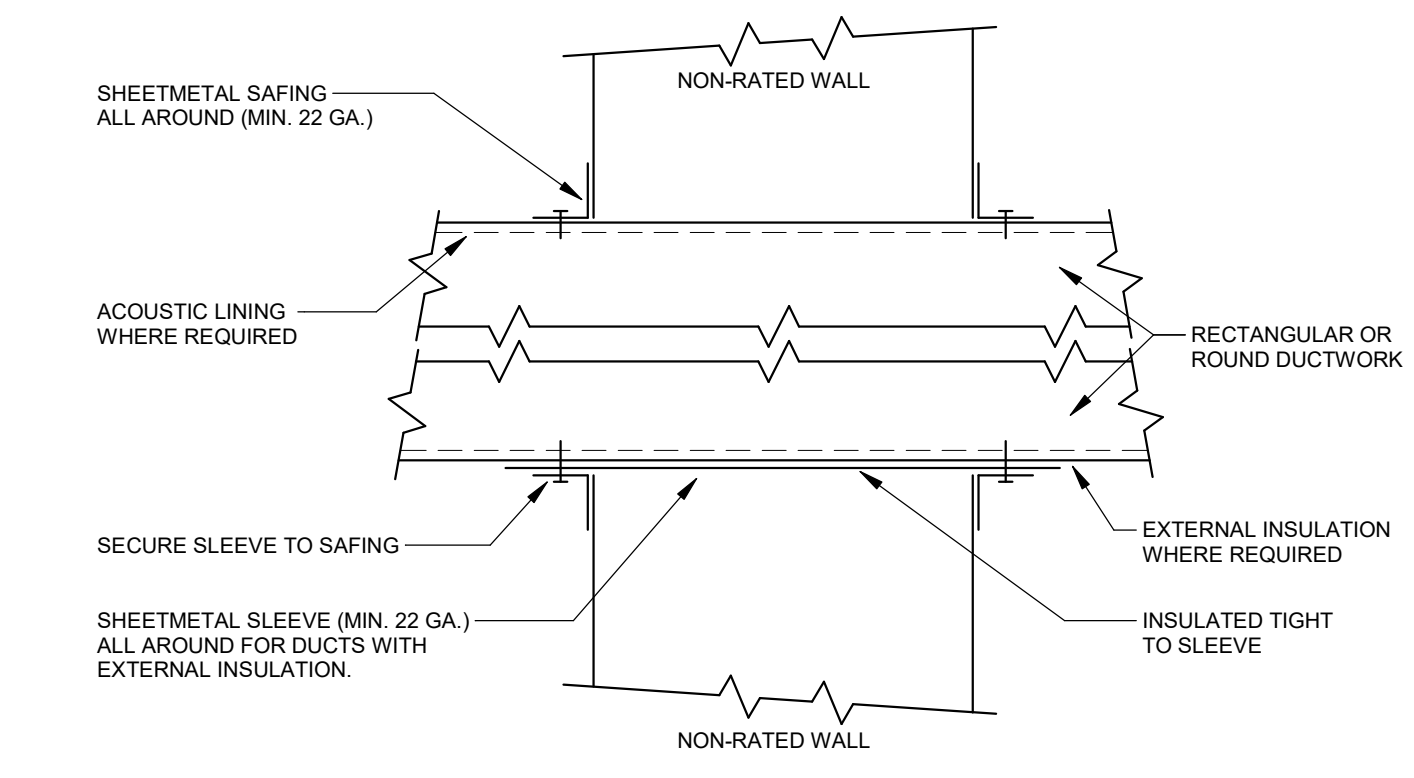
OPN Project No.
23816000

Sheet Issue Date
BID SET 12/4/2023

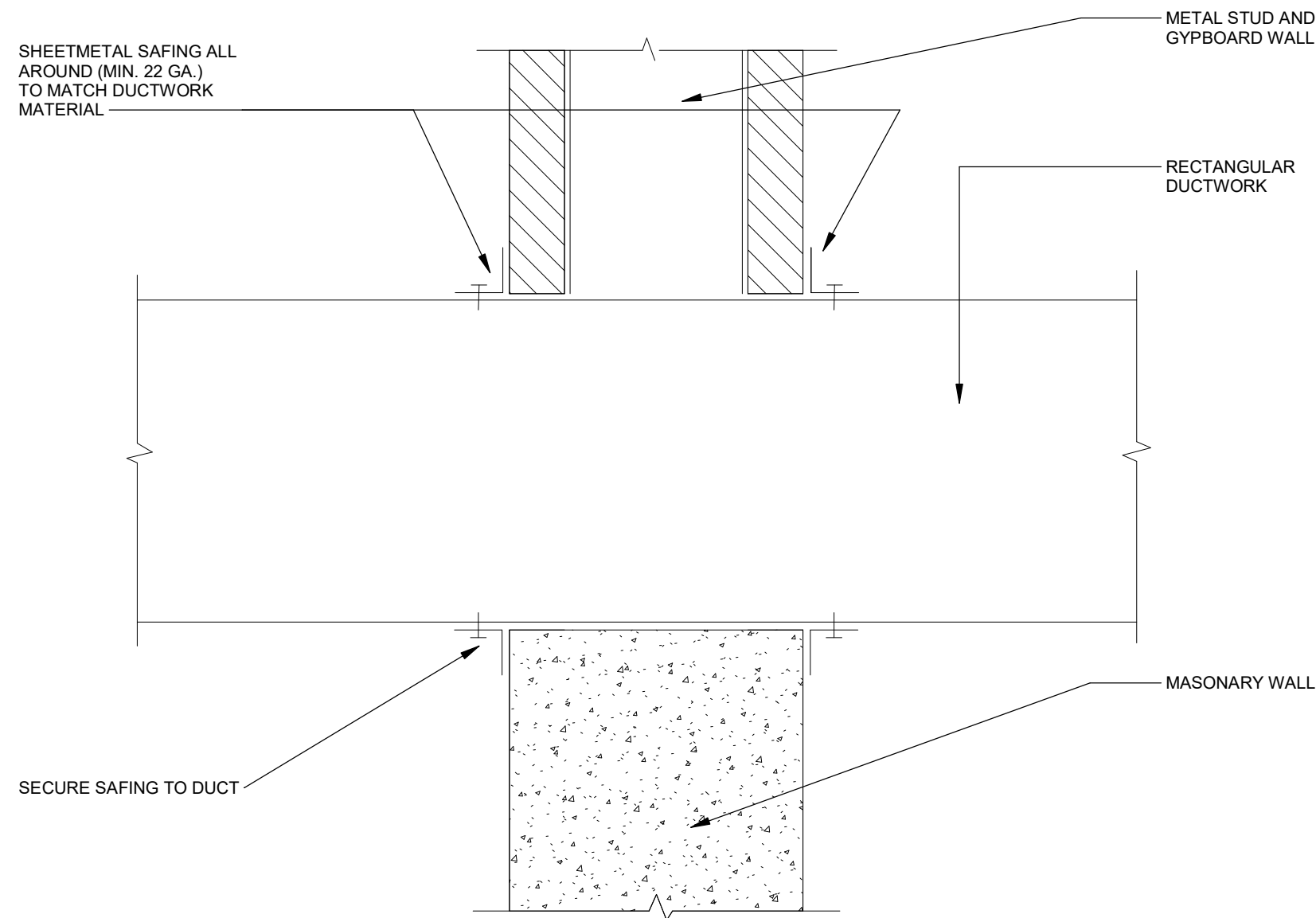
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MECHANICAL HVAC OVERALL PLAN

Sheet Number

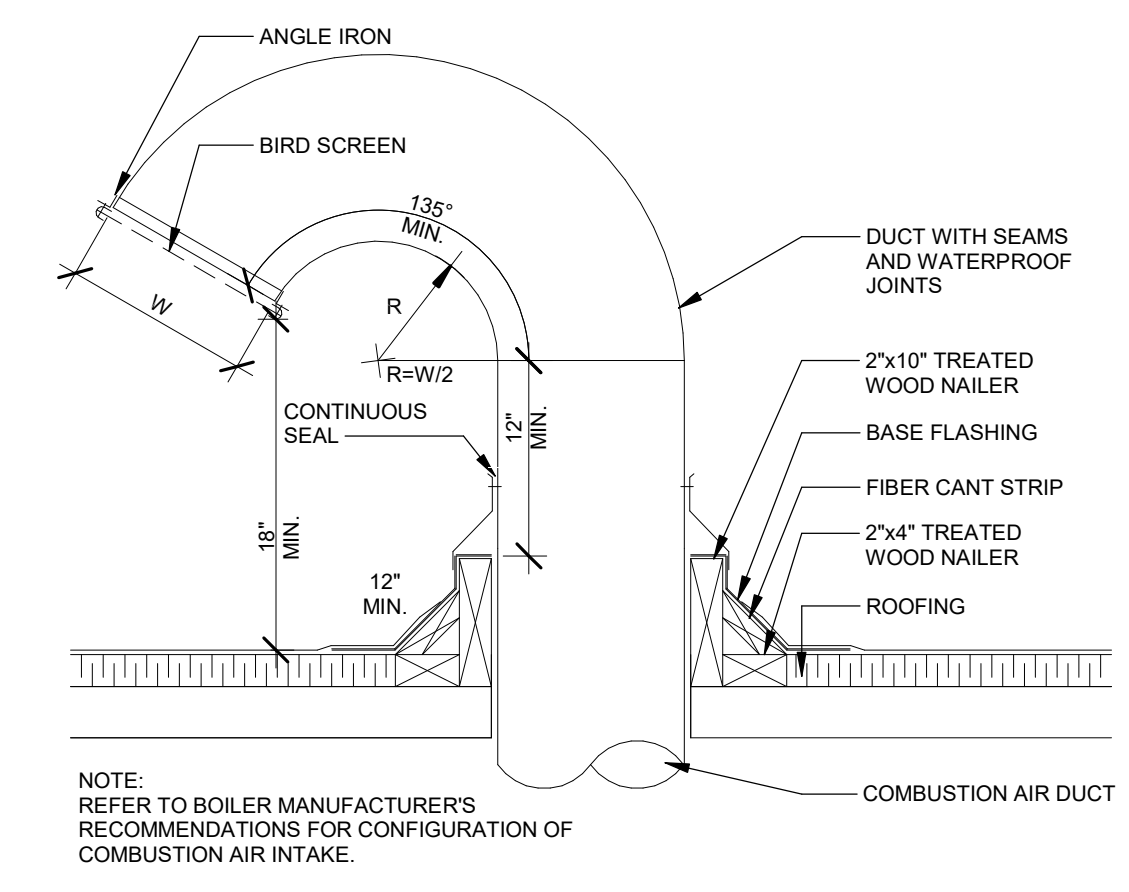
1 MECHANICAL HVAC OVERALL PLAN
1/8" = 1'-0"



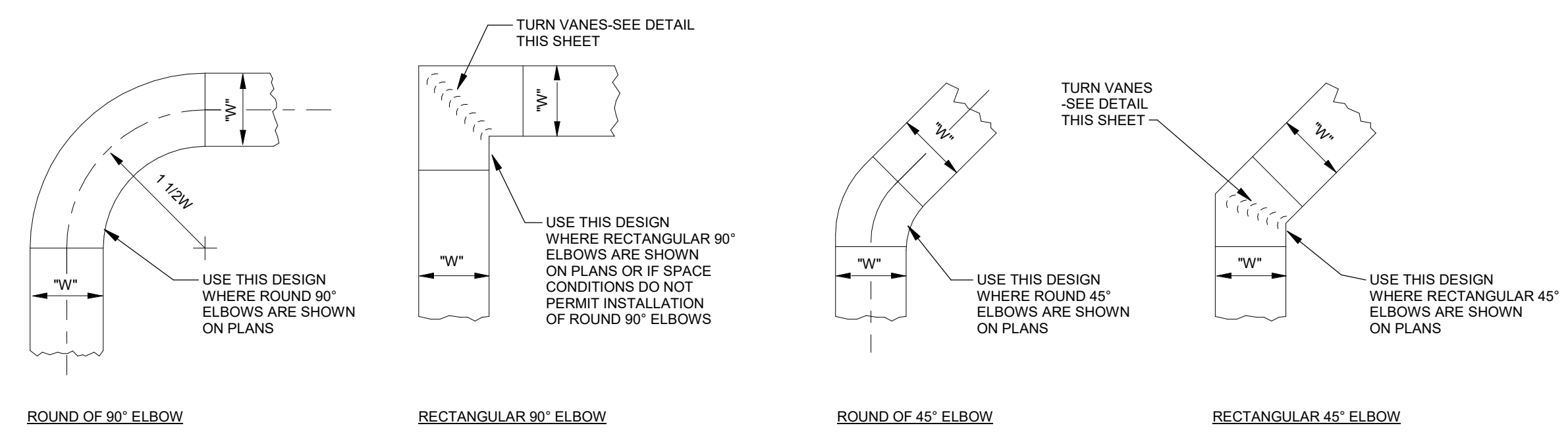
4 DUCT PENETRATION THROUGH NON-FIRE RATED WALL DETAIL NTS



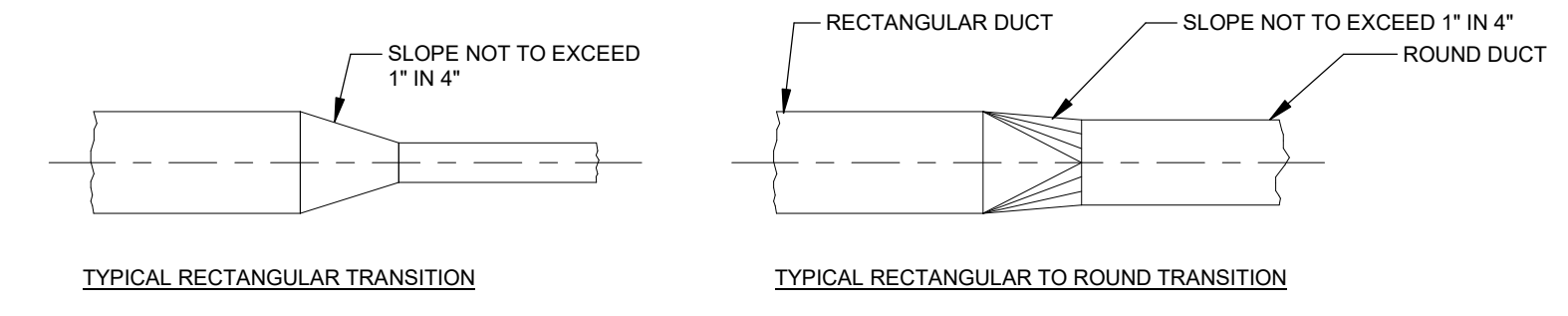
5 DUCT PENETRATION THRU NON-RATED WALLS DETAIL NTS



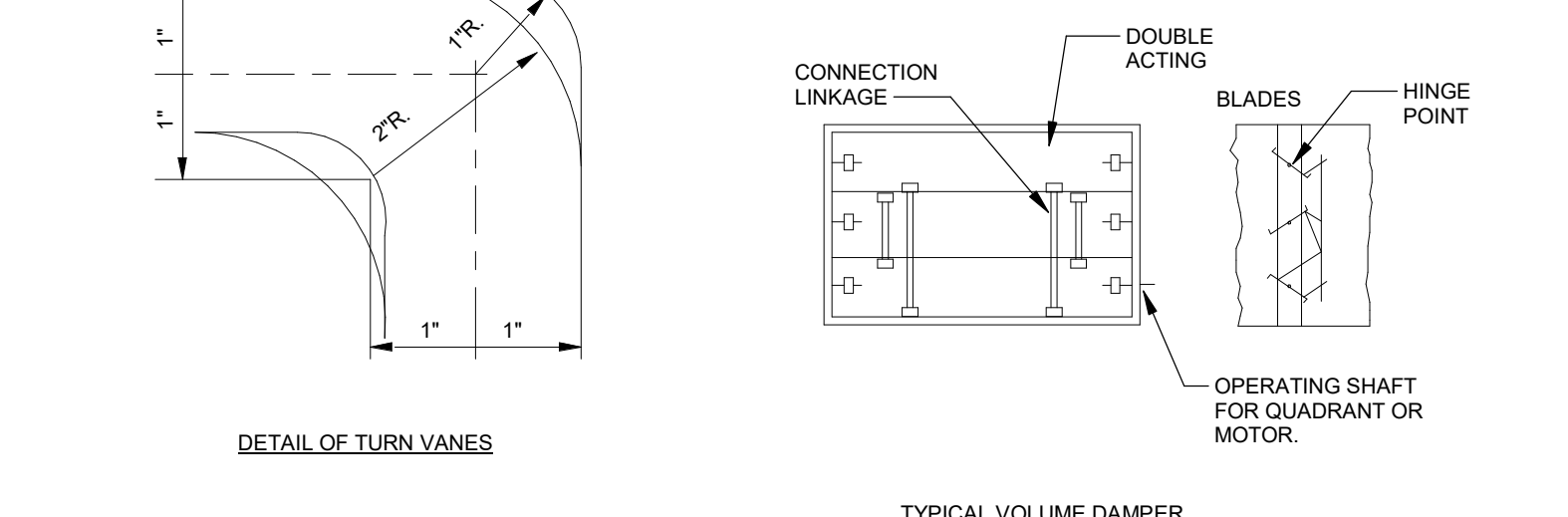
6 ROOF MOUNTED GOOSENECK DETAIL NTS



CONSTRUCTION OF 90° ELBOW, CONSTRUCTION OF 45° ELBOW



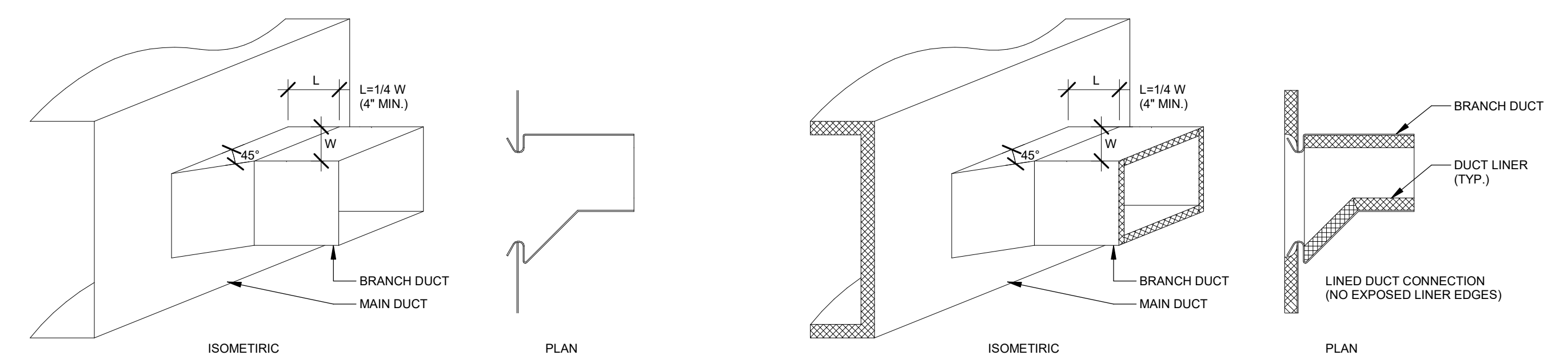
TYPICAL RECTANGULAR TRANSITION, TYPICAL RECTANGULAR TO ROUND TRANSITION



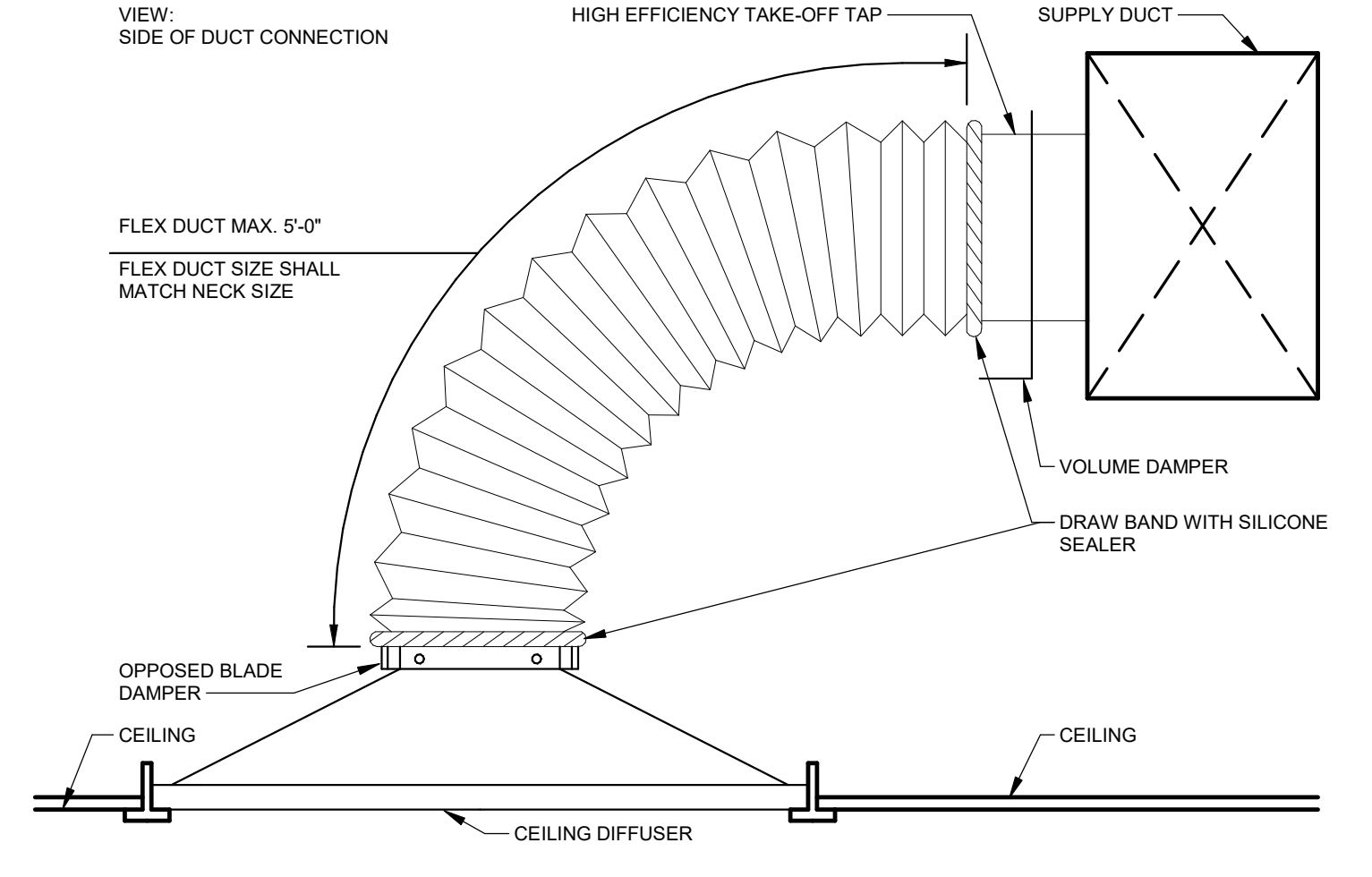
DETAIL OF TURN VANES, TYPICAL VOLUME DAMPER

- INSTALLATION NOTES**
1. ALL DUCTS SHALL BE CONSTRUCTED AND ERECTED IN A NEAT AND WORKMAN LIKE MANNER.
 2. DUCTS SHALL BE CONSTRUCTED OF THE WEIGHTS, GAGES AND MATERIAL AS SPECIFIED.
 3. THE DIMENSION SHOWN FOR ALL DUCTS SHOWN IN PLAN GIVE THE WIDTH FIRST AND THEN THE HEIGHT.
 4. DUCT RISERS SHOULD BE SUPPORTED BY ANGLES AT EVERY FLOOR.
 5. TURNING VANES SHALL BE INSTALLED IN ALL ABRUPT ELBOWS TO PREVENT TURBULENCE.
 6. DUCTS SHALL BE SECURELY ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
 7. DIVERGING TRANSITION PIECES SHALL BE MADE AS GRADUAL AS POSSIBLE.
 8. INSTALL FIRE DAMPERS IN ACCORDANCE TO ALL APPLICABLE REQUIREMENTS INCLUDING UL 555.
 9. ACCESS PANELS SHALL BE PLACED BEFORE AND/OR AFTER EQUIPMENT INSTALLED IN THE DUCT.
 10. DUCT AREA SHALL NOT BE DECREASED MORE THAN 10 PERCENT WHEN OBSTRUCTIONS CANNOT BE AVOIDED, AND THEN A STREAMLINED FITTING SHALL BE USED.
 11. FLEXIBLE FABRIC CONNECTIONS (OR EQUAL) SHALL BE USED ON BOTH INLETS AND OUTLETS OF ALL FANS.
 12. JOINTS AND SEAMS OF SUPPLY DUCTS SHALL BE FASTENED SECURELY AND MADE AIR TIGHT.

1 LOW VELOCITY DUCT LAYOUT DETAIL NTS



2 45° BRANCH DUCT TAKEOFF DETAIL NTS



3 TYPICAL DIFFUSER CONNECTION DETAIL NTS

Key Plan

Revision	Description	Date

OPN Project No.
23816000

Sheet Issue Date
BID SET 12/4/2023

Sheet Name
MECHANICAL DETAILS

Sheet Number
M301

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GRILLES REGISTERS AND DIFFUSERS SCHEDULE

REFERENCE	MATERIAL	MARGIN (IN)	INLET (IN)	FACE (IN)	DAMPER	MFR	MODEL	NOTES
CD-1 (CEILING DIFFUSER)	ALUMINUM	LAY-IN	SEE DWG	24 x 24	NO	TITUS	OMNI	1,2,3
SR-1 (SUPPLY REGISTER)	ALUMINUM	1 1/4"	SEE DWG	INLET +2	EXTRACTOR	TITUS	S300FL	2,4,5
SR-2 (SUPPLY REGISTER)	ALUMINUM	1 1/4"	SEE DWG	INLET +2	YES	TITUS	300RS	2,3,5
RG-1 (RETURN GRILLE)	ALUMINUM	1 1/4"	SEE DWG	24 x 24	NO	TITUS	PAR-AA	1,2
EG-1 (EXHAUST GRILLE)	ALUMINIUM	1 1/4"	SEE DWG	24 x 24	NO	TITUS	PAR-AA	1,2

-
- REFER TO ARCH DRAWINGS FOR FINAL CEILING TYPE FOR MOUTING TYPE.
 - PROVIDE WITH WHITE FINISH. COORDINATE COLOR SELECTION WITH ARCHITECT.
 - DAMPER TO BE OPPOSED BLADE.

FAN SCHEDULE

REFERENCE	EF-1	EF-2
MANUFACTURER	COOK	COOK
MODEL #	SQNH	SQNH
TYPE	INLINE	INLINE
SERVES	RESTROOM	RESTROOM
WEIGHT (LBS)	45	45
DIMENSIONS - L x W x H (INCHES)	15.5x17x14	15.5x17x14
AIRFLOW (CFM)	300	300
ESP (IN. W.C.)	0.50	0.50
FAN SPEED (RPM)	1,584	1,584
DRIVE TYPE	DIRECT	DIRECT
SPEED CONTROL	NO	NO
SONES	2	2
DAMPER TYPE	GRAV. BACKDRAFT	GRAV. BACKDRAFT
MOTOR HP	0.125	0.125
VOLTAGE - PHASE	120 - 1	120 - 1
MCA		
MOCP		
NOTES	1,2,3,4	1,2,3,4

-
- FAN TO BE CONNECTED TO ROOM LIGHT SWITCH.
 - EC TO POWER MOTORIZED DAMPER TO OPEN/CLOSE WITH FAN START OR STOP.
 - PROVIDE UNIT WITH SINGLE POINT POWER CONNECTION AND DISCONNECT. EC TO PROVIDE DISCONNECT.
 - INSTALL SCR UNDER FAN SHROUD FOR BALANCING.



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Key Plan:

Revision	Description	Date
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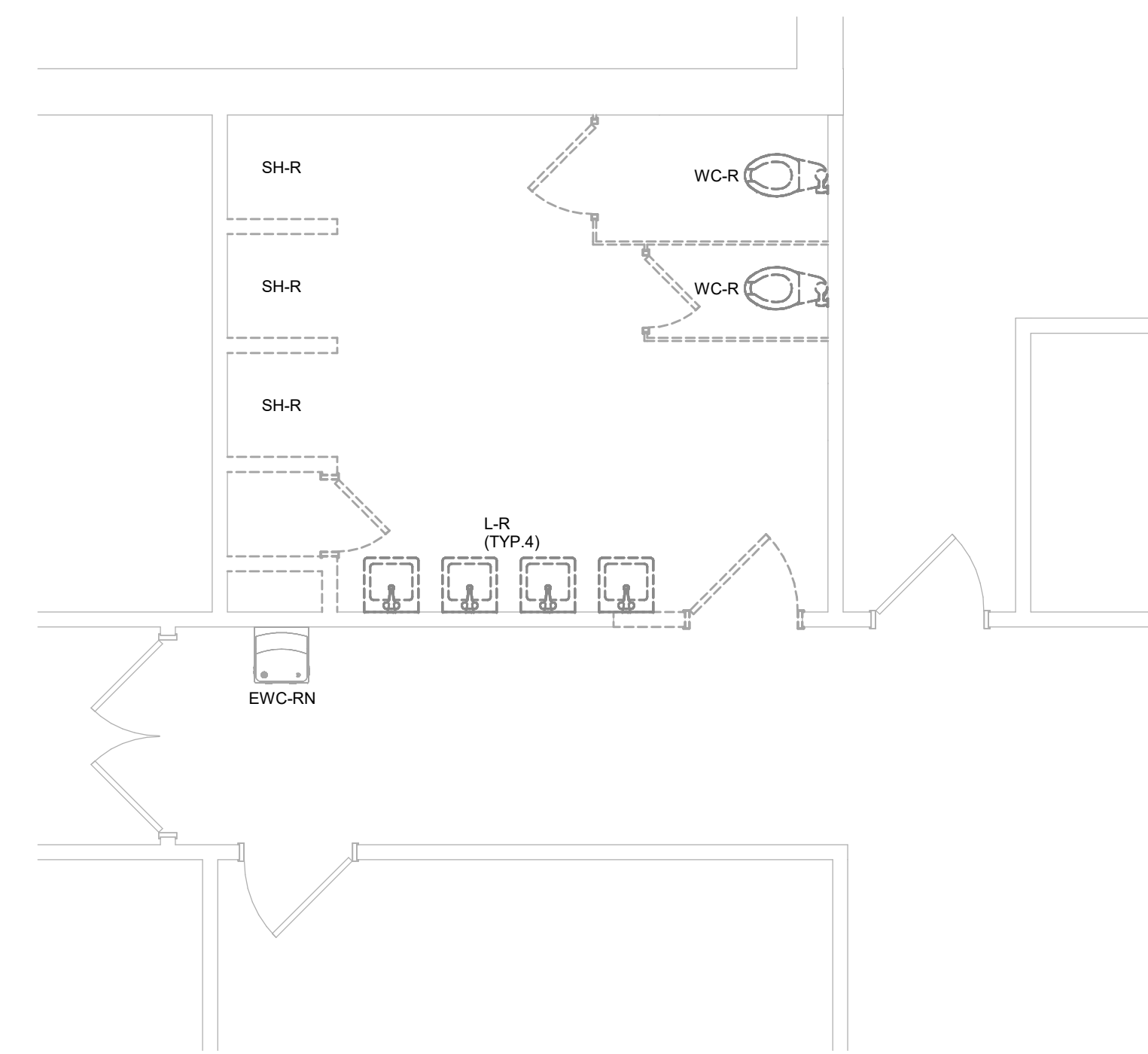
Sheet Name
MECHANICAL SCHEDULES

Sheet Number
M501

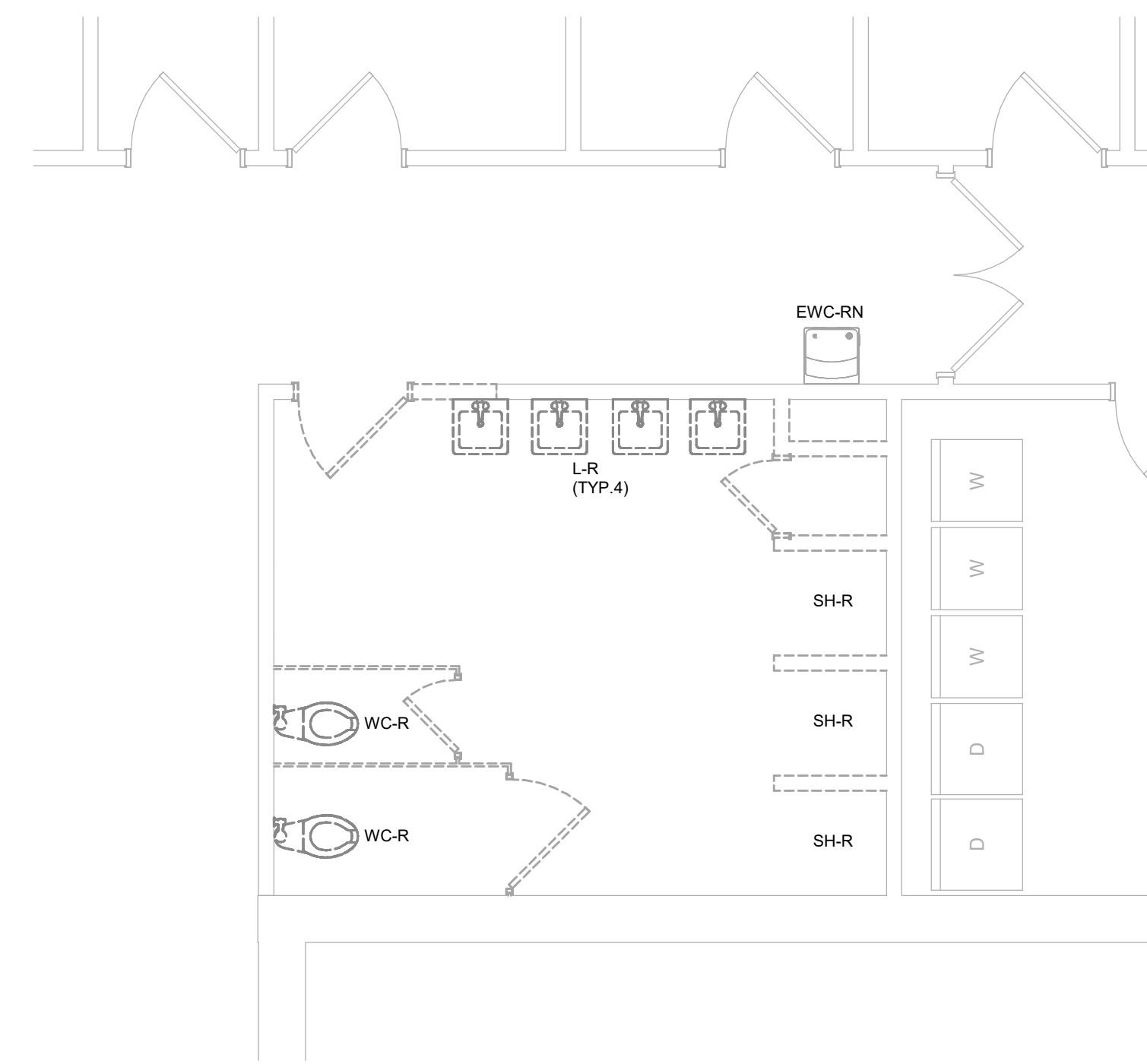
GENERAL NOTES:

- A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.
- B. PATCH WALLS, ROOFS, AND/OR FLOOR WHERE PIPES OR EQUIPMENT ARE REMOVED. PAINT OR FINISH TO MATCH ORIGINAL CONSTRUCTION.
- C. [COORDINATE WITH OWNER AND ASBESTOS ABATEMENT CONTRACTOR FOR WORK IN AREAS CONTAINING ASBESTOS.]
- D. WHERE PIPING, EQUIPMENT, AND PLUMBING FIXTURES ARE REMOVED, REMOVE ALL VALVES, SUPPORTS, INSULATION, AND APPURTENANCES. REMOVE PIPING BACK TO MAINS AND CAP. DO NOT LEAVE DEAD LEGS LONGER THAN 12".
- E. ABBREVIATIONS:
E - EXISTING ITEM TO REMAIN
ER - NEW LOCATION OF EXISTING ITEM
N - NEW ITEM IN EXISTING LOCATION
R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
RN - REPLACE EXISTING WITH NEW
RR - EXISTING ITEM TO BE REMOVED AND RELOCATED

KEYNOTES (P)



2 PLUMBING DEMOLITION PLAN - SOUTH RESTROOM
1/4" = 1'-0"



1 PLUMBING DEMOLITION PLAN - NORTH RESTROOM
1/4" = 1'-0"

Key Plan

Revision Description Date

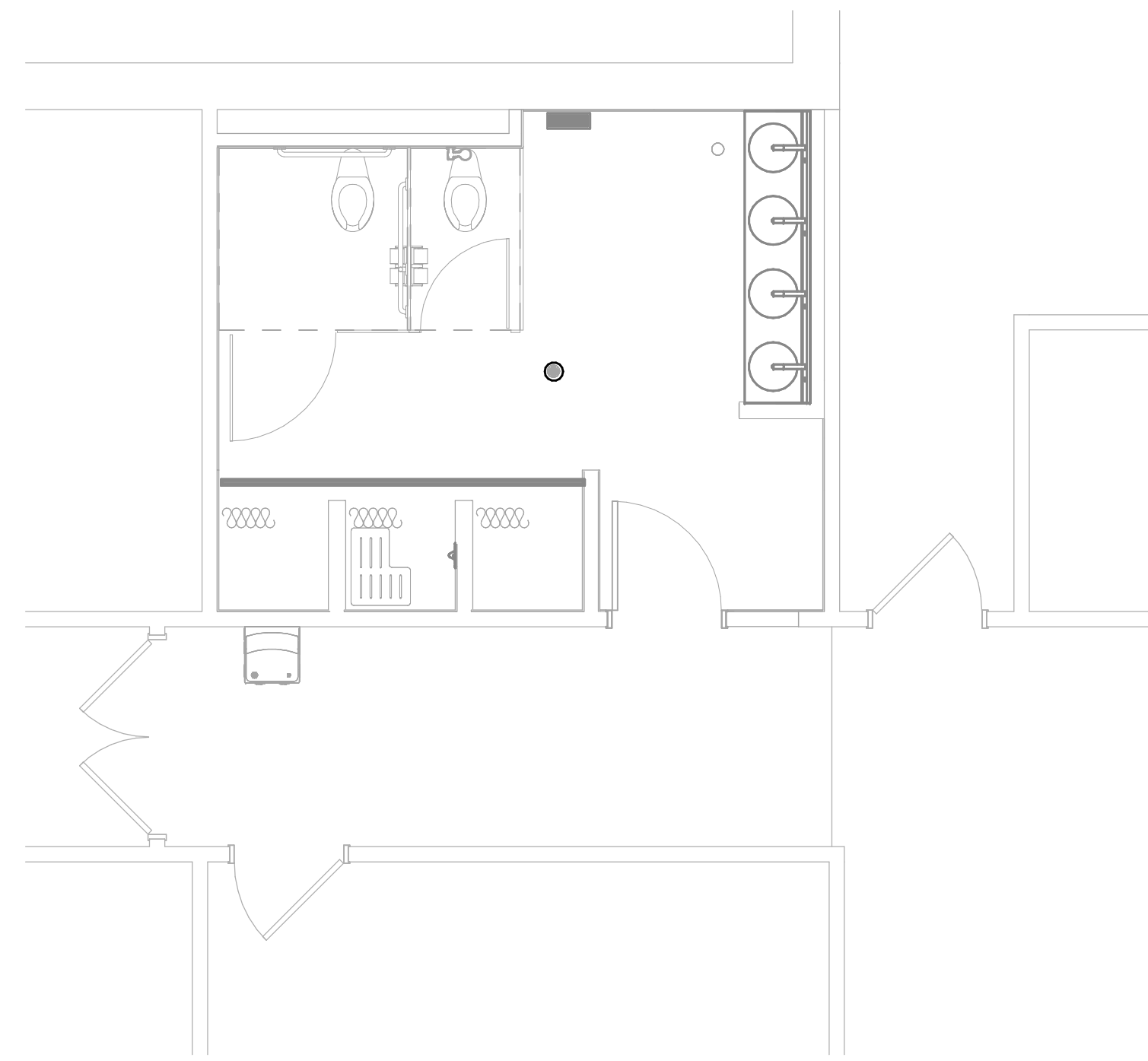
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GENERAL NOTES:

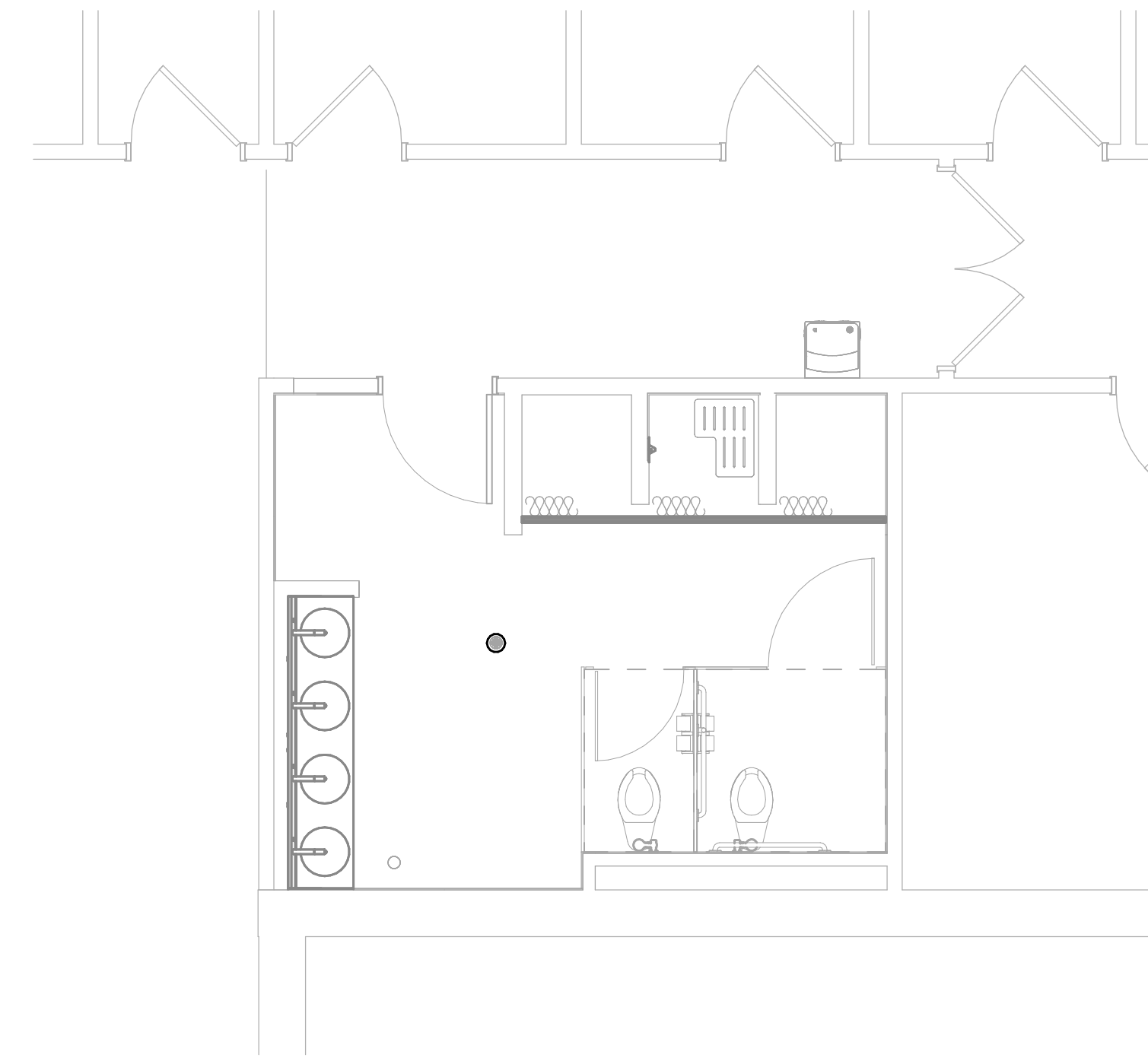
- A. REFER TO M0.00 FOR GENERAL NOTES & SYMBOLS.
- B. REFER TO P3.XX AND P3.XX FOR PLUMBING DETAILS.
- C. REFER TO P5.XX AND P5.XX FOR PLUMBING SCHEDULES.
- D. REFER TO PLUMBING FIXTURE ROUGH-IN SCHEDULE FOR BRANCH PIPE SIZING TO INDIVIDUAL PLUMBING FIXTURES.
- E. COORDINATE PIPE ROUTING WITH DUCTWORK. DUCTWORK HAS PRIORITY OVER PRESSURE PIPING. [ROUTE PIPING WITHIN JOIST SPACES WHERE POSSIBLE.]
- F. BRANCH PIPING SHALL BE TAKEN OFF THE TOP OF MAIN PIPING.

KEYNOTES

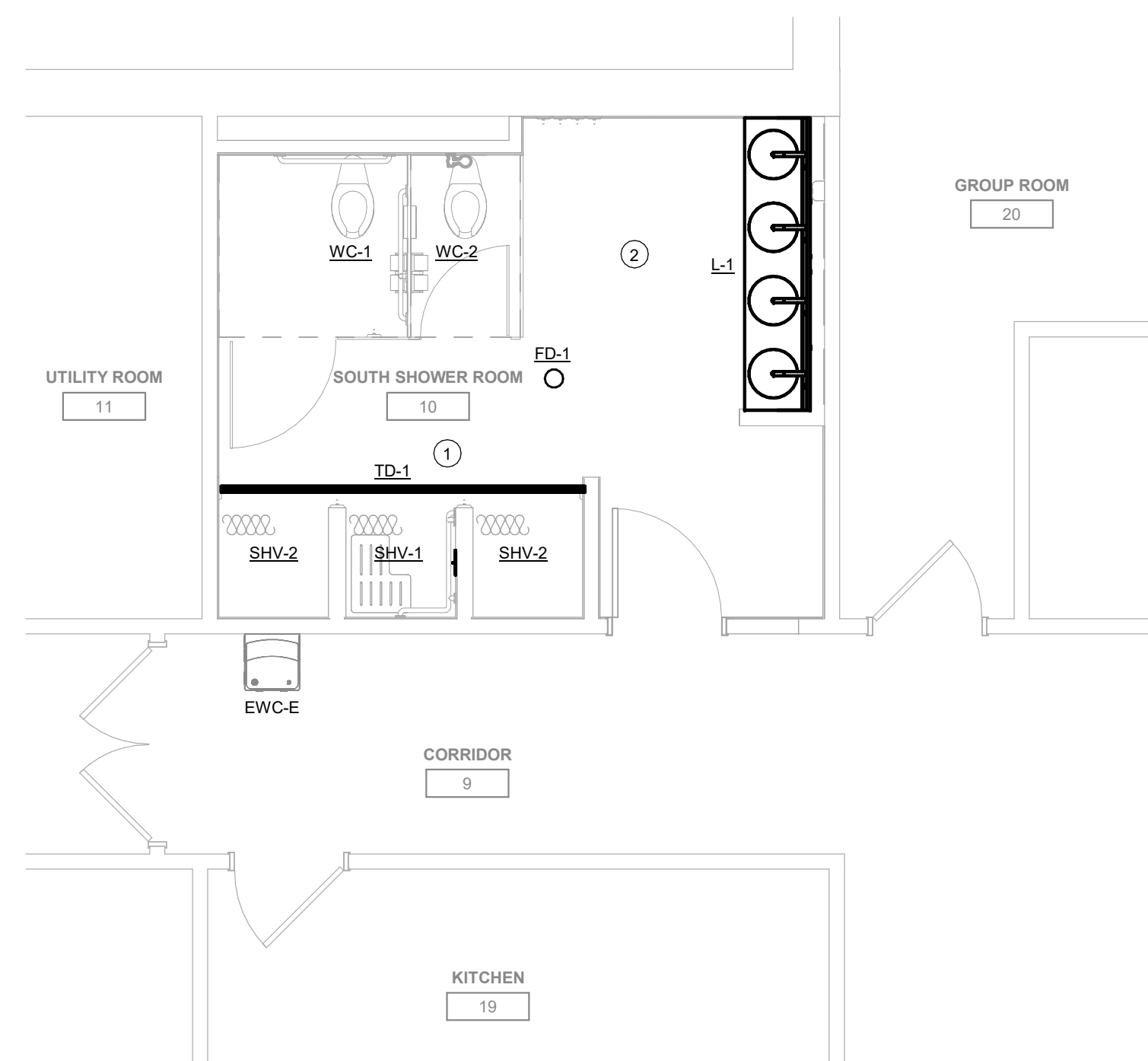
- 1. CONNECT NEW FIXTURES TO EXISTING CW, HW, SAN AND V PIPING. PROVIDE SINGLE SHUT-OFF VALVES TO ISOLATE RESTROOM.
- 2. REMOVE EXISTING FIXTURES AND PIPING TO MAINS.



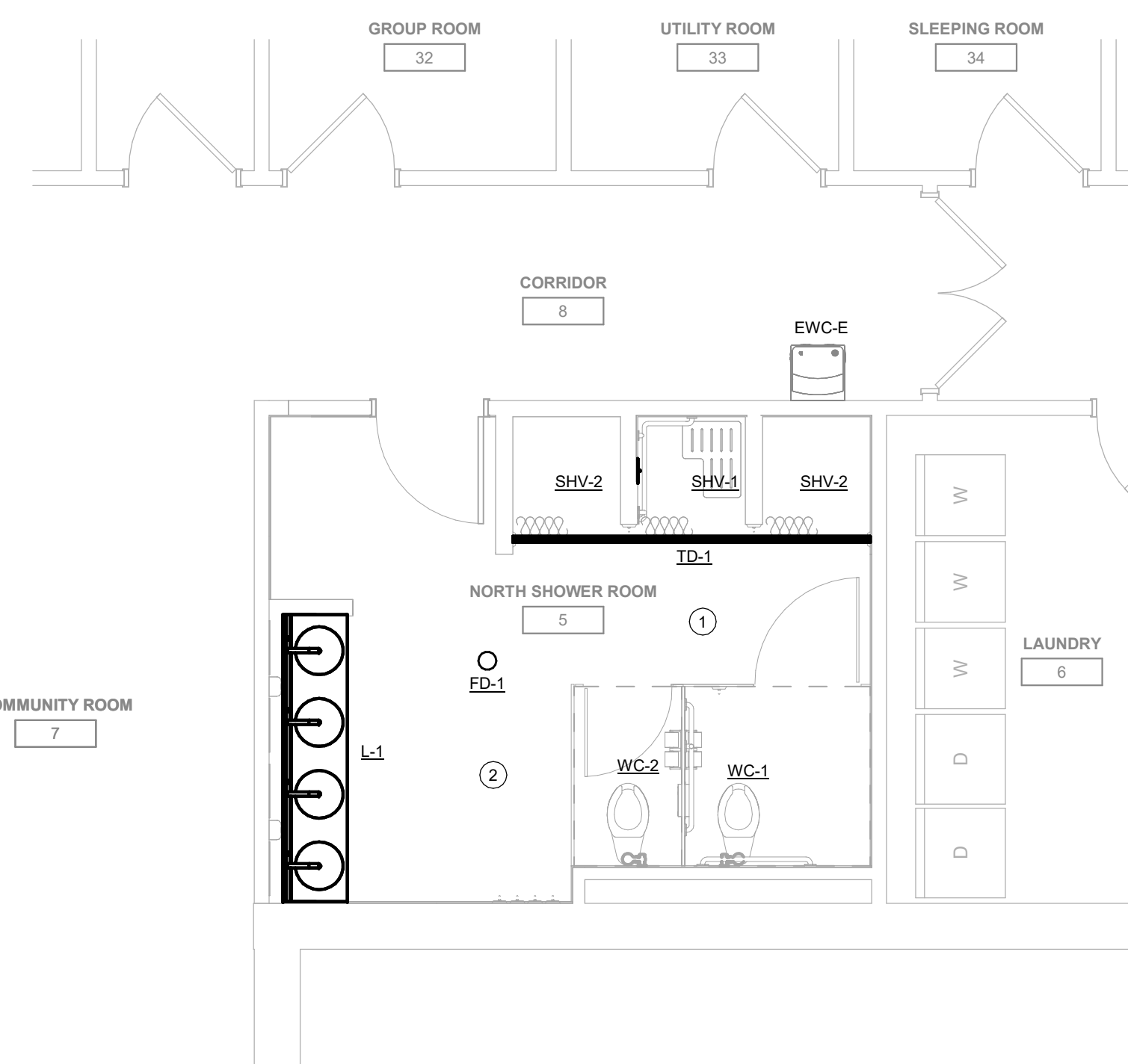
1 PLUMBING FOUNDATION PLAN - SOUTH RESTROOM
1/4" = 1'-0"



4 PLUMBING FOUNDATION PLAN - NORTH RESTROOM
1/4" = 1'-0"



2 PLUMBING PLAN - SOUTH RESTROOM
1/4" = 1'-0"



3 PLUMBING PLAN - NORTH RESTROOM
1/4" = 1'-0"

Key Plan

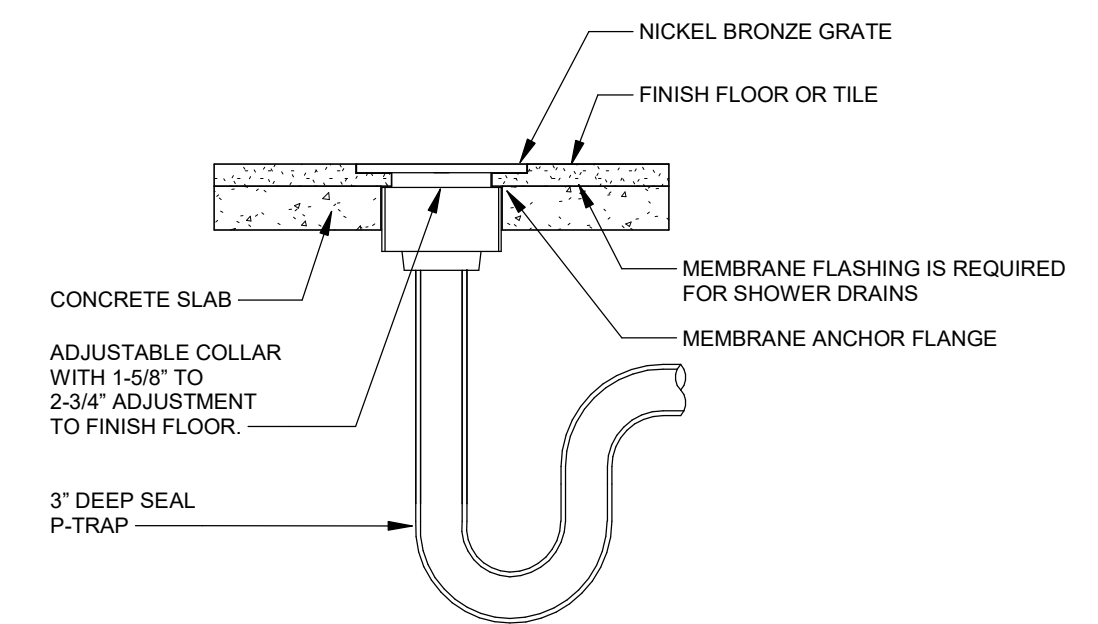
Revision Description Date

OPN Project No.
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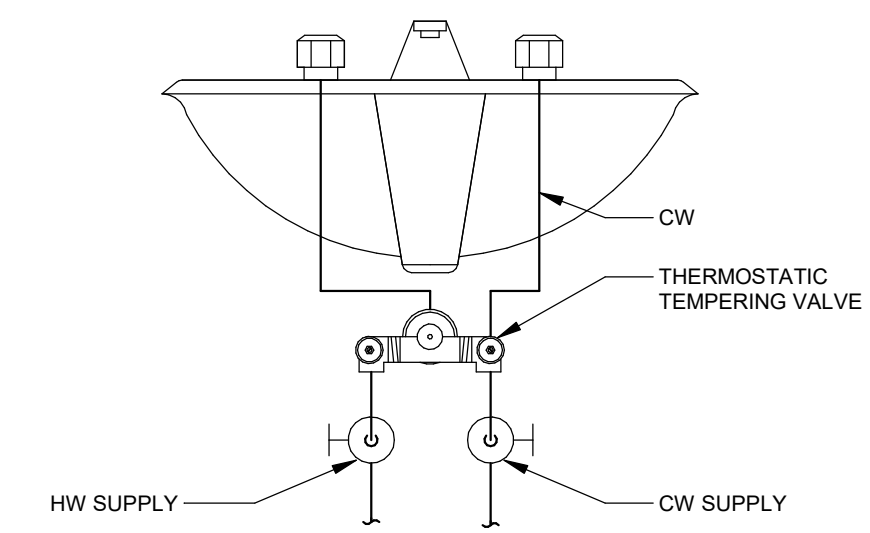
Sheet Issue Date
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Sheet Name
ENLARGED PLUMBING PLANS

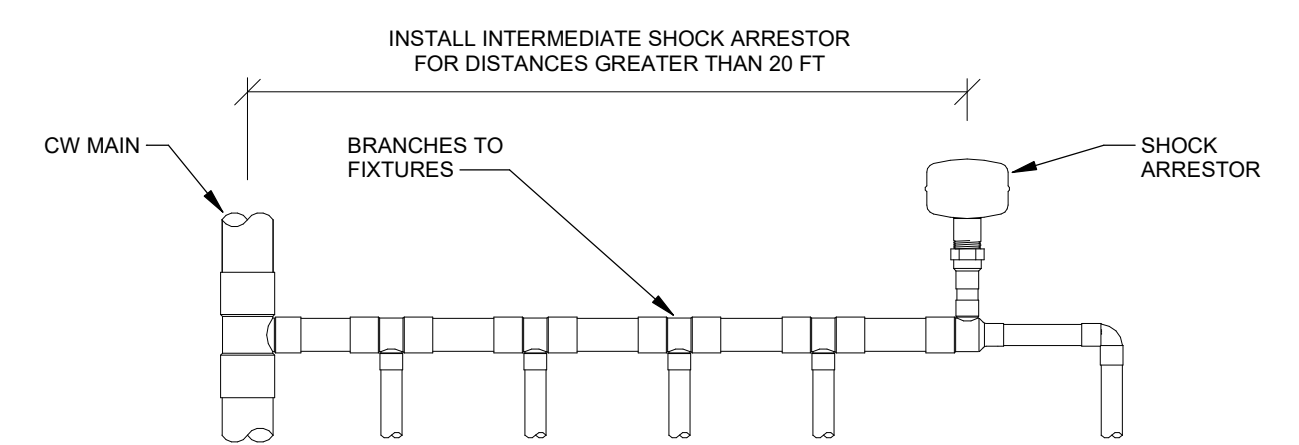
Sheet Number
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1 FLOOR DRAIN DETAIL
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2 POINT-OF-USE MIXING VALVE DETAIL
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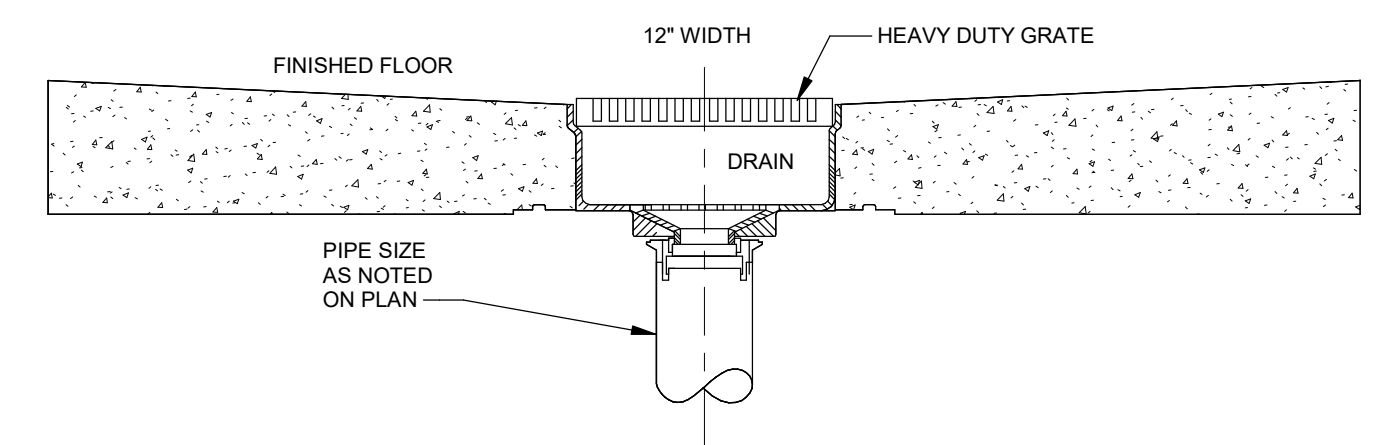


TYPICAL INSTALLATION

SYMBOL	CONNECTION SIZE	FIXTURE UNIT RATING	DIMENSION "A"	DIMENSION "B"
A	3/4"	1-11	3 3/4"	3 3/8"
B	3/4"	12-32	4 1/4"	3 3/8"
C	1"	33-60	5"	3 3/8"
D	1"	61-113	6 5/8"	3 3/8"
E	1"	114-154	8 1/4"	3 3/8"
F	1"	155-330	10	3 3/8"

NOTE: ALL WATER SHOCK ARRESTORS SHALL COMPLY WITH ASSE 1010 OR PD-VWH 201.

3 WATER SHOCK ARRESTOR DETAIL
NTS



4 TRENCH DRAIN DETAIL
NTS

Key Plan

Revision Description Date

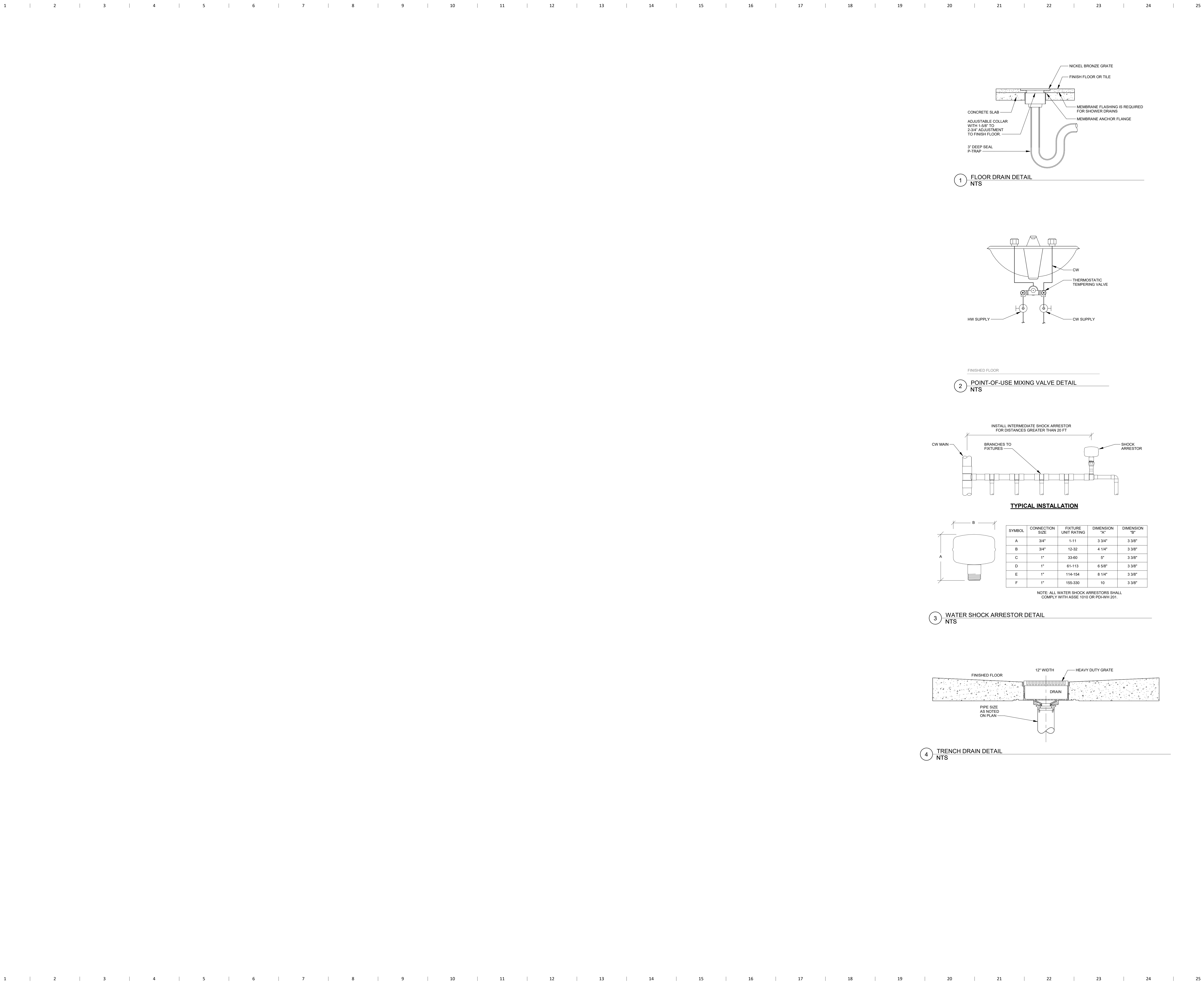
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Sheet Issue Date
BID SET 12/4/2023

Sheet Name
PLUMBING DETAILS

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PLUMBING FIXTURE ROUGH-IN SCHEDULE					
FIXTURE	CW	HW	VENT	WASTE	NOTES
FLOOR DRAIN	-	-	1 1/2"	2"	1
FLOOR DRAIN / FLOOR SINK	-	-	1 1/2"	3"	1
LAVATORY	1/2"	1/2"	1 1/4"	1 1/4"	1,2
SHOWER	1/2"	1/2"	1 1/2"	2"	1,3
WATER CLOSET (FLUSH VALVE)	1"	-	2"	4"	1
NOTES: 1. ALL SIZES SHOWN ARE MINIMUM CONNECTION SIZES, REFER TO DRAWINGS FOR FINAL SIZES. 2. ALL VERTICAL WASTE RISERS TO FIXTURES AND ALL BELOW FLOOR WASTE SIZES SHALL BE A MINIMUM OF 2". 3. FOR TEMPERED WATER SHOWER, EXTEND 3/4" TW TO ASSEMBLY.					

PLUMBING FIXTURE SCHEDULE					
REFERENCE	MFR	MODEL	DESCRIPTION	TRIM	
FCO-1	ZURN	Z1400	ADJUSTABLE FLOOR CLEANOUT, CAST IRON BODY, TAPERED THREAD PLUG AND ROUND NICKEL BRONZE SCORRIATED CAST IRON HEAVY-DUTY SECURED TOP, ADJUSTABLE TO FINISHED FLOOR. OUTLET SIZE AS NOTED ON DRAWINGS.	NA	
FD-1 [SQUARE]	ZURN	Z415S	CAST IRON BODY FLOOR DRAIN, TYPE "S" 6"x6" SQUARE POLISHED NICKEL BRONZE, HEEL-PROOF, LIGHT-DUTY STRAINER.	PROVIDE WITH TRAP GUARD; PROSET "TRAP GUARD", SURE SEAL "MODEL SS", OR APPROVED EQUAL.	
FD-1 [ROUND]	ZURN	Z415B	CAST IRON BODY FLOOR DRAIN, TYPE "B" 6" ROUND POLISHED NICKEL BRONZE STRAINER. OUTLET SIZE AS NOTED ON DRAWINGS.	PROVIDE WITH TRAP GUARD; PROSET "TRAP GUARD", SURE SEAL "MODEL SS", OR APPROVED EQUAL.	
L-1 (ADA)	ACORN	3714-1	VANDAL RESISTANT, OVAL BOWL, WALL MOUNTED MOUNT, TYPE 304 SATIN FINISH, STAINLESS STEEL LAVATORY/WASH BASIN, ADA COMPLIANT, 4 STATION, OVERALL DIMENSIONS 20 3/4" x 36", BACKSPLASH, ENCLOSED BOTTOM, OVERFLOW, GRID STRAINERS, SENSOR OPERATED FAUCETS, 0.6 GPM, PLUG-IN TRANSFORMER AND SOLENOID VALVE, ASSE 1070 MIXING VALVE, P-TRAP, OPTIONAL DECK MOUNTED SOAP DISPENSER.	NA	
SHV-1 (ADA)	ACORN	LR1741ADA-FA	COVERALL WALL SHOWER, TYPE 304 STAINLESS STEEL PANEL POLISHED TO A #4 FINISH, ALL EXPOSED PARTS OF STAINLESS STEEL OR CHROME PLATED BRASS, HOT & COLD CONTROL, THERMOSTATIC SHOWER VALVE, 2.0 GPM FLOW, 1/2" NPT FLEXIBLE STAINLESS STEEL SUPPLY INLETS, CHECK STOPS AND INTEGRAL STRAINER. 60" STAINLESS STEEL FLEXIBLE SPRAY HOSE AND POST WITH MOUNTING BRACKETS, ELEVATED IN-LINE BACKFLOW PREVENTER. PROVIDE VANDAL RESISTANT SCREWS AND TOP AND BOTTOM CAPS. COORDINATE MOUNTING HEIGHT WITH ARCHITECT. FRONT ACCESS	NA	
SHV-2 (STANDARD)	ACORN	LR1741-FA	COVERALL WALL SHOWER, TYPE 304 STAINLESS STEEL PANEL POLISHED TO A #4 FINISH, ALL EXPOSED PARTS OF STAINLESS STEEL OR CHROME PLATED BRASS, HOT & COLD CONTROL, THERMOSTATIC SHOWER VALVE, 2.0 GPM FLOW, 1/2" NPT FLEXIBLE STAINLESS STEEL SUPPLY INLETS, CHECK STOPS AND INTEGRAL STRAINER. VANDAL RESISTANT SHOWERHEAD, FIXED DIRECTION, INTEGRAL VACUUM BREAKER. PROVIDE VANDAL RESISTANT SCREWS AND TOP AND BOTTOM CAPS. COORDINATE MOUNTING HEIGHT WITH ARCHITECT. FRONT ACCESS	NA	
TD-1	JAY R. SMITH	9667-BS	FINE-LINE LINEAR ADA SHOWER DRAIN. FABRICATED 18GA STAINLESS STEEL BODY WITH SATIN FINISH AND LOOSE SET STAINLESS STEEL PERFORATED GRATE. 2" NO-HUB BOTTOM OUTLET. REFER TO ARCHITECTURAL MILLWORK FOR FINAL SHOWER ENTRANCE WIDTH. VERIFY FLOORING MATERIAL FOR INSTALLATION REQUIREMENTS.	VERIFY GRATE PATTERN/TYPE WITH ARCHITECT.	
WC-1 (FLOOR/ADA)	KOHLER	K-96057	FLOOR MOUNTED 1.6 GPF, WHITE VITREOUS CHINA, ELONGATED BOWL, SIPHON JET TOILET, BOLT CAPS, 1 1/2" TOP SPUD, ADA COMPLIANT BOWL HEIGHT.	SLOAN "8111-MC" OR APPROVED EQUAL, BATTERY POWERED, 1.6 GPF EXPOSED SENSOR OPERATED FLUSH VALVE WITH VANDAL RESISTANT CAP AND OVERRIDE BUTTON, CHURCH 295SSCT WHITE OPEN FRONT SELF-SUSTAINING HEAVY SEAT, INJECTION MOLDED PLASTIC, STAINLESS STEEL POSTS, ESCUTCHEON.	
WC-2 (FLOOR)	KOHLER	K-96053	FLOOR MOUNTED 1.6 GPF, WHITE VITREOUS CHINA, ELONGATED BOWL, SIPHON JET TOILET, BOLT CAPS, 1 1/2" TOP SPUD, STANDARD BOWL HEIGHT.	SLOAN "8111-MC" OR APPROVED EQUAL, BATTERY POWERED, 1.6 GPF EXPOSED SENSOR OPERATED FLUSH VALVE WITH VANDAL RESISTANT CAP AND OVERRIDE BUTTON, CHURCH 295SSCT WHITE OPEN FRONT SELF-SUSTAINING HEAVY SEAT, INJECTION MOLDED PLASTIC, STAINLESS STEEL POSTS, ESCUTCHEON.	

NOTES:

PLUMBING PIPING AND INSULATION SCHEDULE									
SYSTEM	SIZE RANGE (INCHES)	LOCATION	PIPE MATERIAL (NOTE 1)	JOINT TYPE (NOTE 1)	VALVE TYPES (NOTE 3)	INSULATION TYPE (NOTE 2)	INSULATION THICKNESS (INCHES)	JACKET (NOTE 4)	NOTES
COIL CONDENSATE DRAIN	1/2 - 3	INSIDE BLDG	TYPE M COPPER	SOLDER/PRESSURE SEAL	N/A	MINERAL FIBER / ELASTOMERIC	1/2	--	
DOMESTIC COLD WATER	3/4 - 1 1/4	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER / ELASTOMERIC	1/2	PVC	5
DOMESTIC COLD WATER	3/4 - 1 1/4	ABOVE GROUND	PEX	METAL INSERT		MINERAL FIBER / ELASTOMERIC	1/2	--	
DOMESTIC COLD WATER	1 1/2 - 2	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER / ELASTOMERIC	1	PVC	5
DOMESTIC COLD WATER	2 1/2 - 8	ABOVE GROUND	TYPE L COPPER	GROOVED		MINERAL FIBER	1	ALUMINUM	5
DOMESTIC HOT WATER	3/4 - 1 1/4	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER / ELASTOMERIC	1	PVC	5
DOMESTIC HOT WATER	3/4 - 1 1/4	ABOVE GROUND	PEX	METAL INSERT		MINERAL FIBER / ELASTOMERIC	1	--	
DOMESTIC HOT WATER	1 1/2 - 2	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER	1 1/2	--	5
DOMESTIC HOT WATER	2 1/2 - 8	ABOVE GROUND	TYPE L COPPER	GROOVED		MINERAL FIBER	1 1/2	ALUMINUM	5
DOMESTIC HOT WATER CIRC	3/4 - 1 1/4	ABOVE GROUND	TYPE L COPPER	SOLDER/PRESSURE SEAL	BRONZE BALL W/ SS TRIM	MINERAL FIBER / ELASTOMERIC	1	PVC	5
DOMESTIC HOT WATER CIRC	3/4 - 1 1/4	ABOVE GROUND	PEX	METAL INSERT		MINERAL FIBER / ELASTOMERIC	1	--	
DOMESTIC COLD/HOT/RECIRC	3/4 - 2	BELOW GROUND	TYPE K COPPER	SOLDER / BRAZE	BRONZE BALL W/ SS TRIM	--	--	--	
SANITARY DRAIN (GRAVITY)	1 1/2 - 8	BELOW GROUND	SCH 40 PVC DWV / CI	SOLVENT / HUB & SPIGOT	N/A	--	--	--	
SANITARY VENT PIPING	1 1/4 - 4	BELOW GROUND	SCH 40 PVC DWV / CI	SOLVENT / HUB & SPIGOT	N/A	--	--	--	
SANITARY DRAIN (GRAVITY)	1 1/2 - 8	ABOVE GROUND	SCH 40 PVC DWV / CI	SOLVENT / NO HUB	N/A	--	--	--	
SANITARY VENT PIPING	1 1/4 - 6	ABOVE GROUND	SCH 40 PVC DWV / CI	SOLVENT / NO HUB	N/A	MINERAL FIBER	1	--	5,6
NOTES: 1. ALL PIPING UTILIZED FOR POTABLE WATER SHALL MEET NSF 14, 61 AND 372. PUSH TO CONNECT / PUSH ON TYPE JOINTS ARE NOT ALLOWED. REFER TO SPECIFICATIONS FOR FURTHER JOINT AND MATERIAL REQUIREMENTS. 2. REFER TO SPECIFICATIONS FOR FURTHER INSULATION REQUIREMENTS. INSULATION R-VALUE SHALL MEET INTERNATIONAL ENERGY CODE [2012] [2015] REQUIREMENTS. 3. ALL VALVES UTILIZED IN POTABLE WATER SYSTEMS SHALL MEET NSF 61 AND 372. REFER TO SPECIFICATIONS FOR FURTHER VALVE REQUIREMENTS. 4. EXPOSED PIPING MOUNTED BELOW 6'-0" ABOVE FLOOR SHALL HAVE [PVC] [ALUMINUM] JACKET. 5. INSULATION APPLIED TO PIPING THAT IS LOCATED IN RETURN AIR PLENUMS SHALL MEET ASTM E 84 25/50 FLAME AND SMOKE SPREAD RATING AND COMPLY WITH NFPA STANDARD 90A. 6. VENT PIPING SHALL BE INSULATED A MINIMUM OF 5'-0" FROM EXTERIOR WALL OR ROOF PENETRATION.									

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INSTALLATION NOTES - ELECTRICAL

- BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BID.
- INCREASE CONDUCTOR SIZES ON 20A 120V-1 PHASE CIRCUITS EXCEEDING 100 FEET TO CENTER OF LOAD TO ACCOUNT FOR VOLTAGE DROP.
- RACEWAYS AND BOXES ARE SHOWN DIAGRAMMATICALLY ONLY AND INDICATE GENERAL AND APPROXIMATE LOCATIONS. LAYOUTS DO NOT ALWAYS SHOW THE TOTAL NUMBER OF RACEWAYS OR BOXES FOR THE CIRCUITS REQUIRED, NOR ARE THE LOCATIONS OF INDICATED RUNS INTENDED TO SHOW THE ACTUAL ROUTING OF THE RACEWAYS.
- LIGHT FIXTURES, SWITCHES, DEVICES, ETC. ARE SHOWN IN PREFERRED LOCATION. MODIFY CONDUIT, HANGERS, CIRCUITING, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- PROVIDE A DEDICATED GREEN INSULATED GROUND CONDUCTOR TO ALL DEVICES. DO NOT USE CONDUIT SYSTEM AS THE ONLY EQUIPMENT GROUNDING METHOD.
- DO NOT INSTALL BOXES BACK-TO-BACK ON OPPOSITE SIDES OF THE SAME WALL. MAINTAIN MINIMUM OF 8" DISTANCE BETWEEN BOXES WHEREVER APPLICABLE.
- BALANCE PANEL LOADS DURING INSTALLATION. CIRCUIT NUMBERING SHOWN ON PLANS MAY BE ADJUSTED TO ACCOMMODATE.
- PROVIDE TYPED PANEL DIRECTORY AT PROJECT COMPLETION FOR NEW PANELS AND EXISTING PANELS WITH CIRCUITS MODIFIED AS A RESULT OF THIS PROJECT. USE OWNER'S CURRENT ROOM NUMBERS AND EQUIPMENT NAMES.
- CONTRACTOR IS RESPONSIBLE FOR OPENINGS IN WALLS, FLOORS, CEILINGS, AND ROOFS THAT ARE REQUIRED TO COMPLETE THEIR SCOPE OF WORK. SEAL PENETRATIONS IN ACCORDANCE WITH THE RATING OF THE AFFECTED ASSEMBLY. REFER TO ARCHITECTURAL CODE PLAN FOR RATED WALLS, FLOORS, AND CEILINGS.

DEVICE INSTALLATION AND MATERIALS - ELECTRICAL

- PROVIDE NORMAL WIRING DEVICES AS **WHITE** UNLESS OTHERWISE NOTED.
- PROVIDE DEVICES COVER PLATES AS **STAINLESS STEEL**.
- PROVIDE GFCI TYPE RECEPTACLES AT ALL LOCATIONS REQUIRED BY THE NEC.
- INSTALL WALL MOUNTED RECEPTACLES AT +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
- INSTALL WALL MOUNTED LIGHT SWITCHES AT +48" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. EXCEPTION: INSTALL DEVICES ABOVE AN OBSTRUCTED HIGH FORWARD REACH OBSTACLE GREATER THEN 20 INCHES IN DEPTH AT +42".
- INSTALL ABOVE COUNTERTOP RECEPTACLES +8" ABOVE COUNTERTOP OR AS OTHERWISE INDICATED.
- AT A COMMON COUNTERTOP, INSTALL ALL RECEPTACLES AND SWITCHES AT THE SAME HEIGHT UNLESS OTHERWISE SPECIFICALLY INDICATED.

INSTALLATION NOTES - LIGHTING

- UNLESS NOTED OTHERWISE, CONNECT ALL EMERGENCY BATTERY FIXTURES WITH AN UN-SWITCHED LEG OF THE LIGHTING CIRCUIT THAT SERVES THE FIXTURES. MAINTAIN NORMAL SWITCHING SCHEME OF EMERGENCY FIXTURES UNDER NORMAL OPERATION. INSTALL PER EMERGENCY FIXTURE OR TRANSFER DEVICE INSTRUCTIONS.
- VERIFY CEILING TYPE (IE. GRID, GYP) WITH ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO RELEASE OF LIGHTING FIXTURE EQUIPMENT PACKAGE. ADJUST FIXTURE TYPE, CONSTRUCTION, FLANGE, OR OTHER COORDINATION DETAILS AS REQUIRED FOR CEILING TYPE.
- LIGHTING CONTROLS SENSORS ARE SHOWN ON PLANS AT SUGGESTED LOCATIONS ONLY. VERIFY LOCATIONS WITH MANUFACTURER GUIDELINES AND INSTALLATION RECOMMENDATIONS. ADJUST LOCATIONS AS REQUIRED TO MEET MANUFACTURER GUIDELINES.
- PROVIDE LIGHTING CONTROLS AS A COMPLETE SYSTEM AND INCLUDE MATERIAL AND INSTALLATION FOR ALL POWER PACKS, ACCESSORIES, CONTROLLERS, AND WIRING REQUIRED FOR OPERATION.

BUILDING EQUIPMENT COORDINATION NOTES - ELECTRICAL

- REFER TO EQUIPMENT CONNECTION SCHEDULE FOR COORDINATION DETAILS BETWEEN MECHANICAL AND ELECTRICAL SYSTEMS.
- PROVIDE AND INSTALL ELECTRICAL SYSTEMS UNDER THIS CONTRACT MEETING THE REQUIREMENTS OF THE SPECIFIED MECHANICAL, FIRE PROTECTION, AND PLUMBING SYSTEMS. REFERENCE THE ENTIRE PROJECT DOCUMENTS, MANUALS, SCHEDULES, DETAILS, AND NOTES.
- PROVIDE ELECTRICAL CONNECTIONS AND ACCESSORIES INCLUDING STARTERS, DISCONNECTS, CONTROL WIRING, ETC. AS REQUIRED FOR THE BUILDING MECHANICAL EQUIPMENT. INFORMATION HEREIN AND ON THE DRAWINGS IS FOR GENERAL DESCRIPTION AND ESTIMATING PURPOSES ONLY. VERIFY VOLTAGE, AMPERAGE, PHASE, INRUSH, ETC. FOR EACH ITEM OF EQUIPMENT BEFORE PROCEEDING WITH INSTALLATION. INSTALL EQUIPMENT PER WIRING DETAILS AND INSTRUCTIONS FURNISHED BY THE SUPPLIERS OF THE EQUIPMENT TO PROVIDE PROPER OPERATION.
- REVIEW MECHANICAL EQUIPMENT SHOP DRAWINGS FOR COMPLIANCE AND COORDINATION WITH ELECTRICAL CONNECTIONS. NOTIFY ENGINEER IF CHANGES TO ELECTRICAL CONNECTIONS, WIRING, AND BREAKER REQUIREMENTS ARE NECESSARY TO ACCOMMODATE EQUIPMENT BEING SUPPLIED.
 - DO NOT RELEASE ELECTRICAL DISTRIBUTION EQUIPMENT UNTIL ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL INFRASTRUCTURE HAS BEEN SUBMITTED AND APPROVED. MAKE COORDINATION ADJUSTMENTS TO BREAKER SIZES AND SIMILAR CHANGES TO ELECTRICAL EQUIPMENT PRIOR TO SUBMITTAL RELEASE. COORDINATE SCHEDULING OF SHOP DRAWINGS WITH ALL TRADES.
- PROVIDE DISCONNECTS RATED FOR EQUIPMENT AS REQUIRED AND AS INDICATED WITHIN EQUIPMENT CONNECTION SCHEDULE. COORDINATE DISCONNECT MOUNTING TO ALLOW EQUIPMENT REMOVAL WITHOUT DISCONNECT REMOVAL AND TO MINIMIZE WIRING WORK REQUIRED.
- PROVIDE HEAVY DUTY TYPE DISCONNECTS RATED FOR THE INSTALLED ENVIRONMENT. PROVIDE MINIMUM NEMA 3R RATED DISCONNECTS FOR EXTERIOR INSTALLATIONS OR AS NOTED.
- VERIFY LOCATIONS OF ALL EQUIPMENT. REFER TO MECHANICAL, PLUMBING, AND ARCHITECTURAL DRAWINGS AND COORDINATE WITH THE ASSOCIATED SUB-CONTRACTOR. ADJUST ELECTRICAL INSTALLATION AS REQUIRED.

ELECTRICAL ABBREVIATIONS

A	DEVICE MOUNTED +8" ABOVE COUNTER TOP (VERIFY LOCATION)	NIC	NOT IN CONTRACT
AFS	ABOVE FINISHED FLOOR	NM	NONMETALLIC
ATS	AUTOMATIC TRANSFER SWITCH	NTS	NOT TO SCALE
C	CEILING	OC	ON CENTER
CB	CIRCUIT BREAKER	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CT	CURRENT TRANSFORMER	OFOI	OWNER FURNISHED, CONTRACTOR INSTALLED
E	EXISTING ITEM TO REMAIN	R	OWNER INSTALLED
EC	ELECTRICAL CONTRACTOR	RR	EXISTING ITEM TO BE REMOVED AND RELOCATED
EM	EMERGENCY LIGHT FIXTURE	RN	EXISTING ITEM TO BE REMOVED AND REPLACED WITH NEW
ER	NEW LOCATION OF EXISTING ITEM ROUGH IN FOR FUTURE DEVICE	SCCR	SHORT CIRCUIT CURRENT RATING
FAAP	FIRE ALARM ANNUNCIATOR PANEL	T	TAMPER PROOF DEVICE
FACP	FIRE ALARM CONTROL PANEL	TCC	TEMPERATURE CONTROL CONTRACTOR
FSD	FIRE SMOKE DAMPER	TV	TELEVISION
G	GROUND	TYP	TYPICAL
GND	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
KVA	KILO-VOLT-AMPERES	V	VOLTS
KW	KILOWATTS	VA	VOLT-AMPERES
MC	MECHANICAL CONTRACTOR	WG	WIREGUARD COVER
MCB	MAIN CIRCUIT BREAKER	WP	WEATHERPROOF DEVICE
MDP	MAIN DISTRIBUTION PANEL	WR	WEATHER RESISTANT DEVICE
MLO	MAIN LUGS ONLY	+24"	INDICATES MOUNTING HEIGHT CENTER LINE OF DEVICE TO FINISHED FLOOR
N	NEW DEVICE IN EXISTING LOCATION		

GENERAL NOTES - ELECTRICAL

- COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. BEGIN INSTALLATION AND ROUGH-IN ONLY AFTER PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION IS COMPLETE. COORDINATE WITH BUILDING STRUCTURE, ARCHITECTURE, MECHANICAL SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, EQUIPMENT ACCESS/CLEARANCE, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR REWORK OF INSTALLED EQUIPMENT RESULTING FROM INSUFFICIENT COORDINATION.
- ELECTRICAL DRAWINGS ARE ONLY A PORTION OF THE COMPLETE SET OF PLANS AND CONTRACT DOCUMENTS. THE ELECTRICAL SCOPE OF WORK IS DEFINED BY THE COMPLETE SET OF CONTRACT DOCUMENTS. THIS INCLUDES BUT IS NOT LIMITED TO REFERENCING; ARCHITECTURAL PLANS FOR DIMENSIONS AND DETAILS; EQUIPMENT PLANS FOR ROUGH-IN REQUIREMENTS; MECHANICAL PLANS FOR EQUIPMENT SIZES AND LOCATIONS.

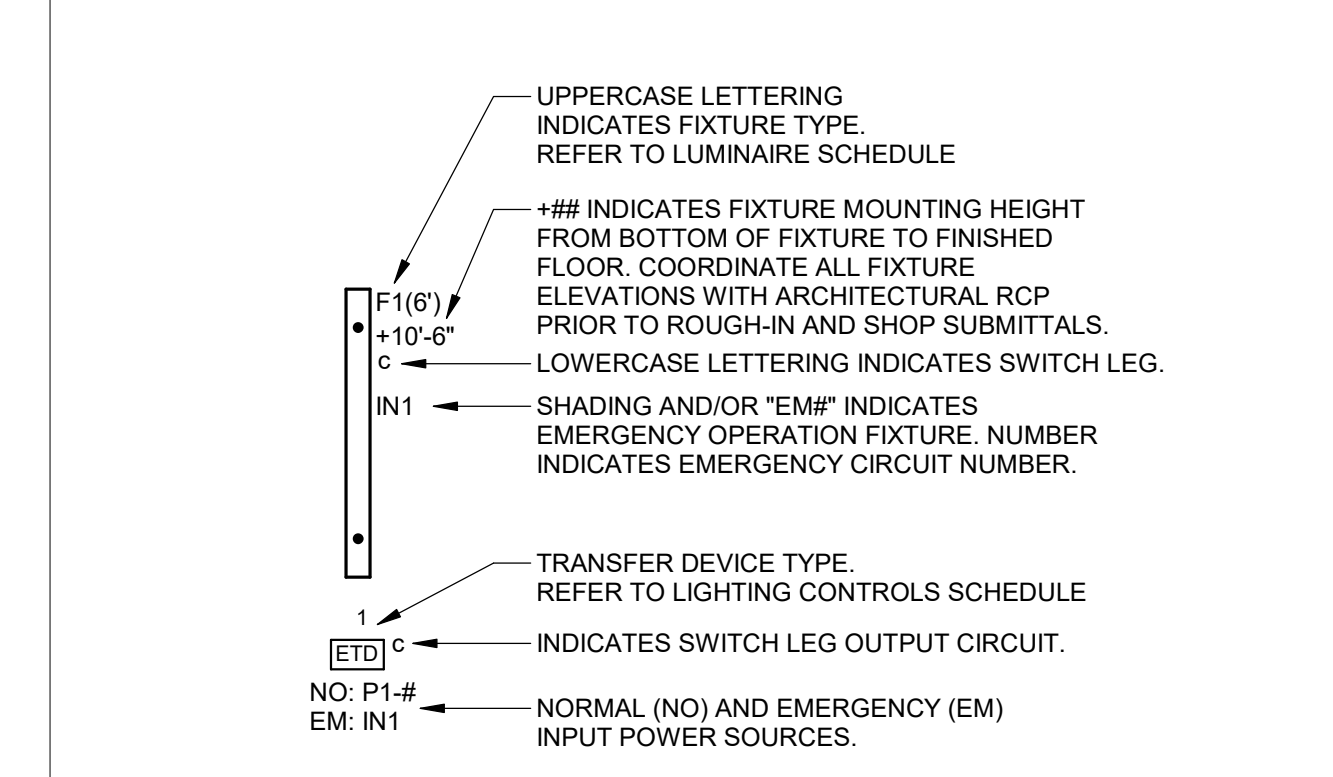
CODE NOTES - ELECTRICAL

- PROVIDE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES.
- THE CURRENT ADOPTED EDITION OF THE ELECTRICAL CODE IS THE STANDARD FOR THE ELECTRICAL INSTALLATION. VERIFY WITH LOCAL OFFICIALS WHEN PERMITS ARE OBTAINED. NOTIFY DESIGN TEAM OF ANY DISCREPANCIES BETWEEN THE PROJECT MANUAL OR DRAWINGS AND THE GOVERNING CODE.
- INSTALLATION SHALL FOLLOW REQUIREMENTS OF THE ADAAG - AMERICANS WITH DISABILITIES ACT.
- REFER TO PROJECT MANUAL AND PROJECT CODE REVIEW SHEET FOR LIST OF APPLICABLE CODES.

DEMOLITION AND RENOVATION NOTES - ELECTRICAL

- ELECTRICAL DEMOLITION DRAWINGS SHOWING EXISTING CONDITIONS HAVE BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. FIELD VERIFY EXISTING CONDITIONS BEFORE WORK BEGINS. ADDITIONAL COMPONENTS MAY EXIST WHICH ARE NOT SHOWN. BECOME FAMILIAR WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK.
- PROVIDE EQUIPMENT, LABOR, AND MATERIALS TO REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK PROVIDED UNDER THIS CONTRACT.
- IN OCCUPIED AREAS BEYOND THE DEMOLITION SCOPE, KEEP EXISTING SYSTEMS NOT AFFECTED BY PROJECT SCOPE OPERATIONAL THROUGH THE DURATION OF THE PROJECT. OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE DEMOLITION AREA. INFORM OWNER'S REPRESENTATIVE OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND ENSURE THAT THE SHUTDOWN IS MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
- REMOVE CONDUITS, BOXES, ETC. AS REQUIRED BY WALL, CEILING, AND ADJACENT COMPONENTS DEMOLITION. REMOVE EXISTING WIRE UNLESS OTHERWISE NOTED.
- INSTALL NEW CONDUCTORS FOR NEW CIRCUITS IN REMODELED AREAS UNLESS SPECIFICALLY NOTED OTHERWISE. RETAIN EXISTING CONDUITS IN GOOD CONDITION WHERE APPROVED BY ENGINEER OR AS INDICATED.
- IDENTIFY DISCONNECTED BRANCH CIRCUIT LOCATION OR ITEM SERVED BEFORE DISCONNECTION. UPDATE PANELEQUIPMENT DIRECTORY ACCORDINGLY.
- MAINTAIN CIRCUITS SERVING AREAS BEYOND THE DEMOLITION AREA. EXTEND NEW WIRING AND BYPASS DEMOLISHED DEVICES TO MAINTAIN EXISTING CIRCUITS.
- KEEP EXISTING SYSTEMS OPERATIONAL DURING ALL PHASES OF CONSTRUCTION. DO NOT CUT EXISTING TELECOMMUNICATION WIRING, CABLES OR CONDUIT. CONTRACTORS WHO CUT IN-SERVICE CABLES ARE RESPONSIBLE FOR ALL DOWNTIME AND COSTS TO REPAIR.
- INSTALL BLANK COVER PLATES OVER OPENING AT REMOVED DEVICE LOCATIONS. THIS INCLUDES BUT IS NOT LIMITED TO, CLOCKS, RECEPTACLES, SWITCHES, JUNCTION BOXES, ETC.
- PROVIDE CUTTING AND PATCHING OF EXISTING MATERIALS AS REQUIRED FOR THE PROPER COMPLETION OF THE DEMOLITION WORK AND THE INSTALLATION OF THE NEW WORK.
- MAINTAIN FULL FUNCTIONAL AND AESTHETIC INTEGRITY OF DEVICES IDENTIFIED TO BE REMOVED AND RELOCATED, AND HANDLE WITH APPROPRIATE CARE TO ALLOW FOR REINSTALLATION. REPLACE DEVICES DAMAGED DURING DEMOLITION WITH NEW AT CONTRACTOR'S EXPENSE.
- EQUIPMENT AND SYSTEM THAT ARE REMOVED REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE NOTED. DISPOSE OF ALL MATERIALS NOT SALVAGED BY THE OWNER.
- REMOVE AND REINSTALL CEILING TILES REQUIRED FOR THE WORK BEING DONE UNDER THIS CONTRACT. REPLACE CEILING TILES DAMAGED DURING CONSTRUCTION TO MATCH EXISTING.

LIGHTING PLANS NOTATION KEY



GENERAL SYMBOLS

- CONDUIT SLEEVE
- JUNCTION BOX, CEILING OR FLOOR MOUNTED.
- JUNCTION BOX, WALL MOUNTED, ELEVATION AS NOTED.
- KEYNOTE
- EQUIPMENT IDENTIFICATION TAG. REFER TO EQUIPMENT CONNECTION SCHEDULE
- DETAIL DRAWING REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE

POWER SYMBOLS

- DUPLEX RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED
- DUPLEX RECEPTACLE, SURFACE RACEWAY, WALL MOUNT +18", OR AS NOTED
- DUPLEX GFCI RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED
- DUPLEX RECEPTACLE, MOUNTED WITHIN WATER COOLER HOUSING, VERIFY HEIGHT. CONNECT TO GFCI, CIRCUIT BREAKER OR REMOTE WALL DEVICE.
- EQUIPMENT CONNECTION, REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE
- EQUIPMENT CONNECTION, WALL MOUNT +18", OR AS NOTED. REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE FOR CONNECTION TYPE
- BLANK FACE GFCI DEVICE, WALL MOUNT +48", OR AS NOTED
- JUNCTION BOX, WITH PULL STRING, WALL MOUNT, REFER TO PLAN OR DETAIL FOR MOUNTING HEIGHT
- HAND DRYER, WALL MOUNT, REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT.
- SAFETY DISCONNECT SWITCH
- PANELBOARD - SURFACE MOUNTED

LIGHTING SYMBOLS

- RECESSED LIGHT FIXTURE, LETTER INDICATES SWITCH LEG (TYPICAL), SHADING INDICATES EMERGENCY LIGHT (TYPICAL)
- SQUARE LIGHT FIXTURE - SURFACE MOUNTED
- ROUND APERTURE RECESSED DOWNLIGHT FIXTURE
- SURFACE MOUNTED STRIP FIXTURE
- INDUSTRIAL STRIP LIGHT FIXTURE
- WALL MOUNTED STRIP LIGHT FIXTURE.
- EMERGENCY LIGHT FIXTURE, WALL MOUNT, +96" OR AS NOTED
- EMERGENCY LIGHT FIXTURE, CEILING MOUNT
- EXIT SIGN, WALL MOUNT +96", SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
- SINGLE POLE SWITCH, WALL MOUNT +48", OR AS NOTED, LETTER INDICATES SWITCH LEG
- OCCUPANCY SENSOR, WALL MOUNT +48" OR AS NOTED, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE
- OCCUPANCY SENSOR, CEILING MOUNT, NUMBER INDICATES TYPE, LETTER INDICATES SWITCH LEG, REFER TO LIGHTING CONTROLS SCHEDULE

FIRE DETECTION AND ALARM SYMBOLS

- MANUAL FIRE ALARM PULL STATION
- SMOKE DETECTOR
- COMBINATION HORN WITH STROBE - WALL MOUNTED
- STROBE - WALL MOUNTED
- STROBE - CEILING MOUNTED
- FIRE ALARM CONTROL PANEL + EMERGENCY COMMUNICATIONS PANEL

SURVEILLANCE SYMBOLS

- IP/VIDEO CORPORATION HALO SMART SENSOR V2.0, AUDIO/SMOKE MONITORING DEVICE, CEILING MOUNTED

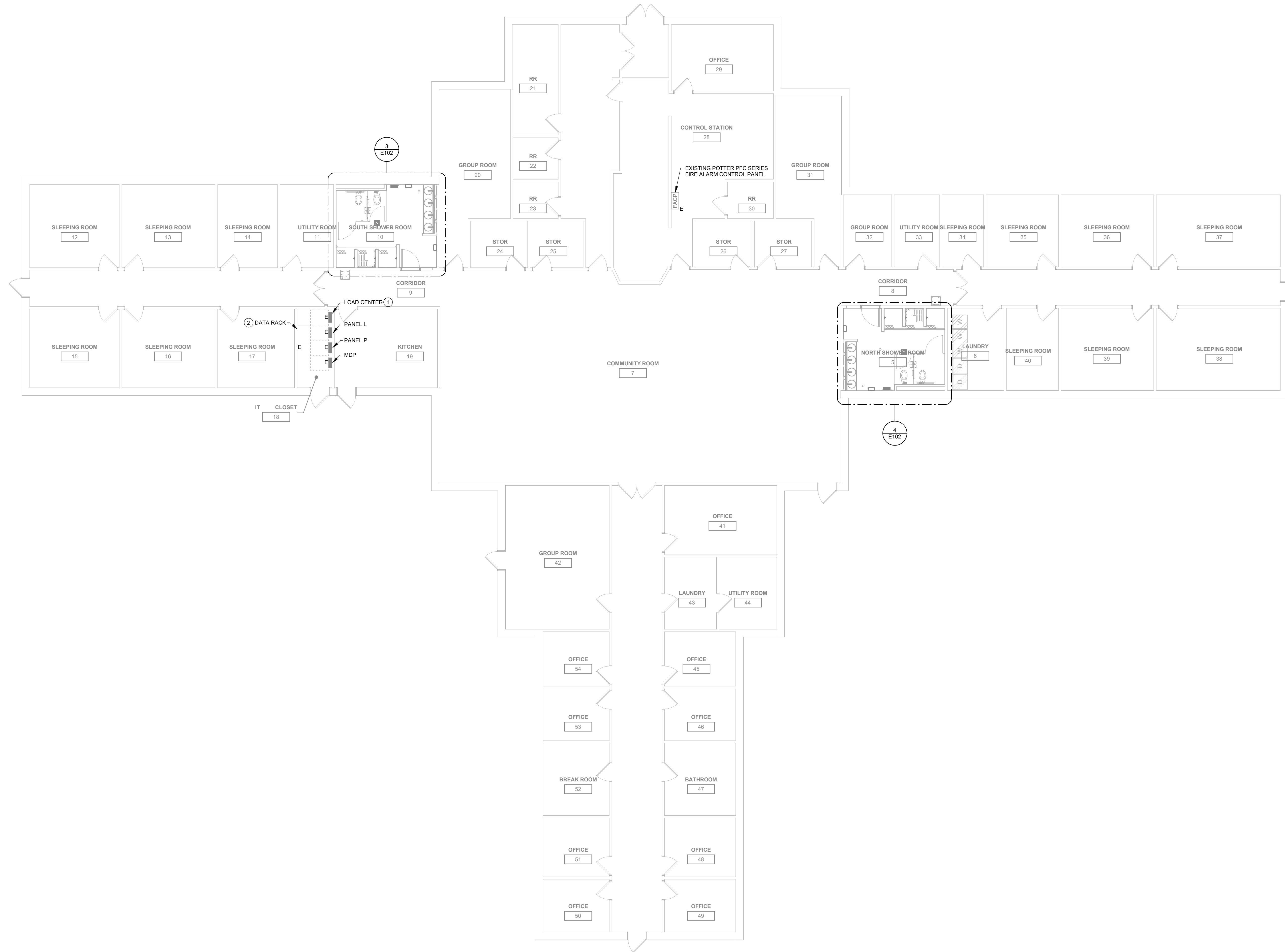
TEMPERATURE CONTROLS SYMBOLS - DEVICES PROVIDED BY T.C.C

- THERMOSTAT JUNCTION BOX ROUGH-IN, WALL MOUNTED +48" OR AS NOTED. EXTEND 3/4" CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING.

***NOTE: ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT**

- POWER GENERAL NOTES**
- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
 - B. COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH MECHANICAL CONTRACTOR AND FINAL MECHANICAL SHOP DRAWINGS.
 - C. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

- KEYNOTES** #
- 1 EXISTING SIEMENS LOAD CENTER WITH (3) SPACES. EXISTING BREAKERS HAVE 10KA AIC RATING. EACH NEW CIRCUIT REQUIRED FOR THIS PROJECT SHALL BE CONNECTED TO A NEW 20A-1P BREAKER IN THIS PANEL.
 - 2 ADD ALTERNATE: NEW HEAD END SYSTEM FOR HALO VAPE DETECTORS TO BE INSTALLED IN EXISTING DATA RACK. PROVIDE PATHWAY AND DATA CABLING TO NEW SENSORS PER MANUFACTURER REQUIREMENTS. PROVIDE REQUIRED SYSTEM ACCESSORIES, SOFTWARE, AND OWNER TRAINING.



1 ELECTRICAL OVERALL PLAN
1/8" = 1'-0"

Key Plan

Revision Description Date

OPN Project No.
23816000

Sheet Issue Date
BID SET 12/4/2023

Sheet Name
ELECTRICAL OVERALL PLAN

Sheet Number
E101

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ELECTRICAL DEMOLITION NOTES

- A. DEMOLITION DRAWINGS PRESENT LAYOUT OF EXISTING CONDITIONS AND MAJOR MECHANICAL/ELECTRICAL ITEMS. THEY ARE NOT TO BE CONSTRUED AS COMPLETE IN REPRESENTATION OF ACCESSORIES AND INCIDENTALS TO BE REMOVED, REPLACED, OR REWORKED. NOR SHOULD ACCESSIBILITY BE INFERRED. THE CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE BUILDING AND EXISTING CONDITIONS, PRIOR TO THE SUBMITTING OF A BID FOR THIS PROJECT.
- B. REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.
- C. THIS ELECTRICAL DEMOLITION DRAWING SHOWING EXISTING CONDITIONS HAS BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. ADDITIONAL COMPONENTS MAY EXIST WHICH DO NOT SHOW, AND SUCH ITEMS SHALL BE DEALT WITH IN A MANNER SIMILAR TO THOSE ITEMS WHICH DO SHOW. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS. CONDUITS, BOXES, ETC. SHALL BE REMOVED AS REQUIRED BY WALL AND CEILING DEMOLITION AND REMOVALS. WIRING SHALL BE REMOVED. ALL WIRING FOR THE REMOVED AREAS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE. ALL BRANCH CIRCUITS TO BE DISCONNECTED SHALL BE IDENTIFIED AS TO LOCATION OR ITEM SERVED BEFORE DISCONNECTING. CIRCUITS SERVING AREAS BEYOND THE IMMEDIATE DEMOLITION AREA SHALL BE MAINTAINED.
- E. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK. CONTRACTOR SHALL OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE IMMEDIATE DEMOLITION AREA. SUCH PERMISSION WILL BE GRANTED ONLY AFTER OWNER'S REPRESENTATIVE IS INFORMED OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND IS SATISFIED THAT THE SHUTDOWN CAN BE MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
- F. PANELBOARDS, DISCONNECTS, FIXTURES, WIRING DEVICES, SIGNAL DEVICES, ETC. SHOWN ON PLANS SHALL BE REMOVED UNLESS NOTED OTHERWISE. REMOVAL SHALL BE DONE IN A TIMELY MANNER IN ACCORDANCE WITH THE GENERAL DEMOLITION WORK. COORDINATE WITH THE OWNER AND OTHER CONTRACTORS.
- G. ABBREVIATIONS:
E - EXISTING ITEM TO REMAIN
ER - NEW LOCATION OF EXISTING ITEM
N - NEW ITEM IN EXISTING LOCATION
R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER
RN - REPLACE EXISTING WITH NEW
RR - EXISTING ITEM TO BE REMOVED AND RELOCATED

POWER GENERAL NOTES

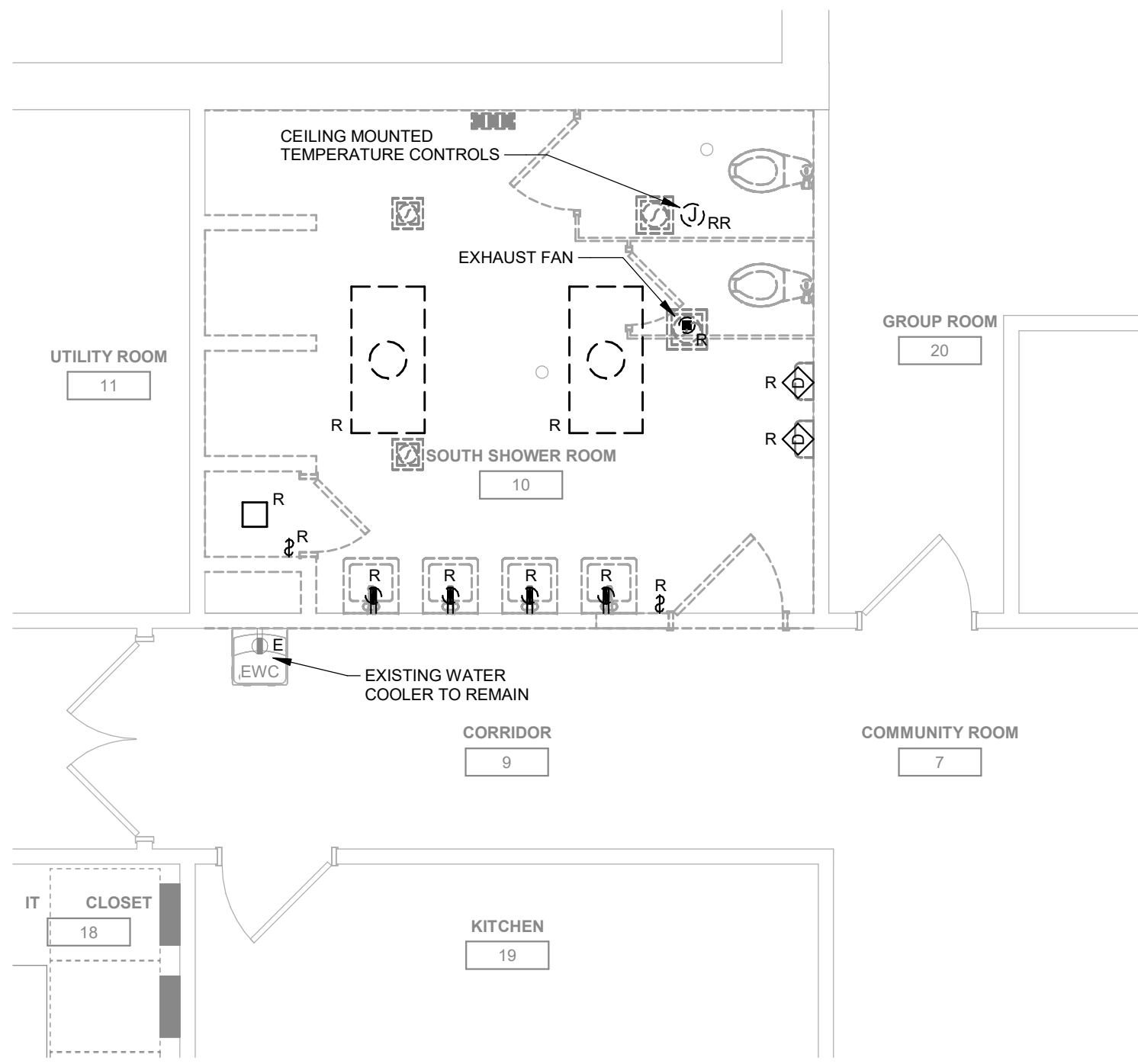
- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- B. COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH MECHANICAL CONTRACTOR AND FINAL MECHANICAL SHOP DRAWINGS.
- C. PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

LIGHTING GENERAL NOTES

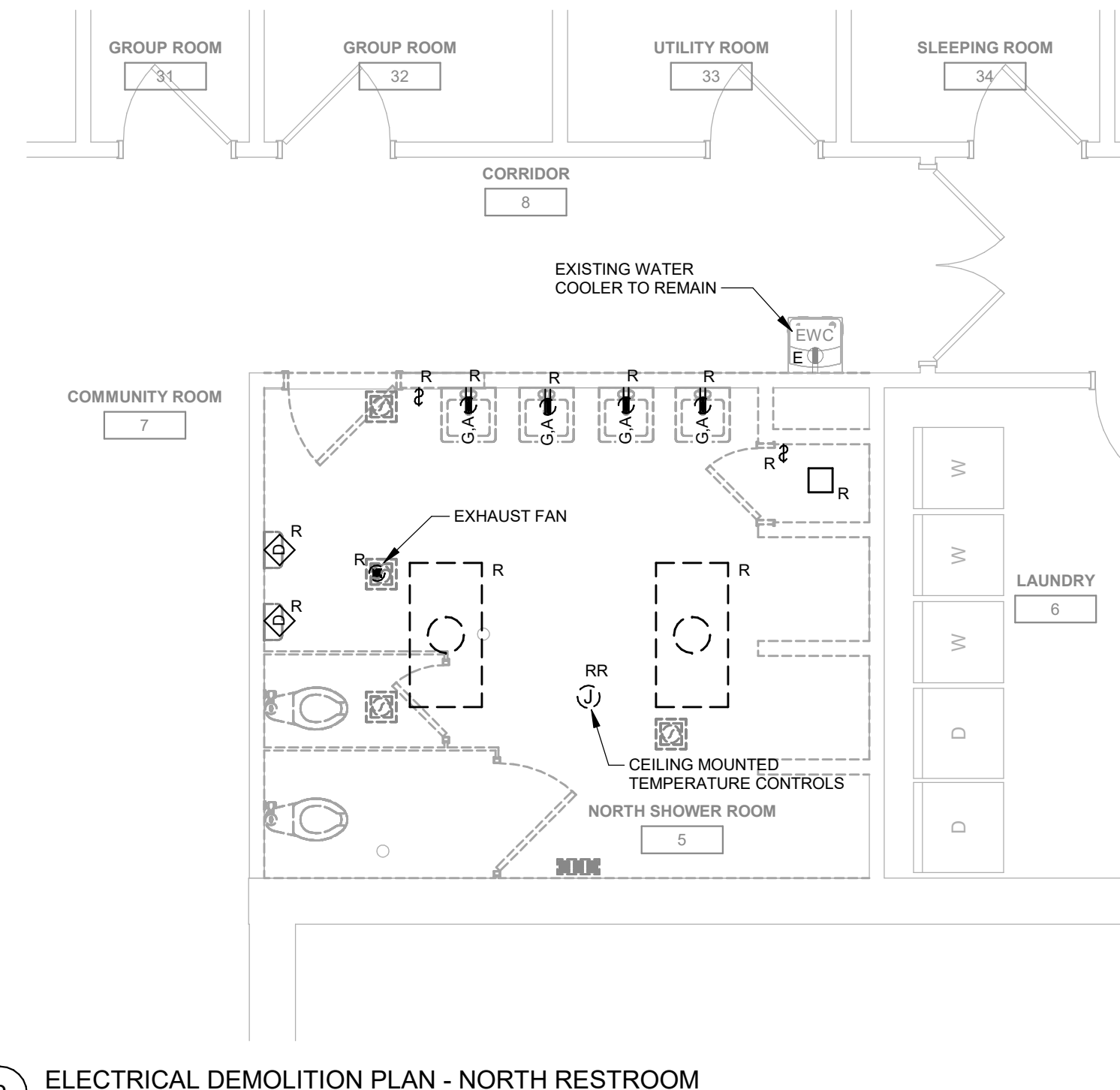
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KEYNOTES

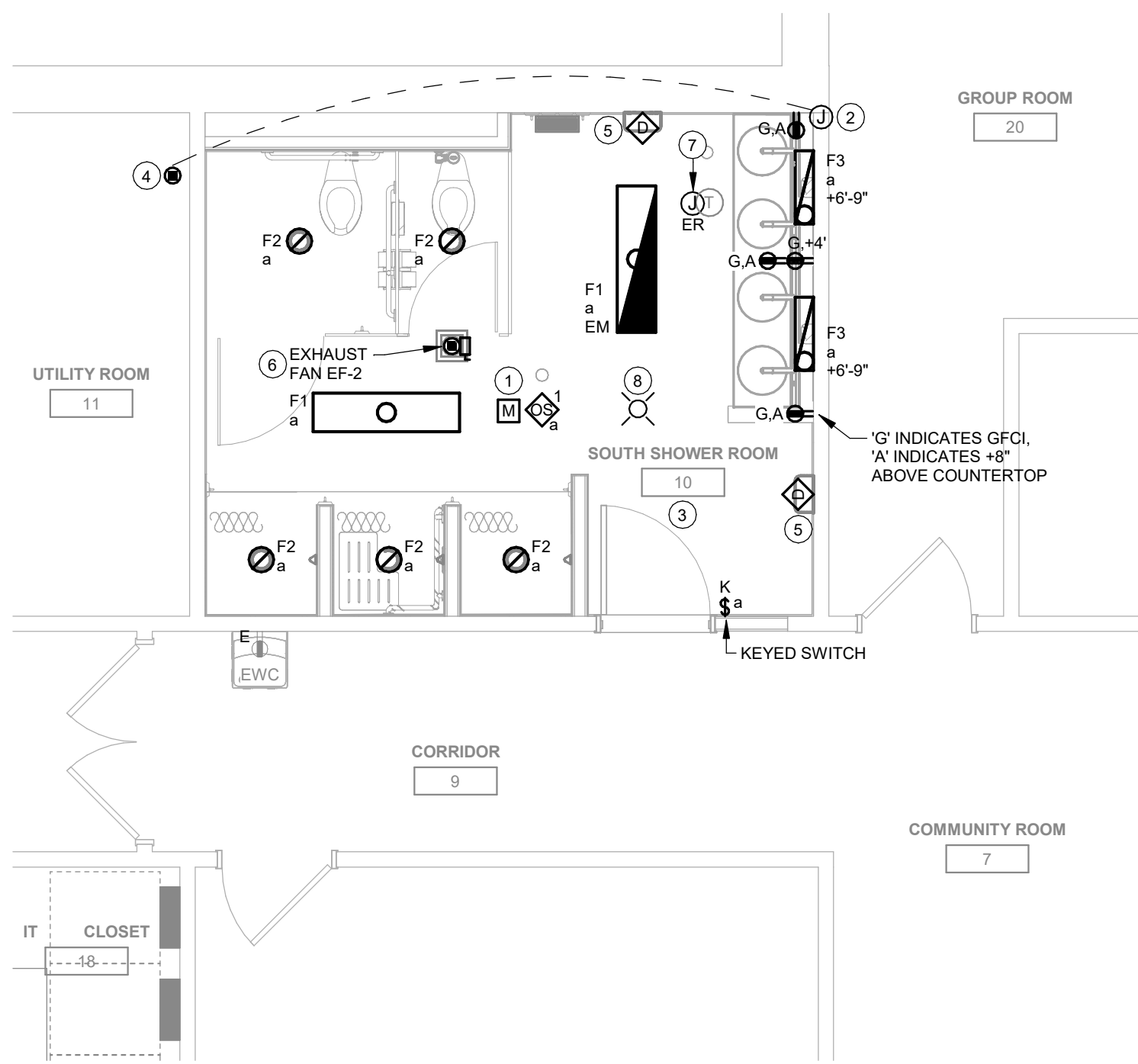
- 1. BASE BID: ROUGH-IN FOR NEW CEILING MOUNTED HALO SMART SENSOR. PROVIDE PULL STRING TO ACCESSIBLE LOCATION. NEW DEVICE AND DATA CABLING PROVIDED AND INSTALLED BY OWNER. ADD ALTERNATE: ADD HALO SMART SENSOR SYSTEM INCLUDING HEAD END EQUIPMENT IN EXISTING DATA RACK, CAT6 LOW VOLTAGE CABLING, PATHWAYS, AND SENSOR.
- 2. PROVIDE QUANTITY OF ELECTRICAL CONNECTIONS AS REQUIRED FOR EACH SINK SENSOR. BASIS OF DESIGN ALLOWS UP TO (8) SENSORS PER 1A LOW VOLTAGE POWER SUPPLY WITH POWER SUPPLY REQUIRING (1) 120V RECEPTACLE. COORDINATE FINAL ELECTRICAL CHARACTERISTICS WITH SINK MANUFACTURER.
- 3. CONNECT NEW LIGHTING TO EXISTING LOCAL 120V LIGHTING CIRCUIT. CONNECT NEW LAVATORY SENSORS AND RECEPTACLES TO EXISTING LOCAL 120V RECEPTACLE CIRCUITS. CONNECT EACH NEW HAND DRYERS TO EXISTING 120V HAND DRYER CIRCUIT.
- 4. LOW VOLTAGE POWER SUPPLY FOR LAVATORY SENSORS. MOUNT POWER SUPPLY IN ACCESSIBLE LOCATION COORDINATED WITH OWNER. COORDINATE ELECTRICAL REQUIREMENTS WITH APPROVED EQUIPMENT. PROVIDE RECEPTACLES AS REQUIRED. CONNECT TO LOCAL 120V RECEPTACLE CIRCUIT.
- 5. CONNECT TO EXISTING 20A-1P HAND DRYER CIRCUIT.
- 6. CONNECT TO EXISTING 20A-1P EXHAUST FAN CIRCUIT. CONTROL WITH LIGHTING IN AREA.
- 7. REINSTALL EXISTING TEMPERATURE CONTROLS. FIELD VERIFY REQUIREMENTS WITH EQUIPMENT. COORDINATE LOCATION WITH OWNER.
- 8. NEW FIRE ALARM STROBE CONNECTED TO EXISTING FIRE ALARM CONTROL PANEL.



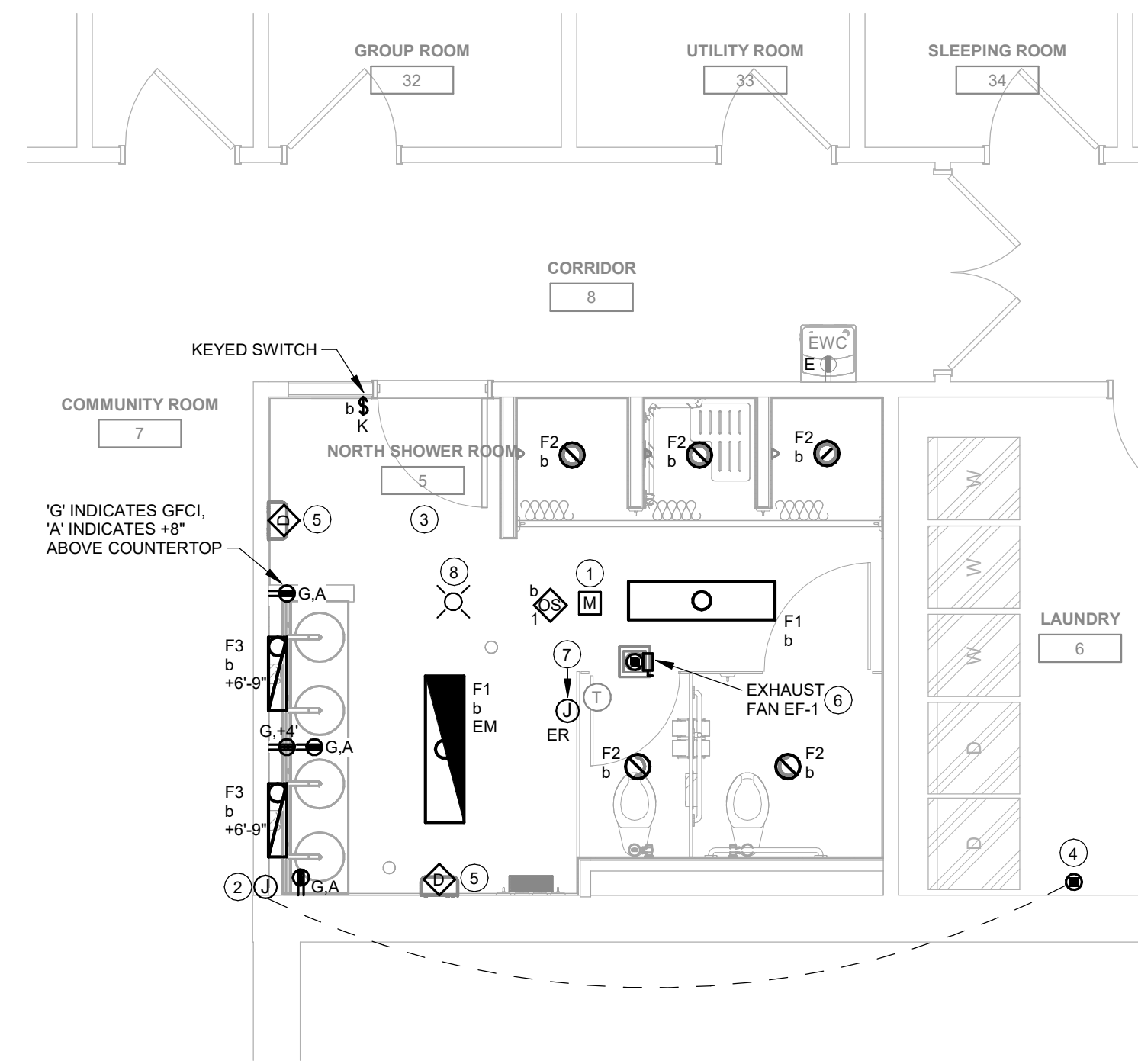
1 ELECTRICAL DEMOLITION PLAN - SOUTH RESTROOM
1/4" = 1'-0"



2 ELECTRICAL DEMOLITION PLAN - NORTH RESTROOM
1/4" = 1'-0"



3 ELECTRICAL PLAN - SOUTH RESTROOM
1/4" = 1'-0"



4 ELECTRICAL PLAN - NORTH RESTROOM
1/4" = 1'-0"

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LIGHTING FIXTURE SCHEDULE

- NOTES:**
- ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
 - INCLUDE A MINIMUM 1 YEAR WARRANTY FOR LIGHTING FIXTURES, WHERE NOT OTHERWISE SPECIFIED.
 - REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE PURCHASE.
 - VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL. NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.
 - AIM AND TARGET ADJUSTABLE INTERIOR AND EXTERIOR LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.
 - CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FILLING OUT ALL UTILITY REBATE FORMS FOR OWNER.

DESIGNED BY: A/JV

TYPE	MANUFACTURER	MODEL	DESCRIPTION	FINISH	LUMENS	CRI	SOURCE-CCT	VOLTAGE	LOAD-VA	APPROVED EQUALS
F1	KENALL	MHLA12-48-F-LG-CP-1-45L40K-DCC-1-DV	LED VANDAL RESISTANT SURFACE MOUNTED STRIP FIXTURE, 1'X4' LENGTH, HIGH IMPACT, 156° POLYCARBONATE LENS, MARINE GRADE ALUMINUM HOUSING, TAMPER RESISTANT TORX HEAD SCREWS, FLAT ENDCAPS, PROVIDE WITH INTEGRAL 8.5W EMERGENCY BATTERY BACKUP WHERE NOTED BY 'EM'. PROVIDE WITH 10 YEAR WARRANTY.	WHITE	5,000	82	LED - 4000K	120 V	45 VA	LUMINAIRE LED, LC DOANE, FAIL-SAFE, AS APPROVED BY ENGINEER
F2	JUNO	IC1JB-ISF-7IN-40K-90CRI-MVO-LT-WH-JSFMTGLT	LED SURFACE MOUNTED SLIM SHOWER DOWNLIGHT, 7" DIAMETER, IC RATED HOUSING, WET LOCATION LISTED, 5 YEAR WARRANTY, ACT, TAMPER RESISTANT TORX HEAD SCREWS, IP65 WET LOCATION LISTED, 5 YEAR WARRANTY.	WHITE	1000	90	LED - 4000K	120 V	13 VA	PHILIPS, GREEN CREATIVE, AS APPROVED BY ENGINEER
F3	KENALL	MLHA5-2'F-MW-CP-1-25L40K-DCC-1-DV	WALL MOUNTED LED VANITY LIGHT, 5" WIDE X 24" LENGTH, DIE CAST ALUMINUM HOUSING, FLAT END CAPS, IMPACT RESISTANT POLYCARBONATE LENS, TAMPER RESISTANT TORX SCREWS, PROVIDE WITH 10 YEAR WARRANTY.	WHITE	2,500	82	LED - 4000K	120 V	25 VA	LUMINAIRE LED, FAIL-SAFE, AS APPROVED BY ENGINEER

LIGHTING CONTROLS SCHEDULE

- NOTES:**
- ALL DEVICES SHALL BE U.L. OR SIMILARLY LISTED.
 - ALL DEVICES PROVIDED WITH MANUFACTURER LIMITED 5 YEAR WARRANTY.
 - PROVIDE LIGHTING CONTROLS WITH MANUFACTURER COMPLIANT POWER PACKS AND LOW VOLTAGE ROOM CONTROLLERS IN QUANTITY REQUIRED TO INSTALL A COMPLETE AND OPERATIONAL SYSTEM. MANUFACTURER OR MANUFACTURERS REP TO PROVIDE DEVICE QUANTITIES, LAYOUTS AND TYPICAL WIRING DETAILS DURING SHOP SUBMITTAL PROCESS. PROVIDE DIMMING COMPATIBLE DEVICES WHERE DIMMING CONTROLS ARE SHOWN. COORDINATE DIMMING TYPE WITH LIGHTING FIXTURES SHOWN. REFER TO LUMINAIRE SCHEDULE FOR FIXTURE DIMMING TYPE.
 - WHERE WIRELESS LIGHTING CONTROLS ARE PROVIDED, POWERPACKS SHALL BE PROVIDED AND INSTALLED WITHIN MANUFACTURER RECOMMENDED DISTANCES TO ENSURE CONTROLLER OPERATION.
 - INSTALL LOW VOLTAGE POWER PACKS AND ROOM CONTROLLERS ABOVE NEARBY ACCESSIBLE CEILING TILES OR IN MECHANICAL/STORAGE SPACES ADJACENT TO CONTROLLED FIXTURES. DO NOT INSTALL POWERPACKS EXPOSED IN COMMON SPACES OR IN INACCESSIBLE LOCATIONS.
 - PROVIDE FACTORY AUTHORIZED REPRESENTATIVE TO DEMONSTRATE TYPICAL INSTALLATION AND COMMISSIONING OF EQUIPMENT.
 - WHERE APPROVED EQUAL MANUFACTURER PRODUCTS SENSOR COVERAGE OR LOAD RATINGS DIFFER FROM BASIS OF DESIGN, CONTRACTOR AND MANUFACTURER ARE RESPONSIBLE FOR PROVIDING ADDITIONAL DEVICES AS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
 - ETDS AND ALL EMERGENCY LIGHTING CONTROLS COMPONENTS SHALL BE TESTED AND LISTED AS COMPATIBLE BY MANUFACTURER WITH NORMAL LIGHTING CONTROLS IN ALL AREAS.
 - UNLESS INDICATED OTHERWISE, LIGHTING CONTROL SCHEMES/OPERATION SHALL BE AS FOLLOWS:

RESTROOMS SENSORS PROGRAMMED FOR OCCUPANCY MODE, AUTOMATIC ON/OFF OPERATION, 20 MINUTES MINIMUM, 30 MINUTES MAXIMUM.

DESIGNED BY: A/JV

TYPE	DESCRIPTION	ELECTRICAL	MOUNTING	SENSOR TYPE	COVERAGE	APPROVED MANUFACTURERS
OS 1	CEILING MOUNTED OCCUPANCY/VACANCY SENSOR, WHITE FINISH, AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION, 9-30 MINUTE TIMER SETTINGS, INDOOR USE.	LOW VOLTAGE	CEILING / 8'-12" MH	DUAL-TECH	2000 SQ FT / 360 DEG	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, GREENGATE, AS APPROVED BY ENGINEER.

EQUIPMENT CONNECTION SCHEDULE

- GENERAL NOTES:**
- INCLUDE AUXILIARY CONTACTS AND LOW-VOLTAGE WIRING TO AUXILIARY EQUIPMENT THAT RUNS IN TANDEM WITH EQUIPMENT, (I.E. 120V DAMPERS WITH 480V MOTORS).

ABBREVIATIONS:

1	NEMA 1 ENCLOSURE	INT	INTEGRAL WITH EQUIPMENT FROM FACTORY
3R	NEMA 3R ENCLOSURE	MMS	MANUAL MOTOR STARTER WITH FUSES
4	NEMA 4 ENCLOSURE	NFD	NON-FUSED DISCONNECT SWITCH, HEAVY DUTY
4X	NEMA 4X ENCLOSURE	RD	RETURN AIR DUCT DETECTOR
BO	PROVIDED BY OTHERS	RSR	RUN STATUS RELAY, NORMALLY OPEN
CB	CIRCUIT BREAKER IN PANEL	SD	SUPPLY AIR DUCT DETECTOR
CSD	COMBINATION STARTER/DISCONNECT	SSP	START/STOP PUSHBUTTON WITH PILOT
CP	CORD AND PLUG PROVIDED WITH UNIT	SS	START/STOP PUSHBUTTON
ECB	ENCLOSED CIRCUIT BREAKER	ST	SHUNT TRIP
FAR	FIRE ALARM SHUTDOWN RELAY	TOR	TIME DELAY OFF RELAY
FDS	FUSED DISCONNECT SWITCH, HEAVY DUTY	TS	TOGGLE SWITCH WITH PLUG FUSE
GF	GROUND FAULT CIRCUIT INTERRUPTION	VFD	VARIABLE FREQUENCY DRIVE
HOA	HAND-OFF-AUTO		

TAG	ELECTRICAL CHARACTERISTICS				DISCONNECT			CONTROLS		REMARKS	
	VOLTAGE	PHASE	MOTOR HP	KW	MCA	TYPE	SIZE (AMPS)	NEMA RATING	FUSE SIZE (AMPS)		STARTER
EF-1	120 V	1	1/8			TS	20	1	15		CONTROL WITH LIGHTING IN AREA.
EF-2	120 V	1	1/8			TS	20	1	15		CONTROL WITH LIGHTING IN AREA.

Key Plan

Revision Description Date

OPN Project No.
23816000

Sheet Issue Date
BID SET 12/4/2023

Sheet Name
ELECTRICAL DETAILS AND SCHEDULES

Sheet Number