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GENERAL DRAWINGS

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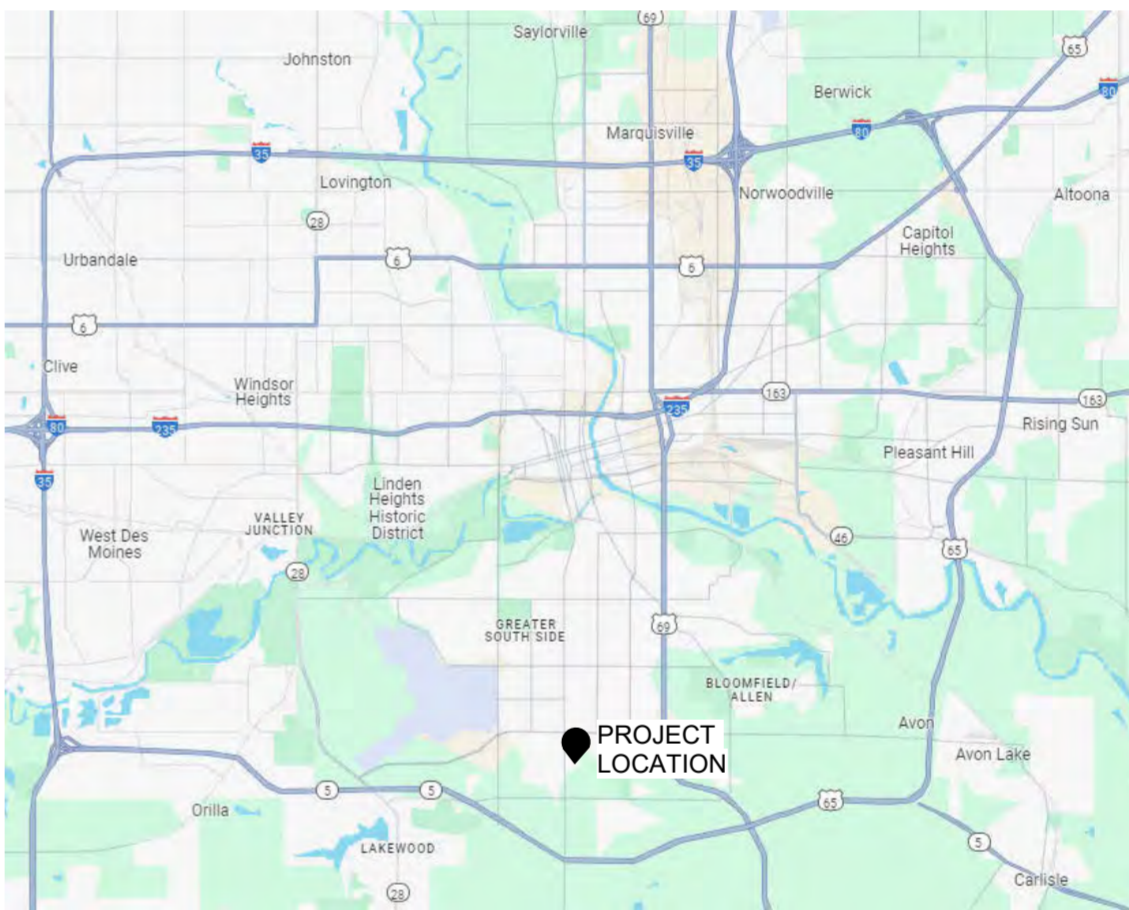
SHEET NUMBER	SHEET NAME
P001	PLUMBING OVERALL PLANS
P101	PLUMBING PLANS
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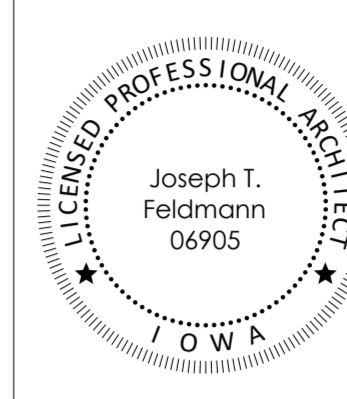
SHEET NUMBER	SHEET NAME
E000	ELECTRICAL GENERAL NOTES & SYMBOLS
E001	ELECTRICAL OVERALL PLANS
E101	ELECTRICAL PLANS
E201	ELECTRICAL SCHEDULES



▲ SITE LOCATION

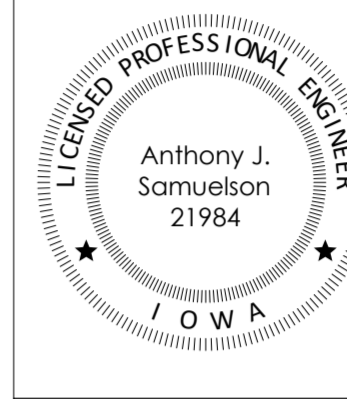
All questions regarding these plans and specifications should be directed to:

NATE STIELER, AIA
Project Manager
nstiel@opnarchitects.com
515-309-6862



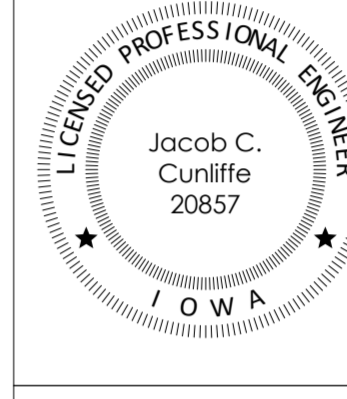
I hereby certify these plans and specifications were prepared by me or under my direct personal supervision and that I am a duly licensed professional architect under the laws of the state of Iowa.

Signature: *Joseph T. Feldmann*
Name: Joseph T. Feldmann, AIA
Iowa Registration No: 06905 Renewal Date: 06/30/2026



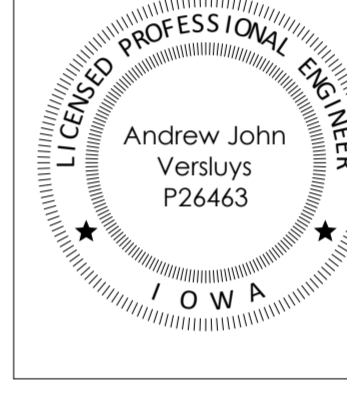
I hereby certify this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the state of Iowa.

Signature: *Anthony J. Samuelson*
Name: Anthony J. Samuelson
Iowa Registration No: 21984 Renewal Date: 12/31/2025



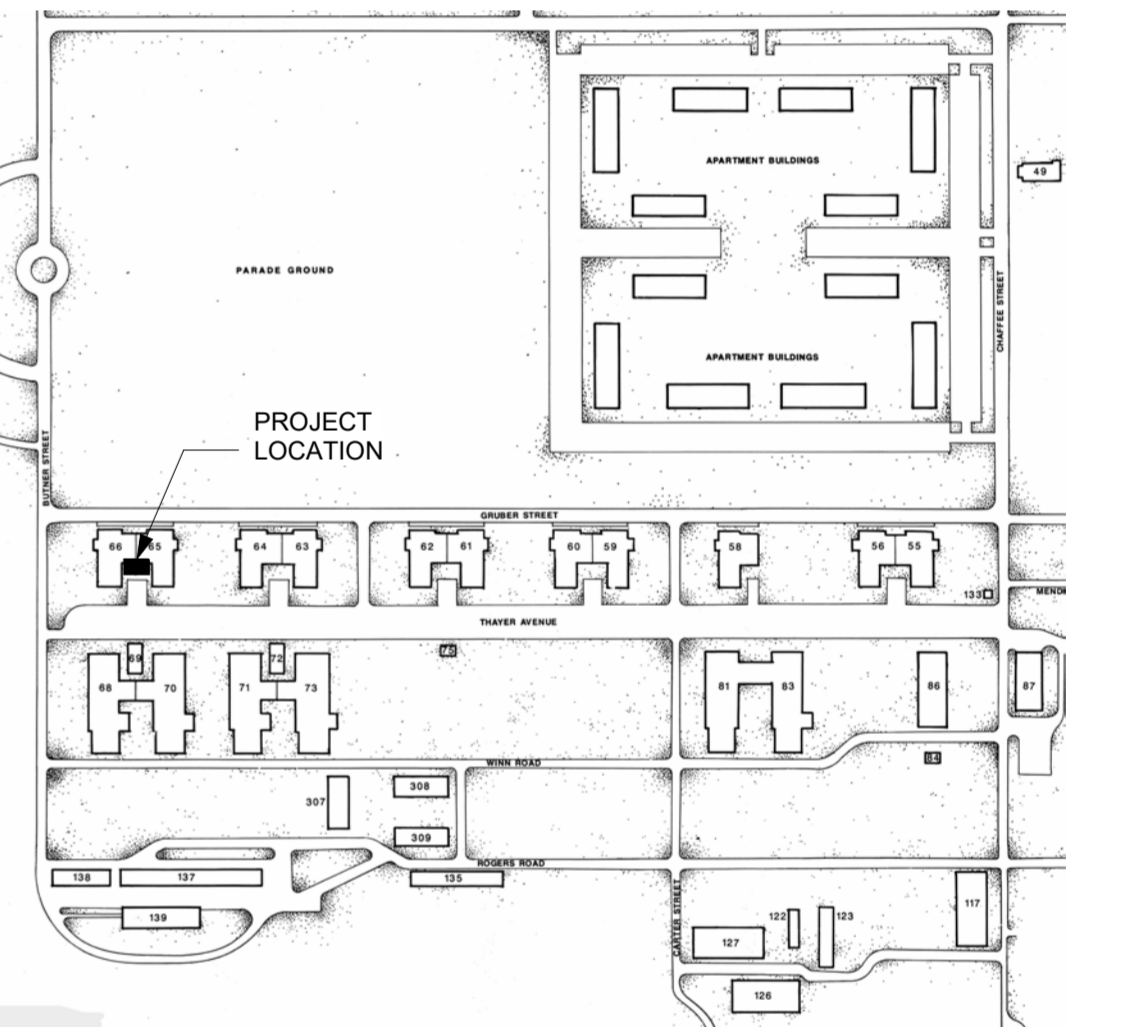
I hereby certify this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed professional engineer under the laws of the state of Iowa.

Signature: *Jacob C. Cunliffe*
Name: Jacob C. Cunliffe, PE
Iowa Registration No: 20857 Renewal Date: 12/31/2025



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: *Andrew John Versluys*
Name: Andrew John Versluys, PE
Iowa Registration No: P26463 Renewal Date: 12/31/2024



9375.00 - DOC 5JD FT DES MOINES BLDG 65-66 RESTROOM RENOVATION

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STRUCTURAL ENGINEER

RAKER RHODES ENGINEERING
4717 GRAND AVE
DES MOINES, IA 50312

APPLICABLE CODE INFORMATION

The project shall comply with the following codes:
2015 International Building Code, including State of Iowa amendments.
2021 International Mechanical Code
2015 International Fire Code
2020 National Electrical Code
Iowa State Plumbing Code (2021 Uniform Plumbing Code)
2015 International Existing Building Code
2012 NFPA 101 Life Safety Code
Iowa State Energy Code, 2012 International Energy Conservation Code
Accessibility - Division 7 of Iowa State Building Code, Iowa State Accessibility Code, 2015 IBC and ANSI A117.1 - 2009 Edition

Building Characteristics
Project description: Project includes renovation of the existing Level 2 shower and toilet facilities in a residential correctional facility, as well as relocation of existing laundry room to Level 2. Renovations include reconfiguration of restrooms and shower room layouts and addition of accessible toilet, lavatory and shower fixtures. Mechanical, plumbing and electrical services will be reconfigured for the new layout.
Building Area: 12,818.59 SF
Building Height: 31'-0"
Number of Stories: 3 (see below for detailed information)
Fully Sprinkled: Yes - Equipped with fully automated sprinkler system
Fire Alarm: Yes

IC Chapter 3 - Use and Occupancy Classification
Occupancy Group: B, R-2 (Nonseparated occupancy use)

IBC Chapter 5 - General Building Heights and Areas
Occupancy Group B
Building Height: 31'-0" (75'-0" max per IBC Table 504.3)
Number of Stories: 3 (4 max per IBC Table 504.4)
Building Area: 12,818.59 GSF (57,000 GSF per IBC Table 506.2)
Occupancy Group R-2
Building Height: 31'-0" (75'-0" max per IBC Table 504.3)
Number of Stories: 3 (5 max per IBC Table 504.4)
Building Area: 12,818.59 GSF (48,000 GSF per IBC Table 506.2)

508 Mixed Use and Occupancy
508.3 Nonseparated occupancies: Buildings or portions of buildings that comply with the provisions of this section shall be considered as nonseparated occupancies.

IBC Chapter 6 - Types of Construction
Construction Classification: Type III-B
Table 601 Fire Resistance Rating Required
Primary Structural Frame 0 HR
Bearing Walls 2 HR
Nonbearing Wall and Partition (Exterior) 0 HR
Nonbearing Wall and Partitions (Interior) 0 HR
Floor Construction and Secondary Members 0 HR
Roof Construction and Secondary Members 0 HR

Table 602 Fire Resistive Rating for Exterior Walls based on Fire Construction
Fire Separation Distance is greater than 30 FT = 0 HR

IBC Chapter 9 - Fire Protection Systems
903 Automatic Sprinkler Systems Required/Provided
906 Portable Fire Extinguishers Required/Provided

IBC Chapter 10 - Means of Egress
1004 Occupant Load (See Building Occupant Load Calculations for details)
Basement 35.2
Level 1 263.1
Level 2 119.6
Total Occupants 417.8

Table 1006.2.1 Spaces With One Exit Or Exit Access Doorway
Occupancy Group B
Max. common path of egress travel distance (feet) for buildings with sprinkler system 100 feet
Occupancy Group R-2
Max. common path of egress travel distance (feet) for buildings with sprinkler system 125 feet

Table 1017.2 Exit Access Travel Distance
Occupancy Group B/R-2
Max. exit access travel distance for buildings with sprinkler system 250 feet

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 Requirements per Iowa State Plumbing Code (2018 International Plumbing Code Table 2902.1)
Table 403.1 Minimum Number of Required Plumbing Fixtures
Occupancy W.C. Lav. Urinals Showers DF Other
Business M/F 1 per 25 before 50 1 per 40 before 80 (See note) -- 1 per 100 1 Service Sink
Residential M/F 1 per 10 1 per 10 (See note) 1 per 8 1 per 100 1 Service Sink
For each urinal added in excess of the maximum required, one water closet may be deducted. The number of water closets shall not be reduced to less than two-thirds (2/3) of the minimum.
There shall be a minimum of one (1) drinking fountain per occupied floor in offices or public buildings.

OCCUPANT LOAD CALCULATIONS

Name	Area	Occupancy Group	O.L.F.	Area Occupants
BASEMENT				
UNFINISHED	401.23 SF		0	
UNFINISHED	801.39 SF		0	
UNFINISHED	125.48 SF		0.00	
UNFINISHED	261.04 SF		0	
UNFINISHED	141.30 SF		0	
UNFINISHED	227.78 SF		0	
UNFINISHED	275.06 SF		0	
B - Business				
BOILER ROOM	803.69 SF	B - Business	300	2.68
BUSINESS (U)	1255.87 SF	B - Business	150	8.37
BUSINESS (U)	1834.26 SF	B - Business	150	12.23
MAINTENANCE	331.22 SF	B - Business	300	1.10
STORAGE	1015.09 SF	B - Business	300	3.38
STORAGE	2102.73 SF	B - Business	300	7.01
WATER	123.52 SF	B - Business	300	0.41
ENTRANCE				
				35.19
				35.19

PLUMBING FIXTURE ANALYSIS OCCUPANCY LOAD CALCULATED USING 2021 UNIFORM PLUMBING CODE

BASED ON A TYPE R-2 & B OCCUPANCY - TABLE 422.1, 2021 UPC: RESIDENTIAL - BOARDING HOUSE; BUSINESS		LAV	WC	URINALS	SHOWERS	DRINKING FOUNTAINS	SERVICE SINKS	OCCUPANT LOAD
BASEMENT	BUSINESS	REQUIRED	0.88	1.41	--	--	0.35	35.2 OCCUPANTS
	RESIDENTIAL	REQUIRED						0 OCCUPANTS
	TOTAL REQ'D		1	2	--	0	1	
	PROVIDED		2	0	0	0	0	
LEVEL 1	BUSINESS	REQUIRED	4.29	6.26	--	--	2.63	263.1 OCCUPANTS
	RESIDENTIAL	REQUIRED						0 OCCUPANTS
	TOTAL REQ'D		5	7	--	0	3	
	PROVIDED		9	8	2	0	1	
LEVEL 2	BUSINESS	REQUIRED	0.88	1.4	--	--	0.35	35 OCCUPANTS
	RESIDENTIAL	REQUIRED	8.5	8.5	--	10.58	0.85	84.6 OCCUPANTS
	TOTAL REQ'D		10	10	--	11	2	
	PROVIDED		10	7	3	8	2	
COMBINED TOTAL	REQUIRED		16	19	--	11	6	417.9 TOTAL OCCUPANTS
	PROVIDED		19	15	5	8	3	

REFLECTED CEILING PLAN - LEVEL 1 - RESTROOMS

B - Business	BREAK ROOM	341.85 SF	B - Business	150	2.28
B - Business	CLOSET	15.46 SF	B - Business	300	0.05
B - Business	CONFERENCE	1102.80 SF	B - Business	15	73.52
B - Business	CONFERENCE	457.12 SF	B - Business	15	30.47
B - Business	CONFERENCE	481.03 SF	B - Business	15	32.07
B - Business	CONTROL	130.19 SF	B - Business	150	0.87
B - Business	I.T. ROOM	90.08 SF	B - Business	150	0.60
B - Business	INSTRUCTION	1878.70 SF	B - Business	20	93.93
B - Business	KITCHENETTE	110.25 SF	B - Business	150	0.74
B - Business	LAUNDRY	467.41 SF	B - Business	150	3.12
B - Business	MECH	22.70 SF	B - Business	300	0.08
B - Business	OFFICE	189.96 SF	B - Business	150	1.27
B - Business	OFFICE	115.31 SF	B - Business	150	0.77
B - Business	OFFICE	192.03 SF	B - Business	150	1.28
B - Business	OFFICE	282.81 SF	B - Business	150	1.89
B - Business	OFFICE	68.11 SF	B - Business	150	0.44
B - Business	OFFICE	122.81 SF	B - Business	150	0.82
B - Business	OFFICE	104.87 SF	B - Business	150	0.70
B - Business	OFFICE	106.21 SF	B - Business	150	0.71
B - Business	OFFICE	108.13 SF	B - Business	150	0.72
B - Business	OFFICE	111.02 SF	B - Business	150	0.74
B - Business	OFFICE	99.66 SF	B - Business	150	0.66
B - Business	OFFICE	112.33 SF	B - Business	150	0.75
B - Business	OFFICE	174.62 SF	B - Business	150	1.16
B - Business	OFFICE	163.18 SF	B - Business	150	1.09
B - Business	OFFICE	165.58 SF	B - Business	150	1.10
B - Business	OFFICE	190.35 SF	B - Business	150	1.27
B - Business	OFFICE	141.26 SF	B - Business	150	0.94
B - Business	OFFICE	174.45 SF	B - Business	150	1.16
B - Business	OFFICE	151.96 SF	B - Business	150	1.01
B - Business	OFFICE	166.40 SF	B - Business	150	1.11
B - Business	OFFICE	152.10 SF	B - Business	150	1.01
B - Business	OFFICE	211.72 SF	B - Business	150	1.41
B - Business	PANTRY	50.79 SF	B - Business	300	0.17
B - Business	STORAGE	68.48 SF	B - Business	300	0.23
B - Business	STORAGE	88.57 SF	B - Business	300	0.30
B - Business	STORAGE	283.79 SF	B - Business	300	0.95
B - Business	WORK ROOM	122.13 SF	B - Business	150	0.81
B - Business	WORK ROOM	130.99 SF	B - Business	150	0.87
					263.07
					263.07

PLUMBING FIXTURE ANALYSIS OCCUPANCY LOAD CALCULATED USING 2021 UNIFORM PLUMBING CODE - USING ACTUAL OCCUPANT LOADS*

BASED ON A TYPE R-2 & B OCCUPANCY - TABLE 422.1, 2021 UPC: RESIDENTIAL - BOARDING HOUSE; BUSINESS		LAV	WC	URINALS	SHOWERS	DRINKING FOUNTAINS	SERVICE SINKS	OCCUPANT LOAD
BASEMENT	BUSINESS	REQUIRED						0 OCCUPANTS
	RESIDENTIAL	REQUIRED						0 OCCUPANTS
	TOTAL REQ'D		0	0	0	0	0	
	PROVIDED		2	0	0	0	0	
LEVEL 1	BUSINESS	REQUIRED	0.55	0.88	--	--	0.22	22 OCCUPANTS (STAFF)
	RESIDENTIAL	REQUIRED						0 OCCUPANTS
	TOTAL REQ'D		1	1	0	0	1	
	PROVIDED		9	8	2	0	1	
LEVEL 2	BUSINESS	REQUIRED	0.075	0.12	--	--	0.03	3 OCCUPANTS (STAFF)
	RESIDENTIAL	REQUIRED	6	6	--	7.5	0.6	60 OCCUPANTS (BEDS)
	TOTAL REQ'D		7	7	0	8	1	
	PROVIDED		10	7	3	8	2	
COMBINED TOTAL	REQUIRED		8	8	0	8	2	85 TOTAL OCCUPANTS
	PROVIDED		19	15	5	8	3	

* = ACTUAL OCCUPANT LOADS BASED ON STAFF COUNTS AND LICENSED BED COUNTS PROVIDED BY FIFTH JUDICIAL DISTRICT. FORT DES MOINES BUILDING 65-66 CORRECTIONAL FACILITY IS CURRENTLY LICENSED FOR 60 BEDS.

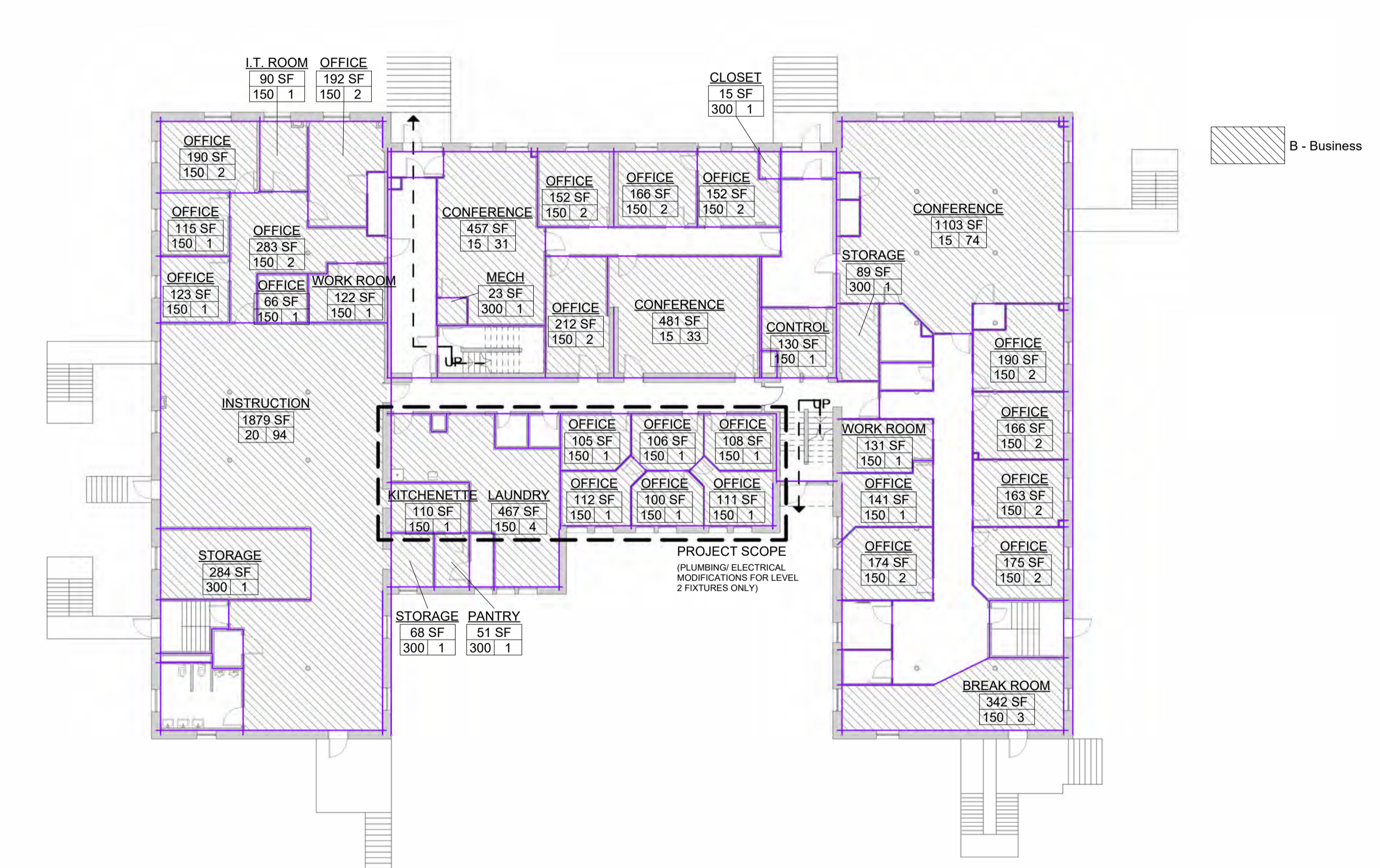
Level 2	Area	Occupancy Group	O.L.F.	Area Occupants
B - Business				
BUSINESS (U)	218.80 SF	B - Business	150	1.46
BUSINESS (U)	496.28 SF	B - Business	150	3.31
BUSINESS (U)	464.89 SF	B - Business	150	3.10
CONTROL	148.99 SF	B - Business	150	0.99
OFFICE	177.39 SF	B - Business	150	1.18
OFFICE	174.96 SF	B - Business	150	1.17
OFFICE	124.03 SF	B - Business	150	0.83
STAFF	1148.26 SF	B - Business	50	22.97
TRAINING				
				35.00
R-4 - Residential				
2 BED ROOM	116.52 SF	R-4 - Residential	50	2.33
2 BED ROOM	117.50 SF	R-4 - Residential	50	2.35
2 BED ROOM	133.17 SF	R-4 - Residential	50	2.66
2 BED ROOM	118.48 SF	R-4 - Residential	50	2.37
2 BED ROOM	118.48 SF	R-4 - Residential	50	2.37
3 BED ROOM	182.13 SF	R-4 - Residential	50	3.64
3 BED ROOM	164.50 SF	R-4 - Residential	50	3.29
4 BED ROOM	232.79 SF	R-4 - Residential	50	4.66
4 BED ROOM	223.54 SF	R-4 - Residential	50	4.47
4 BED ROOM	225.08 SF	R-4 - Residential	50	4.50
4 BED ROOM	238.96 SF	R-4 - Residential	50	4.78
4 BED ROOM	205.94 SF	R-4 - Residential	50	4.10
4 BED ROOM	228.17 SF	R-4 - Residential	50	4.56
4 BED ROOM	419.17 SF	R-4 - Residential	50	8.38
4 BED ROOM	235.05 SF	R-4 - Residential	50	4.70
4 BED ROOM	382.17 SF	R-4 - Residential	50	7.65
4 BED ROOM	390.03 SF	R-4 - Residential	50	7.80
4 BED ROOM	234.62 SF	R-4 - Residential	50	4.69
DAYROOM	736.72 SF	R-4 - Residential	200	3.68
ELEC.	95.85 SF	R-4 - Residential	300	0.32
LAUNDRY	253.25 SF	R-4 - Residential	200	1.27
				84.58
				119.58
Total Occupants				417.84

Key Plan

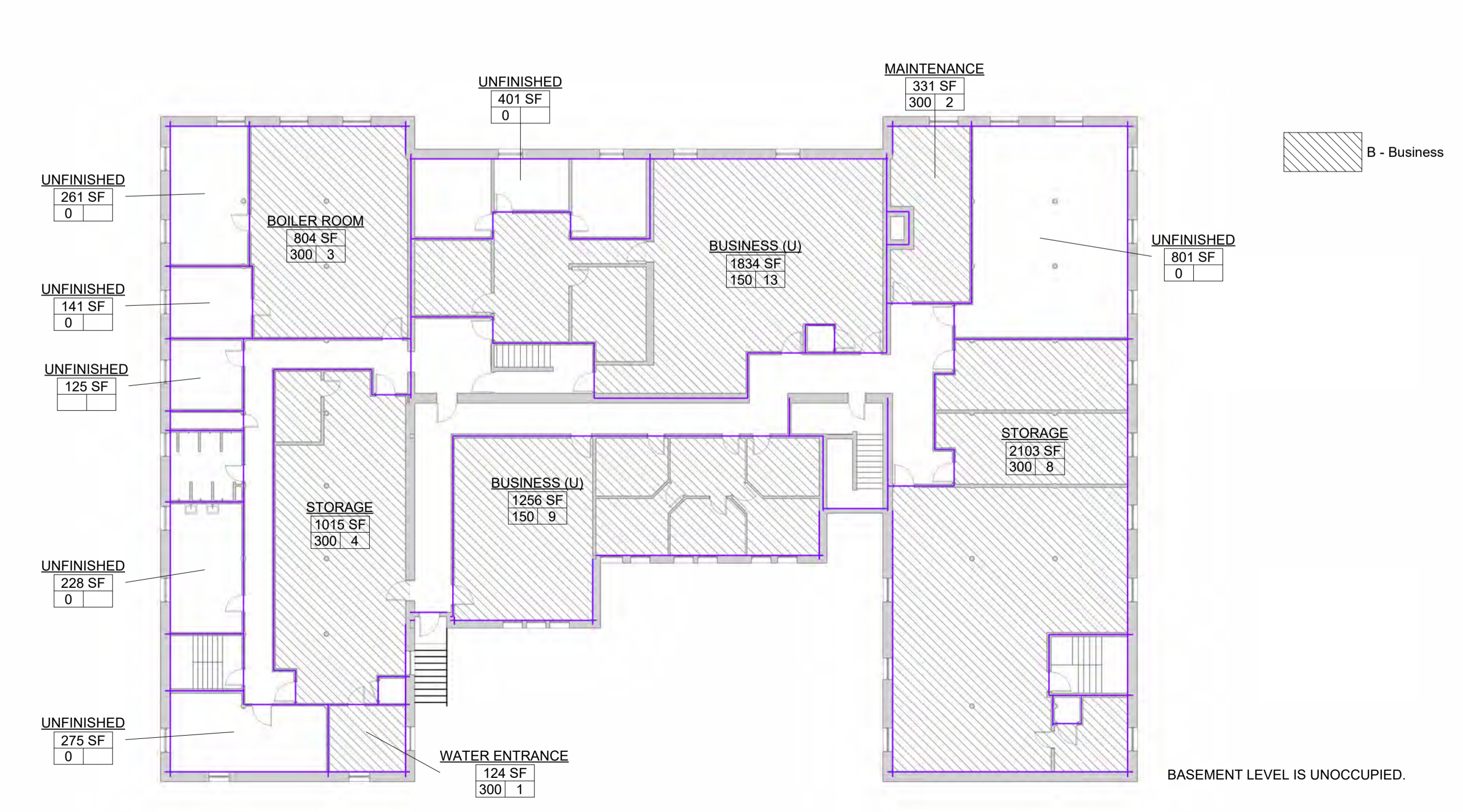


Revision	Description	Date

N1 LEVEL 2 OCCUPANCY PLAN
1/16" = 1'-0"

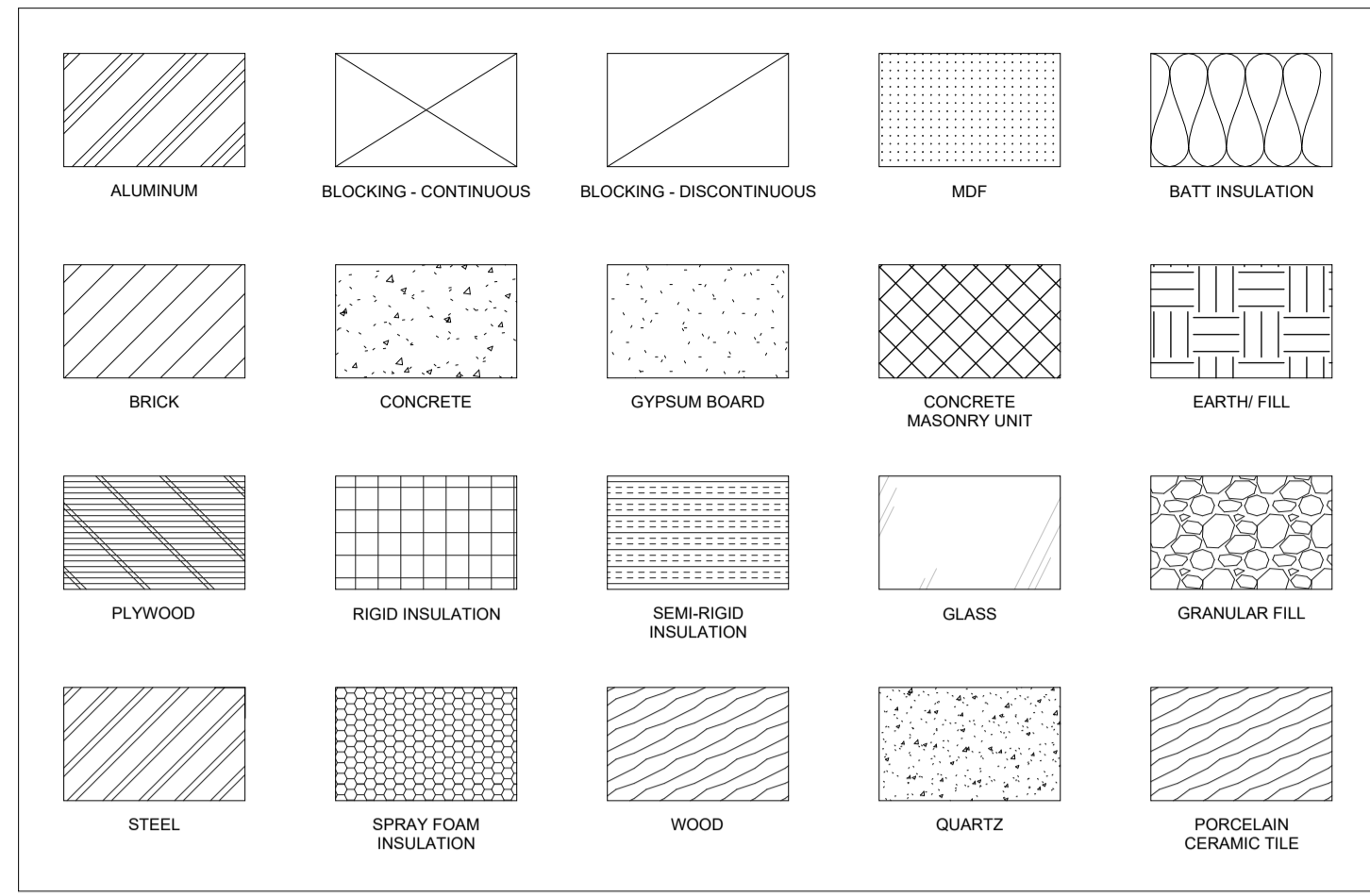


G1 LEVEL 1 OCCUPANCY PLAN
1/16" = 1'-0"



A1 BASEMENT OCCUPANCY PLAN
1/16" = 1'-0"

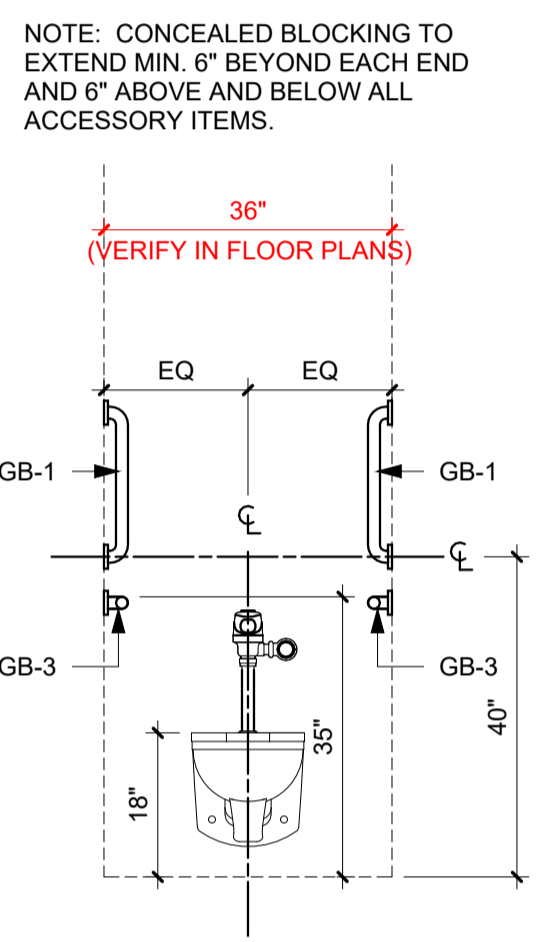
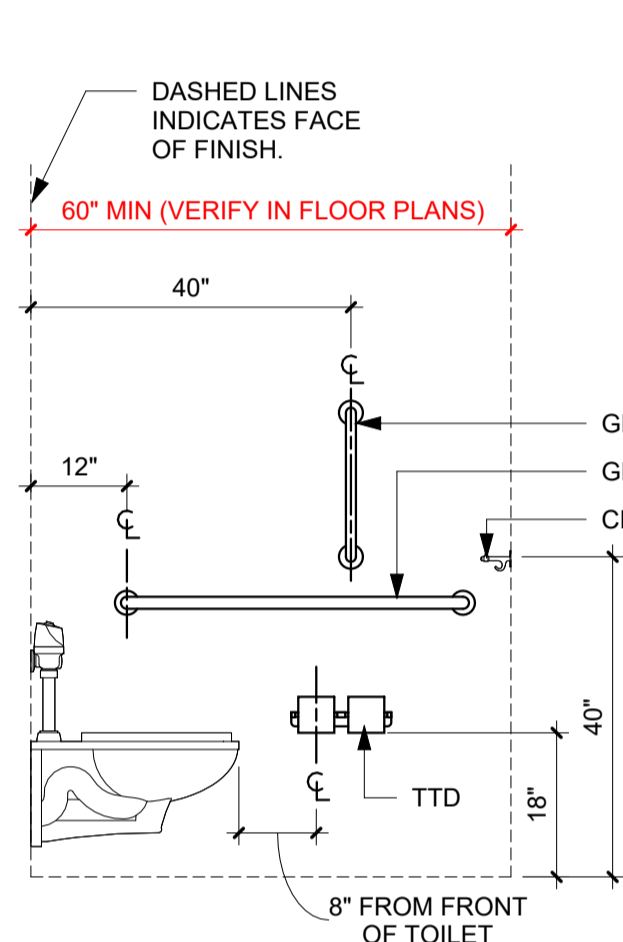
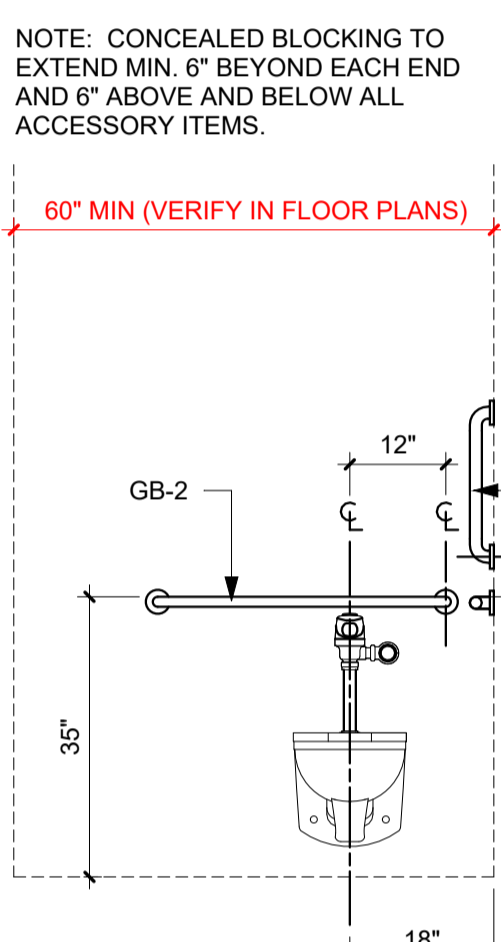
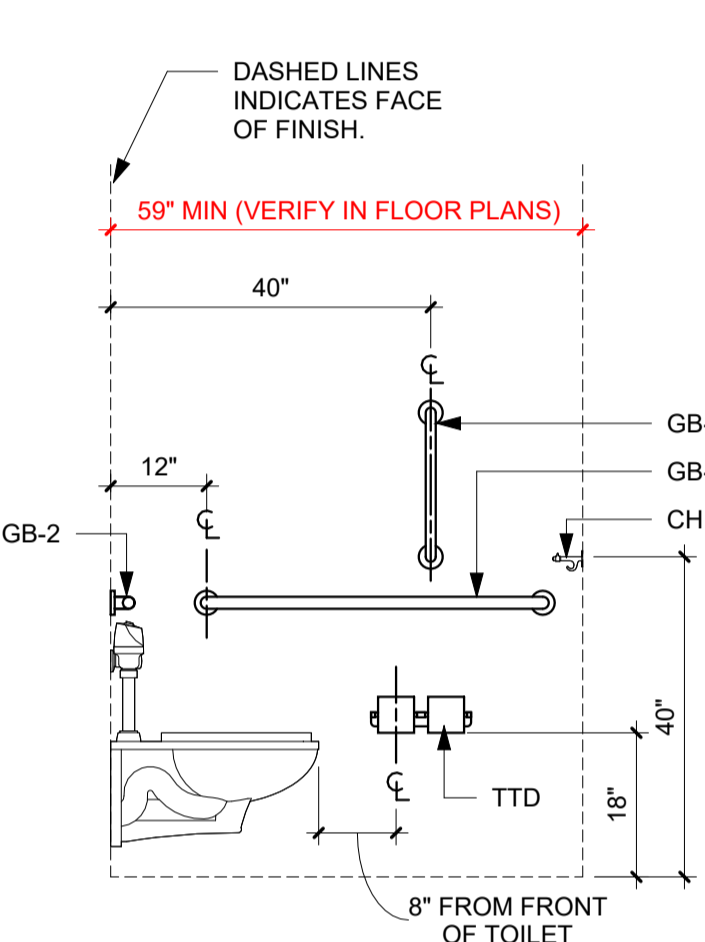
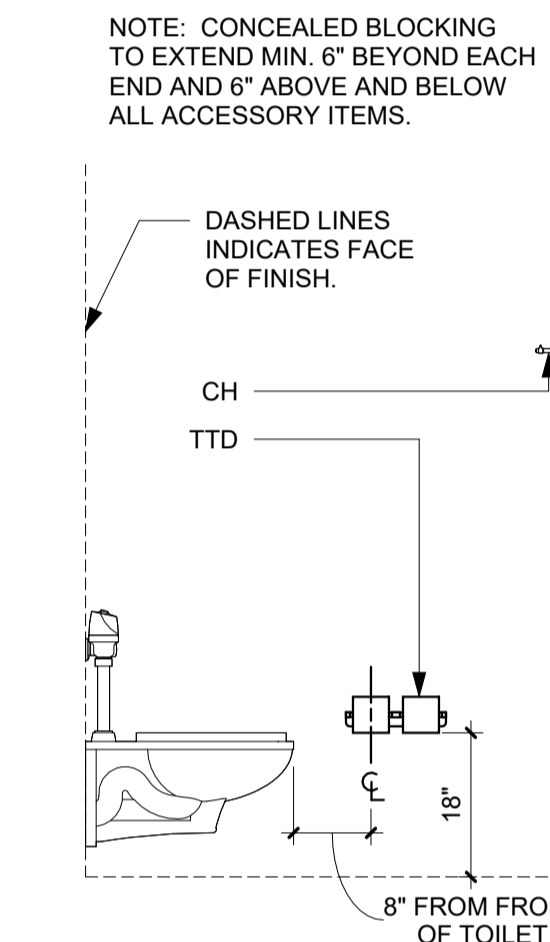




DESIGNATION	DESCRIPTION	PROVIDED BY
CH-1	COAT HOOK STRIP	CFCI
GB-1	NOT USED	
GB-2	REAR GRAB BAR	CFCI
GB-3	SIDE GRAB BAR	CFCI
GB-4	CONTINUOUS SHOWER GRAB BAR	CFCI
HD	HAND DRYER	CFCI
MR-1	MIRROR - 18" X 26"	CFCI
MR-2	MIRROR - 13" X 16"	CFCI
SB	ADA SHOWER BENCH	CFCI
SD	SOAP DISPENSER	OFOI
SND	SANITARY NAPKIN DISPOSAL	CFCI
TTD	TOILET TISSUE DISPENSER	CFCI

ALTERNATE #1
 DEMO EXISTING WOOD WINDOWS
 AND REPLACE WITH NEW ALUMINUM
 STOREFRONT WINDOW SYSTEM.

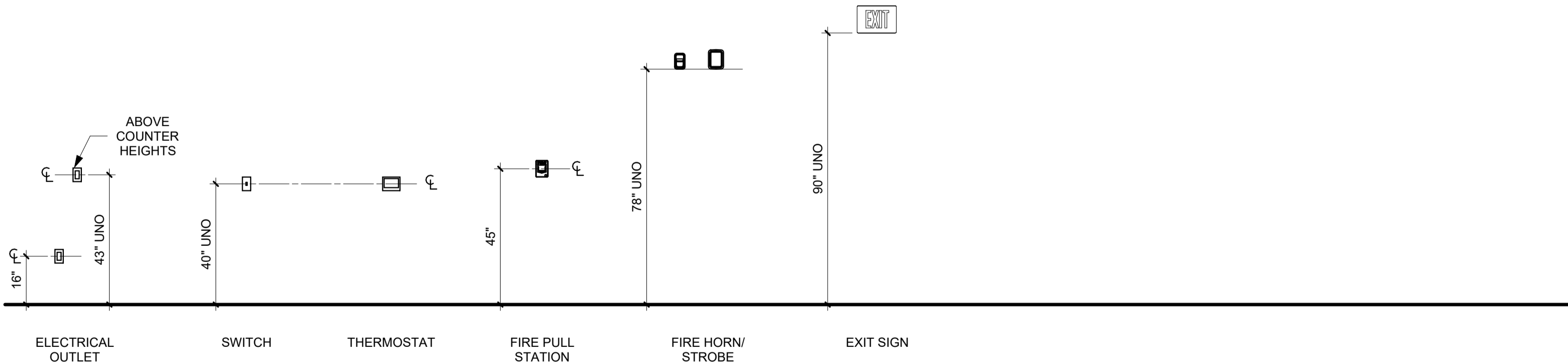
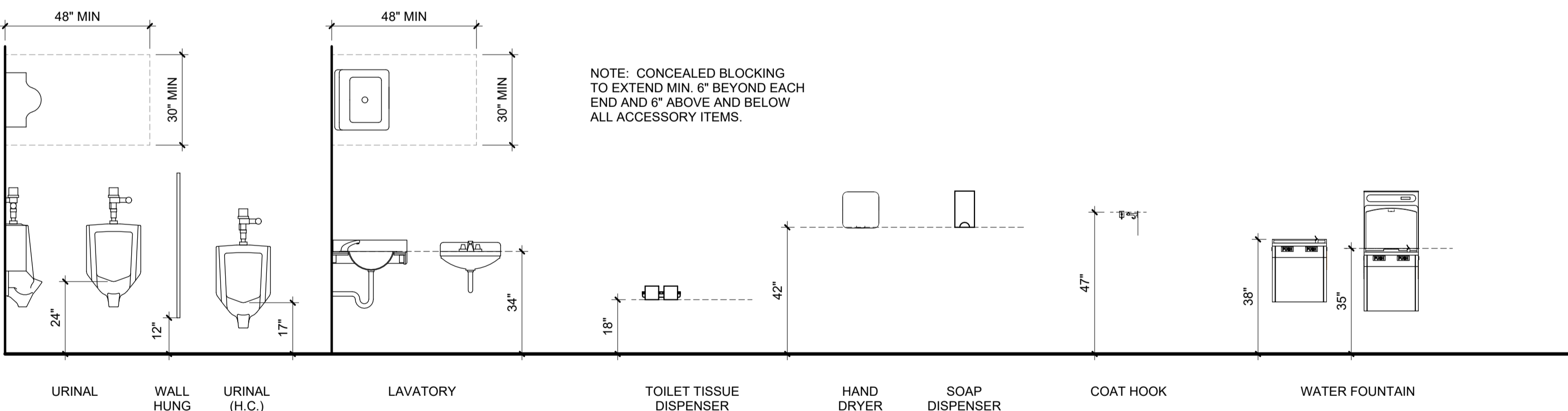
GENERAL INFORMATION - STANDARD ARCHITECTURAL MATERIAL DEFINITIONS



STANDARD TOILET ACCESSORIES MOUNTING LOCATIONS

ACCESSIBLE TOILET ACCESSORIES MOUNTING LOCATIONS

AMBULATORY TOILET ACCESSORIES MOUNTING LOCATIONS



GENERAL INFORMATION - STANDARD MOUNTING HEIGHTS

STANDARD SYMBOLS	STANDARD SYMBOLS	STANDARD ABBREVIATIONS
<ul style="list-style-type: none"> CABINET DESIGN SERIES NUMBER MODIFICATION ADA COMPLIANT 	<ul style="list-style-type: none"> ROOF/FLOOR TYPE 	<ul style="list-style-type: none"> NUMBER ALUMINUM COMPOSITE METAL PANEL ALUMINUM ABOVE FINISH FLOOR ALUMINUM ANODIZED ACOUSTIC WALL PANEL BUILDING AUTOMATION SYSTEM BOTTOM OF CURB BENCH MARK BACK OF CURB BOTTOM OF STEEL BOTTOM OF WALL BUMPER GUARD/BUMPER RAIL BEARING BOTTOM OF STAIR CHANNEL CUBICLE CURTAIN CONTRACTOR FURNISHED CONTRACTOR INSTALLED CORNER GUARD CAST-IN-PLACE CONTROL JOINT CORK FLOORING CENTER LINE CLEARING CONSTRUCTION LIMITS LINE CONCRETE MASONRY UNIT CONCRETE CONTINUOUS CARPET CORK DEMOLISH / DEMOLITION DRINKING FOUNTAIN DIAMETER DOWN DOWNSPOUT ELECTRICAL CONTRACTOR EXTERIOR INSULATION FINISH SYSTEM EXPANSION JOINT ELECTRICAL ELEVATION EPOXY FLOORING EPOXY PAINT EQUAL ELECTRIC WATER COOLER EXISTING FLUID APPLIED FLOORING FLOOR DRAIN FACTORY FINISH FINISHED FLOOR ELEVATION FACE OF CURB FACE OF FINISH FACE OF GLAZING FIBER REINFORCED PANEL GAUGE GALVANIZED GENERAL CONTRACTOR GALVANIZED HOLLOW METAL GLASS GROUT GYPSUM WALL BOARD GYPSUM HORIZONTAL HOLLOW METAL HEIGHT HEATING/VENTING/AIR CONDITIONING INSIDE DIAMETER ID ANGLE POUND / POUNDS LUXURY VINYL TILE MAXIMUM MARKERBOARD MECHANICAL CONTRACTOR MEDIUM DENSITY FIBERBOARD MANUFACTURERS MANHOLE MIL THICKNESS MINIMUM MASONRY OPENING NOT IN CONTRACT NOT TO SCALE ON CENTER OVERALL OUTSIDE DIAMETER OWNER FURNISHED CONTRACTOR INSTALLED OWNER FURNISHED OWNER INSTALLED OVERHEAD OVERFLOW ROOF DRAIN OPEN TO STRUCTURE PORCELAIN CERAMIC TILE PLATE PLASTIC LAMINATE POLYMER PANEL POLY VINYL CHLORIDE PAIN QUARTZ RADIUS RESILIENT ATHLETIC FLOORING RESILIENT BASE ROOF DRAIN REVISION ROUGH OPENING RIGHT-OF-WAY RESILIENT SHEET FLOORING RESILIENT STAIR TREAD RESILIENT TILE FLOORING RUBBER SEALED CONCRETE SQUARE FEET SIMILAR SOLID SURFACE STONE STONE STAINLESS STEEL SUSPENDED TILE TONGUE AND GROOVE TEMPERED GLASS TOP OF CURB TOP OF MASONRY TOP OF SLAB / TOP OF STEEL TOP OF WALL TOILET PARTITION TACKABLE PANEL FABRIC TERRAZZO TOP OF STAIR TYPICAL UNDERWRITERS LABORATORIES, INC. UNLESS NOTED OTHERWISE VERTICAL VERIFY IN FIELD WALL BASE WALL COVERING WITH WITHOUT WOOD WALLGUARD HANDRAIL WALK-OFF MAT WALL PROTECTION WINDOW TREATMENT WELDED WIRE FABRIC

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 P. 515 724-7938

Key Plan

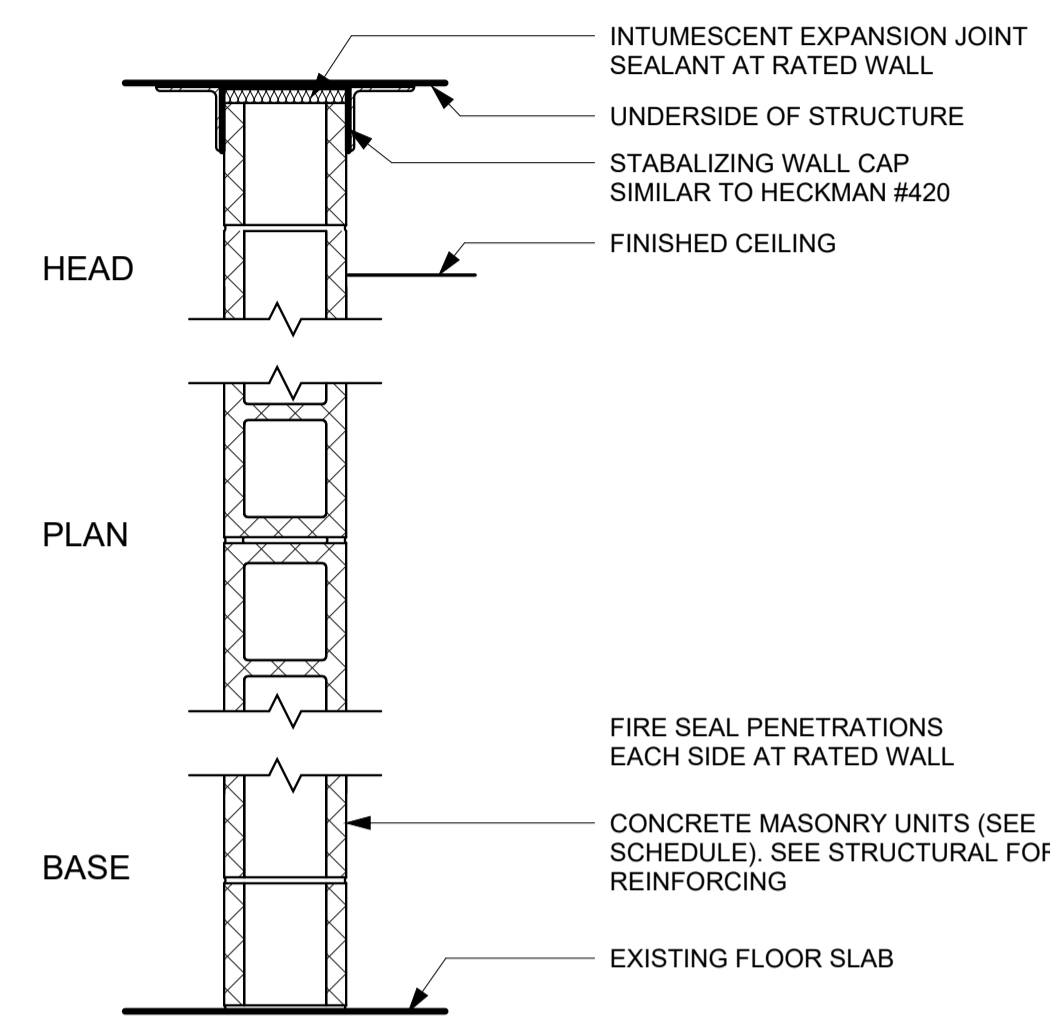
Revision	Description	Date

OPN Project No.
24805000

Sheet Issue Date
BID SET 11/01/2024

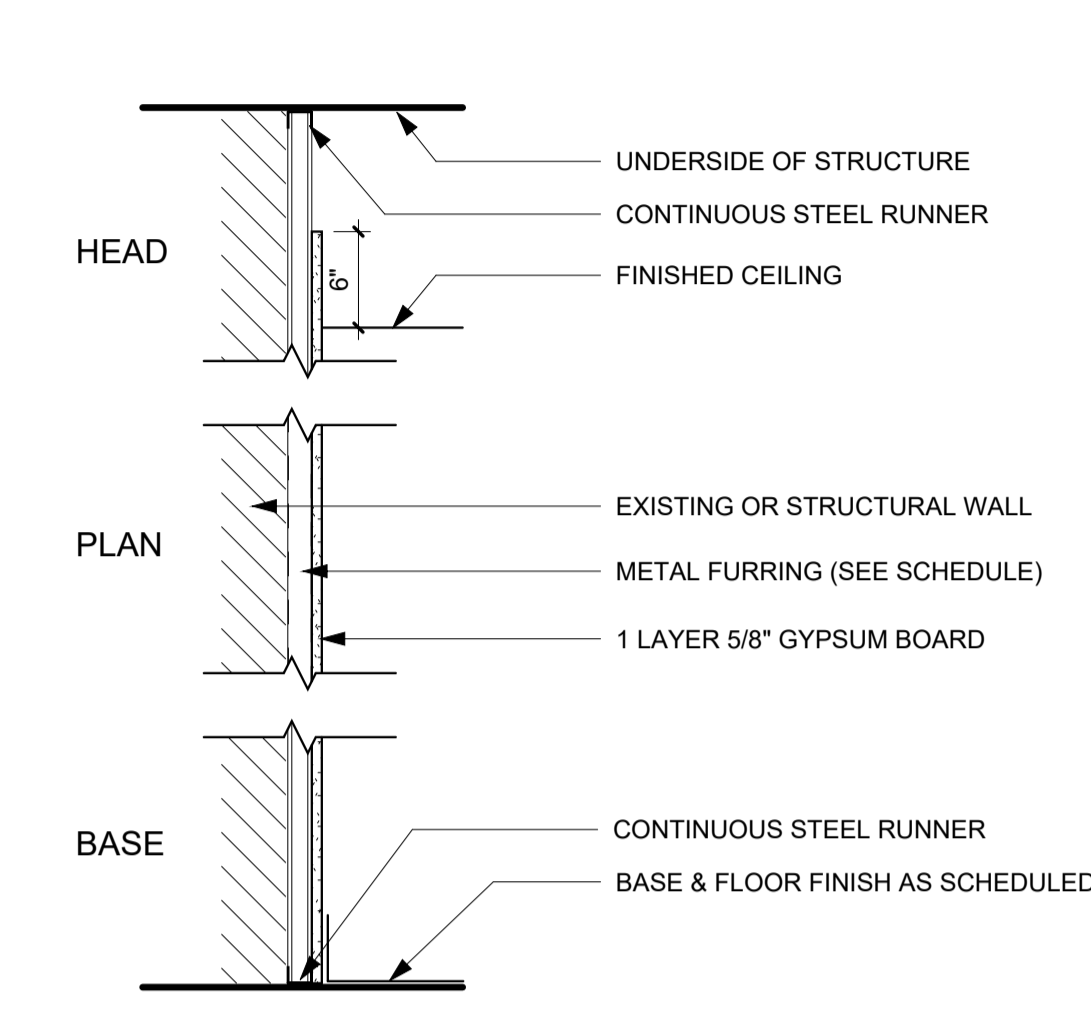
Sheet Name
GENERAL DRAWING INFORMATION

Sheet Number
A000



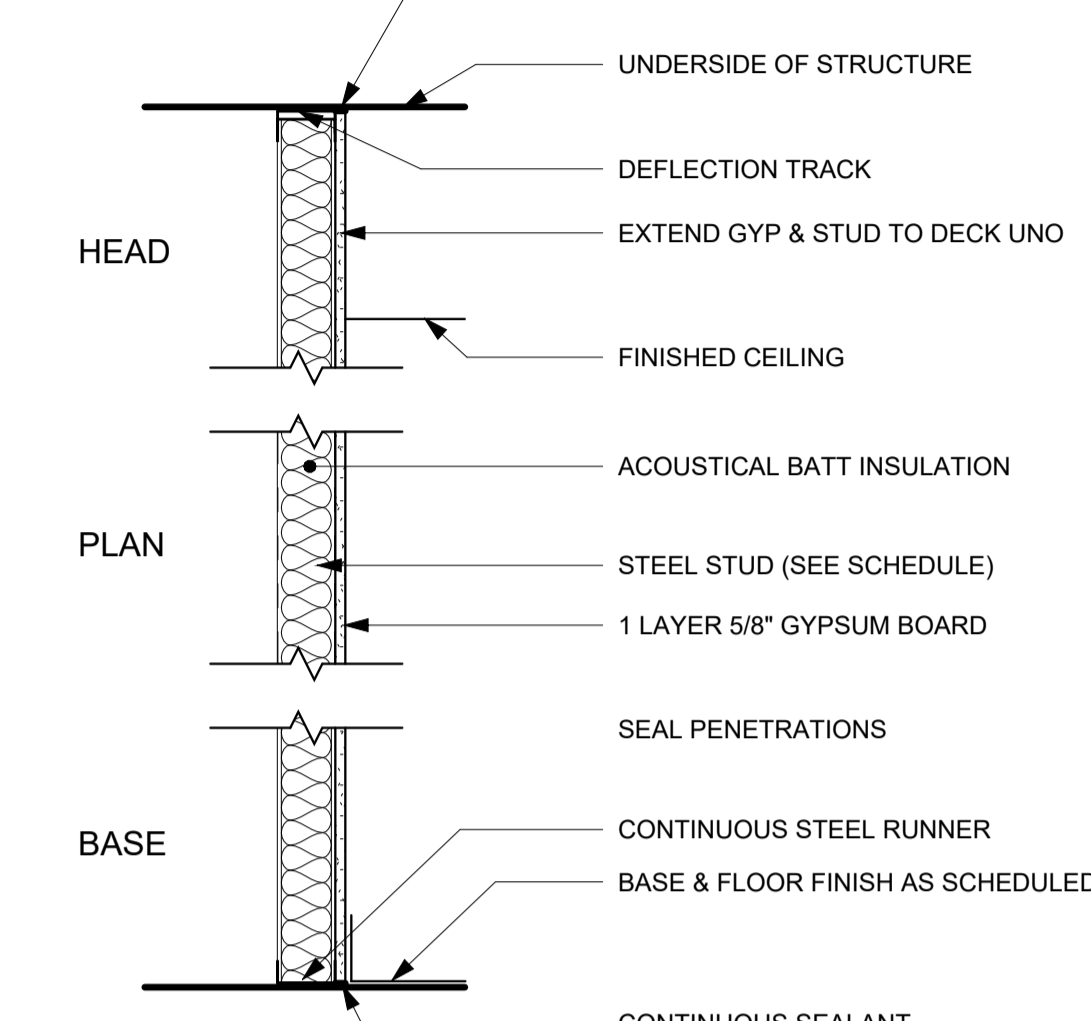
D1 CONCRETE MASONRY
NON RATED / 2 HOUR RATED / NON-LOAD BEARING

WIDTH	BLOCK SIZE	UL DESIGN NUMBER
3 5/8"	3 5/8"	N/A
5 5/8"	5 5/8"	N/A
7 5/8"	7 5/8"	N/A
9 5/8"	9 5/8"	U905
11 5/8"	11 5/8"	U905



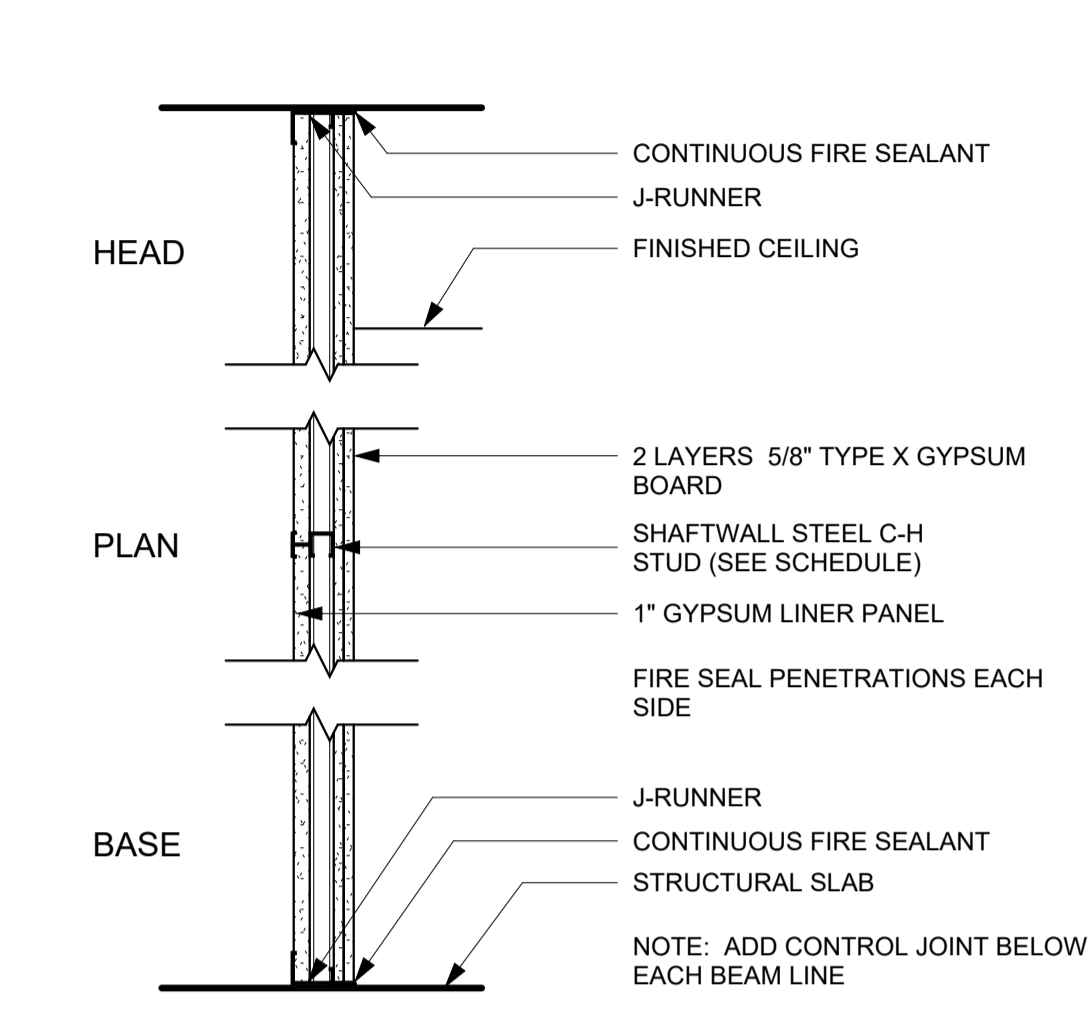
C1 FURRED PARTITION
NON RATED / NON-LOAD BEARING

WIDTH	STUD SIZE	UL DESIGN NUMBER
1 1/2"	7/8"	N/A
1 5/8"	1"	N/A
2 1/8"	1 1/2"	N/A
2 5/8"	2"	N/A
3 5/8"	3"	N/A



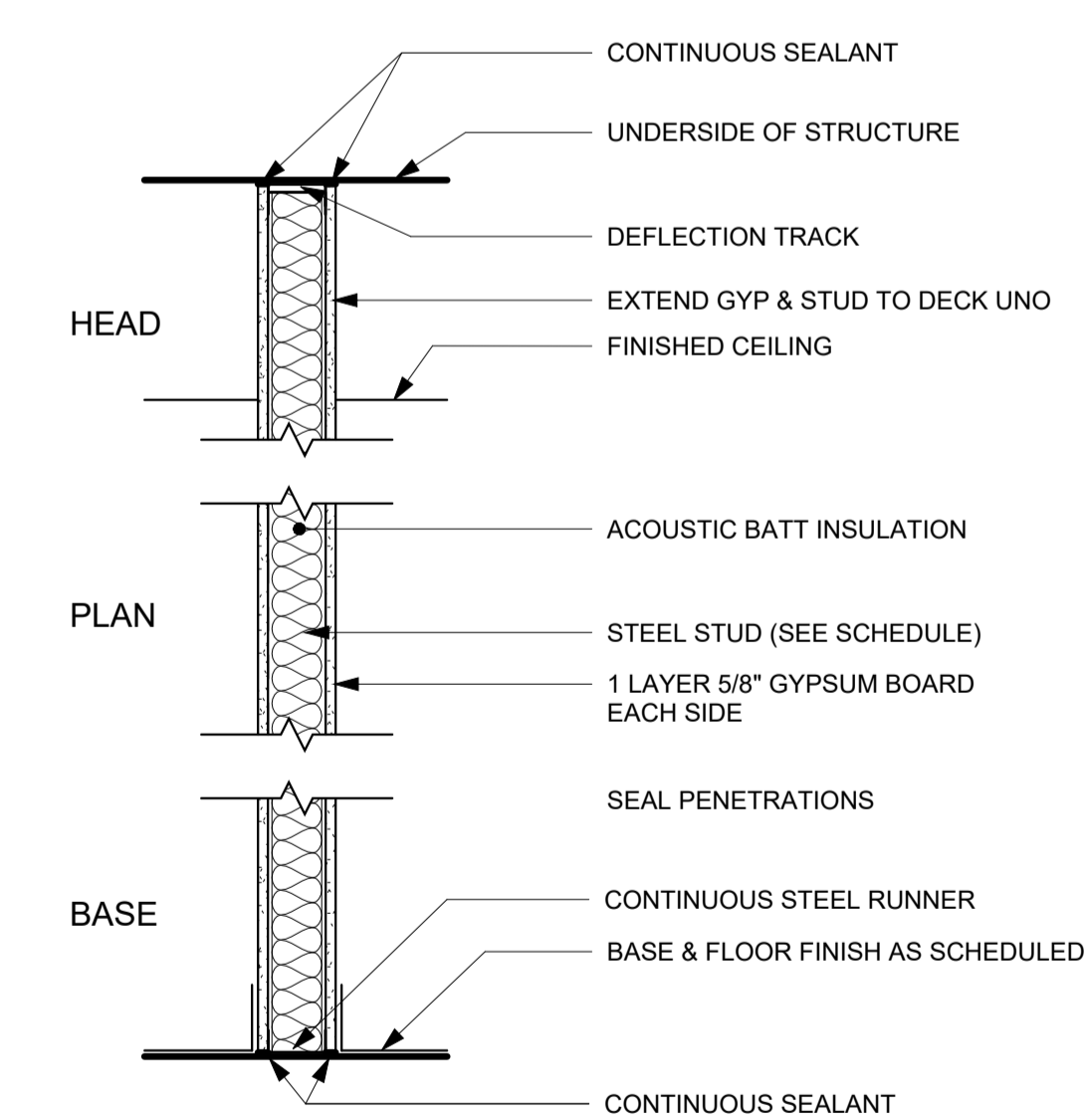
A2 STEEL FRAMED PARTITION
NON RATED / NON-LOAD BEARING

WIDTH	STUD SIZE	UL DESIGN NUMBER
2 1/4"	1 5/8"	N/A
4 1/4"	3 5/8"	N/A
6 5/8"	6"	N/A



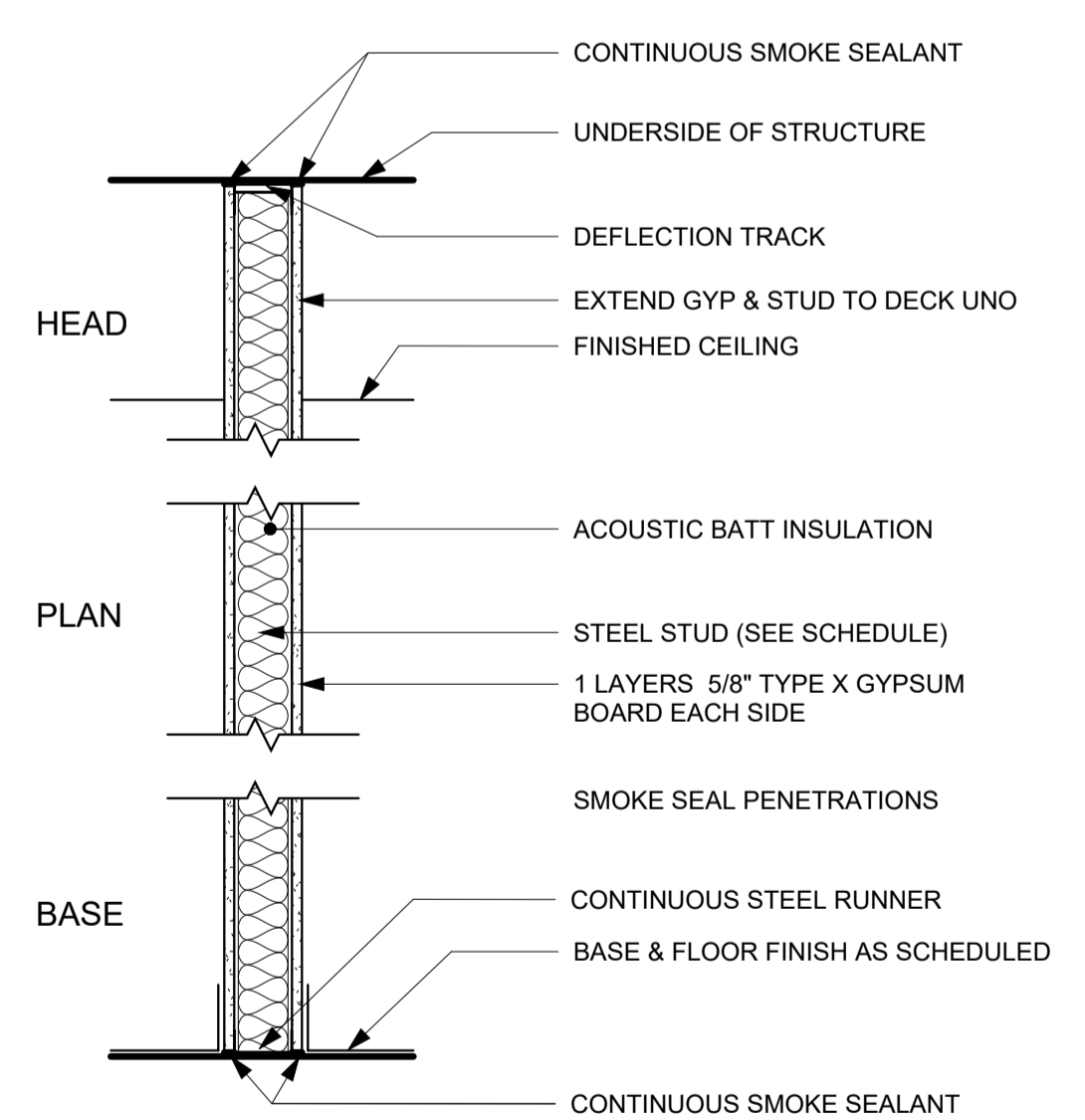
B1 SHAFTWALL PARTITION
2 HOUR RATED / NON-LOAD BEARING

WIDTH	STUD SIZE	UL DESIGN NUMBER
3 1/8"	2 1/2"	U415
4 5/8"	4"	U415
6 5/8"	6"	U415



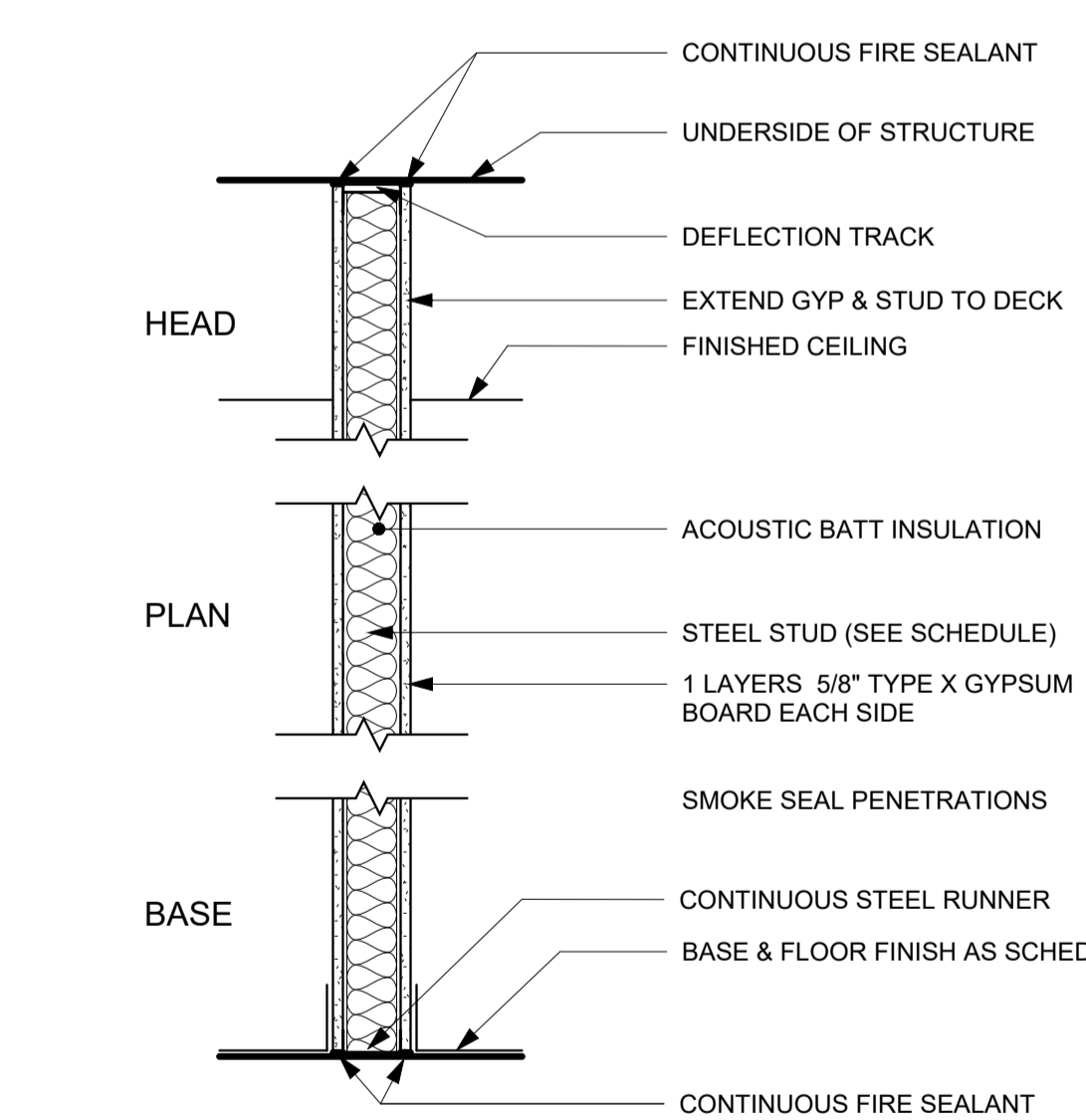
A1 STEEL FRAMED PARTITION
NON RATED / NON-LOAD BEARING

WIDTH	STUD SIZE	UL DESIGN NUMBER
4 7/8"	3 5/8"	N/A
7 1/4"	6"	N/A



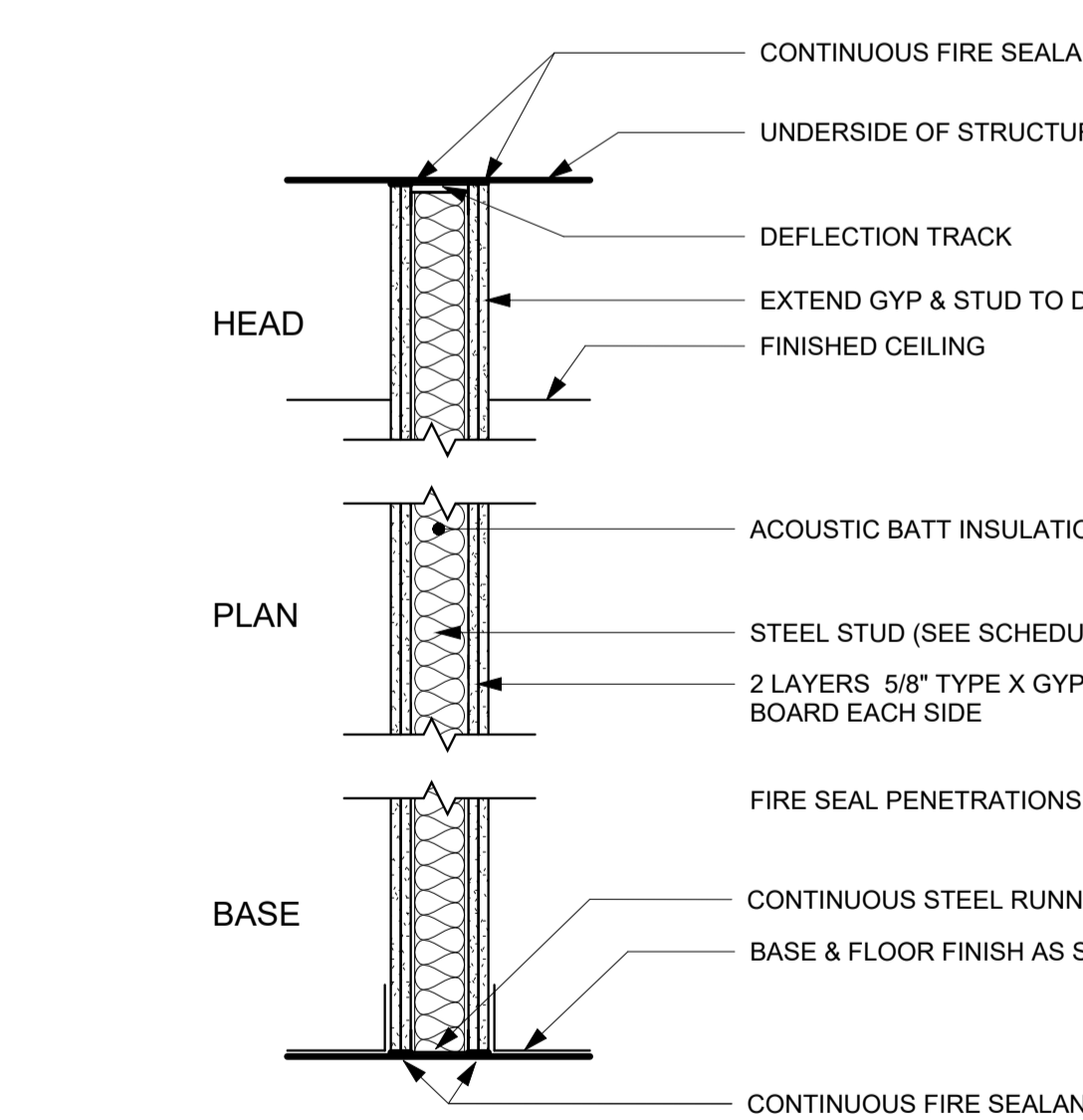
SMOKE RATED / NON-LOAD BEARING

WIDTH	STUD SIZE	UL DESIGN NUMBER
4 7/8"	3 5/8"	U465
7 1/4"	6"	U465



1 HOUR RATED / NON-LOAD BEARING

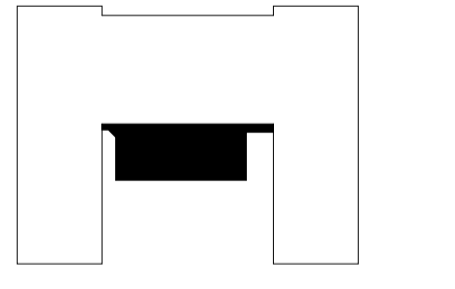
WIDTH	STUD SIZE	UL DESIGN NUMBER
4 7/8"	3 5/8"	U465
7 1/4"	6"	U465



2 HOUR RATED / NON-LOAD BEARING

WIDTH	STUD SIZE	UL DESIGN NUMBER
4 7/8"	3 5/8"	U411
7 1/4"	6"	U411

Key Plan



Revision	Description	Date
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OPN Project No.
24805000

Sheet Issue Date
BID SET 11/01/2024

Sheet Name
WALL TYPES

Sheet Number
A001

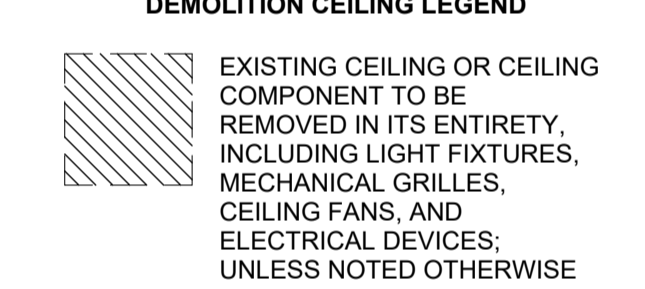
KEYNOTE LEGEND

- 01 02 A1 REMOVE WALLS AND ASSOCIATED DOORS, FRAMES AND FINISHES FLOOR TO DECK.
- 01 02 A3 REMOVE CMU WALL TO EXTENTS SHOWN. PREP SURFACES FOR NEW OPENING.
- 01 02 B1 REMOVE LAVATORIES COMPLETE, TYP.
- 01 02 B2 REMOVE TOILET (AND TOILET PARTITION WHEN APPLICABLE) COMPLETE, TYP.
- 01 02 B3 REMOVE SHOWER COLUMN COMPLETE.
- 01 02 C1 REMOVE ACP CEILING AS REQUIRED FOR OVERHEAD PLUMBING AND ELECTRICAL WORK. SALVAGE LIGHT FIXTURES AND DEVICES. PREP FOR NEW CEILING WORK. REINSTALL LIGHTS FIXTURES AND DEVICES.
- 01 02 C3 REMOVE GYP CEILING AS NECESSARY FOR INSTALL OF NEW LINTELS AND DUCTWORK. PREP FOR NEW WORK.
- 01 02 C4 REMOVE GYP CEILING, DIFFUSERS AND SURFACE-MOUNTED LIGHTS COMPLETE. PREP FOR NEW WORK. EXISTING CEILING FRAMING TO REMAIN.
- 01 02 C5 REMOVE GYP CEILING TO THE EXTENTS SHOWN.
- 01 02 D6 REMOVE EXISTING MIRRORS, TYP.
- 01 02 E1 AREA OF FINISH FLOORING AND CONCRETE TOPPING REMOVAL FOR SLOPE TO NEW TRENCH DRAINS.
- 01 03 A3 REMOVE CONCRETE TOPPING AS REQ'D TO PROVIDE SLOPE FOR SHOWER TRENCH DRAIN, TYP.
- 01 06 A1 REMOVE CASEWORK AND COUNTERTOP ASSEMBLIES, COMPLETE. PREP SURFACES FOR NEW FINISHES.
- 01 08 A1 REMOVE DOOR AND FRAME COMPLETE.
- 01 08 C1 ALT #1 - REMOVE EXISTING WINDOW SYSTEM COMPLETE, TYP. PREP OPENING FOR NEW WORK.
- 01 09 A2 REMOVE VCT FLOORING AND WALL BASE COMPLETE.
- 01 09 A5 REMOVE TILE FLOORING COMPLETE. PREP FLOOR TO RECEIVE NEW FINISHES.
- 01 09 A6 REMOVE WALL TILE COMPLETE. PREP WALL TO RECEIVE NEW FINISHES.
- 01 09 A9 REMOVE TERRAZZO FLOOR AND CURB - EXTENT OF EXISTING TERRAZZO TOPPING REMOVAL TO EXIST' DIVIDER STRIP
- 01 22 A4 REMOVE MOP SINK - SEE PLUMBING
- 01 22 A5 REMOVE SINK - SEE PLUMBING
- 01 22 A6 REMOVE EXISTING DRAIN - SEE MECHANICAL. PREP FOR INFILL
- 01 26 A1 REMOVE SURFACE-MOUNTED LIGHT FIXTURES - SEE ELECTRICAL
- 01 26 A2 SALVAGE AND REINSTALL LIGHT FIXTURES - SEE ELECTRICAL
- 02 01 K EXISTING CEILING TO REMAIN
- 02 09 B1 PROTECT EXISTING TERRAZZO FLOOR.

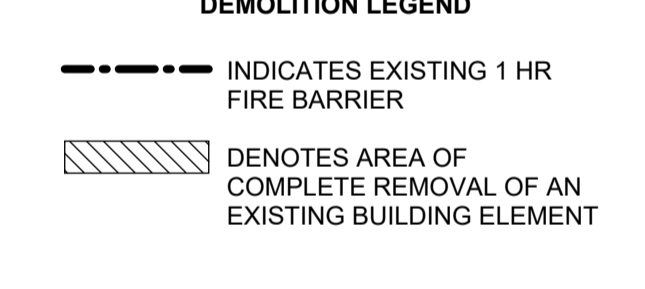
GENERAL NOTES

1. REMOVE AND SALVAGE ALL CEILING TILE AND LIGHTING FIXTURES FOR REINSTALLATION UNLESS NOTED OTHERWISE.
2. 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.
3. REFER TO SPECIFICATION FOR RECYCLING CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL REQUIREMENTS.
4. REMOVE LOOSE PAINT AND MISCELLANEOUS HANGING OBJECTS FROM WALLS AND CEILINGS AT ALL AREAS TO RECEIVE NEW FINISHES.
5. OPENING IN THE EXISTING STRUCTURE SMALLER THAN 12" IN ANY DIRECTION ARE NOT IDENTIFIED ON THESE DRAWINGS. SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROVIDING OPENINGS SMALLER THAN 12" AS REQUIRED FOR INSTALLATION OF THEIR WORK.
6. OPENINGS IN THE EXISTING STRUCTURE SHALL NOT BE MADE WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
7. PATCH ALL AREAS OF ELECTRICAL AND MECHANICAL DEMOLITION THAT WILL NOT BE REUSED.
8. 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.
9. DO NOT REMOVE ANY ITEMS WHICH JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. IF HIDDEN ELEMENTS OR DETERIORATED ELEMENTS ARE ENCOUNTERED, NOTIFY THE ARCHITECT IMMEDIATELY.
10. PATCH ALL REMAINING EXISTING EXPOSED PLASTER CEILING AS REQUIRED TO RECEIVE NEW FINISH.
11. EXISTING BUILDING IS TO REMAIN WEATHER-TIGHT DURING ALL DEMOLITION ACTIVITIES.
12. REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL DEMOLITION OF OTHER DISCIPLINES.
13. PROTECT ALL ADJACENT AREAS AND ITEMS TO REMAIN DURING DEMOLITION/CONSTRUCTION. REPAIR/REPLACE ALL ITEMS DAMAGED DURING CONSTRUCTION.
14. EXISTING BUILDING CONDITIONS SHOWN ON THESE DRAWINGS ARE DERIVED FROM DRAWINGS OF THE ORIGINAL BUILDING AND FROM LIMITED FIELD OBSERVATION.
15. INDICATED EXISTING BUILDING CONDITIONS ARE ASSUMED TO BE REPRESENTATIVE OF THE ACTUAL CONSTRUCTION OF THE BUILDING. LOCAL CONDITIONS MAY VARY.

DEMOLITION CEILING LEGEND

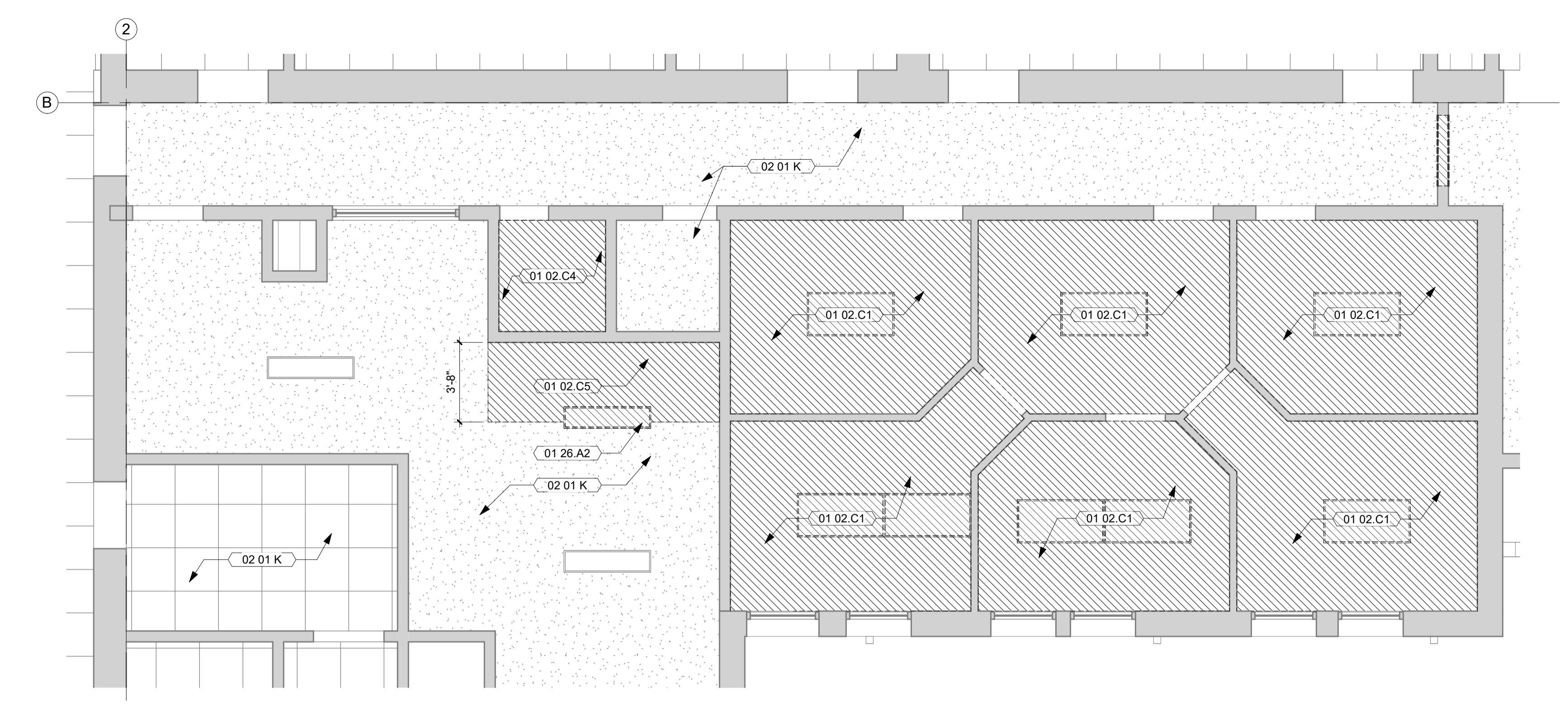


DEMOLITION LEGEND

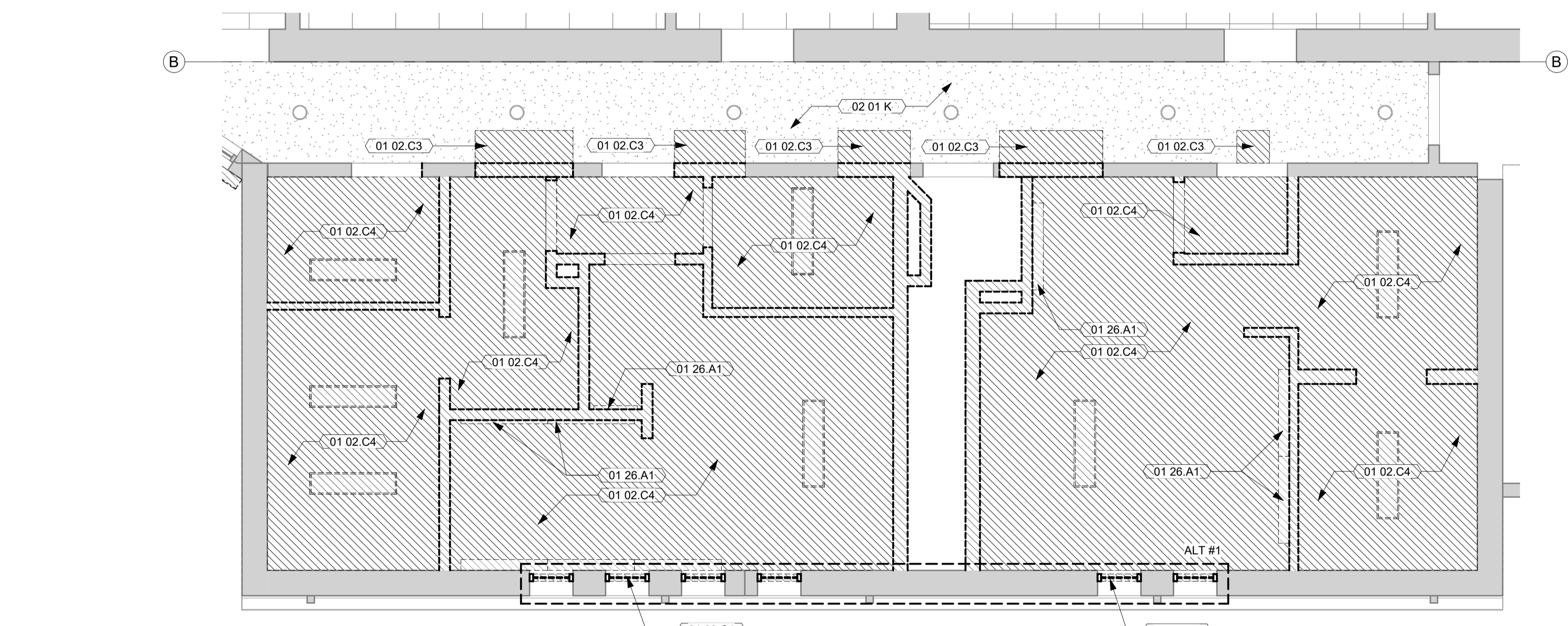


GENERAL NOTES

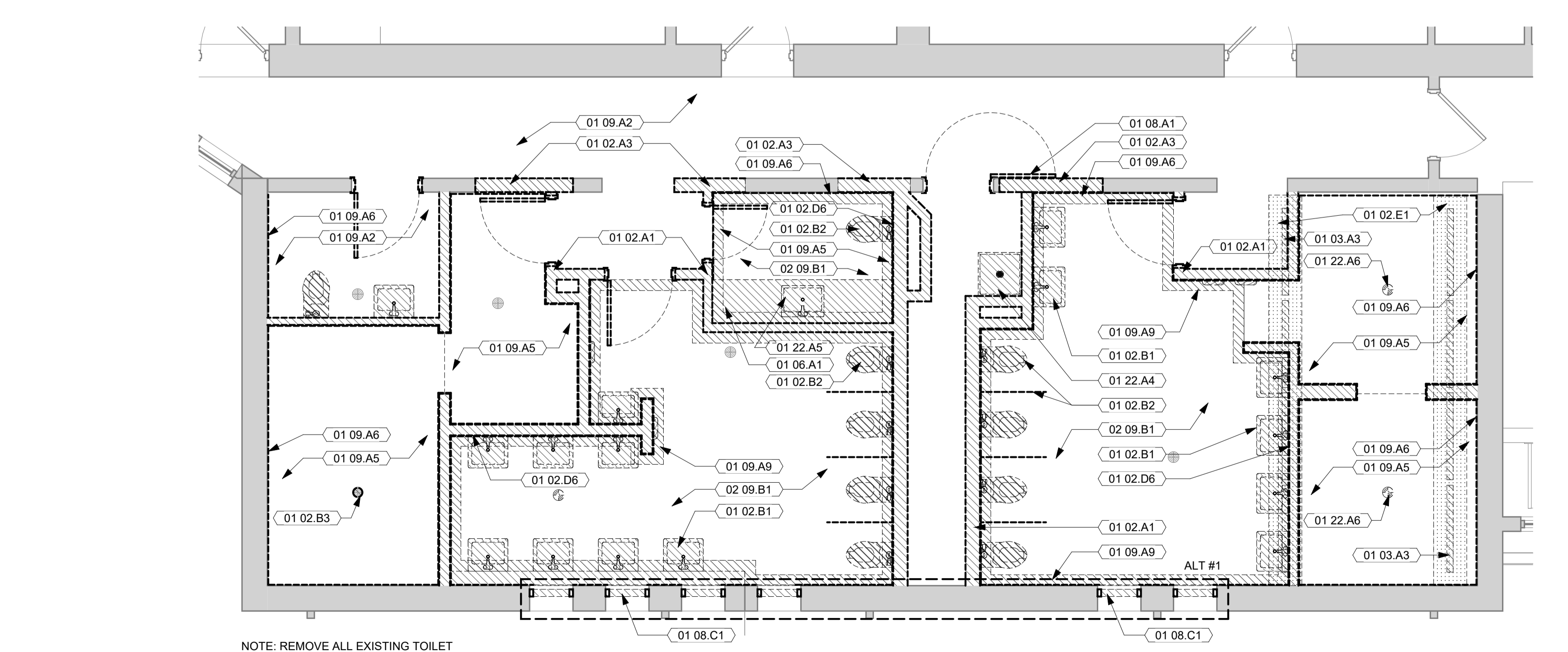
1. IDENTIFICATION AND/OR ABATEMENT OF HAZARDOUS MATERIALS IS NOT PART OF THIS SCOPE OF WORK. IF ASBESTOS OR OTHER HAZARDOUS MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY.
2. REMOVE LOOSE PAINT AND MISCELLANEOUS HANGING OBJECTS FROM WALLS AND CEILINGS AT ALL AREAS TO RECEIVE NEW FINISHES.
3. OPENING IN THE EXISTING STRUCTURE SMALLER THAN 12" IN ANY DIRECTION ARE NOT IDENTIFIED ON THESE DRAWINGS. SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROVIDING OPENINGS SMALLER THAN 12" AS REQUIRED FOR INSTALLATION OF THEIR WORK.
4. OPENINGS IN THE EXISTING STRUCTURE SHALL NOT BE MADE WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
5. PATCH AND REPAIR ALL EXISTING FLOOR SLABS AND WALL SURFACES DAMAGED FROM DEMOLITION OR PRIOR USE.
6. PATCH ALL AREAS OF ELECTRICAL AND MECHANICAL DEMOLITION THAT WILL NOT BE REUSED.
7. 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.
8. DO NOT REMOVE ANY ITEMS WHICH JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. IF HIDDEN ELEMENTS OR DETERIORATED ELEMENTS ARE ENCOUNTERED, NOTIFY THE ARCHITECT IMMEDIATELY.
9. EXISTING BUILDING IS TO REMAIN WEATHER-TIGHT DURING ALL DEMOLITION ACTIVITIES.
10. REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL DEMOLITION OF OTHER DISCIPLINES.
11. PROTECT ALL ADJACENT AREAS AND ITEMS TO REMAIN DURING DEMOLITION/CONSTRUCTION. REPAIR/REPLACE ALL ITEMS DAMAGED DURING CONSTRUCTION.
12. EXISTING BUILDING CONDITIONS SHOWN ON THESE DRAWINGS ARE DERIVED FROM DRAWINGS OF THE ORIGINAL BUILDING AND FROM LIMITED FIELD OBSERVATION.
13. INDICATED EXISTING BUILDING CONDITIONS ARE ASSUMED TO BE REPRESENTATIVE OF THE ACTUAL CONSTRUCTION OF THE BUILDING. LOCAL CONDITIONS MAY VARY.
14. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADDITIONAL MEANS OF EGRESS AS NEEDED AS A RESULT OF CONSTRUCTION SEQUENCING AND/OR REGULATORY REQUIREMENTS.



P2 DEMO REFLECTED CEILING PLAN - LEVEL 1 - RESTROOMS
1/4" = 1'-0"



H2 DEMO REFLECTED CEILING PLAN - LEVEL 2 - RESTROOMS
1/4" = 1'-0"



B2 DEMO ENLARGED FLOOR PLAN - LEVEL 2 - RESTROOMS
1/4" = 1'-0"

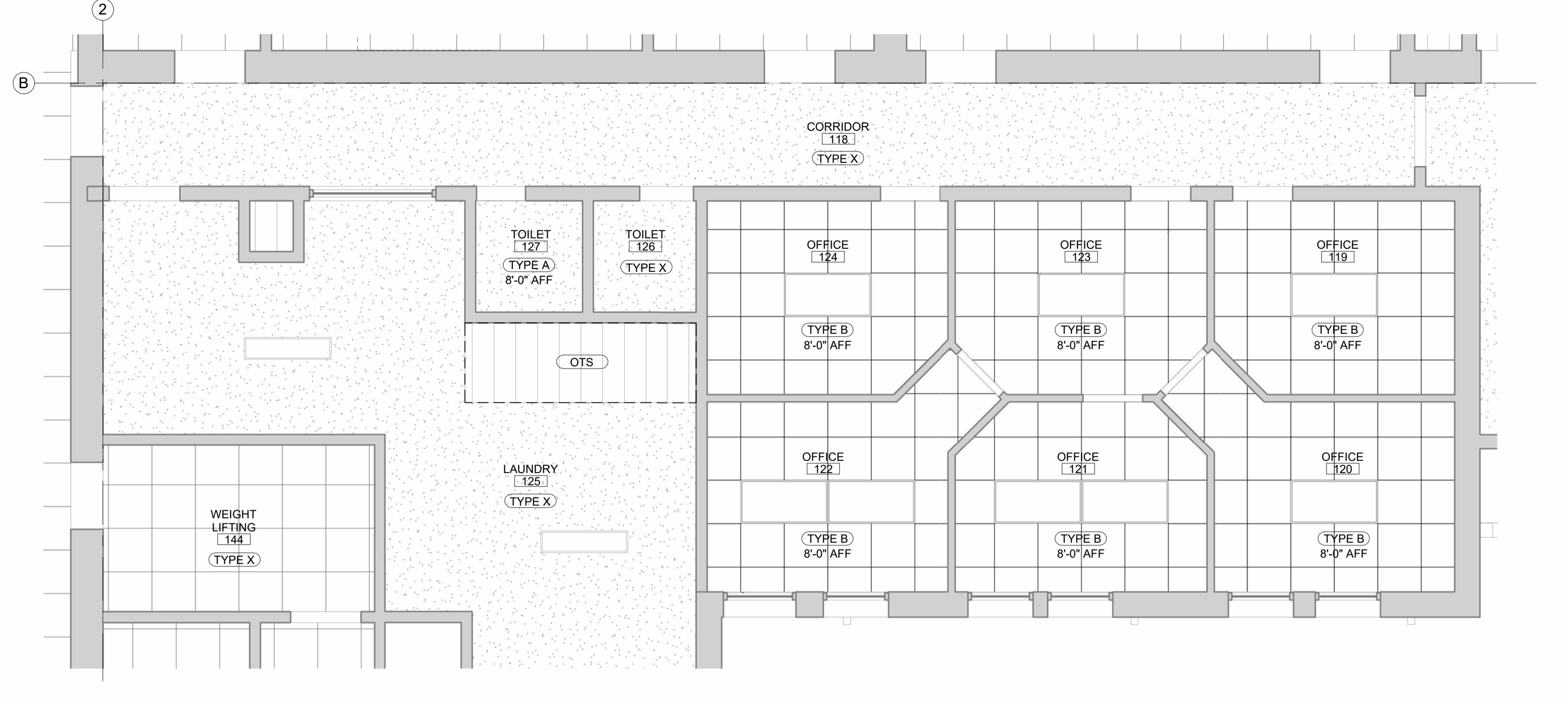
NOTE: REMOVE ALL EXISTING TOILET ACCESSORIES. SALVAGE AND RETURN TO OWNER.



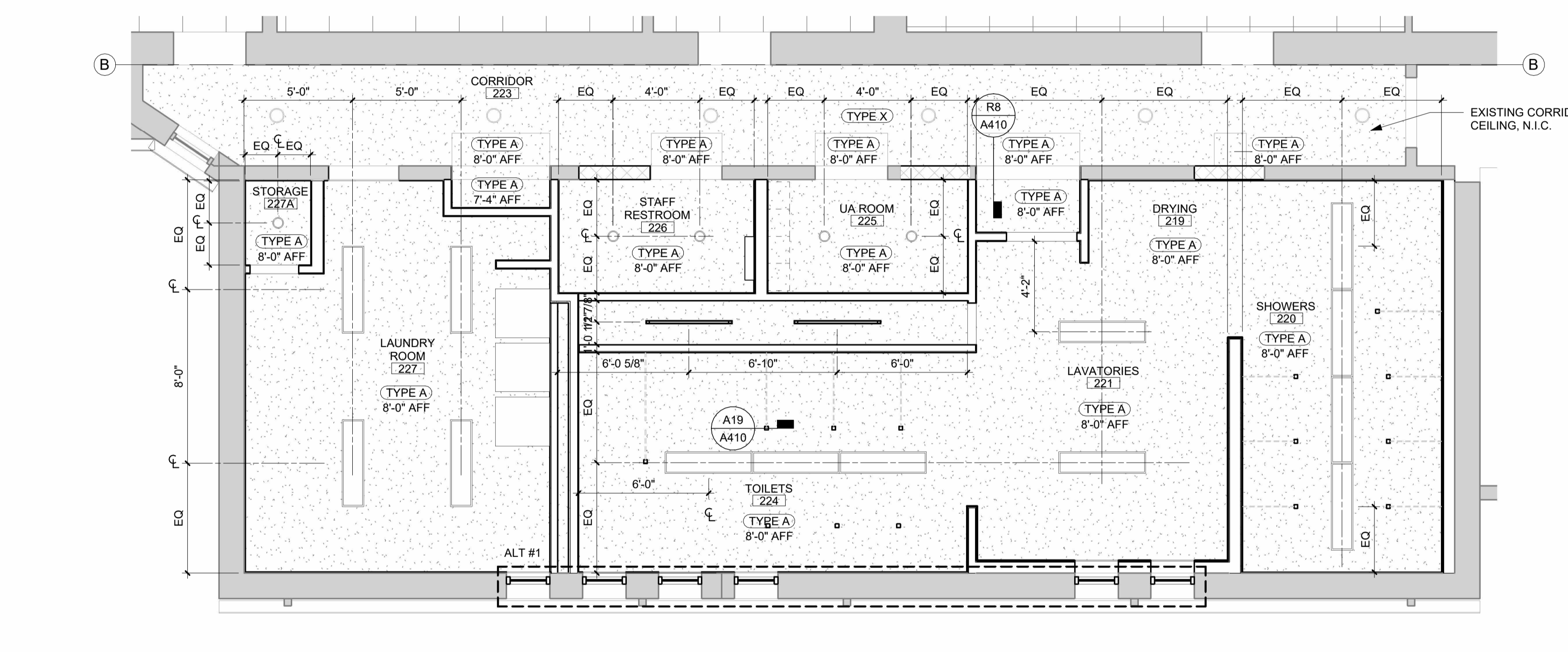
EXISTING RESTROOM

Key Plan

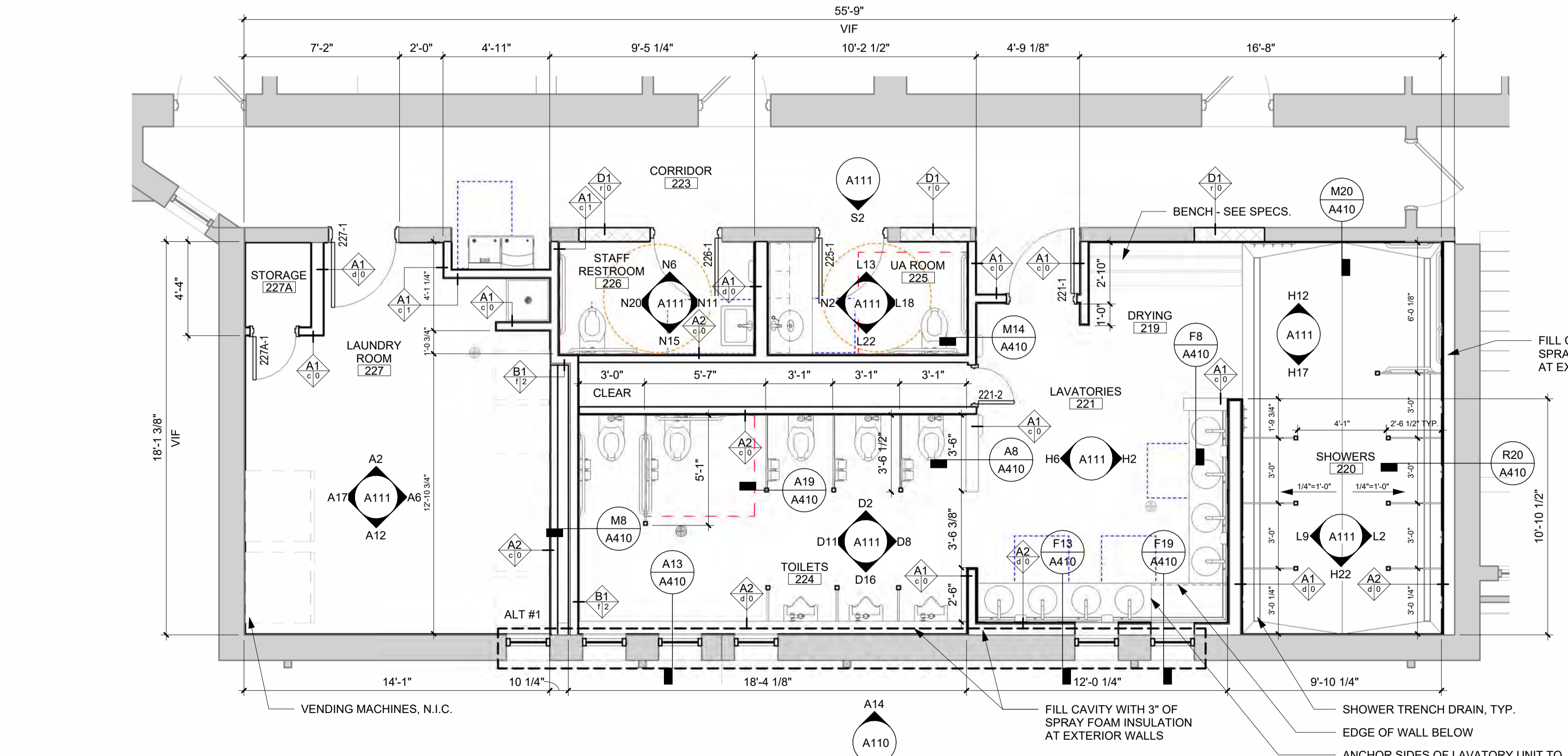
Revision	Description	Date



P1 REFLECTED CEILING PLAN - LEVEL 1 - RESTROOMS
1/4" = 1'-0"



G1 REFLECTED CEILING PLAN - LEVEL 2 - RESTROOMS
1/4" = 1'-0"



A1 ENLARGED FLOOR PLAN - LEVEL 2 - RESTROOMS
1/4" = 1'-0"

CEILING TYPES

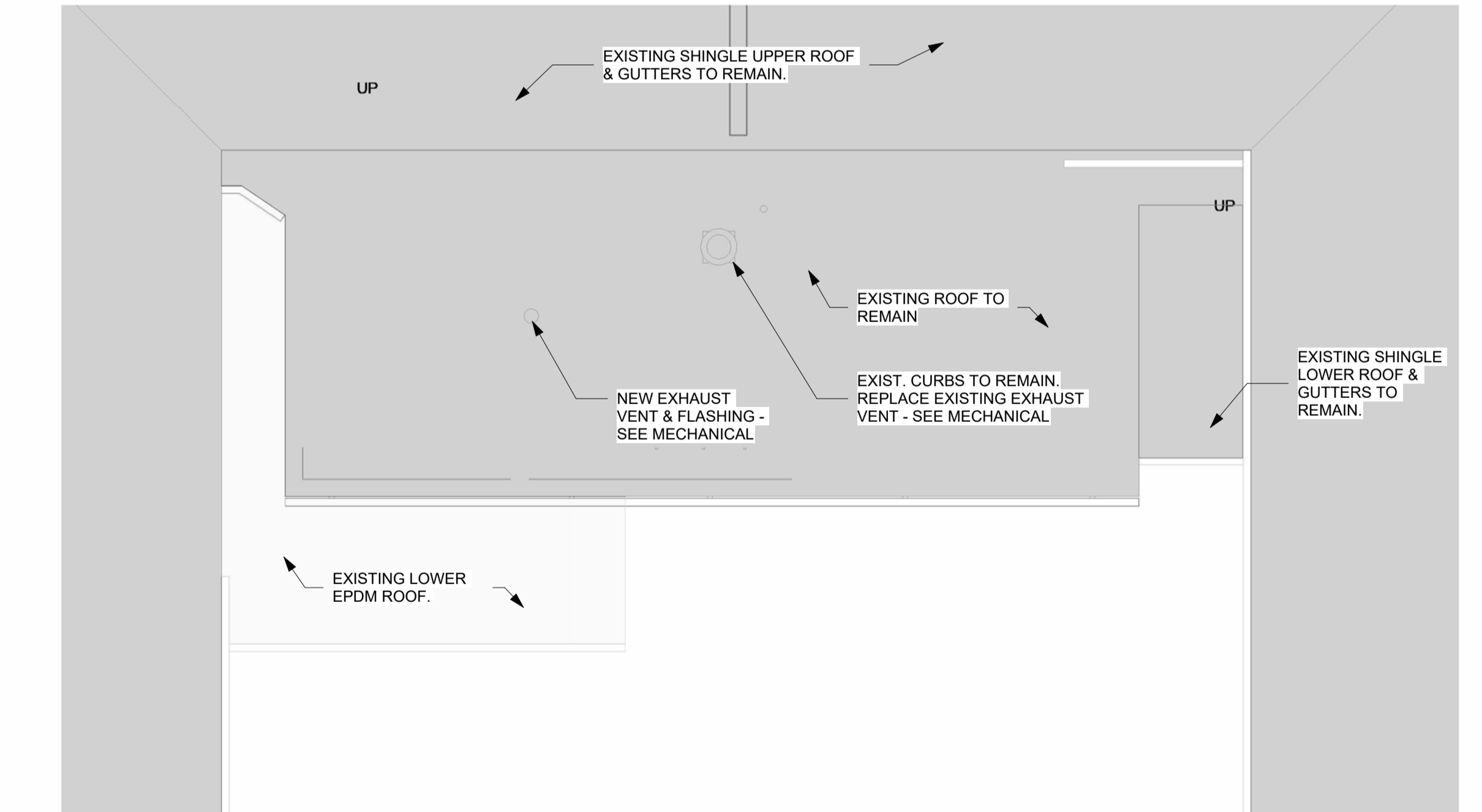
TYPE A	GYPSUM BOARD CEILING ON METAL STUD FRAMING
TYPE B	ACP-1
TYPE X	EXISTING CEILING TO REMAIN

CEILING LEGEND

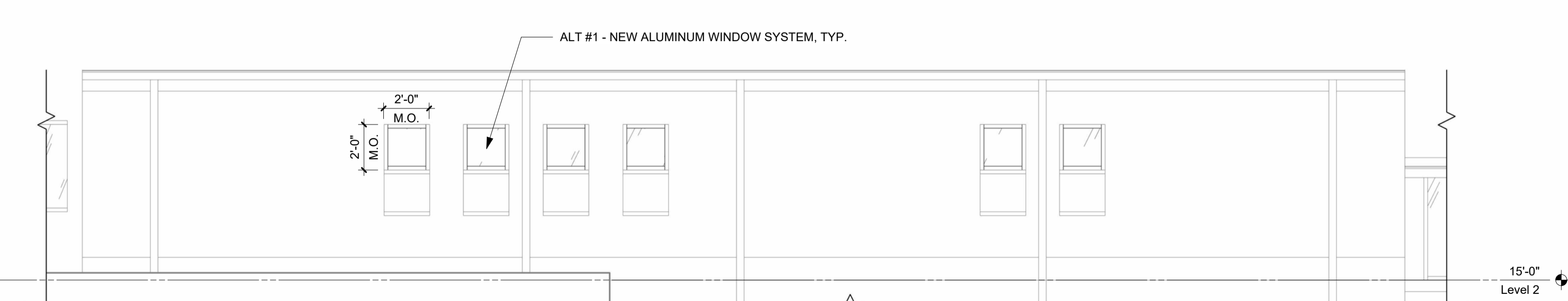
	DASHED LINE DENOTES LOCATIONS OF ACOUSTIC PARTITIONS TO RECEIVE ACOUSTICAL BATT INSULATION AND SOUND SEALANT AT PERIMETER AND PENETRATIONS. REFER TO FLOOR PLANS FOR WALL TYPES.
	ACCESS PANEL
	RECTANGULAR FIXTURE
	LINEAR FIXTURE
	LINEAR PENDANT
	DOWN LIGHTS
	DOWN LIGHT PENDANTS
	UTILITY LIGHTS
	CEILING & WALL MOUNT EXIT SIGNS
	HVAC SUPPLY DIFFUSER
	HVAC RETURN DIFFUSER
	HVAC EXHAUST DIFFUSER
	HVAC SLOT DIFFUSER
	HVAC ROUND DIFFUSER
	PROJECTOR
	PROJECTOR SCREEN
	OCCUPANCY SENSOR
	SPEAKER
	MICROPHONE
	WIRELESS ACCESS POINT
	CEILING & WALL MOUNT CLOCK
	SMOKE DETECTOR
	CEILING & WALL MOUNT CAMERA
	DATA & POWER
	SPRINKLER

- GENERAL NOTES**
- CEILING TYPES ARE TYPE A AND INSTALLED TO MATCH EXISTING ELEVATION (8'-2") UNLESS NOTED OTHERWISE.
 - CEILING-MOUNTED FIXTURES, SPRINKLERS AND EQUIPMENT SHALL BE CENTERED IN CEILING PANELS OR GYPSUM BOARD SOFFITS AND EQUALLY SPACED UNLESS NOTED OTHERWISE.
 - CENTER CEILING GRID IN ROOMS AS SHOWN UNLESS NOTED OTHERWISE.
 - CONCEALED SPLITTER HEAD COVERS SHALL BE PAINTED BY MANUFACTURER TO MATCH ADJACENT SOFFIT/FACE UNLESS NOTED OTHERWISE.
 - COORDINATE LOCATIONS OF EXIT LIGHTS AND EMERGENCY LIGHTS SHOWN ON ARCHITECTURAL DRAWINGS, IN THE EVENT OF A DISCREPANCY, VERIFY WITH ARCHITECT PRIOR TO INSTALLATION.
 - CEILING FIXTURE DIMENSIONS ARE TAKEN FROM CENTERLINE OF FIXTURE UNLESS NOTED OTHERWISE.
 - REFER TO ARCHITECTURAL DRAWINGS (ELEVATIONS & REFLECTED CEILING PLANS) FOR ALL MECHANICAL AND ELECTRICAL DEVICE AND FIXTURE LOCATIONS & MOUNTING HEIGHTS. IF NOT CLEARLY SPECIFIED, CONTACT ARCHITECT FOR FURTHER CLARIFICATION. MECHANICAL & ELECTRICAL DRAWINGS ARE FOR FIXTURE TYPE REFERENCE ONLY. PAINT ALL EXPOSED STRUCTURE, DECK, DUCTWORK, CONDUIT, ETC. IN AREAS NOTED TO BE OPEN TO STRUCTURE UNLESS NOTED OTHERWISE. PAINTING OF EXPOSED STRUCTURE TO BE DONE AFTER ALL UTILITIES ARE INSTALLED.

- GENERAL NOTES**
- DIMENSIONS ARE MEASURED FACE-OF-FINISH TO FACE-OF-FINISH OR ROUGH MASONRY OPENING UNLESS NOTED OTHERWISE - TYPICAL FOR ALL DRAWINGS.
 - FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS - TYPICAL FOR ALL DRAWINGS.
 - IN THE EVENT OF A DISCREPANCY BETWEEN ARCHITECTURAL AND CONSULTANT DRAWINGS, NOTIFY ARCHITECT IMMEDIATELY PRIOR TO COMMENCING WORK - TYPICAL FOR ALL DRAWINGS.
 - THIS FACILITY WILL REMAIN IN OPERATION THROUGHOUT THE DURATION OF THE PROJECT. COORDINATE ALL ROOFING ACTIVITIES WITH THE OWNER TO MINIMIZE INTERFERENCE OF DAILY OPERATIONS.
 - CONTRACTOR TO IDENTIFY AND REPLACE DEFICIENT PLYWOOD ROOF SHEATHING, REPLACE PANELS THAT EXHIBIT SWELLING, BIOLOGICAL GROWTH OR MOISTURE LEVELS ABOVE 19%. CONFIRM LOCATIONS W/ ARCHITECT PRIOR TO REPLACING.
 - VERIFY LOCATIONS OF ALL ROOF PENETRATIONS. PROVIDE BOOTS, FLASHING AND OTHER ACCESSORIES REQUIRED TO PROVIDE A COMPLETE, WATERTIGHT WARRANTED SYSTEM.
 - REPLACE ONLY THE AMOUNT OF ROOFING THAT CAN BE COMPLETED AND MADE WEATHER TIGHT IN A SINGLE WORK DAY. BUILDING INTERIOR MUST BE PROTECTED FROM INCLEMENT WEATHER AT THE END OF EACH WORK DAY.
 - PROTECT SECTIONS OF THE ROOF THAT HAVE ALREADY BEEN INSTALLED, ARE EXISTING TO REMAIN OR ARE NOT IN CONTRACT FROM DAMAGE. DO NOT USE THE ROOF FOR A STAGING AREA UNLESS ADEQUATE FACTORY MUTUAL APPROVED PROTECTION MEASURES ARE USED TO PROTECT THE ROOF INSTALLATION.
 - COORDINATE INSTALLATION OF ROOFING MEMBRANE WITH EXISTING MECHANICAL EQUIPMENT.
 - REMOVE EXISTING ROOFTOP VENTS AND OTHER ITEMS ONLY AS NECESSARY TO INSTALL NEW FLASHINGS AND ROOF MEMBRANE.
 - VERIFY ALL EXISTING ROOF DIMENSIONS, WIDTHS & HEIGHTS OF METAL EDGINGS CONDITIONS PRIOR TO BID.
 - PROVIDE NEW METAL FLASHINGS AT ALL PENETRATIONS AND PERIMETERS.
 - INSTALL NEW GUTTERS TO ACCOMMODATE EXISTING DOWNSPOUT LOCATIONS.



E14 ROOF PLAN
1/8" = 1'-0"



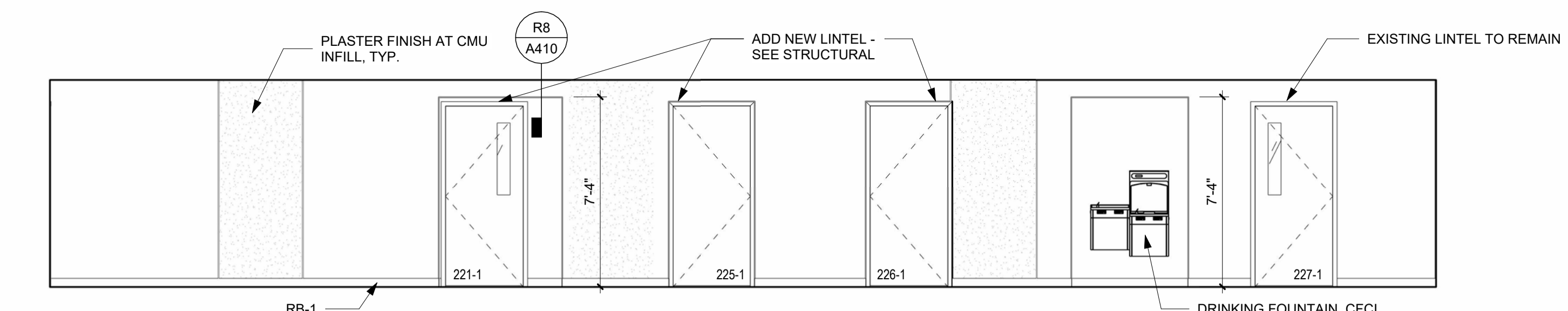
A14 ALTERNATE 1 - EXTERIOR ELEVATION - SOUTH WINDOWS
1/4" = 1'-0"

Key Plan

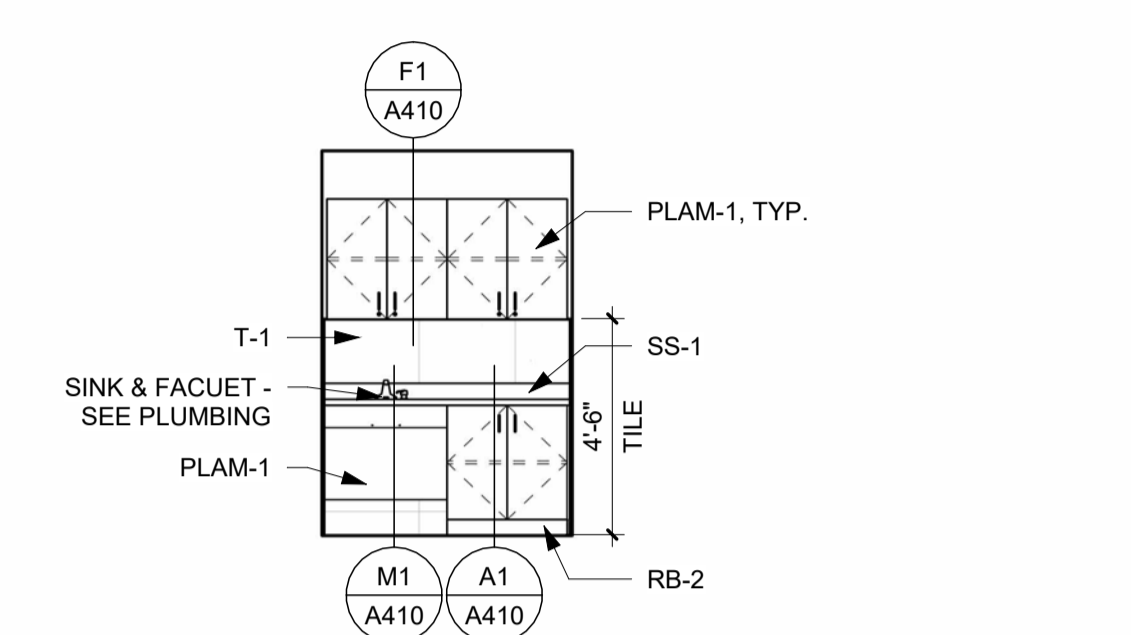
Revision	Description	Date

DESIGNATION	DESCRIPTION	PROVIDED BY
CH-1	COAT HOOK STRIP	CFCI
GB-1	NOT USED	-
GB-2	REAR GRAB BAR	CFCI
GB-3	SIDE GRAB BAR	CFCI
GB-4	CONTINUOUS SHOWER GRAB BAR	CFCI
HD	HAND DRYER	CFCI
MR-1	MIRROR - 16" X 26"	CFCI
MR-2	MIRROR - 13" X 16"	CFCI
SB	ADA SHOWER BENCH	CFCI
SD	SOAP DISPENSER	OFOI
SND	SANITARY NAPKIN DISPOSAL	CFCI
TTD	TOILET TISSUE DISPENSER	CFCI

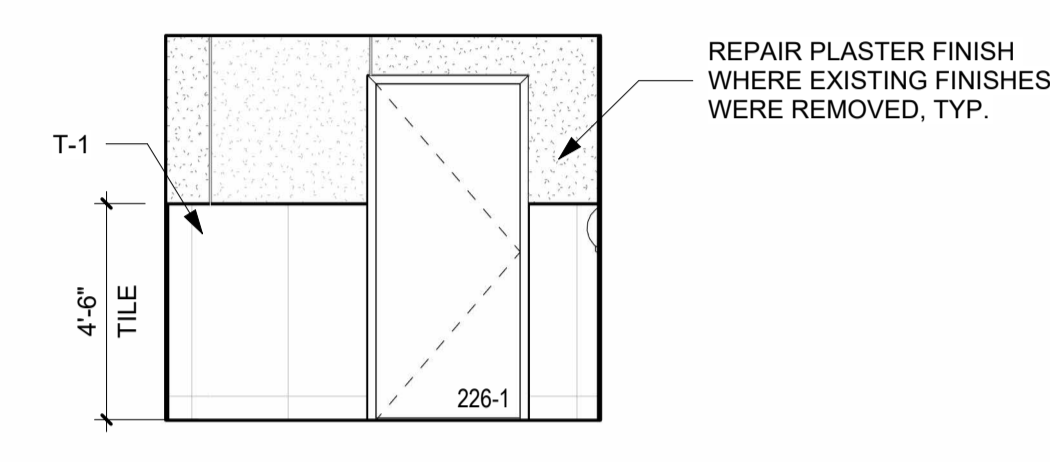
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 DES MOINES, IA 50319
 Project
9375.00 - DOC 5JD FT DES MOINES BLDG 65-66 RESTROOM RENOVATION
 68 THAYER ST
 DES MOINES, IA 50315
 Construction Manager
SAMUELS GROUP
 2929 WESTOWN PARKWAY, SUITE 200
 WEST DES MOINES, IA 50266
 P. 515-288-0467
 Structural Engineer
RAKER RHODES ENGINEERING
 4717 GRAND AVE
 DES MOINES, IA 50312
 P. 515-277-0275
 MEP Engineer
KCL ENGINEERING
 300 4TH ST.
 WEST DES MOINES, IA 50265
 P. 515-724-7938



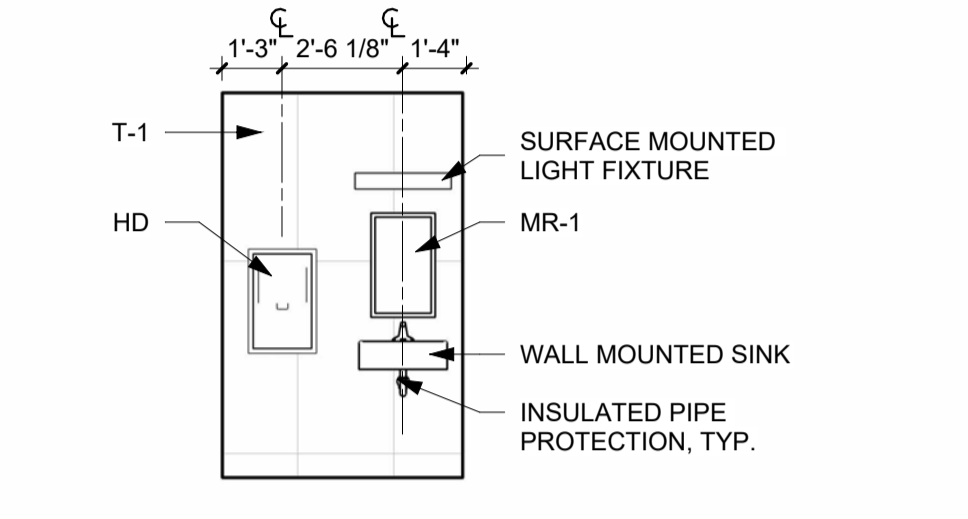
S2 INTERIOR ELEVATION - CORRIDOR 323 - SOUTH
 1/4" = 1'-0"



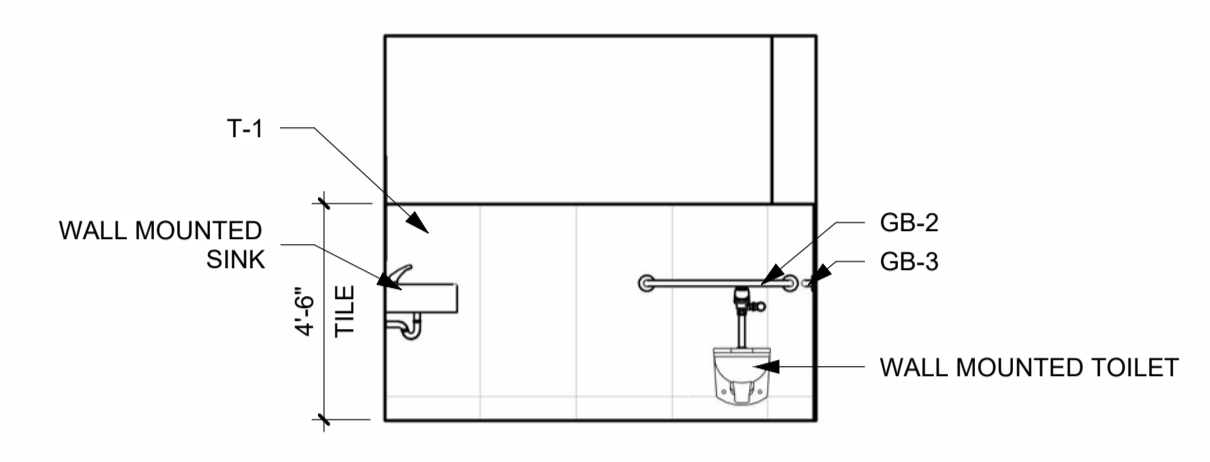
N2 INTERIOR ELEVATION - UA ROOM 225 - WEST
 1/4" = 1'-0"



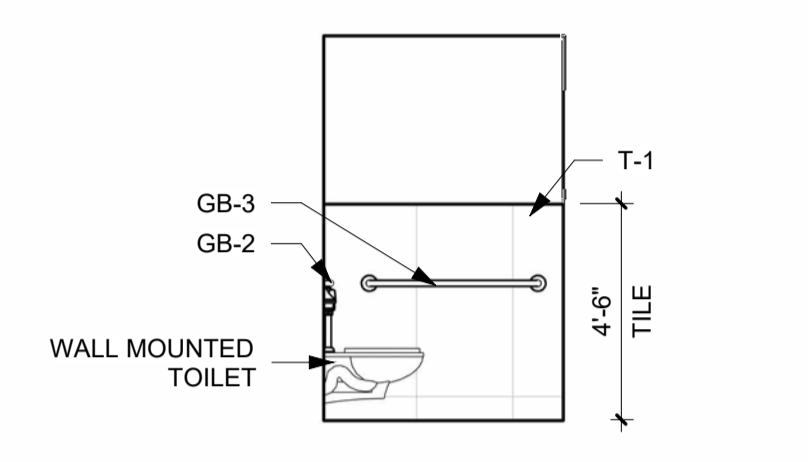
N6 INTERIOR ELEVATION - STAFF RR 226 - NORTH
 1/4" = 1'-0"



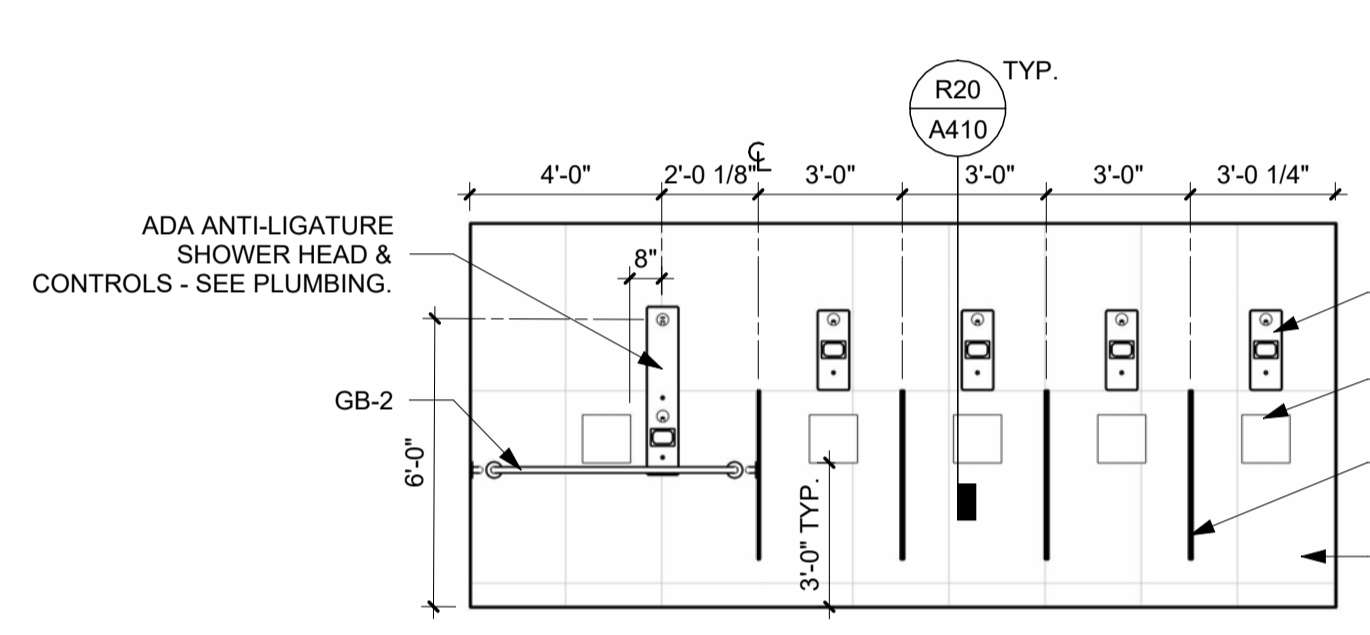
N11 INTERIOR ELEVATION - STAFF RR 226 - EAST
 1/4" = 1'-0"



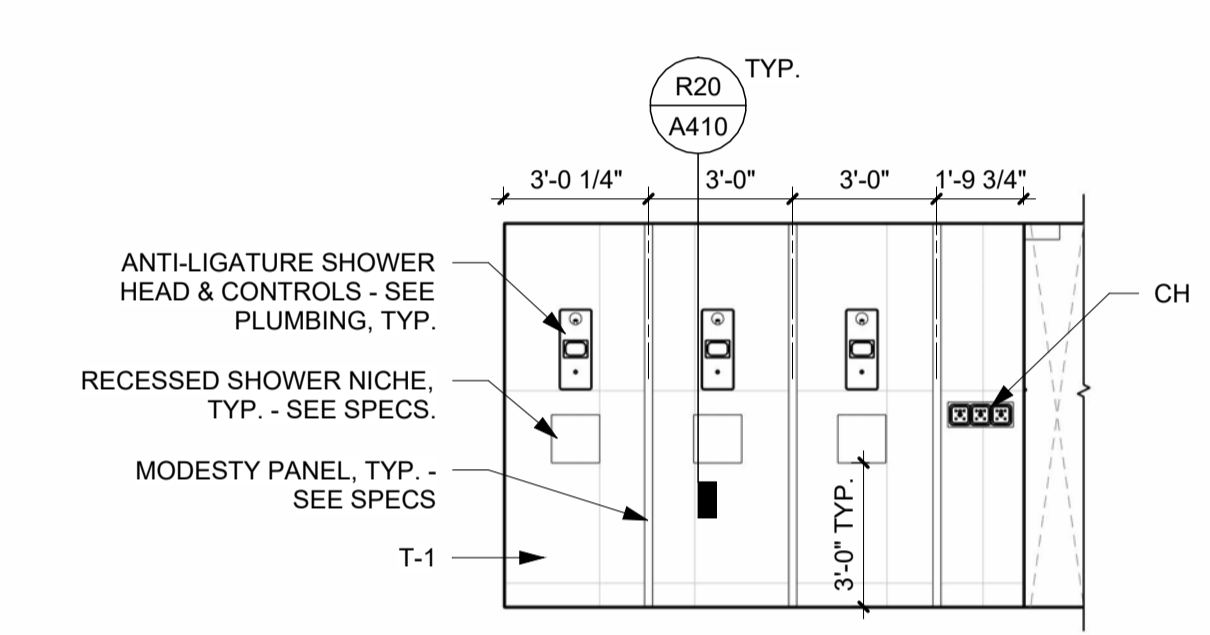
N15 INTERIOR ELEVATION - STAFF RR 226 - SOUTH
 1/4" = 1'-0"



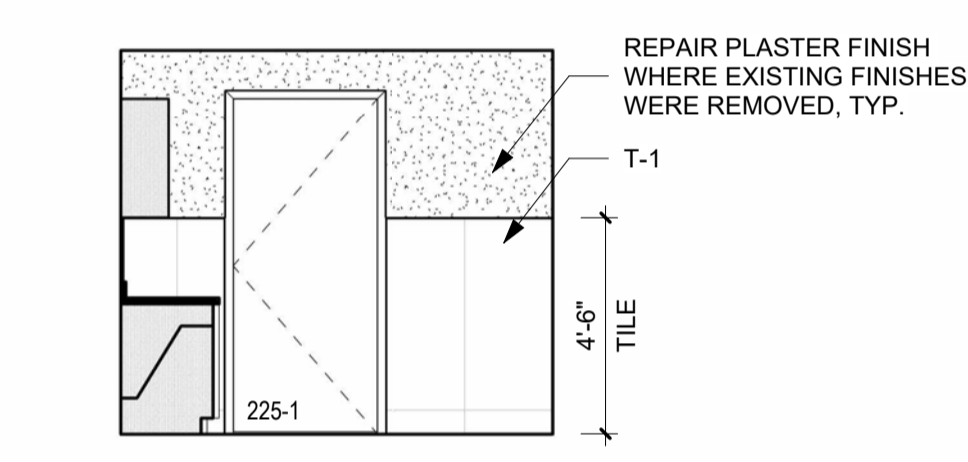
N20 INTERIOR ELEVATION - STAFF RR 226 - WEST
 1/4" = 1'-0"



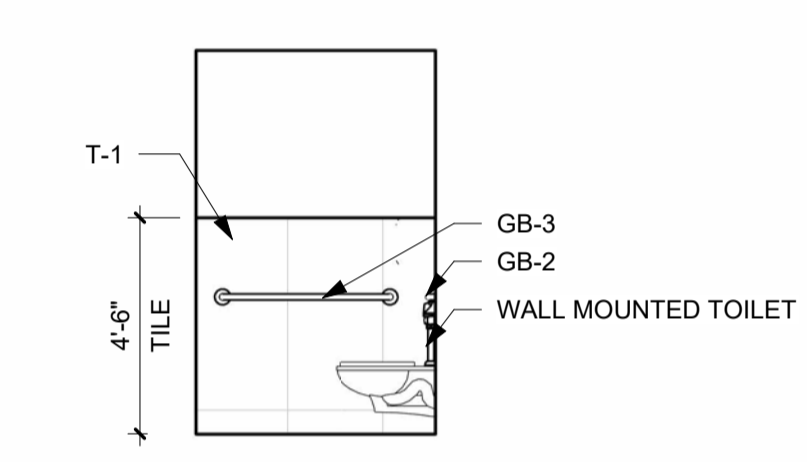
L2 INTERIOR ELEVATION - SHOWERS 220 - EAST
 1/4" = 1'-0"



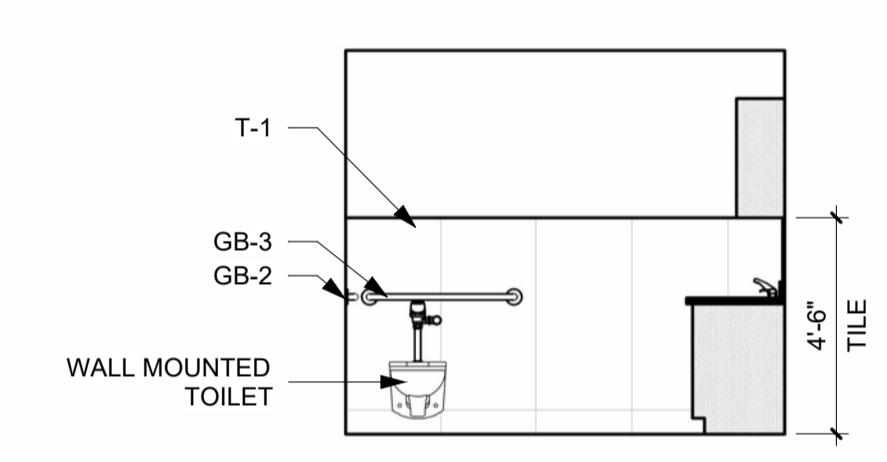
L9 INTERIOR ELEVATION - SHOWERS 220 - WEST
 1/4" = 1'-0"



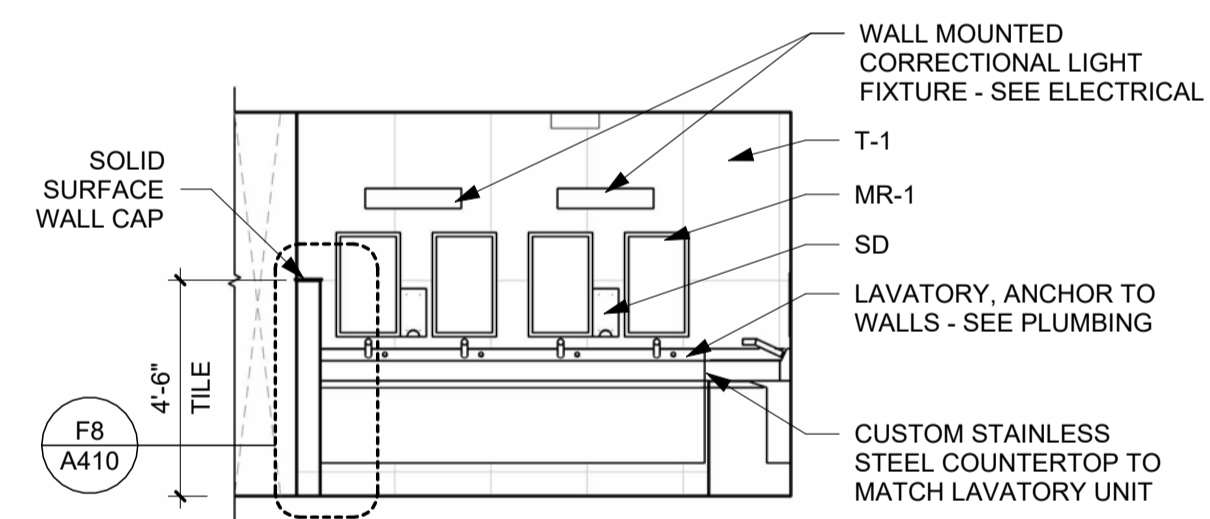
L13 INTERIOR ELEVATION - UA ROOM 225 - NORTH
 1/4" = 1'-0"



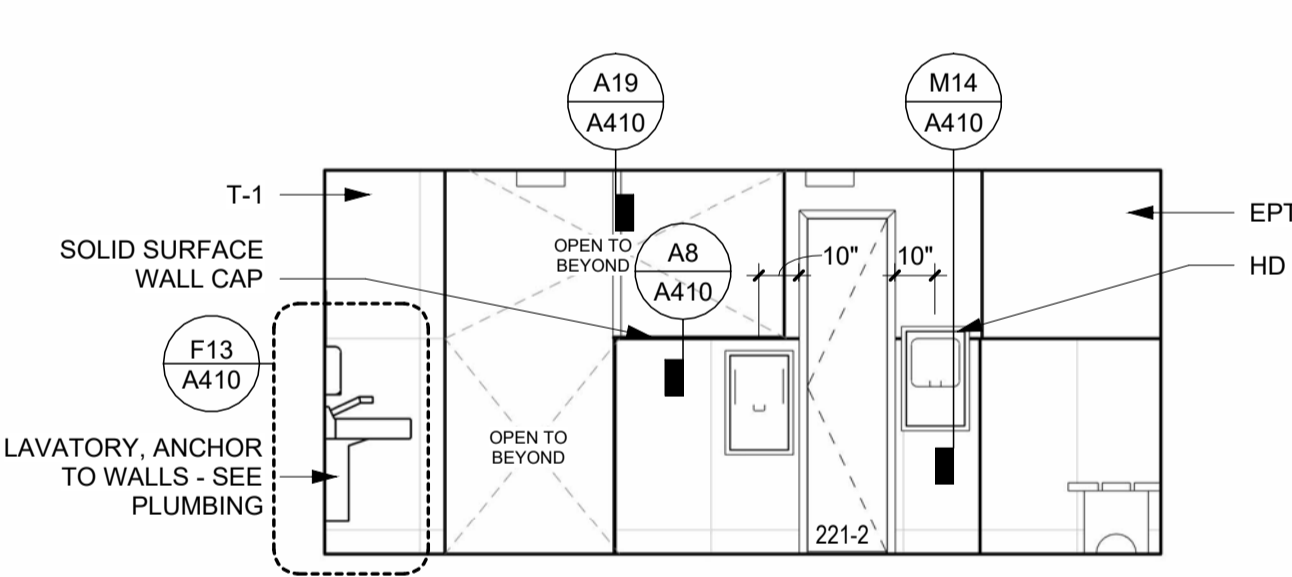
L18 INTERIOR ELEVATION - UA ROOM 225 - EAST
 1/4" = 1'-0"



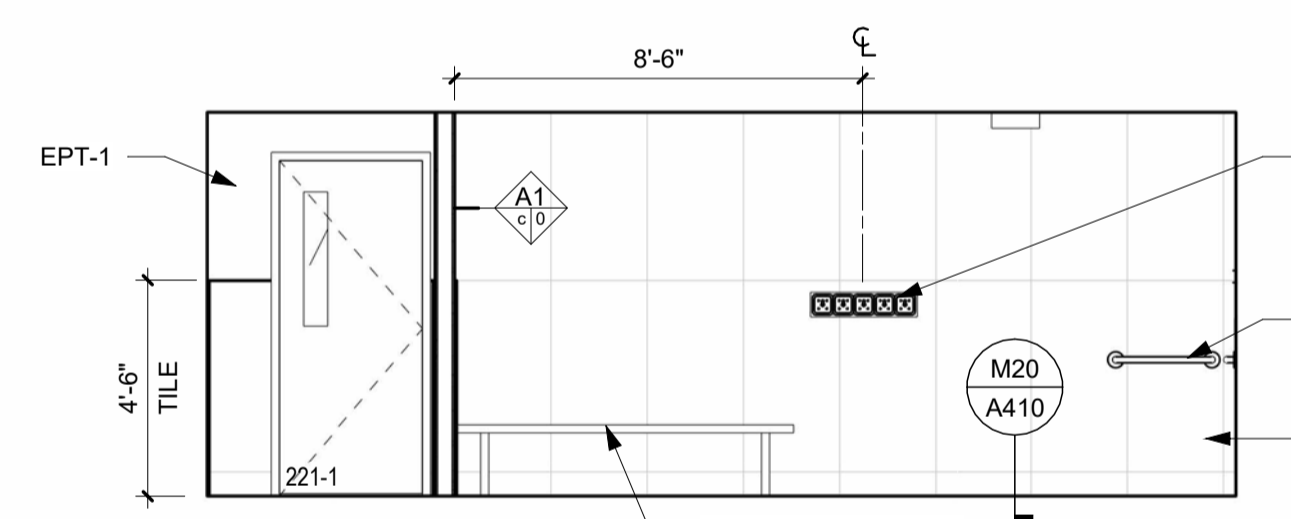
L22 INTERIOR ELEVATION - UA ROOM 225 - SOUTH
 1/4" = 1'-0"



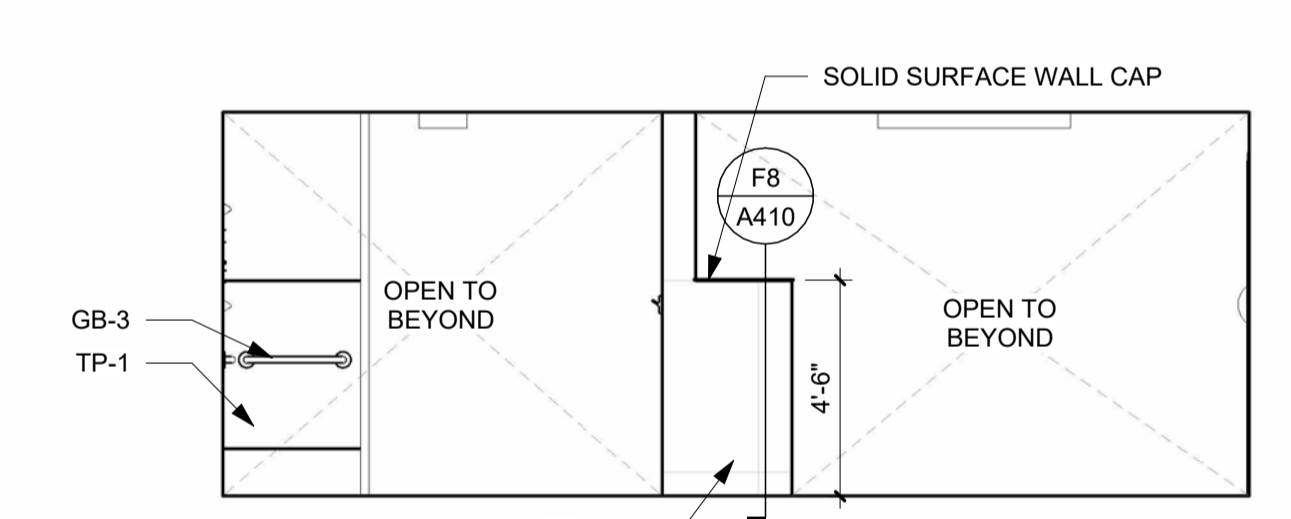
H2 INTERIOR ELEVATION - LAVATORIES 221 - EAST
 1/4" = 1'-0"



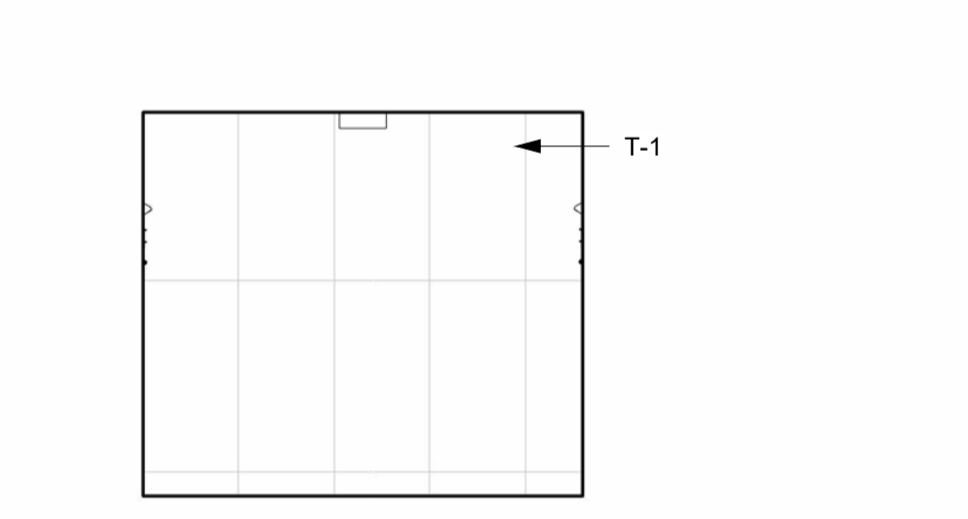
H6 INTERIOR ELEVATION - LAVATORIES 221 - WEST
 1/4" = 1'-0"



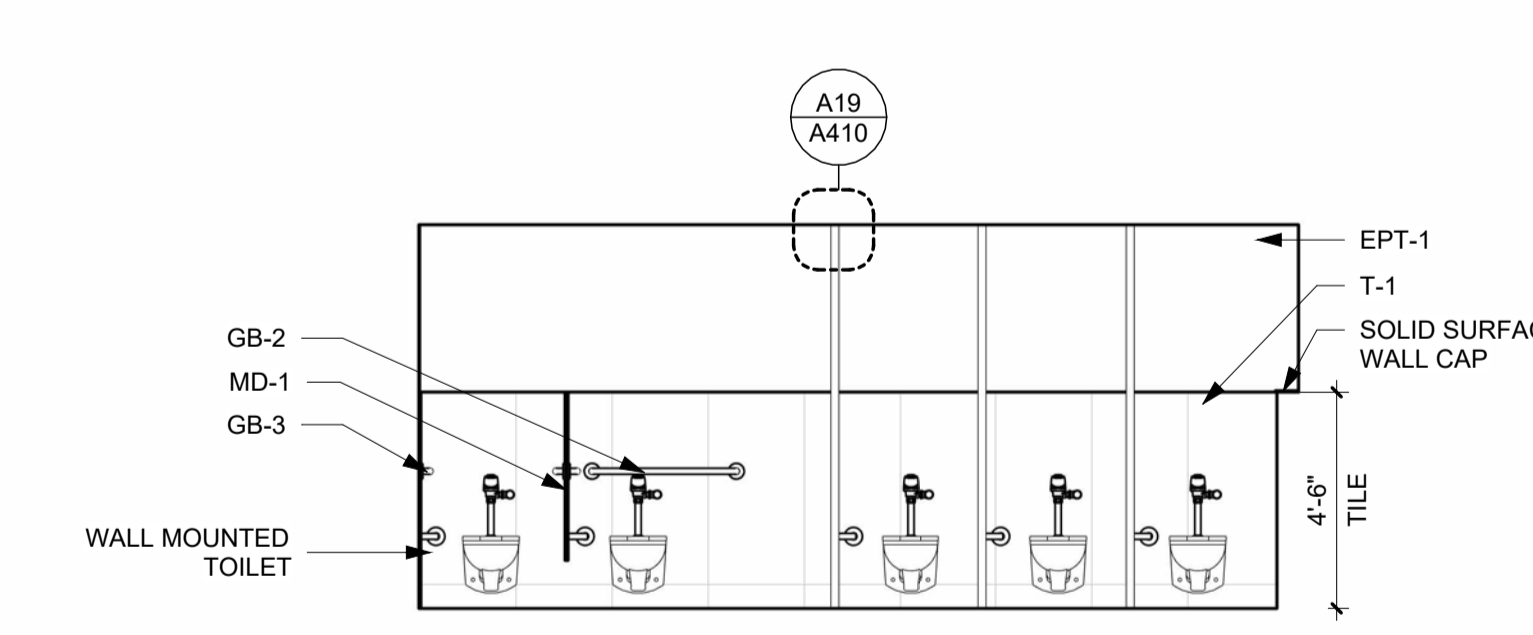
H12 INTERIOR ELEVATION - DRYING 219 & SHOWERS 220 - NORTH
 1/4" = 1'-0"



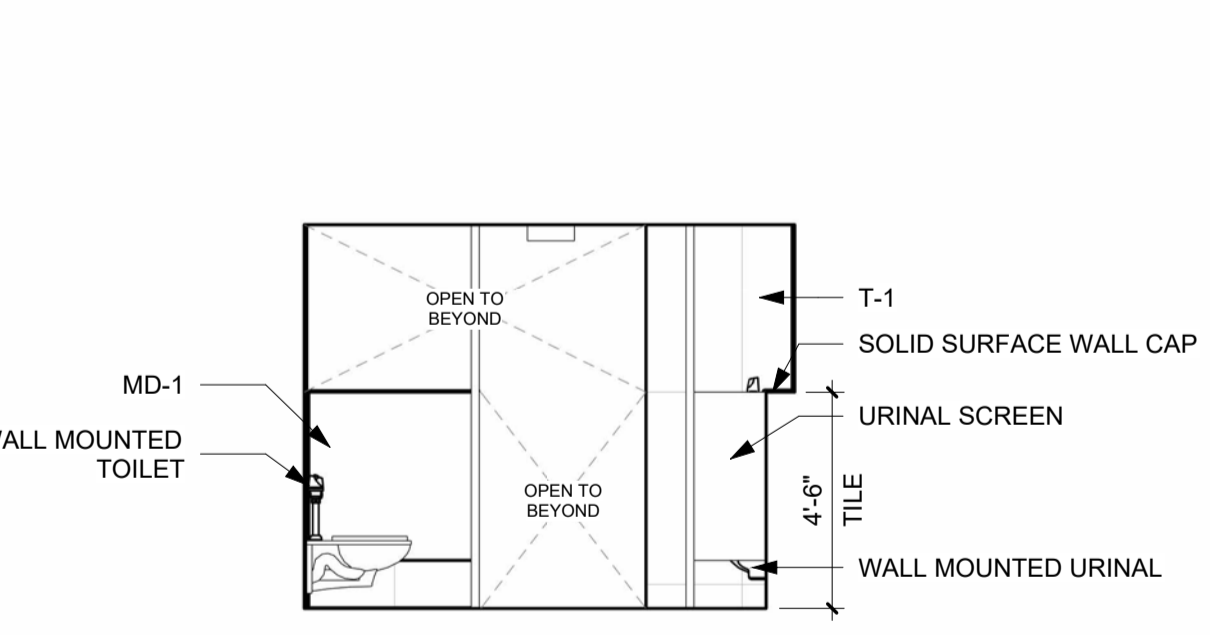
H17 INTERIOR ELEVATION - DRYING 219 - SOUTH
 1/4" = 1'-0"



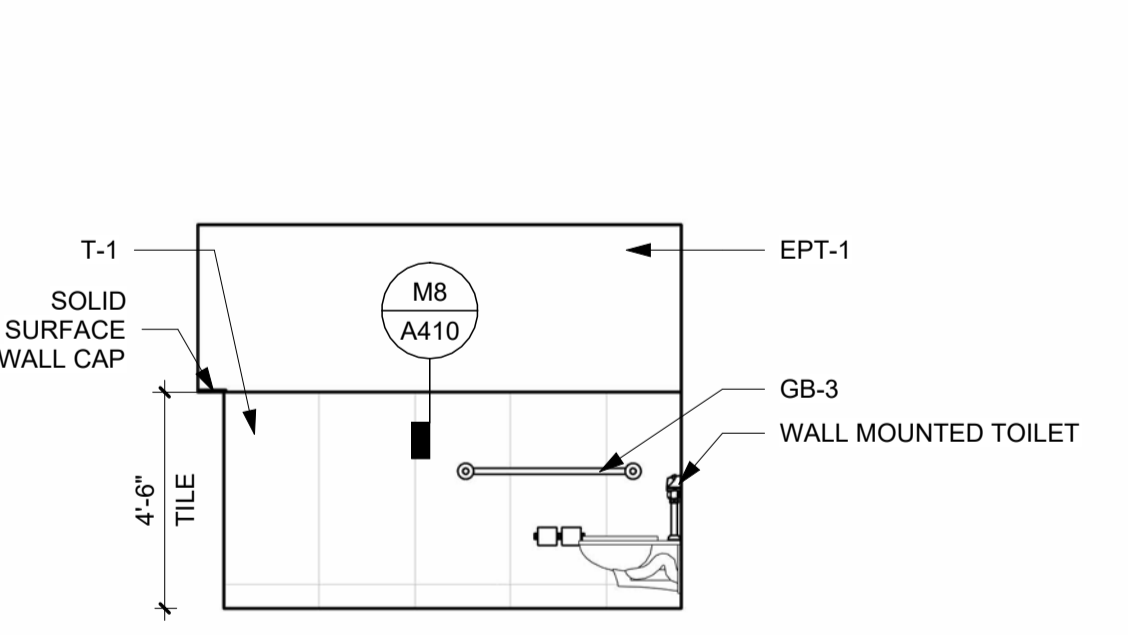
H22 INTERIOR ELEVATION - SHOWERS 220 - SOUTH
 1/4" = 1'-0"



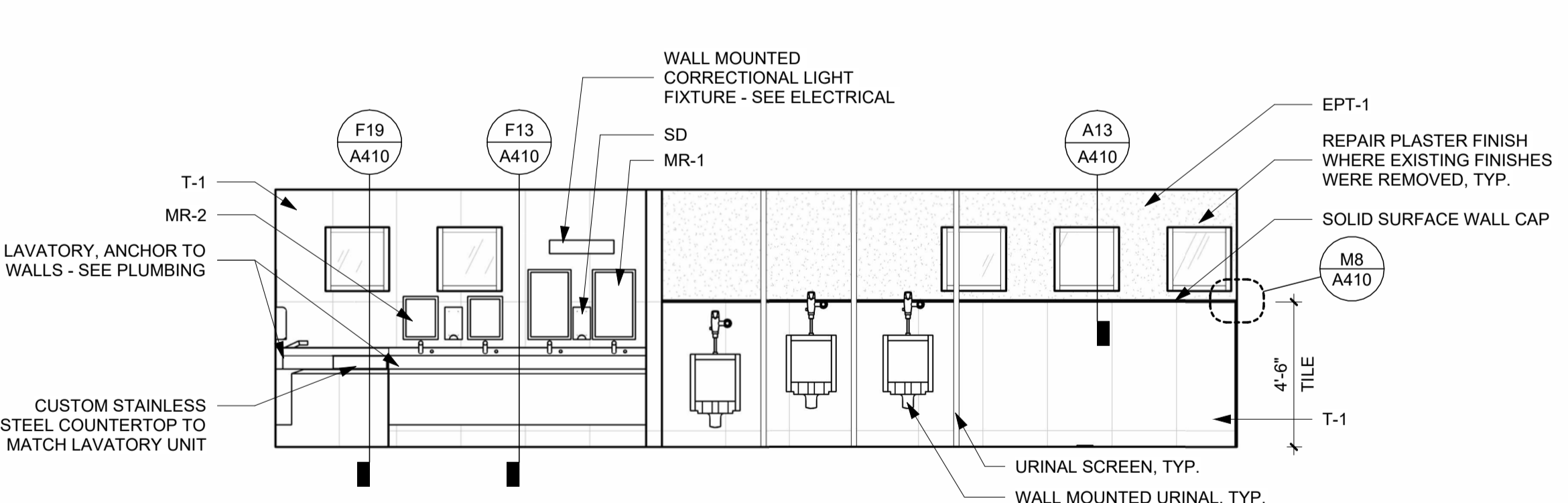
D2 INTERIOR ELEVATION - TOILETS 224 - NORTH
 1/4" = 1'-0"



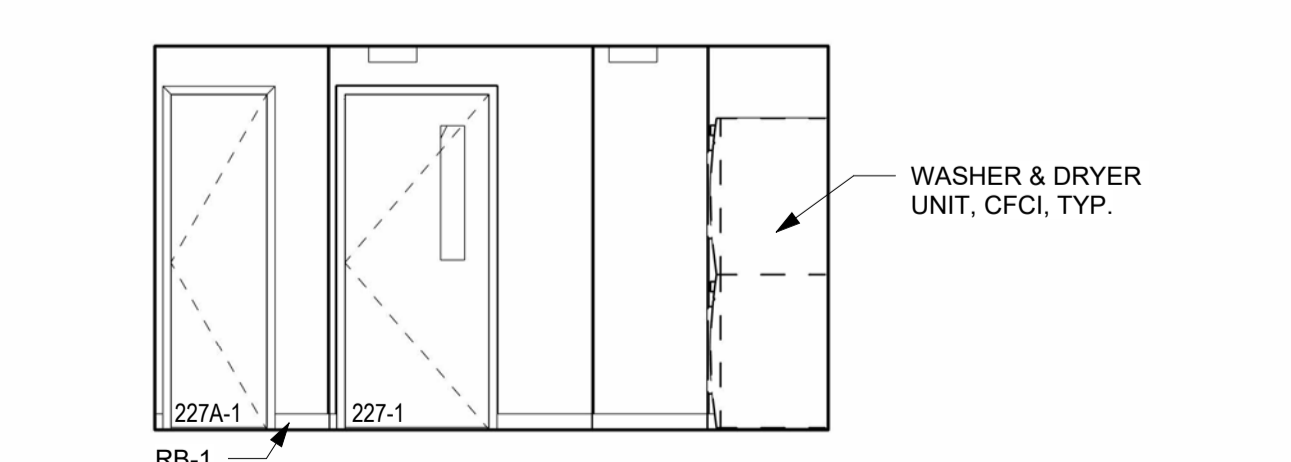
D8 INTERIOR ELEVATION - TOILETS 224 - EAST
 1/4" = 1'-0"



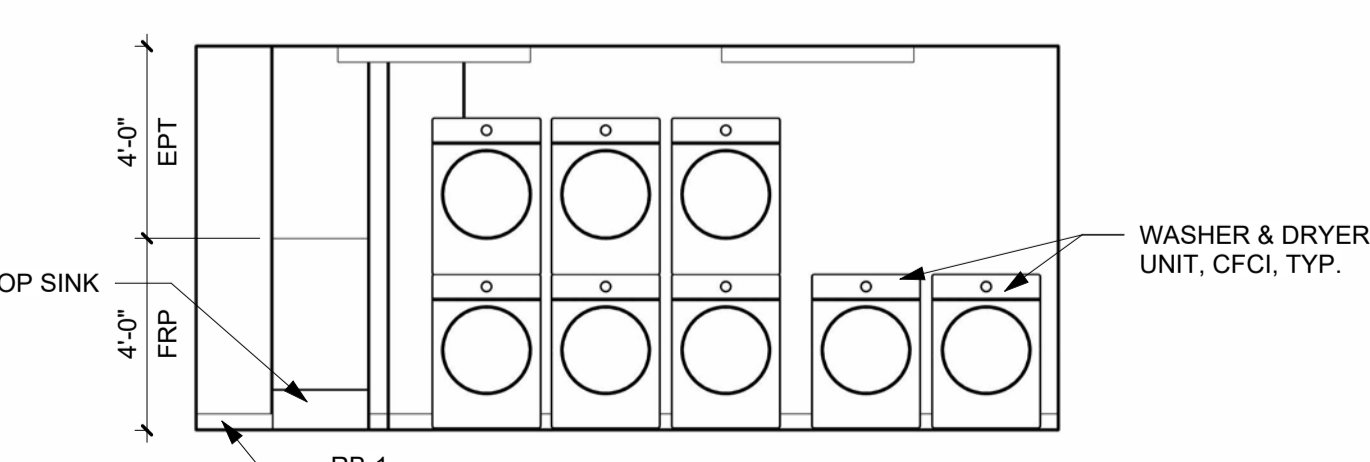
D11 INTERIOR ELEVATION - TOILETS 224 - WEST
 1/4" = 1'-0"



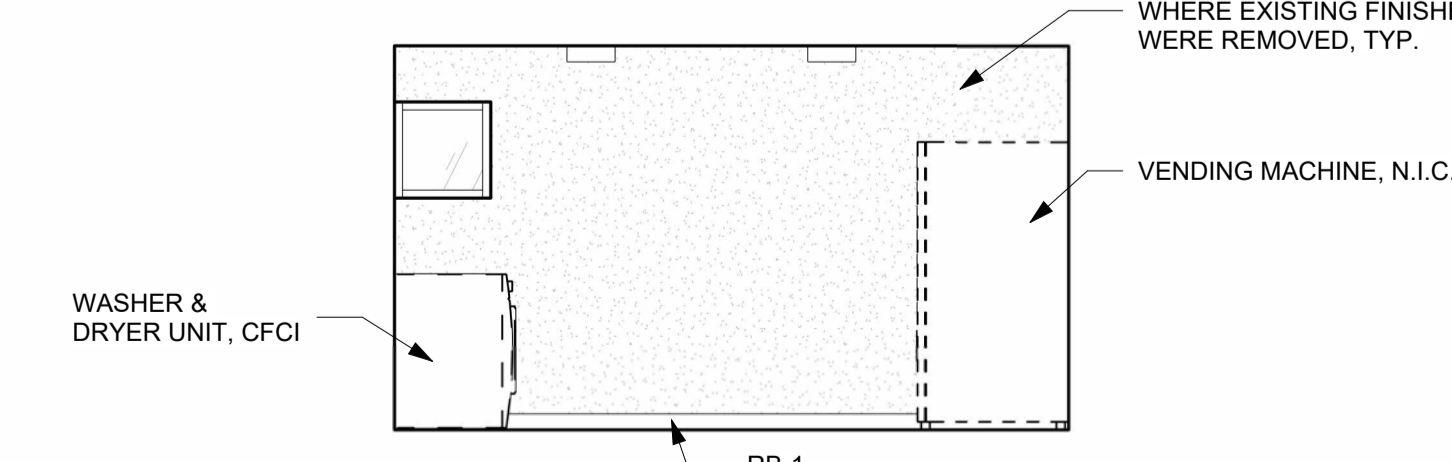
D16 INTERIOR ELEVATION - TOILETS 224 & LAVATORIES 221 - SOUTH
 1/4" = 1'-0"



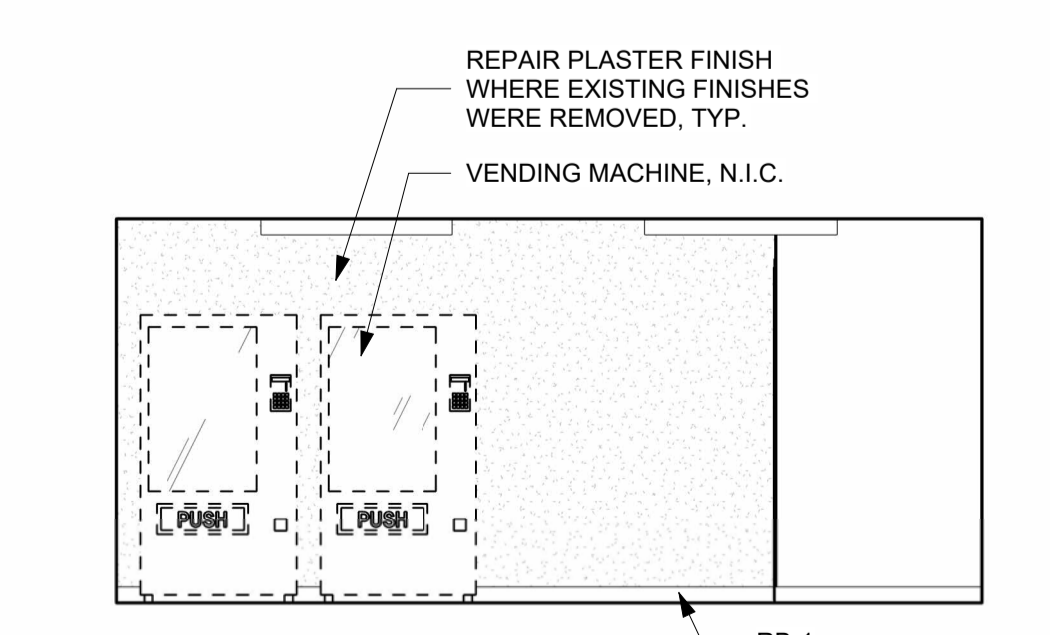
A2 INTERIOR ELEVATION - LAUNDRY 227 - NORTH
 1/4" = 1'-0"



A6 INTERIOR ELEVATION - LAUNDRY 227 - EAST
 1/4" = 1'-0"



A12 INTERIOR ELEVATION - LAUNDRY 227 - SOUTH
 1/4" = 1'-0"

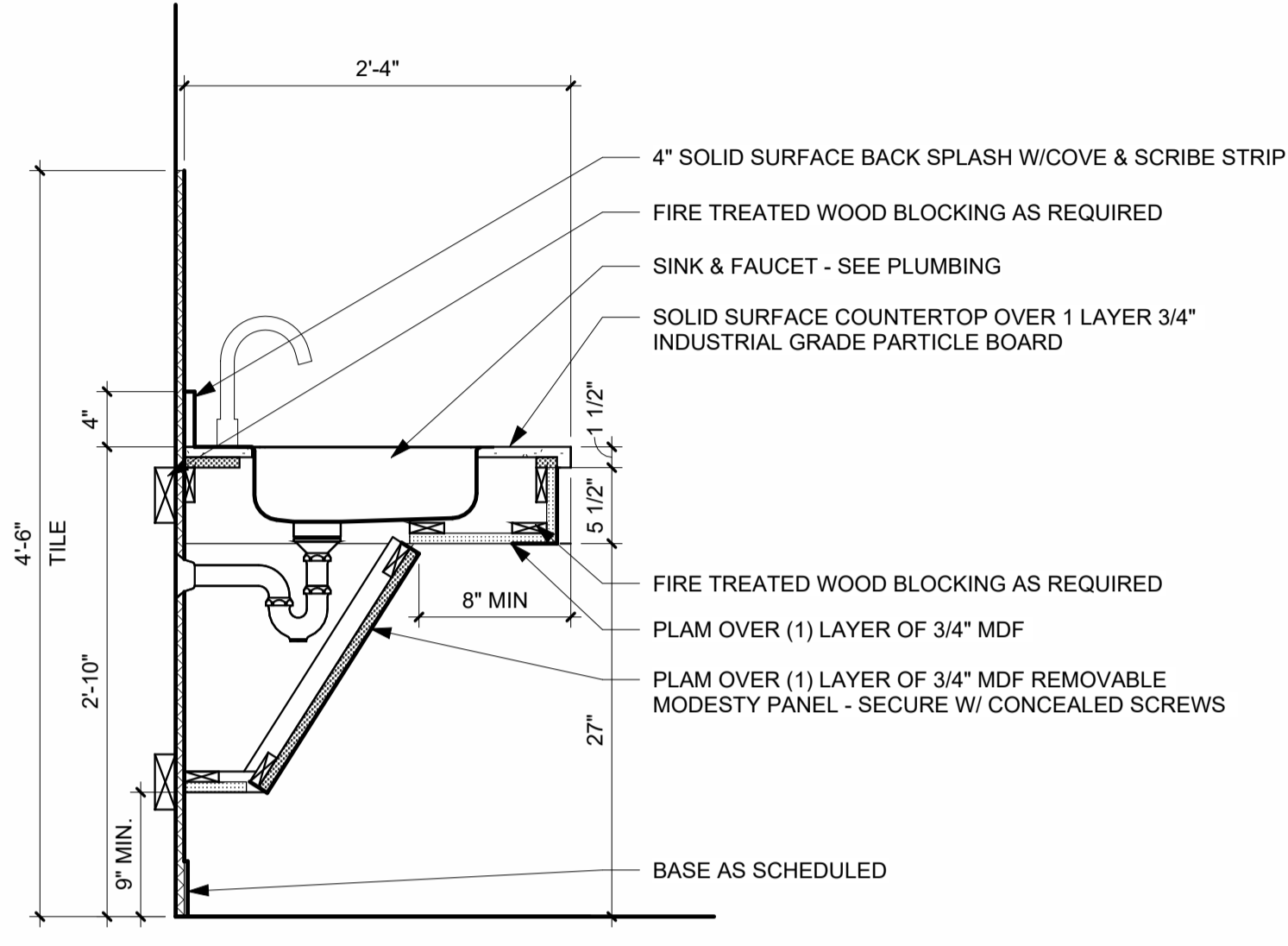


A17 INTERIOR ELEVATION - LAUNDRY 227 - WEST
 1/4" = 1'-0"

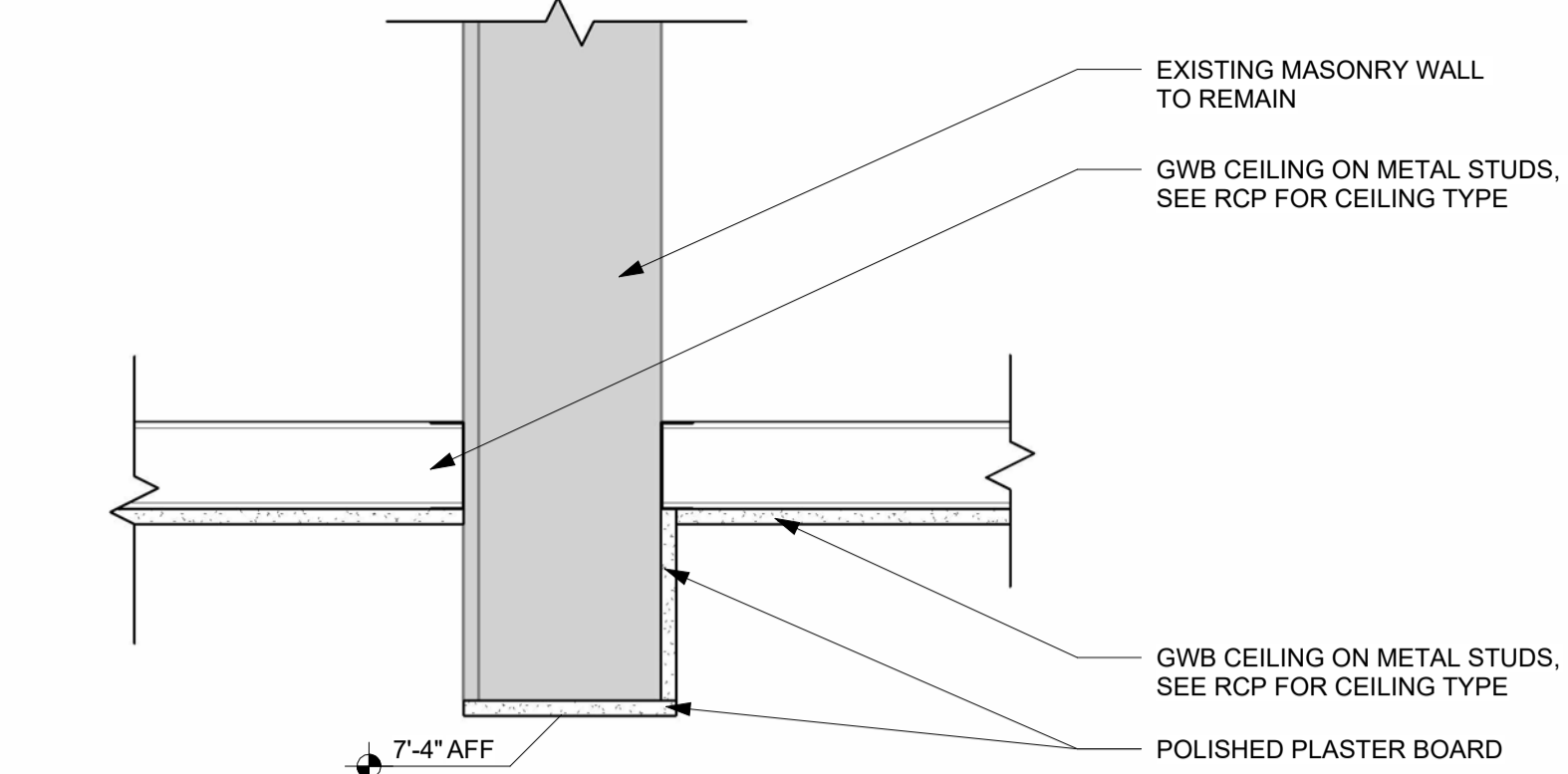
Key Plan

Revision Description Date

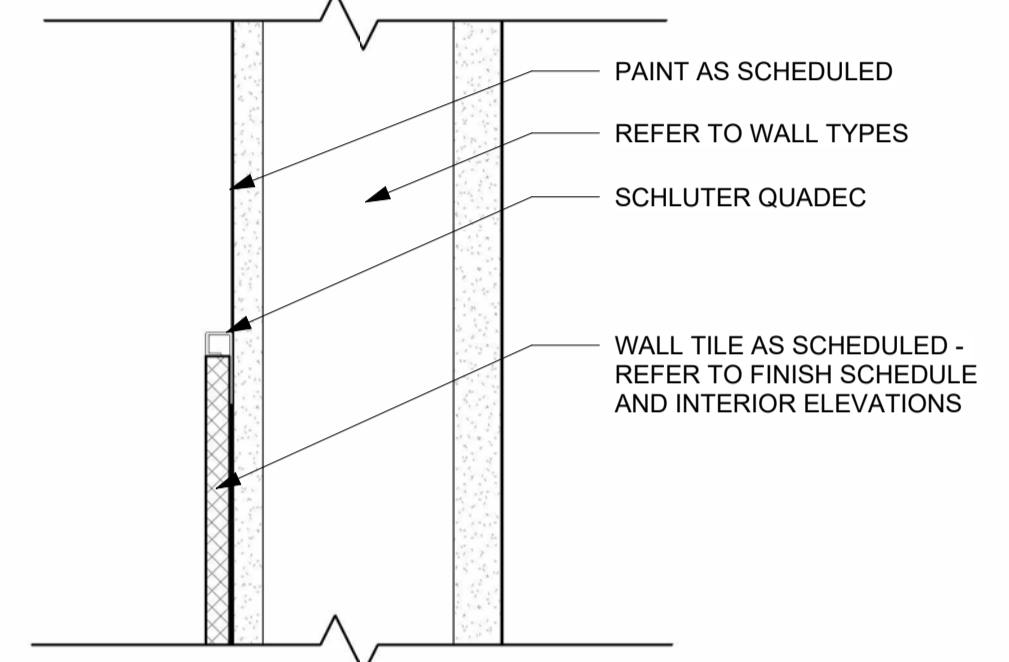
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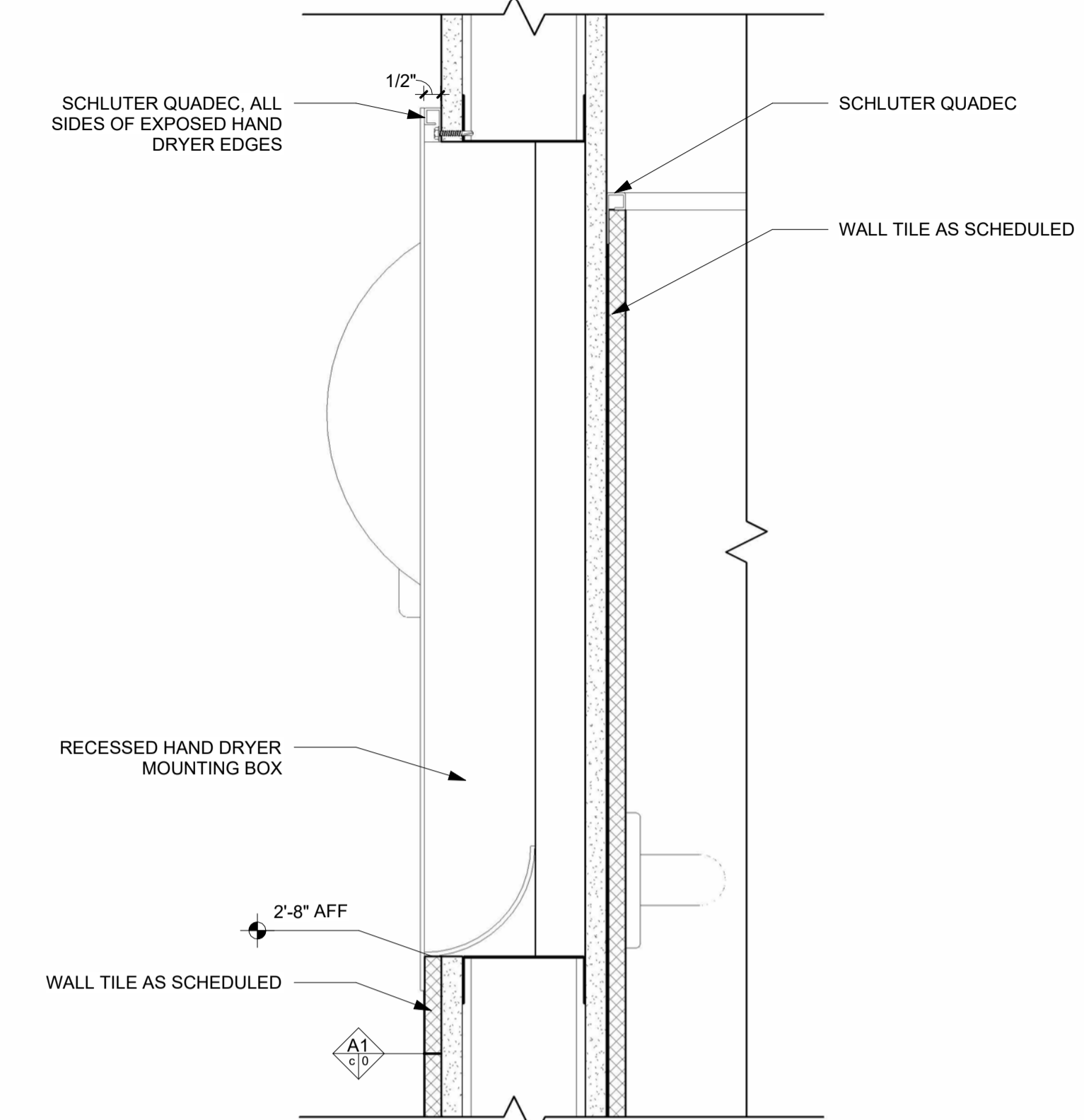
M1 CASEWORK SECTION - SINK W/ ANGLED PANEL
1 1/2" = 1'-0"



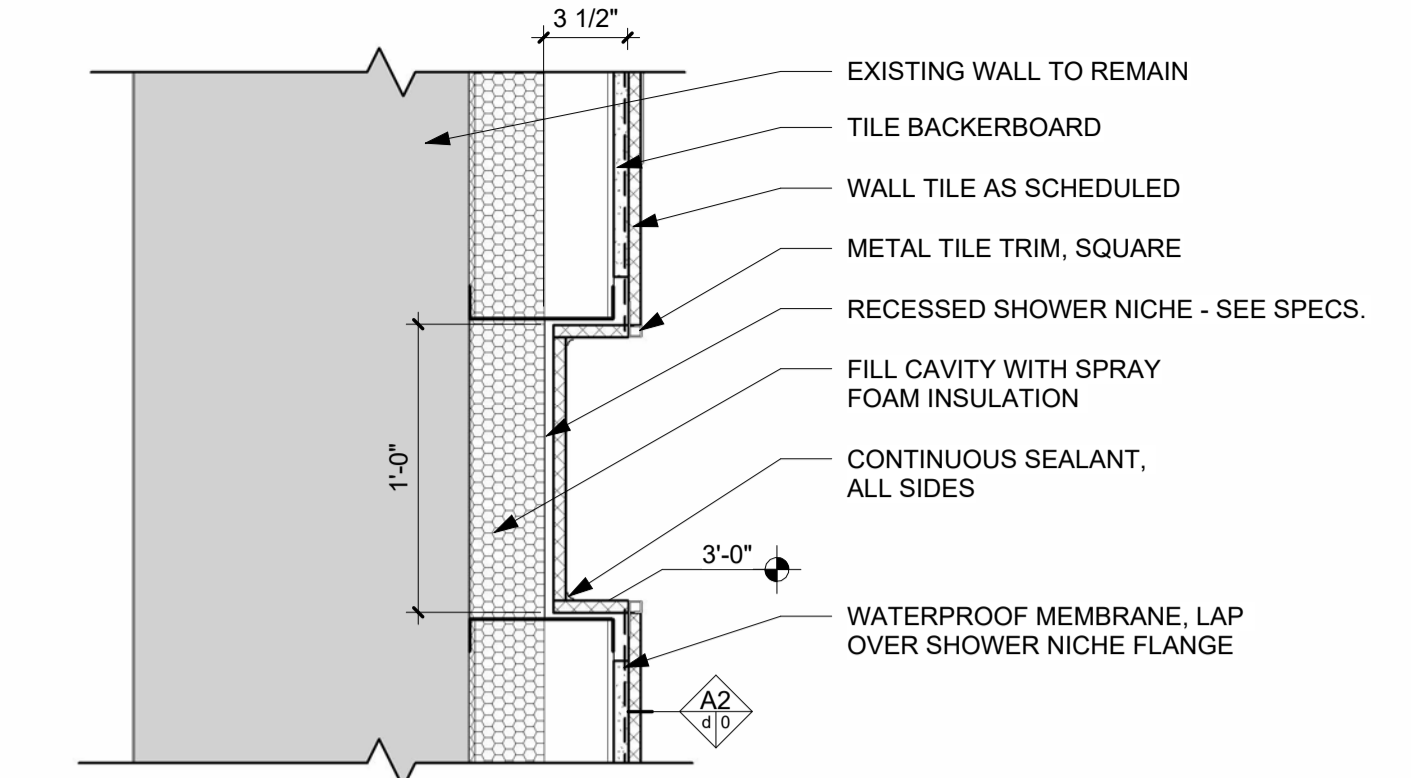
R8 SECTION DETAIL
1 1/2" = 1'-0"



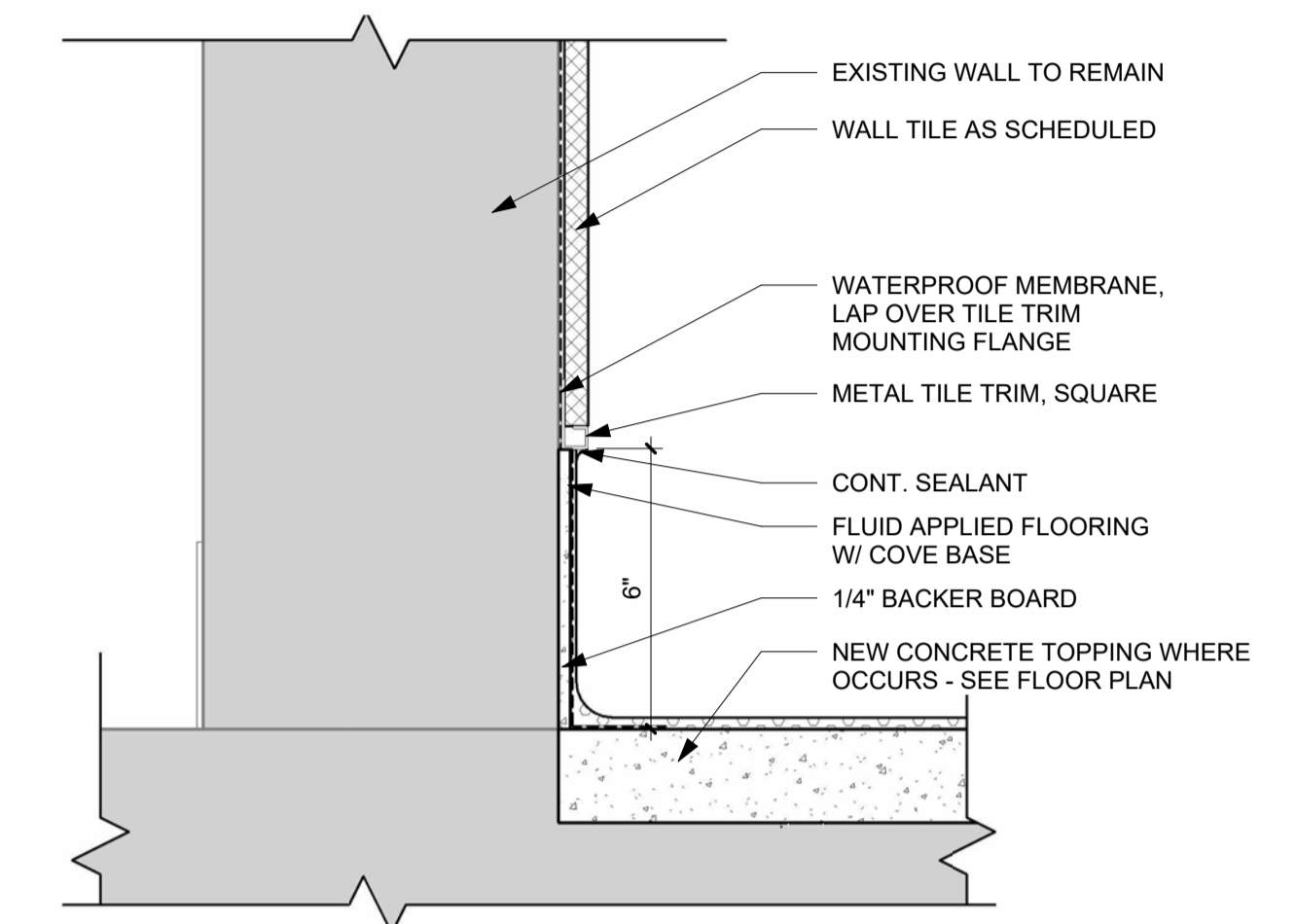
M8 SECTION DETAIL
3" = 1'-0"



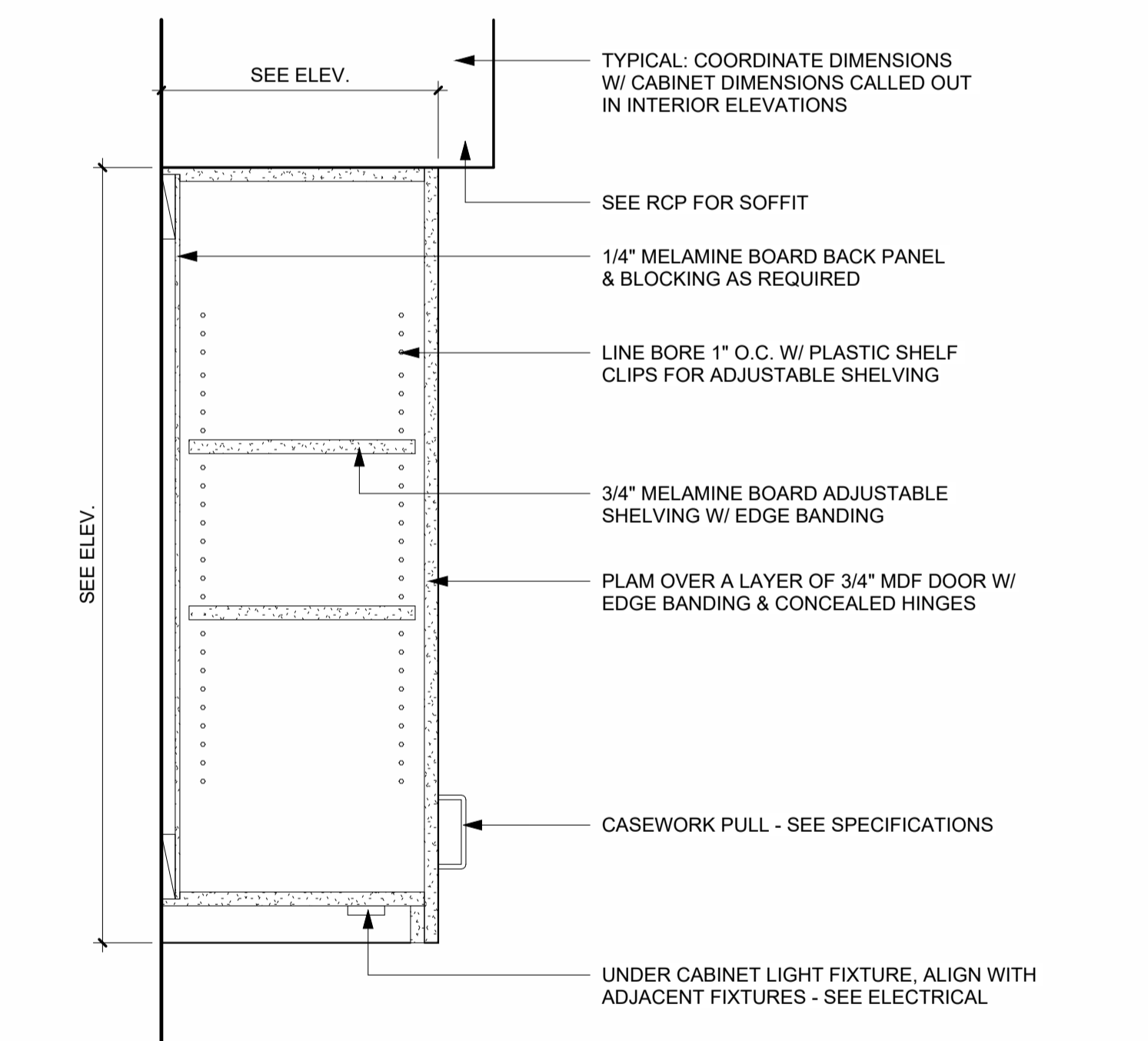
M14 SECTION DETAIL
3" = 1'-0"



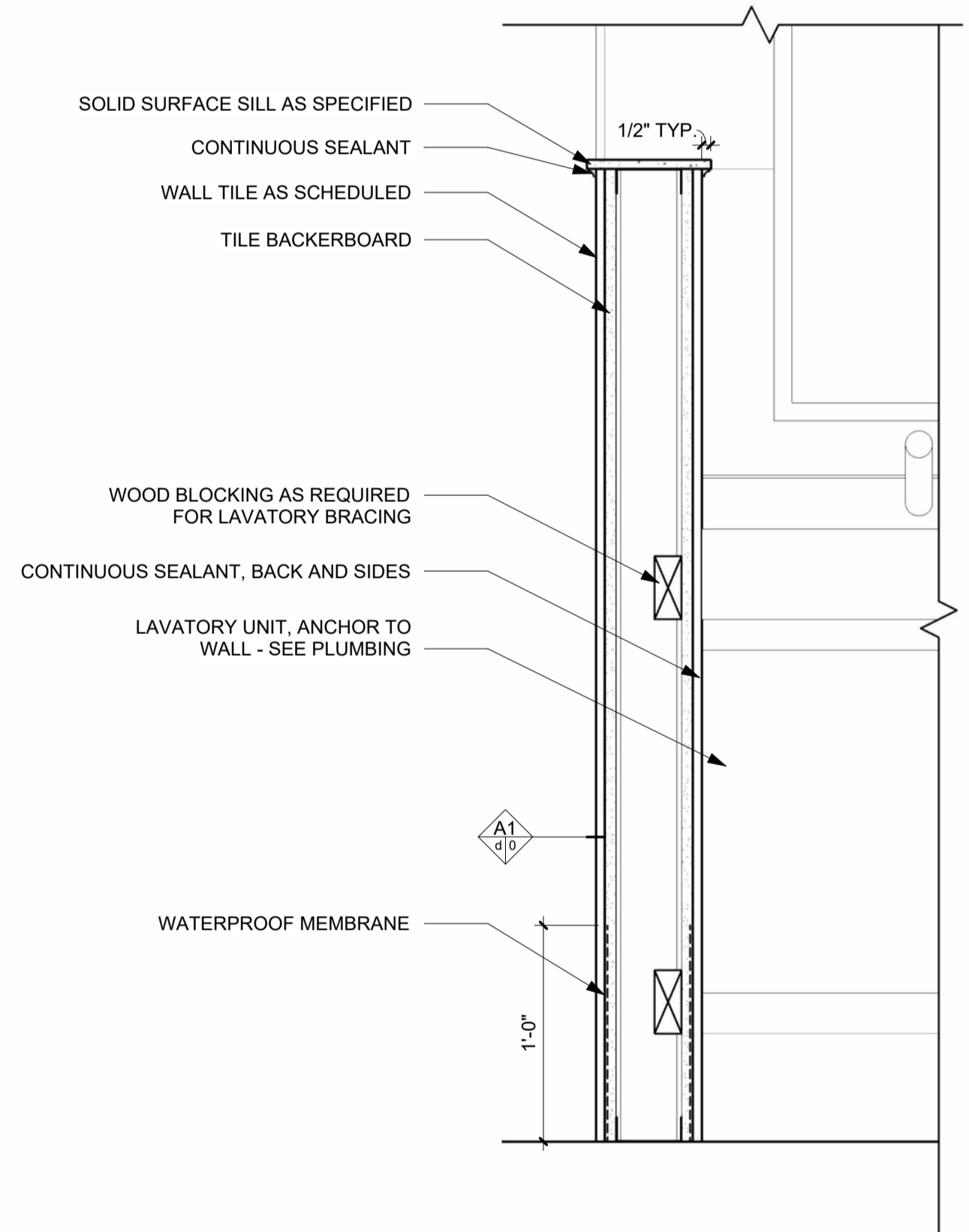
R20 SECTION DETAIL
1 1/2" = 1'-0"



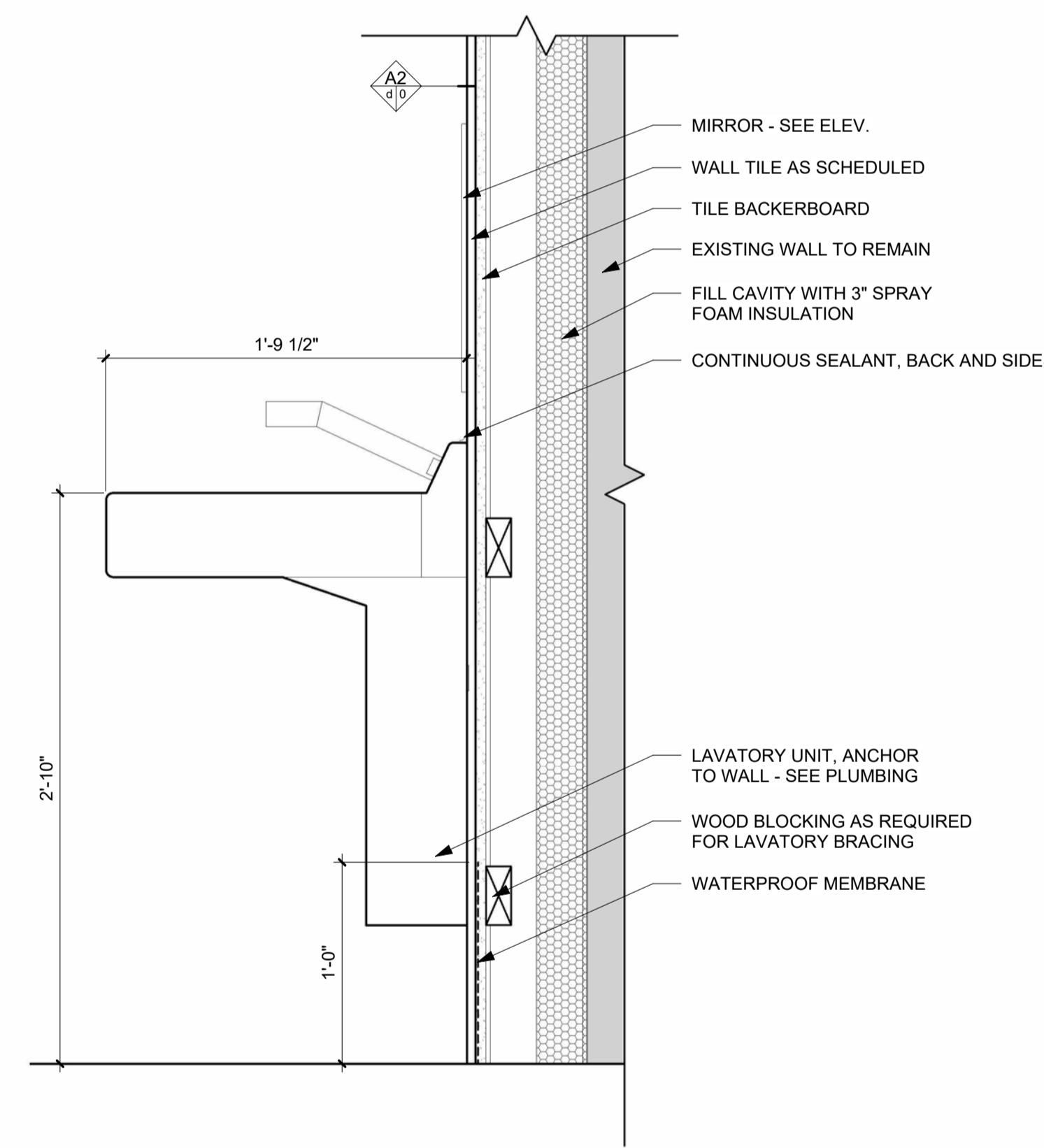
M20 SECTION DETAIL
3" = 1'-0"



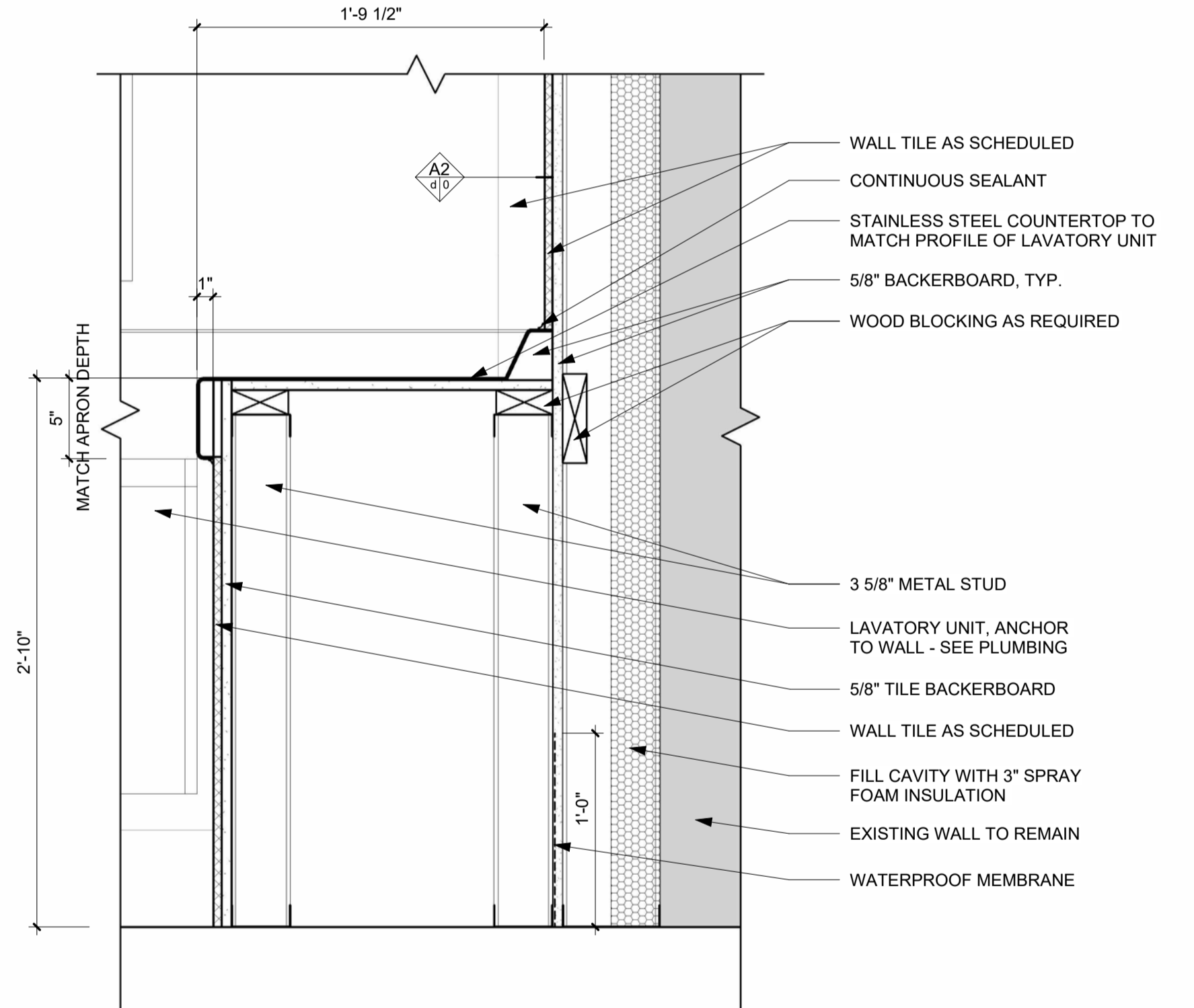
F1 CASEWORK SECTION - OVERHEAD CABINET
1 1/2" = 1'-0"



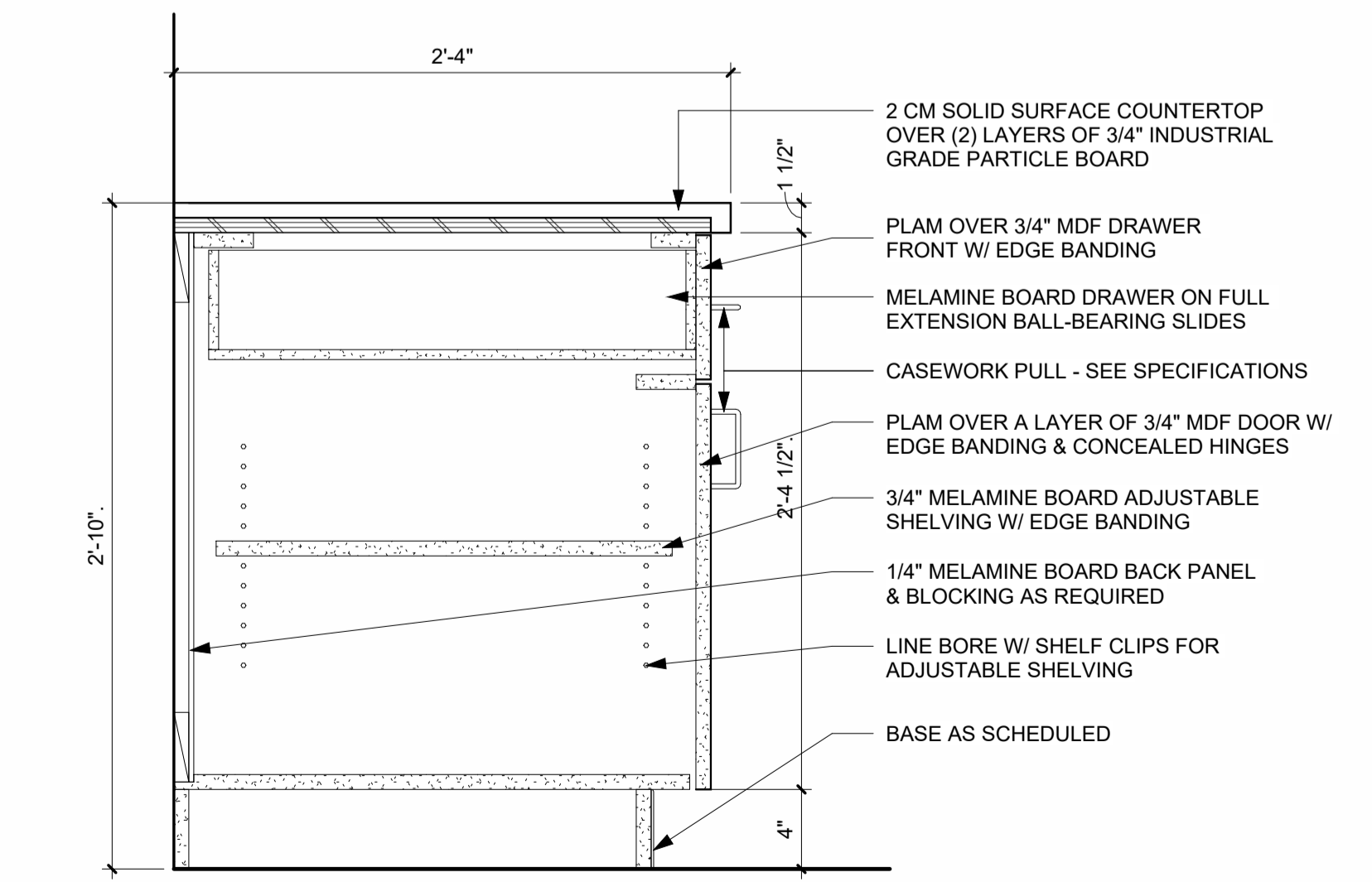
F8 SECTION DETAIL
1 1/2" = 1'-0"



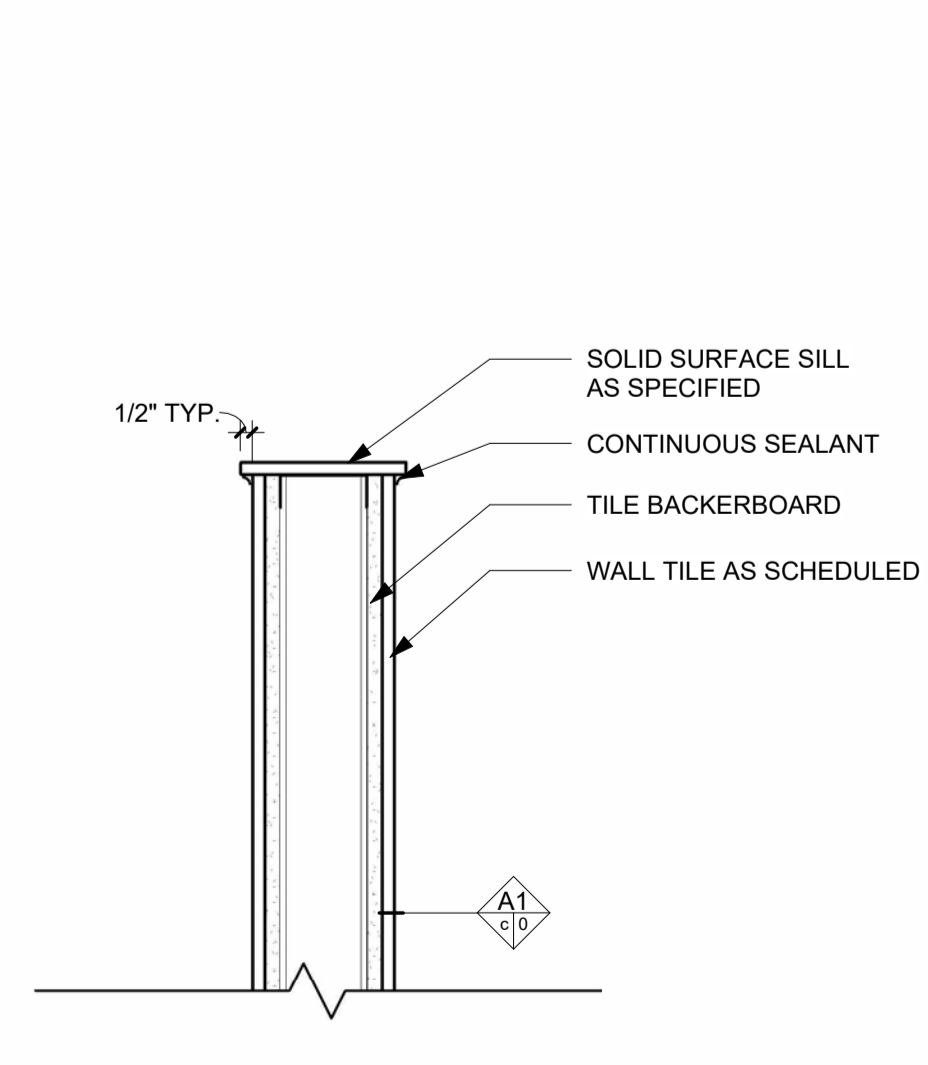
F13 SECTION DETAIL
1 1/2" = 1'-0"



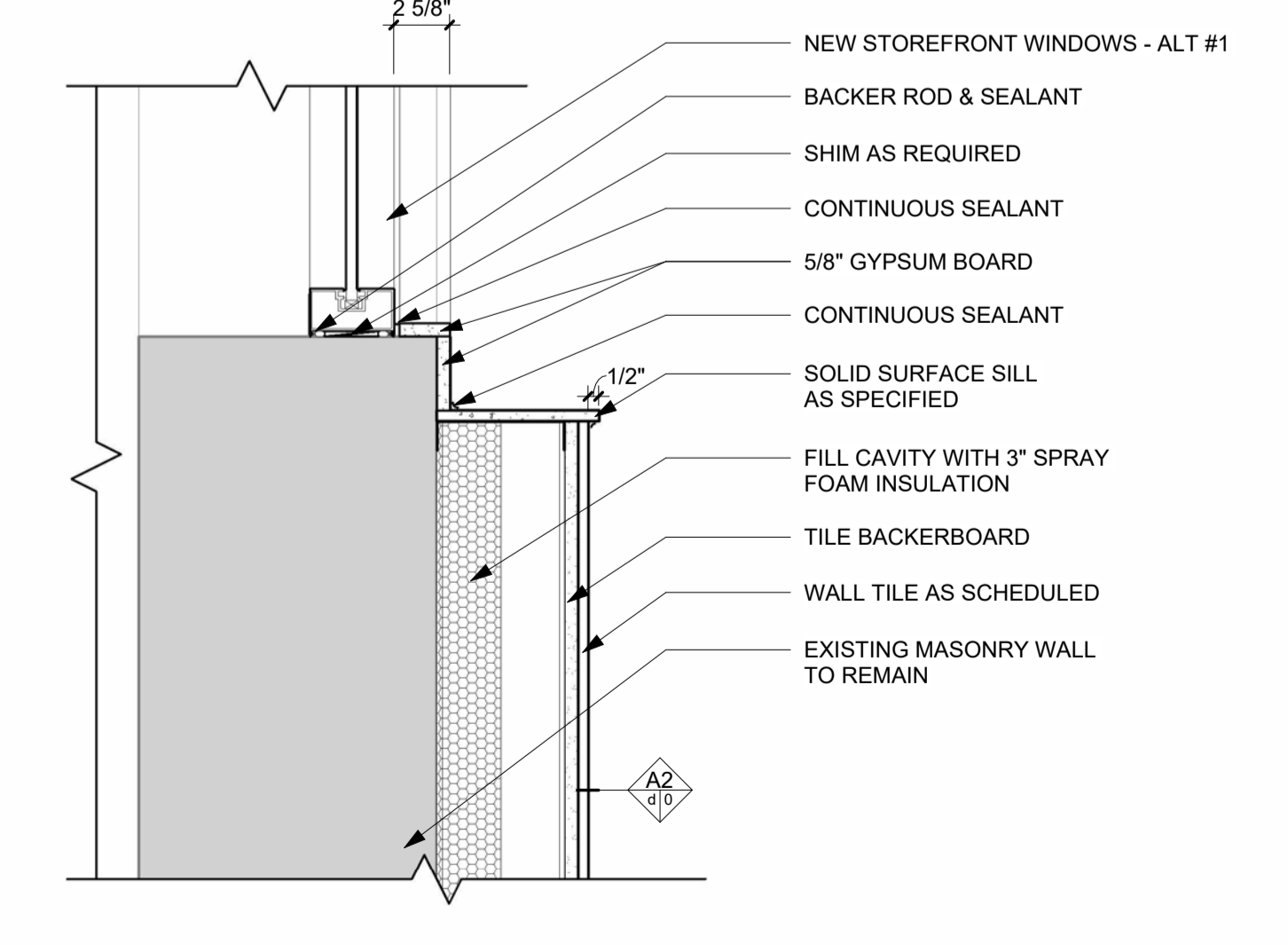
F19 SECTION DETAIL
1 1/2" = 1'-0"



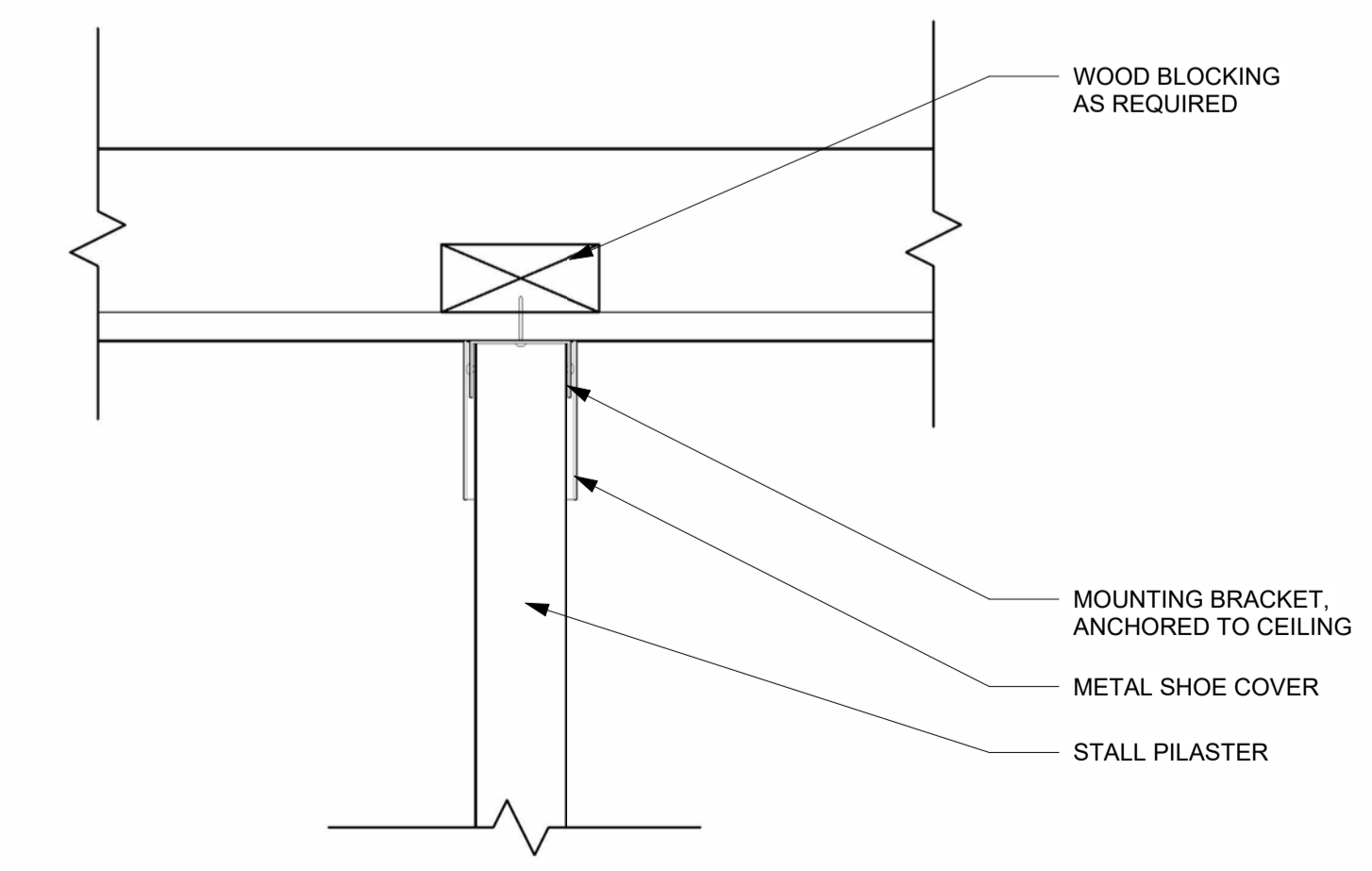
A1 CASEWORK SECTION - BASE CABINET WITH DRAWER
1 1/2" = 1'-0"



A8 SECTION DETAIL
1 1/2" = 1'-0"

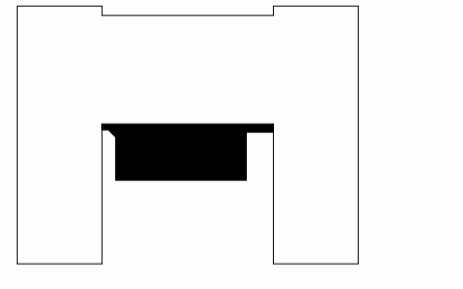


A13 SECTION DETAIL
1 1/2" = 1'-0"



A19 SECTION DETAIL
3" = 1'-0"

Key Plan



Revision Description Date

Revision	Description	Date

OPN Project No.
24805000

Sheet Issue Date
BID SET 11/01/2024

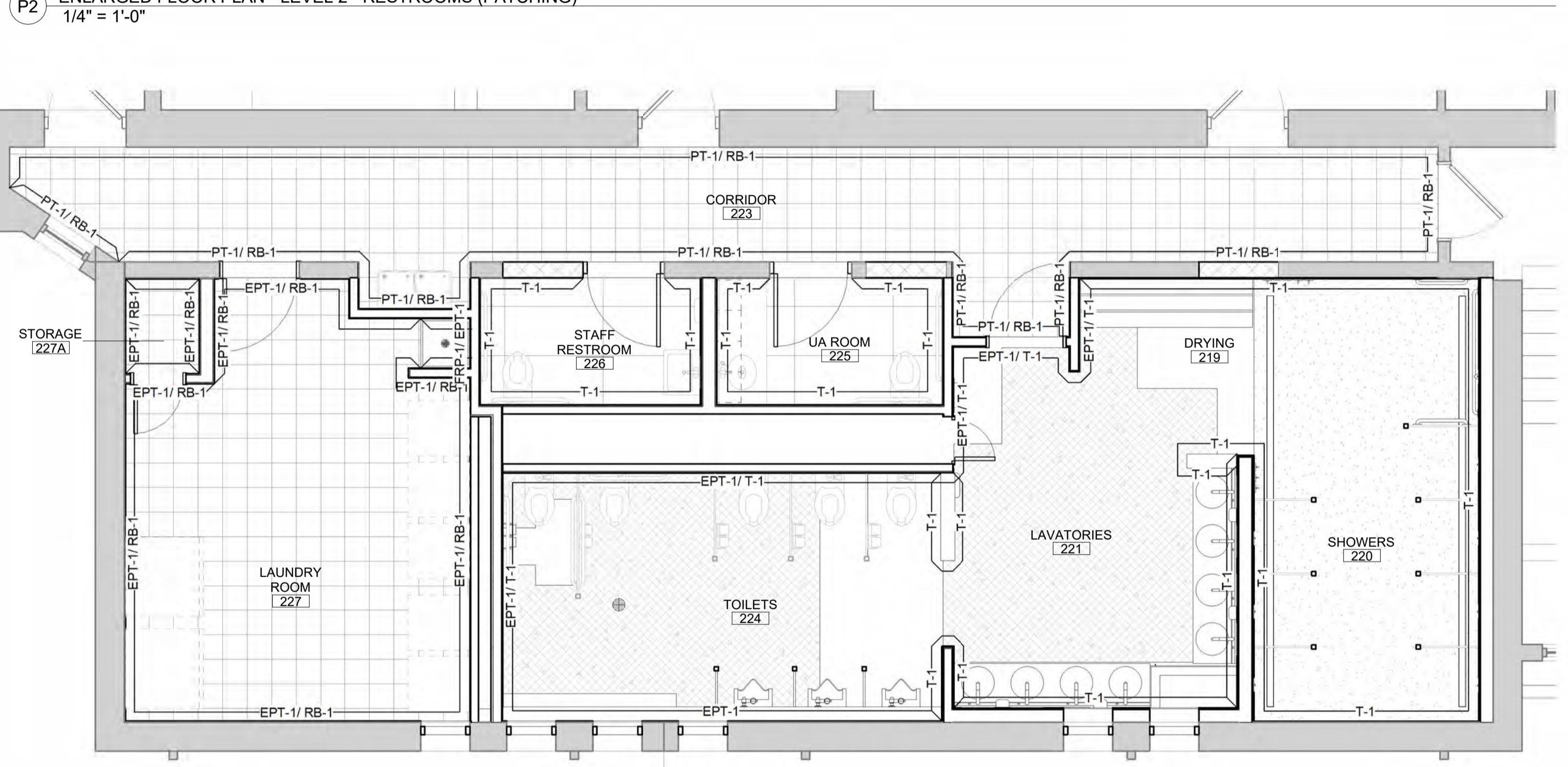
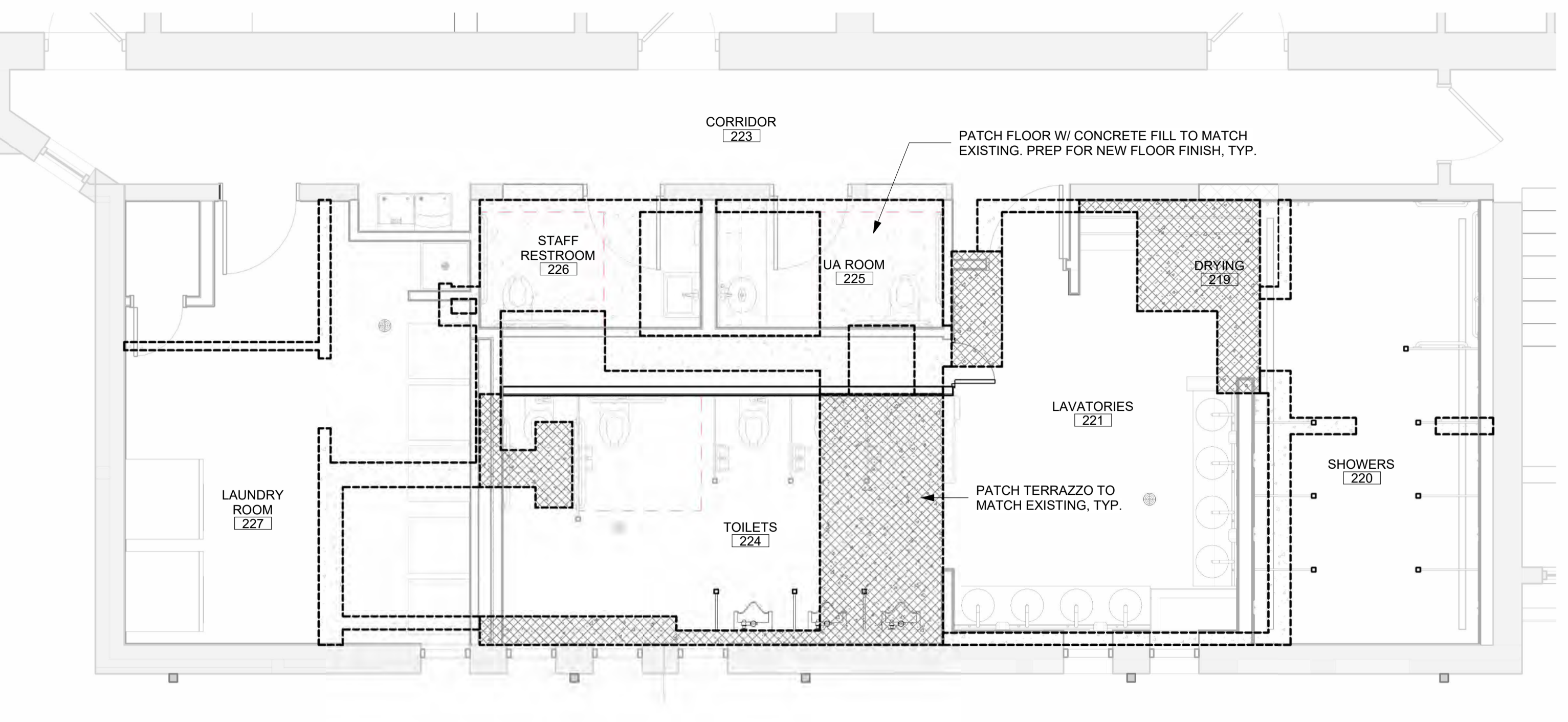
Sheet Name
DETAILS

Sheet Number
A410

ROOM FINISH SCHEDULE - RESTROOMS									
Number	ROOM NAME	FLOOR		WALL FINISH				CEILING FINISH	
		FINISH	BASE	NORTH	EAST	SOUTH	WEST		
Level 2	219	DRYING	TERR-1/ EXIST.	T-1	T-1	T-1	T-1	EPT-1/ T-1	GYP
220	SHOWERS	FAF	FAF	T-1	T-1	T-1	T-1	T-1	GYP
221	LAVATORIES	TERR-1/ EXIST.	T-1	EPT-1/ T-1	T-1	T-1	EPT-1/ T-1	GYP	
223	CORRIDOR	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	EXIST / GYP	
224	TOILETS	TERR-1/ EXIST.	T-1	EPT-1/ T-1	T-1	EPT-1/ T-1	EPT-1/ T-1	GYP	
225	UA ROOM	T-1	T-1	EPT-1/ T-1	EPT-1/ T-1	EPT-1/ T-1	EPT-1/ T-1	GYP	
226	STAFF RESTROOM	T-1	T-1	EPT-1/ T-1	T-1	EPT-1/ T-1	EPT-1/ T-1	GYP	
227	LAUNDRY ROOM	VCT-1	RB-1	EPT-1/ FRP-1	RB-1	EPT-1/ T-1	EPT-1/ T-1	GYP	
227A	STORAGE	VCT-1	RB-1	EPT-1	EPT-1	EPT-1	EPT-1	GYP	

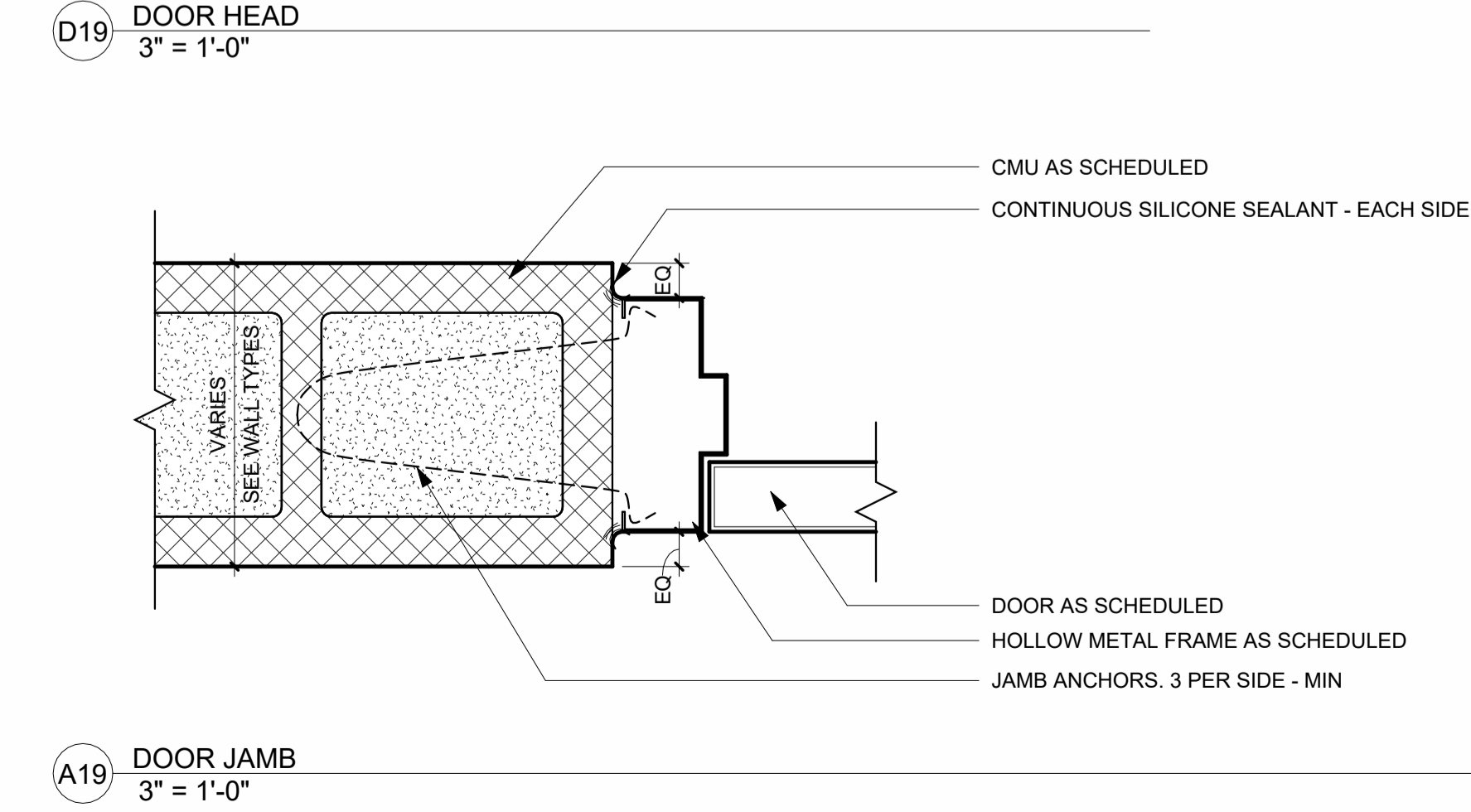
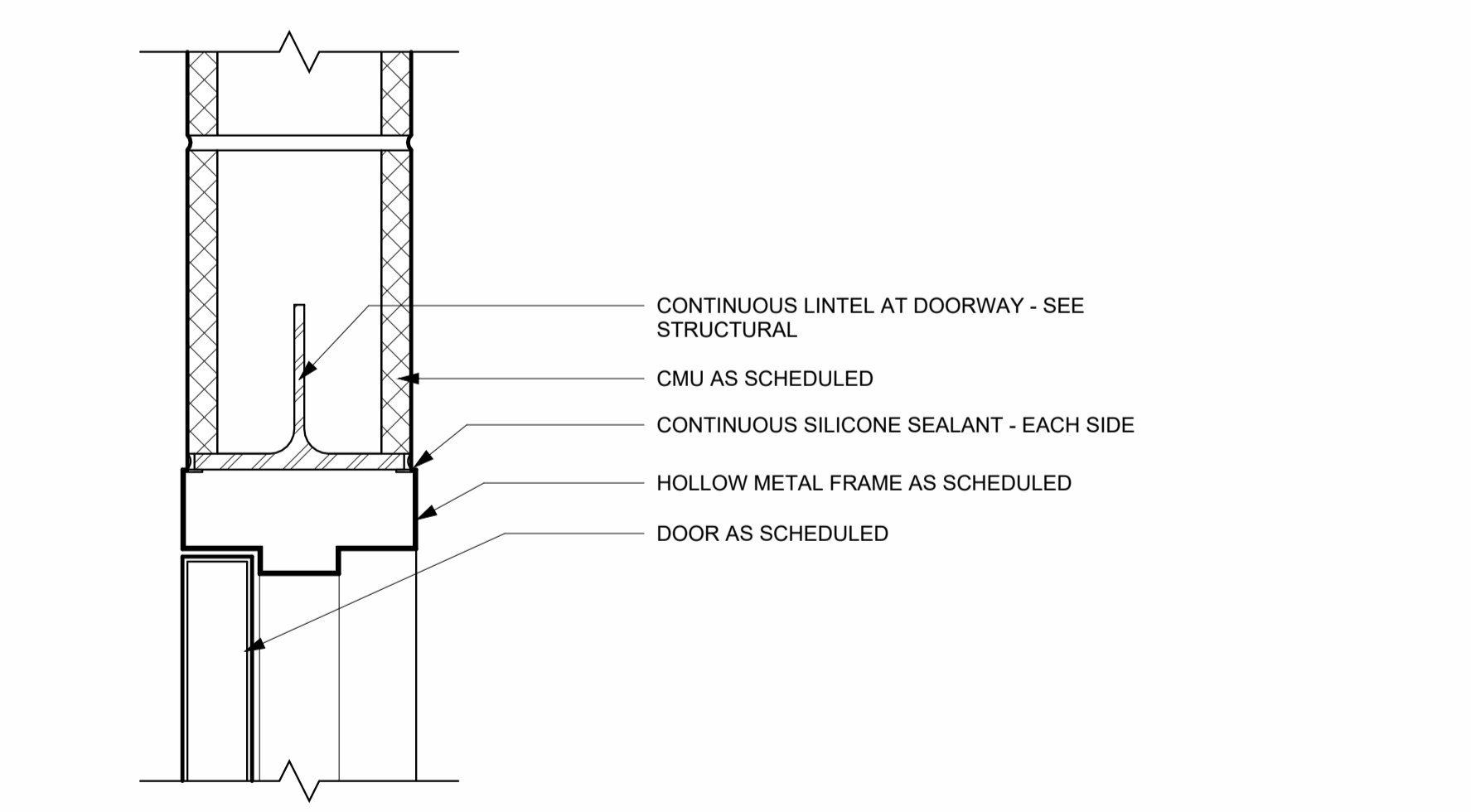
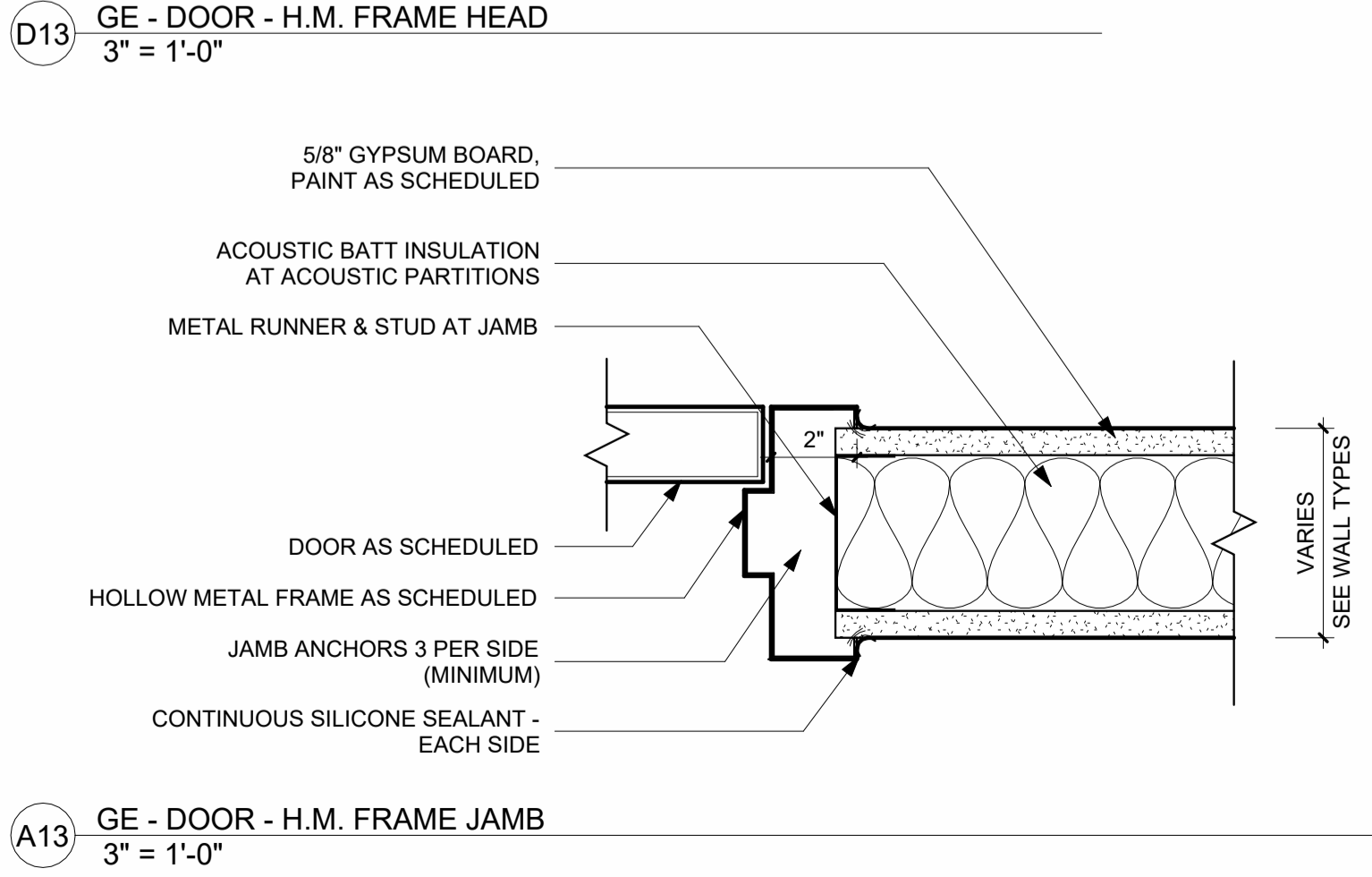
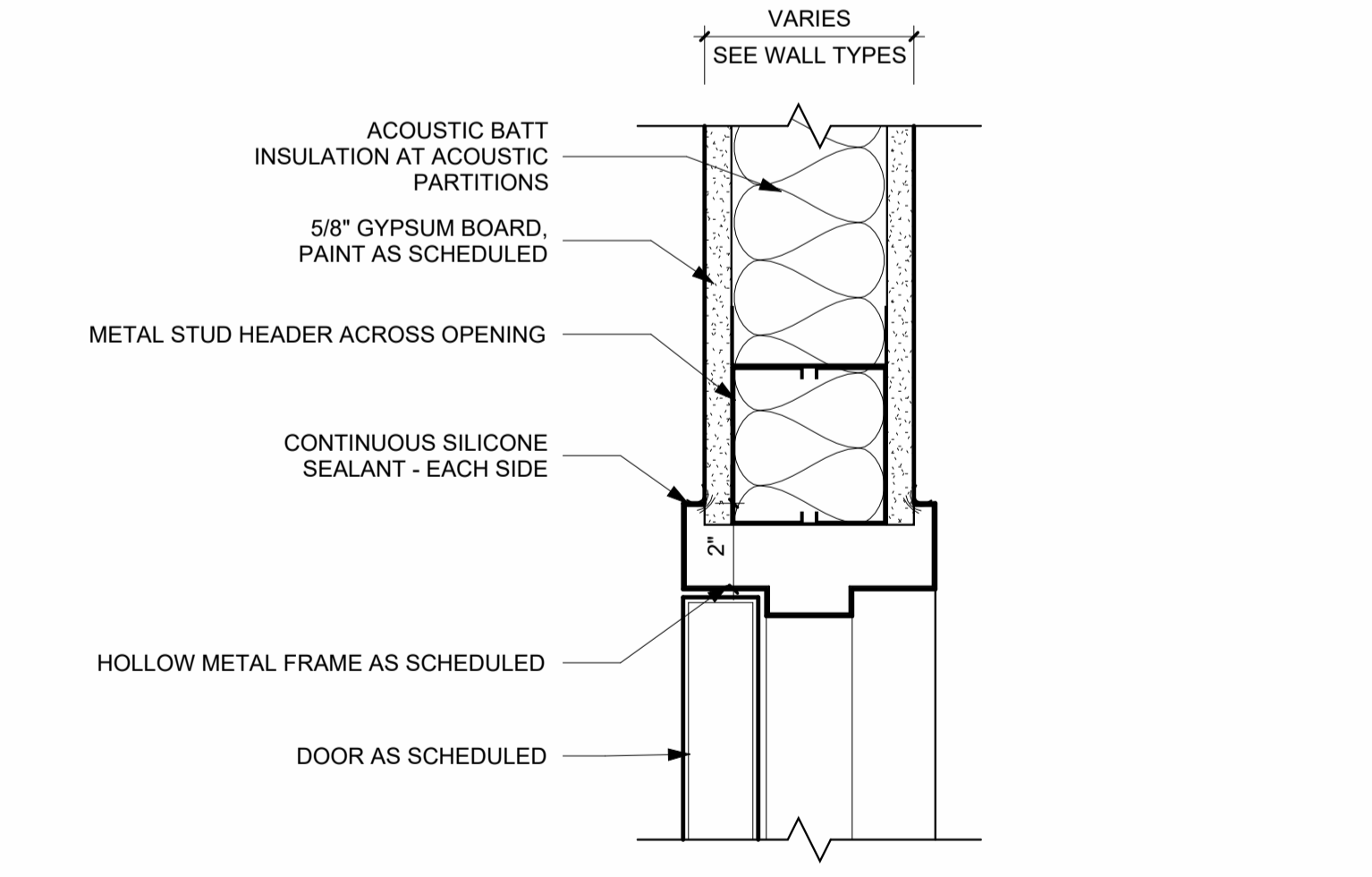
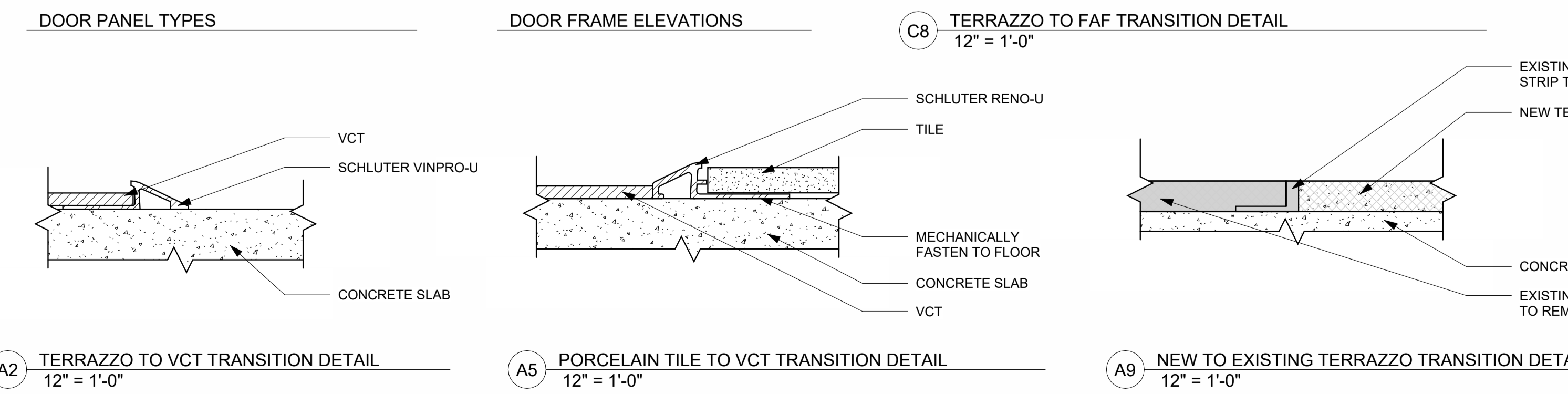
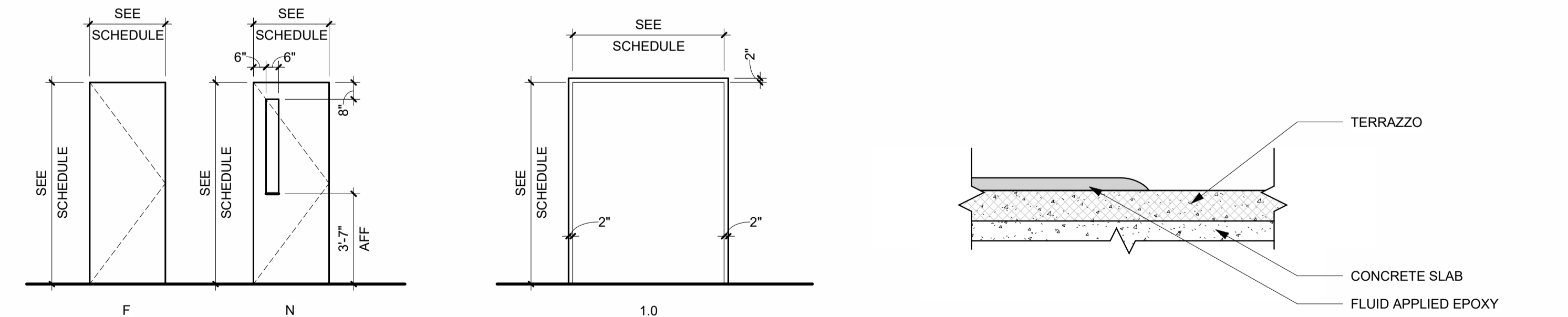
NOTE: FOR WALLS WITH MULTIPLE FINISH, REFER TO INTERIOR ELEVATIONS (SHEET A111).

ACOUSTICAL CEILING PANEL		EPOXY PAINT	
ACP-1	MANUFACTURER: USG STYLE: MARS CLIMA PLUS COLOR/FINISH: WHITE SIZE: 24" x 24" TRIM: 15/16" GRID COLOR: WHITE EDGE TYPE: SHADOWLINE TAPERED APPLICATION: LEVEL 1 OFFICES	EPT-1	MANUFACTURER: SHERWIN WILLIAMS COLOR: GREEK VILLA SW 7551 FINISH: RESTROOM WALLS, DOORS & FRAMES APPLICATION:
		EPT-2	MANUFACTURER: SHERWIN WILLIAMS COLOR: PORPOISE SW 7047 FINISH: RESTROOM DOORS & FRAME APPLICATION:
		EPT-3	MANUFACTURER: SHERWIN WILLIAMS COLOR: BRIGHT WHITE SW 7007 FINISH: EPOXY APPLICATION: CEILING WHITE
FLUID APPLIED FLOORING		PLASTIC LAMINATE	
FAF	MANUFACTURER: SHERWIN WILLIAMS STYLE: RESUFLOOR DECO FLAKE DB COLOR: MODERN CAMO THICKNESS: 18" FLAKE APPLICATION: SHOWER & LAUNDRY ROOMS	PLAM-1	MANUFACTURER: WILSONART COLOR: CHARCOAL 10592 APPLICATION: UA ROOM CASEWORK
FIBERGLASS REINFORCED PANEL		RESILIENT BASE	
FRP-1	MANUFACTURER: MARLITE STYLE: STANDARD FRP COLOR/FINISH: WHITE P 100 SIZE: 48" x 96" TRIM: ANODIZED TRIM APPLICATION: MOP SINK AREA @ LAUNDRY ROOM	RB-1	MANUFACTURER: JOHNSONITE STYLE: 4" COVE COLOR: MOON ROCK 29 APPLICATION: LAUNDRY ROOM & CORRIDOR
		RB-2	MANUFACTURER: JOHNSONITE STYLE: 4" COVE COLOR: GATEWAY T44 APPLICATION: CASEWORK BASE
GROUT		SOLID SURFACE	
G-1	MANUFACTURER: LATICRETE STYLE: SPECTRALOCK 1 COLOR: STORMY GREY 87 APPLICATION: TO USE WITH T-1	SS-1	MANUFACTURER: CORIAN COLOR: RAIN CLOUD APPLICATION: UA ROOM CASEWORK COUNTERTOP
		SS-2	MANUFACTURER: CORIAN COLOR: GLACIER WHITE APPLICATION: INTEGRAL BOWL
		SS-3	MANUFACTURER: WILSONART THICKNESS: 1/2" COLOR: KIMBERLITE APPLICATION: RESTROOM WALL CAP AT HALF WALL
TOILET/URINAL MODESTY PANEL		TERRAZZO	
MD-1	MANUFACTURER: KANE INNOVATIONS STYLE: X-MOD-Z DETENTION MODESTY PANEL MATERIAL: STAINLESS STEEL APPLICATION: RESTROOMS AND SHOWERS	TERR-1	MANUFACTURER: MATRIX AGGREGATE APPLICATION: MATCH EXIST. TERR. ON SITE RESTROOMS
METAL TRANSITIONS		TILE	
MT-1	MANUFACTURER: SCHLUTER STYLE: QUADEC COLOR: BRUSHED STAINLESS STEEL APPLICATION: TILE OUTSIDE CORNERS, EXPOSED EDGE ON TILE WAINSCOT OR BASE	T-1	MANUFACTURER: BEST TILE STYLE: LINK COLOR: BOLT FINISH: MATTE GROUT: G-1; ARCHITECT TO SELECT FROM MANUFACTURER'S FULL RANGE OF COLORS SIZE: 24" x 48" (WALL TILE) 6" x 24" (BASE) THICKNESS: 9 MM TRIM AT EXPOSED EDGE: APPLICATION: AS INDICATED IN DRAWINGS RESTROOM FLOOR & WALL TILE & BASE (REFER TO ELEVATIONS FOR HEIGHT AND LOCATIONS)
MT-2	MANUFACTURER: SCHLUTER STYLE: VINPRO-U COLOR: BRUSHED STAINLESS STEEL APPLICATION: TERR TO VCT		
MT-3	MANUFACTURER: SCHLUTER STYLE: RENO-U COLOR: BRUSHED STAINLESS STEEL APPLICATION: VCT TO TILE		
PAINT		VINYL COMPOSITE TILE	
PT-1	MANUFACTURER: SHERWIN WILLIAMS COLOR: GREEK VILLA SW 7551 FINISH: EGGSHELL APPLICATION: CORRIDOR WALLS & PRIMARY FIELD PAINT	VCT-1	MANUFACTURER: TARKETT STYLE: VCT II COLOR: 509 PEWTER APPLICATION: CORRIDOR & LAUNDRY ROOM
PT-2	MANUFACTURER: SHERWIN WILLIAMS COLOR: PORPOISE SW 7047 FINISH: SEMI-GLOSS APPLICATION: DOOR PANELS & FRAMES		



DOOR SCHEDULE - LEVEL 2 - RESTROOMS																
DOOR NUMBER	PANEL QUANTITY	PANEL TYPE	PANEL				FRAME				REMARKS	HARDWARE SET	FIRE RATING			
			WIDTH	HEIGHT	PANEL 1 WIDTH	PANEL MATERIAL	PANEL FINISH	FRAME TYPE	MATERIAL	FINISH						
221-1	1	N	3'-0"	7'-0"	3'-0"	HM	EPT-2	1.0	HM	EPT-2	D19/A810	A19/A810		4.0		
221-2	1	F	1'-8"	7'-0"	1'-8"	HM	EPT-1	1.0	HM	EPT-1	D13/A810	A13/A810		1.0		
225-1	1	F	3'-0"	7'-0"	3'-0"	HM	PT	1.0	HM	PT	D19/A810	A19/A810	1	3.0		
226-1	1	F	3'-0"	7'-0"	3'-0"	HM	PT	1.0	HM	PT	D19/A810	A19/A810	1	3.0		
227-1	1	N	3'-0"	7'-0"	3'-0"	HM	PT	1.0	HM	PT	D19/A810	A19/A810		5.0		
227A-1	1	F	2'-0"	7'-0"	2'-0"	HM	PT	1.0	HM	PT	D13/A810	A13/A810		2.0	45-MIN	

REMARKS
1. OCCUPANCY INDICATOR

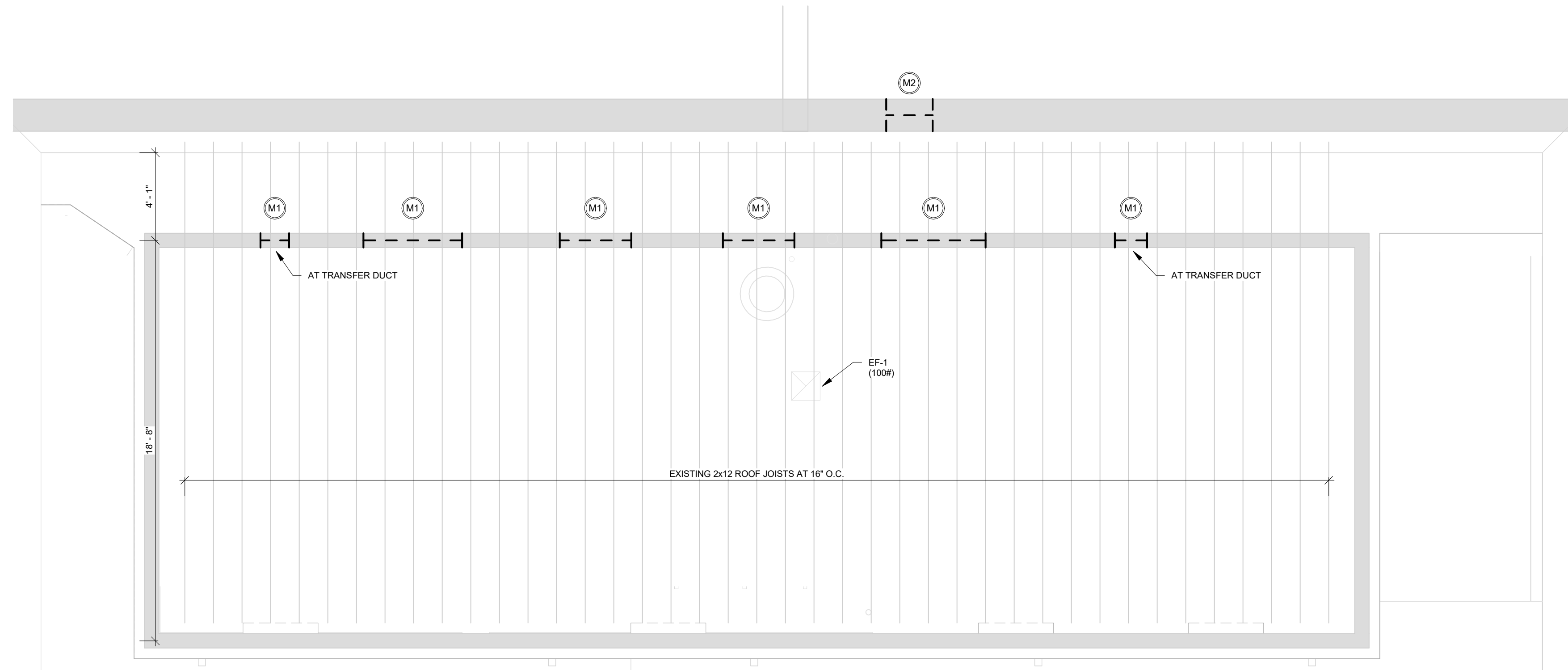


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PRECAST FLOOR FRAMING NOTES:
1. FIELD VERIFY EXISTING FRAMING CONDITIONS PRIOR TO ANY DEMOLITION. CONTACT STRUCTURAL EOR IF ANY DISCREPANCIES ARE NOTED.
2. FIELD VERIFY LOCATION OF EXISTING PRECAST CONCRETE HOLLOW CORE PRESTRESSING STRANDS PRIOR TO DRILLING OF ANY HOLES IN EXISTING FLOOR SYSTEM.
3. LOCATES HOLES BETWEEN PRESTRESSING STRANDS.
4. 6" MAXIMUM HOLE DIAMETER PERMITTED.
5. IF QUESTIONS ON LOCATION OF PRESTRESSING STRANDS ARISE DURING CONSTRUCTION, CONTACT STRUCTURAL EOR FOR REVIEW PRIOR TO DRILLING.
6. ARCHITECTURAL AND MECHANICAL LAYOUTS PERMIT SHIFTING OF DRAINS AND PIPE PENETRATIONS TO MISS PRESTRESSING STRANDS.

A LEVEL 2 FRAMING PLAN
1/4" = 1'-0"



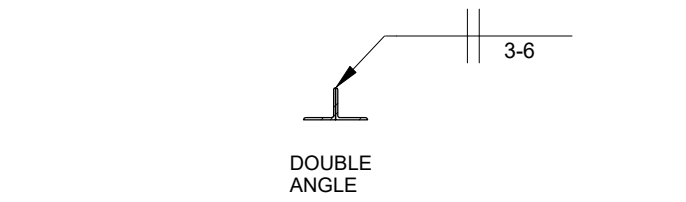
ROOF FRAMING NOTES:
1. FIELD VERIFY EXISTING FRAMING CONDITIONS PRIOR TO ANY DEMOLITION. CONTACT STRUCTURAL EOR IF ANY DISCREPANCIES ARE NOTED.
2. COMPLETE EXISTING CMU WALL DEMOLITION AS REQUIRED FOR NEW OPENINGS.
3. CONSTRUCT NEW CMU WALLS AND INSTALL NEW MASONRY HEADERS PER PLAN AND SCHEDULE.

B ROOF FRAMING PLAN
1/4" = 1'-0"

LOAD-BEARING CMU HEADER SCHEDULE

MARK	SIZE	GEOMETRY	NOTES
(M1)	CMU (2) L543 12x616 (LVL), 8" MIN. BEARING	8" CMU DOUBLE ANGLE	SEE BELOW
(M2)	EXISTING 18" WALL L8x47/16 (LSH) CUT IN FROM EACH SIDE OF EXISTING WALL, 8" BEARING	EXISTING WALL ANGLE EACH SIDE	--

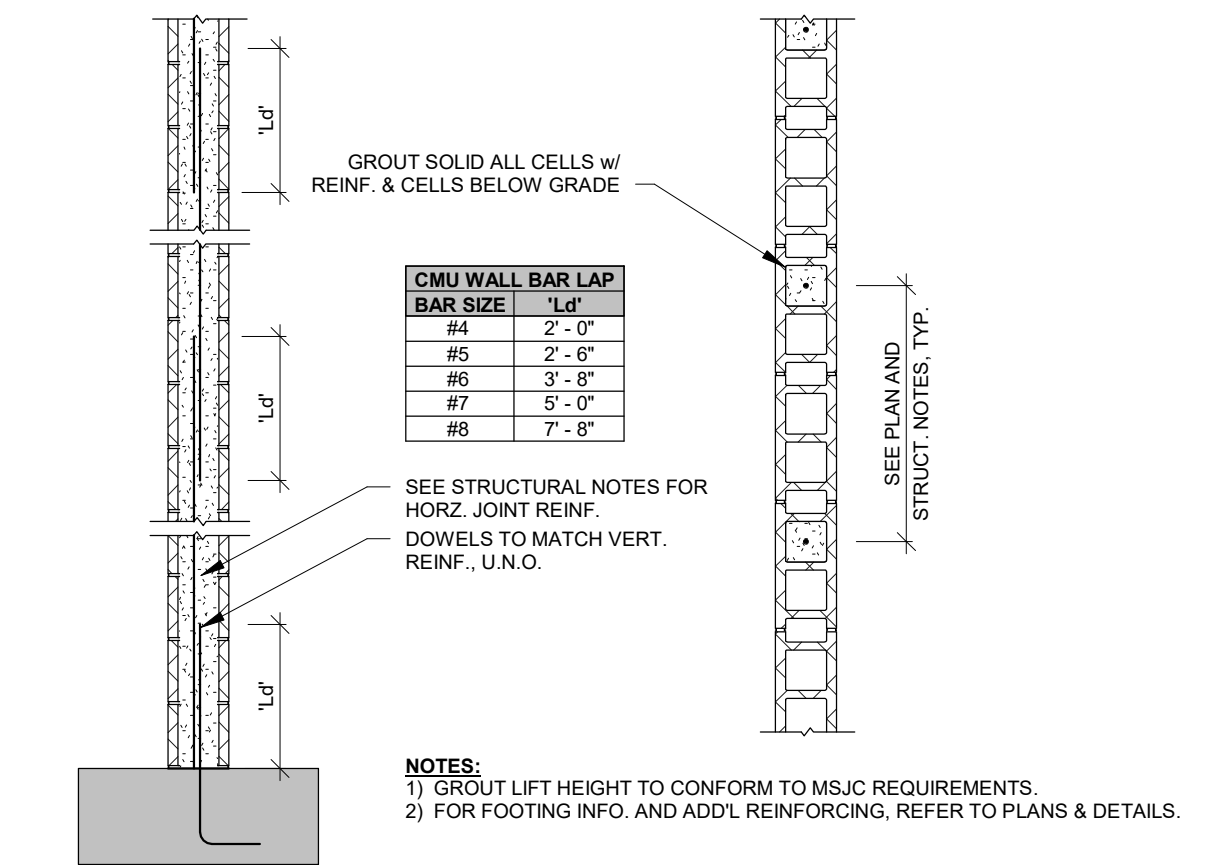
NOTES:
1) FOR HEADERS NOT DESIGNATED ON PLAN (INCLUDING MEP WALL PENETRATIONS) & FOR HEADERS @ NON LOAD-BEARING CMU WALLS, SEE CONCRETE MASONRY SECTION OF STRUCTURAL NOTES.
2) LOAD BEARING HEADERS SHALL HAVE 5/8" CONNECTIONS PER TYP. BEAM BEARING @ CMU DETAIL.
3) FOR HEADERS SUPPORTING CMU W/ SPANS > 6'-0", PROVIDE FIELD WELDED DBAS TO MATCH WALL REINFORCEMENT SIZE & SPACING.
4) WHERE EXPOSED, EXTERIOR HEADERS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION. SEE STRUCTURAL NOTES.



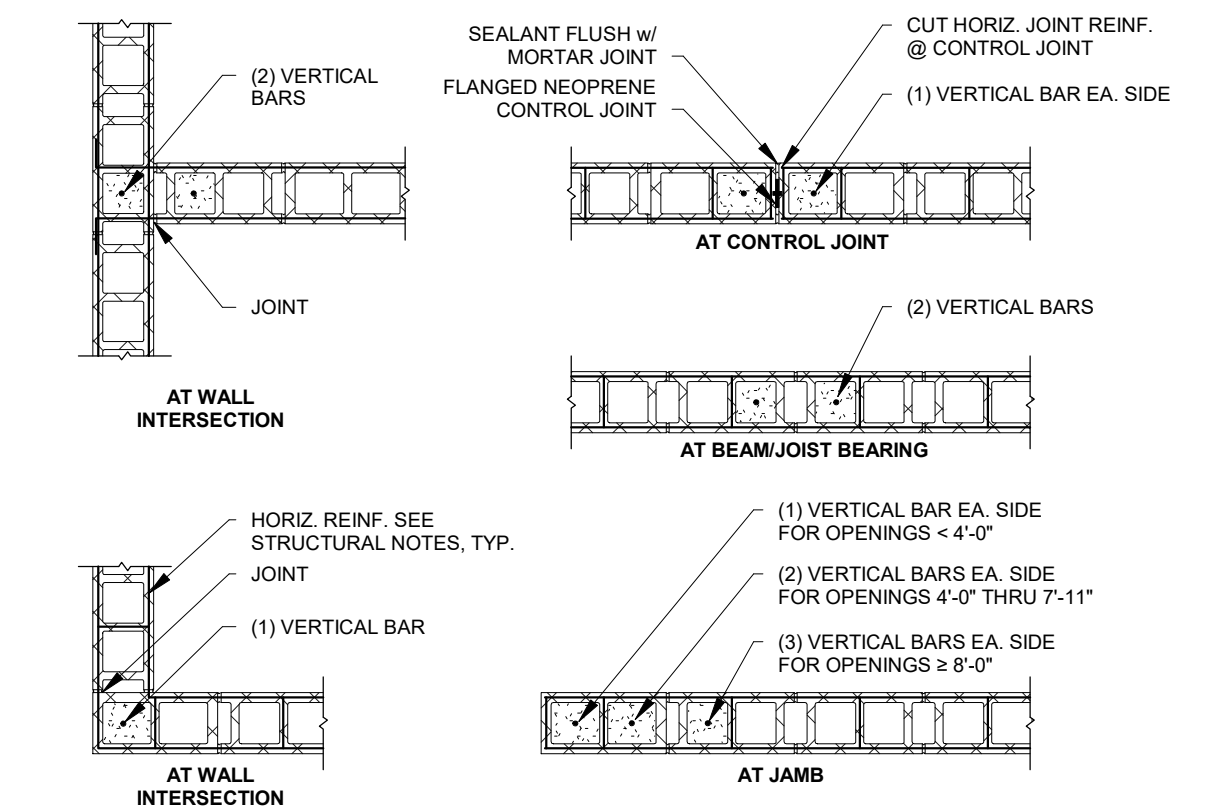
VERIFICATION AND INSPECTION FREQUENCY / TASK

VERIFICATION AND INSPECTION	FREQUENCY / TASK
MASONRY - LEVEL 2 - CONFORM TO TMS 402 & 602 REQUIREMENTS	
1. PRIOR TO CONSTRUCTION, VERIFICATION OF COMPLIANCE OF SUBMITTALS	REQD
2. PRIOR TO CONSTRUCTION, VERIFICATION OF PLACEMENT SPECIFICALLY EXEMPTED BY THE CODE.	REQD
3. DURING CONSTRUCTION, VERIFICATION OF SLUMP FLOW AND VSI WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE.	REQD
4. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:	
A. PROPORTIONS OF SITE-PREPARED MORTAR	PERIODIC
B. GRADE, TYPE, & SIZE OF REINFORCEMENT, CONNECTORS, & ANCHOR BOLTS.	PERIODIC
C. SAMPLE PANEL CONSTRUCTION	PERIODIC
5. PRIOR TO GROUTING, VERIFY THE FOLLOWING ARE IN COMPLIANCE:	
A. GROUT SPACE.	PERIODIC
B. PLACEMENT OF REINFORCEMENT, CONNECTORS, & ANCHOR BOLTS.	PERIODIC
C. PROPORTIONS OF SITE-PREPARED GROUT.	PERIODIC
6. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:	
A. MATERIALS & PROCEDURES WITH THE APPROVED SUBMITTALS.	PERIODIC
B. PLACEMENT OF MASONRY UNITS & MORTAR JOINT CONSTRUCTION.	PERIODIC
C. SIZE & LOCATION OF STRUCTURAL ELEMENTS.	PERIODIC
D. TYPE, SIZE & LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF OTHER CONSTRUCTION.	PERIODIC
E. WELDING OF REINFORCEMENT	CONT.
F. PREPARATION, CONSTRUCTION & PROTECTION OF MASONRY DURING COLD WEATHER (TEMP. BELOW 40°F) OR HOT WEATHER (TEMP. ABOVE 90°F).	PERIODIC
G. PREPARATION OF GROUT.	CONT.
7. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS & OR PRISMS.	PERIODIC

PROGRAM FOOTNOTES:
1. THE ITEMS INDICATED ABOVE SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE IBC BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS. REFER TO THE PROJECT SPECIFICATIONS & THE SPECIFIC STRUCTURAL NOTES SECTIONS. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING & INSPECTION REPORTS DIRECTLY TO THE ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR, & BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGNED COMPONENTS.
2. **CONT.** - CONTINUOUS SPECIAL INSPECTION. SPECIAL INSPECTOR IS PRESENT CONTINUOUSLY WHEN & WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED. (IBC SECTION 202)
3. **PERIOD.** - PERIODIC SPECIAL INSPECTION. SPECIAL INSPECTOR IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED. (IBC SECTION 202)
4. **OBSERVE.** - SPECIAL INSPECTOR SHALL OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS (ASCC 300 SECTION N0).
5. **PERFORM.** - SPECIAL INSPECTOR SHALL PERFORM THESE TASKS FOR EACH JOINT, CONNECTION, ELEMENT OR MEMBER (ASCC 360 SECTION N0).
6. **REQD.** - SPECIAL INSPECTOR SHALL PERFORM THESE TASKS (TMS 602 TABLE 3).
7. SPECIAL INSPECTION IS NOT REQUIRED FOR WORK PERFORMED BY AN APPROVED FABRICATOR (IBC SECTION 1704.2.5).



1 TYP. CMU REINFORCING PLACEMENT N.T.S.



2 TYP. CMU WALL REINF. N.T.S.

GENERAL PARAMETERS:
STRUCTURAL DRAWINGS ARE A PORTION OF THE CONTRACT DOCUMENTS AND ARE INTENDED TO BE USED WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS INTO THEIR SHOP DRAWINGS AND WORK.
VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION OF ANY ITEMS.
DRAWINGS SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL OPENINGS, ELECTRICAL COMPONENTS, FLOOR DEPRESSIONS, ETC. NOT SHOWN ON DRAWINGS.
COORDINATE LOCATION, SIZE AND REINFORCEMENT OF ALL OPENINGS WITH RESPECTIVE TRADES BEFORE FABRICATION. REPORT ANY DISCREPANCIES AND/OR INTERFERENCE PROBLEMS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.
THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE PROVIDED, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
THE BUILDING IS NOT STRUCTURALLY STABLE UNTIL ALL CONNECTIONS, FRAMING, SHEAR WALLS, BRACING AND EXTERIOR WALLS ARE COMPLETE AND HAVE ACHIEVED FINAL DESIGN STRENGTH. CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING STRUCTURAL STABILITY OVERALL AND TO ALL PORTIONS OF THE BUILDING DURING DEMOLITION, ERECTION AND CONSTRUCTION. TEMPORARY BRACING AND LATERAL FORCE RESISTING SYSTEMS THAT MAY BE REQUIRED WILL BE DESIGNED BY, AND AT THE EXPENSE OF, THE CONTRACTOR. STRUCTURAL DRAWINGS DO NOT CONSTITUTE A DESIGN. ANY OR ALL REQUIRED TEMPORARY SUPPORT SYSTEMS, TEMPORARY BRACING SYSTEMS ARE NOT TO BE REMOVED UNTIL STRUCTURE WORK IS COMPLETE OR CONTRACTOR DEEMS THE AREA UNDER CONSIDERATION TO BE STABLE.
CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
RETAINING WALLS AND BASEMENT WALLS WHICH TIE TO UPPER SLABS SHALL NOT BE BACKFILLED UNTIL THE UPPER SLABS REACH FULL DESIGN STRENGTH, UNLESS ADEQUATE BRACING IS PROVIDED AT TOP OF THE WALL.
AS USED IN GENERAL NOTES AND THROUGHOUT STRUCTURAL DRAWINGS, THE TERM "CONTRACTOR" IS DEFINED TO INCLUDE ANY OR ALL OF THE FOLLOWING: GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS, FABRICATORS, INSTALLERS, DELEGATED DESIGNERS, ENGINEERS AND ERECTORS.
DESIGN PARAMETERS:
THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE IBC INTERNATIONAL BUILDING CODE, 2021 EDITION.
UNIFORM LIVE LOADS:
TYPICAL ROOF (COVERED BY SNOW): 25 PSF-DRIFT
DRIFT LOAD AS SHOWN ON PLAN.
SNOW DESIGN PARAMETERS:
GROUND SNOW LOAD (Ps): 30 PSF
FLAT ROOF SNOW LOAD (P): 30 PSF
SNOW EXPOSURE FACTOR (Ce): 1.0
SNOW LOAD IMPORTANCE FACTOR (I): 1.0
SNOW LOAD THERMAL FACTOR (Ct): 1.0
SNOW SLOPE FACTOR (Cs): 1.0
EARTHQUAKE DESIGN PARAMETERS:
NA - NO MODIFICATIONS TO EXISTING LATERAL SYSTEMS.
WIND DESIGN PARAMETERS:
NA - NO MODIFICATIONS TO EXISTING LATERAL SYSTEMS.
SUBMITTALS:
GENERAL CONTRACTOR TO PROVIDE A SHOP DRAWING SUBMITTAL LOG ITEMIZING ALL PROPOSED SUBMITTALS FOR APPROVAL BY STRUCTURAL ENGINEER OF RECORD.
ALL SHOP DRAWINGS SHALL BE CHECKED BY THE FABRICATOR AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER OF RECORD. SHOP DRAWING REVIEW BY ENGINEER IS LIMITED TO VERIFYING GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES FROM THE CONTRACT DOCUMENTS, DIMENSIONAL ERRORS, COORDINATION ERRORS, OR OMISSIONS IN SHOP DRAWINGS.
SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION REGARDING ALL STRUCTURAL ITEMS, INCLUDING THE FOLLOWING:
• MASONRY REINFORCEMENT
• STRUCTURAL STEEL
SHOP DRAWINGS SHALL INCLUDE CONNECTIONS AS WELL AS SIZE, SPACING, AND GRADE OF ALL MEMBERS. PLANS AND ANY DETAILING NECESSARY FOR DETERMINING FIT AND PLACEMENT SHALL ALSO BE INCLUDED.
IF SHOP DRAWINGS DIFFER FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.
DESIGN DRAWINGS, SHOP DRAWINGS, AND CALCULATIONS FOR THE DESIGN AND FABRICATION OF ITEMS THAT ARE DESIGNED BY THE CONTRACTOR, INCLUDING:
• LIGHT GA. METAL FRAMING
• WINDOW WALLS AND ALL OTHER GLAZING SYSTEMS
• TEMPORARY BRACING
SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION. CALCULATIONS SHALL BE INCLUDED FOR ALL CONNECTIONS TO THE STRUCTURE, CONSIDERING LOCALIZED EFFECTS ON STRUCTURAL ELEMENTS INDUCED BY THE CONNECTION LOADS.
ITEMS THAT ARE DESIGNED BY THE CONTRACTOR SHALL BE DESIGNED TO RESIST THE LIVE LOADS INDICATED IN STRUCTURAL NOTES, DEAD LOAD, SELF WEIGHT, ANY ADDITIONAL LOADS INDICATED ON PLANS AND DETAILS, SNOW DRIFT, AND A NET WIND UPLIFT.
ITEMS THAT ARE DESIGNED BY THE CONTRACTOR SHALL INCLUDE ANY RELEVANT TECHNICAL LITERATURE FROM MANUFACTURER. ALSO PROVIDE A CERTIFICATION FROM THE MANUFACTURER SHOWING THE PRODUCT IS IN COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.
THE CONTRACTOR SHALL COORDINATE SEISMIC RESTRAINTS OF MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT, MACHINERY AND ASSOCIATED PIPING WITH THE STRUCTURE. ANY CONNECTIONS TO STRUCTURE SHALL CONFORM TO ASCE 7, CHAPTER 13 AND SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE APPROPRIATE STATE, AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION.
FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.

STEEL FRAMING NOTES:
STEEL FRAMING WORK SHALL COMPLY WITH CHAPTER 22 OF THE IBC.
STEEL FRAMING MATERIALS:
SF2.1 ANGLES PLATES FY=50,000 PSI
ASTM A572
STEEL ERECTION SHALL COMPLY WITH ALL OSHA, STATE, LOCAL, AND INDUSTRY STANDARDS REGULATIONS. IN ADDITION, AT THE END OF THE WORK DAY ALL COLUMNS MUST BE TRUED WITH BEAMS AND/OR GIRDERS IN TWO DIRECTIONS, OR ADEQUATELY GUYED OR BRACED IN BOTH DIRECTIONS. TEMPORARY GUYBRACING IS THE RESPONSIBILITY OF THE ERECTOR (DESIGN AND INSTALLATION).
DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE AISC STEEL CONSTRUCTION MANUAL, AISC 360-16 INCLUDING COMMENTARY, AND THE AISC 303-16.
ALL STEEL BEAMS, COLUMNS AND BRACING SHALL RECEIVE A SINGLE COAT OF SHOP APPLIED PRIMER, WITH THE FOLLOWING EXCEPTIONS:
SF10.1 TOP FLANGE OF BEAMS RECEIVING HEADED STUDS SHALL NOT BE PRIMED.
SF10.2 STEEL THAT IS TO RECEIVE SPRAY-APPLIED FIREPROOFING (SEE ARCH. FOR LOCATIONS) SHALL NOT BE PRIMED OR SHALL BE PRIMED IN ACCORDANCE W/ ASTM E736 AND UL 203.
CONCRETE MASONRY NOTES:
CM1 CONCRETE MASONRY WORK SHALL CONFORM TO CHAPTER 21 OF THE IBC.
CM2 ALL WALLS ARE NOMINAL 8" CMU STACKED WITH A RUNNING BOND PATTERN UNLESS NOTED OTHERWISE ON THE DRAWINGS. JOINT REINFORCING SHALL NOT EXTEND THROUGH CONTROL JOINTS. BOND BEAM REINFORCING SHALL BE CONTINUOUS THROUGH CONTROL JOINTS. INTERSECTING WALLS SHALL BE BONDED BY OVERLAPPING COURSES.
CM3 ALL UNITS SHALL BE NORMAL WEIGHT CONCRETE MASONRY W/ MINIMUM COMPRESSIVE STRENGTH Fm = 2,000 PSI (ASSEMBLY Fm = 2,000 PSI) AND CONFORM TO ASTM C90. UNITS SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH ASTM C140. LINEAR SHRINKAGE FOR UNITS SHALL NOT EXCEED 0.08%. CONCRETE MASONRY WALLS SHALL BE REINFORCED AS SHOWN ON THE PLANS AND DETAILS AND, IF NOT SHOWN, SHALL BE REINFORCED AS NOTED BELOW.
CONCRETE MASONRY REINFORCEMENT:
CM4.1 REINFORCING STEEL SHALL CONFORM TO IBC SECTION 2103.4. REBAR REINFORCEMENT SHALL BE ASTM A635 GRADE 60 U.S. AND SHALL BE SECURELY PLACED IN ACCORDANCE WITH ACSI 530.1 SECTION 3.1. TIES AND STIRRUPS SHALL BE ASTM A635 GRADE 40 (M.M.). PROVIDE MINIMUM LAP FOR REINFORCING BARS PER ACSI 530 (48 BAR DIAMETERS WITH A MINIMUM OF 9").
CM4.2 JOINT REINFORCING SHALL BE ASTM A635 LADDER OR TRUSS TYPE DESIGN NO. 8 WIRE AT SIDES AND CROSS RODS. INSTALL CONTINUOUS JOINT REINFORCING ABOVE AND BELOW OPENINGS AND EXTEND REINFORCING 2d BEYOND EACH SIDE OF OPENING. LAP JOINT REINFORCING SHALL BE A MINIMUM OF 6 INCHES.
CM4.3 CONTINUOUS BOND BEAMS REINFORCED WITH (2) #4 BOND BEAMS AT THE TOP OF WALLS AND AT INTERMEDIATE STAIR LANDING LEVELS. STEP BOND BEAMS AS REQUIRED TO MATCH ROOF SLOPES. CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS UNLESS AT OPENINGS WHERE A STRUCTURAL STEEL HEADER IS NOT SHOWN ON PLAN OR HEADER SCHEDULE. SEE NOTE CM4. PROVIDE A BOND BEAM REINFORCED W/ (2) #5 BARS AT ALL LOCATIONS. EXTEND BARS AT OPENINGS 2'-0" PAST THE OPENING AT EACH SIDE. PROVIDE (1) BAR, MATCHING VERTICAL BAR SIZE FOR THE FULL HEIGHT OF THE WALL AT EACH SIDE OF OPENINGS. WALL CORNER AND WALL INTERSECTIONS UNLESS NOTED OTHERWISE.
CM4.4 DOWELS TO MASONRY WALLS SHALL BE EMBEDDED A MINIMUM OF 1'-0" OR HOOKED INTO THE SUPPORTING STRUCTURE AND BE OF THE SAME SIZE AND SPACING AS WALL REINFORCING. PROVIDE CORNER BARS TO MATCH THE HORIZONTAL WALL REINFORCING AT WALL INTERSECTIONS.
CM4.5 ALL EXTERIOR MASONRY WALLS AND INTERIOR LOAD BEARING MASONRY WALLS SHALL BE REINFORCED WITH #5 BARS VERTICAL, CENTERED IN WALL AT 48" O.C. UNLESS NOTED OTHERWISE IN THE PLANS AND SECTIONS.
CM4.7 PROVIDE GA. GALV. REBAR POSITONERS TO ACCURATELY LOCATE VERTICAL REINFORCING BARS WITHIN WALLS.
CM6 UNLESS NOTED OTHERWISE, MORTAR SHALL BE TYPE S AND SHALL CONFORM TO IBC SECTION 2103 AND ASTM C270. MORTAR BED JOINT THICKNESS SHALL NOT EXCEED 3/8".
CM7 GROUT:
CM7.1 GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI (TYPE S) AND SHALL CONFORM TO IBC SECTION 2103 AND ASTM C476. GROUT SHALL CONSIST OF A MIXTURE OF CEMENTITIOUS MATERIALS AND AGGREGATE TO WHICH SUFFICIENT WATER HAS BEEN ADDED TO CAUSE THE MIXTURE TO FLOW WITHOUT SEGREGATION OF THE CONSTITUENTS. GROUT CELLS SOLD AT REINFORCING, BOND BEAMS, INSERTS, ANCHORS, ELEVATOR GUIDE RAILS, AND 2" BELOW BEARING POINT OF STEEL SECTIONS AND 12" TO EACH SIDE CELLS WHICH ARE TO RECEIVE GROUT ARE TO BE FREE OF PROTRUDING MORTAR AND DROPPINGS. GROUT BOND BEAMS OVER OPENINGS IN ONE CONTINUOUS POUR. SUPPORT AND PROTECT REINFORCEMENT AGAINST DISPLACEMENT BEFORE GROUTING.
CM7.2 CONSOLIDATE GROUT AT THE TIME OF PLACEMENT. GROUT POURS > 12" TO BE CONSOLIDATED BY MECHANICAL VIBRATION OR BY PULVERING. GROUT POURS > 12" TO BE CONSOLIDATED BY MECHANICAL VIBRATION AND RECONSOLIDATED BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.

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KEY PLAN
Revision Description Date
11/01/2024
BID SET
STRUCTURAL NOTES, FRAMING PLANS, AND DETAILS
Sheet Number

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, ACU, AD, AFF, AFG, AHU, AV, BOT, BTI, BTUH, BV, CA, CB, CENT, CFM, CI, CL, COND, CO, CONC, CONTR, CP, CUH, CUI, CWP, DDC, DN, DR, DS, EA, EAT, EC, EDBT, EEW, EF, EJ, EQUIP, ESE, EST, EWB, EWC, EWT, EX, EXH, EXP, FAI, FCU, FD, FDC, FLEX, FLR, FPM, FPS, FS, FSEC.

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, GONDUTS, 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 SCUTCHONS 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 SHUTDOWN. 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 SIZES 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.

PIPING LEGEND - PLUMBING

Table with 2 columns: Line Style, Description. Includes CW (Domestic Cold Water), HW (Domestic Hot Water), RHW (Recirculating Hot Water), SAN (Sanitary), P (Trap Primer), V (Vent).

PIPE FITTINGS

Table with 2 columns: Symbol, Description. Includes symbols for Elbow, Tee, Cross, and other pipe fittings.

PLUMBING ACCESSORY LEGEND

Table with 2 columns: Symbol, Description. Includes symbols for Hose Bibb, Roof Hydrant, Clean Out, Floor Clean Out, Floor Drain, Ventril Roof, Roof Drain, Combo Roof/Overflow Drain, Lamb Tongue, Backflow Preventer, Valve - Ball / Shut-Off.

NOTE: ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT



GENERAL NOTE:

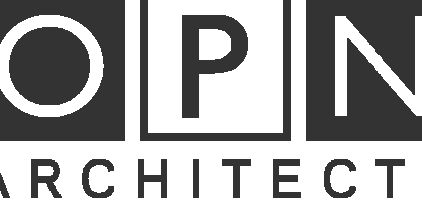
UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN SHOWN BASED UPON INFORMATION OBTAINED FROM FIELD LOCATIONS BY UTILITY COMPANIES, AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS ALSO POSSIBLE THAT THERE MAY BE OTHER UNDERGROUND FACILITIES, STRUCTURES, 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 with 2 columns: Symbol, Description. Includes symbols for Existing/Dark/Dashed/Below Grade Linework, New Connection Point, Point of Disconnect, Keynote, Equipment Identification Tag, Detail Drawing Reference Tag, Section Cut Reference Tag, and Interior Elevation Drawing Reference Tag.

H.V.A.C. / DUCTWORK SYMBOLS

Table with 2 columns: Symbol, Description. Includes symbols for Rectangular/Oval/Round/Flat Oval Duct, Supply Diffuser, Register/Grille, Linear Slot Diffuser, Return Register/Grille, Exhaust Register/Grille, Duct Access Door, Duct End Cap, Turning Vanes, VAV Terminal Unit, Flexible Ductwork, Elevation Change, High Eff. Take Off Fitting, 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.



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Key Plan:

Revision Description Date

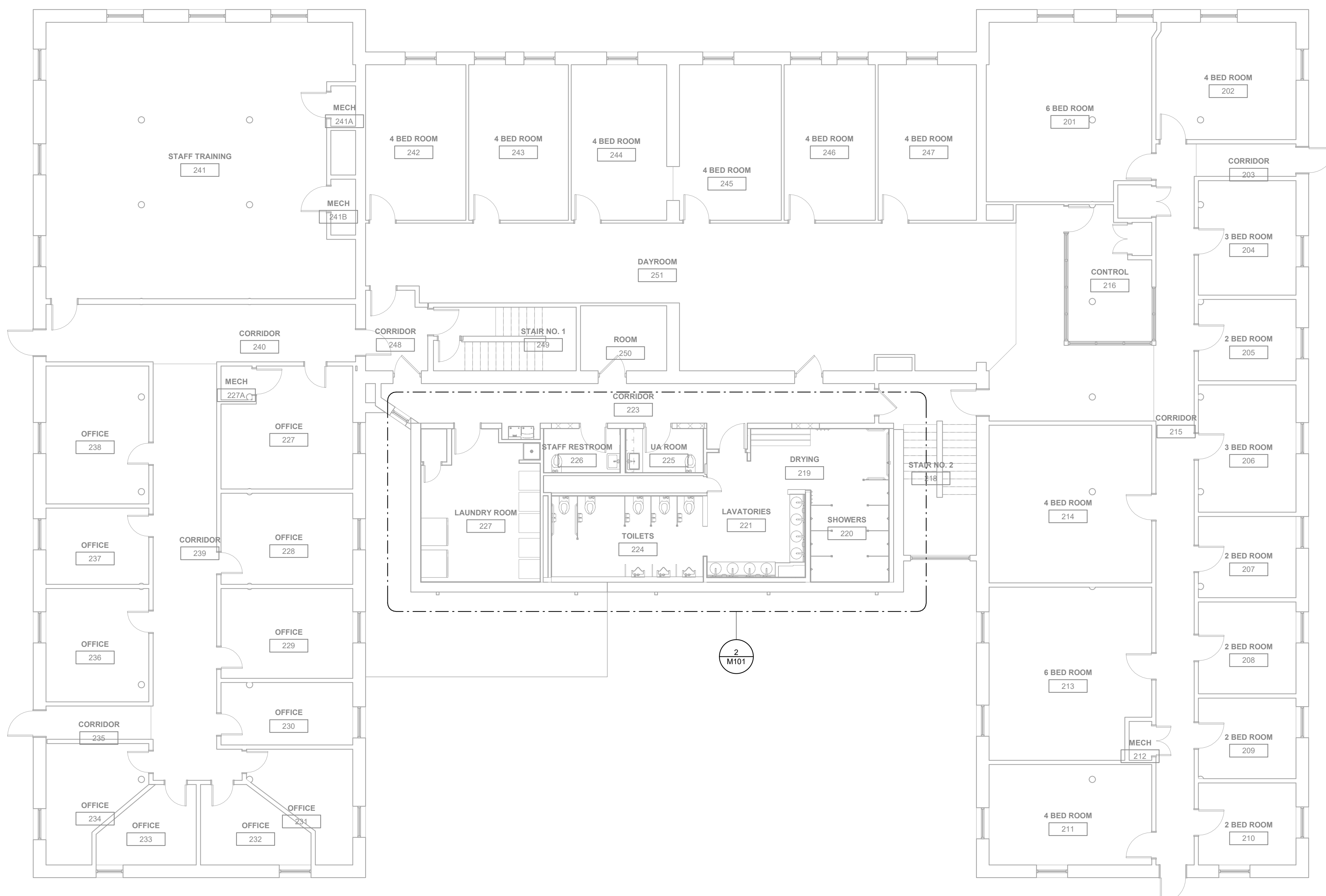
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Sheet Issue Date
BID SET 11/01/2024

Sheet Name:
MECHANICAL GENERAL NOTES & SYMBOLS
Sheet Number:

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.
- F. ABBREVIATIONS:
E - EXISTING ITEM TO REMAIN
ER - NEW LOCATION OF EXISTING ITEM
R - REMOVE EXISTING ITEM. PATCH AND/OR COVER
RN - REPLACE EXISTING WITH NEW
RR - REMOVE AND RELOCATE EXISTING ITEM



LEVEL 2 - MECHANICAL OVERALL PLAN
1/8" = 1'-0"

Key Plan

Revision	Description	Date

OPN Project No.
24805000

Sheet Issue Date
BID SET 11/01/2024

Sheet Name
MECHANICAL OVERALL PLAN
Sheet Number
M001

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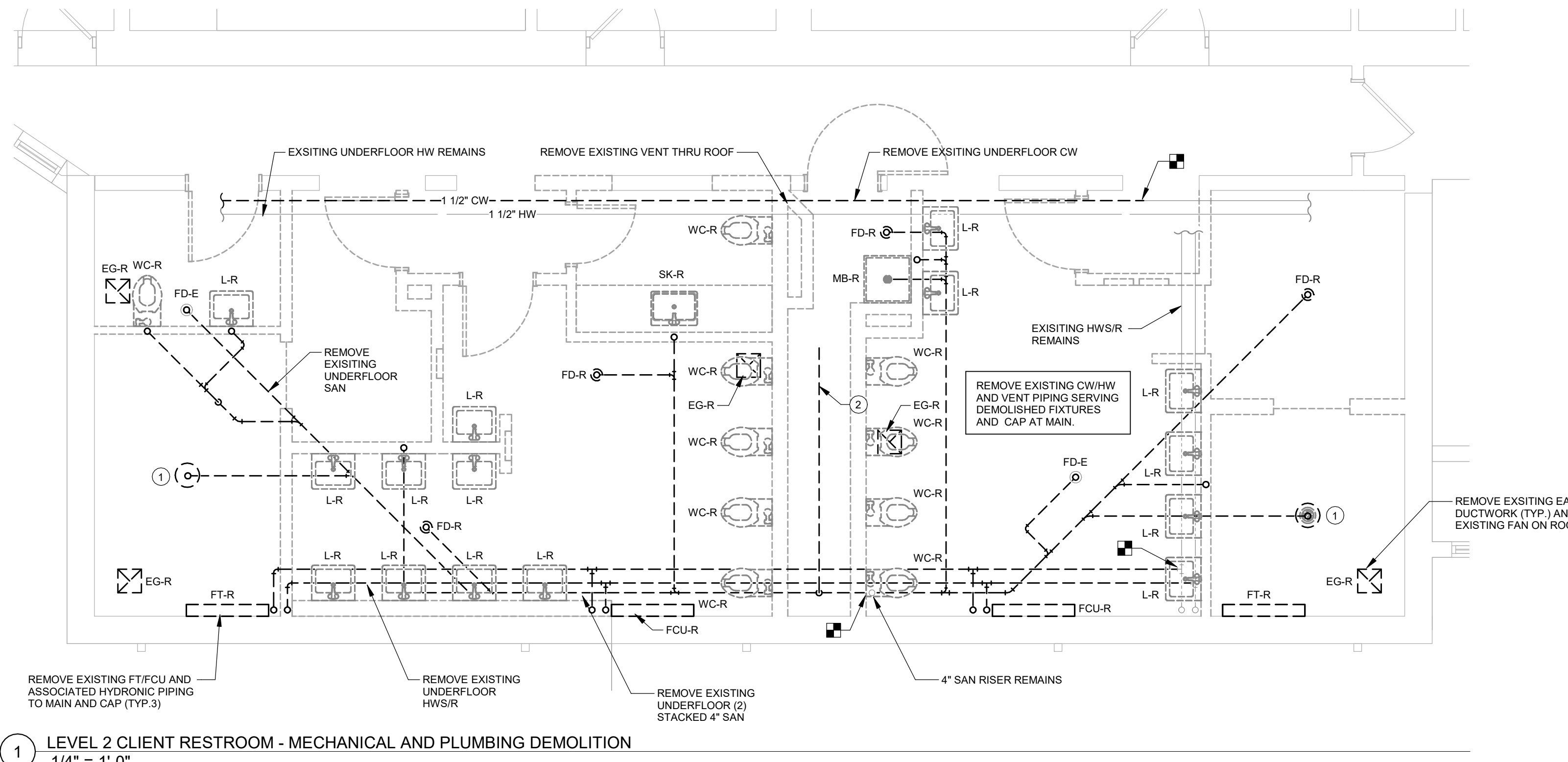
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GENERAL NOTES:

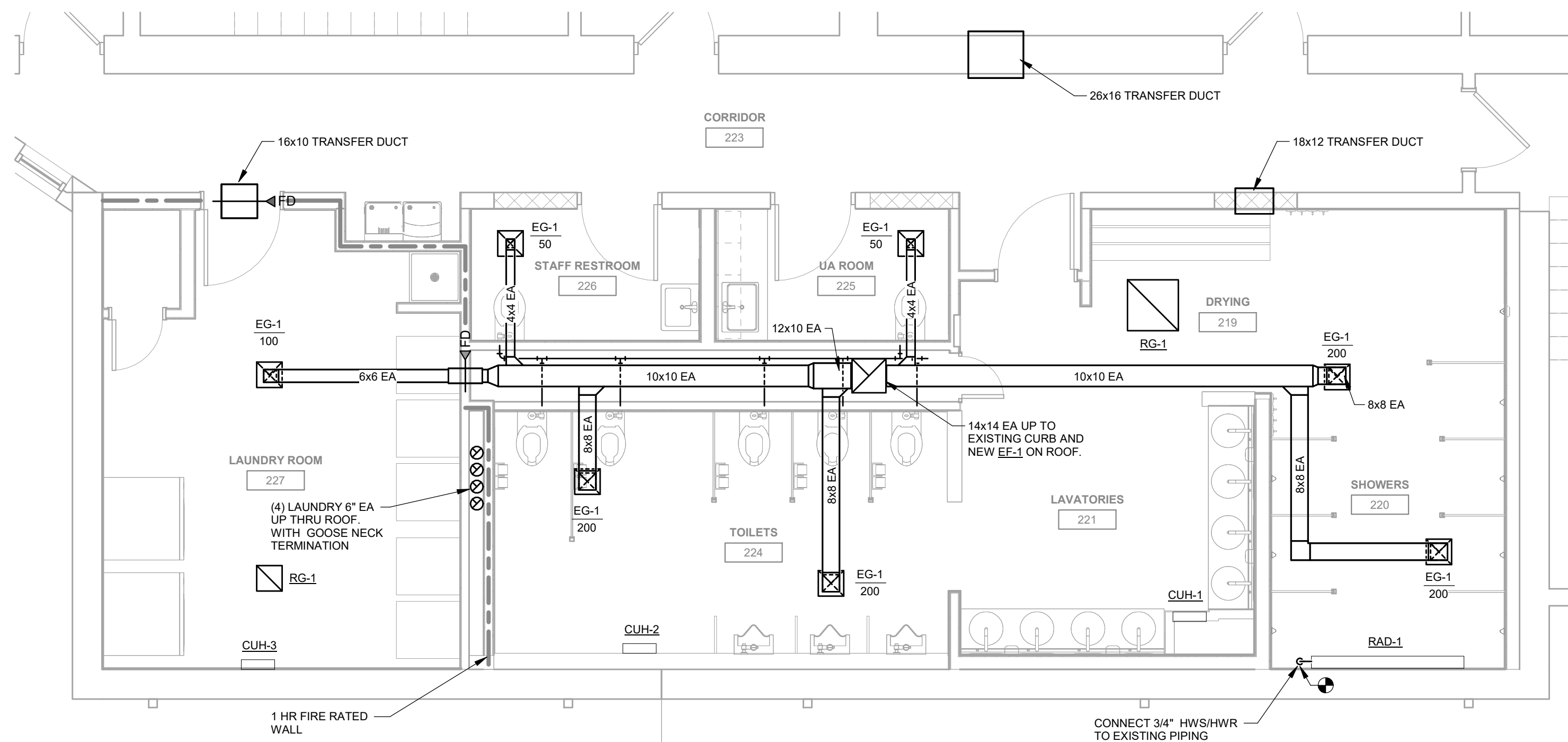
- A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.
- B. REFER TO M301 FOR MECHANICAL DETAILS.
- C. REFER TO M501 FOR MECHANICAL SCHEDULES.
- D. BRANCH DUCT SIZES TO AIR TERMINALS SHALL MATCH NECK SIZE OF GRILLE, REGISTER, OR DIFFUSER UNLESS NOTED OTHERWISE.
- E. MAXIMUM FLEXIBLE DUCT LENGTH TO DIFFUSERS SHALL BE 60', WITH MAXIMUM OF ONE 90 DEGREE ELBOW.
- F. ABBREVIATIONS:
E - EXISTING ITEM TO REMAIN
ER - NEW LOCATION OF EXISTING ITEM
R - REMOVE EXISTING ITEM. PATCH AND/OR COVER
RN - REPLACE EXISTING WITH NEW
RR - REMOVE AND RELOCATE EXISTING ITEM

KEYNOTES

- 1 REMOVE EXISTING COLUMN SHOWER. PATCH FLOORS AND CEILING TO MATCH EXISTING.
- 2 REMOVE ALL PLUMBING PIPING IN CHASE TO MAIN AND CAP.



1 LEVEL 2 CLIENT RESTROOM - MECHANICAL AND PLUMBING DEMOLITION
1/4" = 1'-0"



2 LEVEL 2 CLIENT RESTROOM - MECHANICAL HVAC
1/4" = 1'-0"

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Sheet Name
MECHANICAL HVAC PLANS

Sheet Number
M101

REFERENCE	MATERIAL	MARGIN (IN)	INLET (IN)	FACE (IN)	DAMPER	MFR	MODEL	NOTES
RG-1 (RETURN GRILLE)	ALUMINIUM	1 1/4"	SEE DWG	24 x 24	YES	TITUS	PAR-AA	1,2
EG-1 (EXHAUST GRILLE)	ALUMINIUM	1 1/4"	SEE DWG	12 x 12	YES	TITUS	PAR-AA	1,2

- NOTES:
1. REFER TO ARCH DRAWINGS FOR FINAL CEILING TYPE FOR MOUNTING TYPE.
2. PROVIDE WITH WHITE FINISH. COORDINATE COLOR SELECTION WITH ARCHITECT.

DUCT TYPE	HVAC EQUIPMENT	DUCT DETAILS	PRESSURE CLASS	INSULATION TYPE	INSULATION THICKNESS
EXHAUST AIR DUCT	FROM EXHAUST FANS	N/A	N/A	N/A	N/A
TRANSFER DUCT	N/A	RECTANGULAR GALVANIZED STEEL	-1/2 INCH WG	LINED	N/A

- NOTES:
1. ALL DUCTWORK SHALL BE CONSTRUCTED AND ERECTED IN ACCORDANCE WITH 2021 INTERNATIONAL MECHANICAL CODE.

REFERENCE	RAD-1
MANUFACTURER	ZEHNDER RITTLING
MODEL #	PDS5
TYPE	HYDRONIC
STYLE	WALL MOUNT
SERVES	SHOWERS
FIN DIMENSIONS - L x W (INCHES)	4-1/4"x4-1/4"
FIN SPACING (PER FOOT)	48
ACTIVE ELEMENT LENGTH (FT)	5
CAPACITY (BTUH)	6,000
LWT (°F)	180
LWT (°F)	160
FLOW RATE (GPM)	0.4
PRESSURE DROP (FT HD)	0.1
NOTES	# THROUGH #

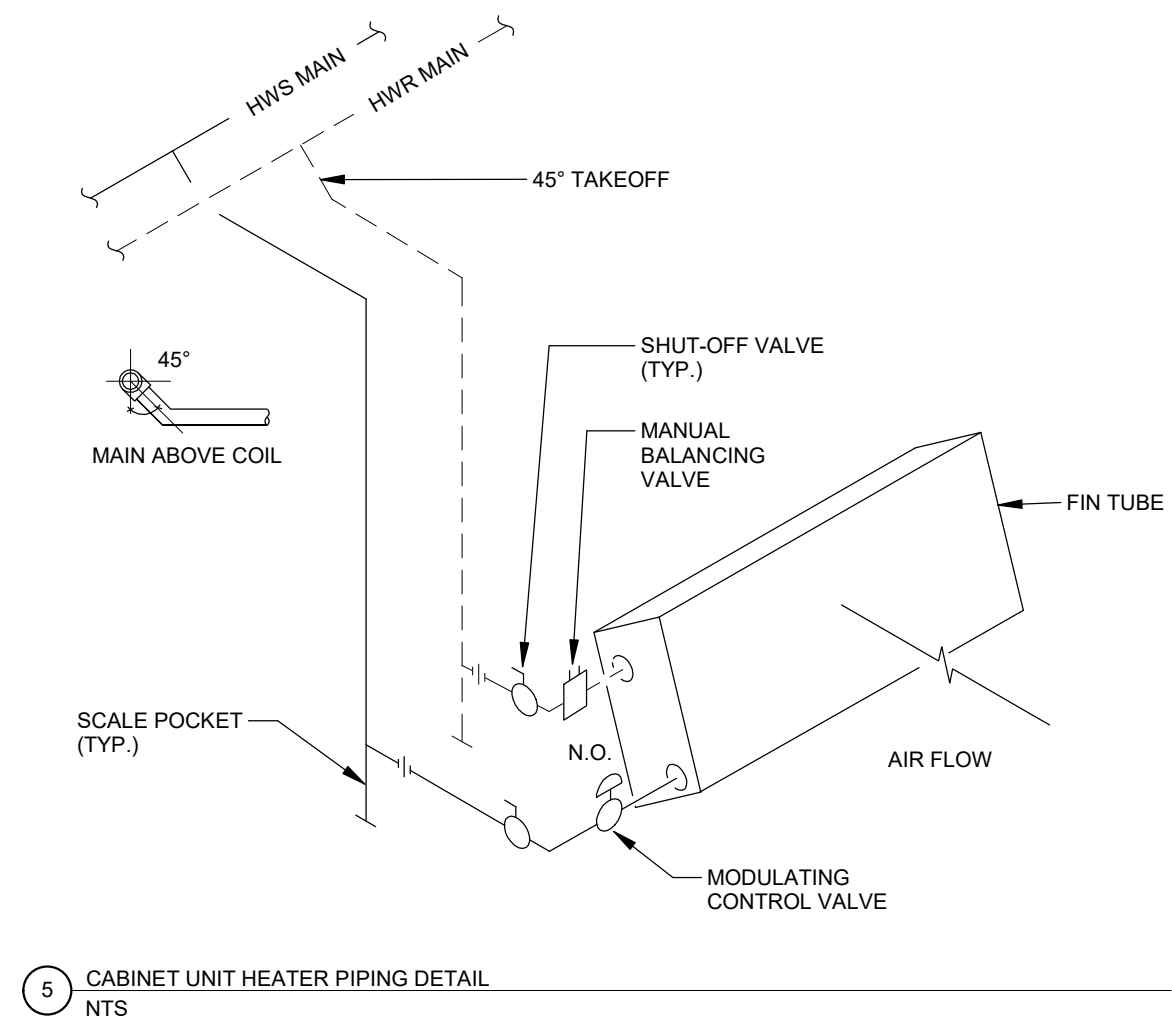
- NOTES:
1. REFER TO ARCH FOR FINAL COLOR SELECTION FROM FULL MFG RANGE OF STANDARD AND CUSTOM COLORS.
2. UNIT TO BE WALL MOUNTED, BOTTOM OF UNIT APPROXIMATELY 7'-0".
3. PROVIDE INTEGRAL TEMPERATURE SENSOR & INTEGRAL DISCONNECT.
4. HEATREX, INDECO, BERKO, MARLEY ARE ACCEPTABLE MANUFACTURERS.
5. PROVIDE RADIATORS WITH ALL NECESSARY WALL MOUNTING BRACKETS.
6. PROVIDE SECTIONS, END CAPS, AND TRIM AS REQUIRED FOR CONTINUOUS LOOK. INSTALL SECTIONS AS REQUIRED TO MEET SCHEDULED LENGTH. FIELD VERIFY LENGTHS.
7. PROVIDE UNIT WITH COPPER/ALUMINIUM FINNS, 14 GA CABINET.
8. ELEMENT HEATING BASED ON 65°F EAT, AND AVERAGE WATER TEMP OF 160°F.

REFERENCE	CUH-1	CUH-2	CUH-3
MANUFACTURER	INDECO	INDECO	INDECO
MODEL #	933	933	933
WEIGHT (LBS)	25	25	25
DIMENSIONS - L x W x D (INCHES)	16 x 20 x 2	17 x 20 x 2	18 x 20 x 2
TYPE	WALL	WALL	WALL
SERVES	LAVATORIES 221	TOILETS 224	LAUNDRY 227
AIRFLOW (CFM)	160	160	160
CAPACITY (MBH)	6,824	6,824	6,824
KILOWATTS	2.0	2.0	2.0
AMPS	9.6	9.6	9.6
VOLTAGE - PH	208 - 1	208 - 1	208 - 1
NOTES	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5

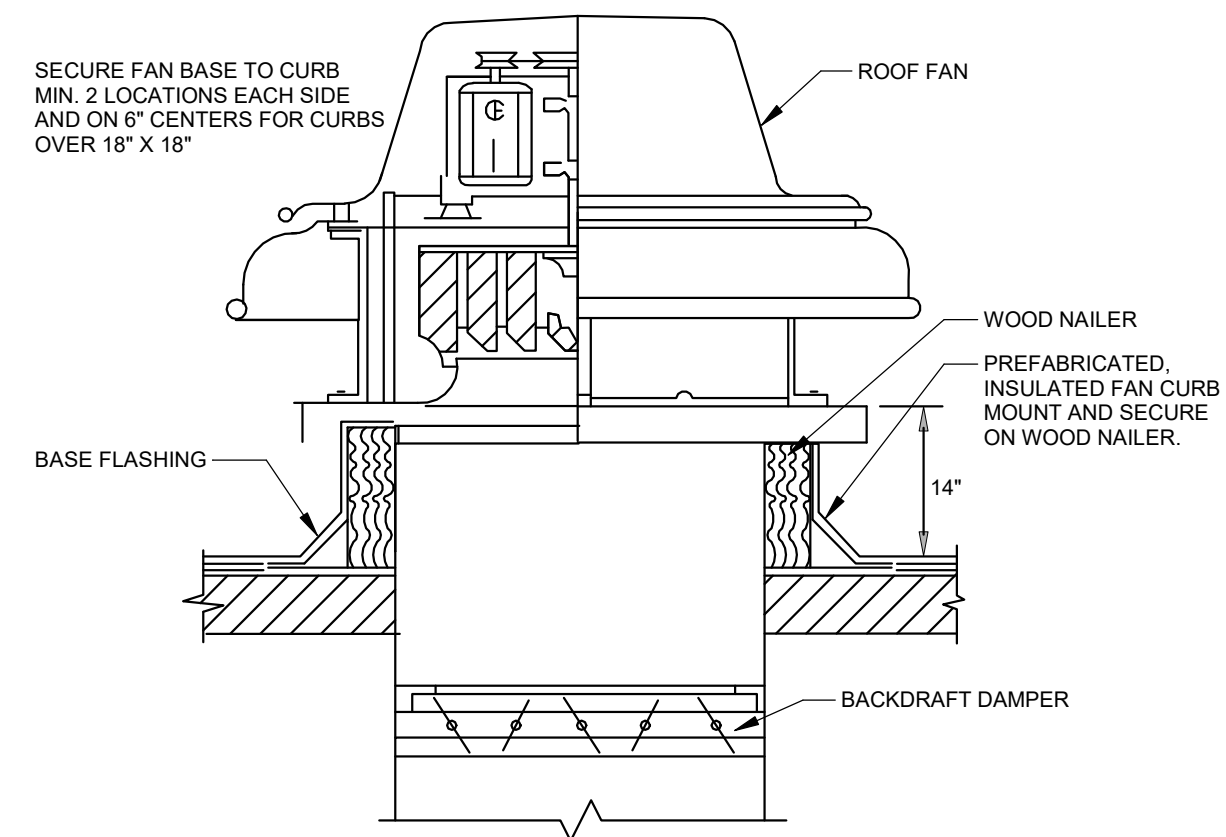
- NOTES:
1. PROVIDE UNIT WITH INTEGRAL THERMOSTAT AND DISCONNECT.
2. UNIT COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD AND CUSTOM COLOR CHART.
3. PROVIDE UNIT WITH THROWAWAY 1" FILTERS.
4. TCC TO PROVIDE SENSOR PLATE FOR MONITORING ROOM TEMP ONLY.
5. PROVIDE OPTIONAL 14-GAUGE SECURITY FRONT COVER.

REFERENCE	EF-1
MANUFACTURER	COOK
MODEL #	ACRUD
TYPE	CENTRIFUGAL
SERVES	RESTROOMS
WEIGHT (LBS)	32
DIMENSIONS - L x W x H (INCHES)	30x30x28
AIRFLOW (CFM)	1,000
ESP (IN. W.C.)	1.00
FAN SPEED (RPM)	1,624
DRIVE TYPE	DIRECT
SPEED CONTROL	YES
SONES	14.2
DAMPER TYPE	MOTORIZED
MOTOR HP	0.50
VOLTAGE - PHASE	120 - 1
NOTES	1,2,3,4,5,6

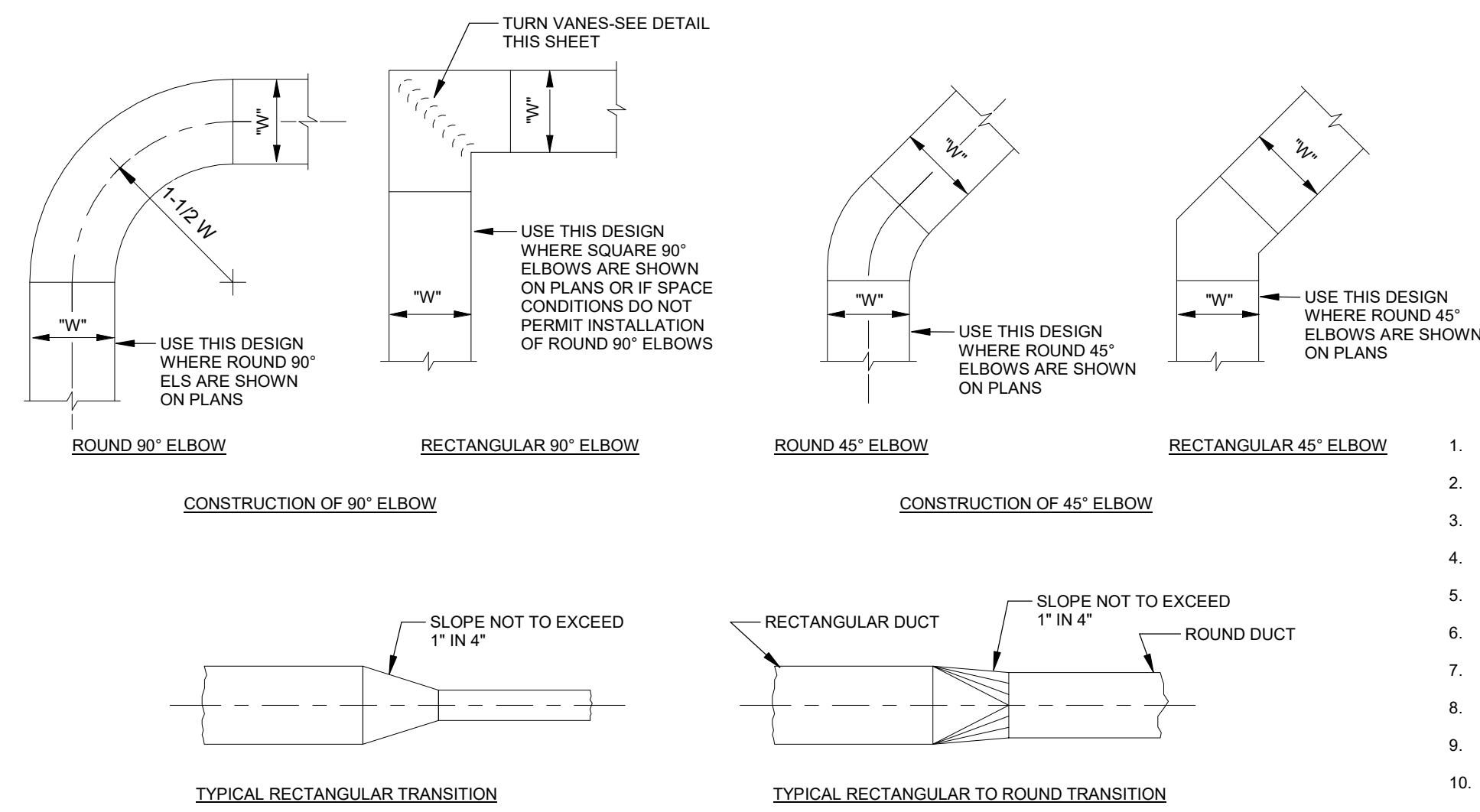
- NOTES:
1. FAN TO RUN CONTINUOUSLY.
2. PROVIDE WITH DAMPER AND 115 VAC ACTUATOR WITH UNIT.
3. EC TO POWER MOTORIZED DAMPER TO OPEN/CLOSE WITH FAN START OR STOP.
4. PROVIDE UNIT WITH SINGLE POINT POWER CONNECTION AND DISCONNECT. EC TO PROVIDE DISCONNECT.
5. PROVIDE MINIMUM 14" ROOF CURB. DISTANCE MEASURED FROM BOTTOM OF FAN BASE TO TOP OF ROOF.
6. INSTALL SPEED CONTROLLER UNDER FAN SHROUD FOR BALANCING.



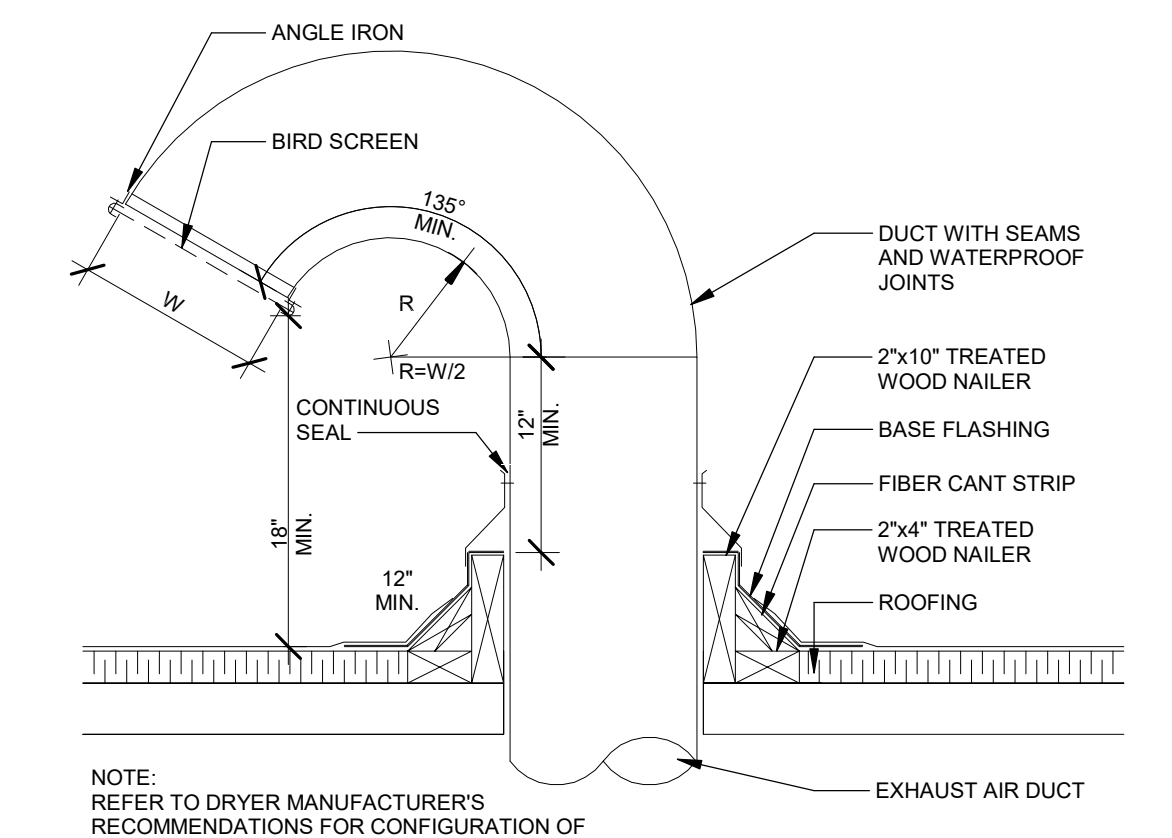
5. CABINET UNIT HEATER PIPING DETAIL NTS



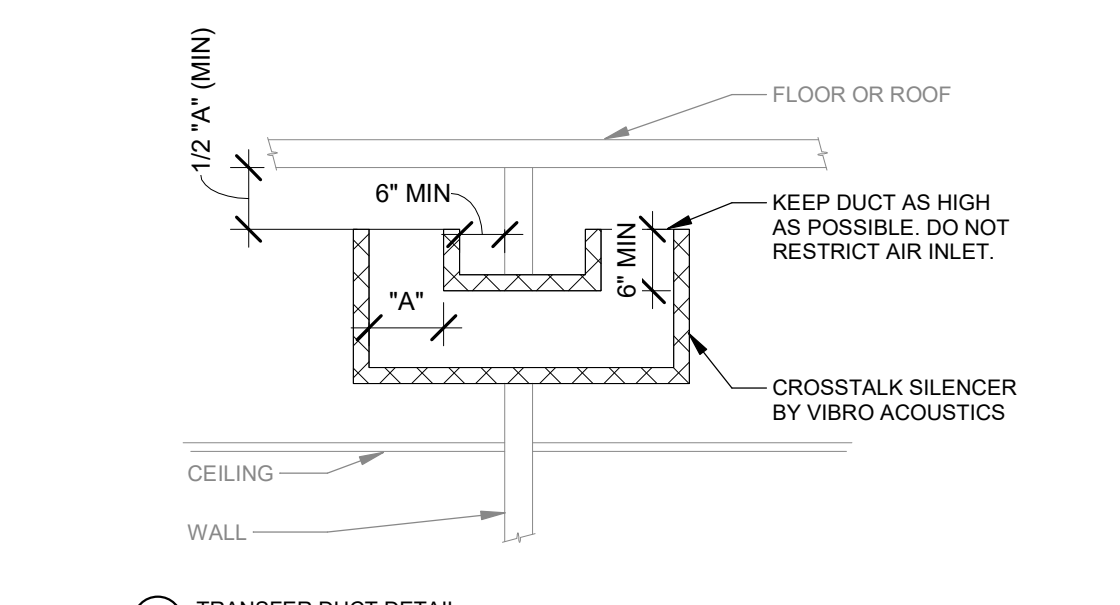
3. ROOF FAN MOUNTING DETAIL NTS



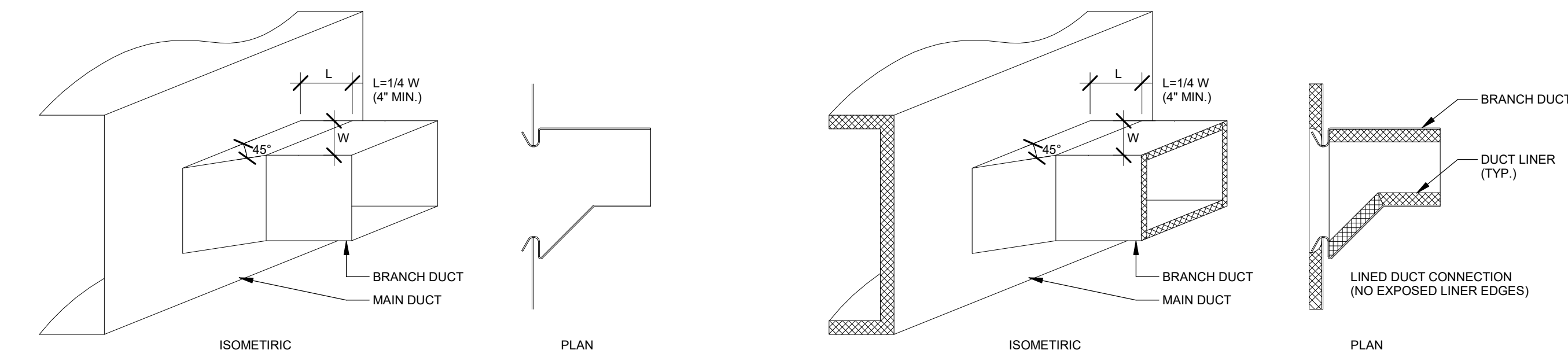
2. DETAILS OF THE LOW VELOCITY DUCT LAYOUT NTS



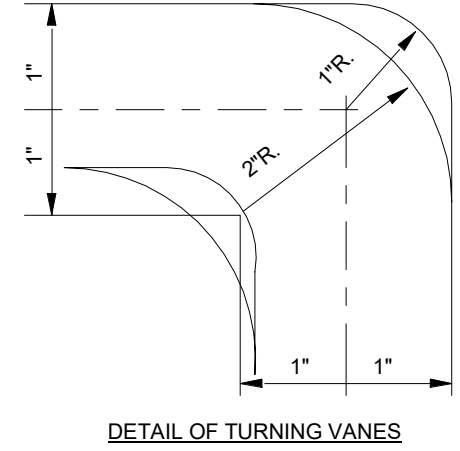
6. ROOF MOUNTED GOOSENECK DETAIL NTS



4. TRANSFER DUCT DETAIL NTS



5. 45° BRANCH DUCT TAKEOFF DETAIL NTS

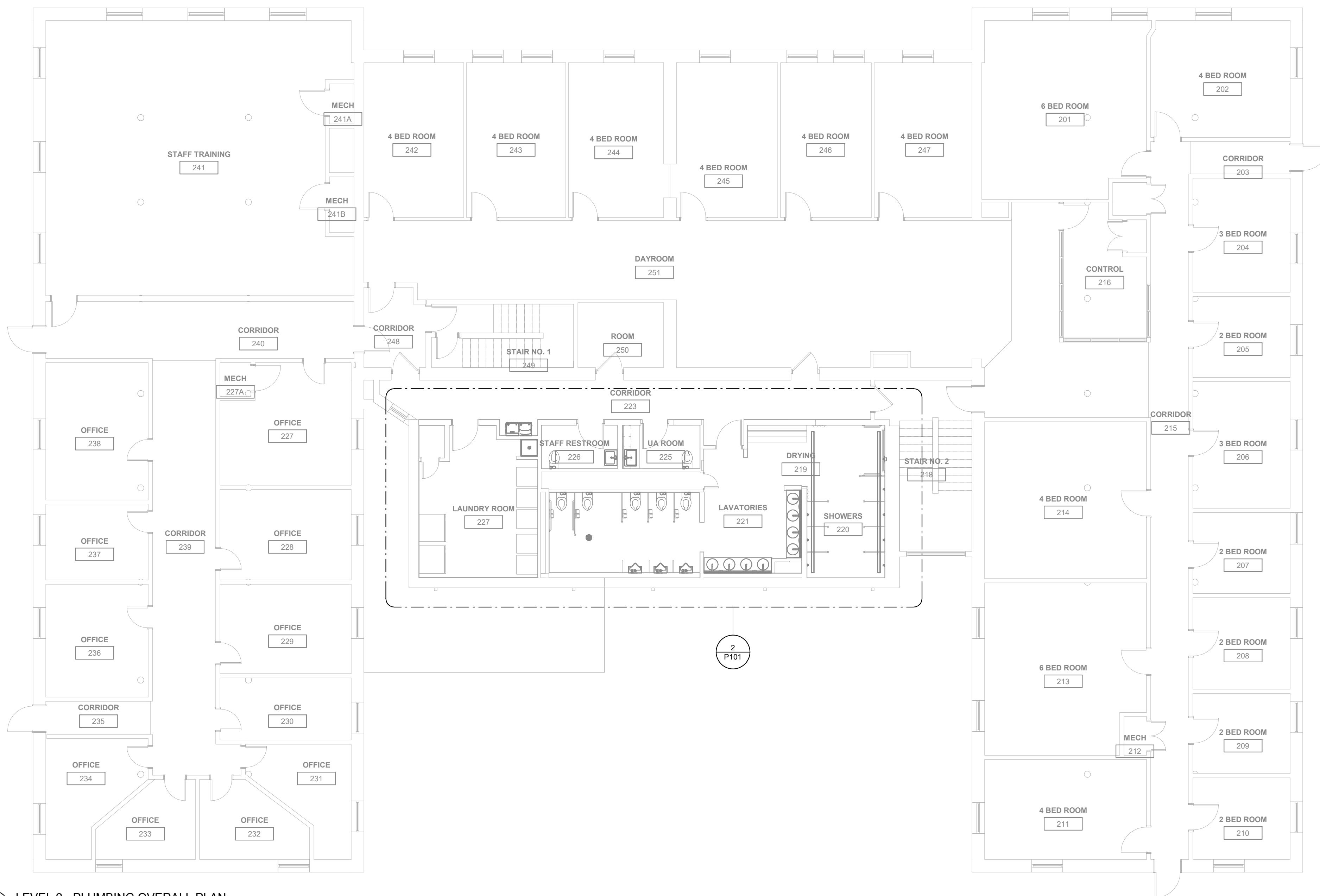


DETAIL OF TURNING VANES

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

GENERAL NOTES:

- A. REFER TO M000 FOR GENERAL NOTES & SYMBOLS.
- B. REFER TO P301 FOR PLUMBING DETAILS.
- C. REFER TO P501 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.
- G. REFER TO MECHANICAL DEMOLITION PLAN, M101 FOR PLUMBING DEMOLITION.



LEVEL 2 - PLUMBING OVERALL PLAN
1/8" = 1'-0"

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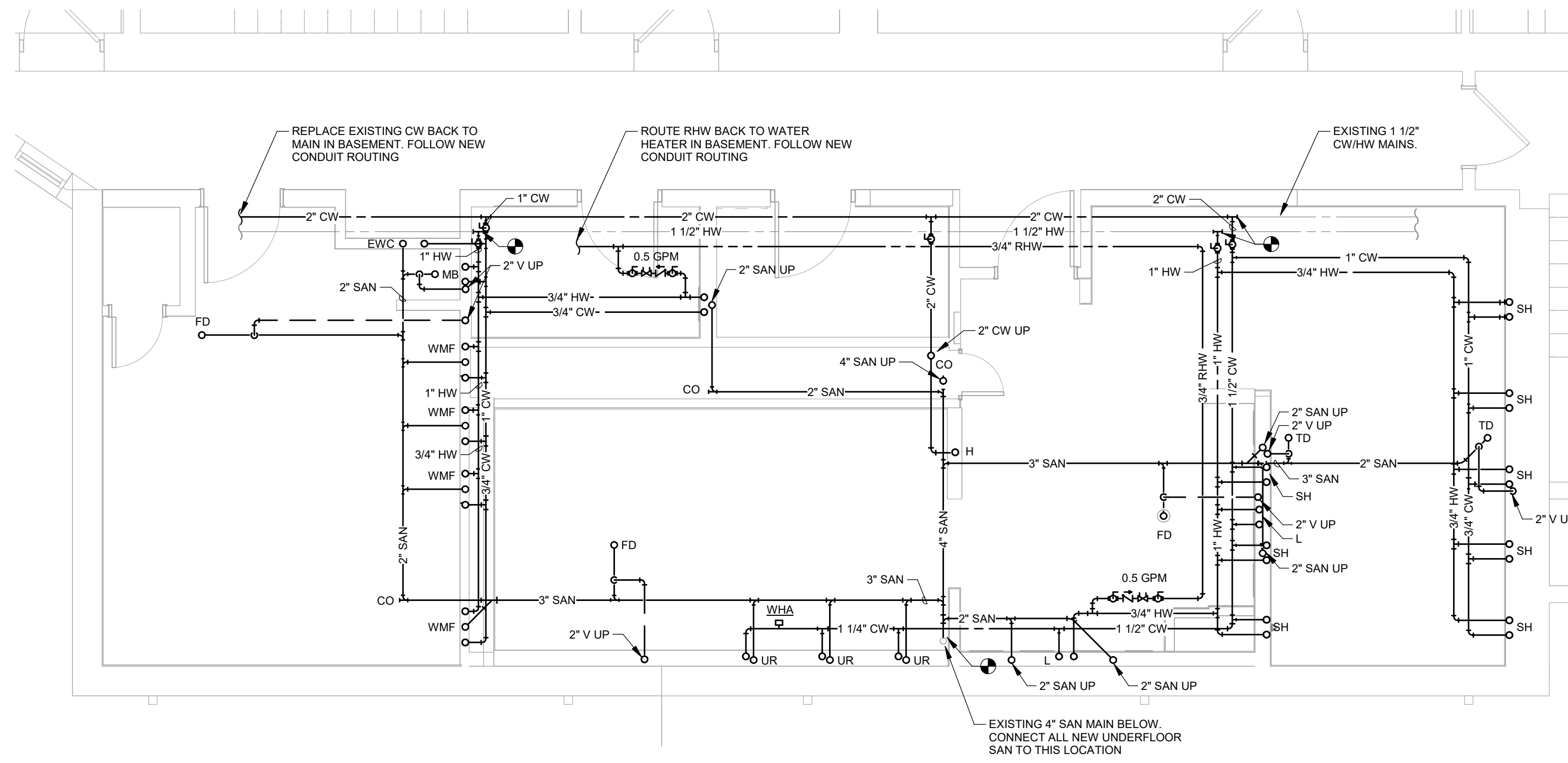
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PLUMBING OVERALL PLAN

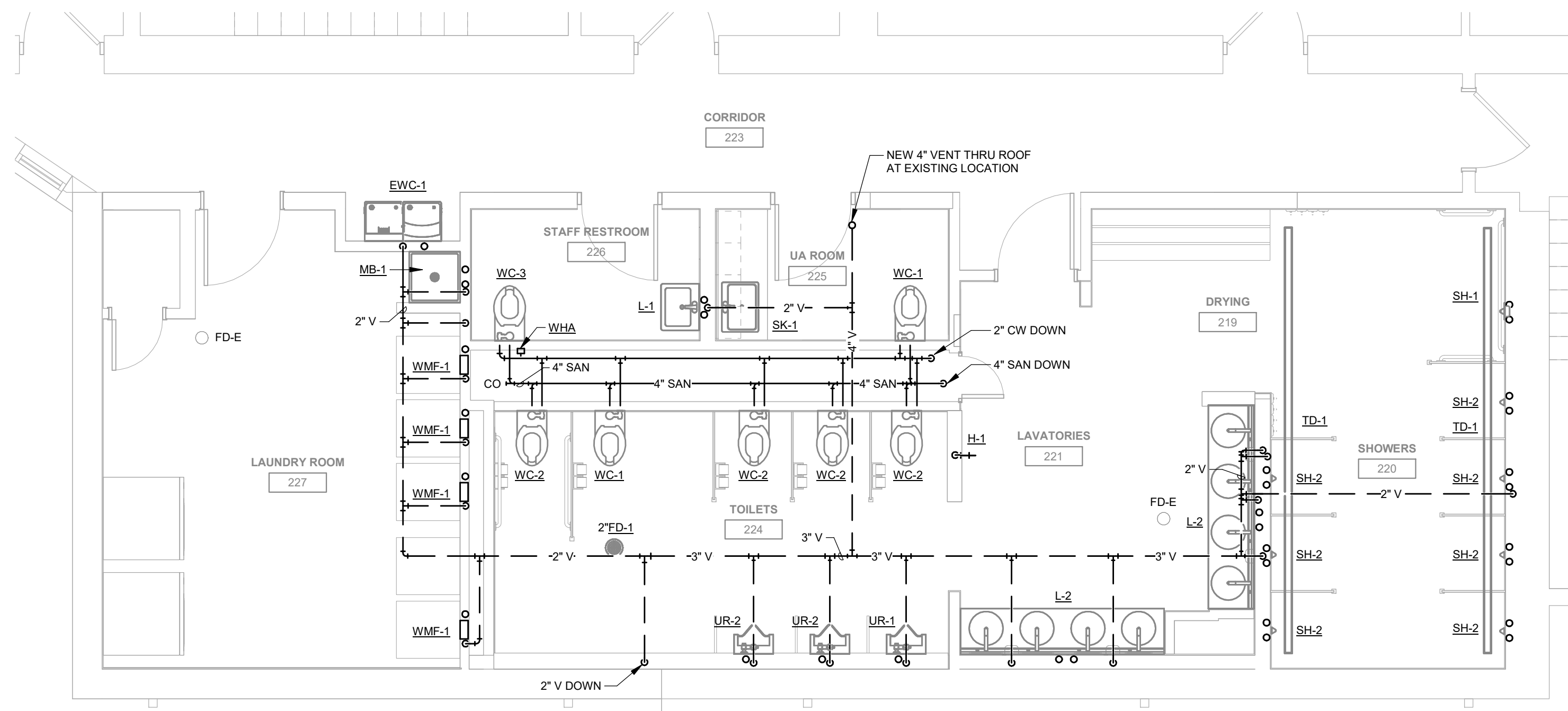
Sheet Number
P001

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- F. BRANCH PIPING SHALL BE TAKEN OFF THE TOP OF MAIN PIPING.
- G. REFER TO MECHANICAL DEMOLITION PLAN, M101 FOR PLUMBING DEMOLITION.



1 LEVEL 2 CLIENT RESTROOM - UNDERFLOOR PLUMBING
1/4" = 1'-0"



2 LEVEL 2 CLIENT RESTROOM - PLUMBING
1/4" = 1'-0"

Key Plan

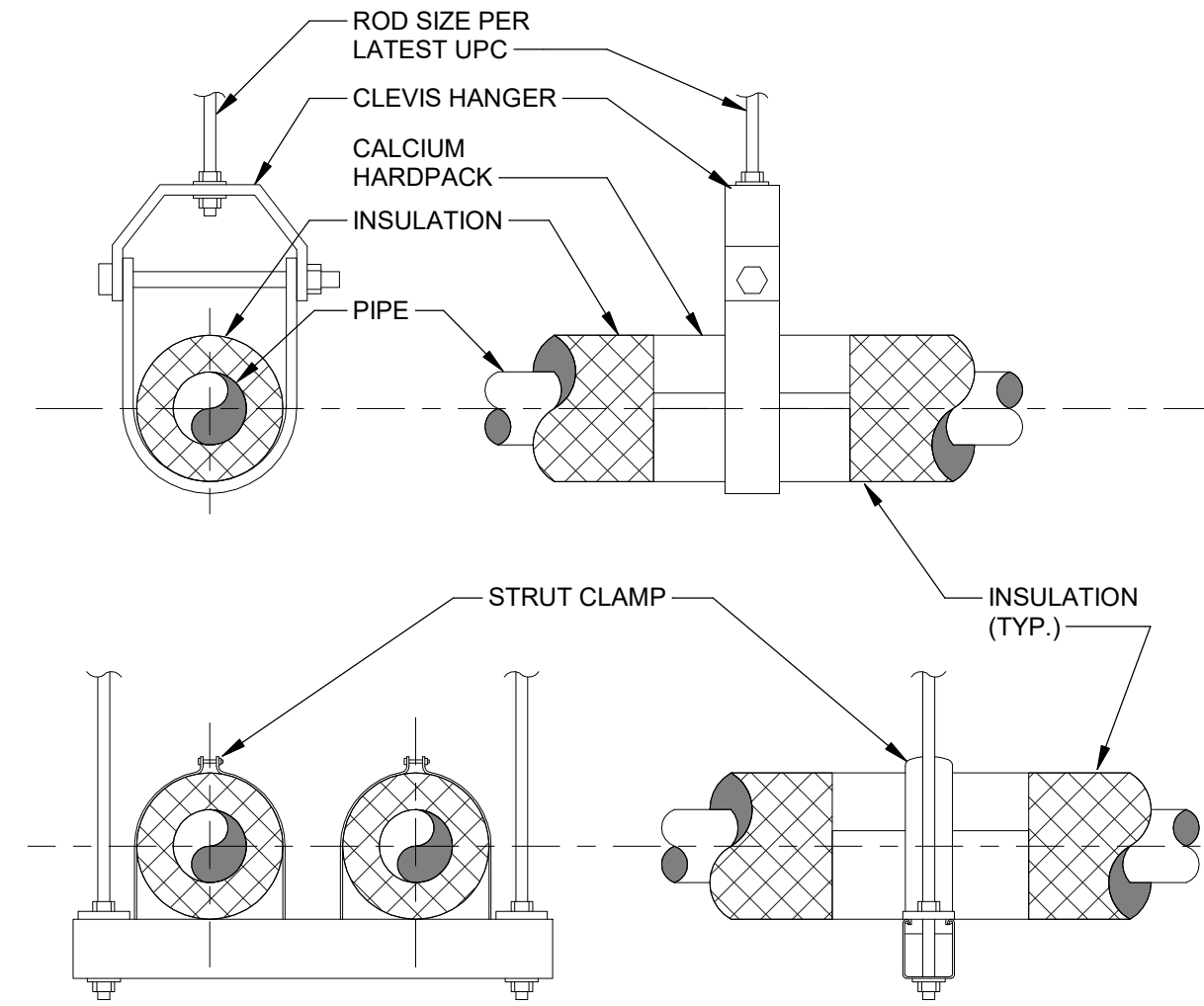
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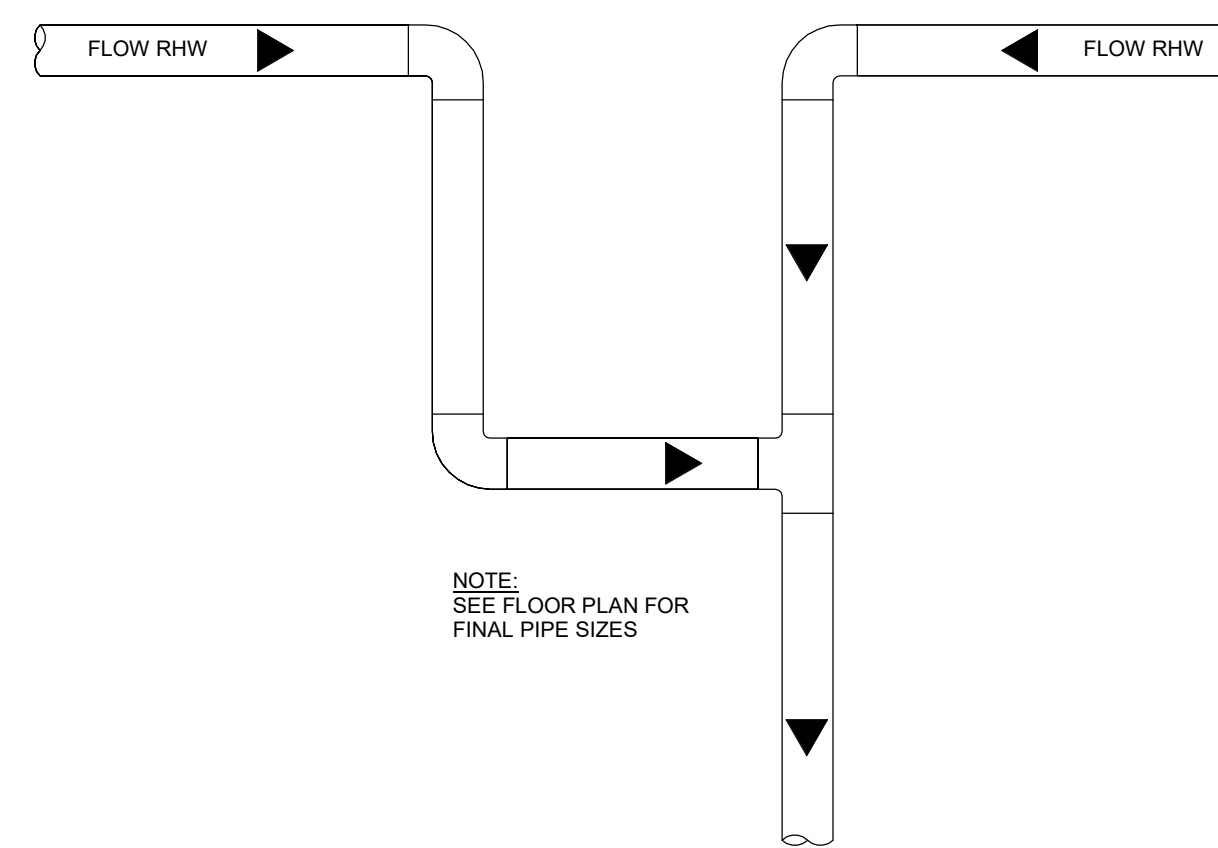
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PLUMBING PLANS

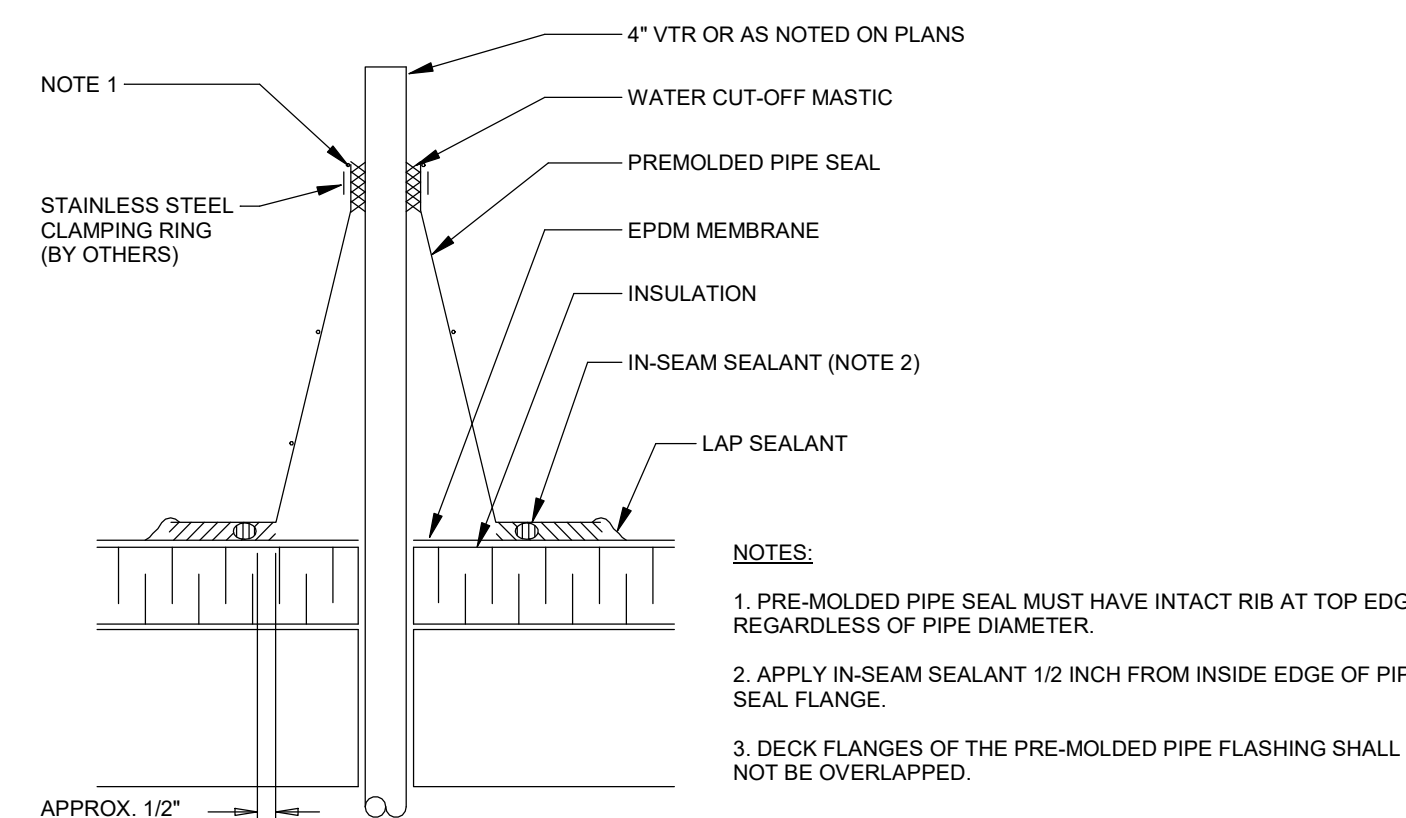
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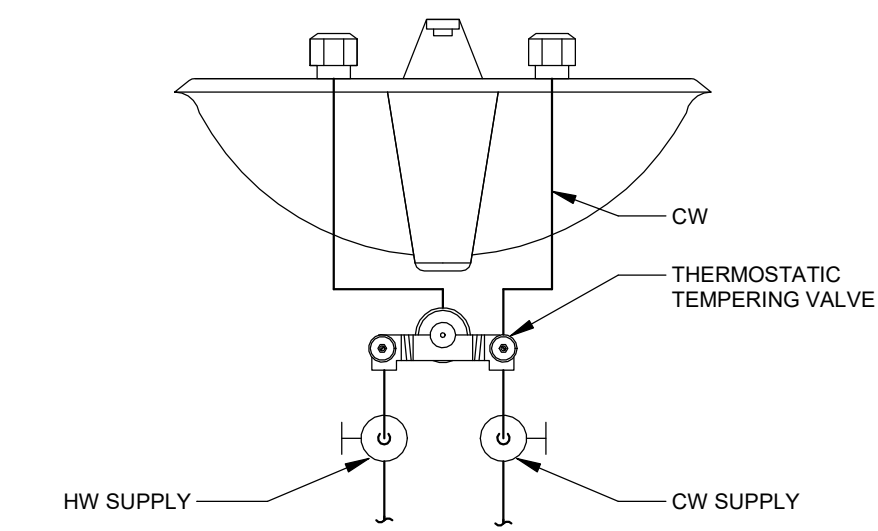
5 PIPE SUPPORT
N.T.S.



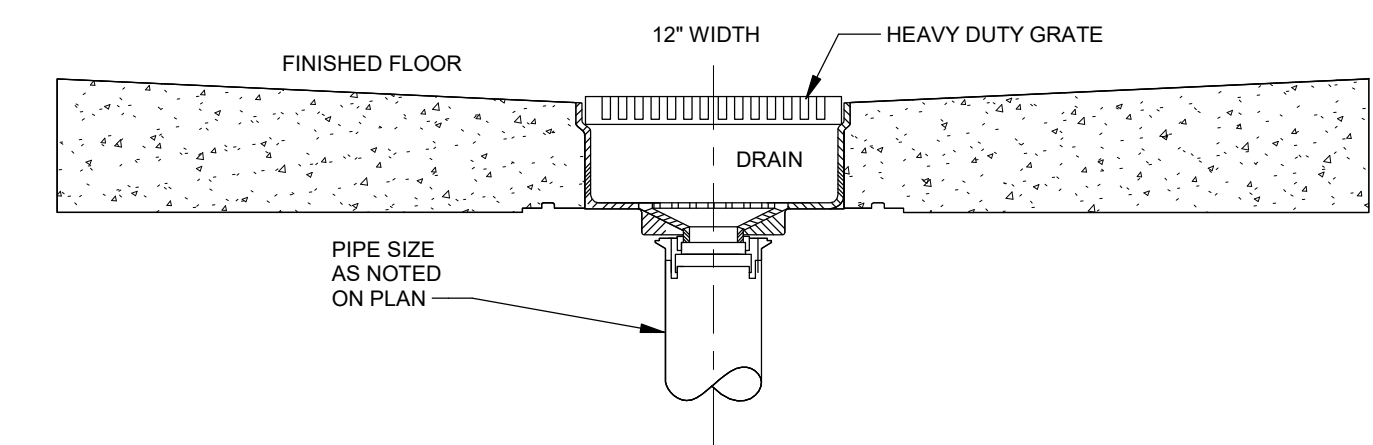
6 RE-CIRC HOT WATER TYPICAL T-INTERSECTION DETAIL
N.T.S.



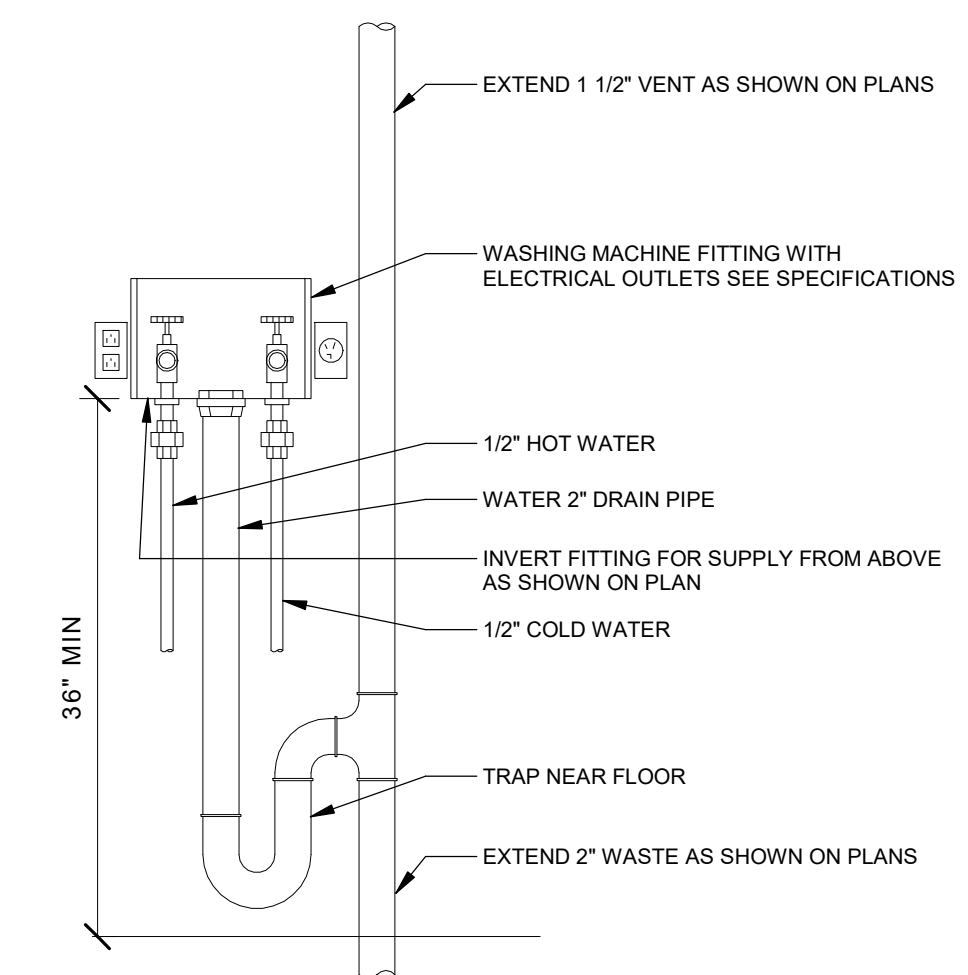
7 PLUMBING VENT THROUGH EPDM ROOF DETAIL
N.T.S.



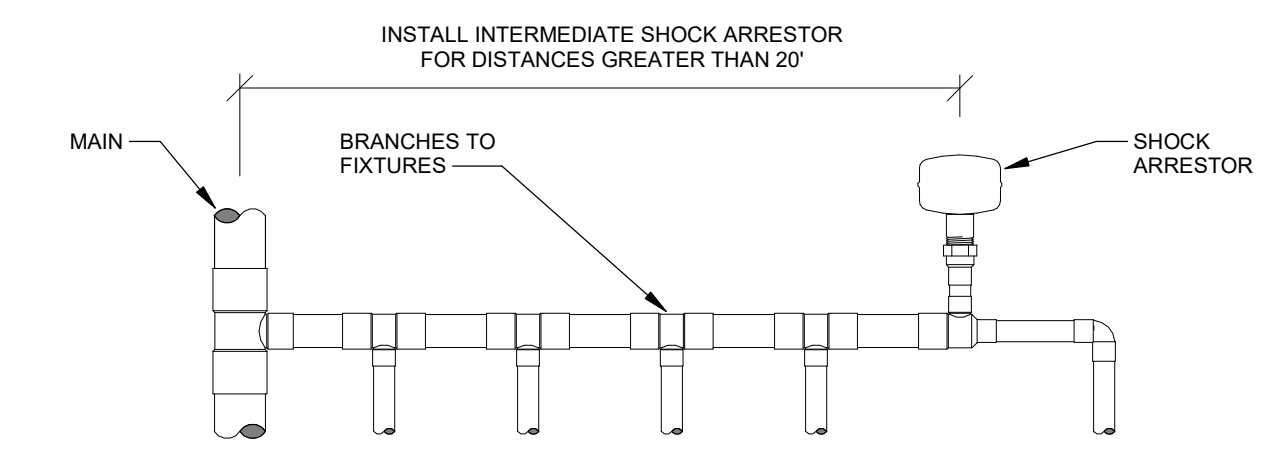
1 POINT-OF-USE MIXING VALVE DETAIL
N.T.S.



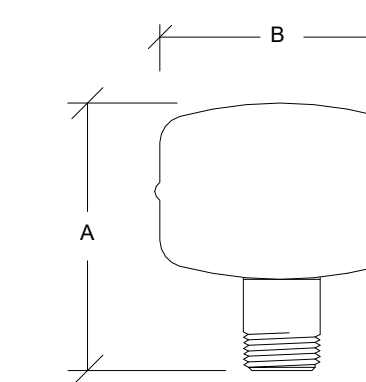
2 TRENCH DRAIN DETAIL
N.T.S.



3 WASHING MACHINE TRENCH DRAIN DETAIL
N.T.S.



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"	81-113	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 PDI-WH 201.

4 WATER SHOCK ARRESTOR
N.T.S.

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PLUMBING DETAILS

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PLUMBING FIXTURE ROUGH-IN SCHEDULE					
FIXTURE	CW	HW	VENT	WASTE	NOTES
ELECTRIC WATER COOLER	1/2"	-	1 1/2"	1 1/2"	1,2
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
MOP BASIN	3/4"	3/4"	1 1/2"	3"	1
SINK	1/2"	1/2"	1 1/2"	1 1/2"	1,2
SHOWER	1/2"	1/2"	1 1/2"	2"	1,4
URINAL (FLUSH VALVE)	3/4"	-	1 1/2"	2"	1
WATER CLOSET (FLUSH VALVE)	1"	-	2"	4"	1
WASHING MACHINE BOX	1/2"	1/2"	1 1/2"	2"	1,3

- 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. MINIMUM 3/4" CW AND HW TO FIXTURE. REDUCE PIPE SIZE AT FIXTURE CONNECTIONS ONLY.
 4. FOR TEMPERED WATER SHOWER, EXTEND 3/4" TW TO ASSEMBLY.

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
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	--	7
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 - 1 1/4	ABOVE GROUND	TYPE L COPPER	GROOVED		MINERAL FIBER	1	PVC	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	--	7
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	PVC	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	--	7
SANITARY DRAIN (GRAVITY)	1 1/2 - 8	ABOVE GROUND	SCH 40 PVC DWV / CI	SOLVENT / NO HUB	N/A	--	--	--	7
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 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 10'-0" ABOVE FLOOR SHALL HAVE PVC JACKET.
 5. INSULATION APPLIED TO PIPING THAT IS LOCATED IN RETURN AIR PLENUMS SHALL MEET ASTM E 84 25/80 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.
 7. ALL PIPING BELOW LEVEL 2 IN THE CEILING TO BE PLENUM RATED.

PLUMBING FIXTURE SCHEDULE					
REFERENCE	MFR	MODEL	DESCRIPTION	TRIM	
EWC-1 (BI-LEV/ADA)	ELKAY	VRCTL8WSK	VANDAL-RESISTANT, ADA COMPLIANT, WALL HUNG BI-LEVEL ELECTRIC WATER COOLER WITH FRONT PUSH BUTTON ACTIVATION. STAINLESS STEEL WRAPPER AND BASIN WITH INTEGRAL GRID DRAIN, VANDAL RESISTANT BUBBLER, 8 GPH OF 50°F WATER AT 90°F AMBIENT TEMPERATURE AND 80°F INLET WATER. 115V COMPRESSOR PROVIDED WITH ELECTRIC CORD AND PLUG. ADA COMPLIANT MOUNTING HEIGHTS. ACCESSORY APRON, PROVIDES MANDATORY 27" FLOOR TO UNDERSIDE REQUIREMENTS - THERMO-FORMED TEXTURED ABS PLASTIC, EQUIPPED WITH BOTTOM COVER PLATE. DRAIN & TRAP ASSEMBLY, ADJUSTABLE THERMOSTAT, MOUNTING ACCESSORIES, AND ANGLE STOPS. UNIT SHALL...	ELKAY "EZHZ20" VRCWS, INTEGRAL ADA BOTTLE FILLING STATION, ELECTRONIC SENSOR FOR NO-TOUCH ACTIVATION WITH AUTOMATIC 30-SECOND SHUT-OFF TIMER. STATION SHALL PROVIDE 1.1-1.5 GPM FLOW RATE WITH LAMINAR FLOW OUTLET TO MINIMIZE SPLASHING, NO FILTER, INTEGRATED SILVER ION ANTI-MICROBIAL PROTECTION, CERTIFIED TO NSF/ANSI 42 AND 53.	
FD-1	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.	
H-1	WOODFORD	B24	WALL HYDRANT, BRASS VALVE BODY AND SEAT. STANDARD FINISH, NON-FERROUS METAL STEM, AUTOMATIC DRAINING, ANTI-SIPHON VACUUM BREAKER, 3/4" MALE HOSE THREAD, WALL CLAMP, POLYCARBONATE WHEEL HANDLE AND LOOSE KEY TEE, CONCEALED IN FLUSH MOUNTED LOCKABLE WALL BOX, KEY OPERATED, ASSE 1019 APPROVED AND LISTED. INSTALL AT 36" ABOVE FINISH FLOOR.	NA	
L-1 (ADA)	KOHLER	K-2005	WALL HUNG, VITREOUS CHINA LAVATORY, OVERALL DIMENSIONS 21" x 18", 4" CENTER HOLES, BACKSPLASH, OVERFLOW, WALL MOUNT / PROVIDE WITH CONCEALED ARM CARRIER. ADA COMPLIANT.	DELTA "590-PALGHDF-HW" ADA COMPLIANT, HARD WIRED, SENSOR TYPE FAUCET, WITH OFFSET GRID STRAINER AND TRAP. TRUEBRO "102W, 103" CW, HW, AND WASTE PIPE GUARDS AND ESCUTCHEONS. MAXIMUM FIXTURE FLOW TO BE 0.5 GPM. PROVIDE POWERS "LFE480" POINT OF USE MIXING VALVE UNDER FIXTURE. MIXING VALVE MUST MEET ASSE 1070 AND UPCC 2009 REQUIREMENTS. PROVIDE WITH 1/4 TURN, 3/8" BRASS STOPS, 17-GAUGE CAST BRASS P-TRAP, FLEXIBLE STAINLESS STEEL OR SOFT...	
L-2 (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 96", BACKSPLASH, ENCLOSED BOTTOM, OVERFLOW, GRID STRAINERS, SENOR OPERATED FAUCETS, 0.5 GPM, PLUG-IN TRANSFORMER AND SOLENOID VALVE, ASSE 1070 MIXING VALVE, P-TRAP.	NA	
MB-1	FIAT	TSB100	SQUARE MOP BASIN - PRECAST TERRAZZO, 24"x24"x12", CONTINUOUS STAINLESS STEEL CAPS ON ALL CURBS, STAINLESS STEEL INTEGRAL DRAIN WITH REMOVABLE STRAINER, 3" OUTLET. CAULK BETWEEN MOP BASIN AND WALL WITH SILICONE BASED CAULK. PROVIDE WITH STAINLESS STEEL SPLASH PLATE WHICH EXTENDS 8" ON EACH SIDE, MOP HANGER, HOSE AND HOSE BRACKET, AND DEEP SEAL TRAP.	ZURN "Z-841M1" - EXPOSED TWO HANDLE MIXING FAUCET, BRASS CONSTRUCTION, CHROME-PLATED FINISH, WRIST BLADE HANDLES, 3/4" HOSE THREAD SPOUT WITH INTEGRAL VACUUM BREAKER, WALL BRACE, PAIL HOOK, INTEGRAL STOPS.	
SHV-1 (STANDARD)	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 (ADA)	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	
SK-1 (ADA)	NA	NA	INTEGRAL COUNTERTOP BASIN PROVIDED BY G.C. COORDINATE REQUIRED COUNTERTOP OPENINGS WITH G.C.	ELKAY "LK406AT08", BRASS CONSTRUCTION, CHROME-PLATED FINISH, SWIVEL SPOUT, 8" REACH, 4" CENTERS, 2.2 GPM VANDAL RESISTANT AERATOR, WRISTBLADE HANDLES, TWO HOLE FAUCET. PROVIDE WITH 1/4 TURN, 3/8" BRASS LOOSE KEY STOPS, 20-GAUGE CAST BRASS P-TRAP, FLEXIBLE STAINLESS STEEL OR SOFT COPPER RISERS.	
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.	
UR- 1 (ADA)	ACORN	1705	WALL-MOUNT, BLOWOUT JET, 14 GAGE, TYPE 304 STAINLESS STEEL, 1.1-1/2" NPT MALE FLUSHING CONNECTION, WALL MOUNTED CARRIER, SERVICED FROM ACCESSIBLE PIPE CHASE, ADA COMPLIANT MOUNTING HEIGHT.	SLOAN "190 ESS" OR APPROVED EQUAL, HARDWIRED, 1.0 GPF, CONCEALED, SENSOR OPERATED FLUSH VALVE WITH AN ELECTRIC OVERRIDE BUTTON. ROUGH BRASS FINISH WITH A REAR SPUD FIXTURE CONNECTION. ADA COMPLIANT.	
UR- 2 (STANDARD)	ACORN	1705	WALL-MOUNT, BLOWOUT JET, 14 GAGE, TYPE 304 STAINLESS STEEL, 1.1-1/2" NPT MALE FLUSHING CONNECTION, WALL MOUNTED CARRIER, SERVICED FROM ACCESSIBLE PIPE CHASE, STANDARD MOUNTING HEIGHT.	SLOAN "190 ESS" OR APPROVED EQUAL, HARDWIRED, 1.0 GPF, CONCEALED, SENSOR OPERATED FLUSH VALVE WITH AN ELECTRIC OVERRIDE BUTTON. ROUGH BRASS FINISH WITH A REAR SPUD FIXTURE CONNECTION. ADA COMPLIANT.	
WC-1 (FLOOR/ADA)	ACORN	LR2141-ADA	LIGATURE RESISTANT, FLOOR MOUNTED, 1.6 GPF, CONCEALED WALL SUPPLY, WALL OUTLET, SIPHON JET SERIES, 16 GA TYPE 304 STAINLESS STEEL TOILET, ADA COMPLIANT HEIGHT, ELONGATED BOWL WITH CONTOURED SEAT.	SLOAN "152 ESS" OR APPROVED EQUAL, HARDWIRED, 1.6 GPF, CONCEALED, SENSOR OPERATED FLUSH VALVE WITH AN ELECTRIC OVERRIDE BUTTON. ROUGH BRASS FINISH WITH A REAR SPUD FIXTURE CONNECTION. ADA COMPLIANT.	
WC-2 (FLOOR)	ACORN	LR2141	LIGATURE RESISTANT, FLOOR MOUNTED, 1.6 GPF, CONCEALED WALL SUPPLY, WALL OUTLET, SIPHON JET SERIES, 16 GA TYPE 304 STAINLESS STEEL TOILET, STANDARD HEIGHT, ELONGATED BOWL WITH CONTOURED SEAT.	SLOAN "152 ESS" OR APPROVED EQUAL, HARDWIRED, 1.6 GPF, CONCEALED, SENSOR OPERATED FLUSH VALVE WITH AN ELECTRIC OVERRIDE BUTTON. ROUGH BRASS FINISH WITH A REAR SPUD FIXTURE CONNECTION. ADA COMPLIANT.	
WC-3 (WALL/ADA)	KOHLER	K-84325	WALL MOUNTED 1.6 GPF, WHITE VITREOUS CHINA, ELONGATED BOWL, SIPHON JET TOILET, BOLT CAPS, 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 295SCT WHITE OPEN FRONT SELF-SUSTAINING HEAVY SEAT, INJECTION MOLDED PLASTIC, STAINLESS STEEL POSTS, ESCUTCHEON.	
WMF-1	GUY GRAY	B200	WASHING MACHINE FIXTURE - 20-GAUGE G90 GALVANIZED ENCLOSURE, 2" CENTER DRAIN, TWO QUARTER-TURN BRASS BALL VALVES WITH 1/2" THREADED OUTLETS.	NA	

NOTES:

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Key Plan

Revision Description Date

OPN Project No.
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Sheet Number
P501

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TECHNOLOGY RESPONSIBILITY MATRIX																
PROVISION RESPONSIBILITIES DEFINED																
	OFI	OCF	CFI	COF												
COMMUNICATIONS - TELECOM SYSTEMS:																
ROUGH-IN, PATHWAYS AND SLEEVES				●												
RACKS, FRAMES AND ENCLOSURES																
CABLE MANAGEMENT																
UNINTERRUPTIBLE POWER SUPPLIES (RACK MOUNT)																
PLYWOOD BACKBOARDS																
COPPER BACKBONE CABLING																
OPTICAL FIBER BACKBONE CABLING																
COAXIAL BACKBONE CABLING																
COPPER HORIZONTAL CABLING				●												
OPTICAL FIBER HORIZONTAL CABLING																
COAXIAL BACKBONE CABLING																
DATA COMMUNICATIONS SWITCHES AND HUBS																
DATA COMMUNICATIONS WIRELESS ACCESS POINTS																
VOICE COMMUNICATIONS SWITCHING AND ROUTING EQUIPMENT																
COMMUNICATIONS - AUDIO-VISUAL SYSTEMS:																
ROUGH-IN, PATHWAYS AND SLEEVES																
PROJECTOR(S)																
FLAT PANEL DISPLAY(S)																
MULTI-TOUCH DISPLAY(S)																
DISPLAY TECHNOLOGY MOUNTING HARDWARE																
MEDIA PLAYER(S)																
HEAD-END EQUIPMENT																
COMMUNICATIONS - DISTRIBUTED SYSTEMS:																
ROUGH-IN, PATHWAYS AND SLEEVES																
MASTER ANTENNA / COMMUNITY ANTENNA TELEVISION DISTRIBUTION																
PUBLIC ADDRESS SYSTEM																
SOUND MASKING / SPEECH PRIVACY SYSTEM																
INTERCOMMUNICATIONS SYSTEM																
WIRED / WIRELESS CLOCK SYSTEM																
NURSE CALL / CODE BLUE SYSTEM																
DISTRIBUTED ANTENNA SYSTEM																
SECURITY - ACCESS CONTROL:																
ROUGH-IN, PATHWAYS AND SLEEVES																
SECURITY MANAGEMENT SYSTEM - HEAD END COMPONENTS																
SECURITY MANAGEMENT SYSTEM - FIELD DEVICES																
SECURITY MANAGEMENT SYSTEM - ELECTRIFIED DOOR HARDWARE																
SECURITY MANAGEMENT SYSTEM - ALL CABLING																
SECURITY - VIDEO INTERCOM:																
ROUGH-IN, PATHWAYS AND SLEEVES																
DOOR STATION(S)																
HEAD END EQUIPMENT AND COMPONENTS																
SECURITY - VIDEO SURVEILLANCE:																
ROUGH-IN, PATHWAYS AND SLEEVES				●												
CAMERA(S)		●														
HEAD END EQUIPMENT AND COMPONENTS		●														
SECURITY - INTRUSION DETECTION:																
ROUGH-IN, PATHWAYS AND SLEEVES				●												
FIELD DEVICES (MOTION DETECTORS, GLASS BREAKS, DOOR SWITCHES)																
HEAD END EQUIPMENT AND COMPONENTS																
SAFETY - FIRE DETECTION AND ALARM:																
ROUGH-IN, PATHWAYS AND SLEEVES				●												
INITIATING FIELD DEVICES (SMOKE, MANUAL PULL, MONITOR MODULES)				●												
NOTIFICATION APPLIANCES (HORNS, STROBES, SPEAKERS)				●												
MISCELLANEOUS DEVICES (RELAYS, TEST STATION, ANNUNCIATOR)				●												
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●	OFI	OWNER FURNISHED & OWNER INSTALLED														
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●	CFI	CONTRACTOR FURNISHED & CONTRACTOR INSTALLED														
●	COF	CONTRACTOR FURNISHED & OWNER INSTALLED														
GENERAL NOTE:																
A. MATRIX IS NOT INTENDED TO BE EXHAUSTIVE TO COVER ALL MATERIALS NECESSARY FOR SCOPE AND SHOULD ONLY BE USED TO QUICKLY IDENTIFY SYSTEMS AND RELATED INFRASTRUCTURE INSIDE AND OUTSIDE THE BID OF THIS PROJECT. ANY ITEMS FURNISHED OR INSTALLED BY THE BIDDING CONTRACTOR SHALL COVER ALL REQUIRED APPURTENANCES NECESSARY FOR A COMPLETE SYSTEM. THIS SHALL INCLUDE BUT NOT BE LIMITED TO, EQUIPMENT, ACCESSORIES, TERMINATIONS, TERMINATION COMPONENTS, ALL FINAL CORDAGE CONNECTIVITY, SOFTWARE, PROGRAMMING, AND THE LABOR TO INSTALL.																

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 GRAY UNLESS OTHERWISE NOTED.
- PROVIDE DEVICES COVER PLATES AS STAINLESS STEEL. MATCH WIRING DEVICES COLOR.
- 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 SPACE. 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 SPECIFICATIONS, 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.
- PROVIDE DISCONNECTS RATED FOR EQUIPMENT AS REQUIRED AND AS INDICATED WITHIN EQUIPMENT CONNECTION SCHEDULE. COORDINATE DISCONNECT MOUNTINGS 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 COORDINATION WITH THE ASSOCIATED SUB-CONTRACTOR. ADJUST ELECTRICAL INSTALLATION AS REQUIRED.

FIRE DETECTION & ALARM NOTES

- EXTEND THE EXISTING SIEMENS FHD2007-U2 FIRE DETECTION AND ALARM SYSTEM TO LOCATIONS ILLUSTRATED ON THE DRAWINGS.
- FIRE ALARM ITEMS AND DEVICES ARE SHOWN IN SUGGESTED LOCATIONS. FINAL LAYOUTS, LOCATIONS, AND QUANTITIES SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS, AND EQUIPMENT LISTINGS. COORDINATE LOCATIONS WITH LIGHTING AND AIR HANDLING SYSTEMS.
- ALL FIRE ALARM CIRCUITRY IN EXPOSED CEILING SPACES SHALL BE IN ¾" CONDUIT PER SPECIFICATIONS. EXPOSED CABLING SHALL NOT BE ACCEPTED.
- ALL CONCEALED, ACCESSIBLE CEILING TILE LOCATIONS SHALL BE ALLOWED TO HAVE OPEN AIR CABLING INSTALLED. PROVIDE J-HOOKS, BRIDLE RINGS AND ASSOCIATED CABLE SUPPORTS TO KEEP INFRASTRUCTURE MANAGED AND OFF OF THE CEILING TILE.
- ELECTRICAL CONTRACTOR SHALL PROVIDE FIRESTOPPING AT ALL PENETRATIONS PER SPECIFICATION.

ELECTRICAL ABBREVIATIONS

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

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 THROUGHOUT 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.

GENERAL SYMBOLS

(B)	KEYNOTE
(XXX) X	EQUIPMENT IDENTIFICATION TAG. REFER TO EQUIPMENT CONNECTION SCHEDULE
(1) A/11	DETAIL DRAWING REFERENCE TAG. SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE

POWER SYMBOLS

⚡	DUPLEX RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED
⚡ ^G	DUPLEX GFCI RECEPTACLE, TAMPER-RESISTANT, WALL MOUNT +18", OR AS NOTED
⚡ ^{EMC}	DUPLEX RECEPTACLE, MOUNTED WITH WATER COOLER HOUSING, VERIFY HEIGHT. CONNECT TO GFCI CIRCUIT BREAKER OR REMOTE WALL DEVICE.
⚡	SPECIAL RECEPTACLE, WALL MOUNT +18", OR AS NOTED, REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE FOR RECEPTACLE TYPE
⚡	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
⚡	JUNCTION BOX, WITH PULL STRING, WALL OR CEILING 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
⚡	PANELBOARD - RECESSED IN WALL

FIRE DETECTION AND ALARM SYMBOLS

⚡	MANUAL FIRE ALARM PULL STATION
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL + EMERGENCY COMMUNICATIONS PANEL
⚡	HEAT DETECTOR
⚡	SMOKE DETECTOR
⚡	HORN
⚡	COMBINATION HORN WITH STROBE
⚡	COMBINATION SPEAKER WITH STROBE
⚡	STROBE

AV AND SURVEILLANCE SYMBOLS

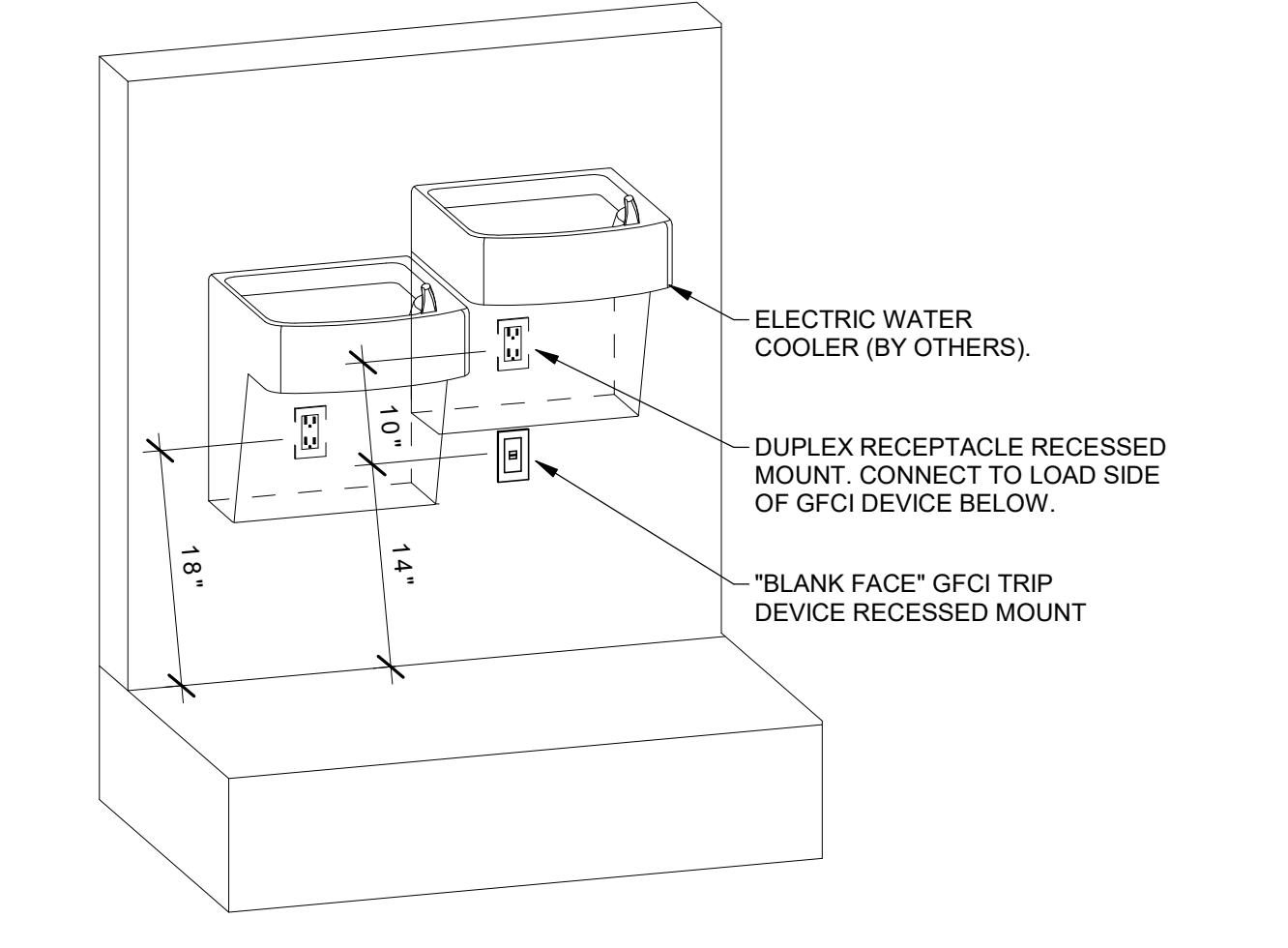
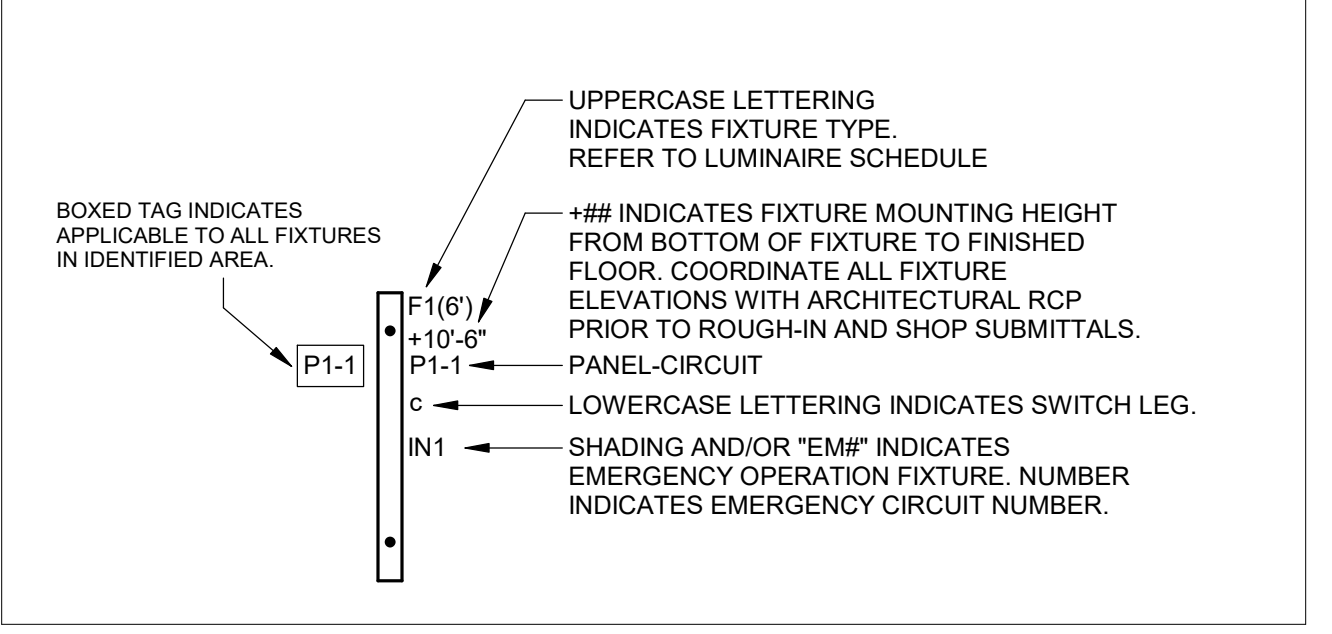
⚡	CCTV SECURITY CAMERA, CEILING MOUNTED, ROUGH-IN ONLY, DEVICE BY OWNER.
M	IP/VIDEO CORPORATION HALO SMART SENSOR V2.0, AUDIO/SMOKE MONITORING DEVICE, CEILING MOUNTED, ROUGH-IN ONLY, DEVICE BY OWNER.
S	CEILING MOUNTED SPEAKER ROUGH-IN, DEVICE BY OWNER.
S	WALL MOUNTED SPEAKER ROUGH-IN, DEVICE BY OWNER.

NOTE: ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT

LIGHTING SYMBOLS

⚡	RECESSED LIGHT FIXTURE, LETTER INDICATES SWITCH LEG (TYPICAL), SHADING INDICATES EMERGENCY LIGHT (TYPICAL)
⚡	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
⚡	EXIT SIGN, CEILING MOUNT, SHADED AREAS INDICATE NUMBER OF FACES, ARROWS INDICATE SIGN ARROWS
⚡	SINGLE POLE SWITCH, WALL MOUNT +46", OR AS NOTED, LETTER INDICATES SWITCH LEG
⚡	SINGLE POLE KEYED SWITCH SWITCH, WALL MOUNT +46", OR AS NOTED, LETTER INDICATES SWITCH LEG
⚡	THREE WAY SWITCH, WALL MOUNT +46", OR AS NOTED, LETTER INDICATES SWITCH LEG
⚡	OCCUPANCY SENSOR, WALL MOUNT +46" 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

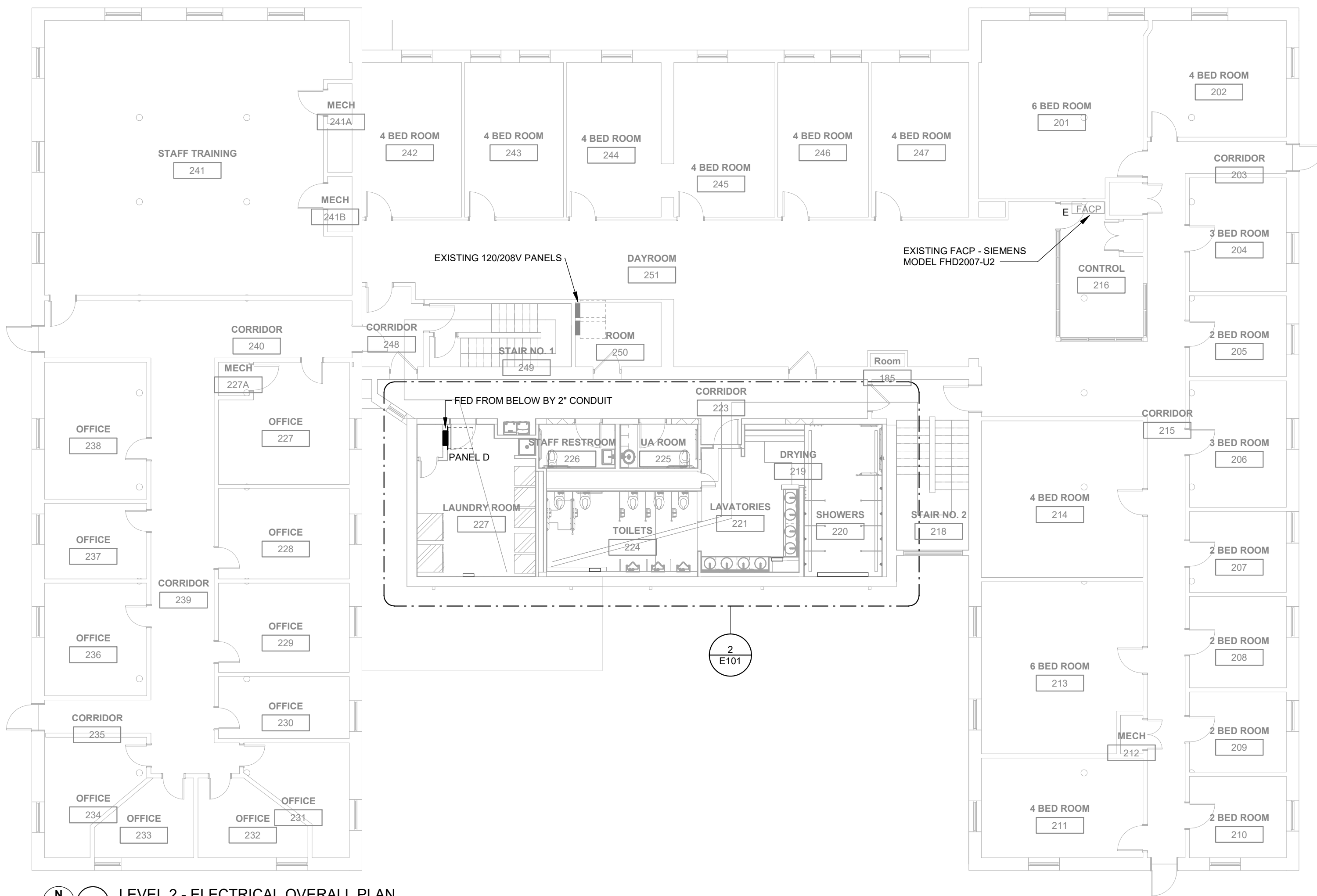
LIGHTING PLANS NOTATION KEY



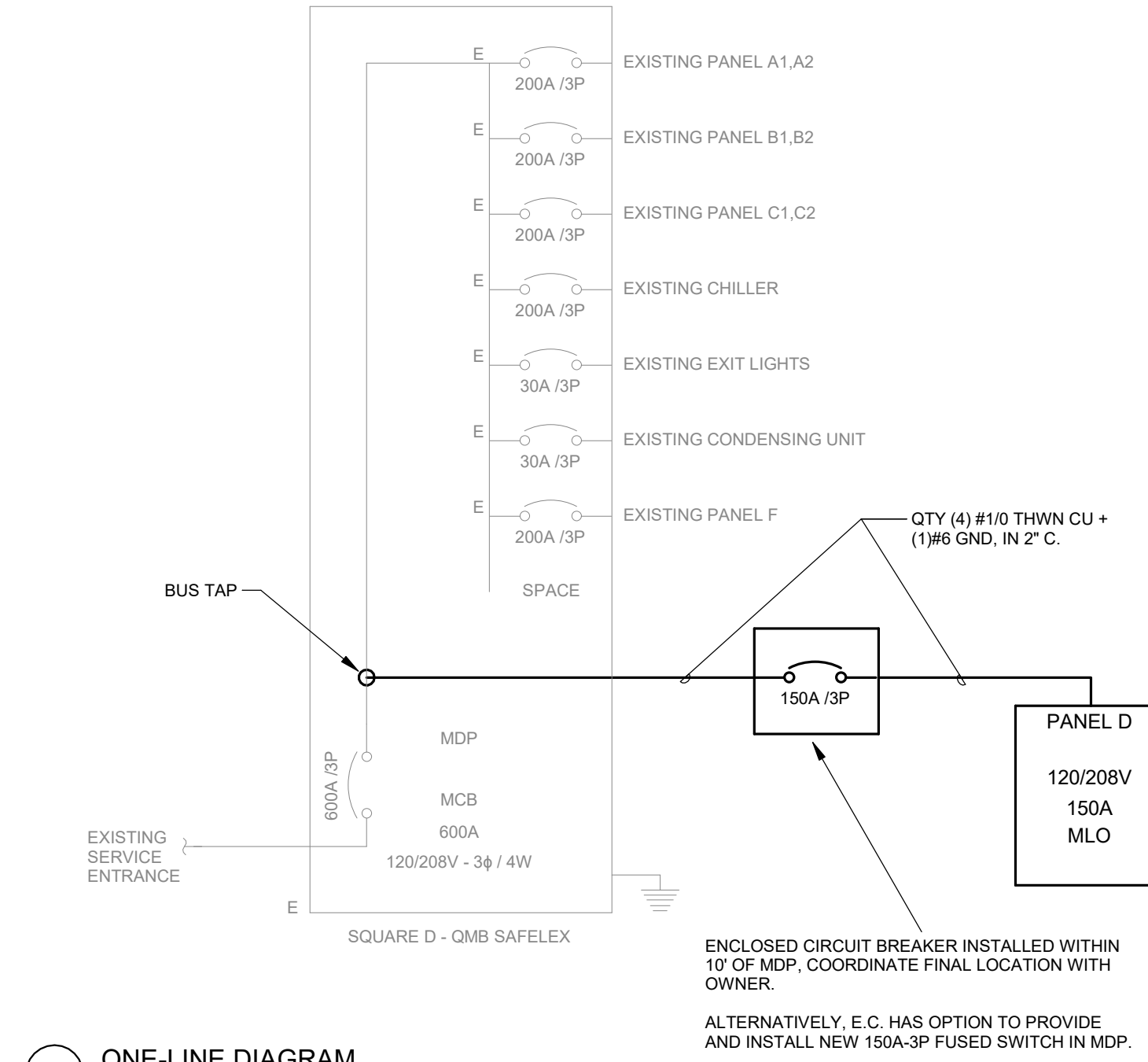
1 ELECTRIC WATER COOLER GFCI DETAIL, NOT TO SCALE

POWER GENERAL NOTES

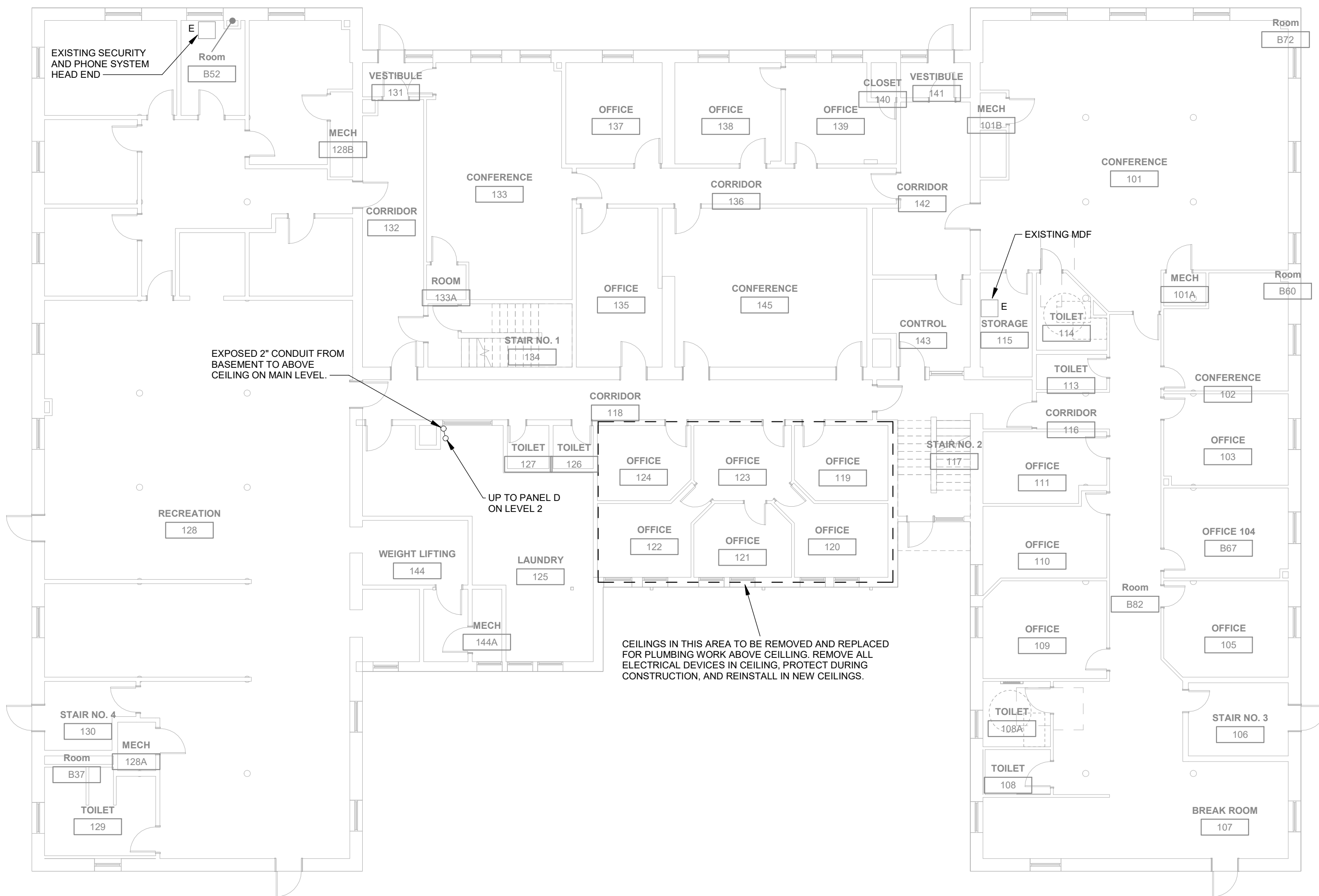
- A. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE 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.



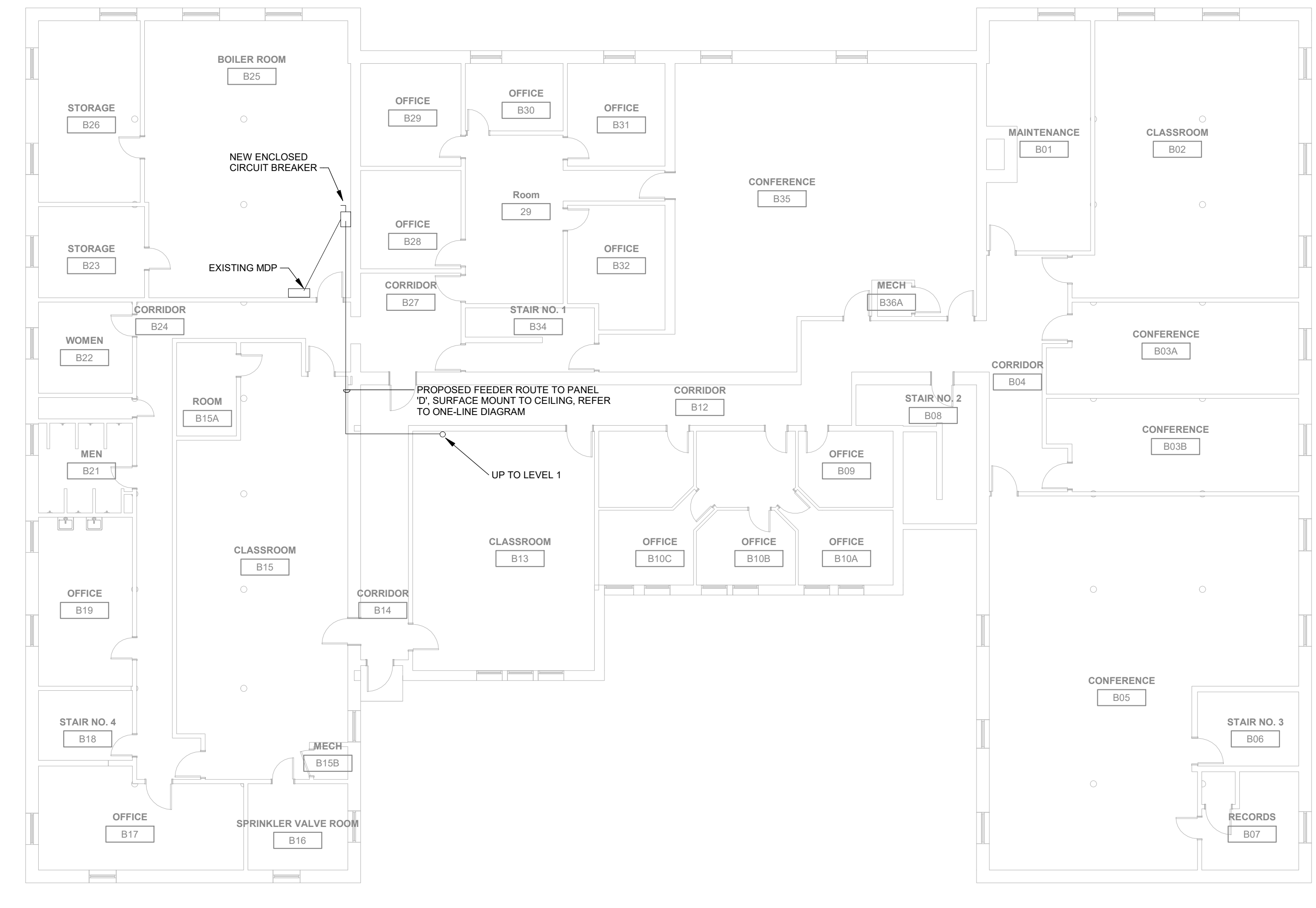
1 LEVEL 2 - ELECTRICAL OVERALL PLAN
1" = 10'-0"



4 ONE-LINE DIAGRAM



2 LEVEL 1 - ELECTRICAL OVERALL PLAN
1" = 10'-0"



3 LOWER LEVEL - ELECTRICAL OVERALL PLAN
1" = 10'-0"

Key Plan

Revision Description Date

OPN Project No.
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Sheet Issue Date
11/01/2024

Sheet Name
ELECTRICAL OVERALL PLANS

Sheet Number

ELECTRICAL DEMOLITION NOTES

- 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. WORK SHOULD BE 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.
- REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.
- 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 REMODELED 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.
- 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.
- 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.
- 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

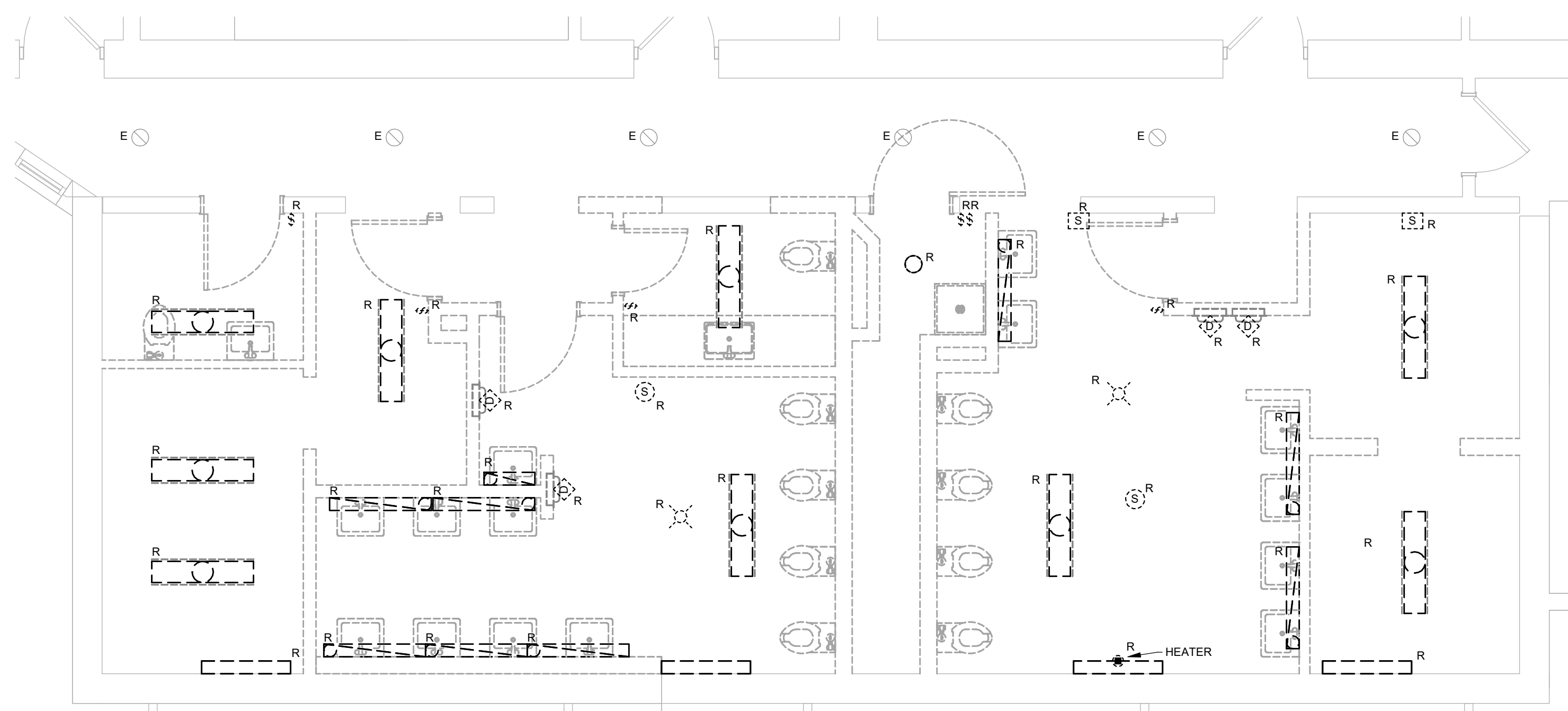
- COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT 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.
- COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH MECHANICAL CONTRACTOR AND FINAL MECHANICAL SHOP DRAWINGS.
- 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

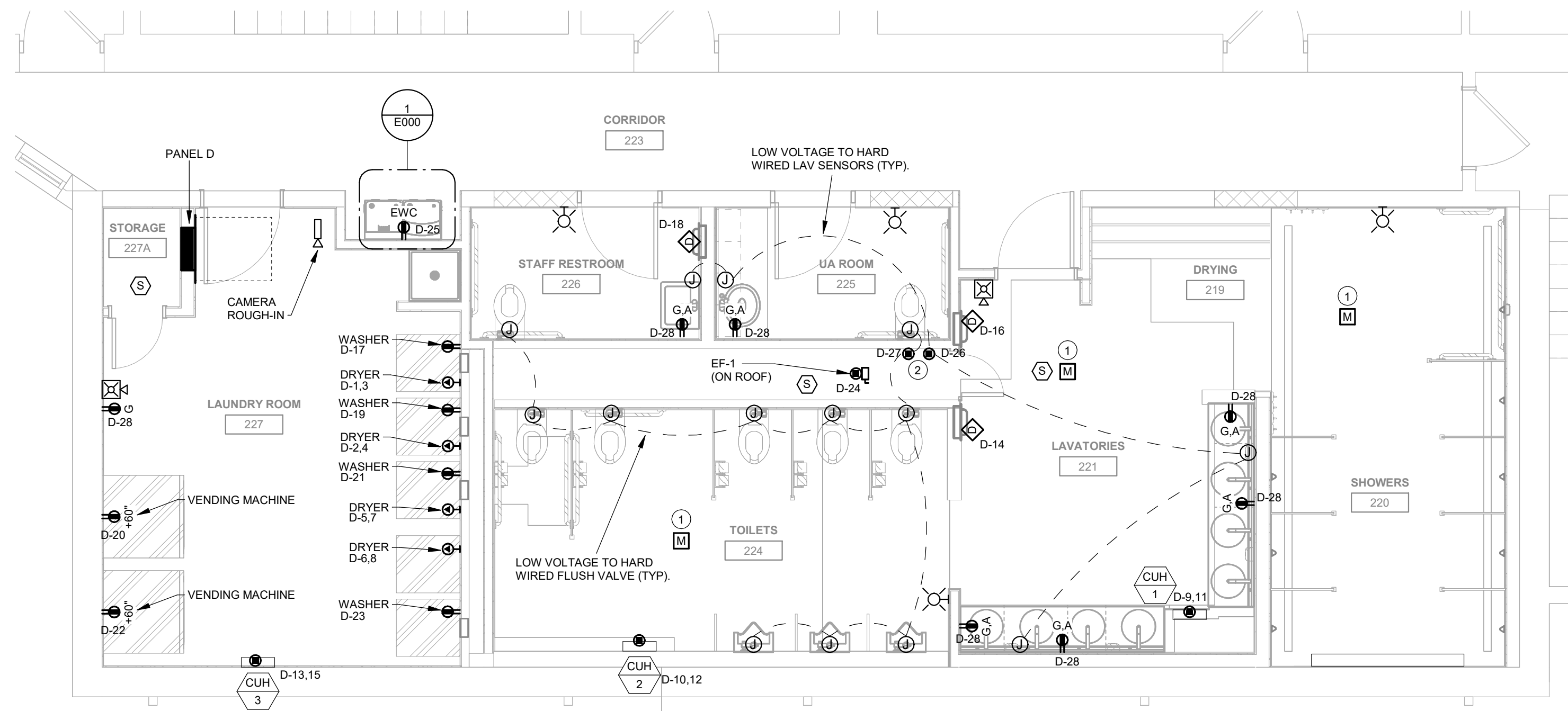
- COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

KEYNOTES

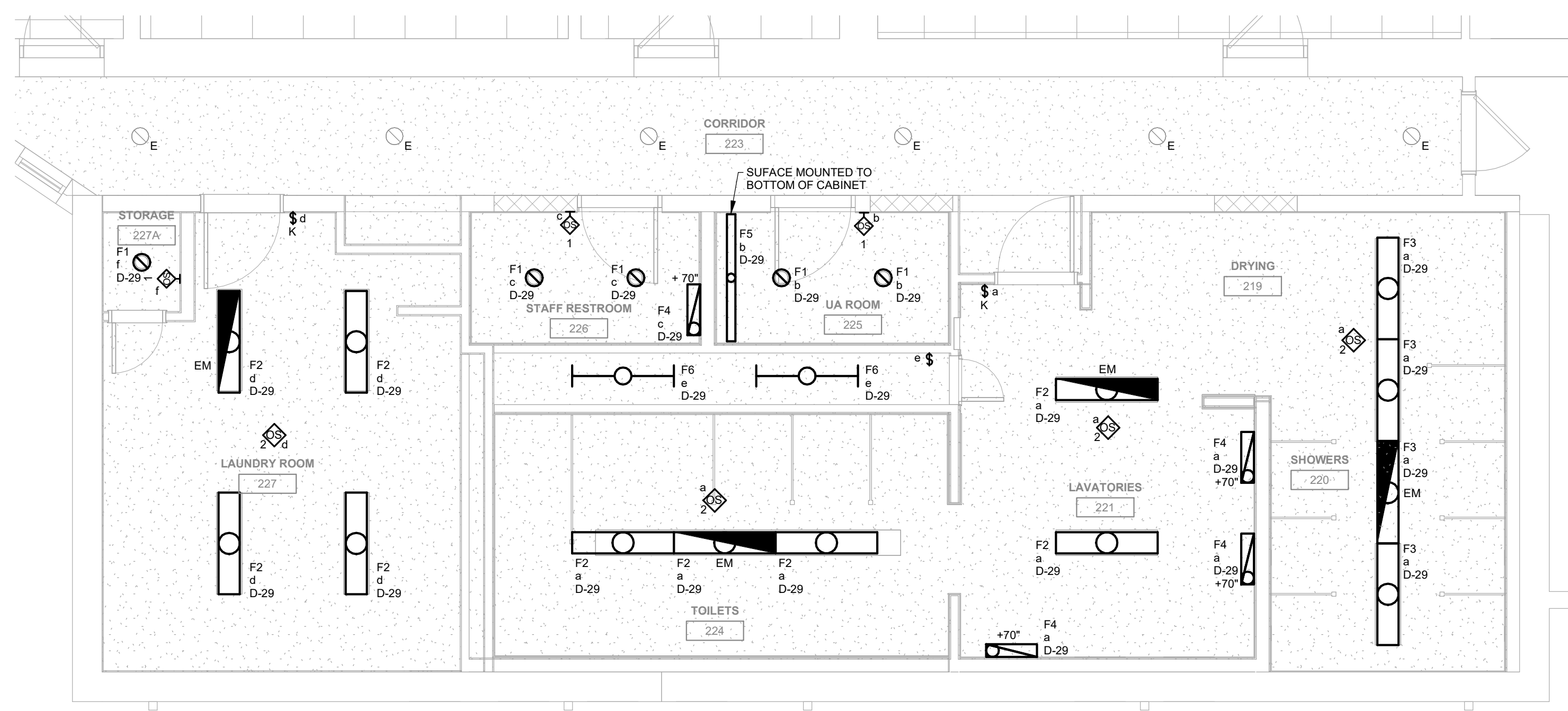
- ROUGH-IN FOR NEW CEILING MOUNTED HALO SMART SENSOR. PROVIDE FULL STRING TO ACCESSIBLE LOCATION. NEW DEVICE AND DATA CABLEING PROVIDED AND INSTALLED BY OWNER.
- LOW VOLTAGE POWER SUPPLIES FOR LAVATORY SENSORS AND FLUSH VALVES. MOUNT ON WALL IN ACCESSIBLE LOCATION. COORDINATE ELECTRICAL REQUIREMENTS WITH APPROVED EQUIPMENT. PROVIDE RECEPTACLES AS REQUIRED. CONNECT TO LOCAL 120V RECEPTACLE CIRCUIT.



1 LEVEL 2 CLIENT RESTROOM - ELECTRICAL DEMOLITION
1/4" = 1'-0"



2 LEVEL 2 CLIENT RESTROOM - POWER AND TECHNOLOGY
1/4" = 1'-0"



3 LEVEL 2 CLIENT RESTROOM - LIGHTING
1/4" = 1'-0"

Key Plan

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Sheet Name
ELECTRICAL PLANS

Sheet Number

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 ROUGH-IN.
 - 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 LUMINAIRE.
 - 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: ANDY V.

TYPE	MANUFACTURER	MODEL	DESCRIPTION	LUMENS	SOURCE-CCT	VOLTAGE	LOAD-VA	APPROVED EQUALS
F1	PRESCOLITE	LTR-4RD-H-SL-10L-DM1+LT R-4RD-T-SL-40K-8-WD-SS-W T	RECESSED 4" DIA DOWNLIGHT, SEMI-SPECULAR REFLECTOR, 60 DEGREE DISTRIBUTION SELF-FLANGED, DAMP LOCATION	1000	LED - 4000K	120 V	12 VA	GOTHAM, ELCO, PORTOFLO, LIGHTOLIER, AS APPROVED BY ENGINEER
F2	KENALL	MHLA12-48-F-LG-CP-1-45L4 0K-DCC-1-DV-L-EL	SURFACE MOUNTED FIXTURE - VANDAL RESISTANT, PROVIDE WITH INTEGRAL 8.4W EMERGENCY BATTERY BACKUP WHERE NOTED BY "EM", 10 YEAR WARRANTY.	5000	LED - 4000K	120 V	50 VA	LUMINAIRE LED, FAIL-SAFE, AS APPROVED BY ENGINEER
F3	KENALL	N1048-P-1-45L40K-DCC-1-D V-SA-LEL	WET LOCATION, LED VANDAL RESISTANT SURFACE MOUNTED STRIP FIXTURE, 10"x48", HIGH IMPACT, 1/2" POLYCARBONATE LENS, GASKETED, TORX FASTENERS, PROVIDE WITH INTEGRAL 8.4W EMERGENCY BATTERY BACKUP WHERE NOTED BY "EM", 10 YEAR WARRANTY.	5000	LED - 4000K	120 V	48 VA	LUMINAIRE LED, AS APPROVED BY ENGINEER
F4	KENALL	MLHA5-2-F-MW-CP-1-25L40 K-D-CC-1-QV	WALL MOUNTED VANITY LIGHT MOUNTED ABOVE MIRROR, 6" WIDE BY 24" LENGTH, DIE CAST ALUMINUM HOUSING, IMPACT RESISTANT POLYCARBONATE LENS, TAMPER RESISTANT TORX SCREWS, PROVIDE WITH 10 YEAR WARRANTY.	2500	LED - 4000K	120 V	25 VA	LUMINAIRE LED, FAIL-SAFE, AS APPROVED BY ENGINEER
F5	LUMINI	KS-60"-72SO-40K-F-FC-WH- B-1	SURFACE MOUNTED UNDERCABINET LIGHT, 5' LENGTH, 0.69" WIDE, FROSTED LENS, FIXED CLIP MOUNTING, 72" WIRE LEAD, INSTALL REMOTE DRIVER ABOVE ACCESSIBLE CEILING.	1580	LED - 4000K	120 V	15 VA	CORE, KELVIX, KLUS, AS APPROVED BY ENGINEER
F6	WILLIAMS	75L-4-L50/840-A12125-DRV- UNV	INDUSTRIAL LINEAR SUSPENDED LED WITH ADJUSTABLE CABLE SUSPENSION, COORDINATE FINAL MOUNTING HEIGHT WITH OWNER, 5,000 LUMEN, 40K, 80 CRI.	5000	LED - 4000K	120 V	40 VA	METALLUX, LITHONIA, DAY-BRITE, MERCURY LIGHTING, COLUMBIA, 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.
 - ETD'S 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:

LAUNDRY ROOM AND LARGE RESTROOM	SENSORS PROGRAMMED FOR OCCUPANCY MODE, AUTOMATIC ON/OFF OPERATION, 20 MINUTES MINIMUM, 30 MINUTES MAXIMUM. DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR.
ALL OTHER SPACES	SENSORS PROGRAMMED FOR VACANCY MODE, MANUAL ON/AUTOMATIC OFF OPERATION 20 MINUTES MINIMUM, 30 MINUTES MAXIMUM. DIMMING CONTROL OF FIXTURES WITHIN DAYLIGHT ZONES SHALL BE BY ALWAYS ON DAYLIGHT SENSOR.

DESIGNED BY: ANDY V.

TYPE	DESCRIPTION	ELECTRICAL	MOUNTING	SENSOR TYPE	COVERAGE	APPROVED MANUFACTURERS
OS 1	WALL SWITCH OCCUPANCY SENSOR, DEVICE FINISH MATCHING WIRING DEVICES SPEC. RATED FOR MIN 1/8 HP MOTOR, INTEGRAL AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION, 8-30 MINUTE TIMER SETTINGS.	120V	WALL SWITCH/ SINGLE GANG	DUAL-TECH	1000 SQ FT / 180 DEG	HUBBELL, CRESTRON, ACUITY, WATTSTOPPER, GREENGATE, AS APPROVED BY ENGINEER.
OS 2	CEILING MOUNTED OCCUPANCY/VACANCY SENSOR, WHITE FINISH, AUTOMATIC SELF-ADAPTIVE COVERAGE THRESHOLD AND FALSE ON/FALSE OFF CORRECTION, 8-30 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... |
| 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		ELECTRICAL CHARACTERISTICS			DISCONNECT			CONTROLS		REMARKS
	VOLTAGE	PHASE	MOTOR HP	KW	MCA	TYPE	SIZE (AMPS)	NEMA RATING	FUSE SIZE (AMPS)	STARTER DESCRIPTION	
CUH-1	208 V	1	2			INT				-	
CUH-2	208 V	1	2			INT				-	
CUH-3	208 V	1	2			INT				-	
EF-1	120 V	1	1/2			TS	20	1	15	-	FAN TO RUN CONTINUOUSLY, POWER MOTORIZED DAMPER TO OPEN/CLOSE WITH FAN START OR STOP.

BRANCH PANEL: D												
LOCATION: LAUNDRY ROOM 227			VOLTAGE: 120/208 WYE			SCCR RATING: 10,000A						
SUPPLY FROM: MDP			PHASES: 3			MAINS TYPE: MLO						
MOUNTING: RECESSED			WIRES: 4			MAINS RATING: 150 A						
ENCLOSURE: TYPE 1												
NOTES:												
CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	C	CKT NO	AMP	P	CIRCUIT DESCRIPTION		
DRYER 1	2	G 30 A	1	2495	2495		2	30 A	G	DRYER 2		
			3		2495	2495	4					
DRYER 3	2	G 30 A	5			2495	2495	6	30 A	G	DRYER 4	
			7	2495	2495			8				
CUH-1	2	15 A	9		1000	1000		10	15 A	2	CUH-2	
			11			1000	1000	12				
CUH-3	2	15 A	13	1000	1500			14	20 A	1	HAND DRYER 1	
			15		1000	1500		16	20 A	1	HAND DRYER 2	
WASHER 1	1	G 20 A	17			670	1500	18	20 A	1	HAND DRYER 226	
WASHER 2	1	G 20 A	19	670	500			20	20 A	G	VENDING 1	
WASHER 3	1	G 20 A	21		670	500		22	20 A	G	VENDING 2	
WASHER 4	1	G 20 A	23			670	1176	24	20 A	1	EXHAUST FAN 1	
ELECTRIC WATER COOLER	1	20 A	25	500	20			26	20 A	1	LABATORY SENSORS	
FLUSH SENSORS	1	20 A	27		4	1260		28	20 A	1	CONVENIENCE RECEPTACLES	
LIGHTING	1	20 A	29				897	0	30	20 A	--	SPARE
SPARE	1	-- 20 A	31	0	0			32	20 A	--	1	SPARE
SPARE	1	-- 20 A	33		0	0		34	20 A	--	1	SPARE
SPARE	1	-- 20 A	35			0	0	36	20 A	--	1	SPARE
SPACE	1	--	37	--	--			38	--	--	1	SPACE
SPACE	1	--	39	--	--			40	--	--	1	SPACE
SPACE	1	--	41	--	--			42	--	--	1	SPACE
				14,170 VA	11,924 VA	11,903 VA						
				118 A	99 A	99 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
LIGHTING	897 VA	125.00%	1,121 VA	
Other	0 VA	0.00%	0 VA	TOTAL CONN. LOAD: 37,997 VA
POWER	7,203 VA	100.00%	7,203 VA	TOTAL EST. DEMAND: 28,271 VA
RECEPTACLE	29,900 VA	66.72%	19,950 VA	TOTAL CONN.: 105 A
				TOTAL EST. DEMAND: 78 A

LEGEND:
"G" INDICATES GFCI TYPE BREAKER, "L" INDICATES PROVIDE LOCKABLE HASP
"P" INDICATES RED LOCK-ON HASP