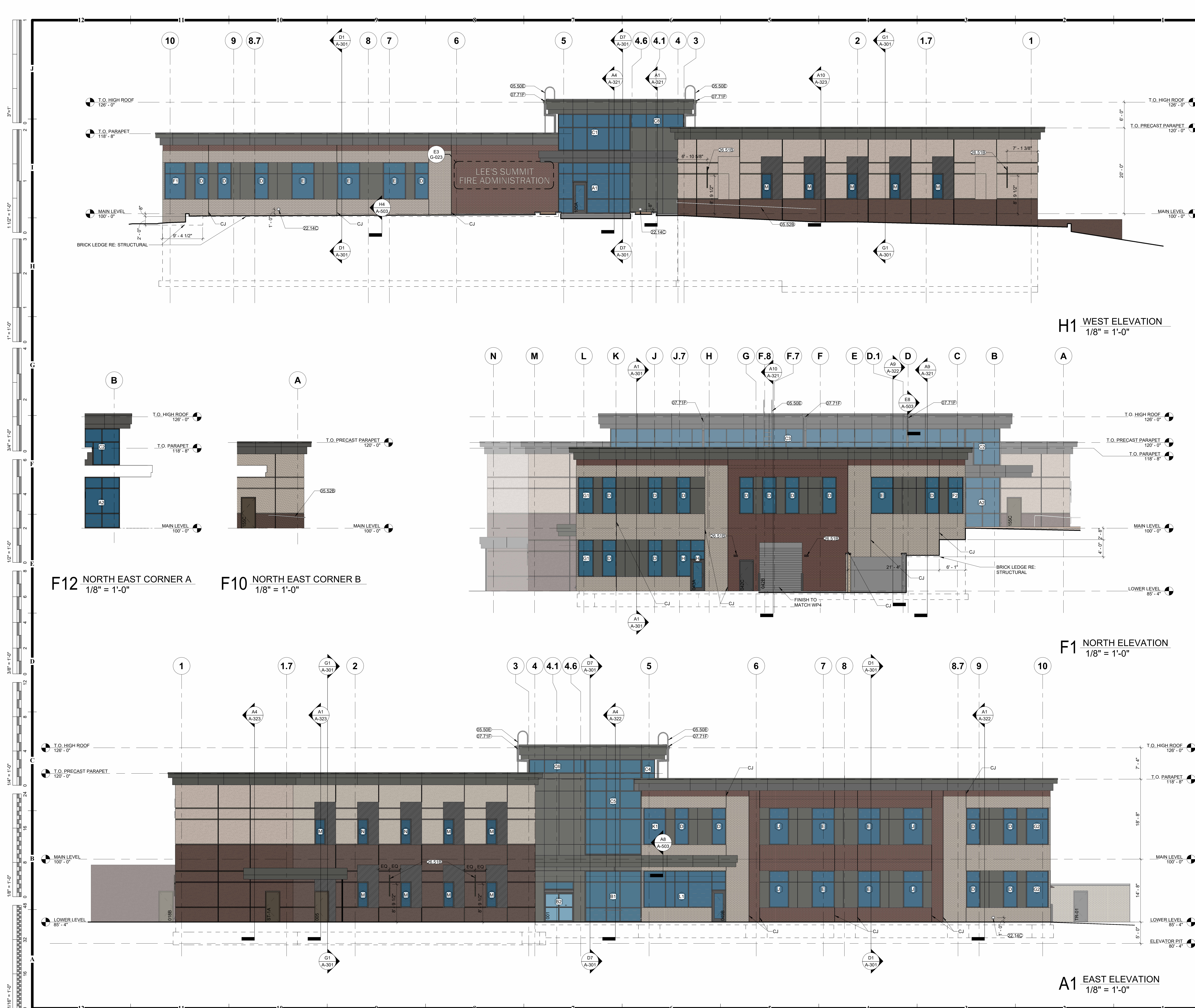




- GENERAL NOTES - EXTERIOR ELEVATIONS:**
- RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
 - DIMENSIONS SHOWN ON THE EXTERIOR ELEVATIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FCW), AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
 - RE: THE WINDOW TYPES SHEET FOR ALL EXTERIOR WINDOW TYPES AND GLASS TYPES.
 - ALL EXPOSED STEEL INCLUDING COLUMNS AND LINTELS TO BE PAINTED WP4.
 - ALL SEALANT JOINTS TO MATCH ADJACENT FINISH, TYP.
 - ALL EXTERIOR DOORS TO BE PAINTED WP4.
 - METAL COPINGS TO MATCH METAL PANEL.

MATERIAL KEYNOTES	
05.50E	METAL LADDERS
05.52B	STAINLESS STEEL PIPE/ TUBE RAILING
07.71F	PREFINISHED METAL SCUPPER BOX
22.14C	LAMBS TONGUE
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL

EXTERIOR ELEVATION MATERIALS	
	BRICK - RUNNING BOND - ENDICOTT - COLOR MEDIUM IRONSPOT 46 VELOUR
	BRICK - RUNNING BOND - INTERSTATE BRICK - COLOR ASH
	PRECAST PANEL, COLOR TAN, ACID ETCH FINISH (USE WHITE PORTLAND CEMENT)
	PRECAST PANEL, COLOR MEDIUM BROWN, HEAVY RETARDANT FINISH
	PRECAST PANEL WITH COLOR TREATMENT, LIGHT SANDBLAST FINISH, COLOR NWN004 CHARCOAL
	IGU - BOD: VIRACON VRE26-38
	COMPOSITE METAL PANEL, COLOR SUNSHINE GRAY
	MODULAR BLOCK RETAINING WALL

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REVISION DATES:

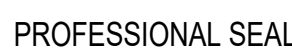


PROFESSIONAL SEAL
A-201
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

EXTERIOR ELEVATIONS



LEE'S SUMMIT, MISSOURI 64086

[illegible]

A-251

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

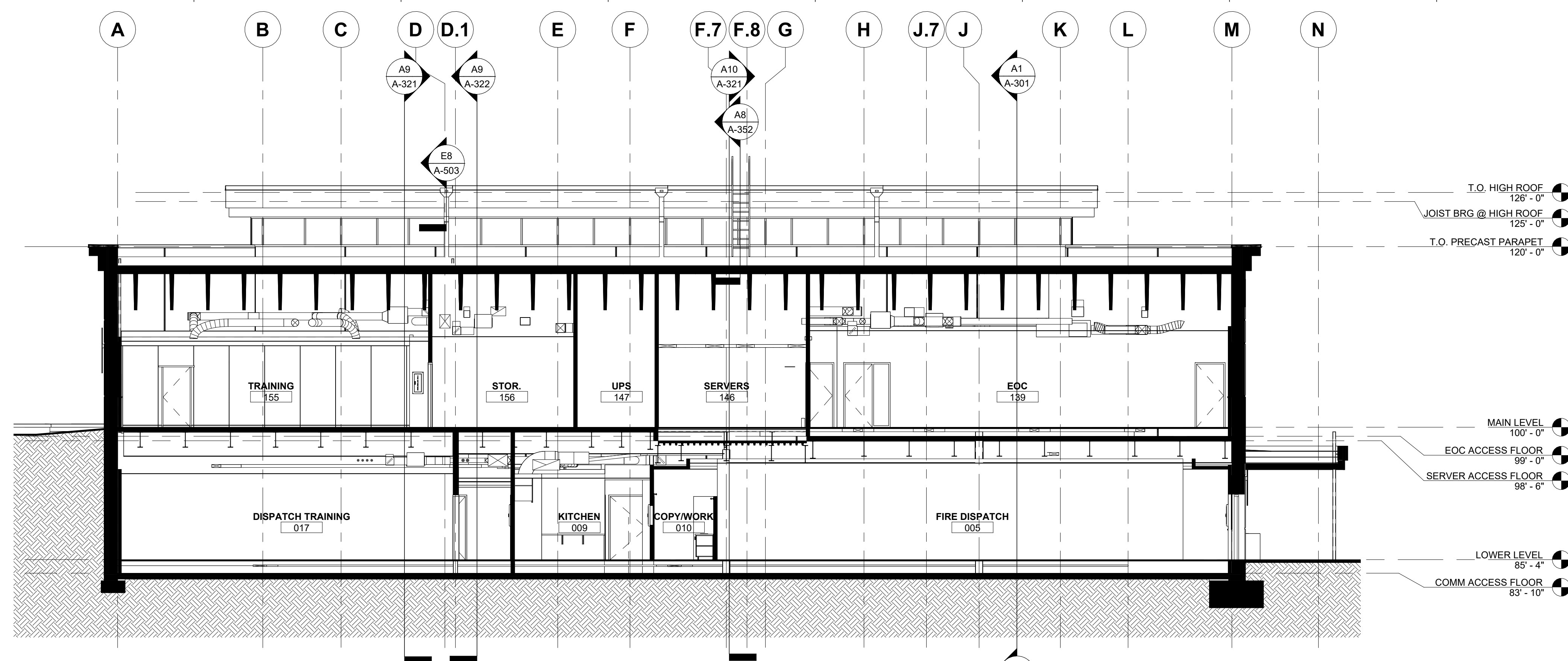
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ALL WINDOW TYPES ARE ALUMINUM STOREFRONT, UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE TO ROUGH OPENING AND TO TOP OR BOTTOM OF MULLION, UNLESS NOTED OR SHOWN OTHERWISE.
4. ALL OPENINGS ARE TO BE FIELD VERIFIED, AND NOTED AS SUCH ON SHOP DRAWINGS, PRIOR TO ARCHITECT'S REVIEW.
5. GLAZING DOORS, ADJACENT PANELS AND ALL GLAZED OPENINGS WITHIN 1'-6" OF THE FLOOR AND WITHIN A 24-INCH ARC OF EITHER VERTICAL EDGE OF A DOOR, ETC., SHALL BE SAFETY GLAZING AS APPROVED FOR IMPACT BY APPLICABLE BUILDING CODES, AND SHALL BE LABELED AS SUCH.

MATERIAL KEYNOTES	
05.50E	METAL LADDERS

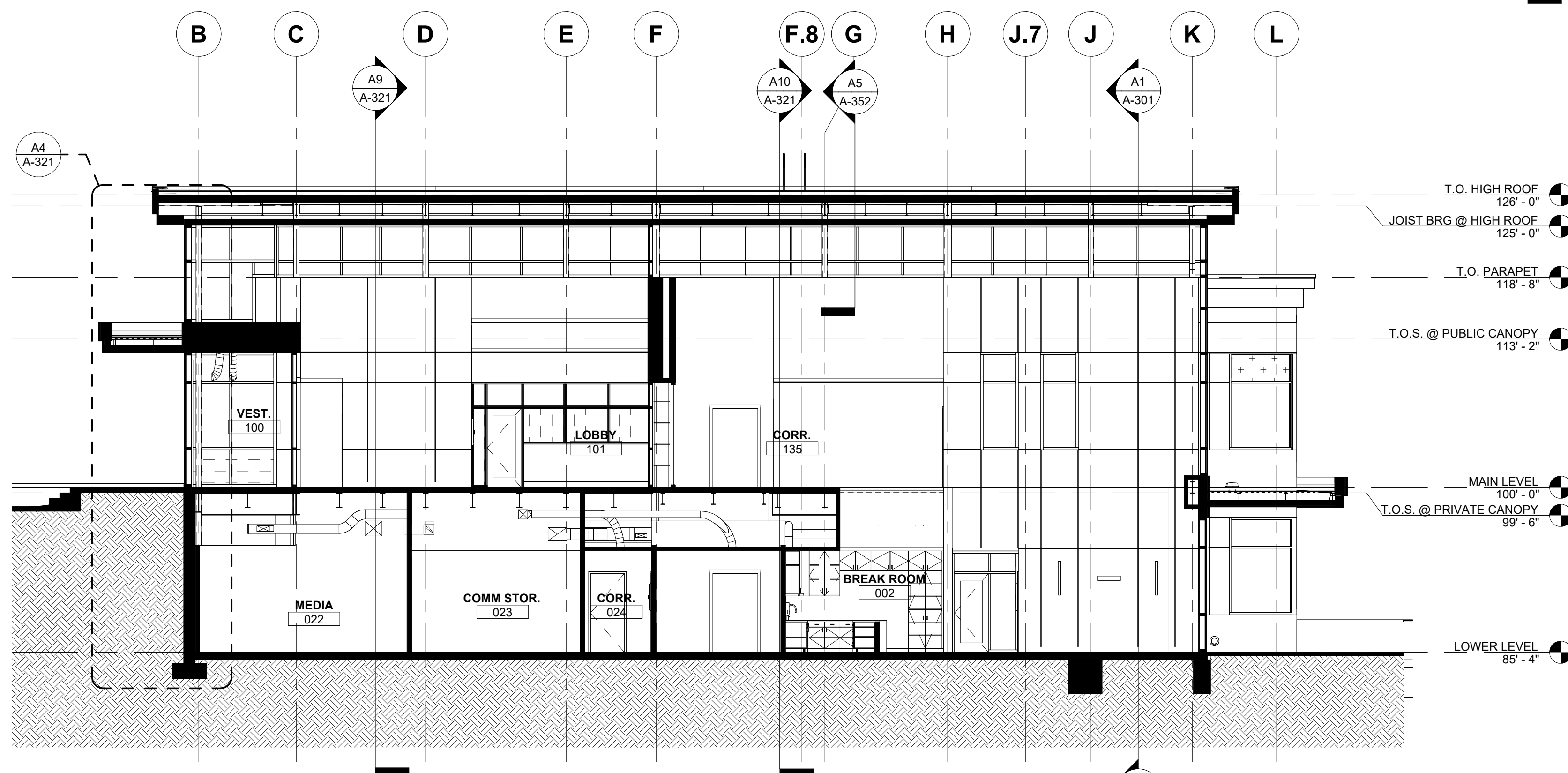


EXTERIOR WINDOW TYPES

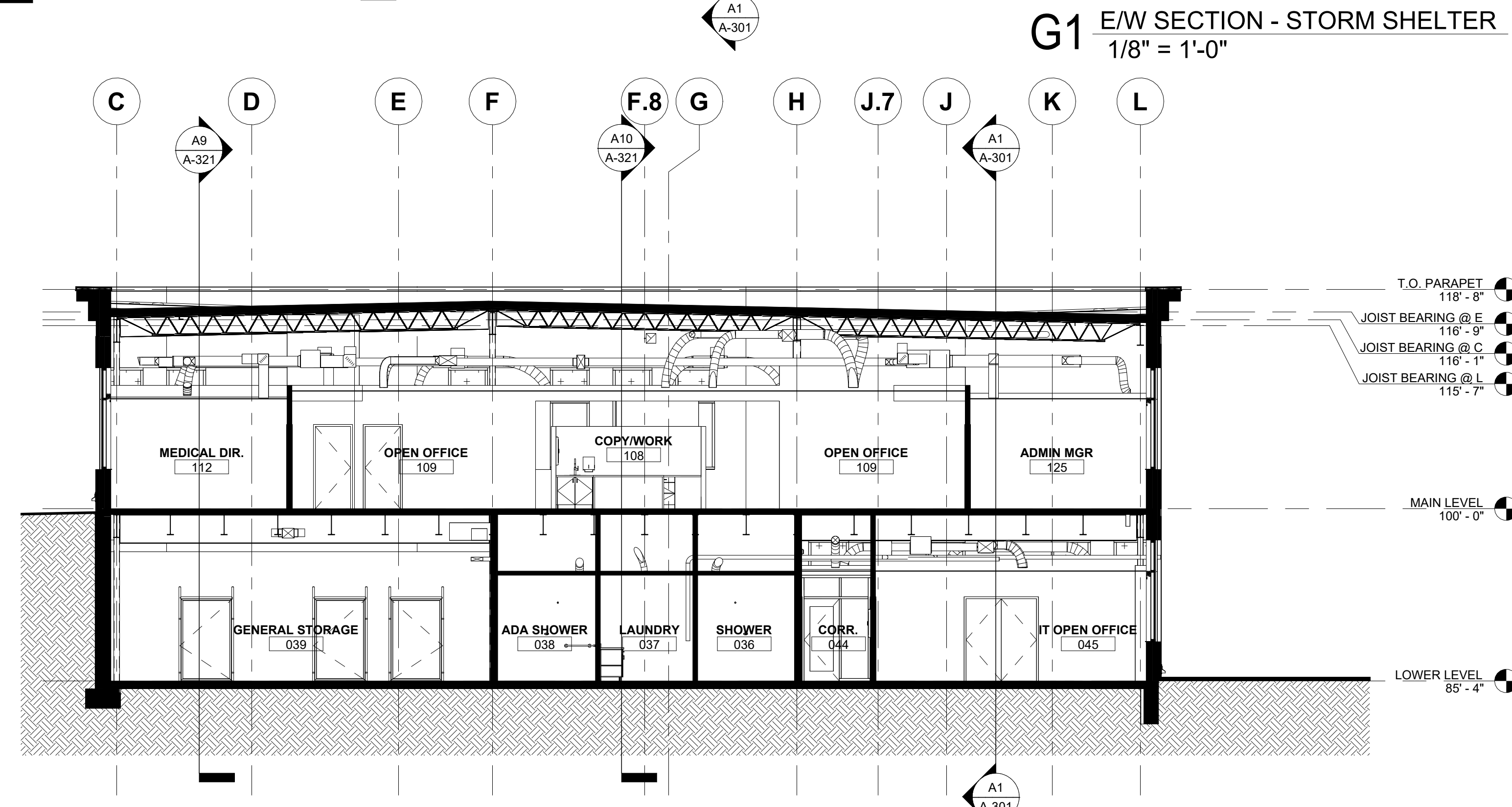
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL FACE OR MASS (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)



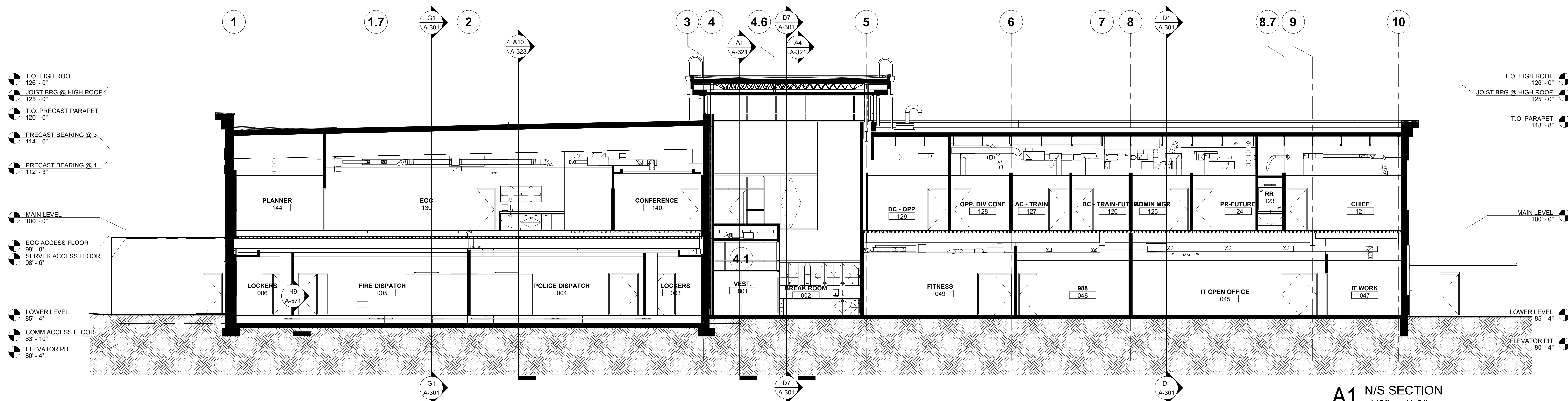
G1 E/W SECTION - STORM SHELTER
1/8" = 1'-0"



D7 $\frac{\text{E/W SECTION -}}{1/8" = 1'-0"}$



D1 E/W SECTION - FIRE ADMIN
1/8" = 1'-0"



A1 $\frac{\text{N/S SECTION}}{1/8" = 1'-0"}$

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LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:



PROFESSIONAL SEAL

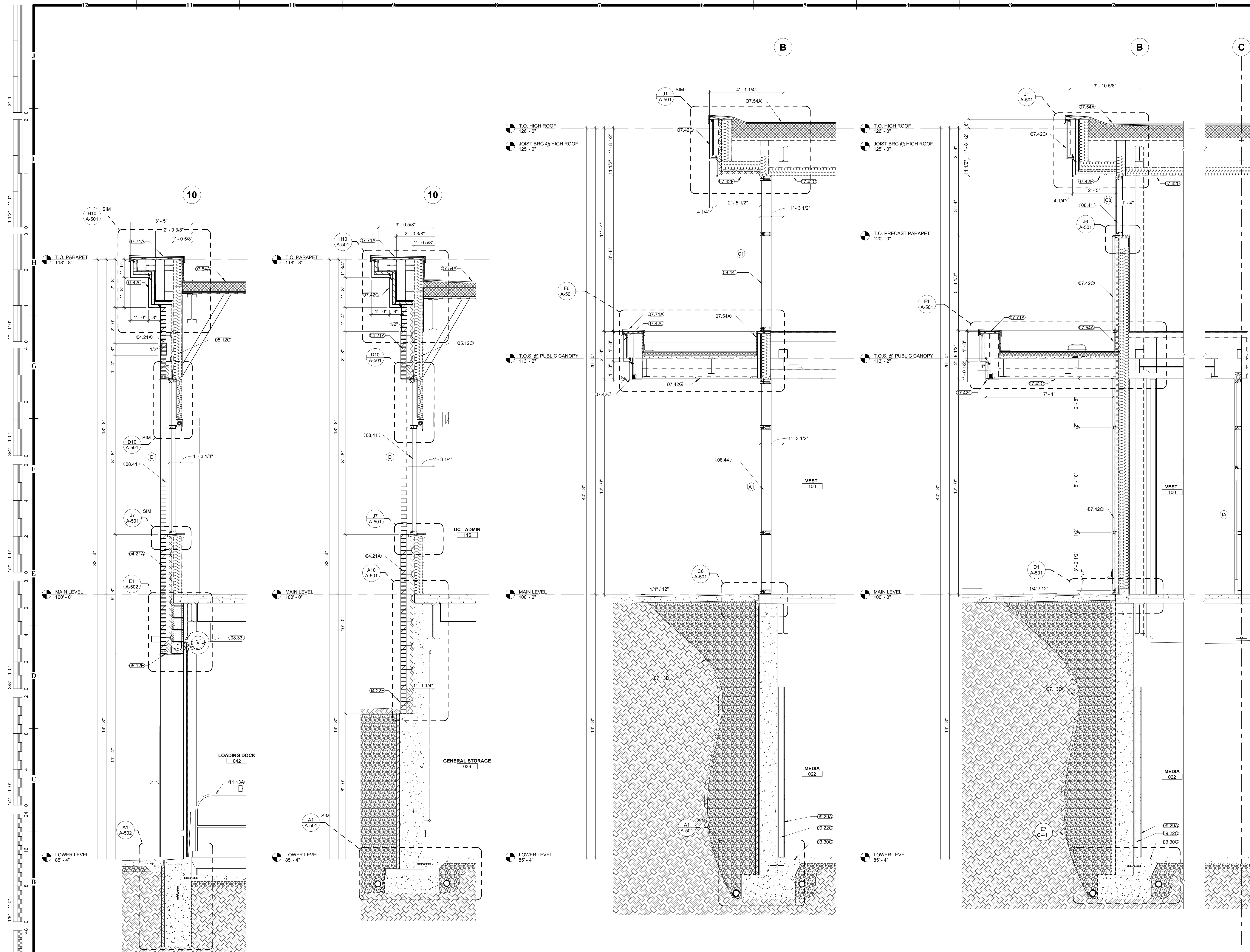
A-321
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER # 138191

WALL SECTIONS

- GENERAL NOTES - EXTERIOR WALL SECTIONS/ DETAILS:**
- RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
 - RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
 - ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
 - DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
 - PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
04.21A	FACE BRICK
04.22F	THROUGH-WALL MEMBRANE FLASHING WITH METAL DRIP EDGE
05.12C	STEEL CHANNEL
05.12E	STEEL PLATE
07.13D	FILTER FABRIC
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42F	METAL WOOD LOOK SOFFIT PANELS
07.42G	METAL WOOD LOOK SOFFIT PANEL - VENTED
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.71A	PREFINISHED METAL COPING & CONT. CLEAT
08.33	OVERHEAD COILING DOOR - RE: DOOR SCHEDULE
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.29A	INTERIOR 5/8-INCH GYP. BD. REF. WALL TYPES
11.13A	LOADING DOCK LIFT



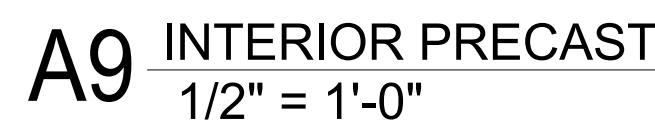
A10 FIRE ADMINISTRATION @ LOADING DOCK
1/2" = 1'-0"

A9 FIRE ADMINISTRATION @ FOUNDATION
1/2" = 1'-0"

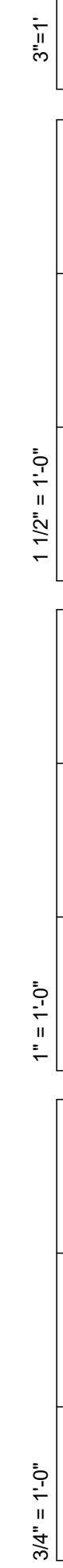
A4 LOBBY @ CURTAIN WALL
1/2" = 1'-0"

A1 LOBBY @ METAL PANEL
1/2" = 1'-0"

03.30C	PRECAST SLAB-ON-GRADE
03.45A	CONCRETE ARCHITECTURAL CONCRETE
04.20B	CONCRETE MASONRY UNIT (CMU) - 3/8"
04.21A	FACE BRICK
05.31B	COMPOSITE FLOOR DECK
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.71	PERFISHED METAL COPING & CONT. CLEAT
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
08.44B	CURTAIN WALL SLIP CONNECTION
09.52	5/8" X 16" X 16" X 16" 16-INCHES O.D.
09.22H	7/8-INCH TID RIGID CHANNEL
27.9A	INTERIOR 5/8-INCH GYP. BD. REF. WALL TYPES
09.29E	INTERIOR 5/8-INCH GYP. BD., EXTENDS TO TOP OF ROOF OR FLOOR ASSEMBLY, REF. WALL SCHEDULE
26.51B	EXTERIOR LIGHT FIXTURE REE. ELECTRICAL



MATERIAL KEYNOTES	
03.30C	CONCRETE SLAB-ON-GRADE
03.30K	UNDER-SLAB VAPOR RETARDER
03.30L	PVC WATER STOP
04.20D	CONCRETE MASONRY UNIT (CMU) - 7 5/8 INCH
04.20Q	CONCRETE MASONRY UNIT (CMU) BOND BEAM (GRADED FULL)
05.12G	STEEL BENT PLATE
05.31B	COMPOSITE FLOOR DECK
05.50E	METAL LADDERS
07.52A	STEEL PIPE/TUBE RAILING
07.53A	SLAB-ADHERING SHEET WATERPROOFING MEMBRANE
07.17B	COMPOSITE HDPE/ BENTONITE-POLYMER WATERPROOFING MEMBRANE
09.22C	3 INCH/INCH METAL STUDS @ 16-INCHES S O C.
09.29A	INTERIOR 5/8-INCH GYP. BD. REF. WALL TYPES
14.24C	ELEVATOR SILL
31.20B	GRANULAR FILL
33.4E	FOUNDATION DRAINAGE

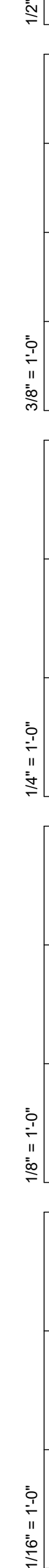


F7 STAIR ST-1 SECTION A
1/4" = 1'-0"



F4 EL-1 SECTION B
1/4" = 1'-0"

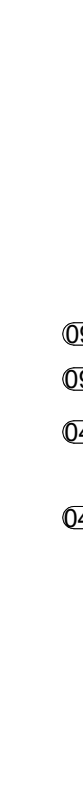
F1 EL-1 SECTION A
1/4" = 1'-0"



 **A8** LOWER LEVEL ST-1
1/4" = 1'-0"



C6 ELEVATOR THRESHOLD AT CMU
1 1/2" = 1'-0"



C4 ELEVATOR HEAD DETAIL @ CMU
1 1/2" = 1'-0"

A6 ELEVATOR THRESHOLD AT CONCRETE
1 1/2" = 1'-0"



 **A4** MAIN LEVEL EL-1
1/4" = 1'-0"



 NORTH

C1 LOWER LEVEL EL-1
1/4" = 1'-0"

 **A1** PIT LEVEL EL-1
1/4" = 1'-0"

PACKAGE 2: CONSTRUCTION SET

LEE'S SUMMIT MISSOURI 64086

REVISION DATES:



PROFESSIONAL SEAL

A-352

ISSUE DATE: NOVEMBER 1, 2011
HOEFER WELKER #: 138

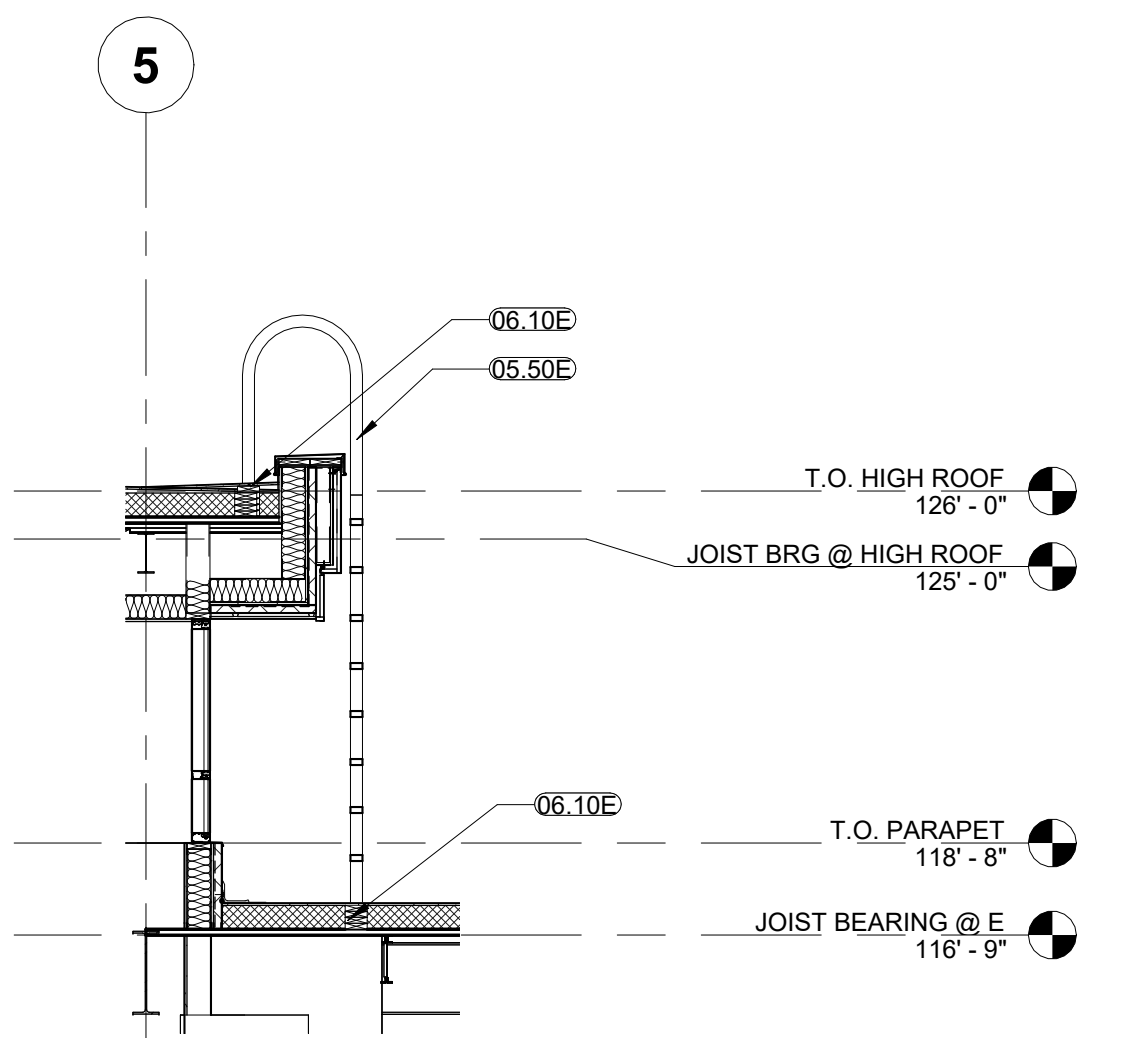
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE
2. TO THE FACE OF EXISTING 12" DIA. 10'0" CIVIL ELEVATION 102.047
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF EXISTING 10'0" DIA. FACE OF CONCRETE WALLS (FOC), AND THE FINISH LINES, UNLESS NOTED OR SHOWN OTHERWISE
4. FOR METAL STUD CONSTRUCTION
5. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD/ WALL (FOG), UNLESS NOTED OR SHOWN OTHERWISE
6. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS
7. DIMENSIONS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL
8. FINISH WALL TO OUTSIDE FACE OF DOOR FRAME - HINGE SIDE, ALWAYS ALLOWING A MINIMUM OF 6" FROM THE HINGE SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL, OR OTHER OBJECT
9. ALL CLOSETS AND ALCOVES WITHOUT A WALL IDENTIFICATION NUMBER SHALL BE IDENTIFIED BY FINISH LINE AND ADJOINING SPACES
10. ALL INTERIOR SPACES, THE WALLS WILL BE FINISHED WITH 5/8" GYP. BD. TO A LEVEL 4 FINISH AND PAINTED, UNLESS NOTED OR SHOWN OTHERWISE
11. RE: FINISH LEGEND, AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES
12. ALL INTERIOR COLUMNS INCLUDING COLUMNS TO BE PAINTED WP4

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS
3. WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOW), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL JOISTS, ETC. (JTP).

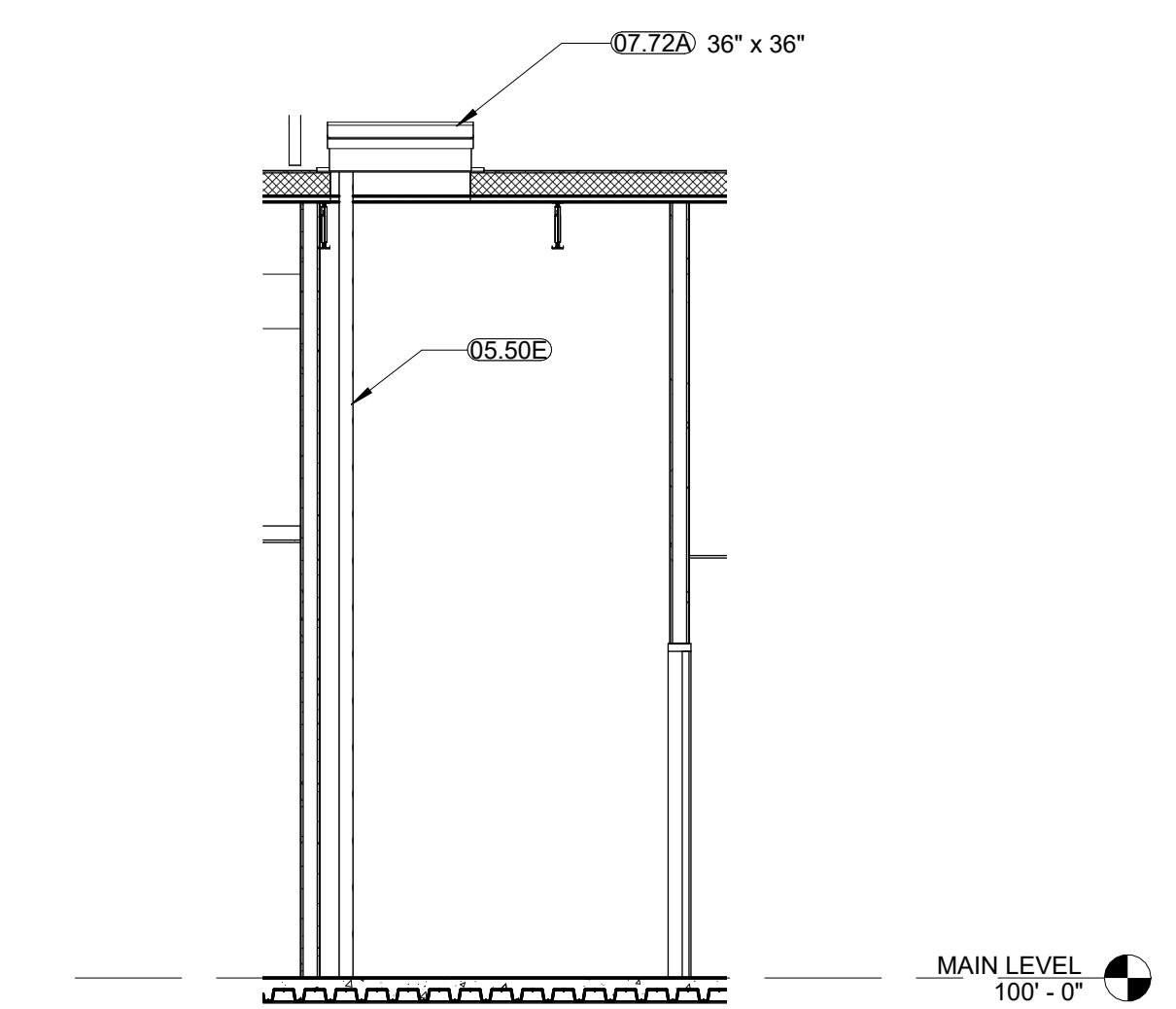
MATERIAL KEYNOTES	
03.30C	CONCRETE SLAB-ON-GRADE
03.30D	CONCRETE FLOOR
03.30K	UNDER-SLAB VAPOR RETARDER
05.12E	STEEL PLATE
05.12F	STEEL TUBE
05.12G	STEEL BENT PLATE
05.12H	STEEL EMBED ANGLE/PLATE
05.50E	METAL LADDERS
05.52B	STAINLESS STEEL PIPE/ TUBE RAILING
06.10E	WOOD BLOCKING, AS REQUIRED
07.72A	ROOF HATCH 36" X 36"
07.92C	BACKER ROOF AND SEALANT
09.22C	1/8"-INCH METAL STUDS @ 16-INCHES O.C.
09.29A	INTERIOR 5/8-INCH GYP. BD. REF. WALL TYPES
31.20B	GRANULAR FILL



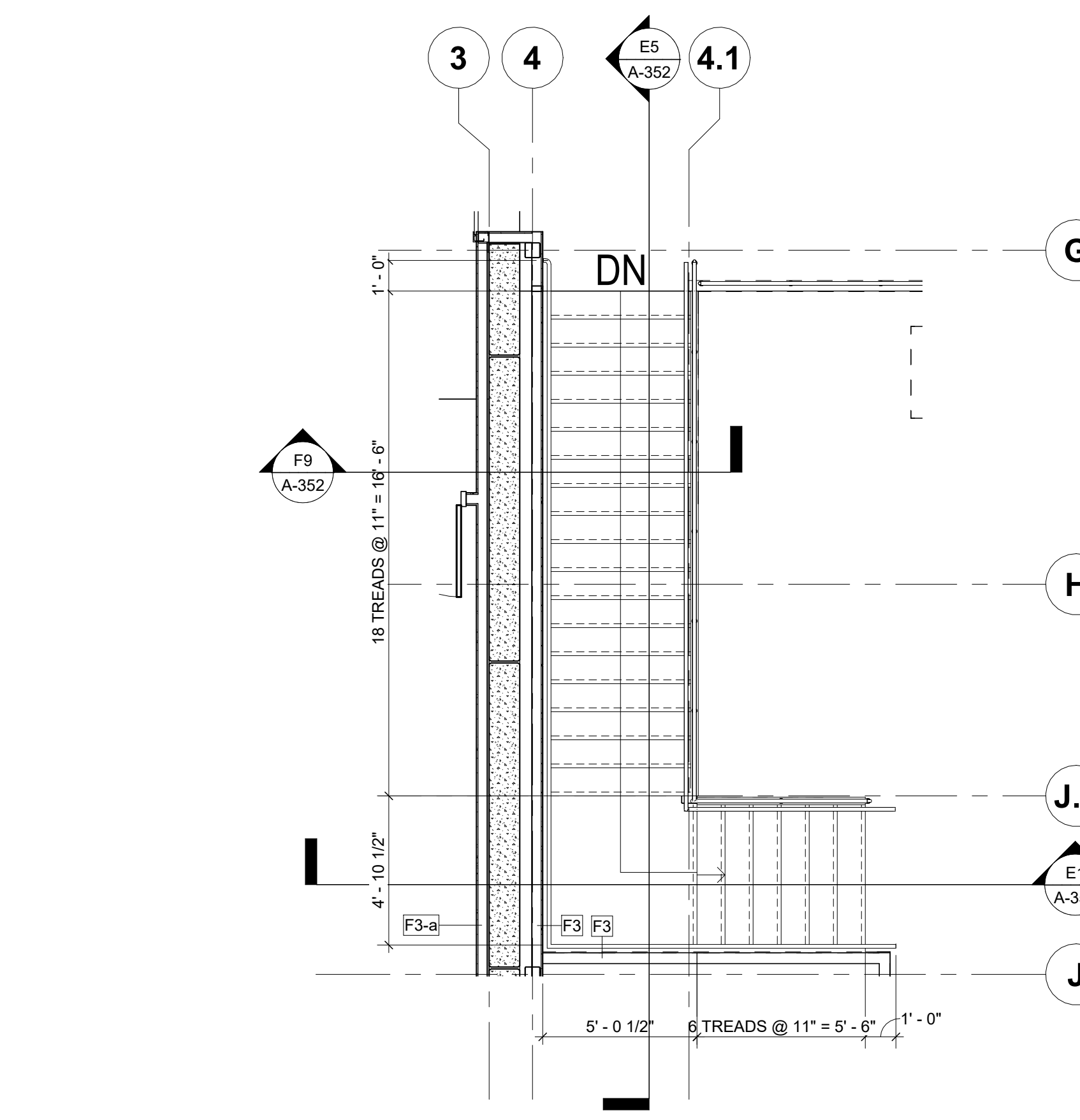
A10 METAL PAN STAIR BASE @ SLAB
1 1/2" = 1'-0"



HIGH ROOF ACCESS LADDER



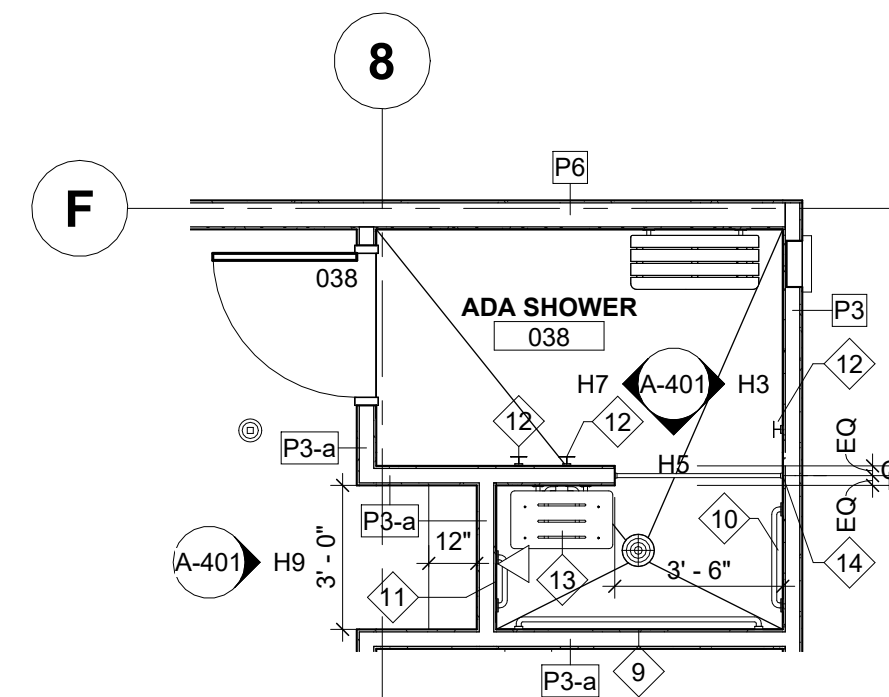
A5 ROOF ACCESS HATCH
1/4" = 1'-0"



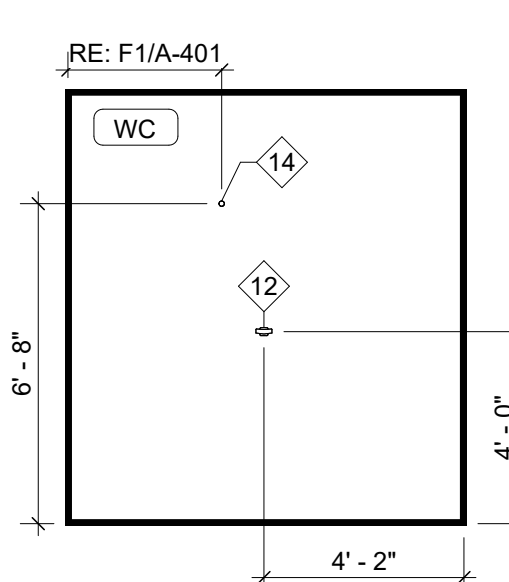
A1 MAIN LEVEL ST-2
1/4" = 1'-0"

COMMENTS: 1. RECESSED 2. SEMI-RECESSED 3. SURFACE MOUNTED 4. MOUNT TOP OF UNIT AT 48" A.F.F. 5. 1/2" SINK 6. INSTALL CENTERED ON INSIDE OF DOOR @ 4" A.F.F. 7. TOILET PAPER DISPENSER SHALL BE 7" MIN. TO 9" MAX. IN. FROM EDGE OF W.C.	GENERAL NOTES: A. REFER TO G-021 AND MANUFACTURERS SPECIFICATIONS FOR MOUNTING HEIGHTS. B. COORDINATE ALL MOUNTING HEIGHTS W/ PLUMBING FIXTURES TO ALLOW PROPER OPERATION & INFORM ARCHITECT IN WRITING OF ANY CONFLICTS. C. REFER TO ELEVATIONS AND GUIDESHEETS FOR ANY ACCESSORIES THAT MAY NOT SHOW UP ON THE PLANS. D. G.C. TO COORDINATE DIRECTLY W/ OWNER TO DETERMINE IF OWNER WILL BE OWNER PROVIDED, CONTRACTOR INSTALLED. VERIFY ALL ITEMS W/ OWNER PRIOR TO PURCHASING. E. ALL TOILET ACCESSORIES LOCATIONS BASED ON PLAN LAYOUT.
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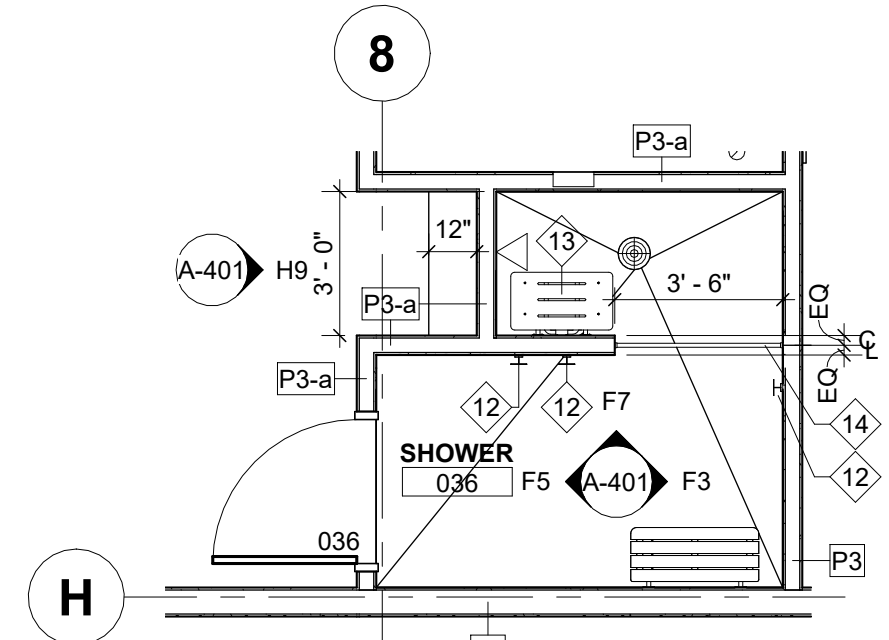
- | MATERIAL KEYNOTES | |
|-------------------|--|
| 06.40K | PLASTIC LAMINATE FILLER PANEL |
| 09.30G | PORCELAIN TILE BASE |
| 09.65E | BASE RE: FINISH SCHEDULE |
| 10.21A | TOILET PARTITION |
| 26.51A | INTERIOR LIGHT FIXTURE, TYP. RE:
ELECTRICAL |



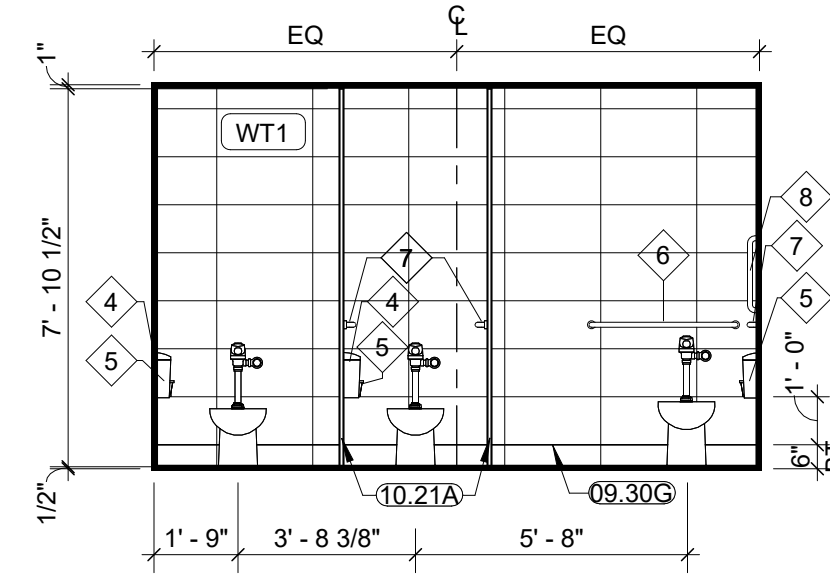
H1 038 SHOWER ROOM
1/4" = 1'-0"



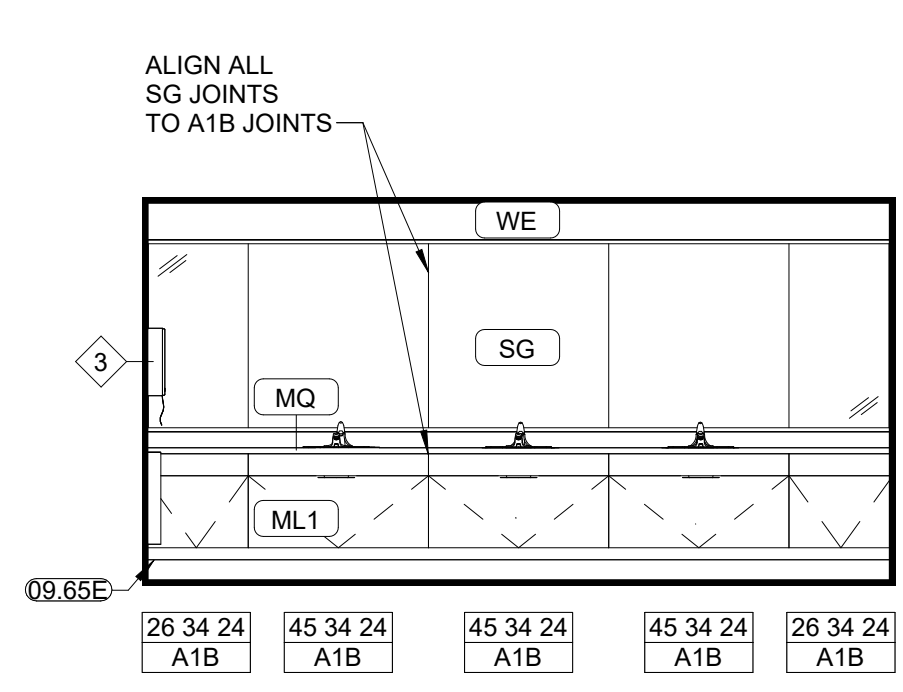
F3 036 SHOWER - N
1/4" = 1'-0"



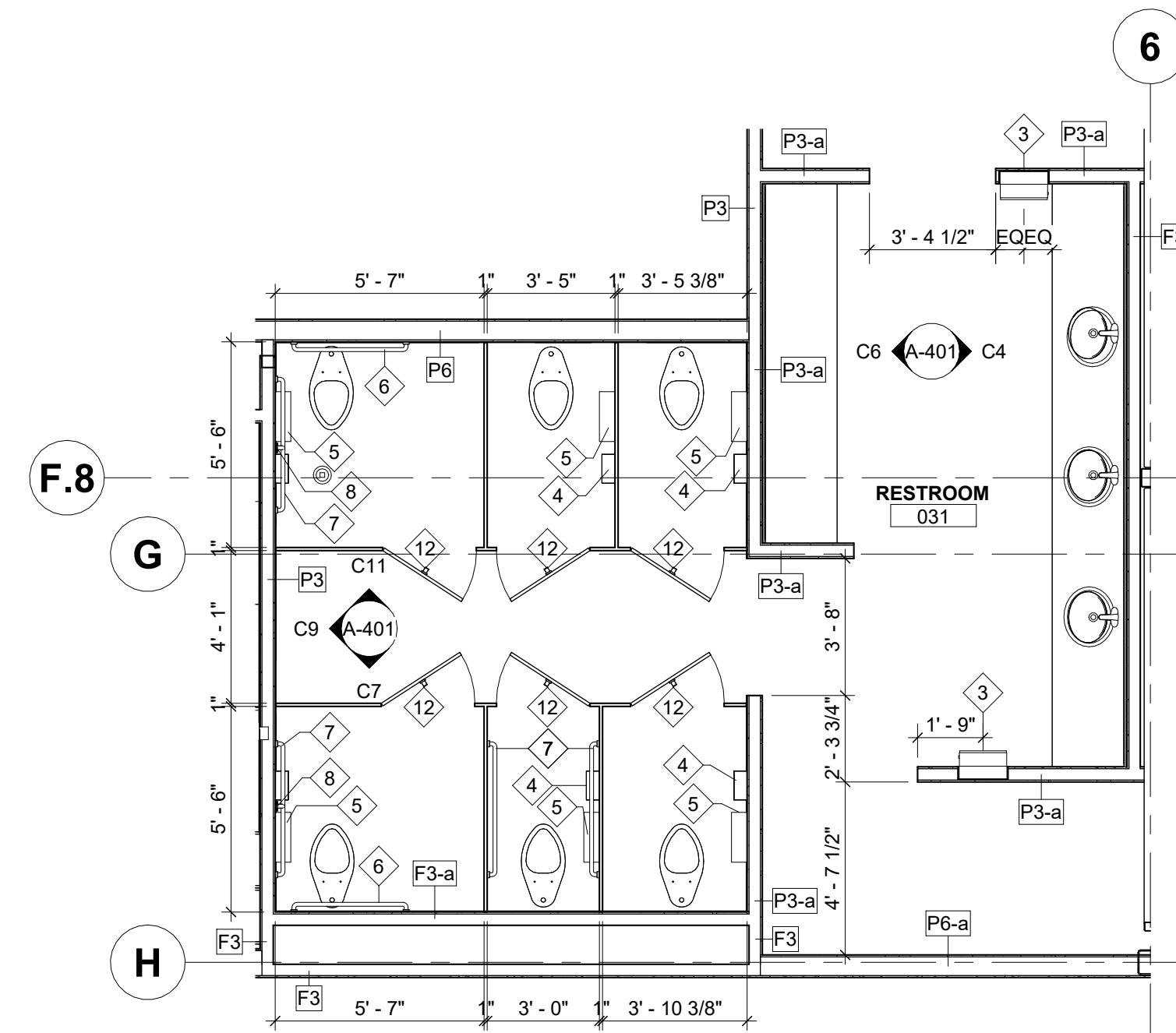
 **F1** 036 SHOWER ROOM
1/4" = 1'-0"



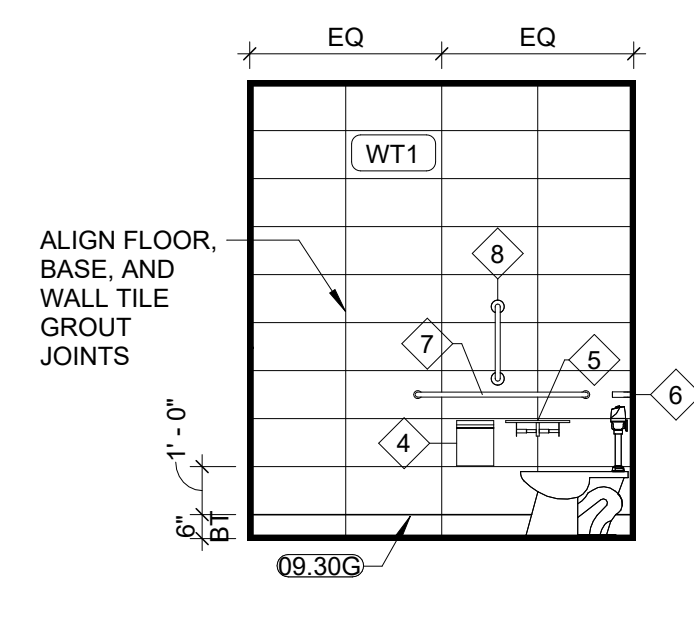
C7 031 RESTROOM TLTS - E
1/4" = 1'-0"



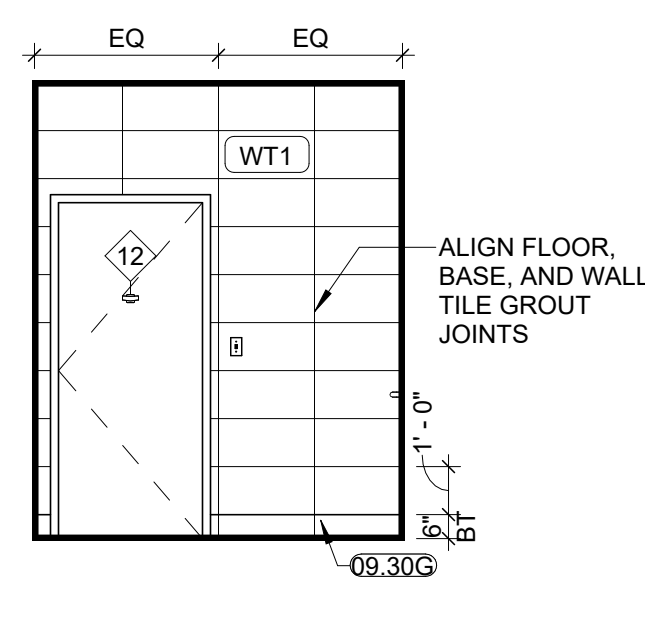
C4 031 RESTROOM - N
1/4" = 1'-0"



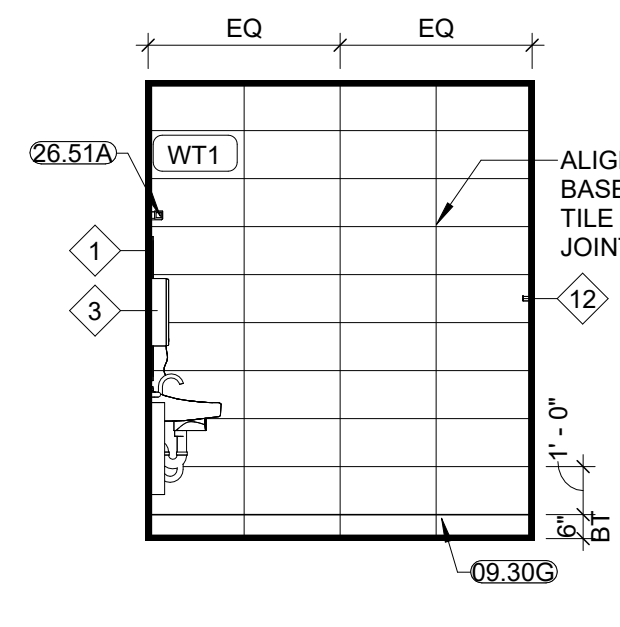
 **C1** 031 RESTROOM
1/4" = 1'-0"



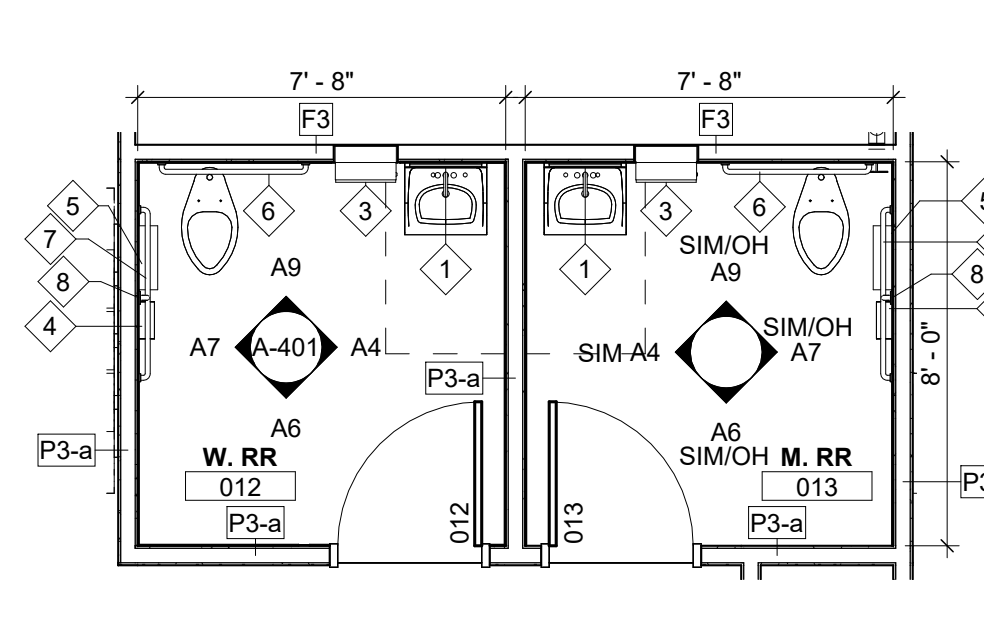
A7 012 W. RR - S
1/4" = 1'-0"



A6 012 W. RR - E
1/4" = 1'-0"



A4 $\frac{012 \text{ W. RR - N}}{1/4" = 1'-0"}$



 NORTH

A1 012-013 RESTROOMS
1/4" = 1'-0"

WALL FINISH LEGEND	
	WT1
	WT2
	WT3
	WT4

RE: FINISH SCHEDULE

REVISION DATES



ISSUE DATE: NOVEMBER 1, 202
HOEFER WELKER #: 13819

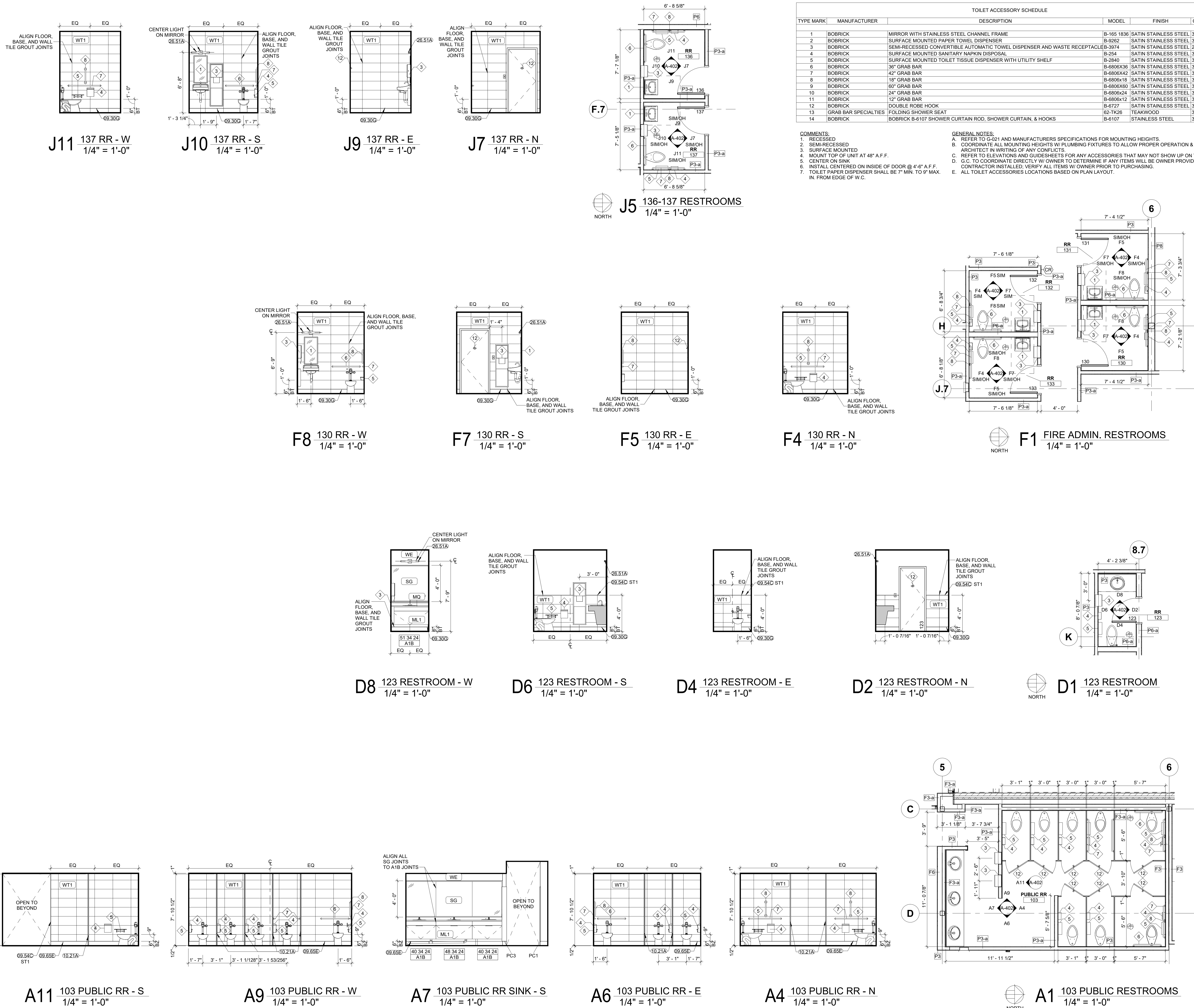
ENLARGED PLANS

GENERAL NOTES:

- A. REFER TO G-021 AND MANUFACTURERS SPECIFICATIONS FOR MOUNTING HEIGHTS.
- B. COORDINATE ALL MOUNTING HEIGHTS W/ PLUMBING FIXTURES TO ALLOW PROPER OPERATION & INFORM ARCHITECT IN WRITING OF ANY CONFLICTS.
- C. REFER TO ELEVATIONS AND GUIDESHEETS FOR ANY ACCESSORIES THAT MAY NOT SHOW UP ON THE PLANS
- D. G.C. TO COORDINATE DIRECTLY W/ OWNER TO DETERMINE IF ANY ITEMS WILL BE OWNER PROVIDED, CONTRACTOR INSTALLED. VERIFY ALL ITEMS W/ OWNER PRIOR TO PURCHASING.
- E. ALL TOILET ACCESSORIES LOCATIONS BASED ON PLAN LAYOUT.

- RE: SHEET G-011 FOR APPLICATION
NOTES THAT ARE ADDITIONAL
TO THE SPECIFICATIONS FOR 100'-0" = CIVIL
ELEVATION 1024.67'
DIMENSIONS SHOWN ON THE FLOOR PLAN
AND ELEVATION OF THE WALL SHALL BE TO THE
FACE OF CONCRETE WALLS (FCO), AND
COLUMN GRID LINES, UNLESS NOTED OR
OTHERWISE SPECIFIED.
FOR METAL STUD CONSTRUCTION
DIMENSIONS SHOWN ON THE FLOOR PLAN
ARE TO THE FACE OF GYP. BOARD WALL
FCO, UNLESS NOTED OR SHOWN
OTHERWISE.
NOTE: WALL THICKNESSES ARE ACTUAL
DIMENSIONS.
DIMENSIONS NOT LOCATED BY
DIMENSION SHALL BE CENTERED IN WALL,
SHOWN OR LOCATED 4 INCHES FROM
FACE OF CONCRETE WALL TO CENTER OF
FRAME - HINGE SIDE, ALWAYS ALLOWING A
MINIMUM OF 18" FROM THE PULL SIDE
TO THE CENTER OF THE HINGE SIDE OF THE
INTERSECTING WALL, OR OTHER
DIMENSION LOCATED BY DIMENSION.
ALL CLOSURES AND CLOSURES WITHOUT A
SPACE IDENTIFICATION NUMBER SHALL
BE IDENTIFIED BY FINISHES AS THE
ADJOINING SPACES.
ALL PUBLIC SPACES: THE WALLS WILL BE
FINISHED TO 58" A.C. AND SHALL BE LEVEL,
FINISHED AND PAINTED, UNLESS NOTED OR
SPECIFIED OTHERWISE.
ALL INTERIOR WALLS: ALL SPECIFICATIONS
FOR DOOR AND DOOR FRAME FINISHES.
ALL EXPOSED STEEL INCLUDING COLUMNS
AND WALLS WILL BE FINISHED TO 58" A.C.

MATERIAL KEYNOTES	
09.30G	PORCELAIN TILE BASE
09.54C	METAL EDGE TRIM
09.65E	BASE RE: FINISH SCHEDULE
10.21A	TOILET PARTITION
26.51A	INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL



2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

[illegible]

ISSUE DATE: NOVEMBER 1, 2011
HOEFER WELKER #: 138

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: SHEET G-012 FOR ADDITIONAL SPECIFICATIONS GUIDELINES FOR COUNTING HEIGHTS OF FIXTURES AND ACCESSORIES.
3. RE: FINISH LEGEND AND FINISH PLANS FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
4. RE: FINISH SCHEDULES FOR FINISH INFORMATION AND CLARIFICATION ONLY. RE: FINISH PLAN ROOM 1A & ELEVATIONS FOR ADDITIONAL ROOM FINISHES.
5. RE: FINISH SCHEDULES FOR FINISH INFORMATION AT DOOR HEADERS WHERE GYPSUM BOARD EXCEEDS 30 FEET (TPY) - UNLESS SHOWN OTHERWISE.
6. RE: FINISH JOINTS FOR MILLWORK CASEWORK, UNLESS NOTED OR SPECIFIED OTHERWISE.
7. RE: TRANSITION ALL WALL AND BASE FINISHES, AND/OR COLOR CHANGES AT INSIDE CORNERS, UNLESS NOTED OTHERWISE.
8. RE: ARCHITECT FOR CLARIFICATION, IF NECESSARY.
9. RE: CONTINUE WALL FINISH BEHIND ALL FURNITURE AND EQUIPMENT.
10. RE: COUNTERS.
11. RE: FINISH WALL BASE AT ALL WALLS, FURRED OUT COLUMNS, COLUMN COVERS, AT ALL CASEWORK TOE KICKS, SIDE PANELS, AND UNDER COUNTERS, UNLESS NOTED OTHERWISE.
12. RE: CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO MILLWORK CASEWORK FABRICATION & INSTALLATION.
13. RE: ALL MILLWORK CASEWORK CONSTRUCTION SHALL BE IN ACCORDANCE WITH AIA/CES/ANES UNLESS NOTED OR SPECIFIED OTHERWISE.
14. RE: CONTRACTOR SHALL PROVIDE & INSTALL GROUNDING AND PROTECTIVE ELECTRICAL WORK STATIONS WITH OPEN KICK SPACE, COORDINATE WITH ELECTRICAL CONTRACTOR. OWNER, COLOR TO BE SELECTED BY ARCHITECT.
15. RE: CONTRACTOR SHALL PROVIDE COUNTERTOP OVERLAP FOR OPEN AREA (MINIMUM 4" MINIMUM 42") CENTER IN OPEN AREA UNLESS NOTED OR SHOWN OTHERWISE. ARCHITECT TO SELECT COLOR.
16. RE: ALL EXPOSED CASEWORK/ MILLWORK SURFACE SHALL BE FINISHED TO MATCH ADJACENT SURFACE. UNLESS NOTED OTHERWISE.
17. RE: ALL FILLER PANELS SHAGBEE FINISHES TO MATCH ADJACENT SURFACE AND SCRIBED TO FIT ADJACENT WALL, UNLESS NOTED OTHERWISE. FILLER PANELS TO BE 1/2" MIN. OR 4" MAX. UNLESS NOTED OTHERWISE.
18. RE: ENLARGED FLOOR PLAN SHEETS FOR TOILET, LOBBY, SCHED. ROOMS, AND ELEVATOR PANEL SURFACES SHALL BE FINISHED TO MATCH ADJACENT CASEWORK/MILLWORK FINISH. PANELS TO BE 1/2" MIN. UNLESS NOTED OTHERWISE.
19. RE: EQUIPMENT DRAWINGS & SPECS FOR EQUIPMENT ITEMS SHALL BE PROVIDED BY EQUIP. CONSULTANT AND/OR SUPPLIED BY OWNER. COORDINATE WITH OTHER TRADES AS NECESSARY.
20. RE: MECH. & ELEC. SYMBOLS AND OUTLETS ARE SHOWN FOR REFERENCE ONLY. COORDINATE WITH MECH. & ELEC. CONTRACTOR.
21. RE: ARCHITECT FOR CLARIFICATION, IF NECESSARY.
22. RE: FINISH LEGEND & DOOR SCHEDULE FOR INTERIOR DOOR AND DOOR FRAME COLORS.
23. RE: FINISH SCHEDULES FOR FINISH INFORMATION FOR CABINETS, MO FOR COUNTERTOPS UNLESS NOTED OTHERWISE.
24. RE: FINISH SCHEDULES FOR CASEWORK SECTION DETAILS.
25. RE: TO A-551 FOR COUNTERTOP SECTIONS BY FINISH MATERIAL.
26. RE: B. TYPE C4: MST

06.40G	COUNTER BRACKET
06.40J	PLASTIC LAMINATE FINISHED END PANEL
06.40K	PLASTIC LAMINATE FILLER PANEL
09.65E	BASE RE: FINISH SCHEDULE
22.15	MOP SINK
22.40	PLUMBING FIXTURE
26.51E	UNDERCABINET LIGHTING RE: ELECTRICAL

WALL FINISH LEGEND	
	WT1
	WT2
	WT3
	WT4

Diagram illustrating the plumbing and blocking requirements for a bathroom stall. The diagram shows a cross-section of the stall with a toilet and a sink. The following details are provided:

- 22.40 RE: PLUMBING SCHED**: Points to the plumbing schedule for the stall.
- CONTRACTOR TO PROVIDE BLOCKING SHELF INSTALLAT**: Indicates the requirement for a blocking shelf installation.
- 22.15**: Points to the blocking shelf installation.

WP1

154B

06.40G

09.65E

EQ

EQ

EQ

120"

34"

[illegible]

4 1/8" 06.40K 24 45 15 W3 24 45 15 W3 24 45 15 W3 24 45 15 W3 39 30 15 W3 39 30 15 W3 39 30 24 W3 24 30 24 W3 06.40L

FULL TILE TO START AT WALL

3" 27" 5" 11' 4" ML2 WT2 MO EQ22 EQ34 EQ18 EQ20 EQ14 ALCON

FULL TILE TO START AT COUNTER TOP

06.40K 24 34 24 B21 24 34 24 B8 24 34 24 B18-O 25" CLEAR 39 34 24 B23 39 34 24 B3 39" CLEAR 24 76 24 T1 3 1/8"

Technical drawing of a window unit. The drawing shows a central window unit with a width of 72" and a height of 42". The unit is labeled "MITER CORNERS, TYP." and "E9 A-551". The unit is also labeled "WP4", "MQ", "ML2", "B21", and "B3". The unit is shown in a cross-section view, with dimensions 24, 34, and 24 indicated for the top and bottom sections. The unit is also labeled "OPEN TO BEYOND".

06.40R

36 34 24 B23

21 34 24 B3

21 34 24 B3

21 34 24 B3

21 34 24 B3

26 34" 24 B3

00.05E BASE REHIN. EQUIP.

A floor plan diagram of a room. The room is rectangular with a width of 72" and a total depth of 42". A section of the room, labeled "ML1", is 16" deep. The remaining area is labeled "OPEN TO BEYOND". A small square symbol is located in the upper left corner. A dimension line on the right indicates a 4" offset from the main wall.

39'

WP1

MST

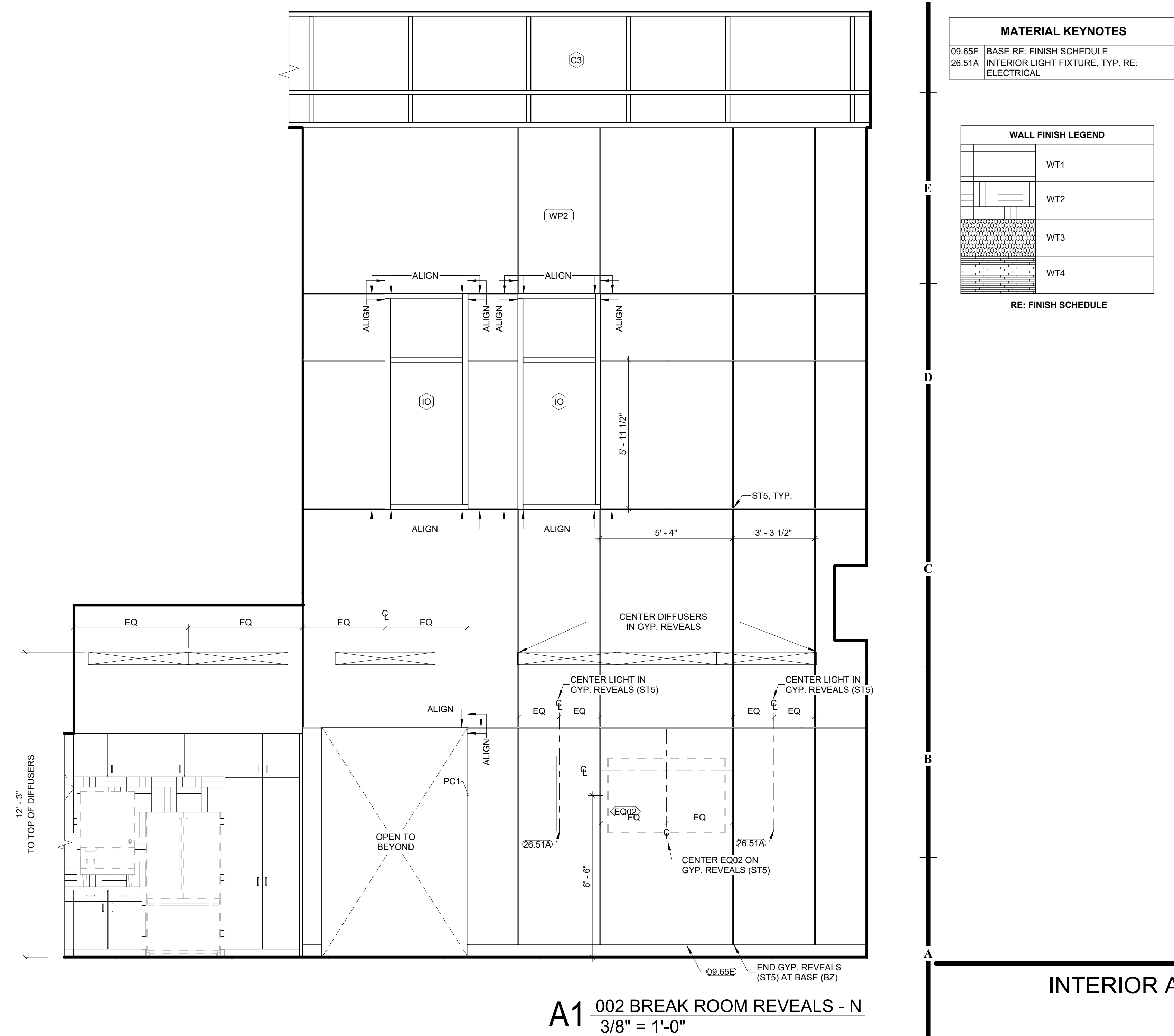
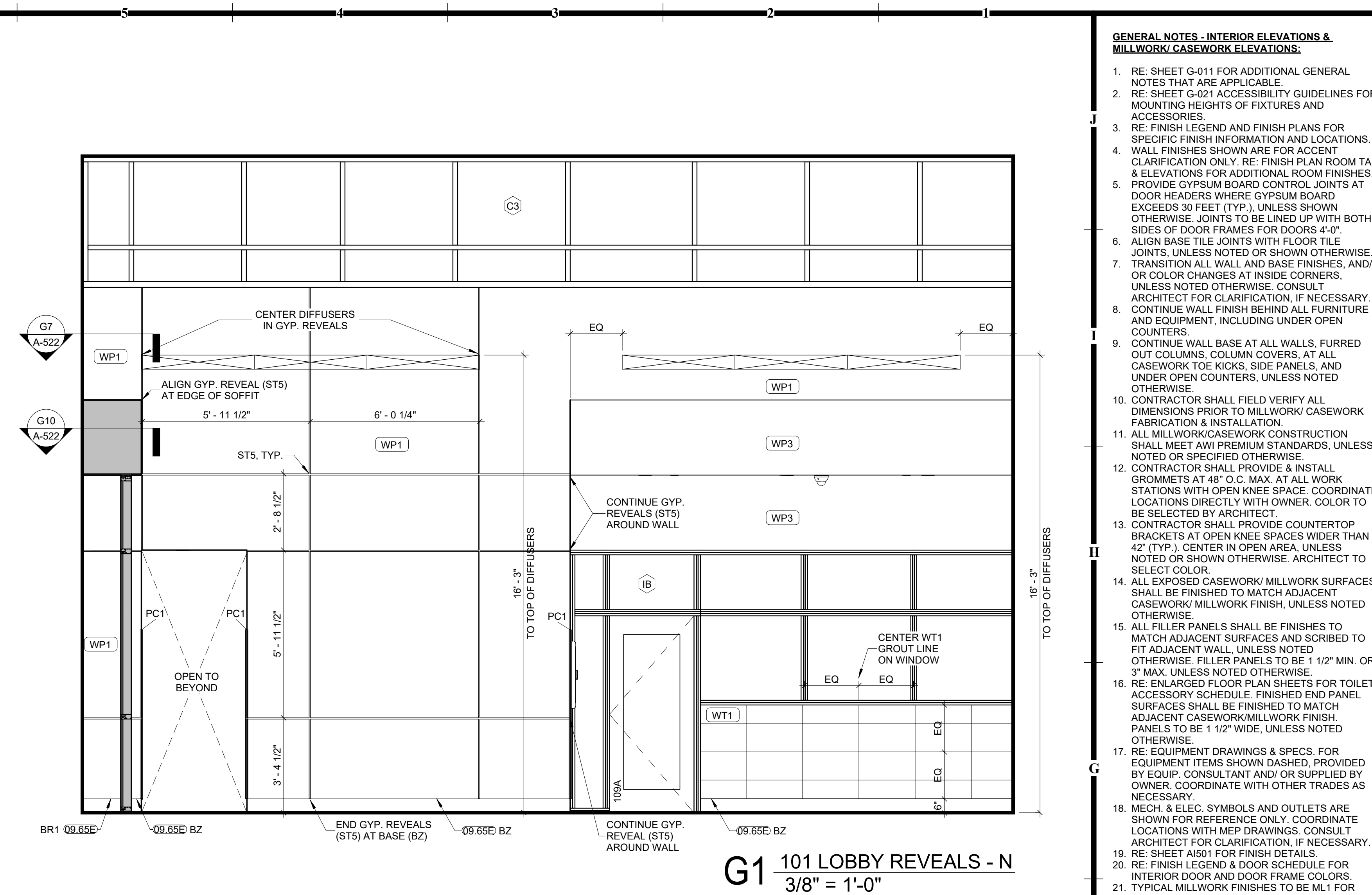
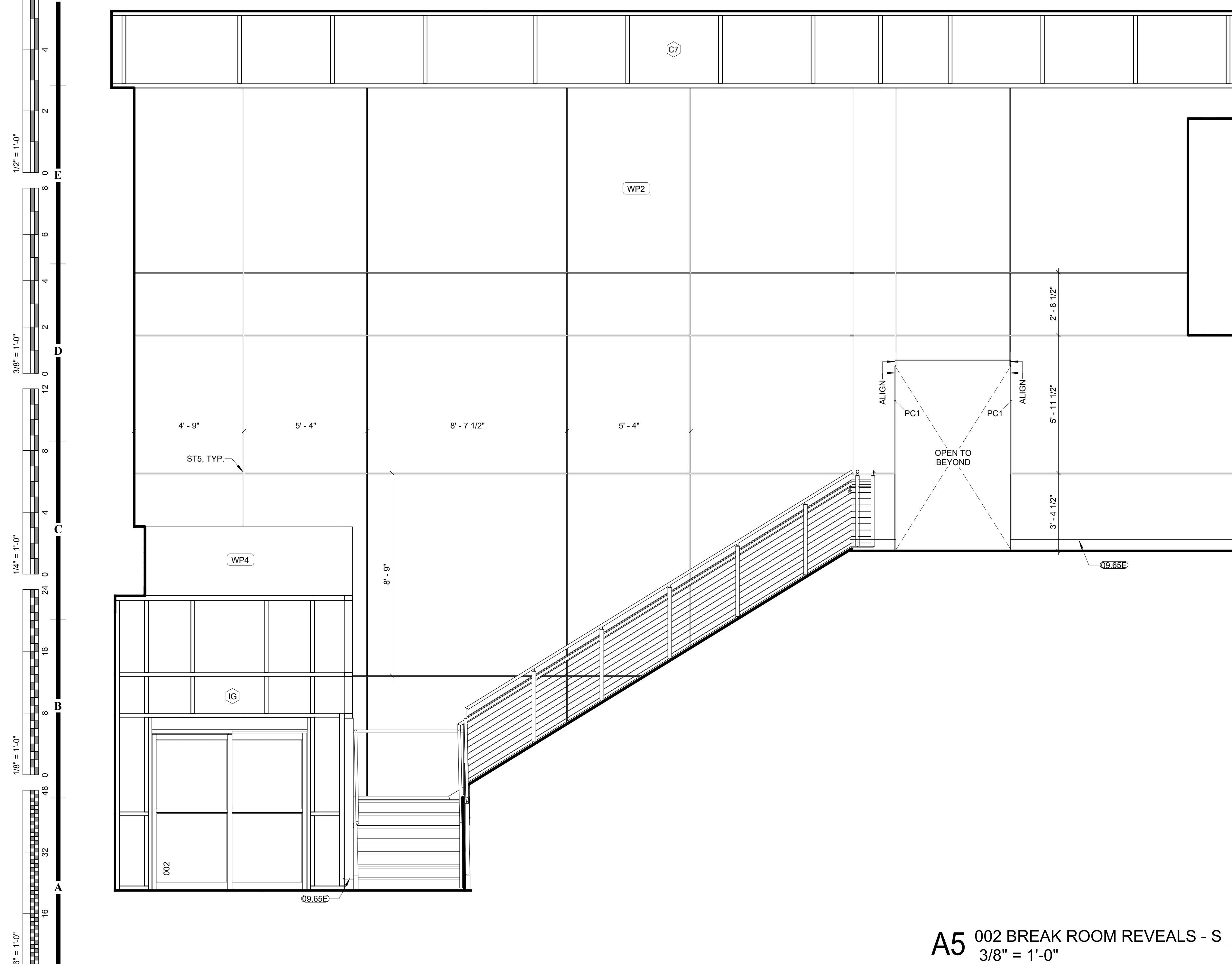
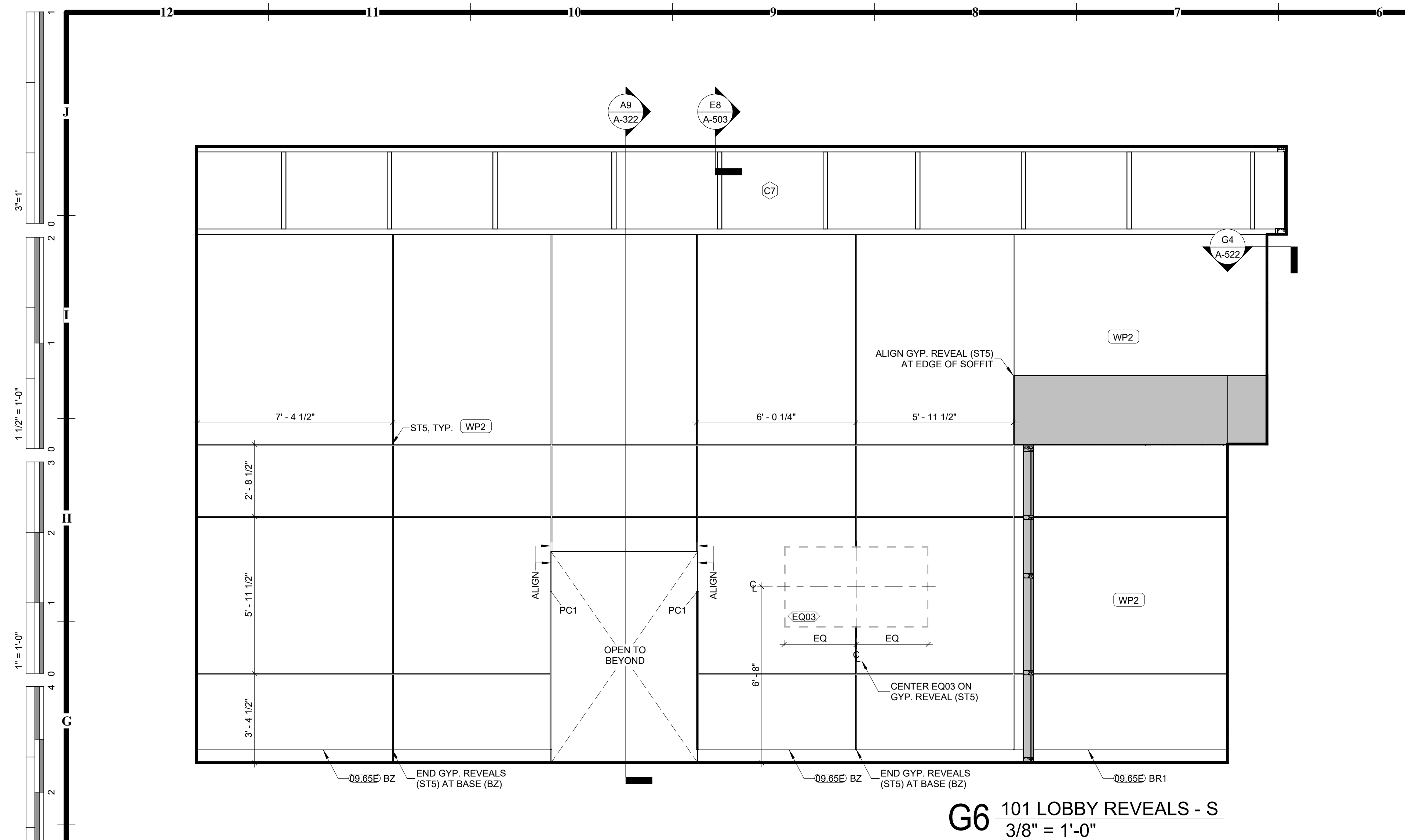
06.40K

06.65D

FO

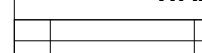
OPEN TO BEYOND

Technical drawing of the MST 42" cabinet. The drawing shows a side view of the cabinet with a width of 42" and a height of 36". The cabinet features a top panel, a main body, and a base. The top panel is labeled "MST". The main body is labeled "06.40 C". The base is labeled "06.55 C". The dimensions are indicated by arrows and text: 42" for the width, 36" for the height, and 06.55 C for the base depth. The top panel is shown with a small gap from the main body.



- GENERAL NOTES - INTERIOR ELEVATIONS, UNLESS NOTED OTHERWISE**
MILLOWORK / CASEWORK ELEVATIONS:
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
 2. RE: SHEET G-021 ACCESSIBILITY GUIDELINES FOR MINIMUM HEIGHTS OF FIXTURES AND ACCESSORIES.
 3. RE: FINISH LEGEND AND FINISH PLANS FOR FINISHES, FINISH INFORMATION AND LOCATIONS.
 4. RE: FINISHES SHOWN ARE FOR ACCENT CLARIFICATION ONLY. RE: FINISH PLAN ROOM TAINTS ARE FOR FINISHES TO BE USED ON FINISHES.
 5. PROVIDE GYPSUM BOARD CONTROL JOINTS A DOOR HEADERS WHERE GYPSUM BOARD CONTROL JOINTS (TYPED) ARE NOT SHOWN OTHERWISE, JOINTS TO BE LINED UP WITH BOTH SIDES OF DOOR FRAMES FOR DOORS 4'-0" & 5'-0".
 6. DESIGN PANELS TO BE LINED UP WITH CONTROL JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
 7. TRANSITION ALL WALL AND BASE FINISHES, AND DOOR HEADERS TO MATCH ADJACENT FINISHES, UNLESS NOTED OTHERWISE. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
 8. MATCH ALL FINISHES TO MATCH ADJACENT FINISHES, UNLESS NOTED OTHERWISE. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
 9. MATCH ALL FINISHES TO MATCH ADJACENT FINISHES, UNLESS NOTED OTHERWISE.
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 22. MATCH ALL FINISHES TO MATCH ADJACENT FINISHES, UNLESS NOTED OTHERWISE.
 23. MATCH ALL FINISHES TO MATCH ADJACENT FINISHES, UNLESS NOTED OTHERWISE.

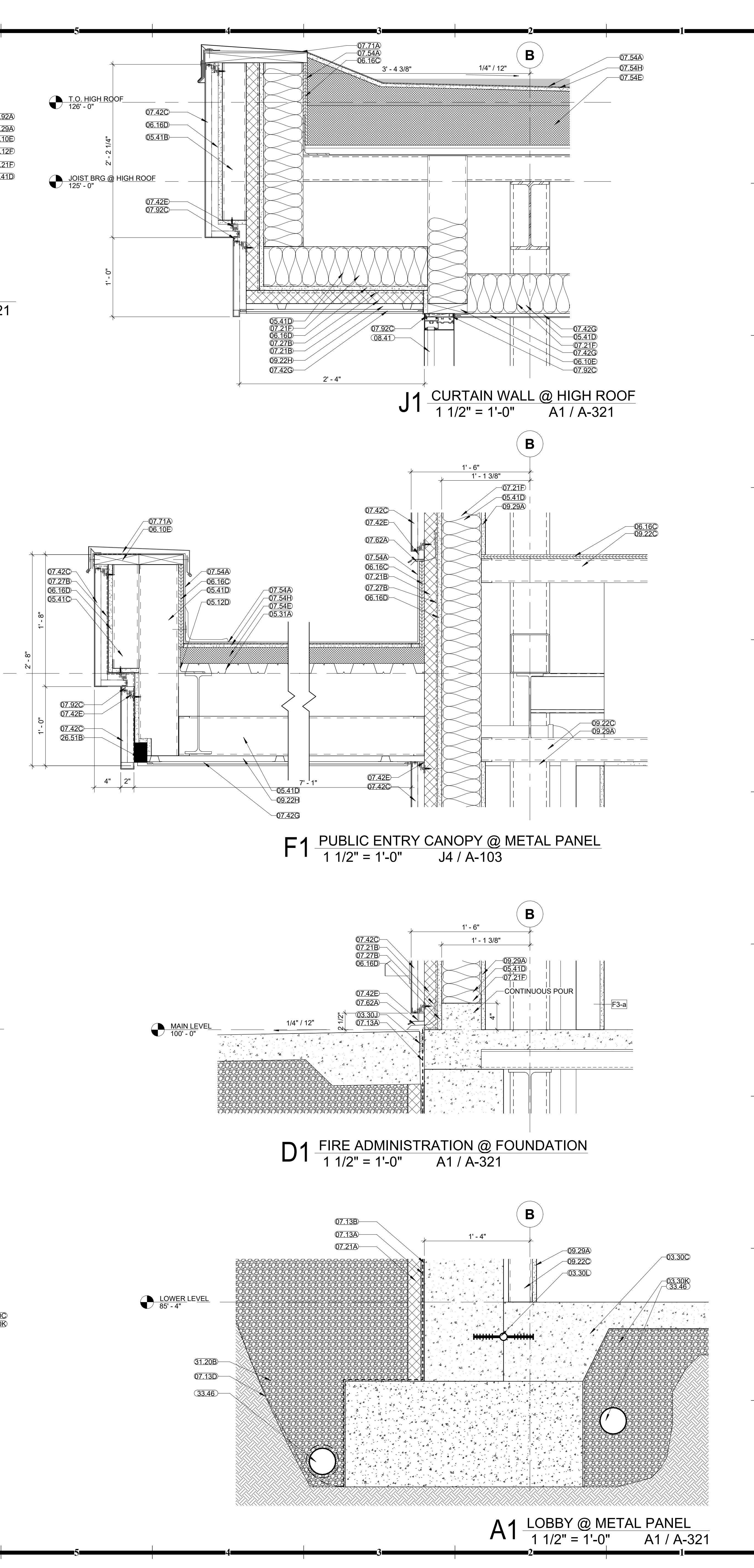
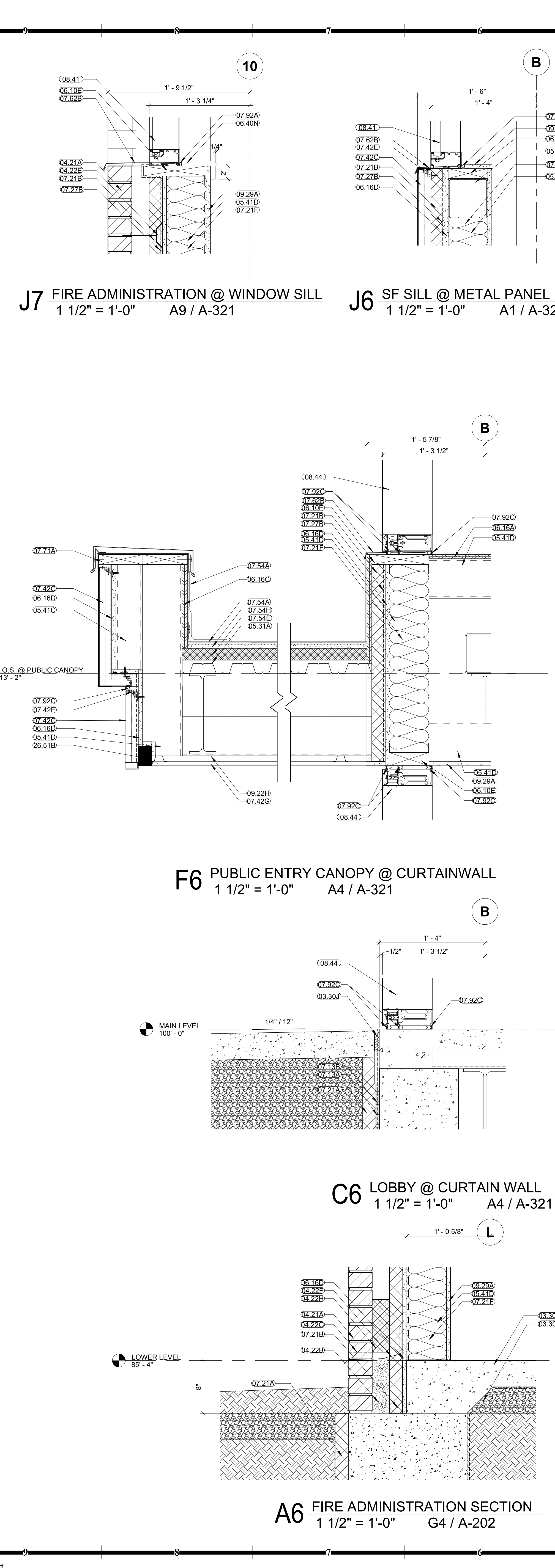
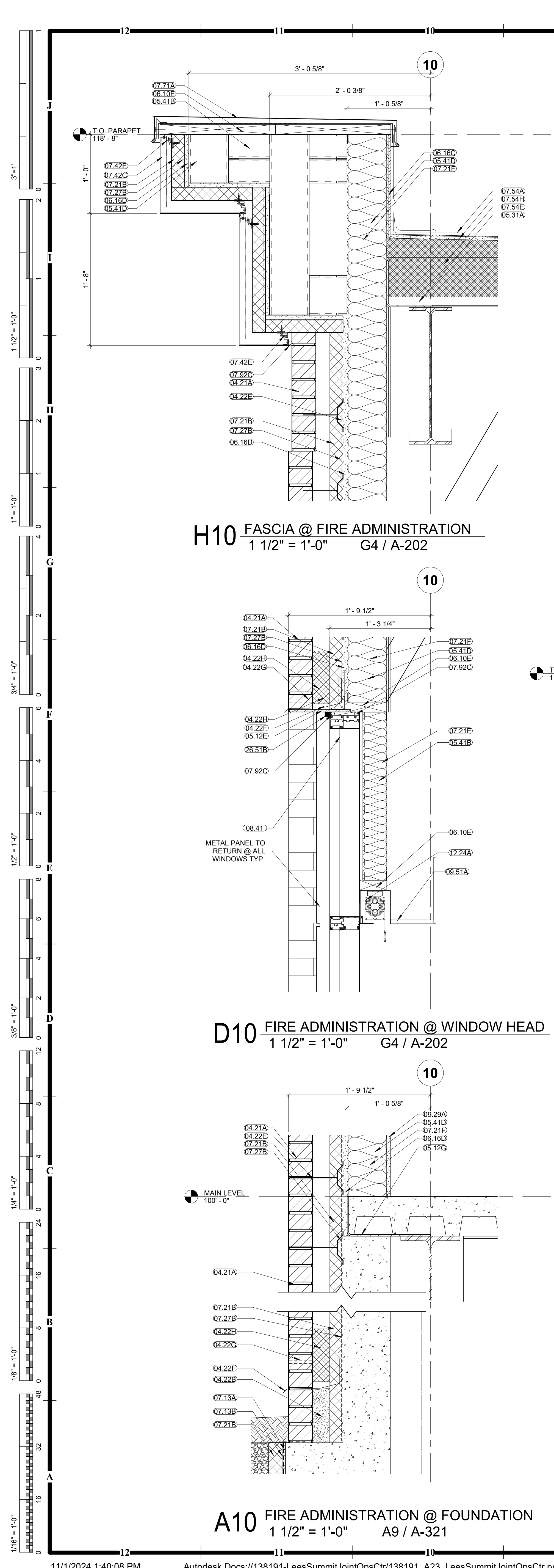
MATERIAL KEYNOTES	
09.65E	BASE RE: FINISH SCHEDULE
26.51A	INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL

WALL FINISH LEGEND	
	WT1
	WT2
	WT3
	WT4

RE: FINISH SCHEDULE

RE: FINISH SCHEDUL





GENERAL NOTES - EXTERIOR WALL SECTIONS/ DETAILS:	
1.	RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2.	RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3.	ALL WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4.	PAIN
5.	PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES	
03.30C	CONCRETE SLAB-ON-GRADE
03.30J	1/2-INCH COMPRESSIBLE JOINT FILLER (HOLD DOWN TOP 1/2-INCH - FILL W/ SEALANT.)
03.30K	UNDER-SLAB VAPOR RETARDER
03.30L	PVC WATER STOP
04.21A	FACE BRICK
04.22B	GROUT SOLID - MASONRY CELLS
04.22E	TIES AND ANCHORS
04.22F	THROUGH-WALL MEMBRANE FLASHING WITH METAL DRIP EDGE
04.22G	WEEP VENTS @ 24-INCH O.C.
04.22H	CAVITY DRAINAGE MATERIAL (MORTAR NET)
05.12D	STEEL ANGLE
05.12E	STEEL PLATE
05.12F	STEEL TUBE
05.12G	STEEL BENT PLATE
05.31A	STEEL ROOF DECK
05.41B	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.41C	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 4-INCH - RE: STRUCT. FOR SPACING
05.41D	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING
06.10E	WOOD BLOCKING, AS REQUIRED
06.16A	1/2-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.16C	3/4-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
06.40N	SOLID-SURFACING-MATERIAL COUNTERTOP
07.13A	SELF-ADHERING SHEET WATERPROOFING MEMBRANE
07.13B	MATRIX DRAINAGE SYSTEM
07.13D	FILTER FABRIC
07.21A	2-INCH RIGID PERIMETER SLAB-ON-GRADE INSULATION
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21E	3-1/2-INCH THERMAL BATT INSULATION
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42E	CONCEALED WALL PANEL FASTENERS
07.42G	METAL WOOD LOOK SOFFIT PANEL - VENTED
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.54E	RIGID ROOF INSULATION
07.54H	ROOFING COVER BOARD
07.62A	PREFINISHED SHEET METAL FLASHING
07.62B	PREFINISHED METAL SILL FLASHING
07.71A	PREFINISHED METAL COPING & CONT. CLEAT
07.92A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22H	7/8-INCH HAT RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
09.51A	ACOUSTICAL PANEL CEILING W/ EXPOSED GRID
12.24A	ROLLER WINDOW SHADE - SINGLE SHADE
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL
31.20B	GRANULAR FILL
33.46	FOUNDATION DRAINAGE

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ARCHITECT
NOVEMBER
2010/12/24

PROFESSIONAL SEAL

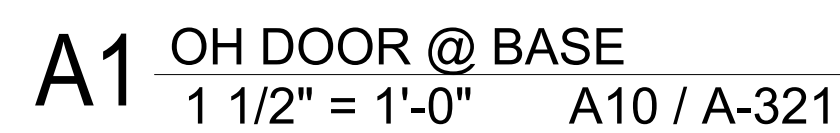
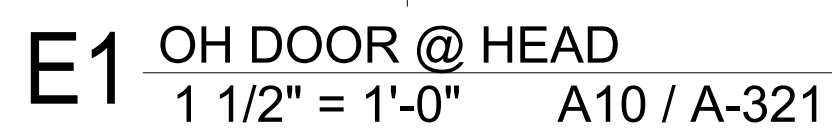
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER # 138191

EXTERIOR SECTION DETAILS

PACKAGE 2: CONSTRUCTION SET

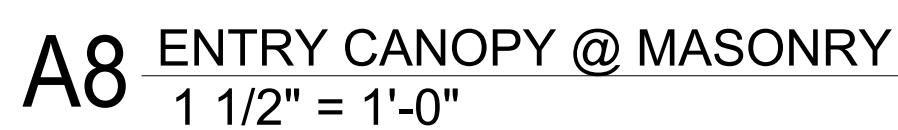
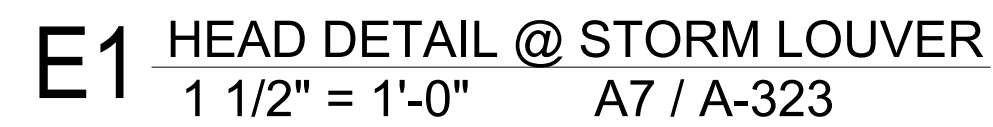
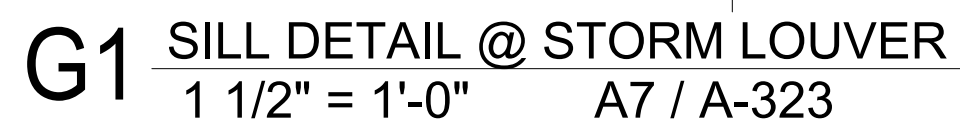
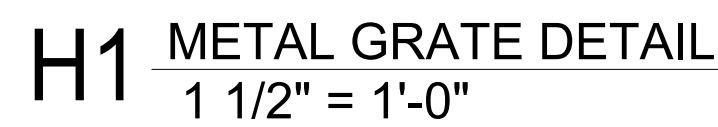
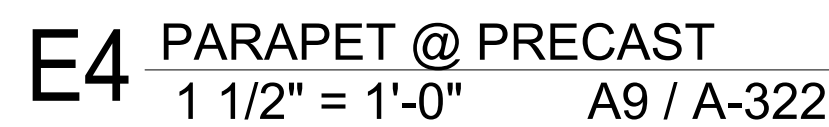
MATERIAL KEYNOTES	
03.30C	CONCRETE SLAB ON-GRADE JOINT
03.30J	1/2-INCH COMPRESSIBLE JOINT FILLER (H/2 INCH DOWN TOP 1/2-INCH- FILL W/ SEALANT)
03.30K	UNDER-SLAB VAPOR RETARDER
04.20B	PVC WATER STOP
04.21B	1/2-INCH CONCRETE FILL WALL
04.20B	CONCRETE MASONRY UNIT (CMU) - 3/8 INCH
04.20C	CONCRETE MASONRY UNIT (CMU) BOND BEAM GROUTED FULL
04.21A	FACE BRICK
04.22E	TIES AND ANCHORS
04.22F	THROUGH-WALL MEMBRANE FLASHING WITH METAL CRIP EAVE
04.22H	WEEP VENTS @ 24-INCH O.C.
04.22H	CAVITY DRAINAGE MATERIAL (MORTAR NET)
05.12E	STEEL PLATE
05.12G	STEEL BENT PLATE
05.31A	STEEL ROOF DECK
05.31B	COMPOSITE FLOOR DECK
05.41D	EXTERIOR NON-LD-BEARING MIT. C-STRUCT. CONCR. RE-STRUCT. FOR SPACING
05.50D	STEEL EMBED ANGLE / PLATE
06.16C	PLYWOOD SHEETING, 3/4" THICK, GRADED
06.16C	3/4-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEETING
06.16D	EXTERIOR GLASS MAT GYPSUM WALL SHEET
06.40N	SOLID-SURFACING-MATERIAL COUNTERTOP
07.13A	SELF-ADHERING SHEET WATERPROOFING MEMBRANE
07.13B	MAINTENANCE DRAINAGE SYSTEM
07.21A	2-INCH RIGID PERIMETER SLAB-ON-GRADE INSULATION
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	1/2-INCH FACED COMPOSITE WALL PANELS
07.42C	CEALED WALL PANEL FASTENERS
07.42G	METAL WOOD LOOF SOKIT PANEL - VENTED
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.54E	RIGID ROOF INSULATION
07.54G	CONC. METAL TERMINATION BAR
07.54H	CONCRETE
07.62A	PREFINISHED SHEET METAL FLASHING
07.62B	PREFINISHED METAL SLIT FLASHING
07.71A	PREFINISHED METAL COPING & CON. CURB
07.92A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.11B	LOWE METAL FRAME
08.31	OVERHEAD COILING DOW. RE. DOOR SCHEDULE
08.41A	ALUMINUM THRESHOLD
08.44	GLAZED ALUMINUM CURTAIN WALL
08.56A	WIND AND IMPACT SECURITY WINDOWS
08.22C	3/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22A	EXTERIOR 1/2-INCH RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH @ 8" BOF. WALL TYPES
09.51A	ACOUSTICAL PANEL CELINGS W/ EXPOSED GRID
09.89	ACCESS DOOR
11.13A	LOADING FLOOR LIFT
12.24B	ROLLER WINDOW SHADE - DOUBLE SHADE
12.24B	EXTERIOR LIGHT FIXTURE RE. ELECTRIC
31.20B	GRANULAR FILL



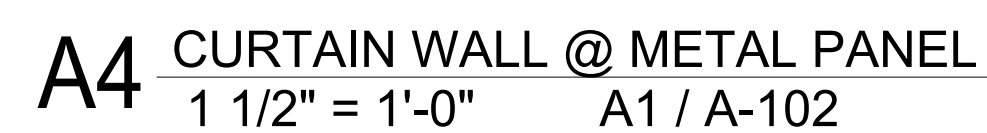
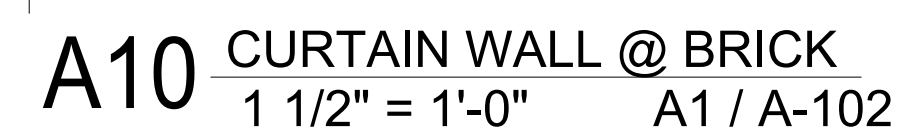
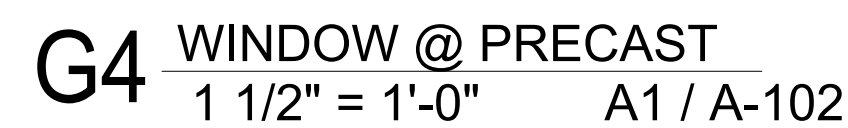
**GENERAL NOTES – EXTERIOR WALL SECTIONS/
DETAILS:**

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS. UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALL OR FACE OF COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL NOTES	
3.30J	1/2-INCH COMPRESSIBLE JOINT FILLER (HOLD DOWN TOP 1/2-INCH - FILL W/ SEALANT.)
3.30K	UNDER-SLAB VAPOR RETARDER
3.41B	PRECAST CONCRETE WALL
3.45A	PRECAST ARCHITECTURAL CONCRETE
3.45B	PRECAST BRICK
4.22E	GROUT SOLD- / MASONRY CELLS
4.22F	TIES AND ANCHORS
4.22G	THROUGH-WALL MEMBRANE FLASHING
4.22H	METAL DRAIN CRACK
4.22H	WEEP VENTS @ 24-INCH O.C.
4.22H	GRAVEL DRAINAGE MATERIAL (MORTAR NET)
5.12B	STEEL BEAM
5.12D	STEEL ANGLE
5.12E	STEEL PLATE
5.12F	STEEL TUBE
5.12G	STEEL TUBE
5.12H	STEEL BENT PLATE
5.12I	STEEL ROOF SHEET
5.12J	EXTERIOR NON-LOAD-BEARING MTL C-STUDS - 3 5/8-INCH - RE: STRUCT FOR SPACING
5.14C	EXTERIOR NON-LOAD-BEARING MTL C-STUDS - 4-INCH - RE: STRUCT FOR SPACING
5.14D	EXTERIOR NON-LOAD-BEARING MTL C-STUDS - 6-INCH - RE: STRUCT FOR SPACING
5.50D	WOOD CLUMBED ANGLE / PLATE
5.53A	METAL GRATING
6.10E	WOOD BLOCKING, AS REQUIRED
6.16C	3/4-INCH FIRE-RATED-UNDER-TREATED PLYWOOD SHEATHING
6.16D	INTERIOR GUSSET ANGLE GYSUM WALL SHEATHING W/ TAPED AND SEALED SEAM
7.13A	SELF-ADHERING SHEET WATERPROOF MEMBRANE
7.13B	MATRIX DRAINAGE SYSTEM
7.13C	FOUNDATION DRAIN SYSTEM
7.21B	EXTRUDED-POLYSTYRENE BOARD
7.21C	INTERIOR WALL WITH TAPED AND SEALED SEAMS
7.21F	6-INCH METAL BATT INSULATION
7.27B	FLUID-APPLIED THERMAL AIR BARRIER
7.27C	COMPOSITE WALL PANELS
7.42E	CONCEALED WALL PANEL FASTENERS
7.42G	METAL WOOD LOOK SOFFIT PANEL - VENTED
7.54A	FLUID-APPLIED POLYOLEFIN (FPO) ROOFING SYSTEM
7.54C	ROOF RIGID INSULATION
7.54E	CONT. METAL TERMINATION BAR
7.54F	ROOFING COVER BOARD
7.62A	PREFINISHED METAL SHEET METAL FLASHING
7.62B	PREFINISHED METAL SILL FLASHING
7.62C	PREFINISHED METAL COPING & CONT. CLEAT
7.71A	PREFINISHED METAL SCUPPER
7.79A	JOIST ANGLE
7.92C	BACKER ROD AND SEALANT
8.41	ALUMINUM-FRAMED STROBE-INCHES 8
8.80B	METAL JOIST
9.22C	PREFINISHED METAL STUDS @ 16-INCHES O.C.
9.22H	7/8-INCH HAT RIDGID CHANNEL
9.22H	INTERIOR 5/8-INCH GYP. BD. REF: WALL PANELS
9.69	ACCESS FLOORING
1.20B	GRANULAR FILL

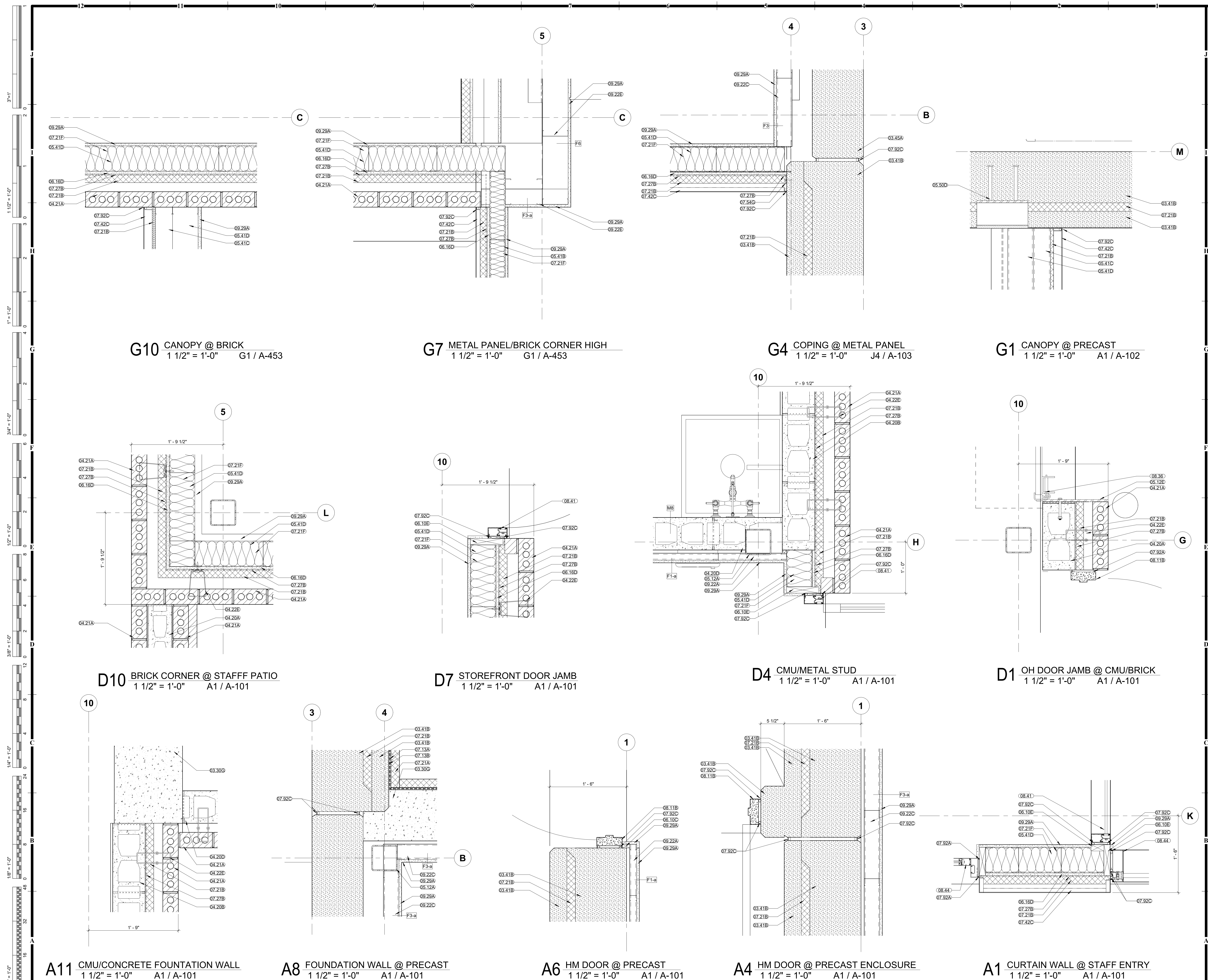


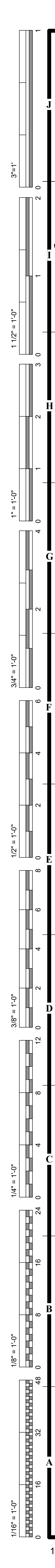
MATERIAL KEYNOTES	
03.41B	PRECAST CONCRETE WALL
03.45A	PRECAST ARCHITECTURAL CONCRETE
04.21A	FACE BRICK
04.22E	TIES AND ANCHORS
05.12A	STEEL COLUMN
05.41C	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 4-INCH - RF. STRUCT. FOR SPACING
05.41D	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RF. STRUCT. FOR SPACING
05.50D	STEEL EMBED ANGLE / PLATE
06.10C	FIRE-RETARDANT-TREATED WOOD BLOCKING - CONTINUOUS
06.10E	WOOD BLOCKING AS REQUIRED
06.16A	1/2-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING WITH TAPED AND SEALED SEAMS
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42E	CONCEALED WALL PANEL FASTENERS
07.54A	1/2-INCH POLYOLEFIN (TPO) ROOFING SYSTEM
07.92A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.18B	1/2-INCH POLYURETHANE FRAME
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
08.56A	WIND AND IMPACT SECURITY WINDOWS
08.90B	METAL LOUVER
09.22C	6-INCH METAL STUDS @ 16-INCHES O.C.
09.22E	6-INCH METAL STUDS @ 16-INCHES O.C.
09.22H	72H-INCH HAT RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH GYP. BD. RF. WALL TYING
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL
26.56	EXTERIOR LIGHT FIXTURE



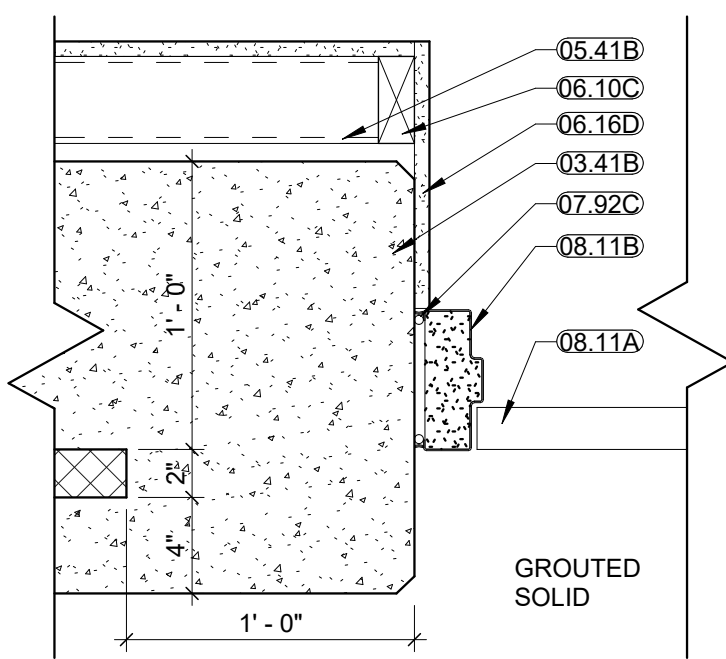
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES	
03.300	CONCRETE WALL
03.41B	PRECAST CONCRETE WALL
03.45A	PRECAST ARCHITECTURAL CONCRETE
04.20A	CONCRETE MASONRY UNIT (CMU)
04.20B	CONCRETE MASONRY UNIT (CMU) - 3 5/8 INCH
04.20D	CONCRETE MASONRY UNIT (CMU) - 3 5/8 INCH
04.21A	FACE BRICK
04.22E	TIES AND ANCHORS
05.12A	STEEL COLUMN
05.12E	STEEL PLATE
05.41B	EXTERIOR NON-LOAD-BEARING MTL C-STDUS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.41C	EXTERIOR NON-LOAD-BEARING MTL C-STDUS - 4-INCH - RE: STRUCT. FOR SPACING
05.41D	EXTERIOR NON-LOAD-BEARING MTL C-STDUS - 6-INCH - RE: STRUCT. FOR SPACING
05.500	STEEL EMBED ANGLE/ PLATE
06.10C	FIRE-RETARANT-FLOATED FLOORING, CONTINUOUS
06.10E	WOOD BLOCKING, AS REQUIRED
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEETING TAPED AND SEALED SEAMS
07.13A	SELF-ADHERING SHEET WATERPROOFING MEMBRANE
07.13B	MATRIAL DRAINAGE SYSTEM
07.21A	2-INCH RIDGE PERIMETER SLAB-ON-GRADE
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.46G	ALUMINUM METAL TERMINATION BAR
07.72A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.11B	HOLLOW METAL FRAME
08.36	SECTIONAL DOOR
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	SLATED ALUMINUM CURTAIN WALL
09.22A	1 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22C	1 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22E	2-INCH METAL STUDS @ 16-INCHES O.C.
09.29A	WALL STUDS 5/8-INCH GYP. BD. REF. WALL TYPES

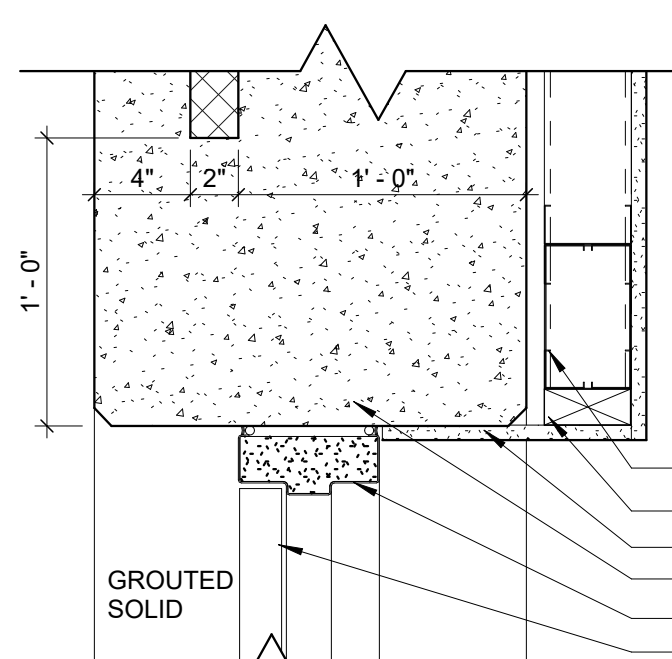




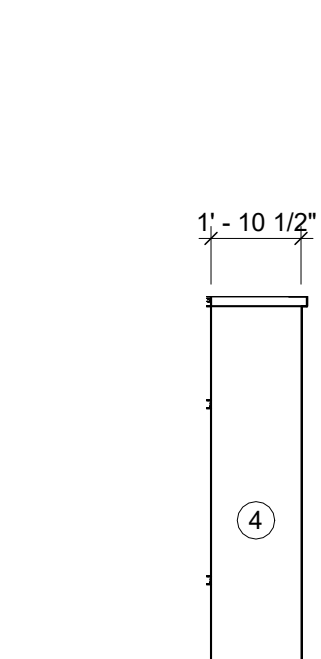
J12 HM DOOR HEAD - TYP.
1 1/2" = 1'-0"



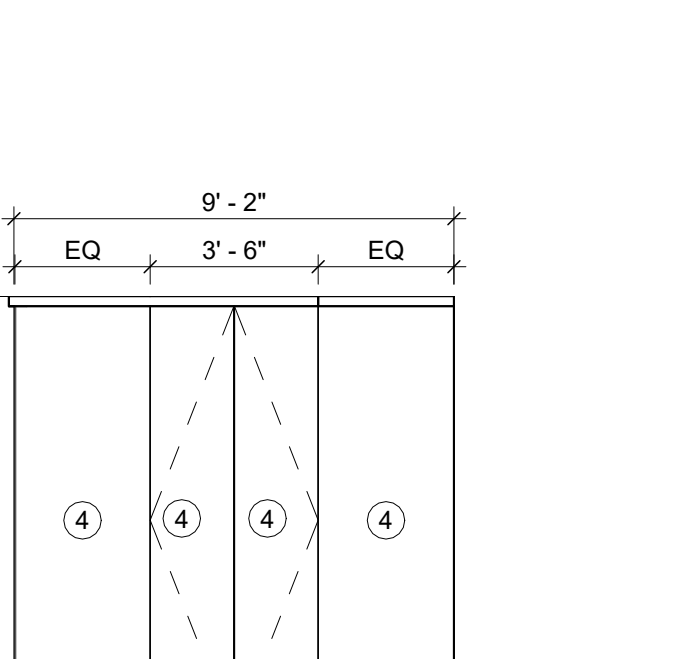
J10 HM DOOR JAMB - TYP.
1 1/2" = 1'-0"



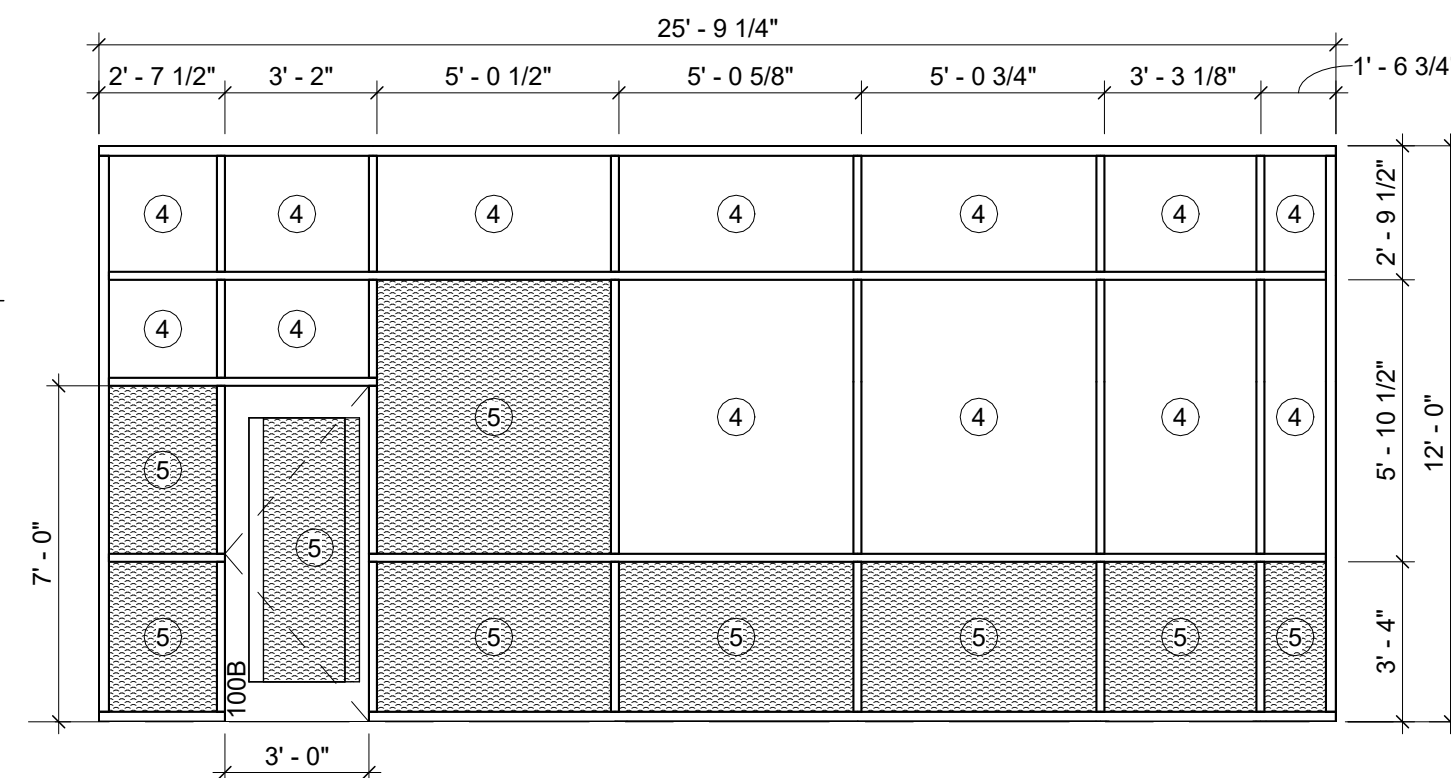
J9 HM DOOR HEAD - MASONRY
1 1/2" = 1'-0"



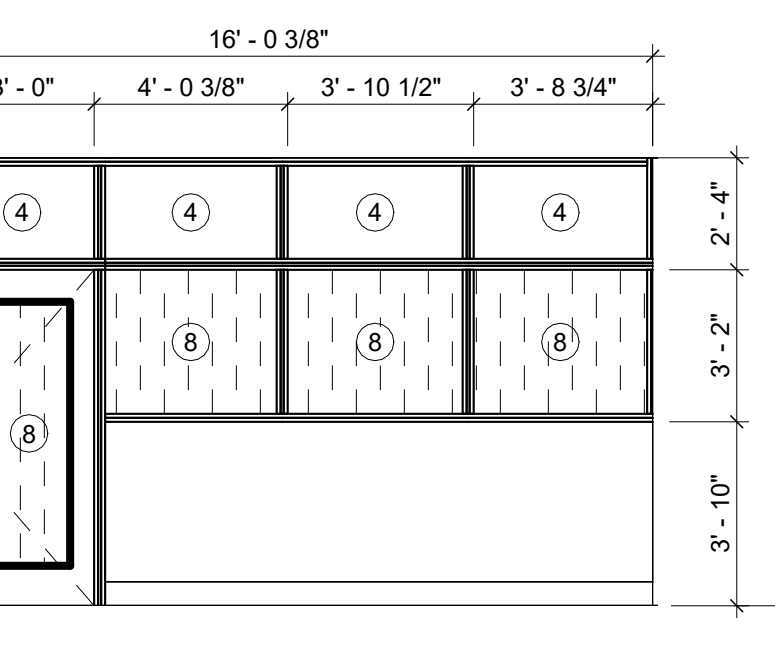
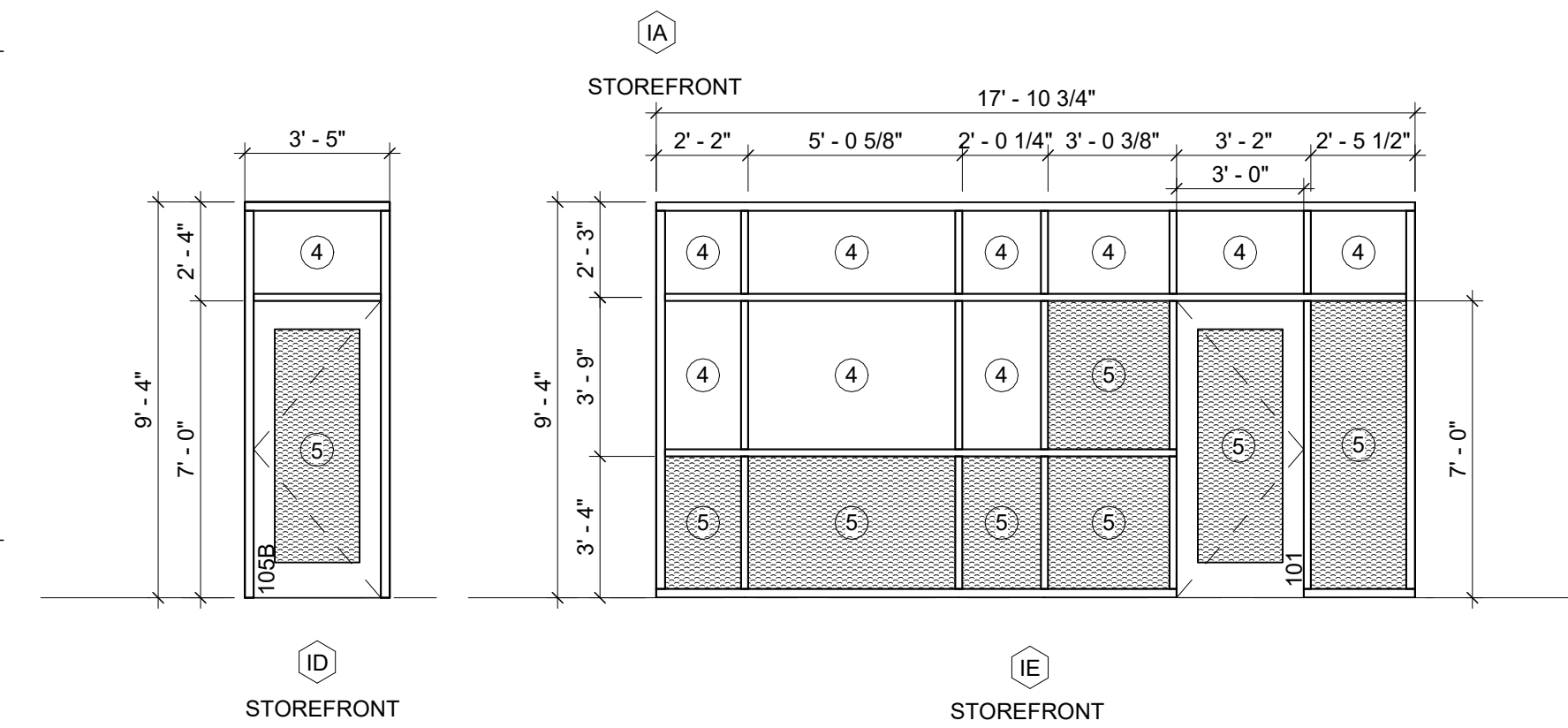
J7 HM DOOR JAMB - MASONRY
1 1/2" = 1'-0"



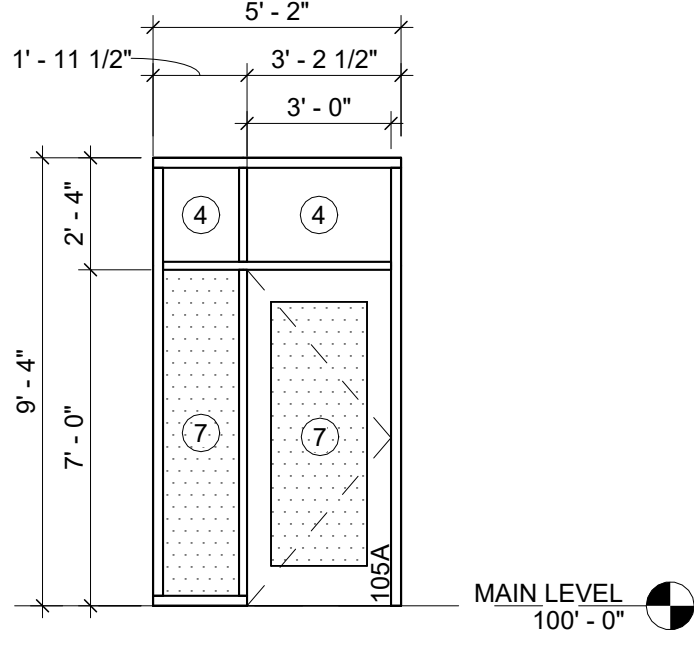
H12 HM JAMB AT PRECAST
1 1/2" = 1'-0"



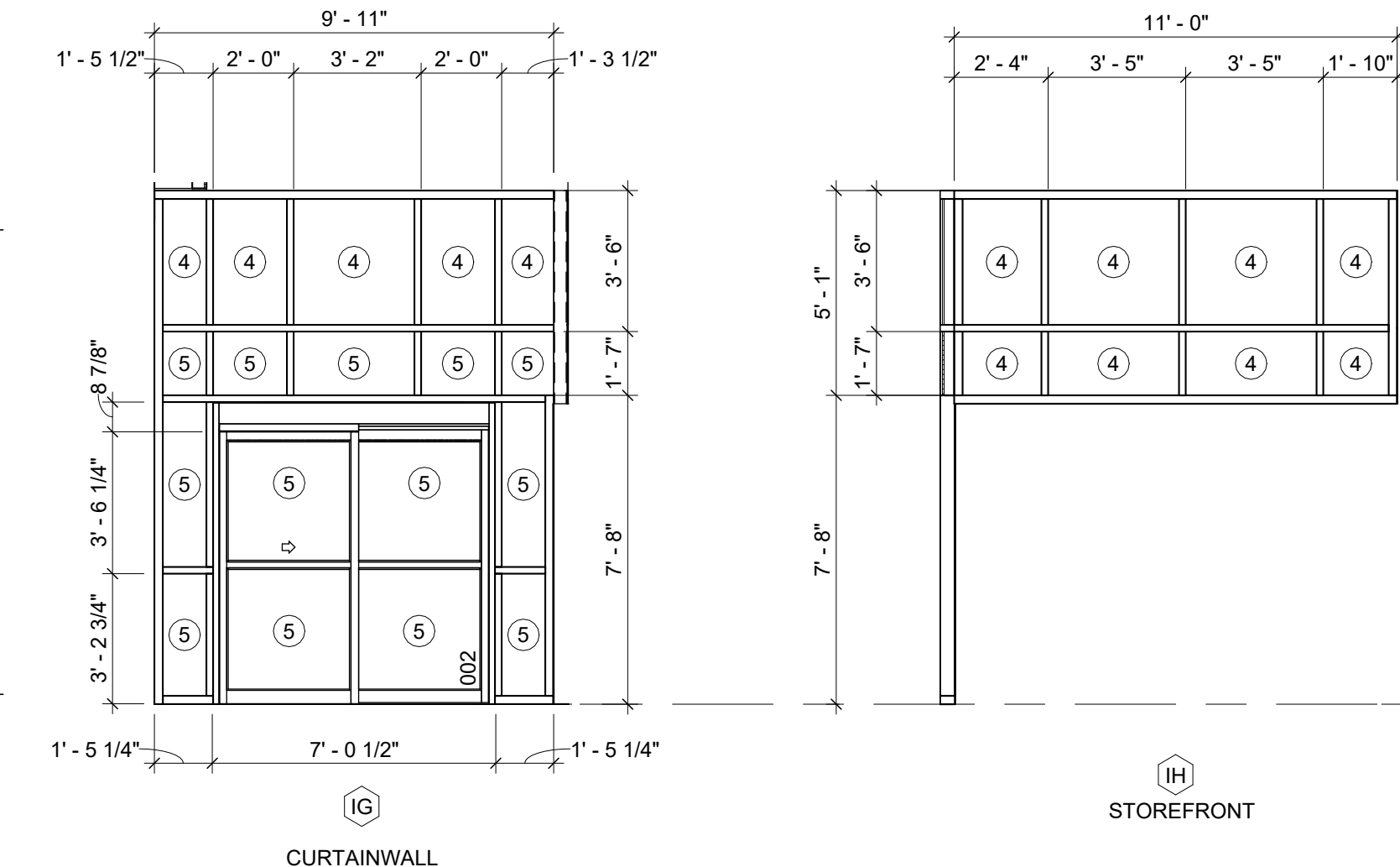
H10 HM HEAD IN PRECAST
1 1/2" = 1'-0"



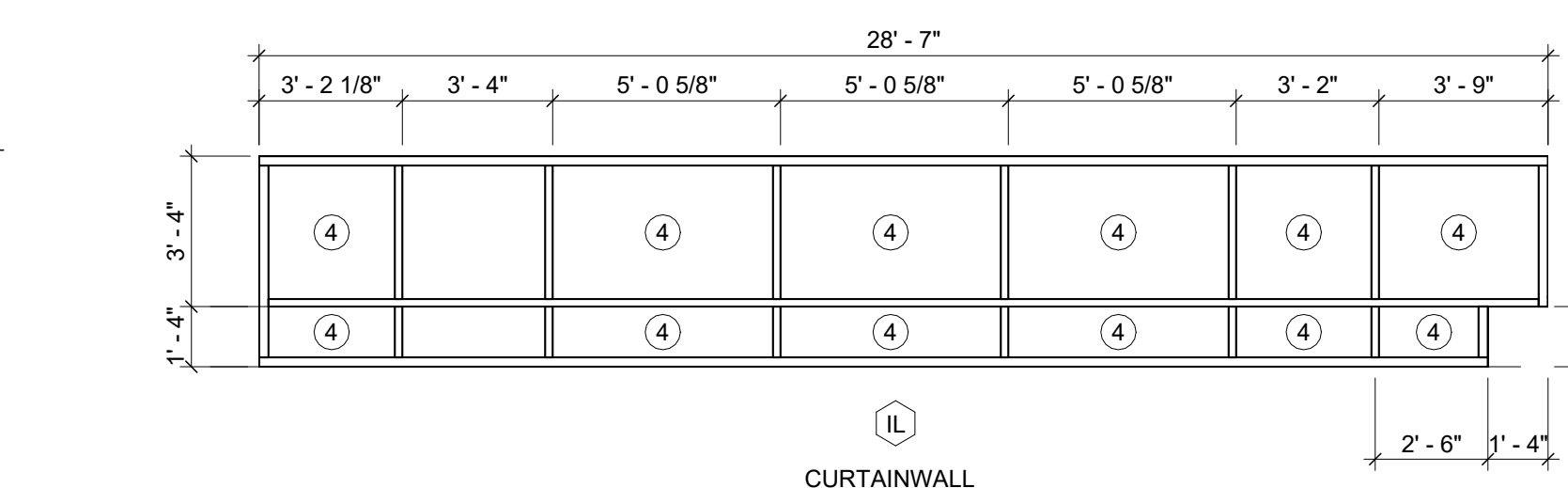
NATURAL VOICE TRANSMISSION LEVEL III BULLET RESISTANT FRAME



MAIN LEVEL 100'-0"



CURTAINWALL

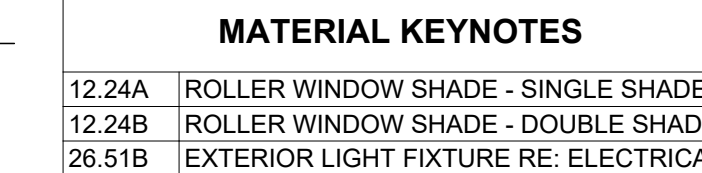


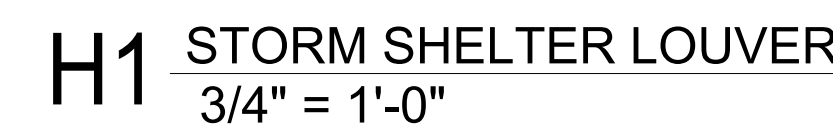
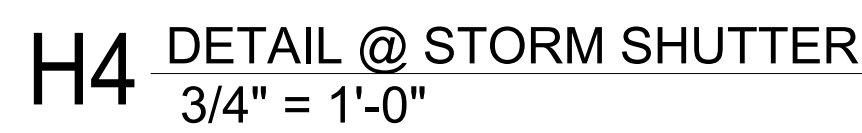
CURTAINWALL

HM FRAME TYPES
1/4" = 1'-0"

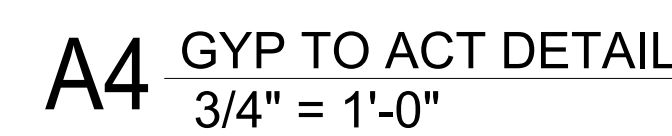
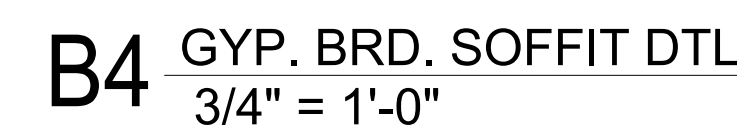
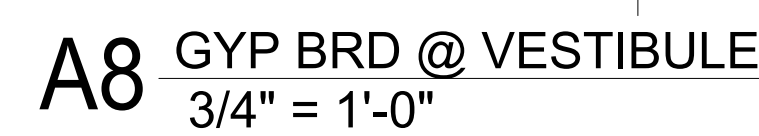
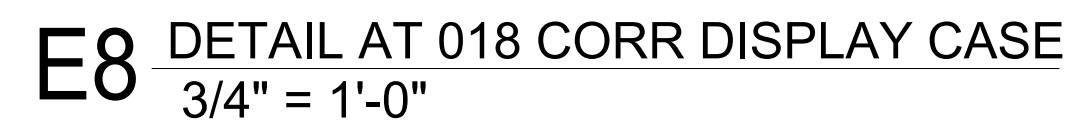
DOOR TYPES
1/4" = 1'-0"

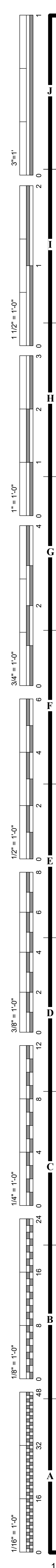
DOOR SCHEDULE												
DOOR #	ROOM: NAME	WIDTH	HEIGHT	DOOR MATERIAL	DOOR TYPE	FRAME MATERIAL	FRAME TYPE	FIRE RATING	AAOS Project HW Set	HEAD	JAMB	REMARKS
001	VEST.	7'-0"	7'-5 3/4"	ALUM	S2	ALUM	B2		2.0		A1/A-522	1
002	VEST.	7'-0"	7'-5 3/4"	ALUM	S2	ALUM	IG		2.0			1
005	FIRE DISPATCH	3'-0"	7'-0"	WD	F	HM	F1		4.0	A4 / A-503	A6 / A-522	2
007A	QA	3'-0"	7'-0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
007B	QA	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
008A	FIRE SUPV	3'-0"	7'-0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
008B	FIRE SUPV	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
011	CORR.	3'-0"	7'-0"	WD	F	HM	F4		10.0	J12 / A-601	J10 / A-601	
012	W. RR	3'-0"	7'-0"	WD	F	HM	F4		30.0	J12 / A-601	J10 / A-601	
013	M. RR	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
014	MECH	3'-0"	7'-0"	WD	F	HM	F1		21.0	J12 / A-601	J10 / A-601	
015A	POLICE SUPV	3'-0"	7'-0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
015B	POLICE SUPV	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
016A	POLICE CAPT	3'-0"	7'-0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
016B	POLICE CAPT	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
017A	DISPATCH TRAINING	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
017B	DISPATCH TRAINING	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
018A	CORR.	3'-0"	7'-0"	WD	F	HM	F1		3.0	A4 / A-503	A6 / A-522	2
018B	UTILITY YARD	3'-0"	7'-0"	HM	F	HM	F1		5.0	A4 / A-522		2
019	CONF.	3'-0"	7'-0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
020	WATER	3'-0"	7'-0"	HM	F	HM	F1		20.0	J12 / A-601	J10 / A-601	
021	ELEC.	3'-0"	7'-0"	HM	F	HM	F1		24.0	J12 / A-601	J10 / A-601	
022	MEDIA	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
023	COMM STOR.	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
024	CORR.	6'-0"	11'-2"	ST	CD	ST	CD	90 MIN	1.0			2
025	QUIET	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
027	QUIET	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
028	QUIET	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
029	QUIET	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
030	JANITOR	3'-0"	7'-0"	WD	F	HM	F1		35.0	J12 / A-601	J10 / A-601	
032	CHANGING	3'-0"	7'-0"	WD	F	HM	F1		31.0	J12 / A-601	J10 / A-601	
033	CHANGING	3'-0"	7'-0"	WD	F	HM	F1		31.0	J12 / A-601	J10 / A-601	
034	CHANGING	3'-0"	7'-0"	WD	F	HM	F1		31.0	J12 / A-601	J10 / A-601	
036	SHOWER	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
038	ADA SHOWER	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
039A	GENERAL STORAGE	6'-0"	8'-0"	ST	CD1	ST			1.0			4
039B	GENERAL STORAGE	3'-0"	7'-0"	HM	F	HM	F1		18.0	J12 / A-601	J10 / A-601	
039C	GENERAL STORAGE	3'-0"	7'-0"	HM	F	HM	F1		18.0	J12 / A-601	J10 / A-601	
040	ELEC.	3'-0"	7'-0"	HM	F	HM	F1		22.0	J12 / A-601	J10 / A-601	
041	IT	3'-0"	7'-0"	HM	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
042A	LOADING DOCK	3'-0"	8'-0"	HM	DF	HM	F2		25.0	J9 / A-601	J7 / A-601	
042B	LOADING DOCK	10'-0"	11'-4"	ST	CD1	ST	CD1		1.0	H1 / A-502	D1 / A-522	
042C	LOADING DOCK	3'-0"	7'-0"	HM	F	HM	F2		8.0			
043A	VEST.	3'-0"	7'-4"	ALUM	GF	ALUM	H		6.0			
043B	VEST.	3'-0"	7'-0"	ALUM	GF	ALUM	U		38.0			
045	IT OPEN OFFICE	3'-0"	7'-0"	WD	DF	HM	F1		15.0	J12 / A-601	J10 / A-601	
047	IT WORK	3'-0"	7'-0"	WD	DF	HM	F1		28.0	J12 / A-601	J10 / A-601	
048	988	3'-0"	7'-0"	WD	F	HM	F1		27.0	J12 / A-601	J10 / A-601	
049A	FITNESS	3'-0"	7'-0"	WD	F	HM	F1		36.0	J12 / A-601	J10 / A-601	
049B	FITNESS	3'-0"	7'-4"	ALUM	GF	ALUM	L1		6.0			
100A	VEST.	3'-0"	7'-4"	ALUM	GF	ALUM	A1		7.0	F6 / A-501		
100B	VEST.	3'-0"	7'-0"	ALUM	GF	ALUM	IA		39.0			
101	LOBBY	3'-0"	7'-0"	ALUM	GF	ALUM	IE		11.0			
105A	CONFERENCE	3'-0"	7'-0"	ALUM	GF	ALUM	IG		17.1			
105B	RECP.	3'-0"	7'-0"	ALUM	GF	ALUM	UD		13.0			
106	STORAGE	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
107	FIRE OPS CTR	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
108A	RECP.	3'-0"	7'-0"	ALUM	GF	ALUM	IB		12.0			3
108B	CORR.	3'-0"	7'-0"	WD	F	HM	F1		9.0	J12 / A-601	J10 / A-601	
110	BC - PREV	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
111	AC - PREV	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
112	MEDICAL DIR.	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
113	AC - EMS	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
114	ADMIN DIV. CONF.	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
115	DC - ADMIN	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
116	OPEN OFFICE	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
116B	AC-SS	3'-0"	7'-0"	WD	F	HM	F1		23.0	J12 / A-601	J10 / A-601	
121	CHIEF	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
122	STOR.	2'-8"	7'-0"	WD	F	HM	F1		23.0	J12 / A-601	J10 / A-601	
123	CHIEF	2'-8"	7'-0"	WD	F	HM	F1		31.0	J12 / A-601	J10 / A-601	
124	PR-FUTURE	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
125	ADMIN MGR	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
126	BC-TRAIN-FUTURE	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
127	AC-TRAIN	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
128	OPP. DIV CONF	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
129	DC - OPP	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
130	RR	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
131	RR	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
132	RR	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
133	RR	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
134	ROOF	3'-0"	7'-0"	ST	F	HM	F1		19.0	J12 / A-601	J10 / A-601	
135	RR	5'-0"	11'-2"	ST	CD	ST	CD	90 MIN	1.0			2
136	RR	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
137	RR	3'-0"	7'-0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
140A	CONFERENCE	3'-0"	7'-0"	WD	F	HM	F4		10.0	J12 / A-601	J10 / A-601	
141	STORAGE	3'-0"	7'-0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
142	CONFERENCE	3'-0"	7'-0"	WD	V	HM	F1		17.0	J12 / A-601	J10 / A-601	
143	CONFERENCE	3'-0"	7'-0"	WD	V	HM	F1		17.0	J12 / A-601	J10 / A-601	
144	PLANNER	3'-0"	7'-0"	WD	V	HM	F1		17.0	J12 / A-601	J10 / A-601	
145	AC - EMERG MGMT	3'-0"	7'-0"	WD	V	HM	F1		17.0	J12 / A-601	J10 / A-601	
146	SERVERS	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
147	UPS	3'-0"	7'-0"	WD	F	HM	F1		32.0	J12 / A-601	J10 / A-601	
148	BREAK	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
149	JAN	3'-0"	7'-0"	WD	F	HM	F1		22.0	J12 / A-601	J10 / A-601	
150	CORR.	3'-0"	7'-2"	WD	F	HM	F2	90 MIN	41.0			2
151	DRIVING SIM	3'-0"	7'-0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
152A	EMS SIM	3'-0"	7'-0"	WD	F	HM	F1		14.0	J12 / A-601	J10 / A-601	
153	STORAGE	3'-0"	7'-0"	WD	F	HM	F1		20.0	J12 / A-601	J10 / A-601	
154B	VIEW.	3'-0"	7'-0"	WD	F	HM	F1		34.0	J12 / A-601	J10 / A-601	
155A	TRAINING	3'-0"	7'-0"	WD	V	HM	F1		29.0	J12 / A-601	J10 / A-601	
155B	TRAINING	3'-0"	7'-0"	WD	V	HM	F1		29.0	J12 / A-601	J10 / A-601	
155C	TRAINING	3'-0"	7'-0"	HM	F	HM	F1		3.0	E4 / A-502	A1/A-521	2
156	STOR.	3'-0"	7'-0"	WD	DF	HM	F1		26.0	J12 / A-601	J10 / A-601	
157	MECH.	3'-0"	7'-0"	HM	F	HM	F1		22.0	J12 / A-601	J10 / A-601	





- | MATERIAL KEYNOTES | |
|-------------------|---|
| 03.41B | PRECAST CONCRETE WALL |
| 06.10E | WOOD BLOCKING, AS REQUIRED |
| 06.40C | PLASTIC LAMINATE CASEWORK |
| 06.41A | GLASS DISPLAY CASE |
| 08.33F | ICC 500 RATED ROLLUP SHUTTER |
| 08.41I | ALUMINUM-FRAMED STOREFRONT SYSTEM |
| 09.22C | 5/8-INCH ALUM. STUDS @ 4 INCHES O.C. |
| 09.29A | INTERIOR 5/8-INCH GYP. BD. REF. WALL
TYPES |
| 09.29E | INTERIOR 5/8-INCH GYP. BD. EXTENDS TO
UNDERSIDE OF ROOF OR FLOOR
ASSEMBLY. REF. WALL SCHEDULE |
| 09.51A | ACOUSTICAL PANEL, CEILING W/ EXPOSED
GRID |
| 26.51A | INTERIOR LIGHT FIXTURE, TYPE: REF.
ELECTRICAL |





- GENERAL NOTES - FINISH PLANS:**
1. RE: SHEET G-011 - FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
 2. RE: FINISH LEGEND, AND FLOOR FINISH PLANS FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
 3. RE: FINISH DETAILS SHEET A1501 FOR ADDITIONAL FINISH AND FLOOR TRANSITION CONDITIONS.
 4. RE: FINISH DETAILS SHEET A1501 FOR ADDITIONAL WALL FINISH / WALL PROTECTION DETAILS.
 5. FLOOR FINISHES SHOWN ARE FOR ACCENT CLARIFICATION ONLY. RE: FINISH TAGS FOR ADDITIONAL INFORMATION.
 6. FLOOR FINISH PATTERN SHALL BE CENTERED IN ROOM, UNLESS NOTED OTHERWISE.
 7. ALIGN ALL WALL BASE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
 8. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FLOOR FINISHES AS ADJOINING SPACES.
 9. FLOOR FINISH MATERIAL AND/ OR PATTERN SHALL BE INSTALLED UNDER TOE KICKS OF CASEWORK/MILLWORK, UNDER OPEN COUNTERTOPS, AND UNDER EQUIPMENT.
 10. FLOOR MATERIAL/ COLOR TRANSITIONS TO BE CENTERED UNDER DOOR, UNLESS NOTED OR SHOWN OTHERWISE.
 11. RE: A1501 FOR ALL FLOORING TRANSITION DETAILS & FINISH WALL PROTECTION DETAILS.
 12. CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING FOR WALL PROTECTION ATTACHMENT. THIS INCLUDES, BUT IS NOT LIMITED TO: HANDRAILS. RE: MANUFACTURER'S GUIDELINES FOR CLARIFICATIONS.
 13. CONTRACTOR SHALL PROVIDE MANUFACTURER'S STANDARD ACCESSORY MOLDING OR TRIM FOR WALL PROTECTION ITEMS, UNLESS NOTED OTHERWISE.
 14. IF WALL IS LESS THAN 18" WIDE DO NOT PROVIDE HANDRAIL. HANDRAILS SHOULD STOP APPROXIMATELY 3" FROM THE OPEN SWING OF A DOOR. HANDRAILS SHOULD STOP APPROXIMATELY 3" FROM A CORNER GUARD. RE: SHEET A1501.
 15. CONTRACTOR SHALL PROVIDE BLOCKING FOR ALL WALL MOUNTED EQUIPMENT. RE: G-021 FOR CLARIFICATION.
 16. CONTRACTOR SHALL PROVIDE BLOCKING FOR SIGNS AS CALLED OUT ON ELEVATIONS.

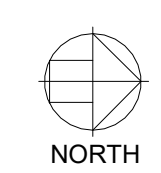
ROOM FINISH TAG KEY LEGEND	
ROOM	000
FLOOR FINISH	
WALL FINISH	
CEILING FINISH	

WALL FINISH LEGEND	
PC	CORNER GUARD (PC)
WP	ACCENT PAINT (WP)
WT	WALL TILE (WT)
SF	FABRIC WRAPPED PANELS (SF)
S	SPECIALTY WALLS (S)

NOT ALL WALL FINISHES ARE SHOWN GRAPHICALLY. REFER TO SHEETS A-601, A-602, A-603 AND SERIES A-45100 FOR SPECIFIC LOCATIONS AND MATERIALS

FLOOR FINISH LEGEND	
FA1/FC	
FA1/FVT2	
FC	
FA2	
FE	
FER	
FR	
FT	
FVT1	
FVT2	
FZ	

RE: FINISH SCHEDULE



A1 LOWER LEVEL FINISH PLAN
1/8" = 1'-0"

LOWER LEVEL - FINISH PLAN

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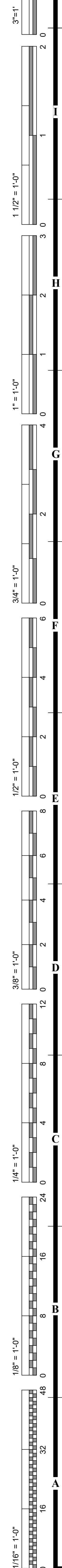
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REVISION DATES:



PROFESSIONAL SEAL

A1101
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191



ROOM FINISH TAG KEY LEGEND	
ROOM	
000	
FLOOR FINISH	
WALL BASE	
WALL FINISH	
CEILING FINISH	

NOT ALL WALL FINISHES ARE SHOWN GRAPHICALLY. REFER TO SHEETS A-601, A-602, A-603 AND SERIES A-45100 FOR SPECIFIC LOCATIONS AND MATERIALS

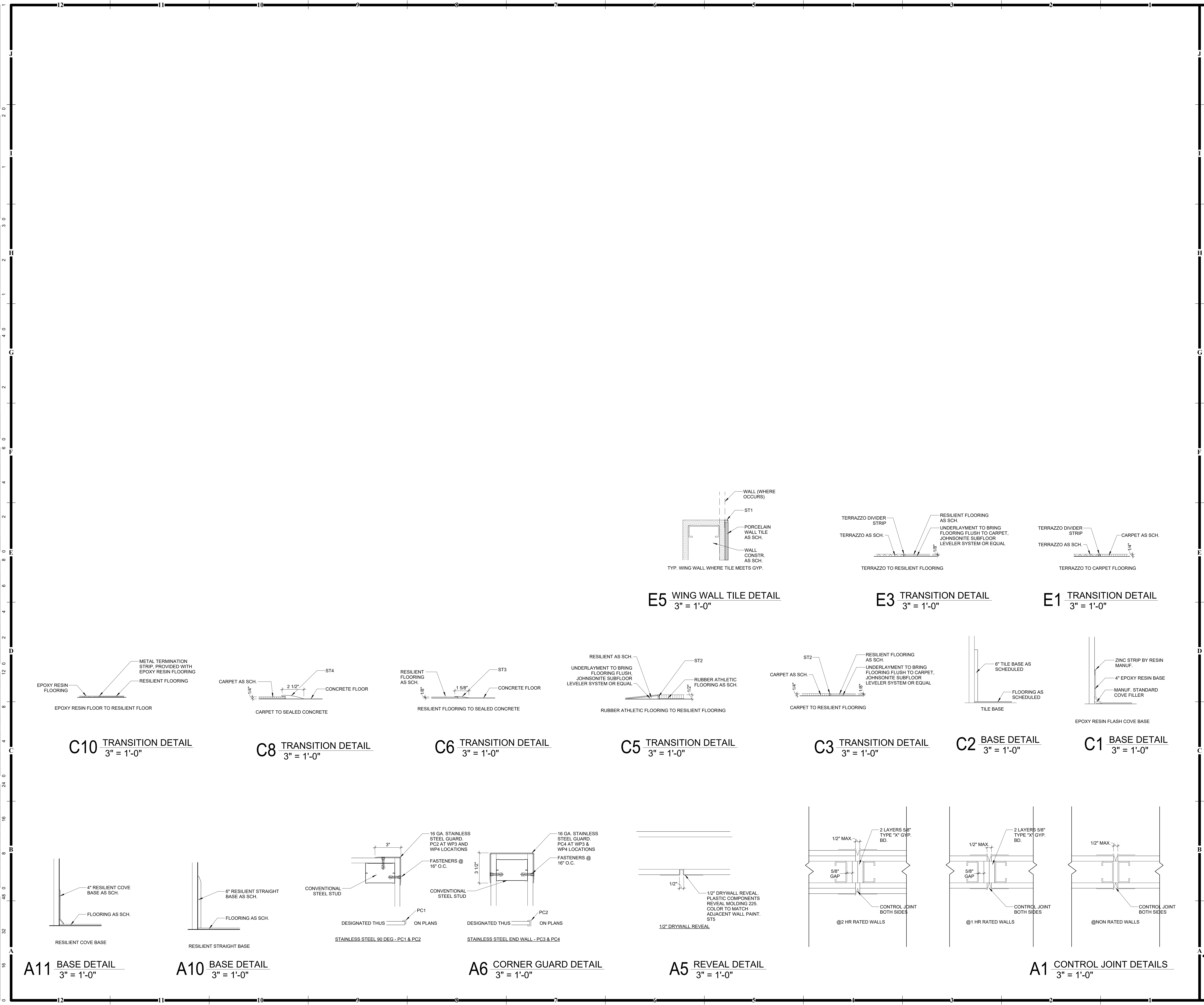
RE: FINISH SCHEDULE

REVISION DATES:



ISSUE DATE: NOVEMBER 1, 2021
DOEFER WELKER #: 13819

MAIN LEVEL - FINISH PLAN



GENERAL NOTES - INTERIOR FINISHES:

- 1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
- 2. RE: AC SHEETS G-012 THROUGH G-015 FOR ADDITIONAL CEILING FINISH INFORMATION.
- 3. RE: A-451 SERIES SHEETS FOR ADDITIONAL WALL FINISH INFORMATION.
- 4. RE: A-51 SERIES SHEETS FOR ADDITIONAL FLOOR FINISH & WALL PROTECTION INFORMATION.
- 5. WHERE MULTIPLE FINISHES ARE LISTED IN ONE AREA OR ON ONE ROOM, REFER TO THE SCHEDULE, REFER TO THE A-451 AND A-51 SERIES SHEETS FOR FINISH DESCRIPTION, AND/OR INTERIOR QP. BD. SURFACES SHALL RECEIVE EGGSHELL/ SATIN FINISH LATEX PAINT, UNLESS NOTED OTHERWISE.
- 6. INTERIOR QP. BD. SURFACES TO RECEIVE POLY PAIN SHALL HAVE A SATIN FINISH, UNLESS NOTED OR SPECIFIED OTHERWISE.
- 7. METAL SURFACES SHALL RECEIVE POLY ENAMEL WALL TILE MEETS PAINTED QP. BD. WALL IN ALL VERTICAL AND/OR HORIZONTAL CONDITIONS, UNLESS NOTED OTHERWISE.
- 8. HOLLOW METAL FRAMES SHALL RECEIVE SEMI-GLOSS FINISH.
- 9. WHERE PORCELAIN OR GLASS WALL TILES OF DIFFERENT THICKNESSES MEET, ENSURE THAT THE EDGES OF THE DIFFERENT TILES ARE FLUSH.

FINISH DETAILS

GENERAL NOTES: INTERIOR FINISHES:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: AC SERIES SHEETS FOR ADDITIONAL CEILING INFORMATION.
3. RE: A-451 SERIES SHEETS FOR ADDITIONAL WALL INFORMATION.
4. RE: AI SERIES SHEETS FOR ADDITIONAL FLOOR FINISH & WALL PROTECTION INFORMATION.
5. WHERE MULTIPLE FINISHES ARE LISTED IN ONE AREA OR ROOM ON THE FINISH SCHEDULE, REFER TO THE A-451 AND AI SERIES SHEETS FOR FINISH CLARIFICATION.
6. ALL OTHERS: REFER TO THE A-451 AND AI RECEIVE EGGSHELL/ SATIN FINISH LATEX PAINT, UNLESS NOTED OR SPECIFIED OTHERWISE.
7. INTERIOR GPY: BD. SURFACES TO RECEIVE EPOXY PAINT SHALL HAVE A SATIN FINISH, UNLESS NOTED OTHERWISE. INSTALL METAL TRANSITION STRIP WHERE WALLS MEET FLOORS AND AT ALL WALL IN ALL VERTICAL AND/OR HORIZONTAL CONDITIONS, UNLESS NOTED OTHERWISE. HOLLOW METAL FRAMES SHALL RECEIVE SEMI-GLOSS FINISH.
8. WHERE PORCELAIN OR GLASS WALL TILES OF DIFFERENT TYPES ARE USED, ENSURE THAT THE FACES OF THE DIFFERENT TILES ARE FLUSH.

REMARKS:

1. REFER TO TOILET ELEVATIONS ON SHEET A-401 & A-402 FOR TYPICAL WALL TILE INSTALLATION PATTERNS.

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:



PROFESSIONAL SEAL

AI601

ISSUE DATE: NOVEMBER 1, 2011
HOEFER WELKER #: 138

FINISH LEGEND

GENERAL NOTES – FURNITURE & EQUIPMENT PLANS:

1. RE: SHEET G-011- FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: SHEET G-021- FOR TYPICAL MOUNTING HEIGHTS
3. RE: SHEET A-401's - FOR ENLARGED TOILET ROOM PLANS.
4. RE: INTERIOR CASEWORK ELEVATIONS ON SHEETS A-451 FOR EQUIPMENT LOCATIONS.
5. ELECTRICAL DATA SHOWN FOR INFORMATION ONLY, RE: MEP SHEETS.

FFE LEGEND	
	FURNITURE
	EQUIPMENT
	TOILET ACCESSORIES TAG
	SPECIALTY EQUIPMENT TAG

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PACKAGE 2: CONSTRUCTION SET

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AF101

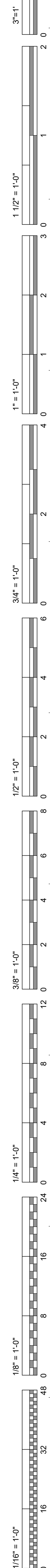
ISSUE DATE: NOVEMBER 1, 2024

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LOWER LEVEL - FFE PLAN



A1 LOWER LEVEL FFE PLAN
1/8" = 1'-0"



"SOME SYMBOLS MAY NOT BE USED. REFER TO PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."

- BRACKET DENOTES A WALL MOUNTED DEVICE. TYP

*SOME SYMBOLS MAY NOT BE USED. REFER TO PLANS FOR ALL SYMBOLS AND ABBREVIATIONS.

- | | |
|-----------|--|
| H | THERMODETECTOR(HEAT) DETECTOR |
| HD | THERMODETECTOR(HEAT) DETECTOR - DUCT MOUNTED |
| DH | DOOR HOLDER |

1. FIRE ALARM SHALL MEET THE APPLICABLE REQUIREMENTS OF NFPA 72, NFPA 101, NFPA 90A, NFPA 96 AND ASME 17.2 OR 17.3 IN ADDITION TO THE LOCALLY ADOPTED CODES.
2. SET CAMELDA SETTINGS ON ALL STROBES PER THE REQUIREMENTS OF NFPA 72.
3. CONDUITS, BOXES AND SLEEVES SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
4. SEAL ALL PENETRATIONS MADE FOR FIRE ALARM CABLING AND INFRASTRUCTURE USING APPROPRIATE METHOD AND MATERIAL TO MAINTAIN FIRE RATING. ALL FIRE RESISTANCE RATED CONSTRUCTIONS. REFER TO FIRESTOP DETAILS ON THE LOW VOLTAGE DETAIL SHEETS FOR ADDITIONAL INFORMATION AND ARCHITECTURAL CODE SHEETS FOR RATED WALL AND FLOOR LOCATIONS.
5. SPECIAL MOUNTING HEIGHTS NOTED ON PLANS ARE MEASURED TO THE CENTER OF THE JUNCTION BOX. REFER TO TYPICAL MOUNTING HEIGHT DETAIL FOR TYPICAL MOUNTING HEIGHTS.
6. FIRE ALARM DEVICES TO BE WHITE.

- 1 FIRE ALARM CONTROL PANEL.
- 2 WEATHERPROOF HORN STROBE ABOVE FIRE PROTECTION SERVICE ENTRANCE LOCATION
- 3 FIRE ALARM CONNECTION TO FIRE SHUTTER DOOR. COORDINATE WITH DOOR INSTALLER.



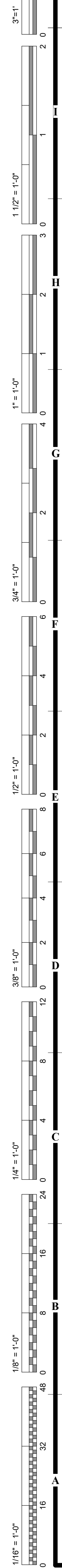
smith & boucher
engineers
618 west 103rd St olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 2421800

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DUE DATE: NOVEMBER 1, 2024
 REFER WELKER #: 138191

LOWER LEVEL - FIRE ALARM PLAN

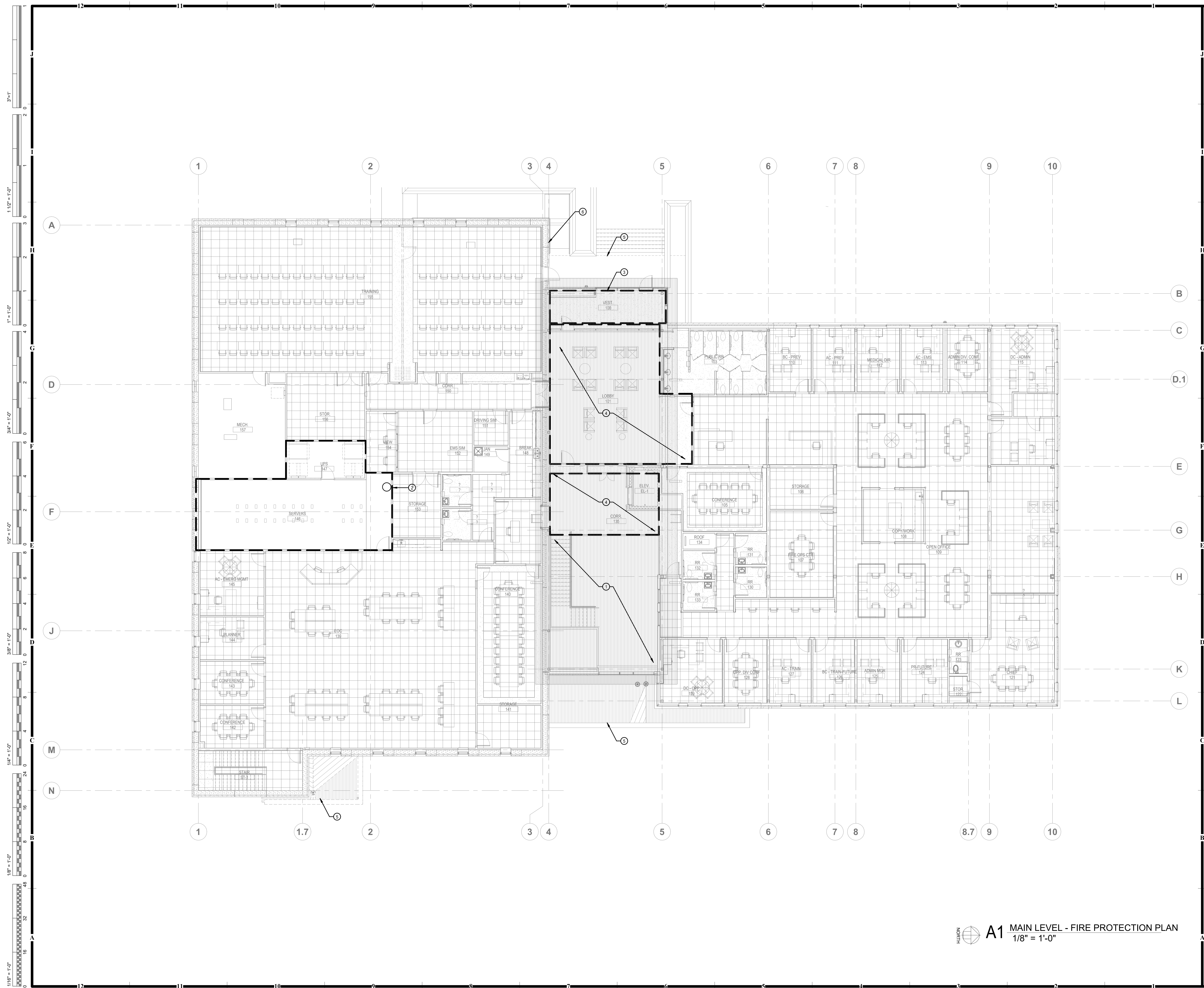


PACKAGE 2: CONSTRUCTION SET

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ALTERNATIVE

MAIN LEVEL - FIRE ALARM PLAN



PLAN NOTES:

- ① COORDINATE PIPE ROUTING AT TWO-STORY BREAK ROOM.
- ② PROVIDE COMPLETE CLEAN AGENT FIRE SUPPRESSION SYSTEM AND ALL REQUIRED ALARMS, ACCESSORIES, AND PIPING FOR SERVER ROOM AND UPS ROOM. SYSTEM TO BE DELEGATED DESIGN.
- ③ THERE IS A LID ON THE VESTIBULE AND THE SPACE ABOVE THE VESTIBULE IS OPEN TO THE LOBBY. SO COORDINATE THE SPRINKLER SYSTEM ACCORDINGLY.
- ④ AVOID ROUTING SPRINKLER MAINS THROUGH THIS SPACE. COORDINATE ROUTING THE SPRINKLER MAINS THROUGH THE LOWER LEVEL.
- ⑤ EXTERIOR CANOPIES CONSIST OF ONLY NON COMBUSTIBLE MATERIALS, NO SPRINKLER REQUIRED.
- ⑥ COORDINATE ALL PENETRATIONS IN THE STORM SHEET PRECAST PRIOR TO CONSTRUCTION. PRECAST PENETRATIONS CANNOT BE FIELD CUT.



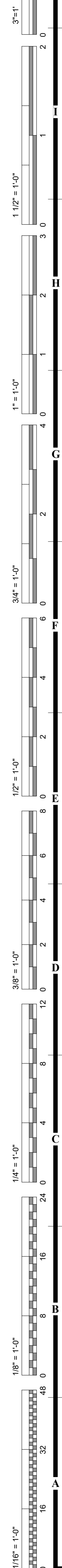
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engineers
25618 west 103rd St olathe, ks 66061
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project number 2421800

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MAIN LEVEL - FIRE PROTECTION PLAN



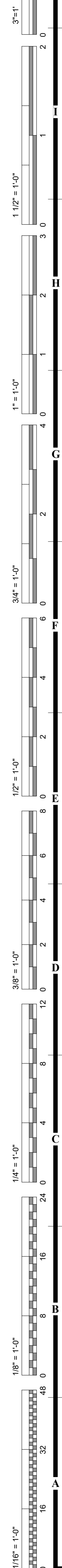
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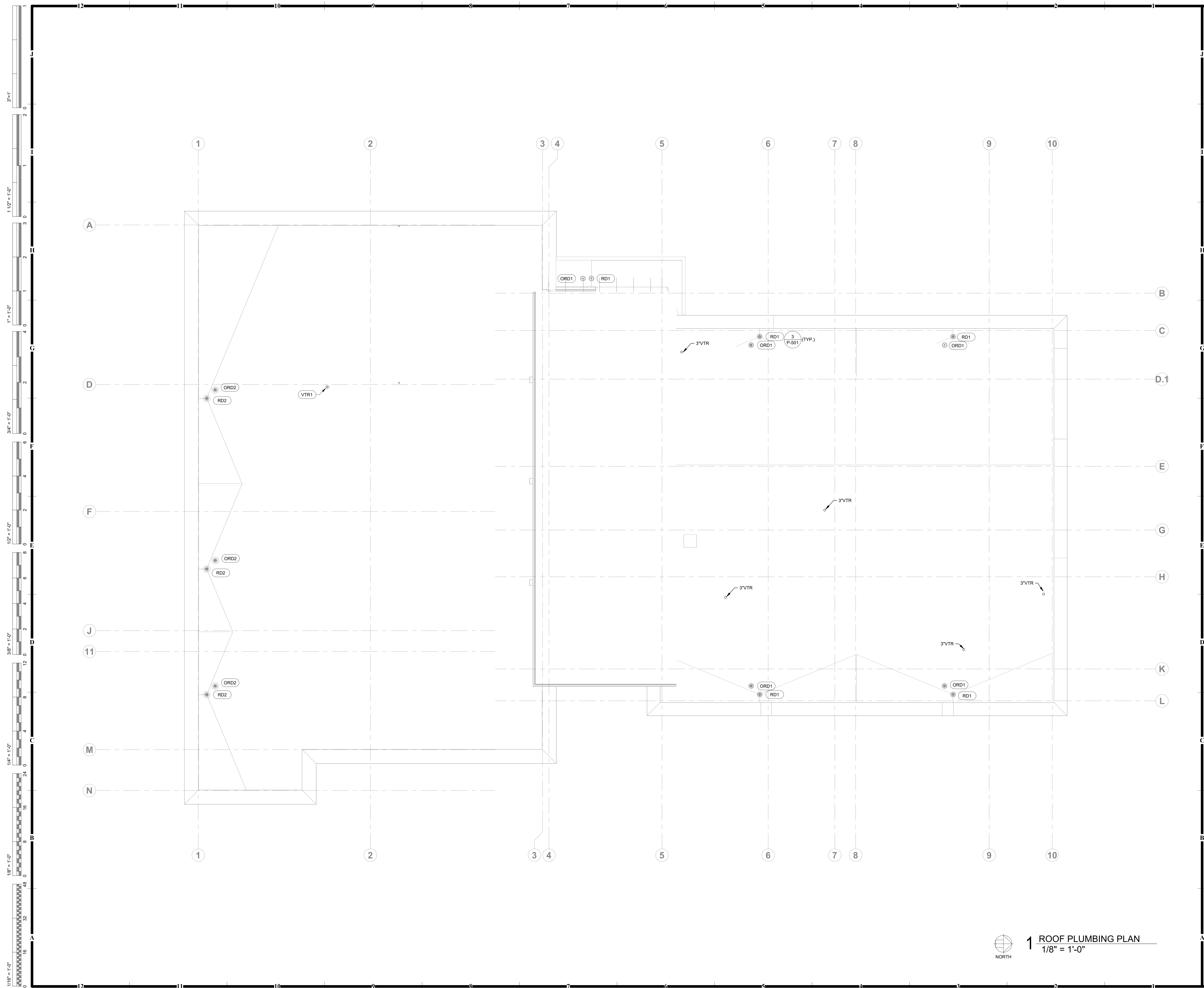
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NORTH





1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

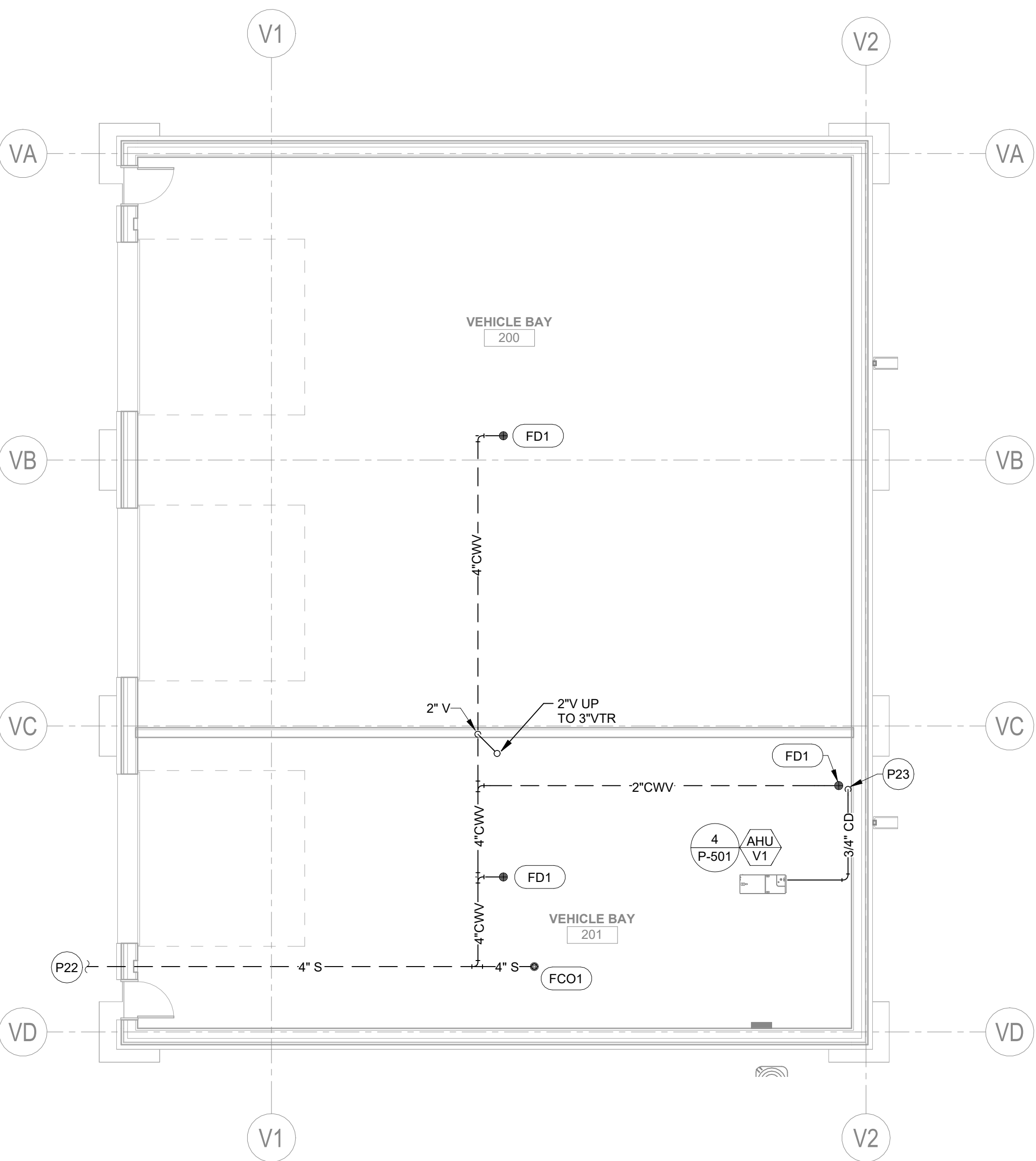
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ROOF PLUMBING PLAN



1 VEHICLE BUILDING - PLUMBING PLAN
1/8" = 1'-0"

P22 EXTEND SANITARY SEWER 5'-0"
OUTSIDE BUILDING AND CONNECT TO
CIVIL AT 1007.67. REFER TO CIVIL
DRAWINGS FOR CONTINUATION.

P23 ROUTE CONDENSATE WALL DOWN IN
WALL AND TERMINATE AT FLOOR
DRAIN WITH AIR GAP.

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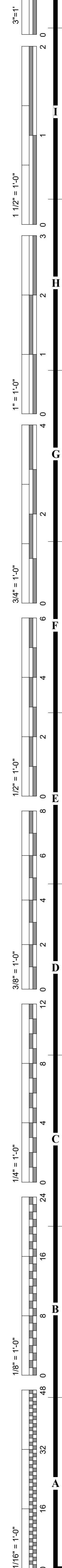
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

VEHICLE BAY PLUMBING PLAN



LOWER LEVEL - WATER AND GAS PLAN

ISSUE DATE: NOVEMBER 1, 2021
HOEFER WELKER #: 138191



P9
P24

FFA
STUB OUT 1/2" CW BELOW
COUNTERTOP FOR COFFEE MAKER.
INSTALL SHUT-OFF VALVE AND DUAL
CHECK BACKFLOW PREVENTER IN
ACCESSIBLE LOCATION WITHIN
CABINetry AND EXTEND FLEXIBLE
COPPER TUBE OR BRAIDED STAINLESS
STEEL HOSE TO COFFEE MAKER
THROUGH HOLE DRILLED IN
COUNTERTOP AND CONNECT PER
MANUFACTURERS
RECOMMENDATIONS.

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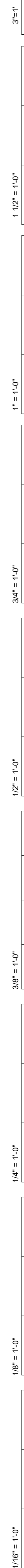
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MAIN LEVEL - WATER AND GAS PLAN

Autodesk Docs://138191-LeesSummitJointOpsCtr/138191 MEP23 LeesSummitJointOpsCtr.rvt

1 MAIN LEVEL WATER & GAS PLAN



- P1
P9
P19
P20
P29

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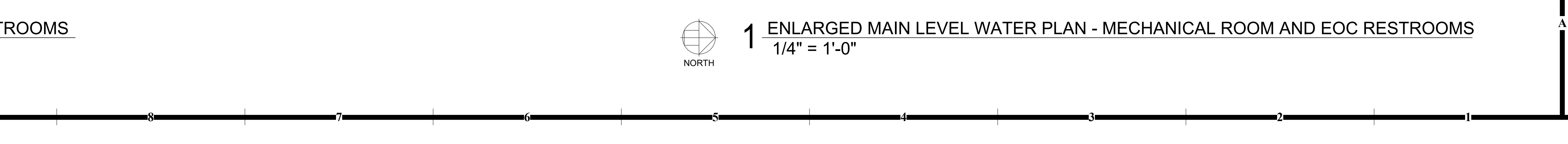
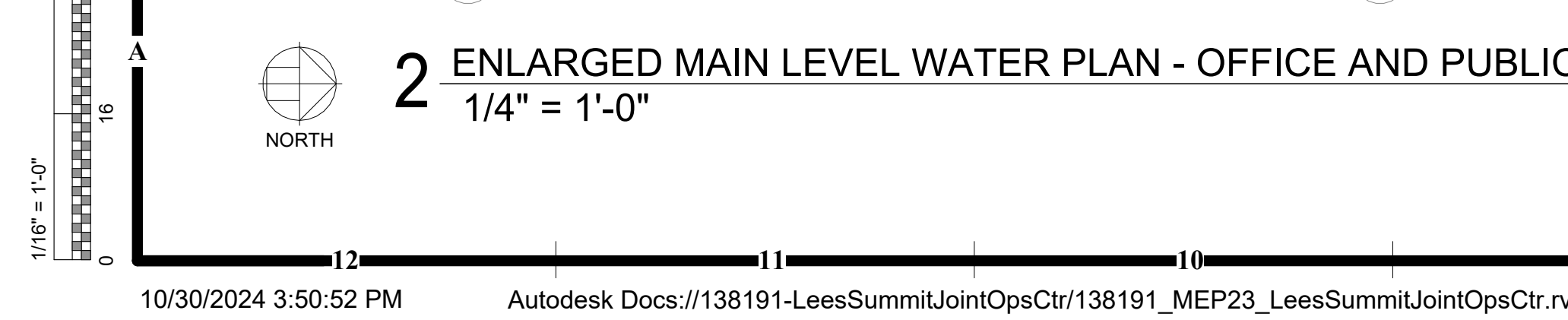


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ENLARGED MAIN LEVEL WASTE AND VENT PLANS



- ENLARGED LOWER LEVEL WATER
PLANS



- | | | |
|--|--|--|
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LEE'S SUMMIT, MISSOURI 64086</p> <p>REVISION DATES:</p> <table border="1" style="width: 100%;"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> | |
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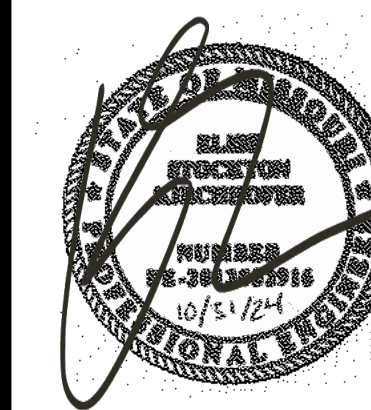


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P-404

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LEVEL WATER PLANS



DRAINAGE FIXTURE SCHEDULE					
PLAN MARK	TYPE	MANUFACTURER	MODEL	OPTIONS	NOTES
DN1	DOWNSPOUT NOZZLE	ZURN	Z199		
DN2	DOWNSPOUT NOZZLE	ZURN	Z199		
FCO1	FLOOR CLEANOUT	JAY R SMITH	4031L		
FD1	FLOOR DRAIN - ROUND	JAY R SMITH	205SA	CC NBS, TG	
GC02	TWO-WAY FINISHED GRADE CLEANOUT	JAY R SMITH	4261L		
ORD1	OVERFLOW ROOF DRAIN	ZURN	Z180-B9		
ORD2	ICC 500 COMPLIANT OVERFLOW ROOF DRAIN	ROOF PENETRATION HOUSINGS	COFRD		
RD1	ROOF DRAIN	ZURN	Z180		
RD2	ICC 500 COMPLIANT ROOF DRAIN	ROOF PENETRATION HOUSINGS	CRD		
WCO1	WALL CLEANOUT	JAY R SMITH	4530S		

SUMP PUMP SCHEDULE														
MODEL	UNIT TYPE	PUMP				BASIN		ELECTRICAL					OPTIONS	NOTES
		MIN FLOW RATE (GPM)	HEAD (FT)	MAX HP	RPM	DIAMETER (IN)	HEIGHT (IN)	VOLTAGE	PHASE	FLA	MCA	MOPP		
1-538	ELEVATOR	50	20	0.5	1750	24"	36"	120	1	3.1	3.1	15		

RECIRCULATION PUMP SCHEDULE																
PLAN MARK	MANUFACTURER	MODEL	SIZE	MOUNTING	FLOW RATE (GPM)	HEAD (FT)	ELECTRICAL					AS	OPTIONS	NOTES		
							VOLTAGE	PHASE	FLA	MCA	MOCp					
RP1	GRUNDFOS	ALPHA 15-58 F	3/4"	INLINE	2.0	15	120	1	0.3	0.8	15					

PRESSURE REGULATOR SCHEDULE								
MANUFACTURER	MODEL	SYSTEM	MAX CAPACITY (MBH)	INLET PRESSURE (PSIG)	OUTLET PRESSURE (IN. W.C.)	VALVE SIZE (IN)	OPTIONS	NOTES
METRO FIORENTINI	31156/F	NATURAL GAS	4140	2	7	2.5		
METRO FIORENTINI	31156/F	NATURAL GAS	4140	2	7	2.5		

WATER STORAGE PUMP/FILTRATION SCHEDULE													
PUMP LOW RATE (GPM)	OUTLET PRESSURE (PSI)	BLADDER TANK VOLUME (GAL)	PROCESSING				ELECTRICAL			LENGTH	WIDTH	OPTIONS	NOTES
			FILTER TYPE	FILTRATION LEVEL	SANITATION TYPE	SANITATION LEVEL	VOLTAGE	PHASE	MOCp				
50	60	26	BAG FILTER	5 MICRON	ULTRAVIOLET	40 ml/cm2	480	3	30	84	48		1,2,3,4

PLUMBING STORAGE TANK SCHEDULE									
PLAN MARK	SERVICE	MANUFACTURER	MODEL	VOLUME (GAL)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	OPTIONS	NOTES
WST1	EMERGENCY WATER STORAGE	WAHAGO	CUSTOM	3000	192	96	62		

LUMBER PRESSURIZED STORAGE TANK SCHEDULE					
VOLUME (GAL)	DRAWDOWN (GAL)	OPERATING PRESSURE (PSI)	DIAMETER (IN)	HEIGHT(IN)	WEIGHT (LB)
9	2.16	60	12.5	19	90
9	2.16	60	12.5	19	90

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SCHEDULE

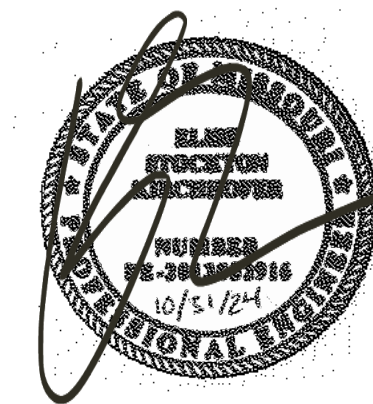
SCHEDULE

PLUMBING SCHEDULE:

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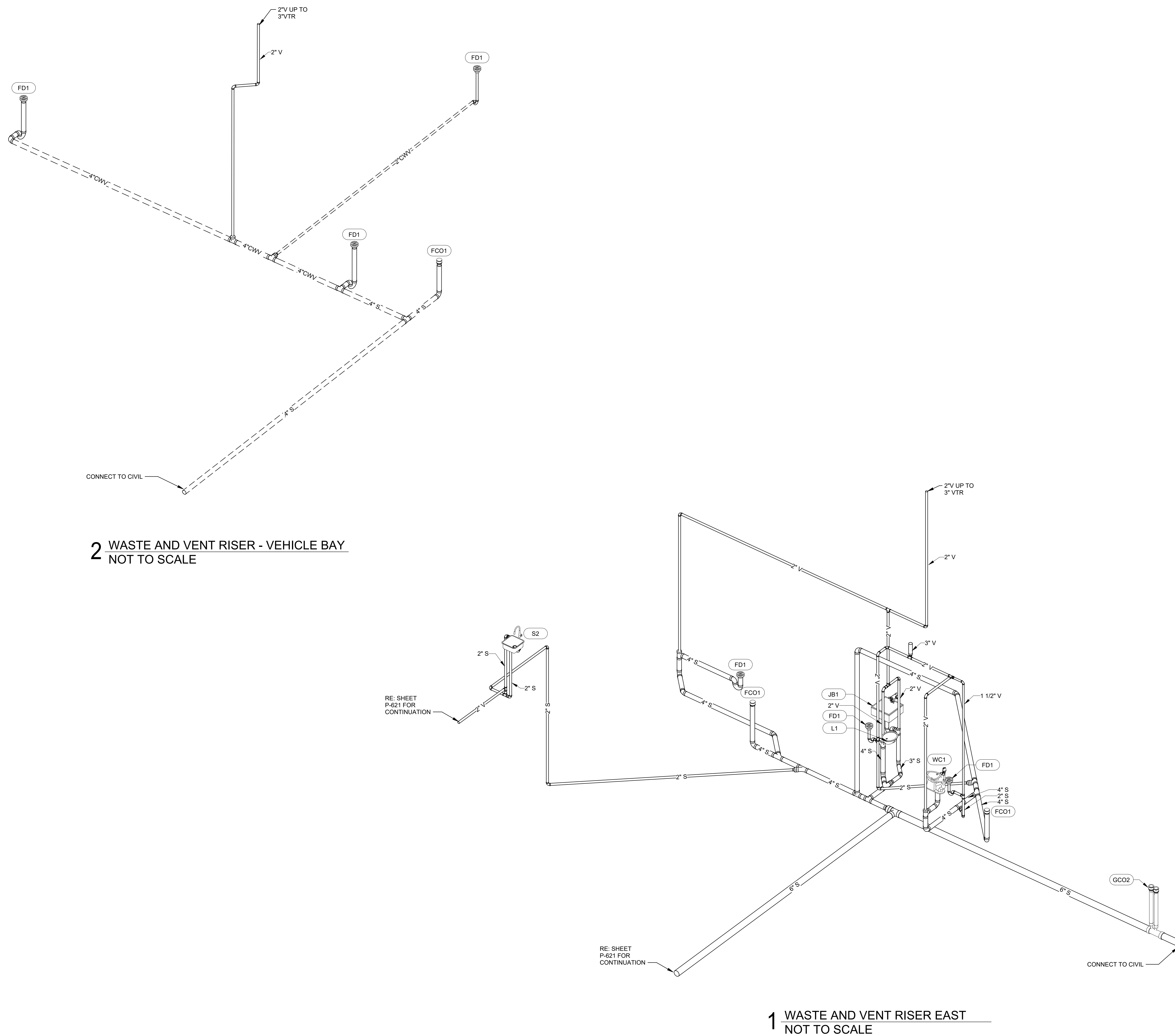


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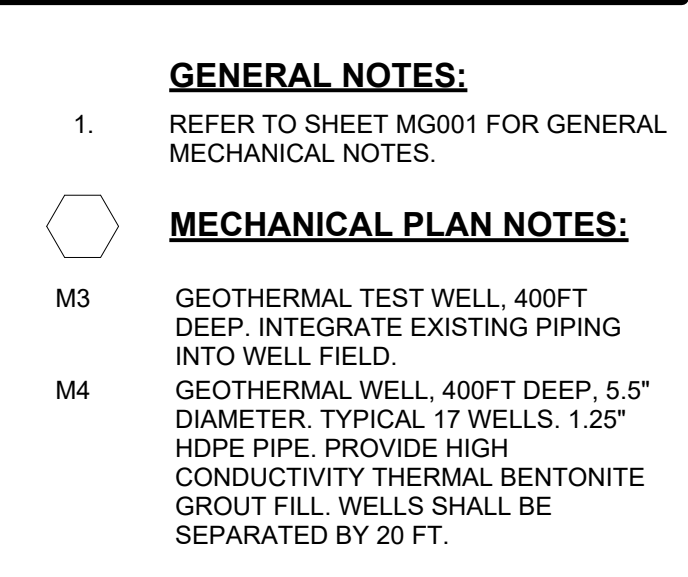
P-622

ISSUE DATE: NOVEMBER 1, 202
HOEFER WELKER #: 138191

PLUMBING WASTE AND VENT RISER



10



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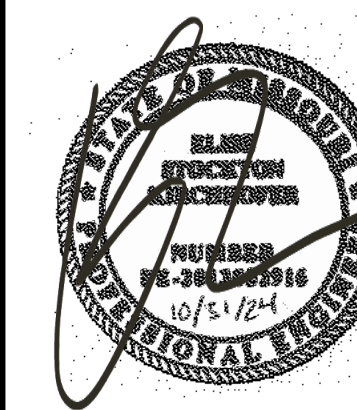
MECHANICAL SITE PLAN

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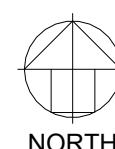
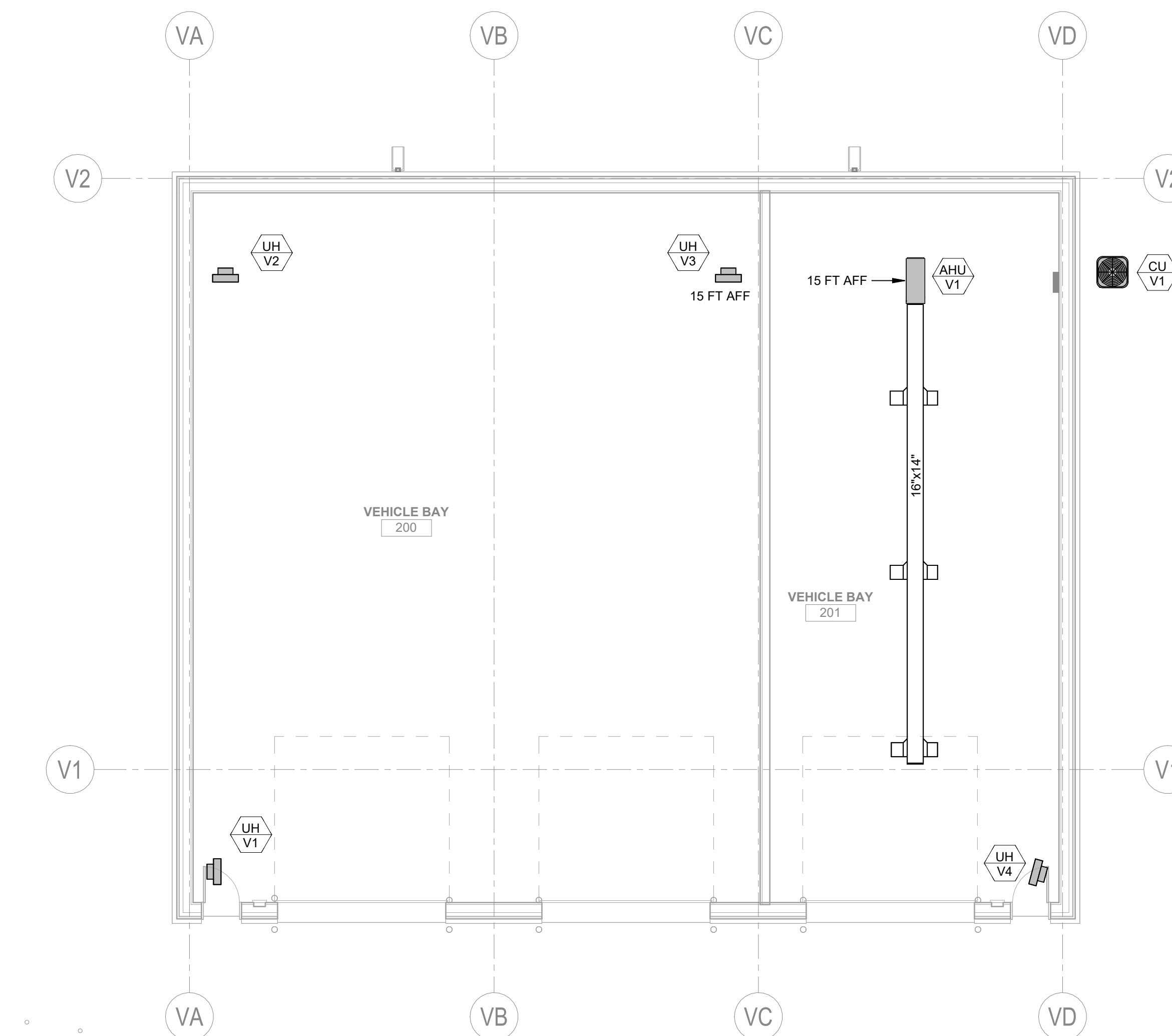


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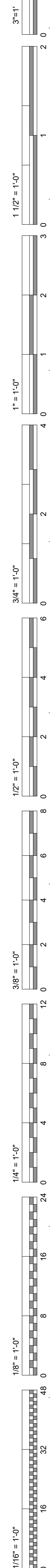
M-103

ISSUE DATE: NOVEMBER 1, 2011
HOEFER WELKER #: 1381

VEHICLE BUILDING - HVAC PLAN



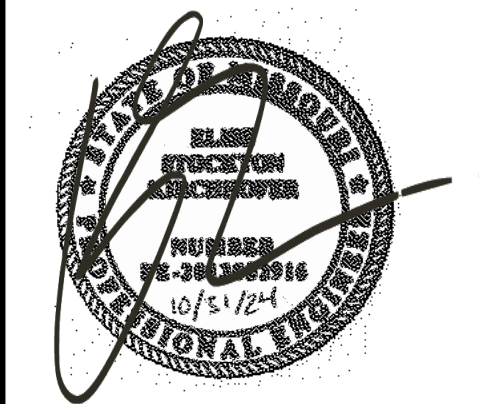
1 VEHICLE BUILDING - MECHANICAL PLAN
1/8" = 1'-0"



M7	DO NOT ROUTE HYDRONIC PIPING THROUGH IT SERVER ROOM.
M8	DO NOT ROUTE HYDRONIC PIPING THROUGH ELECTRICAL ROOM.

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hoeferwelker.com

PACKAGE 2: CONSTRUCTION SET

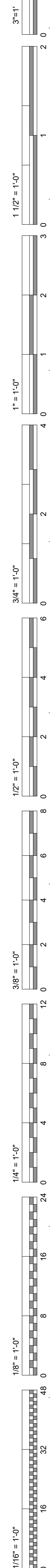
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

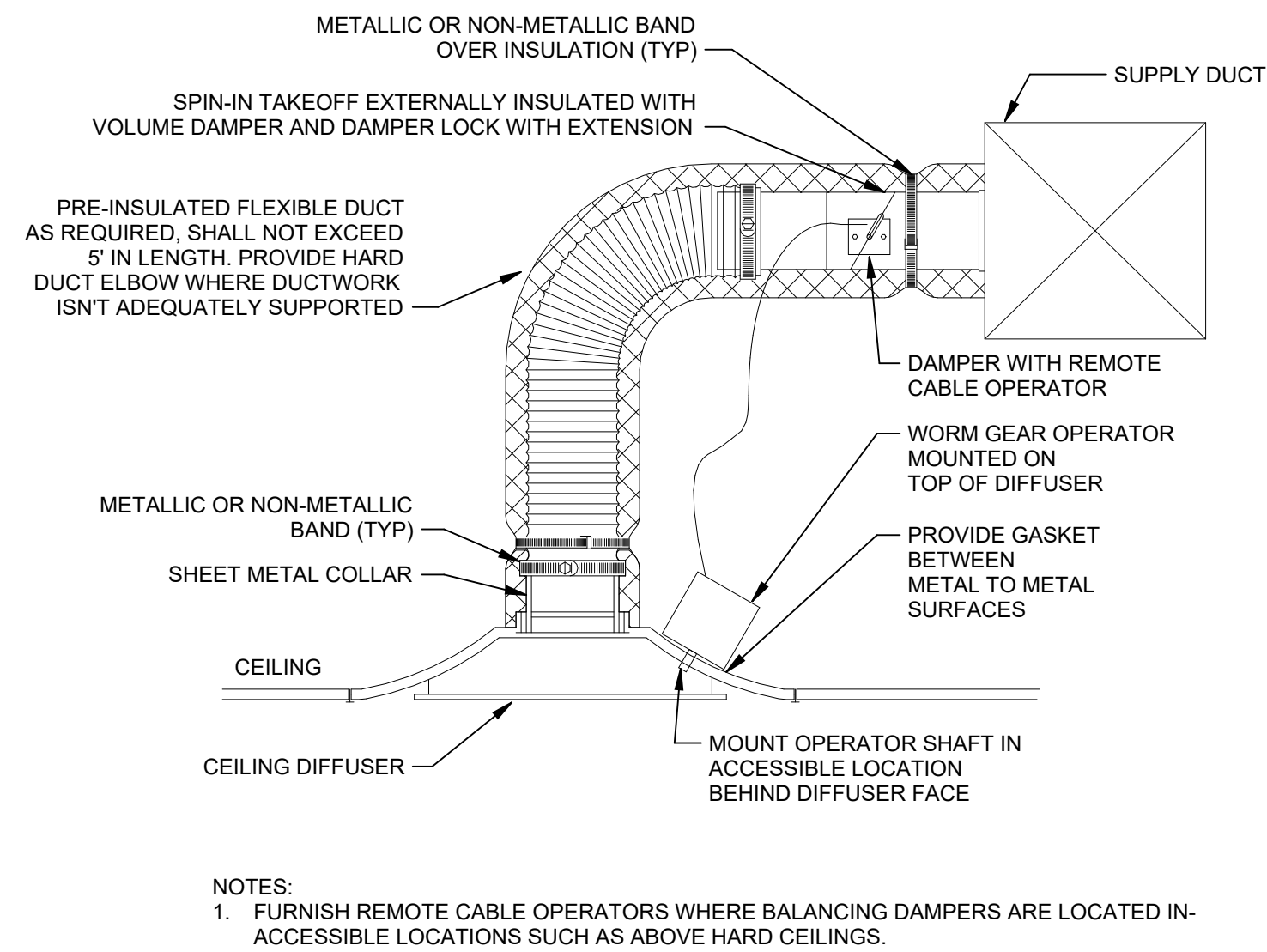
LOWER LEVEL - PIPING PLAN

1 LOWER LEVEL HVAC PIPING PLAN

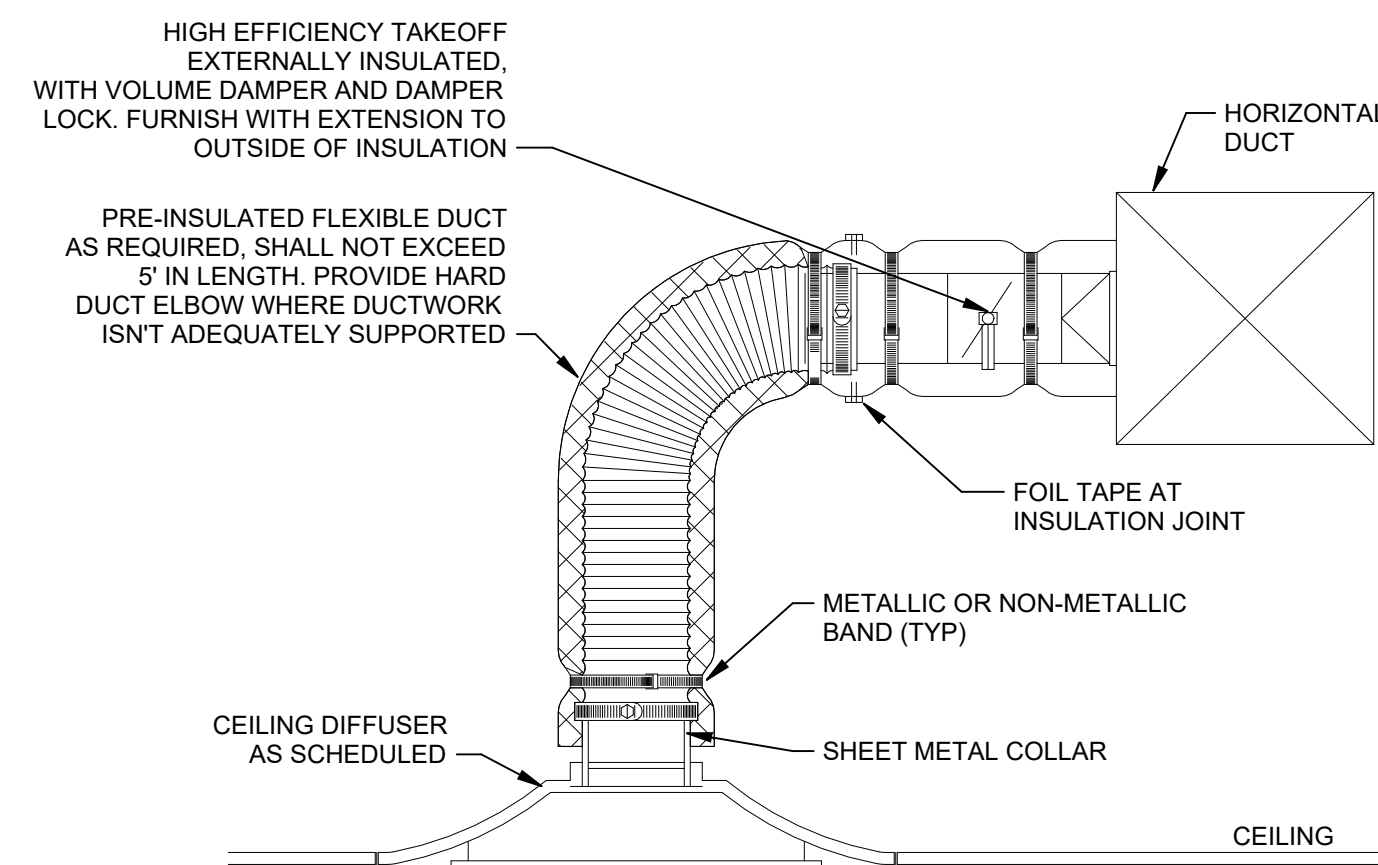
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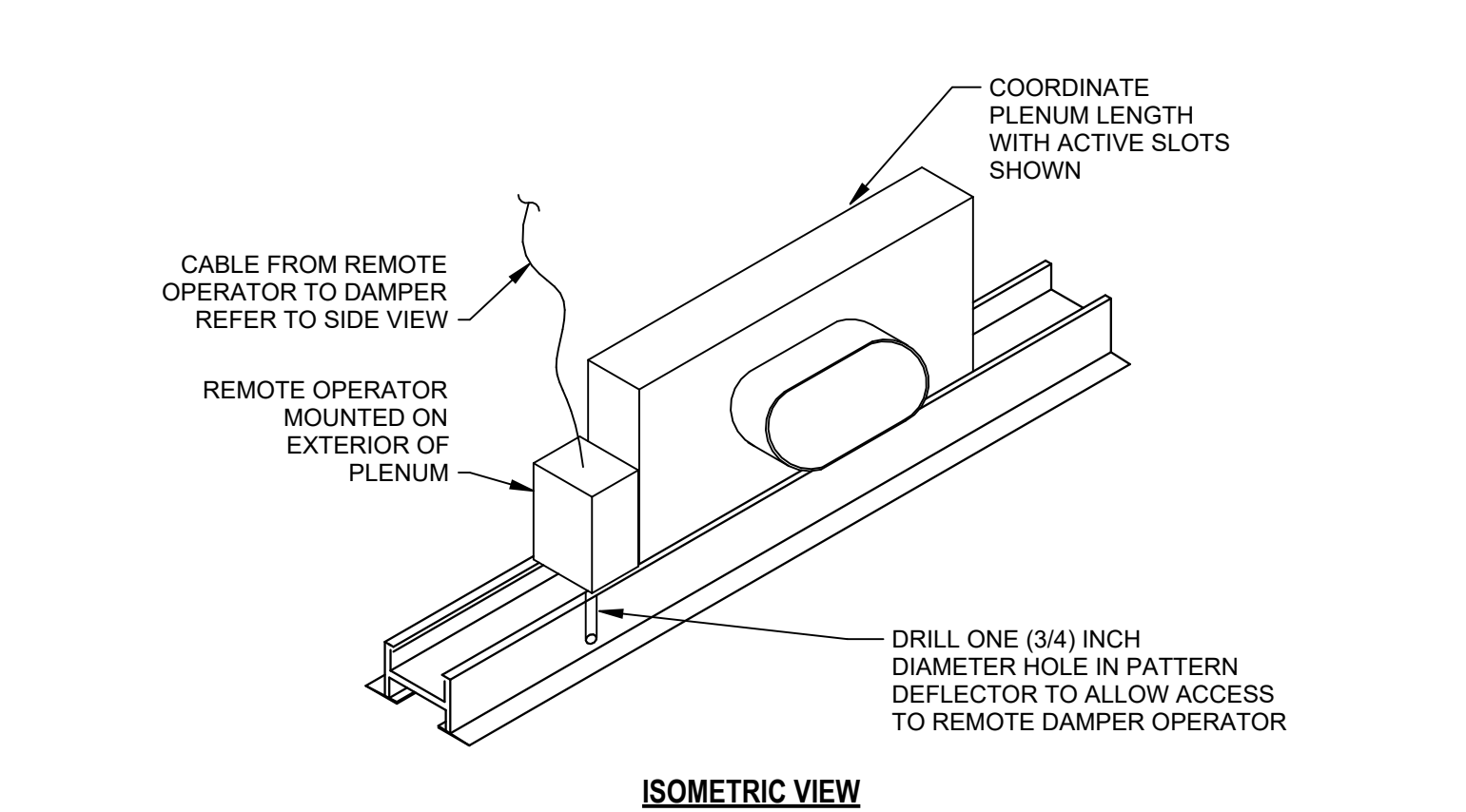
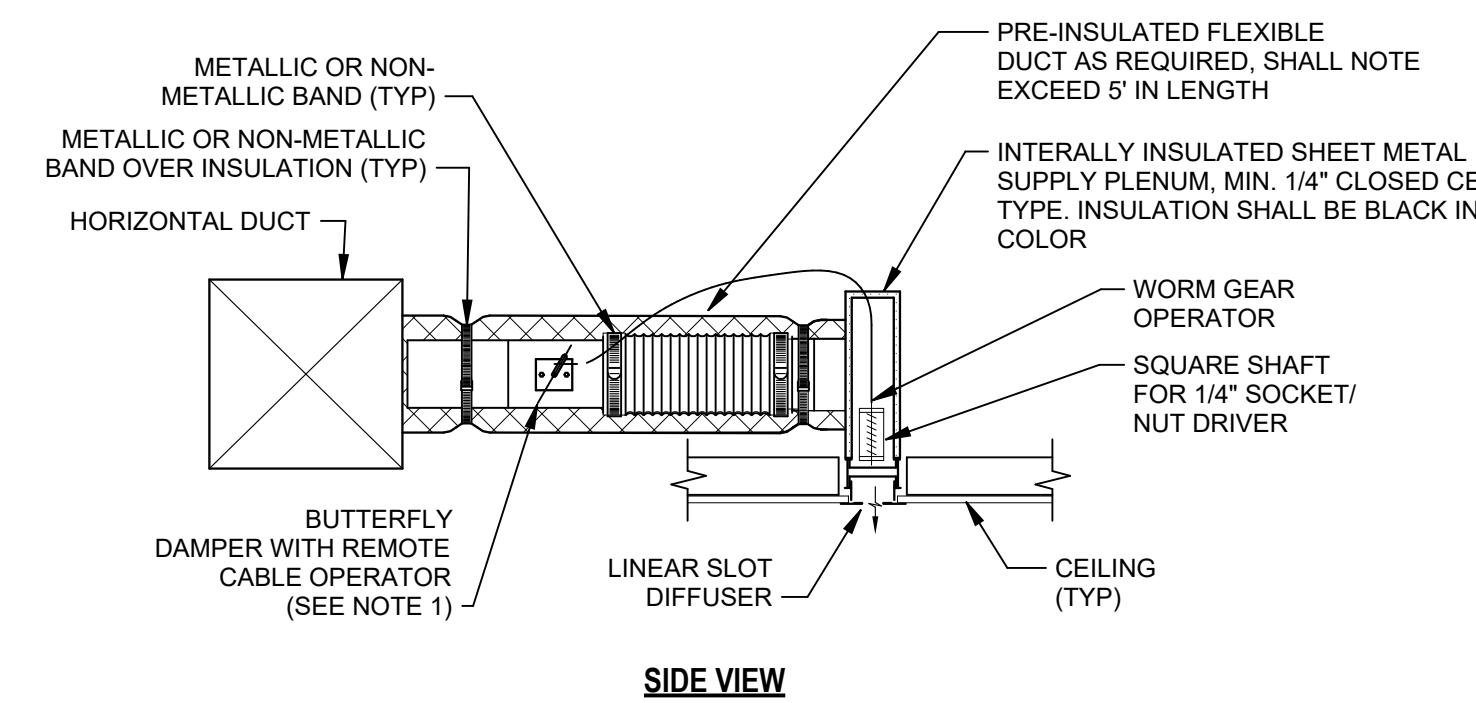
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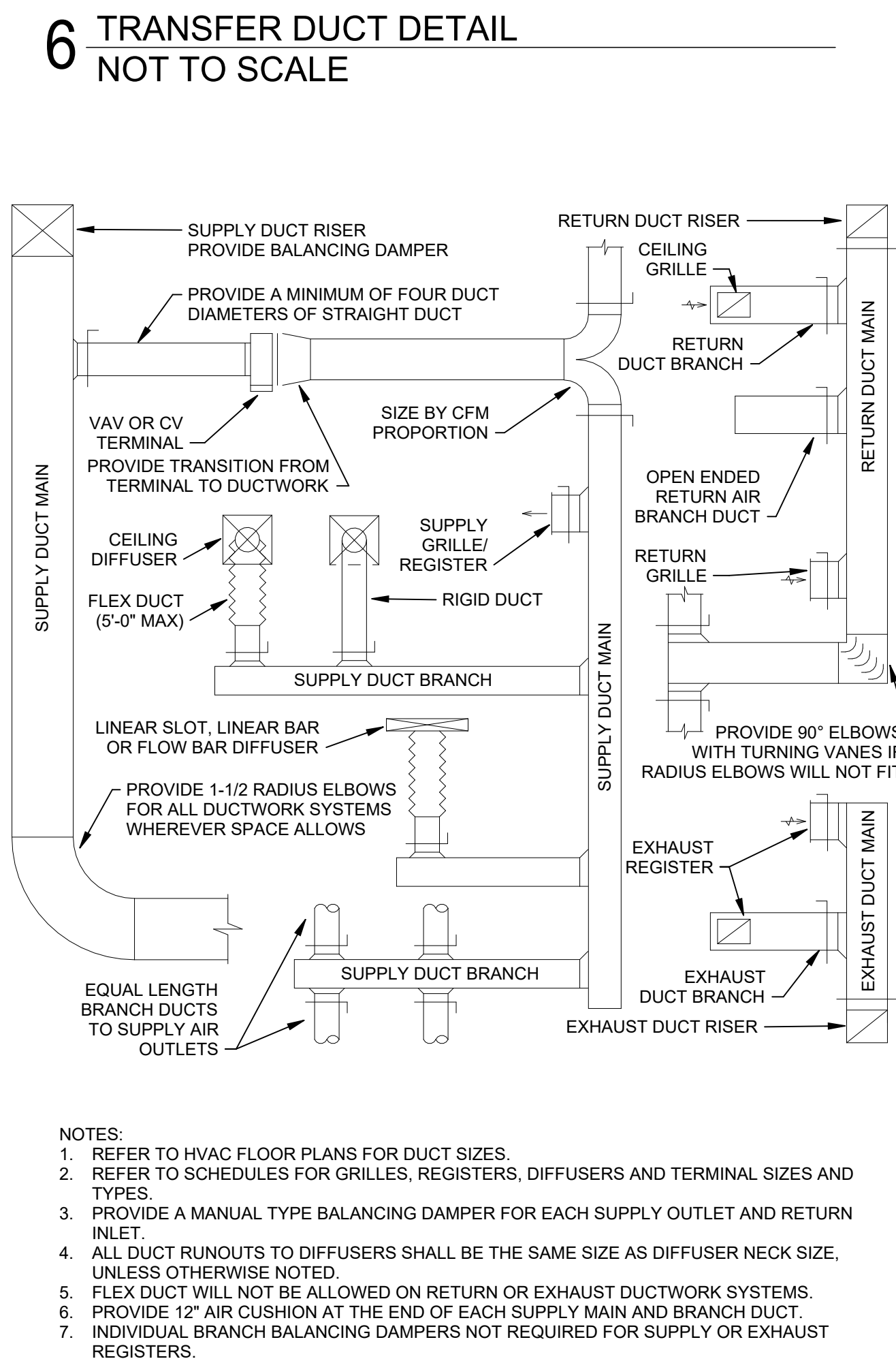
3 HARD CEILING DIFFUSER DETAIL
NOT TO SCALE



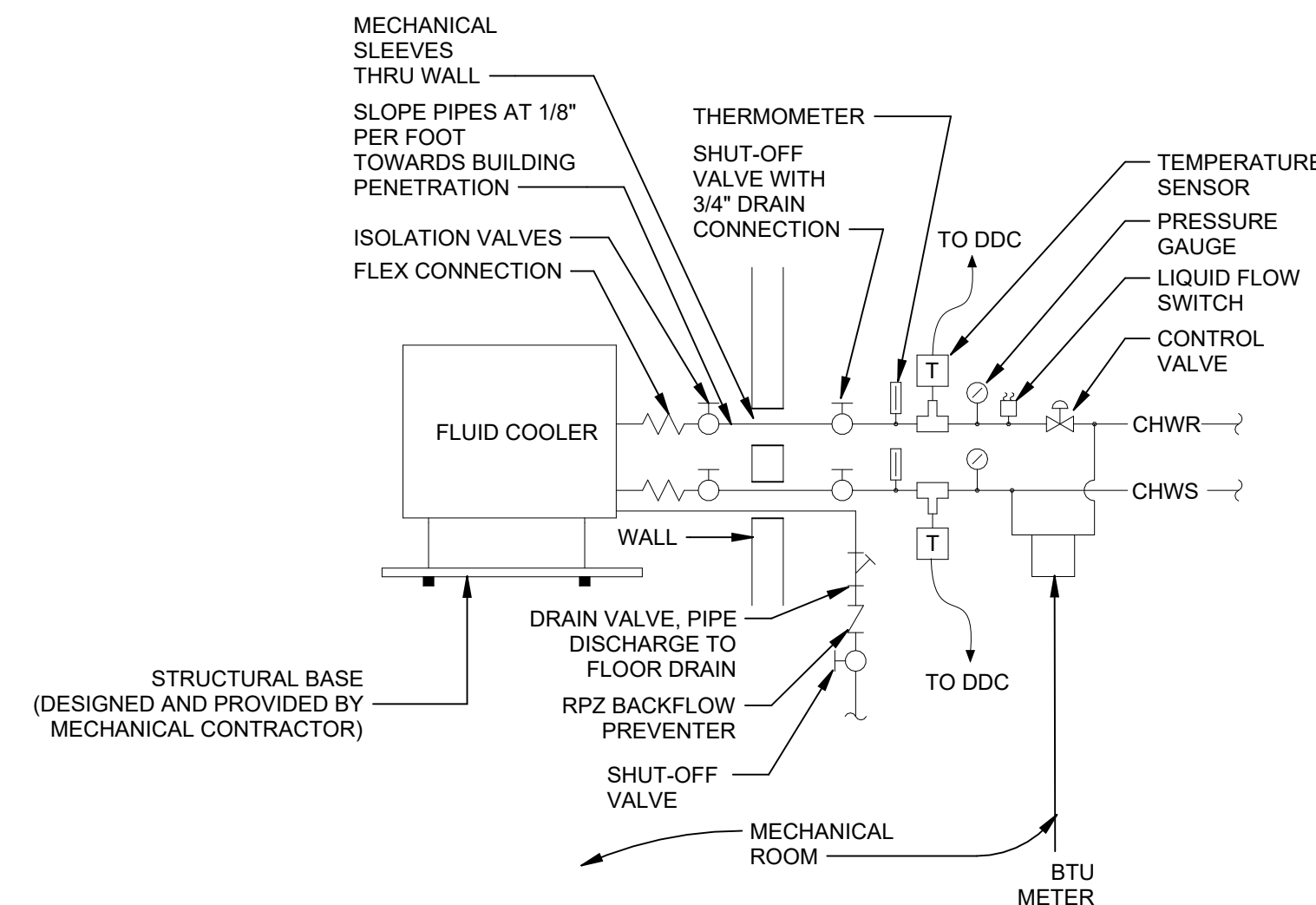
2 LAY-IN CEILING DIFFUSER DETAIL
NOT TO SCALE



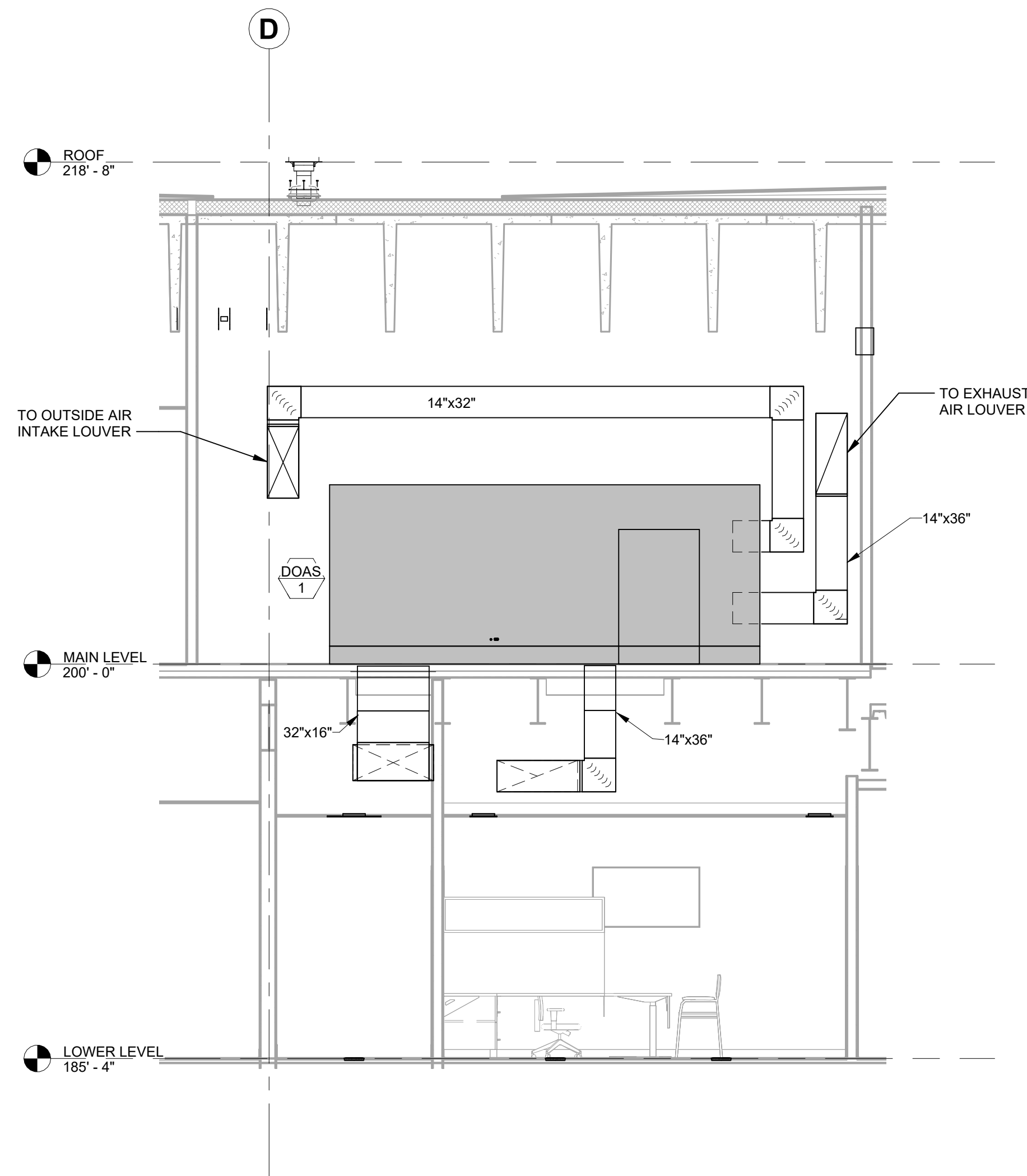
1 LINEAR SLOT DIFFUSER DETAIL
NOT TO SCALE



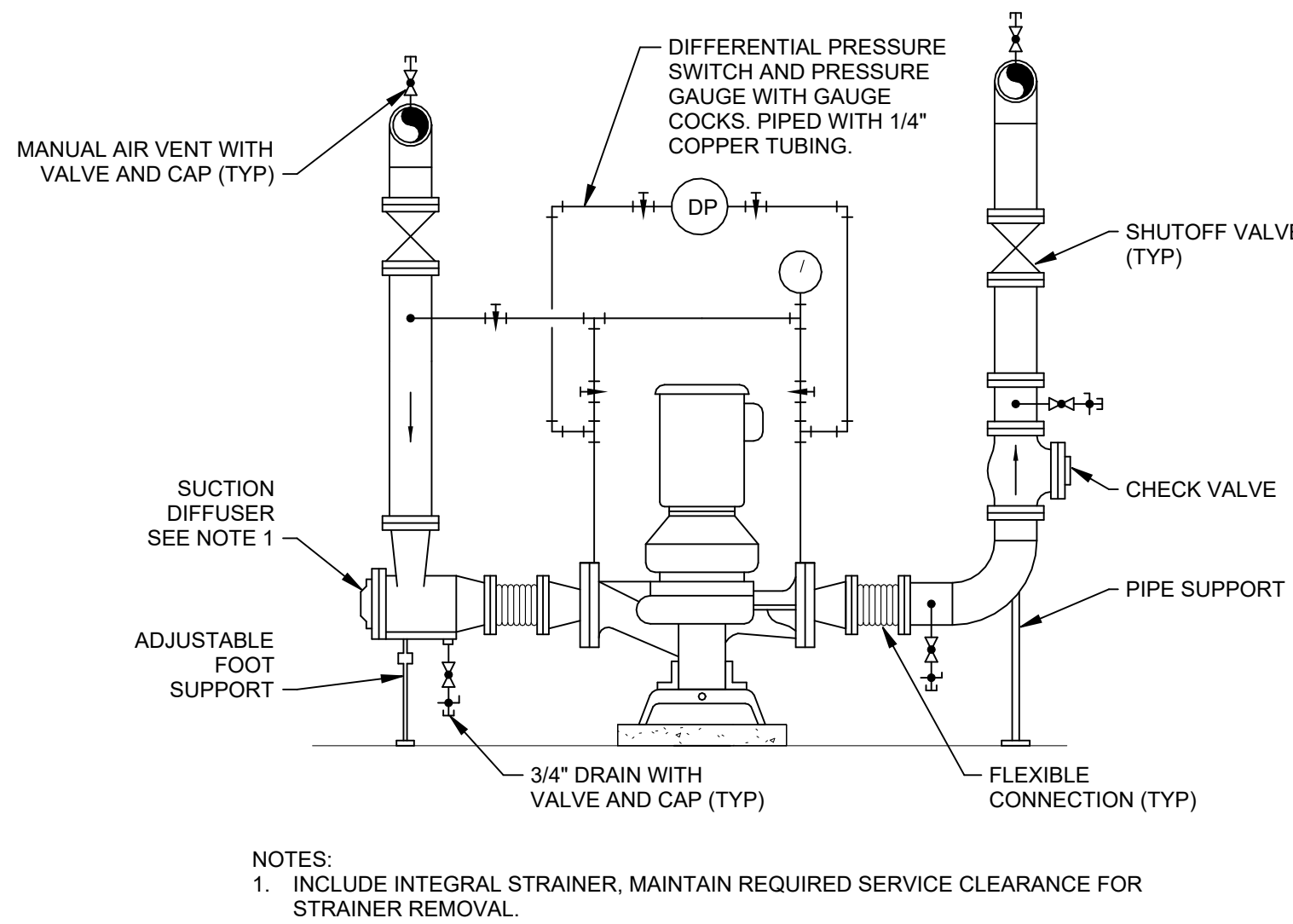
5 DUCTWORK INSTALLATION DIAGRAM
NOT TO SCALE



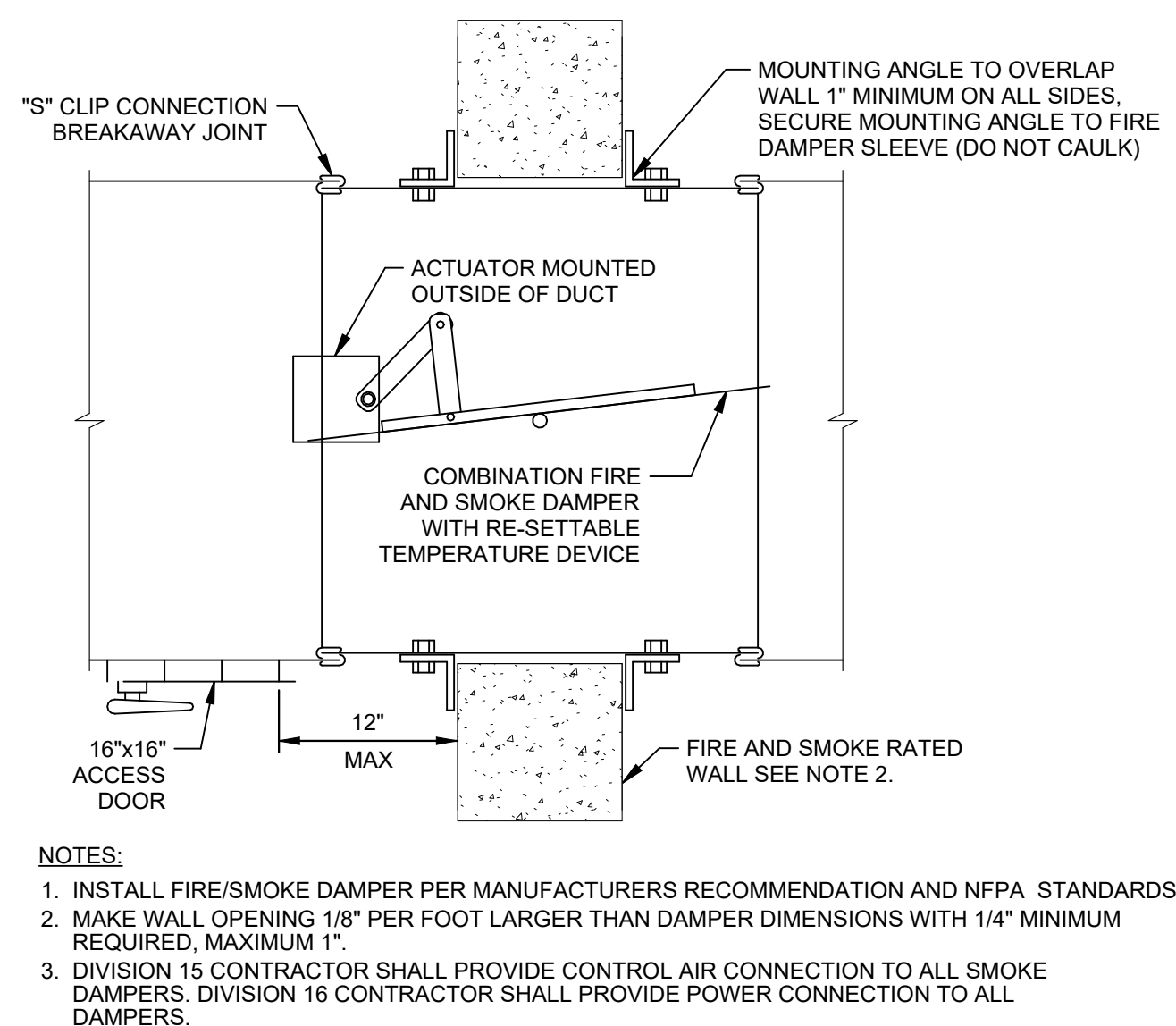
4 FLUID COOLER DETAIL
NOT TO SCALE



9 DOAS 1
1/4" = 1'-0"

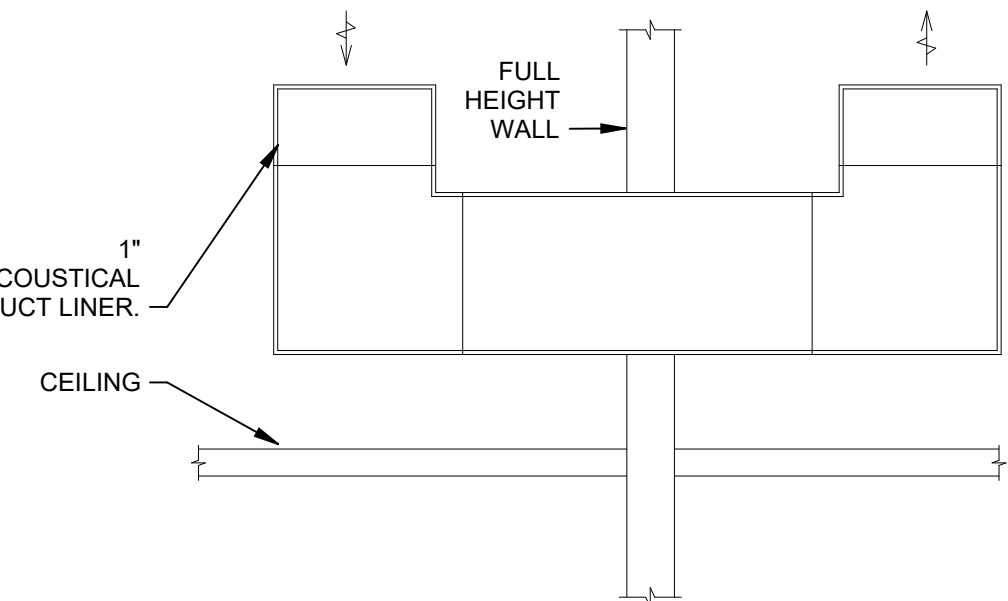


8 FLOOR MOUNTED IN-LINE PUMP
NOT TO SCALE



7 FIRE/SMOKE DAMPER DETAIL
NOT TO SCALE

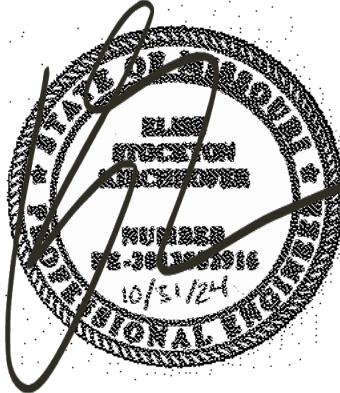
6 TRANSFER DUCT DETAIL
NOT TO SCALE



LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:



PROFESSIONAL SEAL

M-502

ISSUE DATE: NOVEMBER 1, 2011
DOEFER WELKER #: 1381

INSULATION AND VAPOR BARRIER AS REQUIRED

INSTALL VENT AT HIGHEST POINT OF PIPING

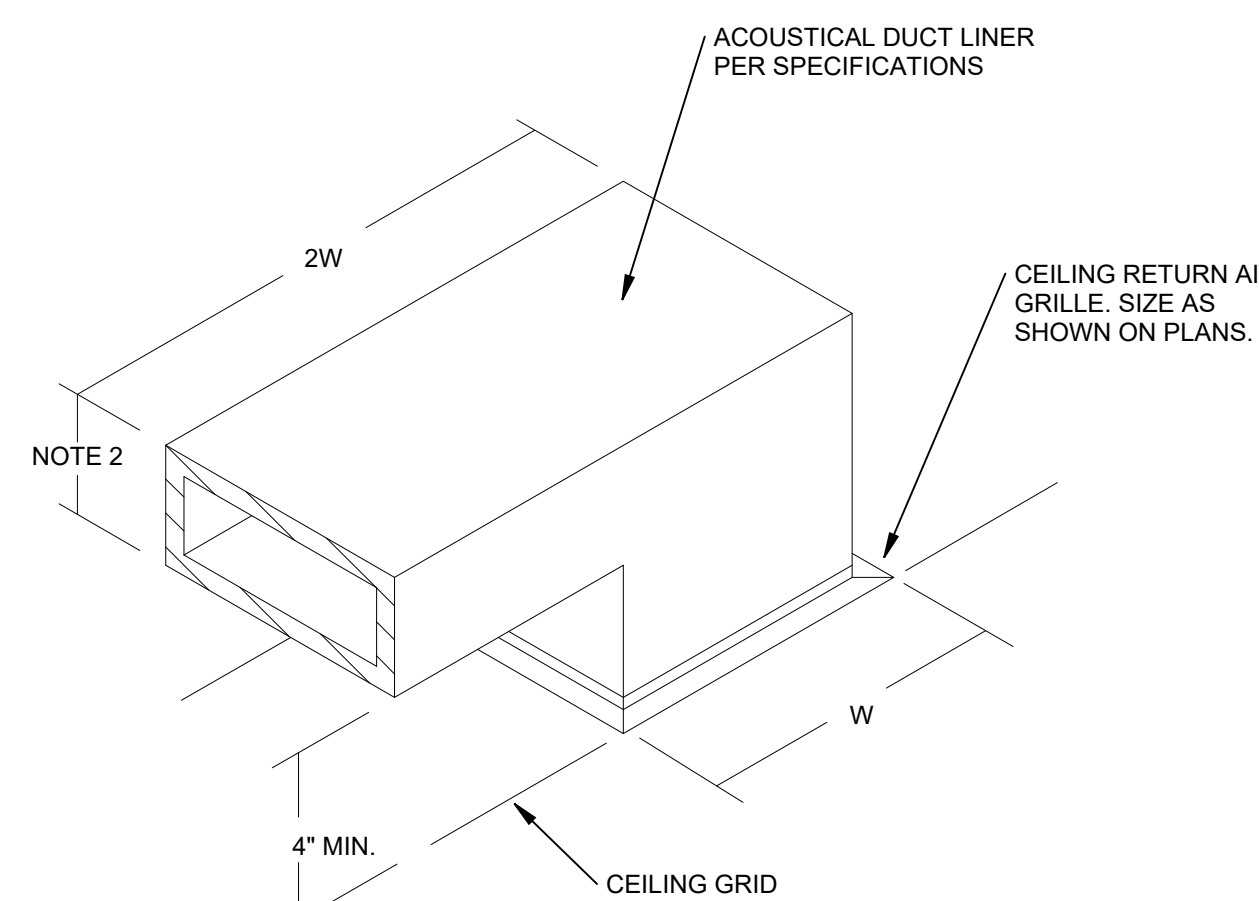
SCHEDULE 80 BLACK NIPPLE

VENT VALVE TYPE PER SPECIFICATION

STEEL COUPLING WELDED TO PIPING 1/2" MINIMUM SIZE

OBSTRUCTION S (TYPICAL)

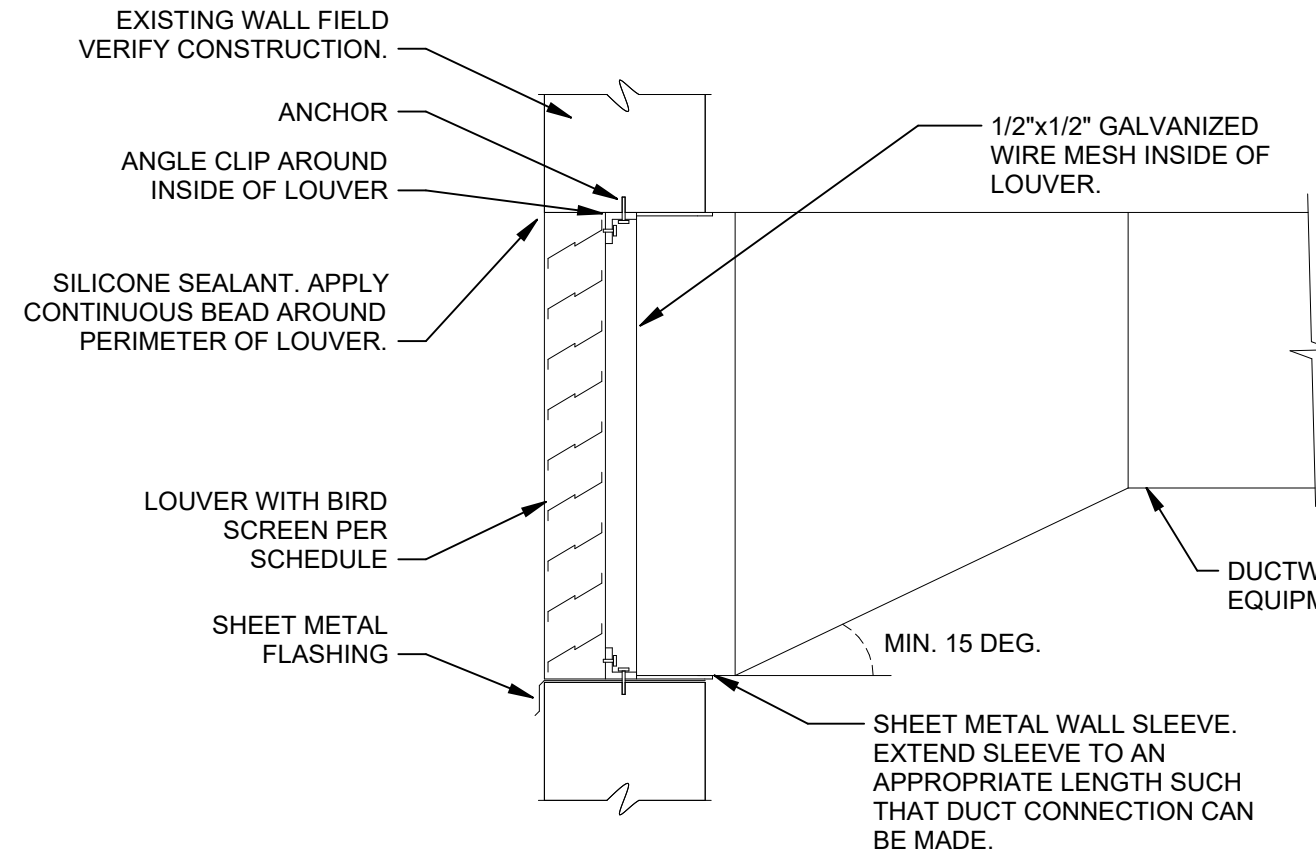
4 HIGH POINT MANUAL AIR VENT - STEEL PIPE



- NOTES:
1. ALL INTERIOR SURFACES OF DUCT BOOTS INCLUDING FASTENERS SHALL BE BLACK IN COLOR
 2. REFER TO FLOOR PLAN FOR NECK SIZE.

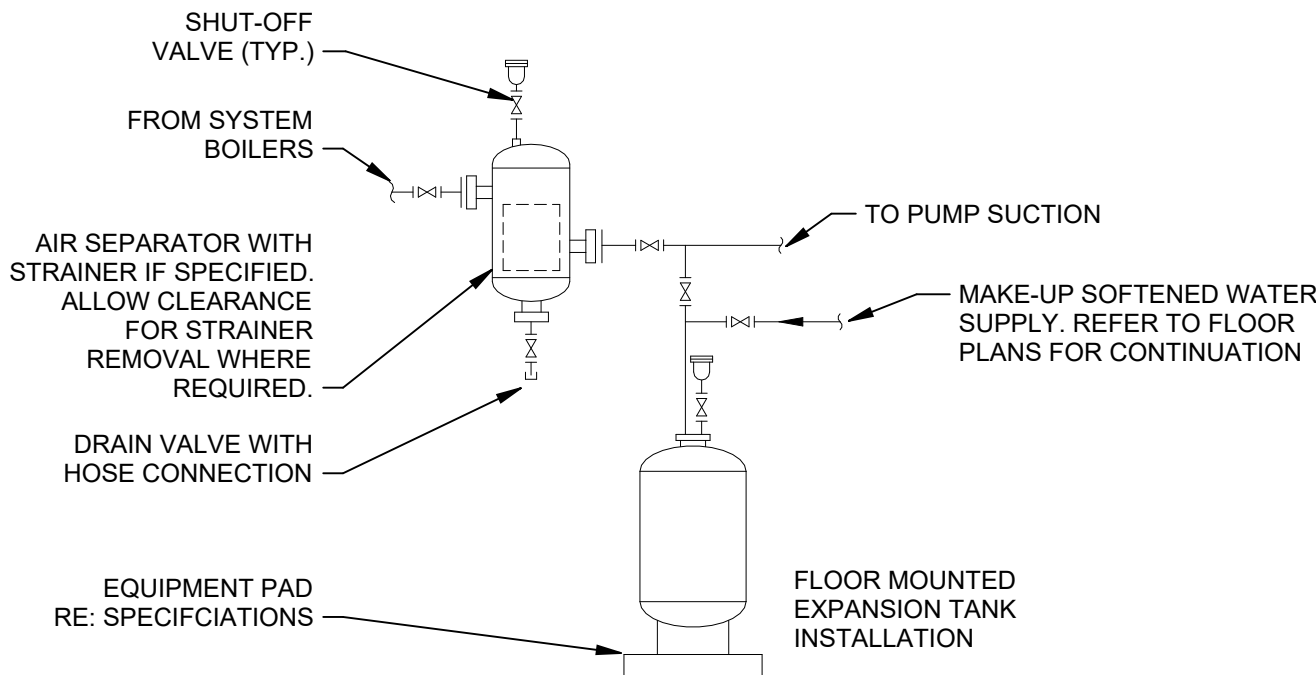
3 RETURN AIR BOOT DETAIL

NOT TO SCALE



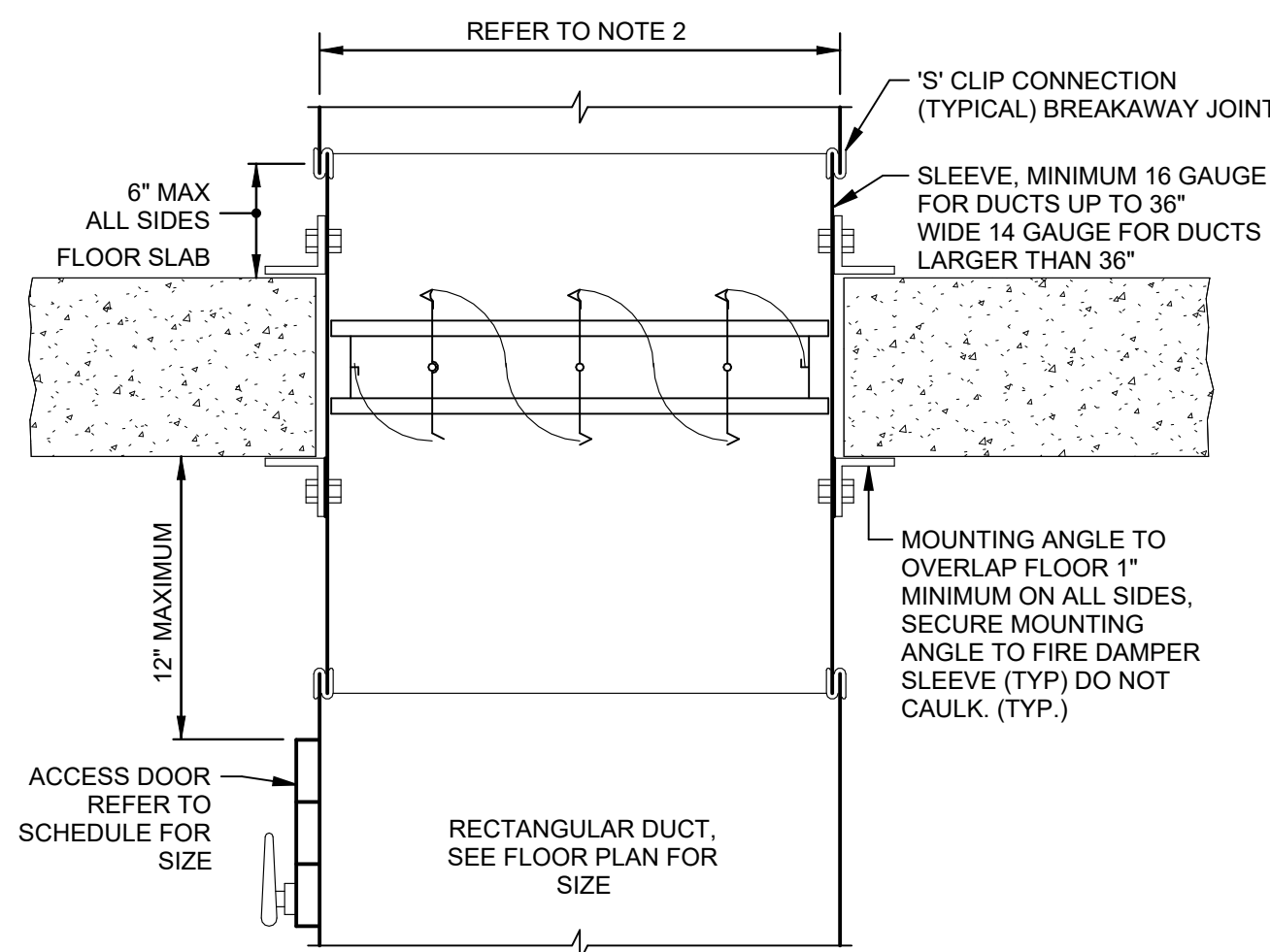
2 LOUVER ASSEMBLY DETAIL

NOT TO SCALE



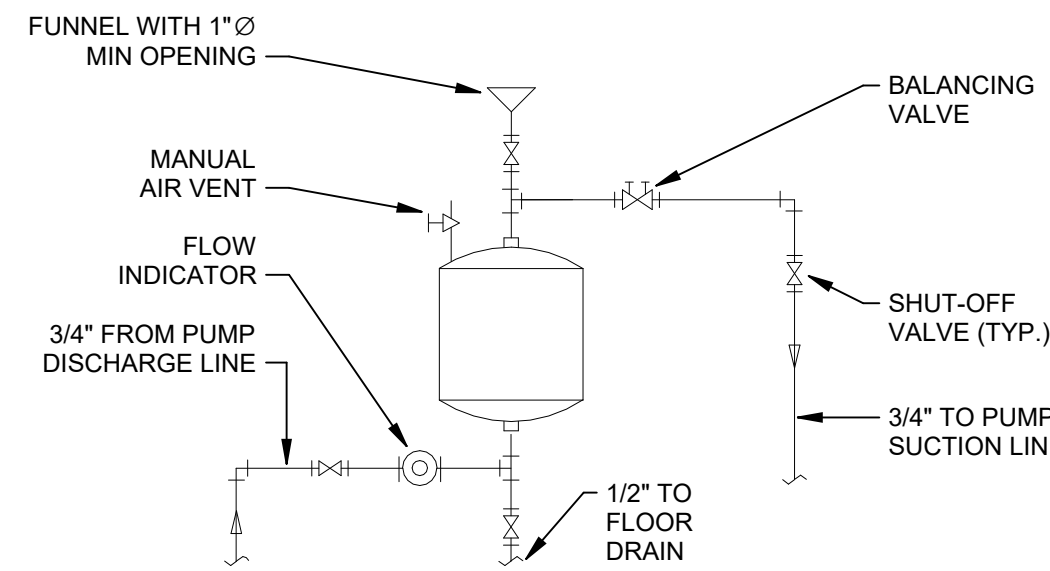
- NOTES:
1. REFER TO SCHEDULE FOR EXPANSION TANK TYPE AND MOUNTING
 2. INSULATE COMPONENTS PER SPECIFICATIONS. PROVIDE REMOVABLE ACCESS TO STRAINERS, VALVES AND VENTS

1 EXPANSION TANK WITH AIR SEPARATOR DETAIL

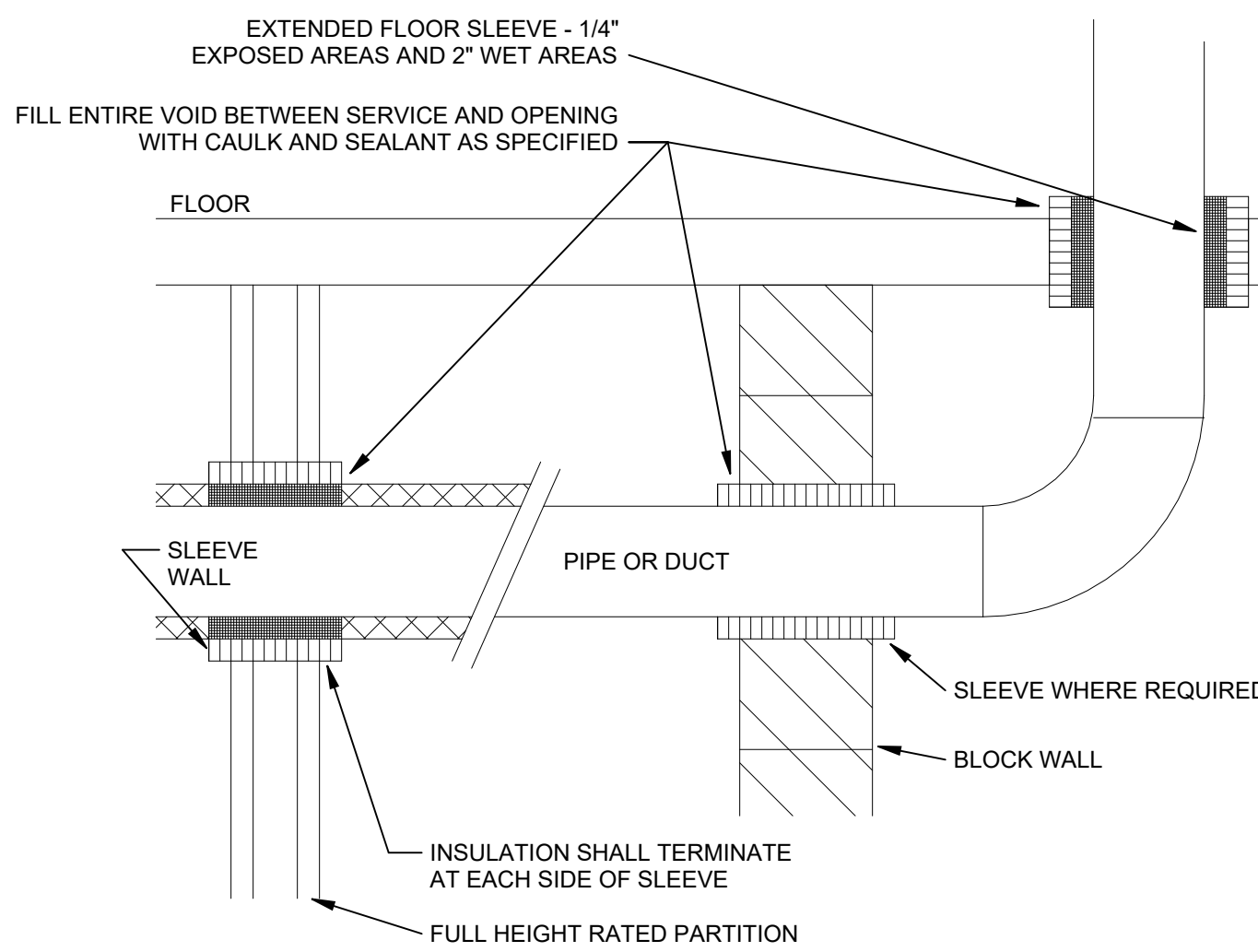


- NOTES:
1. INSTALL FIRE DAMPER PER MANUFACTURERS RECOMMENDATION AND NFPA STANDARDS.
 2. DIVISION 23 CONTRACTOR TO COORDINATE FLOOR OPENING WITH DIVISION 01 CONTRACTOR TO ALLOW DAMPER CURTAIN TO BE INSTALLED OUTSIDE AIRSTREAM.

7 FLOOR FIRE DAMPER DETAIL

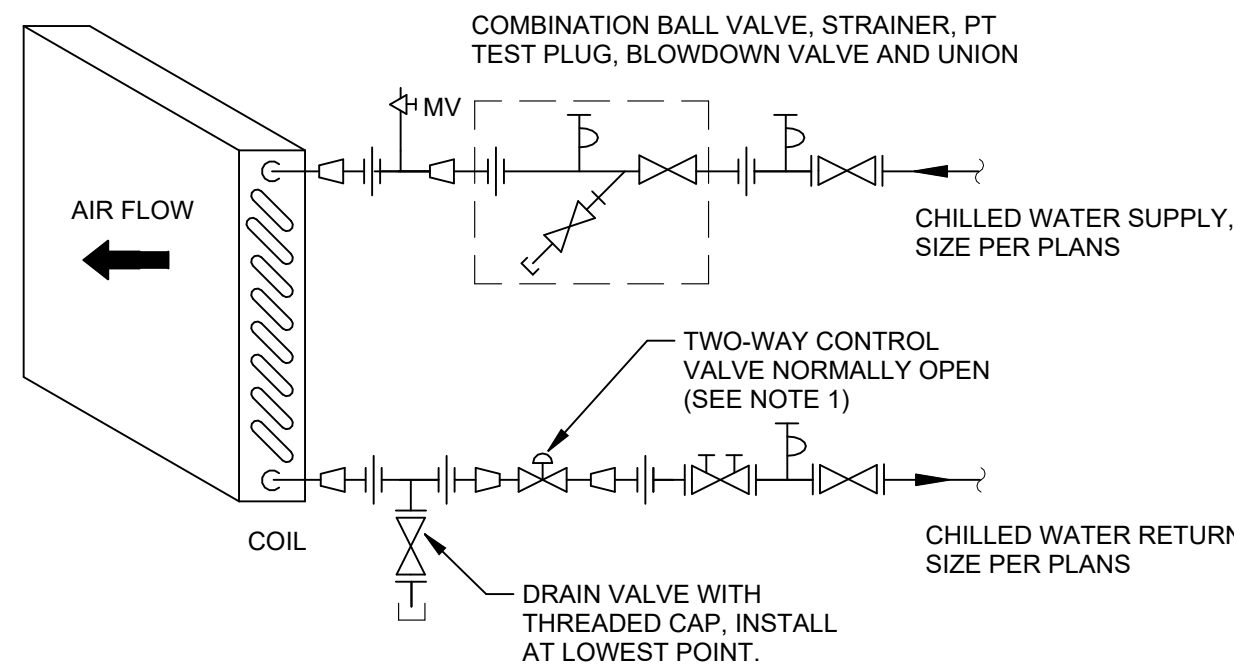


6 CHEMICAL SHOT FEEDER DETAIL



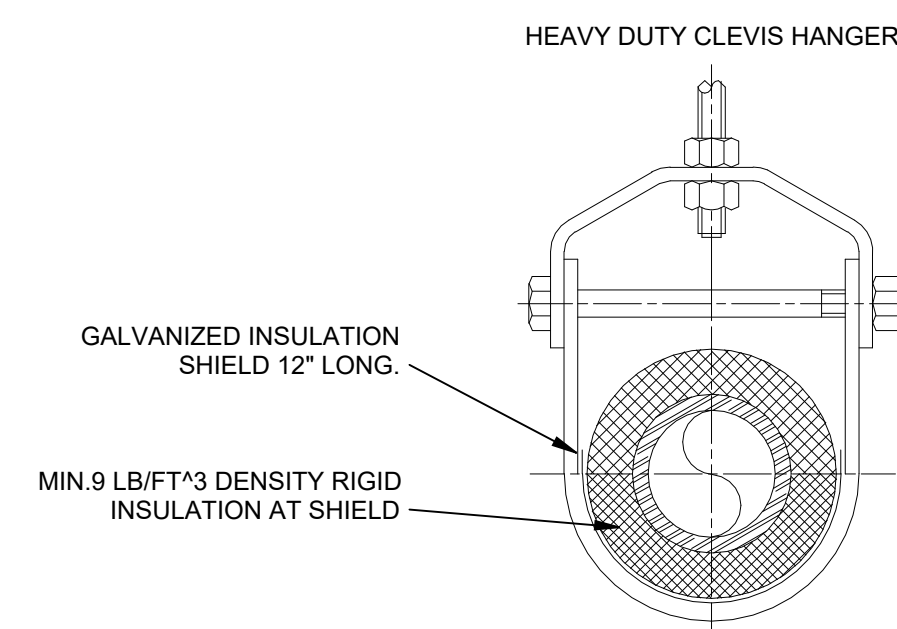
- NOTES:
1. VAPOR BARRIER (WHERE REQUIRED) AND INSULATION TO BE FITTED TIGHT TO SLEEVE. SEAL WITH CONTINUOUS BEAD OF NON-HARDENING CAULKING.

5 DUCT/PIPE WALL/FLOOR PENETRATION DETAIL



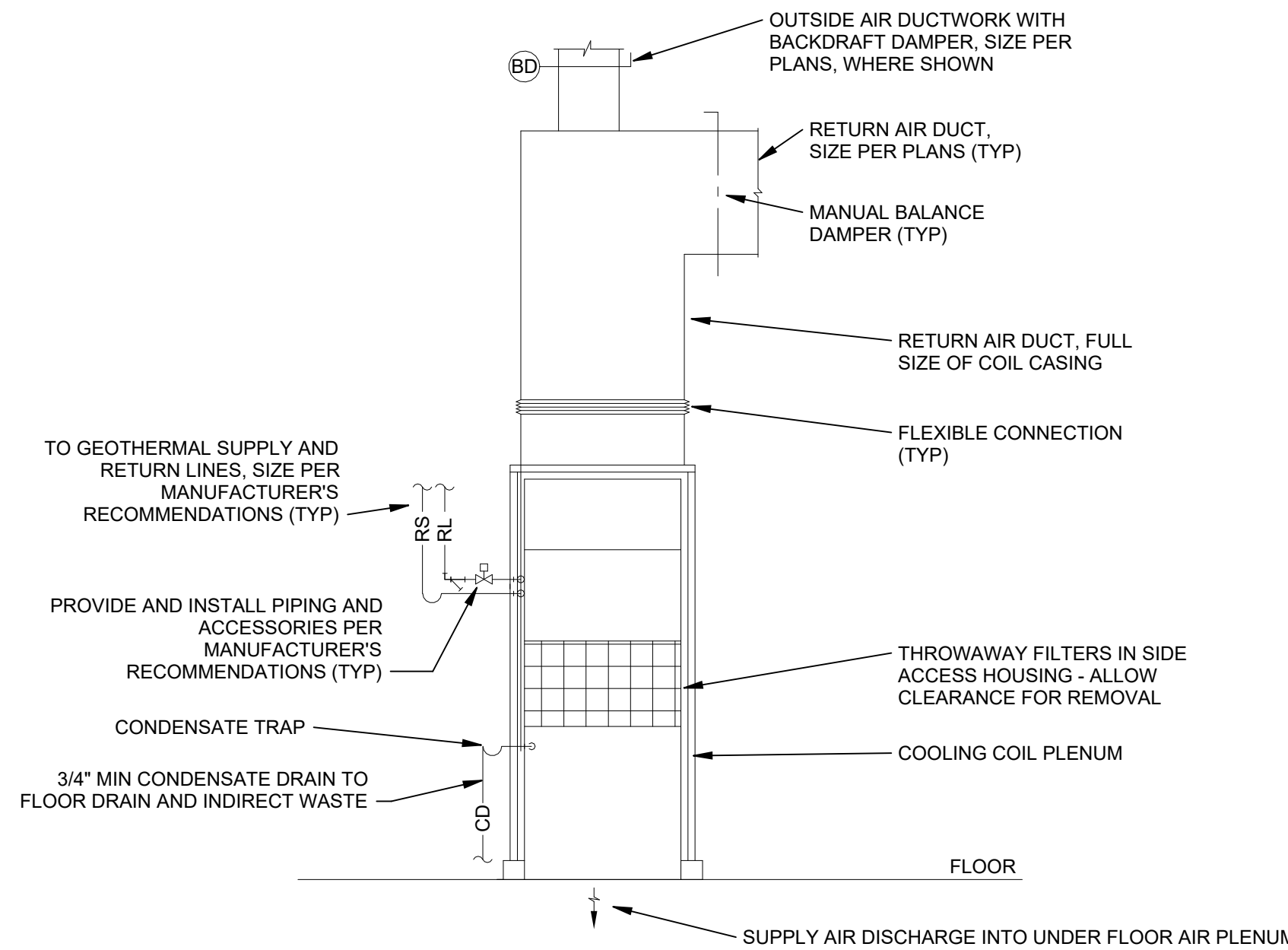
- NOTES:
1. CONTRACTOR SHALL COORDINATE CONTROL VALVE FURNISHING AND SIZES WITH TERMINAL UNIT MANUFACTURER. PROVIDE CONCENTRIC REDUCERS ON BOTH SIDES OF CONTROL VALVE AS REQUIRED.
 2. PREMANUFACTURED HOSE KIT ASSEMBLIES ARE ACCEPTABLE.

10 WSHP PIPING DETAIL
NOT TO SCALE



- NOTES:
1. SEE SPECIFICATION FOR HANGER TYPE AND SIZES

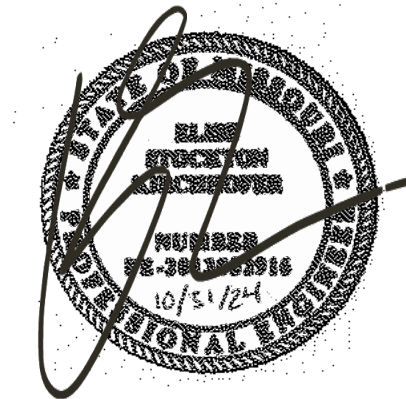
9 PIPE SUPPORT DETAIL
NOT TO SCALE



8 FLOOR MOUNTED WHSP DETAIL
NOT TO SCALE

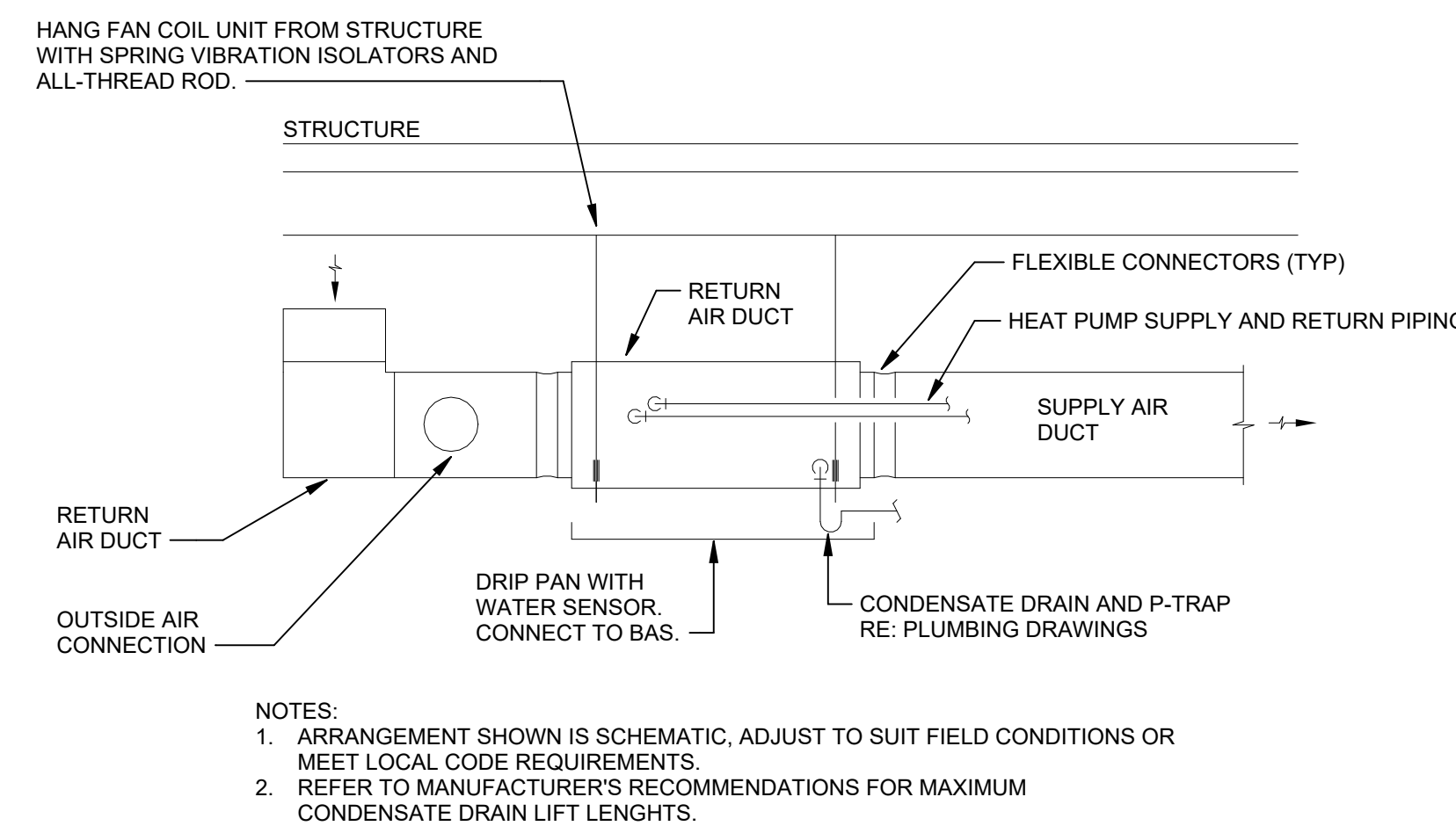
LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

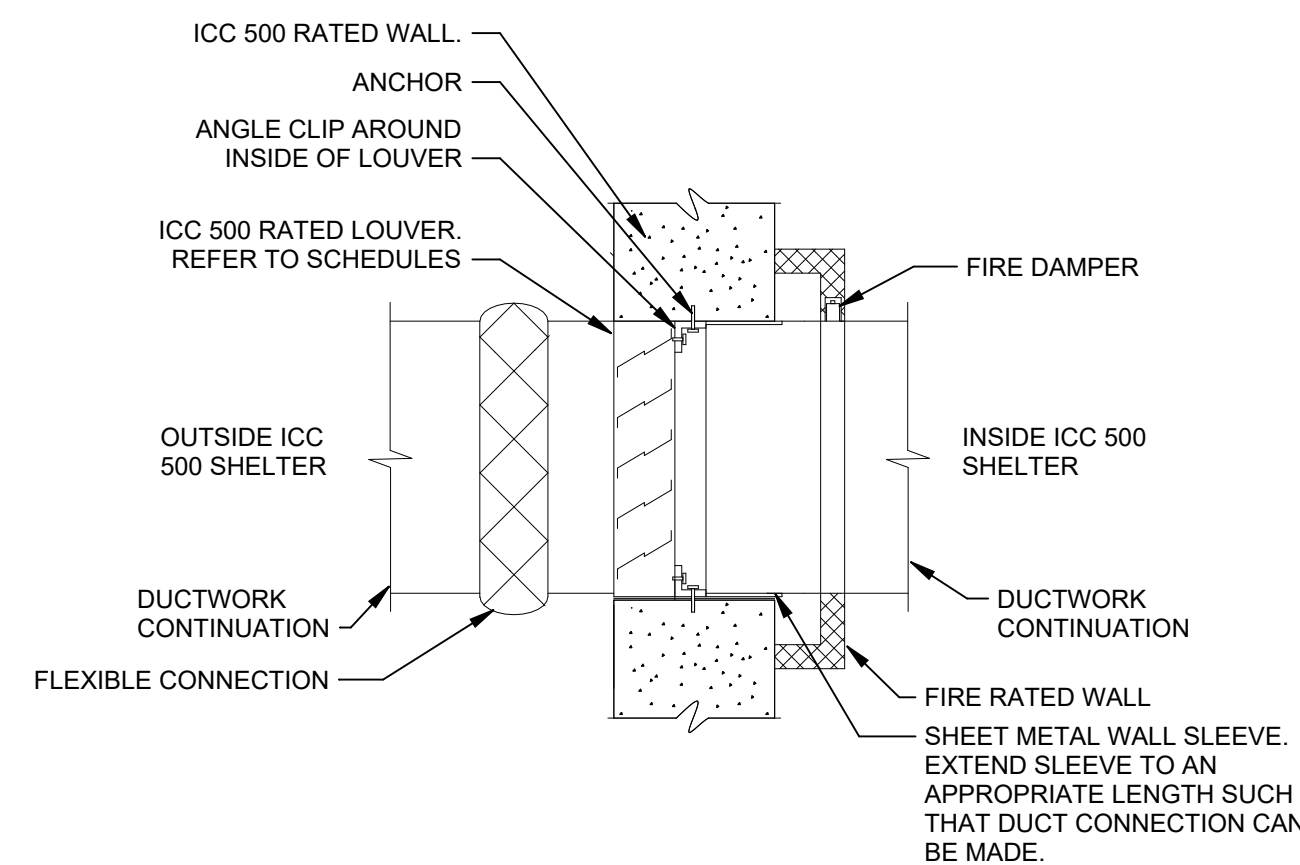
[illegible]

M-503

MECHANICAL DETAILS



2 WATER SOURCE HEAT PUMP UNIT - CEILING CONCEALED
NOT TO SCALE

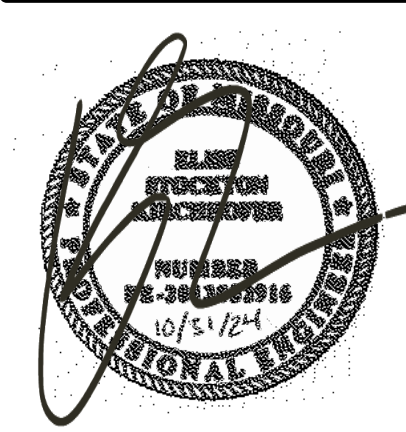


1 DUCT PENETRATION THROUGH ICC 500 WALL
NOT TO SCALE

DEDICATED OUTDOOR AIR SUPPLY UNIT SCHEDULE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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PLAN MARK	MANUFACTURER	MODEL	UNIT TYPE	TYPE	QUANTITY	AIRFLOW (CFM)	ESP (IN)	TSP (IN)	MAX HP	BRAKE HP	STARTER TYPE	TYPE	QUANTITY	AIRFLOW (CFM)	ESP (IN)	TSP (IN)	MAX HP	BRAKE HP	STARTER TYPE	TOTAL (MBH)	SENSIBLE (MBH)	EAT (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB 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(DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB

ENERGY RECOVERY WHEEL SCHEDULE																																							
PLAN MARK MANUFACTURER MODEL			SUPPLY		EXHAUST		FILTERS				SUMMER										WINTER				OPTIONS	NOTES													
			AIRFLOW (CFM)	AIRFLOW (CFM)	ERV	DIRTY SP LOSS (IN)	RA FILTER	DIRTY SP LOSS (IN)	EXHAUST LOSS (IN)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	TH (DEG.F)	EXHAUST LOSS (IN)	DB (DEG.F)	WB (DEG.F)	TH (DEG.F)																			
DOAS1	YORK	ECW 484	4900	3900	8	0.4	8	0.4	0.4	75.0	64.0	96.0	75.3	84.6	69.7	140	70.0	0.0	37.5	276																1-4			
NOTES: 1. TOTAL ENERGY RECOVERY WHEEL SHALL BE INTEGRATED INTO DOAS 1 SHOWN ABOVE. 2. PROVIDE VFD DEFROST CONTROL AND BYPASS DAMPERS. 3. COOLING EFFECTIVENESS: TOTAL=72%, SENSIBLE=74%. 4. HEATING EFFECTIVENESS: TOTAL=77%, SENSIBLE=80%.																																							

WATER SOURCE HEAT PUMP SCHEDULE																																					
SUPPLY FAN			COOLING COIL										HEATING COIL										ELECTRICAL				PHYSICAL PROPERTIES										
PLAN MARK	MANUFACTURER	MODEL	AIRFLOW (CFM)	ESP (IN)	STARTER TYPE	TOTAL (MBH)	SENSIBLE (MBH)	EAT (DEG.F)	DB (DEG.F)	WB (DEG.F)	DB (DEG.F)	WB (DEG.F)	FLOW RATE (GPM)	EWT (DEG.F)	LWT (DEG.F)	MIN. OUTPUT (BTU/H)	EAT (DEG.F)	LAT (DEG.F)	EAT (DEG.F)	LWT (DEG.F)	MAX WWT (DEG.F)	CONTROL (STAGED/MOD)	MIN O/A AIRFLOW (CFM)	VOLTAGE	PHASE	FLA	MCA	MOP	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	WEIGHT (LBS)	OPTIONS	NOTES			
WSHP 1-01	CLIMATE MASTER	SC-024	900	0.5	ECM	20.3	18.0	75.0	63.0	55.0	53.0	5.0	80.0	90.0	8.4	68.0	90.0	50.0	40.0	11.0	2	110	460	3	5.0	6.0	15	43"	21"	18"	175	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-02	CLIMATE MASTER	SE-060	1800	0.5	ECM	45.5	38.8	75.0	63.0	55.0	53.0	12.5	80.0	90.0	5.3	68.0	90.0	50.0	40.0	11.0	2	345	460	3	12.5	14.1	15	81"	26"	22"	475	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-03	CLIMATE MASTER	SC-015	700	0.5	ECM	12.1	7.7	75.0	63.0	55.0	53.0	3.1	80.0	90.0	11.7	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.9	8.2	15	43"	20"	18"	155	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-04	CLIMATE MASTER	SC-018	750	0.5	ECM	16.1	14.3	75.0	63.0	55.0	53.0	3.8	80.0	90.0	4.8	68.0	90.0	50.0	40.0	11.0	1	110	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-05	CLIMATE MASTER	SE-048	1200	0.5	ECM	31.8	28.0	75.0	63.0	55.0	53.0	10.0	80.0	90.0	3.6	68.0	90.0	50.0	40.0	11.0	2	310	460	3	11.6	13.3	15	55"	31"	26"	450	ESM,DSN,HK,RDS,DP	2-8	1-3-8			
WSHP 1-06	CLIMATE MASTER	SC-015	700	0.5	ECM	10.4	10.1	75.0	63.0	55.0	53.0	3.1	80.0	90.0	3.3	68.0	90.0	50.0	40.0	11.0	1	55	277	1	6.9	8.2	15	43"	20"	18"	155	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-07	CLIMATE MASTER	SC-009	300	0.5	ECM	7.0	5.0	75.0	63.0	55.0	53.0	1.9	80.0	90.0	1.6	68.0	90.0	50.0	40.0	11.0	1	90	277	1	5.9	6.8	15	34"	20"	12"	110	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-08	CLIMATE MASTER	SC-018	750	0.5	ECM	12.1	7.7	75.0	63.0	55.0	53.0	3.1	80.0	90.0	11.7	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.9	8.2	15	43"	20"	18"	155	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-09	CLIMATE MASTER	SC-015	700	0.5	ECM	11.0	9.5	75.0	63.0	55.0	53.0	3.1	80.0	90.0	7.3	68.0	90.0	50.0	40.0	11.0	1	135	277	1	6.9	8.2	15	43"	20"	18"	155	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-10	CLIMATE MASTER	SC-018	750	0.5	ECM	16.3	13.3	75.0	63.0	55.0	53.0	3.8	80.0	90.0	5.4	68.0	90.0	50.0	40.0	11.0	1	150	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-11	CLIMATE MASTER	SC-036	1350	0.5	ECM	21.7	20.0	75.0	63.0	55.0	53.0	7.5	80.0	90.0	13.9	68.0	90.0	50.0	40.0	11.0	2	100	460	3	9.3	10.4	15	72"	26"	22"	360	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-12	CLIMATE MASTER	SC-024	900	0.5	ECM	19.8	18.7	75.0	63.0	55.0	53.0	5.0	80.0	90.0	8.5	68.0	90.0	50.0	40.0	11.0	2	100	460	3	5.0	6.0	15	43"	21"	18"	175	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-13	CLIMATE MASTER	SC-024	900	0.5	ECM	23.8	14.4	75.0	63.0	55.0	53.0	5.0	80.0	90.0	8.2	68.0	90.0	50.0	40.0	11.0	2	180	460	3	5.0	6.0	15	43"	21"	18"	175	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-14	CLIMATE MASTER	SC-018	750	0.5	ECM	13.8	13.4	75.0	63.0	55.0	53.0	3.8	80.0	90.0	8.1	68.0	90.0	50.0	40.0	11.0	1	195	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-15	CLIMATE MASTER	SC-012	400	0.5	ECM	7.9	6.8	75.0	63.0	55.0	53.0	2.5	80.0	90.0	2.7	68.0	90.0	50.0	40.0	11.0	1	60	277	1	6.5	7.6	15	35"	20"	12"	120	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-16	CLIMATE MASTER	SC-024	900	0.5	ECM	19.4	16.7	75.0	63.0	55.0	53.0	5.0	80.0	90.0	10.2	68.0	90.0	50.0	40.0	11.0	2	150	460	3	5.0	6.0	15	43"	21"	18"	175	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-17	CLIMATE MASTER	SC-018	750	0.5	ECM	17.9	16.1	75.0	63.0	55.0	53.0	3.8	80.0	90.0	10.7	68.0	90.0	50.0	40.0	11.0	1	0	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-18	CLIMATE MASTER	SC-018	750	0.5	ECM	17.9	8.9	75.0	63.0	55.0	53.0	3.8	80.0	90.0	10.7	68.0	90.0	50.0	40.0	11.0	1	0	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 1-19	CLIMATE MASTER	SC-012	400	0.3	ECM	10.7	10.6	75.0	63.0	55.0	53.0	2.5	80.0	90.0	0.5	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.5	7.6	15	35"	20"	12"	120	ESM,DSN,HK,RDS,DP	2-8	1-3-8			
WSHP 2-01	CLIMATE MASTER	SE-048	1600	0.5	ECM	49.0	36.4	0.0	63.0	55.0	53.0	10.0	80.0	90.0	20.0	68.0	90.0	50.0	40.0	11.0	2	490	460	3	11.6	13.3	15	58"	33"	21"	450	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-02	CLIMATE MASTER	SC-012	400	0.5	ECM	6.4	6.0	75.0	63.0	55.0	53.0	2.5	80.0	90.0	4.2	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.5	7.6	15	35"	20"	12"	120	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-03	CLIMATE MASTER	SC-012	400	0.5	ECM	10.4	9.1	75.0	63.0	55.0	53.0	2.5	80.0	90.0	6.3	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.5	7.6	15	35"	20"	12"	120	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-04	CLIMATE MASTER	SC-015	700	0.5	ECM	13.4	9.8	75.0	63.0	55.0	53.0	3.1	80.0	90.0	5.2	68.0	90.0	50.0	40.0	11.0	1	125	277	1	6.9	8.2	15	43"	20"	18"	155	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-05	CLIMATE MASTER	SC-036	1350	0.5	ECM	27.1	21.6	75.0	63.0	55.0	53.0	7.5	80.0	90.0	8.0	68.0	90.0	50.0	40.0	11.0	2	160	460	3	9.3	10.4	15	72"	26"	22"	360	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-06	CLIMATE MASTER	SC-036	1350	0.5	ECM	27.9	23.0	75.0	63.0	55.0	53.0	7.5	80.0	90.0	14.5	68.0	90.0	50.0	40.0	11.0	2	170	460	3	9.3	10.4	15	72"	26"	22"	360	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-07	CLIMATE MASTER	SC-012	400	0.5	ECM	6.4	6.1	75.0	63.0	55.0	53.0	2.5	80.0	90.0	4.6	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.5	7.6	15	35"	20"	12"	120	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-08	CLIMATE MASTER	SC-018	750	0.5	ECM	15.6	13.7	75.0	63.0	55.0	53.0	3.8	80.0	90.0	7.5	68.0	90.0	50.0	40.0	11.0	1	125	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-09	CLIMATE MASTER	SC-015	700	0.5	ECM	12.9	12.5	75.0	63.0	55.0	53.0	3.1	80.0	90.0	0.0	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.9	8.2	15	43"	20"	18"	155	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-10	CLIMATE MASTER	SC-036	1350	0.5	ECM	36.5	27.0	75.0	63.0	55.0	53.0	7.5	80.0	90.0	12.9	68.0	90.0	50.0	40.0	11.0	2	360	460	3	9.3	10.4	15	72"	26"	22"	360	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-11	CLIMATE MASTER	SC-012	400	0.5	ECM	9.5	7.7	75.0	63.0	55.0	53.0	2.5	80.0	90.0	5.1	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.5	7.6	15	35"	20"	12"	120	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-12	CLIMATE MASTER	SC-018	750	0.5	ECM	17.4	17.1	75.0	63.0	55.0	53.0	3.8	80.0	90.0	23.3	68.0	90.0	50.0	40.0	11.0	1	165	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-13	CLIMATE MASTER	SC-015	700	0.5	ECM	14.4	13.3	75.0	63.0	55.0	53.0	3.1	80.0	90.0	5.6	68.0	90.0	50.0	40.0	11.0	1	60	277	1	6.9	8.2	15	43"	20"	18"	155	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-14	CLIMATE MASTER	SC-015	700	0.5	ECM	12.0	10.8	75.0	63.0	55.0	53.0	3.1	80.0	90.0	2.8	68.0	90.0	50.0	40.0	11.0	1	95	277	1	6.9	8.2	15	43"	20"	18"	155	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-15	CLIMATE MASTER	SC-012	400	0.5	ECM	8.9	8.0	75.0	63.0	55.0	53.0	2.5	80.0	90.0	7.0	68.0	90.0	50.0	40.0	11.0	1	55	277	1	6.5	7.6	15	35"	20"	12"	120	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-16	CLIMATE MASTER	SC-009	300	0.5	ECM	7.0	5.3	75.0	63.0	55.0	53.0	1.9	80.0	90.0	5.3	68.0	90.0	50.0	40.0	11.0	1	90	277	1	5.9	6.8	15	34"	20"	12"	110	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-17	CLIMATE MASTER	SC-009	300	0.5	ECM	8.8	6.1	75.0	63.0	55.0	53.0	1.9	80.0	90.0	1.8	68.0	90.0	50.0	40.0	11.0	1	90	277	1	5.9	6.8	15	34"	20"	12"	110	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-18	CLIMATE MASTER	SC-018	750	0.5	ECM	14.8	13.1	75.0	63.0	55.0	53.0	3.8	80.0	90.0	8.2	68.0	90.0	50.0	40.0	11.0	1	60	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-19	CLIMATE MASTER	SC-024	900	0.5	ECM	20.9	17.3	75.0	63.0	55.0	53.0	5.0	80.0	90.0	8.2	68.0	90.0	50.0	40.0	11.0	2	150	460	3	5.0	6.0	15	43"	21"	18"	175	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-20	CLIMATE MASTER	SC-012	400	0.5	ECM	9.2	8.0	75.0	63.0	55.0	53.0	2.5	80.0	90.0	5.1	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.5	7.6	15	35"	20"	12"	120	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-21	CLIMATE MASTER	SC-018	750	0.5	ECM	16.8	15.5	75.0	63.0	55.0	53.0	3.8	80.0	90.0	1.6	68.0	90.0	50.0	40.0	11.0	1	60	277	1	8.4	10.0	15	44"	23"	18"	160	ESM,DSN,HK,RDS,DP	2-8				
WSHP 2-22	CLIMATE MASTER	SC-024	900	0.5	ECM</																																



MECHANICAL ABBREVIATION LIST	
GENERAL NOTES	
1	THE MANUFACTURER LISTED SHALL BE CONSIDERED THE BASIS OF DESIGN. EQUIPMENT AND ACCESSORIES SHALL BE SUPPLIED IN ACCORDANCE WITH THE SCHEDULED VALUES. NOTES, DETAILS, AND SPECIFICATIONS. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COST AND COORDINATION WHEN NON BASIS OF DESIGN EQUIPMENT IS PROVIDED.
2	ALL PERFORMANCE SHALL BE BASED ON EQUIPMENT OPERATING AT AN ELEVATION OF 1,086 FEET ABOVE SEA LEVEL.
3	SPECIFIED FAN ESP INCLUDES DUCT AND EQUIPMENT LOSSES EXTERNAL TO UNIT. SCHEDULED FAN TSP INCLUDES EXTERNAL LOSSES PLUS INTERNAL UNIT LOSSES DUE TO COILS, FILTERS AT DIRTY CONDITIONS, ETC.
OPTIONS	
AC	ALUMINUM CONSTRUCTION
AS	AIRFLOW SWITCH
ASD	AIR SCOOP DEVICE
BS	BIROSCREEN
BSK	BREAKER SEAL KIT
CAB	COMPRESSOR ACCOUSTICAL BLANKET
CL	COLOR BY ARCHITECT
CPE	CONDENSATE PUMP - EXTERNAL EQUAL TO 7'
CPI	CONDENSATE PUMP - INTEGRAL
DMK	DOWNFLOW MOUNTING KIT AND CONDENSATE MANAGEMENT KIT
DP	DRAIN PAN
DSE	DISCONNECT BY E/C
DSF	FUSED DISCONNECT - FACTORY MOUNTED
DSN	NON-FUSED DISCONNECT - FACTORY MOUNTED
DSR	DUPLEX SERVICE RECEPTACLE - FACTORY MOUNTED AND POWERED
DSRE	DUPLEX SERVICE RECEPTACLE BY E/C
EEF	EXTERNAL EXHAUST FAN
GBD	GRAVITY BACKDRAFT DAMPER
HG	HAIL GUARD
HK	HOSE KIT
IC	INSULATED CABINET
MDG	MAGNETIC DOOR CONTROLLER
OAH	OUTDOOR AIR HOOD
PC	PLUG CONNECTIONS FOR ELECTRIC HEATER
RD	RADIATION DAMPER
RDS	REFRIGERANT DETECTION SYSTEM
RMB	2" RECESSED MOUNTING BOX
SC	SPEED CONTROLLER
SFS	SELF CONTAINED FIRE SUPPRESSION
SG	STANDARD GRILLE
SMB	SURFACE MOUNTING BOX
SPP	SINGLE POINT POWER ENTRY KIT
SS	STAINLESS STEEL
SSDP	STAINLESS STEEL DRAIN PAN
STC	SMART TOUCH CONTROLLER
TEV	THERMAL EXPANSION VALVE
UIT	USER INTERFACE TOUCHPAD
WS	WALL SLEEVE
WSH	WEATHERSHIED HOOD

EVAPORATIVE FLUID COOLER SCHEDULE																																
PLAN MARK	SERVICE	MANUFACTURER	MODEL	OUTDOOR FAN				PUMPS				COOLING COIL				WATER REQUIREMENTS				ELECTRICAL					PHYSICAL PROPERTIES			OPTIONS	NOTES			
				FAN TYPE	FAN QUANTITY	AIRFLOW (CFM)	MAX HP	BRAKE HP	RPM	PUMP QUANTITY	FLOW RATE (GPM)	MAX HP	TH (MBH)	TEMP (DEG. F)	LOW AMB DB (DEG. F)	HIGH AMB DB (DEG. F)	HIGH AMB WB (DEG. F)	EWT	LWT	WPD (FT)	CONNECTION SIZE (IN)	VOLTAGE	PHASE	FLA	MCA	MOCp	MAX LENGTH (FT)			MAX WIDTH (FT)	MAX HEIGHT (FT)	WEIGHT (LBS)
EFC 1	GSHP	MARLEY	LWA048ME1	DIRECT	3	26500	22.5	22.5	1200	1	150	1.5	600		50	95	76	90	80	9.3	0"	480	3	17	22	25	12'-0"	4'-2"	10'-4"	7500	DSE	1-3
NOTES: 1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS. 2. MOUNT ON CONCRETE PAD AND PER MANUFACTURER RECOMMENDATIONS. 3. UNIT SIZED FOR PURE WATER, 0% GLYCOL. UNIT WILL NOT OPERATE FOR 6 MONTHS OF THE YEAR. SEE CONTROLS DRAWINGS FOR WINTERIZATION DRAINDOWN SEQUENCE. 4. SET AUTOMATIC CONTROL VALVE MINIMUM POSITION TO CALCULATED BLOWDOWN AS REQUIRED BY MANUFACTURER.																																

SPLIT SYSTEM AIR HANDLER SCHEDULE																																							
PLAN MARK	SERVICE	MANUFACTURER	MODEL	UNIT TYPE	SUPPLY FAN						COOLING COIL						HEATING COIL						CONTROL (STAGED/ MOD)	MIN O/A AIRFLOW (CFM)	FILTER		ELECTRICAL					DUCT CONNECTIONS		PHYSICAL PROPERTIES				OPTIONS	NOTES
					TYPE	AIRFLOW (CFM)	ESP (IN)	TSP (IN)	MAX HP	BRAKE HP	STARTER TYPE	TH (BTUH)	SH (BTUH)	DB (DEG F)	WB (DEG F)	DB (DEG F)	WB (DEG F)	AIRFLOW (CFM)	TH (BTUH)	NOMINAL (KW)	EAT (DEG F)	LAT (DEG F)			MERV	DIRTY SP LOSS (IN)	VOLTAGE	PHASE	FLA	MCA	MOCp	SUPPLY	RETURN	LENGTH	WIDTH	HEIGHT	WEIGHT		
AHU V1	VEHICLE BAY	TRANE	TEM40C048	SINGLE	DD	1600	0.5	0.0	0.75	INTEGRAL	48800	34500	80.0	67.0	55.0	53.0	1600	36800	10.8	60.0	81.0	1 STAGE	0	8	0.4	208	1	68.0	91.0	100	FRONT	REAR	21"	23"	51"	300	DSE,IC	1-5	
NOTES: 1. SUSPEND UNIT FROM STRUCTURE. 2. SIZE EVAPORATOR COIL BASED ON ASSOCIATED CONDENSING UNIT. 3. UNIT SHALL BE BLOW THRU CONFIGURATION. 4. FURNISH 1" FILTER RACK. 5. FURNISH UNIT WITH TERMINAL STRIP AND 7-DAY PROGRAMMABLE THERMOSTAT.																																							

SPLIT SYSTEM CONDENSING UNIT SCHEDULE																
PLAN MARK	SERVICE	MANUFACTURER	MODEL	REFRIGERANT	TH (BTUH)	SH (BTUH)	AMB TEMP (DEG. F)	ELECTRICAL					MIN SEER	OPTIONS	NOTES	
								VOLTAGE	PHASE	FLA	MCA	MOCp				
CU V1	VEHICLE BAY	TRANE	4TTA3048	R454B	48800	34500	105	208	3	18.0	18.0	30	14	DSE,HG	1,2	
NOTES: 1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS. 2. MOUNT ON CONCRETE PAD.																

COMPUTER ROOM CONDENSING UNIT SCHEDULE																									
PLAN MARK	AREA SERVED	MANUFACTURER	MODEL	REFRIGERANT	OUTDOOR FAN				COOLING COIL			CONNECTION SIZES		ELECTRICAL				PHYSICAL PROPERTIES				OPTIONS	NOTES		
					FAN QUANTITY	AIRFLOW (CFM)	MAX HP	RPM	TH (MBH)	LOW AMB TEMP (DEG. F)	HIGH AMB TEMP (DEG. F)	LIQUID LINE (IN)	HOT GAS LINE (IN)	VOLTAGE	PHASE	MCA	MOCp	MAX LENGTH (IN)	MAX WIDTH (IN)	MAX HEIGHT (IN)	MAX WEIGHT (LBS)				
CRCU 1	SERVER 146	STULZ	SCS-252-SEC	407C	2	18400	7.7	1500	204	-15	105	1 1/8"	1 3/8"	460	3	9.3	15	9'-1"	4'-0"	3'-5"	500	DSN	1-3		
CRCU 2	SERVER 146	STULZ	SCS-252-SEC	407C	2	18400	7.7	1500	204	-15	105	1 1/8"	1 3/8"	460	3	9.3	15	9'-1"	4'-0"	3'-5"	500	DSN	1-3		
CRCU 3	SERVER 146	STULZ	SCS-252-SEC	407C	2	18400	7.7	1500	204	-15	105	1 1/8"	1 3/8"	460	3	9.3	15	9'-1"	4'-0"	3'-5"	500	DSN	1-3		
NOTES: 1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS. 2. COOLING COILS BASED ON NET CAPACITIES. 3. MOUNT ON CONCRETE PAD WITH NEOPRENE VIBRATION ISOLATION PAD AND PER MANUFACTUER IOM INSTRUCTIONS.																									

COMPUTER ROOM AIR CONDITIONING SCHEDULE																						
PLAN MARK	MANUFACTURER	MODEL	UNIT TYPE	SUPPLY FAN		COOLING		HUMIDIFICATION CAPACITY (LBS/HR)	FILTER MERV	ELECTRICAL				OPTIONS	NOTES							
				AIRFLOW (CFM)	ESP (IN)	TOTAL (MBH)	SENSIBLE (MBH)			VOLTAGE	PHASE	MCA	MCCP									
CRAC 1	STULZ	COS-120-AR-D-EC	DOWNFLOW	4800	0.5	111	92	15	11	480	3	33.7	50	DSN	1-2							
CRAC 2	STULZ	COS-120-AR-D-EC	DOWNFLOW	4800	0.5	111	92	15	11	480	3	33.7	50	DSN	1-2							
CRAC 3	STULZ	COS-120-AR-D-EC	DOWNFLOW	4800	0.5	111	92	15	11	480	3	33.7	50	DSN	1-2							
NOTES:																						
1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS.																						
2. PROVIDE FLOOR MOUNTED WATER SENSOR IN UNDER FLOOR AIR PLenum. CONNECT TO BAS.																						
3. PROVIDE MANUFACTURER'S STANDARD FLOOR STAND FOR DOWNFLOW CONFIGURATION.																						

2. IF THE EXHAUST FAN FAILS TO PROVE STATUS FOR 30 SECONDS (ADJ.), THE FAN SHALL BE COMMANDED OFF, ALL HEATING AND COOLING SHALL BE DISABLED, AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET SHALL BE REQUIRED TO RESTART THE FAN. A MANUAL RESET OF THE HIGH STATIC PRESSURE CUT-OFF SWITCH SHALL BE REQUIRED TO RESTART THE FAN. SUPPLY AND EXHAUST FANS ARE INTERLOCKED VIA SOFTWARE, A FAILURE OF EITHER SHALL DISABLE BOTH.

1. THE UNIT SHALL SHUT DOWN IN RESPONSE TO A SIGNAL FROM THE SMOKE DETECTORS INDICATING THE PRESENCE OF SMOKE. THE SMOKE DETECTORS SHALL BE INTERLOCKED TO THE UNIT THROUGH THE DRY CONTACTS OF THE SMOKE DETECTOR. A MANUAL RESET OF THE SMOKE DETECTORS SHALL BE REQUIRED TO RESTART THE UNIT.



ELEVATOR SUMP PUMP

1. THE BAS SHALL ANNUNCIATE AN ALARM WHEN THE HIGH LEVEL SENSOR IS REACHED.

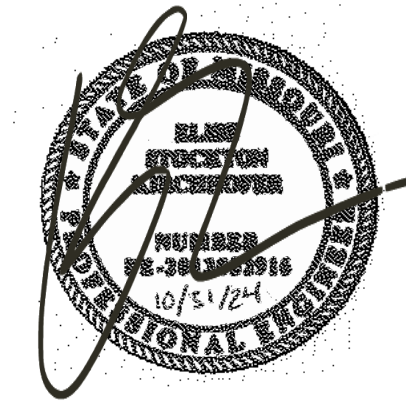
1. THE BAS SHALL MONITOR THE FOLLOWING:
 - A. UPS AVAILABLE
 - B. UPS CHARGE
 - C. UPS IN TEST MODE
 - D. FAILURE OF COMMUNICATION LINK

1 CONTROLS LEGEND
NOT TO SCALE

3 MISC. EQUIPMENT CONTROL DIAGRAM

1 CONTROLS LEGEND
NOT TO SCALE

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BAS POINTS LIST												
POINT ID	POINT DESCRIPTION	POINTS				ALARMS						NOTES
		TYPE	DISPLAY GRAPHIC	SOFTWARE POINT	HARDWIRE INTERLOCK	HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMM. FAIL	
OA T	OUTSIDE AIR TEMPERATURE		X		X							
FC CP	FLUID COOLER CONTROL PANEL		X		X							1
HPP CP	HEAT PUMP PUMP CONTROL PANEL		X		X							2
HPS T	HEAT PUMP SUPPLY TEMPERATURE	AI	X			X	X					
HPR T	HEAT PUMP RETURN TEMPERATURE	AI	X			X	X					
GTS FLW	GEO THERMAL SUPPLY FLOW METER	AI	X							X		
GTR FLW	GEO THERMAL RETURN FLOW METER	AI	X							X		
GTS T	GEO THERMAL SUPPLY TEMPERATURE	AI	X			X	X					
GTR T	GEO THERMAL RETURN TEMPERATURE	AI	X			X	X			X		
GT BYPV CMD	GEO THERMAL BYPASS VALVE COMMAND	AO	X									
GT BYPV P	GEO THERMAL BYPASS VALVE POSITION	AI	X									
HP BYPV CMD	HEAT PUMP BYPASS VALVE COMMAND	AO	X									
HP BYPV P	HEAT PUMP BYPASS VALVE POSITION	AI	X									
FC1 ISO CMD	FLUID COOLER 1 ISOLATION VALVE COMMAND	BO	X									
FCB ISO CMD	FLUID COOLER BASIN ISOLATION VALVE COMMAND	AO	X									
FC1 FLW	FLUID COOLER 1 FLOW SWITCH	BI	X								X	
FCS T	FLUID COOLER SUPPLY TEMPERATURE	AI	X			X	X			X		
FCR T	FLUID COOLER RETURN TEMPERATURE	AI	X			X	X			X		

EVAPORATIVE FLUID COOLER POINTS LIST												
POINT ID	POINT DESCRIPTION	POINTS				ALARMS						NOTES
		TYPE	DISPLAY GRAPHIC	SOFTWARE POINT	HARDWARE INTERLOCK	HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMM. FAIL	
EFC1 F1 CMD	FLUID COOLER 1 FAN 1 ENABLE COMMAND	AO	X									
EFC1 F2 CMD	FLUID COOLER 1 FAN 2 ENABLE COMMAND	AO	X									
EFC1 F3 CMD	FLUID COOLER 1 FAN 3 ENABLE COMMAND	AO	X									
EFC1 IP CMD	FLUID COOLER 1 INTERNAL PUMP ENABLE COMMAND	AO	X									
EFC1 STS	FLUID COOLER 1 STATUS	BI	X									
EFC1 ALM	FLUID COOLER 1 ALARM	BI	X					X				
EFC1 FLW	FLUID COOLER 1 FLOW SWITCH	BI	X									
EFC1 SW T	FLUID COOLER 1 SUPPLY WATER TEMPERATURE	AI	X			X	X					
EFC1 RW T	FLUID COOLER 1 RETURN WATER TEMPERATURE	AI	X			X	X					

PUMP POINTS LIST												
POINT ID	POINT DESCRIPTION	POINTS				ALARMS						NOTES
		TYPE	DISPLAY GRAPHIC	SOFTWARE POINT	HARDWARE INTERLOCK	HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMM. FAIL	
HPP1 CMD	HEAT PUMP PUMP 1 ENABLE COMMAND	AO	X									
HPP1 ST	HEAT PUMP PUMP 1 STATUS	BI	X									
HPP1 SPD	HEAT PUMP PUMP 1 SPEED OUTPUT	BO	X									
HPP2 CMD	HEAT PUMP PUMP 2 ENABLE COMMAND	AO	X									
HPP2 ST	HEAT PUMP PUMP 2 STATUS	BI	X									
HPP2 SPD	HEAT PUMP PUMP 2 SPEED OUTPUT	BO	X									
HPP3 CMD	HEAT PUMP PUMP 3 ENABLE COMMAND	AO	X									
HPP3 ST	HEAT PUMP PUMP 3 STATUS	BI	X									
HPP3 SPD	HEAT PUMP PUMP 3 SPEED OUTPUT	BO	X									
FCP4 CMD	FLUID COOLER PUMP 4 ENABLE COMMAND	AO	X									
FCP4 ST	FLUID COOLER PUMP 4 STATUS	BI	X									
FCP4 SPD	FLUID COOLER PUMP 4 SPEED OUTPUT	BO	X									
HPP LEAD			X	X								
HPP1 FAIL	HEAT PUMP PUMP 1 FAILURE		X	X				X				
HPP2 FAIL	HEAT PUMP PUMP 2 FAILURE		X	X				X				
HPP3 FAIL	HEAT PUMP PUMP 3 FAILURE		X	X				X				
FCP4 FAIL	FLUID COOLER PUMP 4 FAILURE		X	X				X				

SEQUENCE OF OPERATION

SYSTEM GENERAL OPERATION:
1. THE GROUND SOURCE HEAT PUMP SYSTEM IS CONTROLLED AND MONITORED BY THE BAS.
2. THE GROUND SOURCE HEAT PUMP SYSTEMS CONSIST OF 3 SUPPLY PUMPS, AN EVAPORATIVE FLUID COOLER, A FLUID COOLER PUMP, MULTIPLE WATER SOURCE HEAT PUMPS, AND THE WELL FEILD.
3. THE HEAT PUMP SYSTEM INCLUDES FLOWMETERING CAPABILITIES WITH MINIMUM FLOW BYPASS CONTROL.
4. THE SUPPLY PUMPS ARE CONFIGURED AS A PACKAGED SKID WITH THEIR OWN CONTROLS FOR OPTIMUM EFFICIENCY. THE BAS SHALL MONITOR THE PUMP STATUS AND COMMUNICATE WITH THE PUMP CONTROLS.

SUPPLY PUMP CONTROLS:

- THE SUPPLY PUMPS SHALL RUN CONTINUOUSLY AT THE MINIMUM FLOW SETPOINT.
- THE SUPPLY PUMPS SHALL INCREASE IN SPEED LINEARLY TO THE MAX FLOW SETPOINT AS THE HEAT PUMP RETURN TEMPERATURE INCREASES OR DECREASES AS FOLLOWS:
 - BETWEEN 55-70 DEGREES (ADJ.) THE PUMPS SHALL BE AT MINIMUM SPEED.
 - AT 45 DEGREES (ADJ.) AND LOWER THE PUMPS SHALL BE AT THE MAXIMUM FLOW SETPOINT.
 - AT 85 DEGREES (ADJ.) AND HIGHER, THE PUMPS SHALL BE AT THE MAXIMUM FLOW SETPOINT.

EVAPORATIVE FLUID COOLER CONTROLS:

- FLUID COOLER ISOLATION VALVE:
 - THE FLUID COOLER ISOLATION VALVE SHALL FULLY OPEN AND THE FLUID COOLER BASIN ISOLATION VALVE SHALL FULLY CLOSE ON MAY 1ST (ADJ.) OR ON COMMAND FROM THE BAS OPERATOR.
 - THE FLUID COOLER ISOLATION VALVE SHALL FULLY CLOSE AND THE FLUID COOLER BASIN ISOLATION VALVE SHALL FULLY OPEN ON NOVEMBER 1ST (ADJ.) ON COMMAND FROM THE BAS OPERATOR, OR IF THE OUTSIDE AIR TEMPERATURE DROPS BELOW 35 DEGREES (ADJ.).
 - AN ALERT SHALL BE SENT TO THE BUILDING OPERATOR 7 DAYS BEFORE THE ISOLATION VALVE IS PROGRAMMED TO OPEN OR CLOSE INFORMING THE OPERATOR OF THE UPCOMING ACTION, AND NOTIFYING THAT ADDITIONAL WINTERIZATION MAINTENANCE MAY BE REQUIRED.
- THE EVAPORATIVE FLUID COOLER SHALL ENABLE WHEN THE FLUID COOLER ISOLATION VALVE IS CONFIRMED CLOSED AND THE GEO THERMAL SUPPLY TEMPERATURE IS GREATER THAN 85 DEGREES.
 - BETWEEN THE HOURS OF MIDNIGHT AND 6AM (ADJ.) THE FLUID COOLER SHALL ENABLE WHEN THE FLUID COOLER VALVE IS CONFIRMED CLOSED AND THE GEO THERMAL SUPPLY TEMPERATURE IS GREATER THAN 80 DEGREES.
 - WHEN THE FLUID COOLER IS ENABLED, FOLLOWING ACTIONS WILL TAKE PLACE:
 - FLUID COOLER PUMP 4 WILL ENABLE.
 - ALL FLUID COOLER FANS WILL ENABLE.
 - THE FLUID COOLER INTERNAL PUMP SHALL ENABLE FOR EVAPORATIVE COOLING.
 - THE FLUID COOLER WILL DISABLE WHEN THE GEO THERMAL SUPPLY TEMPERATURE IS BELOW 80 DEG (ADJ.) FOR 1 HOUR (ADJ.).

FLOW METER:

- THE FLOW METER SHALL MONITOR THE GEO THERMAL WATER SUPPLY AND RETURN FLOW. THE FLOW MEASURED SHALL BE USED TO ADJUST THE POSITION OF THE GEO THERMAL BYPASS CONTROL VALVE. THE GEO THERMAL BYPASS CONTROL VALVE SHALL MODULATE OPEN WHEN THE GEO THERMAL WATER SUPPLY IS GREATER THAN 150 GPM (ADJ.). THE GEO THERMAL BYPASS CONTROL VALVE SHALL MODULATE CLOSED WHEN THE GEO THERMAL SUPPLY FLOW IS LESS THAN 150 GPM.

SEQUENCE OF OPERATION - CONT.

HEAT PUMP FLOW BYPASS VALVE:
1. WHEN THE LEAD BUILDING PUMP REACHES MINIMUM SPEED, THE PUMP SKID FLOW METER SHALL MEASURE THE SYSTEM GPM. THE MINIMUM FLOW BYPASS VALVE SHALL BE MODULATED TO MAINTAIN THE MINIMUM NEEDED FLOW THROUGH THE PUMPS AS MEASURED BY THE PUMP SKID FLOW METERS.

HEAT PUMP WATER DISTRIBUTION PUMP START/STOP:

- THE SYSTEM SHALL START A HEAT PUMP WATER PUMP THROUGH A CONTACT CLOSURE OF THE PUMP 'S VARIABLE FREQUENCY DRIVE (VARIABLE SPEED DRIVE) RUN-ENABLE CONTACTS.

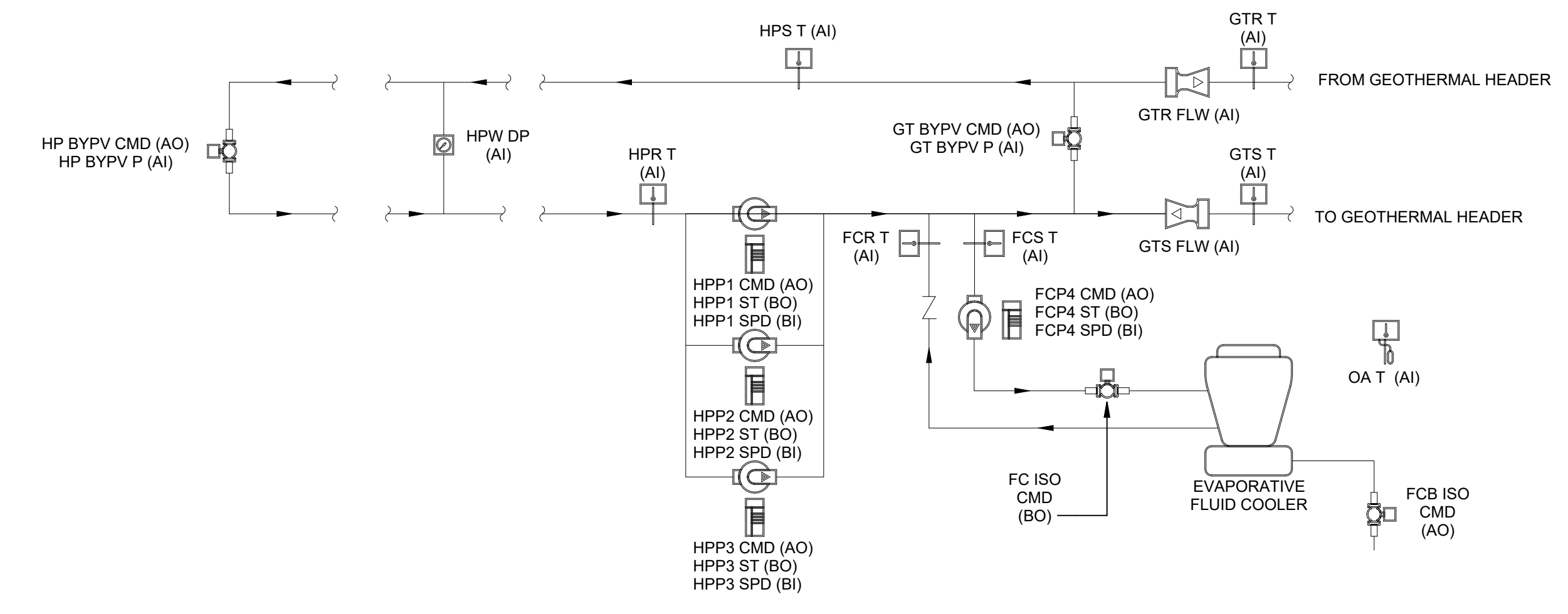
HEAT PUMP WATER DISTRIBUTION PUMP LEAD/LAG:

- THE HEAT PUMP WATER PUMP LEAD/LAG SEQUENCE SHALL BE BASED ON A WEEKLY SCHEDULE. FROM THE BAS, AN OPERATOR SHALL BE ABLE TO MANUALLY CHANGE THE LEAD/LAG SEQUENCE.
- IF THE LEAD PUMP SPEED FALLS BELOW 65% (ADJ.) FOR MORE THAN 5 MINUTES (ADJ.) THE LAST OPERATING PUMP IN THE SEQUENCE SHALL BE DISABLED.

HEAT PUMP WATER DISTRIBUTION PUMP FAILURE:

- IF THE LEAD START/STOP RELAY IS ENABLED AND THE CURRENT SWITCH STATUS IS OFF FOR MORE THAN 30 SECONDS (ADJ.), THE SYSTEM SHALL ANNUNCIATE A HEAT PUMP WATER PUMP FAILURE ALARM TO THE BAS AND START THE LAG PUMP. WHEN A PUMP FAILURE EXISTS, LEAD/LAG AUTOMATION SHALL BE DISABLED AND THE CURRENTLY RUNNING PUMP BECOMES THE LEAD PUMP. ONCE THE PROBLEM HAS BEEN CORRECTED, THE OPERATOR SHALL BE ABLE TO CLEAR THE ALARM FAILURE FROM THE BAS. THIS ACTION SHALL RE-ENABLE THE LEAD/LAG SEQUENCE.

1 GROUND SOURCE HEAT PUMP CONTROL DIAGRAM
NOT TO SCALE



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ISSUE DATE: NOVEMBER 1, 2011
DOEFER WELKER #: 1381

1 HOT WATER RISER DIAGRAM

NOT TO SCALE





NORTH

- | | <u>ELECTRICAL PLAN NOTES:</u> |
|-----|---|
| E4 | TEMPORARY GENERATOR QUICK CONNECT PANEL REFER TO ONE-LINE DIAGRAM AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. |
| E11 | PROVIDE POWER AND DATA TO FUEL SYSTEM AND ACRYLIC PANEL SHALL BE RIGID. ALL FITTINGS AND JUNCTION BOXES SHALL BE EXPLOSION PROOF AND LISTED PER CODE. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH OWNER. |
| E11 | PROVIDE 120V, 1Ø, C, FROM SERPENT (146) TO FUEL PUMP. |
| E12 | PROVIDE DEDICATED LINE VOLTAGE PHOTOCELL FOR FLAS LIGHTING. INSTEAD OF PHOTOCELL, PROVIDE INCONSPICUOUS LOCATION. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION. |
| E24 | BUILDING GROUND RING. REFER TO 2/E-641 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. |
| E25 | EQUIPMENT ENCLOSURE GROUND RING. BOND ALL EQUIPMENT IN THE ENCLOSURE TO BUILDING GROUND RING WITH #2 BONDING CONDUCTOR. REFER TO 2/E-641 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. |
| E26 | TWO (2) CONNECTIONS ARE REQUIRED FOR THE RADIO TOWER GROUNDING SYSTEM TO THE BUILDING GROUNDING SYSTEM. PROVIDE 1/4" CONDUCTOR UNDER ROADWAY FOR GROUNDING CONDUCTORS. BONDING CONDUCTORS SHALL BE PROVIDED BY TOWER INSTALLER. |

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REVISION DATES:

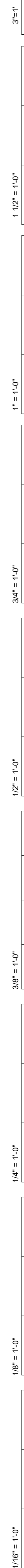


PROFESSIONAL SEAL

ES101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL SITE PLAN



REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.

ELECTRICAL PLANE NOTES:

E13 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT AND FUSE BLOCK. EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E17 PROVIDE POWER CONNECTION TO AUTOMATIC STORM DOOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23. MANUFACTURER'S INSTALLATION INSTRUCTIONS.

E18 PROVIDE POWER CONNECTION TO AUTOMATIC DOOR OPENER. PROVIDE ROUGH-IN FOR BUTTONS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE EXACT BUTTON LOCATIONS WITH ARCHITECT FOR ROUGH-IN. PROVIDE POWER WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR EXACT POWER CONNECTION LOCATIONS AND REQUIREMENTS.

E19 INSTALL COUNTER TOP AIR SWITCH (FURNISHED BY DIVISION 22) TO COUNTER TOP DISPOSAL.

E22 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT AND FUSE BLOCK. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E28 PROVIDE POWER TO 120V WIRING SYSTEM TO SERVE RAISED FLOOR FLOOBXES WITH EOC. PROVIDE WALKER RAIL. PROVIDE EQUAL. PROVIDE ENOUGH LENGTH IN CABLES THAT FLOORBOXES CAN BE USED IN ANY POSITION. PROVIDE LAYOUT / SPECIFICATION OF MODULAR RAISED FLOOR WIRING COMPONENTS TO PROVIDE. PROVIDE BY VENDOR AS A SHOP DRAWING FOR REVIEW.

E29 PROVIDE POWER TO FIRE/SMOKE DAMPER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E30 PROVIDE POWER TO MOTORIZED DAMPER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

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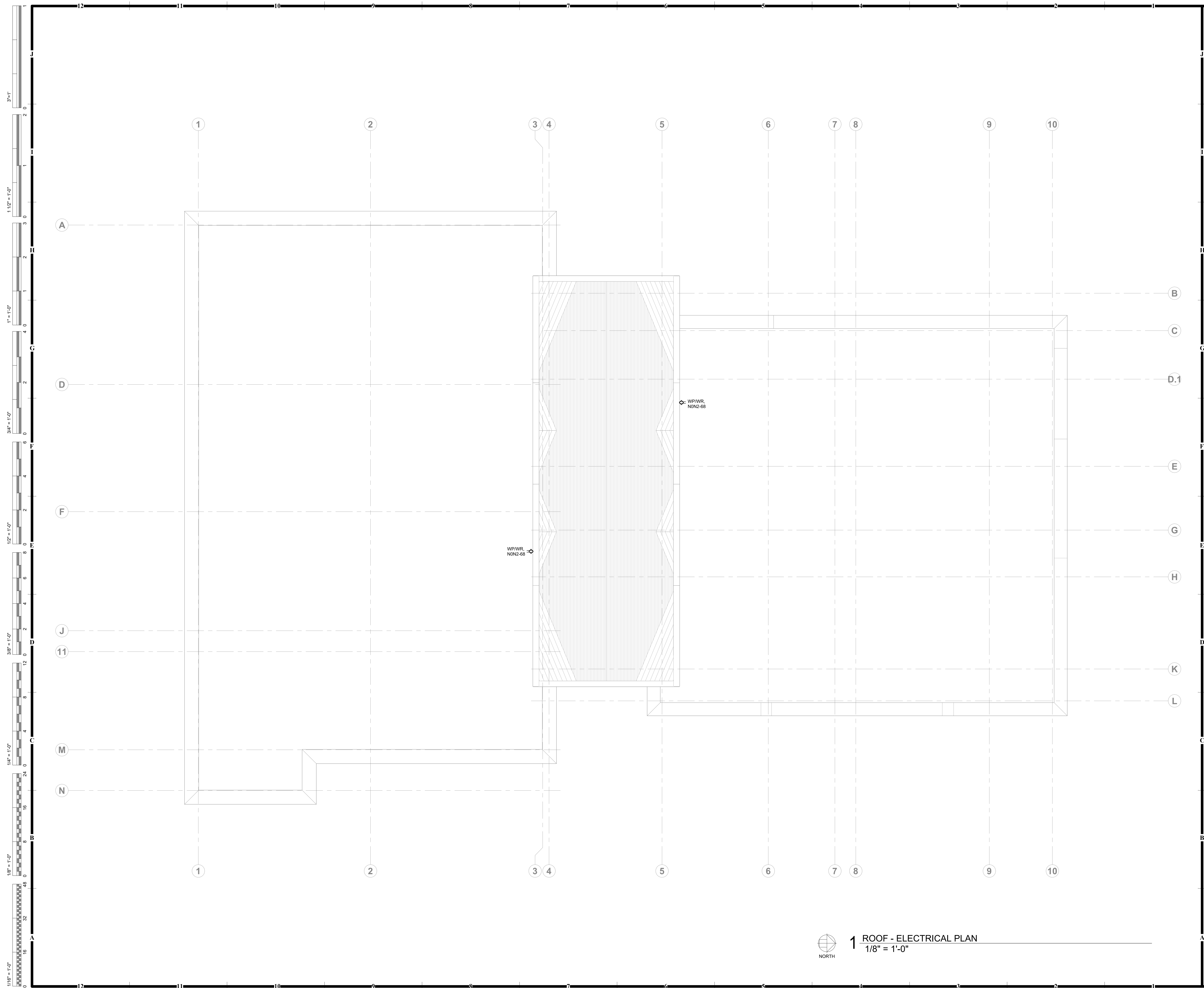
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DUPLICATE DATE: NOVEMBER 1, 2011
REFER WELKER #: 1381

MAIN LEVEL - POWER PLAN

1 MAIN LEVEL - POWER PLAN
1/8" = 1'-0"





GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.

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2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

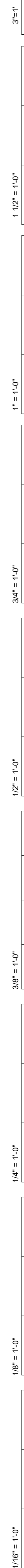


PROFESSIONAL SEAL

E-102

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ROOF - ELECTRICAL PLAN



- GENERAL NOTES:**
1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.
2. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR LIGHT FIXTURE MOUNTING HEIGHTS.
- ELECTRICAL PLAN NOTES:**
- E1 INSTALL VERTICALLY IN WINDOW WELL. REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION.
- E7 WHERE CONDUTS CROSS FROM THE HARDENED PORTION OF THE BUILDING TO THE NON-HARDENED PORTION, PROVIDE ELECTRICAL BOXES (ONE FOR EACH FEEDER AND ONE FOR NONB2 FEEDER) ABOVE ACCESSIBLE CEILING, PROVIDE SPACE WITHIN BOX FOR NON-HARDENED PORTION IS SEPARATED, THE FEEDER WILL BREAK WITHIN THE BOX AND NOT AFFECT THE HARDENED PORTION OF THE BUILDING.
- E14 THE TOP DIMMING SWITCH SHALL CONTROL THE FIXTURE UPLIGHT AND THE BOTTOM DIMMING SWITCH SHALL CONTROL THE FIXTURE DOWNLIGHT.
- E15 RELAY BOXES SHOWN ARE DIAGRAMMATIC. LOCATE RELAY IN A CONCEALED, ACCESSIBLE LOCATION.

HOEFER WELKER
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ANSAS CITY, MO 64112
P: 913.307.3700
hoeferwelker.com

LEE'S SUMMIT JOIN I OPERATIONS FACILITY
ONE TUDOR BL

PACKAGE 2: CONSTRUCTION SET

LEEL'S COMMITTEE, MISSOURI 04000

VISION DATES:



PROFESSIONAL SEAL

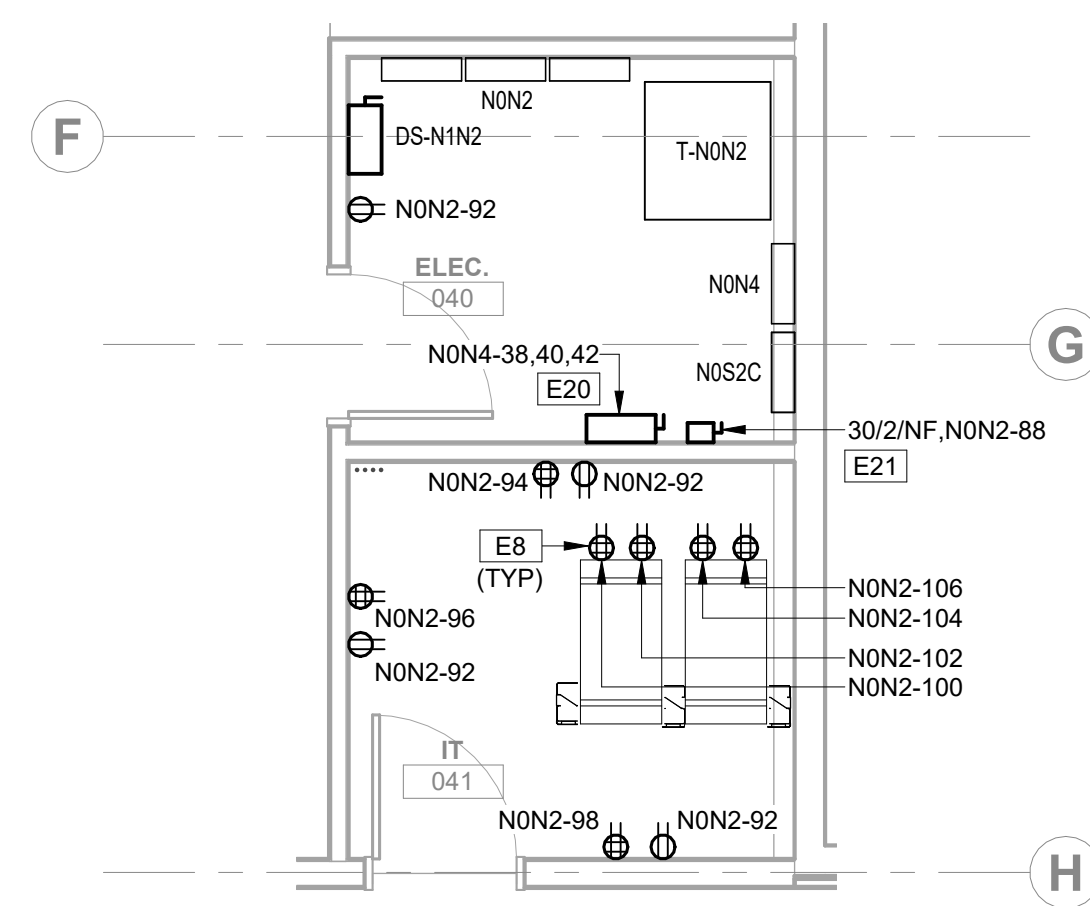
E-110

E DATE: NOVEMBER 1, 2024
FER WELKER #: 138191

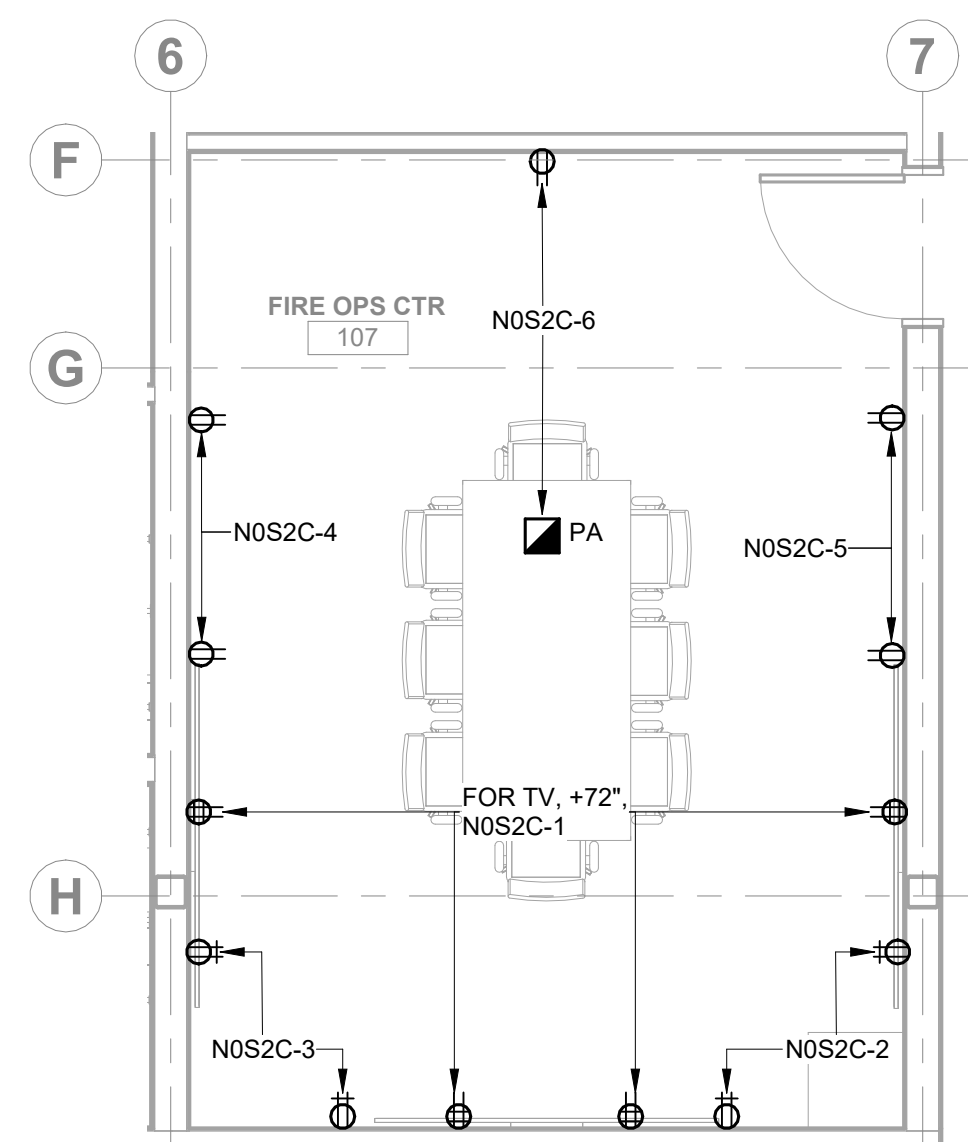
LOWER LEVEL - LIGHTING PLAN

1 LOWER LEVEL - LIGHTING PLAN
1/8" = 1'-0"

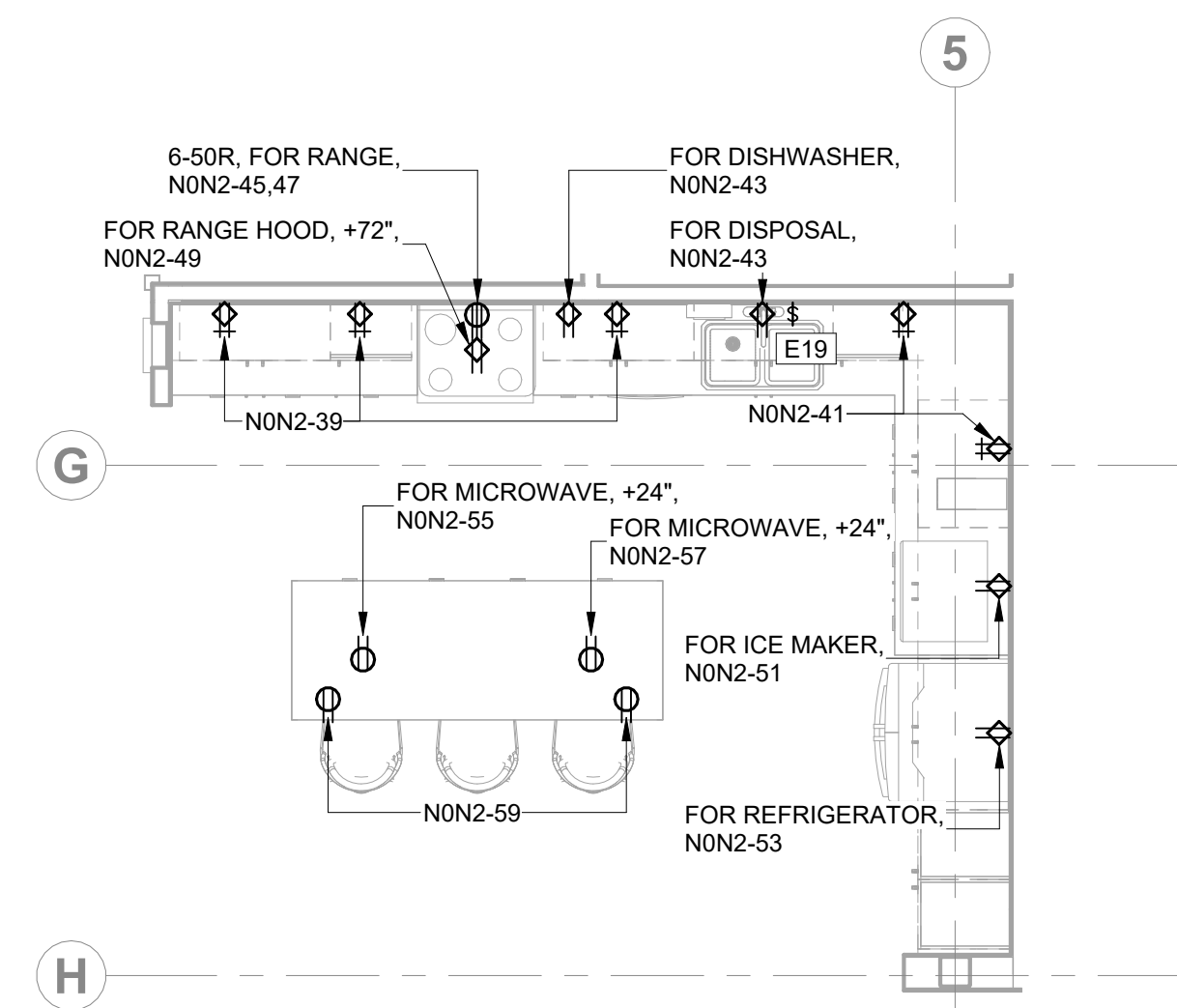
11/1/2024 7:56:21 AM Autodesk Docs://138191-LeesSummitJointOpsCtr/138191_MEP23_LeesSummitJointOpsCtr.rvt



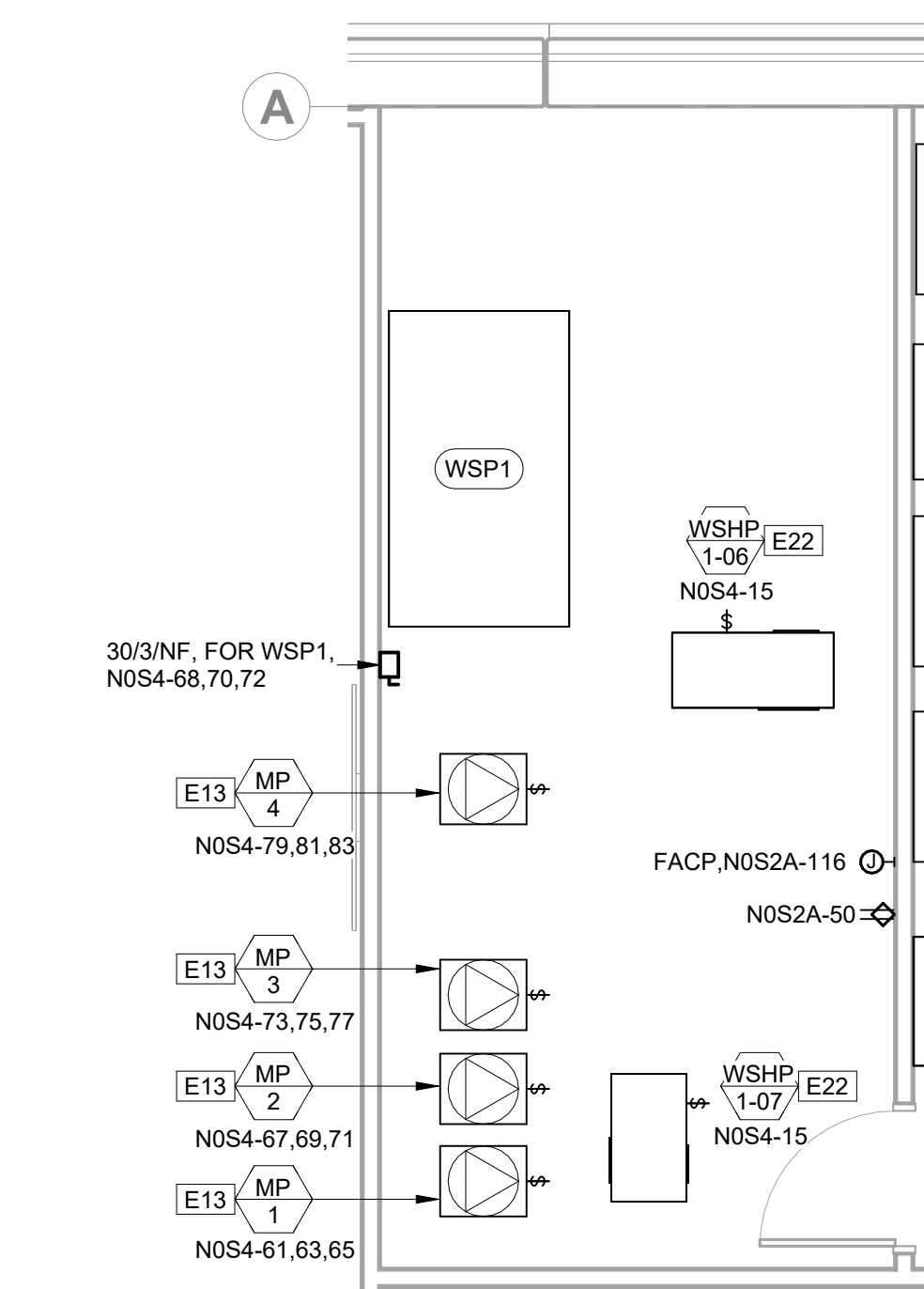
 9 ENLARGED POWER PLAN - ELEC (040) / IT (041)
1/4" = 1'-0"



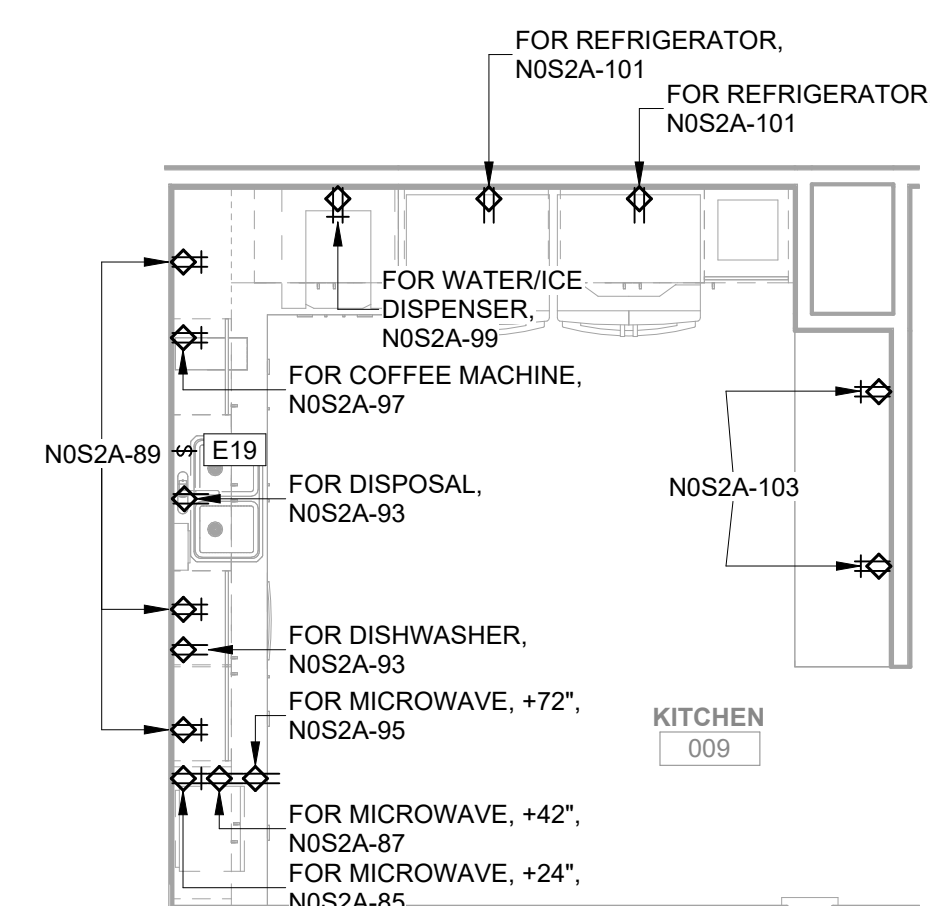
6 ENLARGED POWER PLAN - FIRE OPS CTR
1/4" = 1'-0"



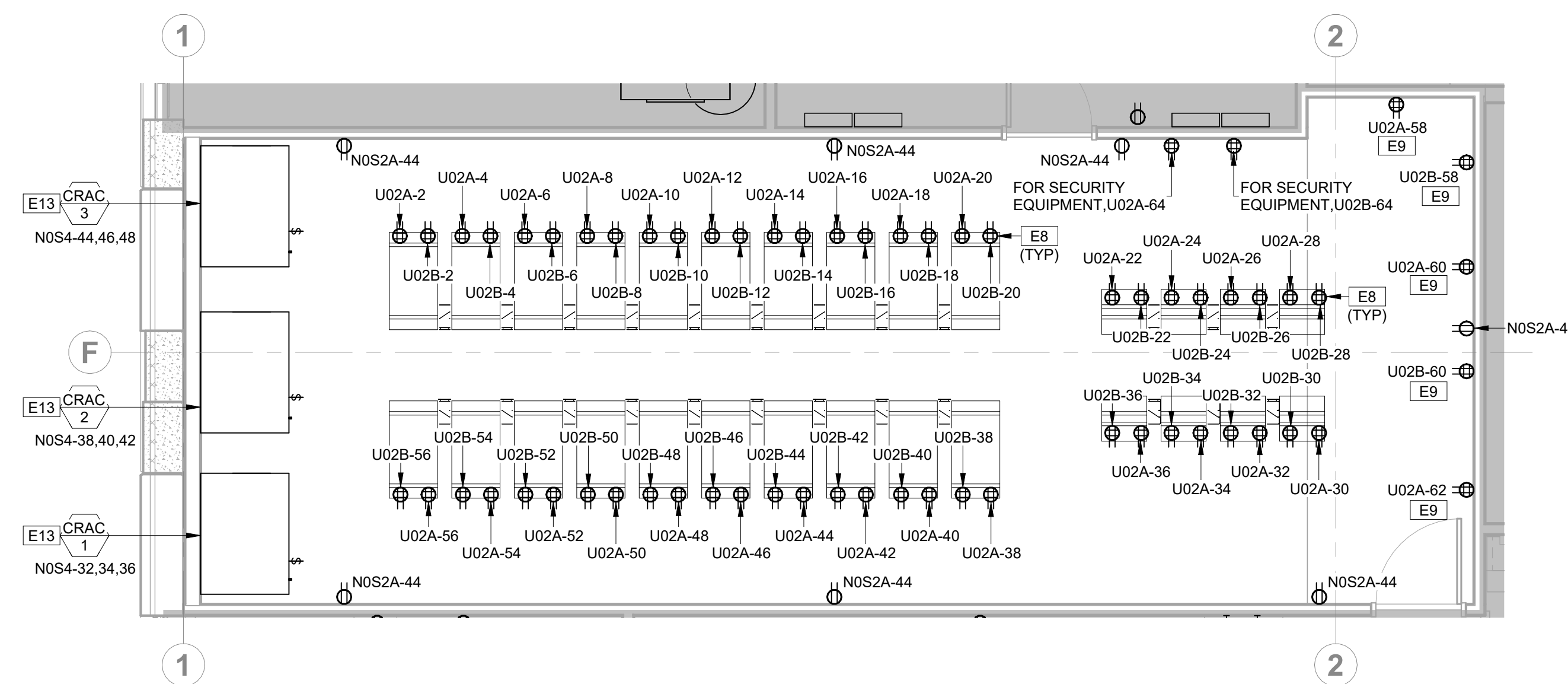
 3 ENLARGED POWER PLAN - BREAKROOM (002)
1/4" = 1'-0"



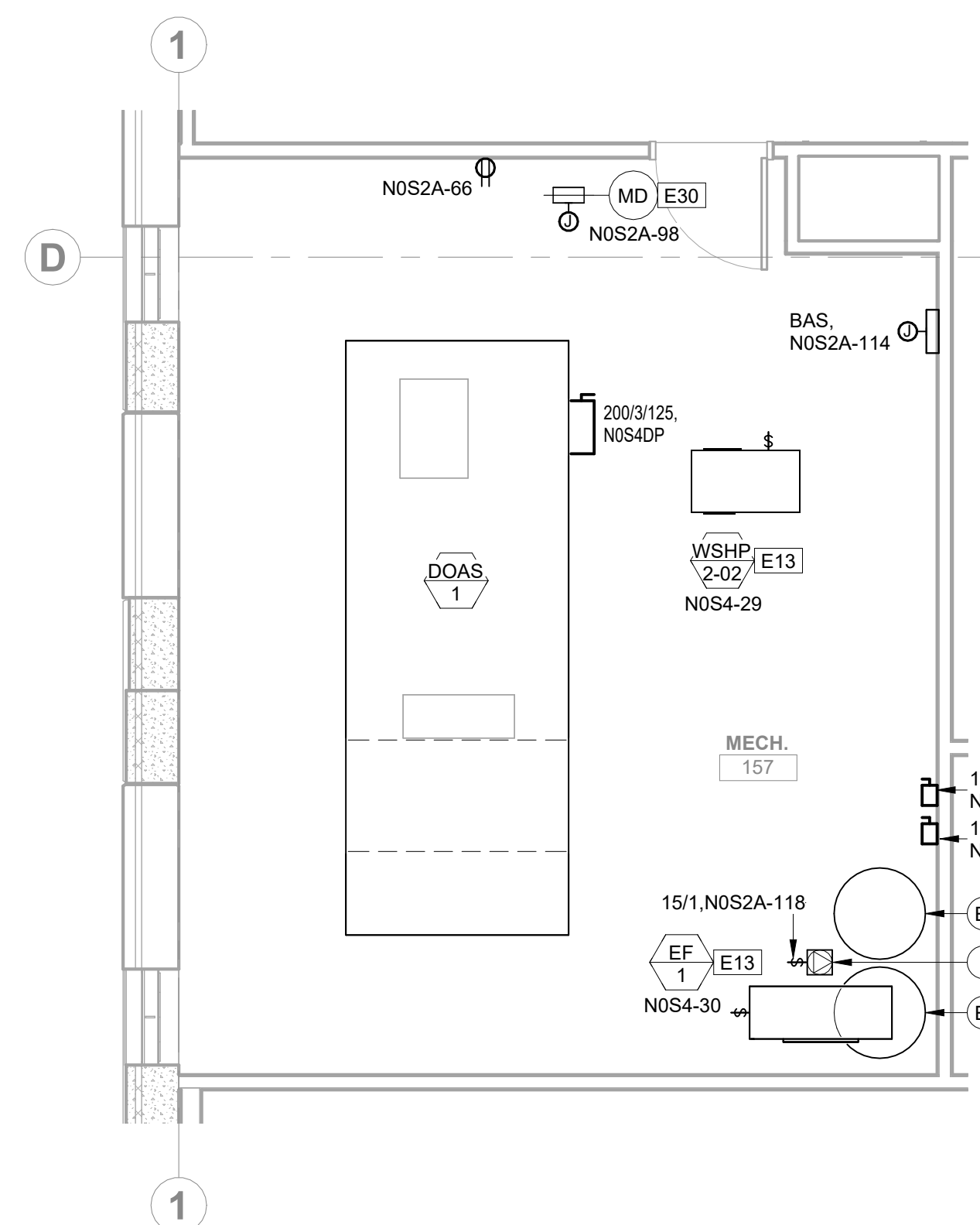
 8 ENLARGED POWER PLAN - WATER 020
1/4" = 1'-0"



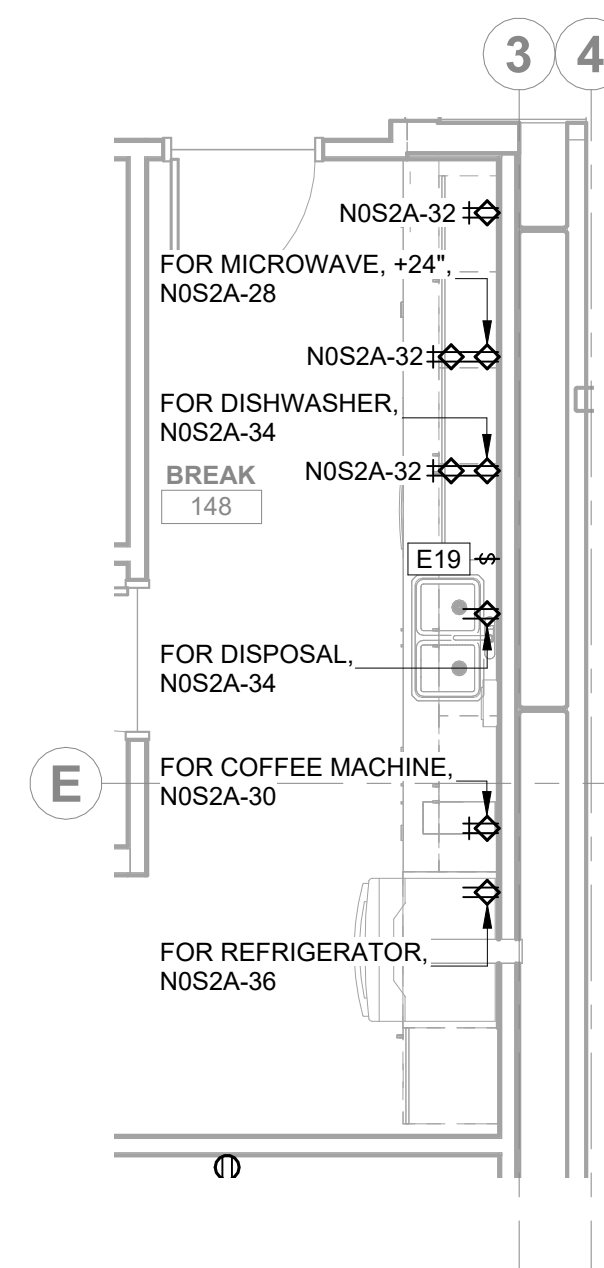
 **5** ENLARGED POWER PLAN - KITCHEN (009)
1/4" = 1'-0"



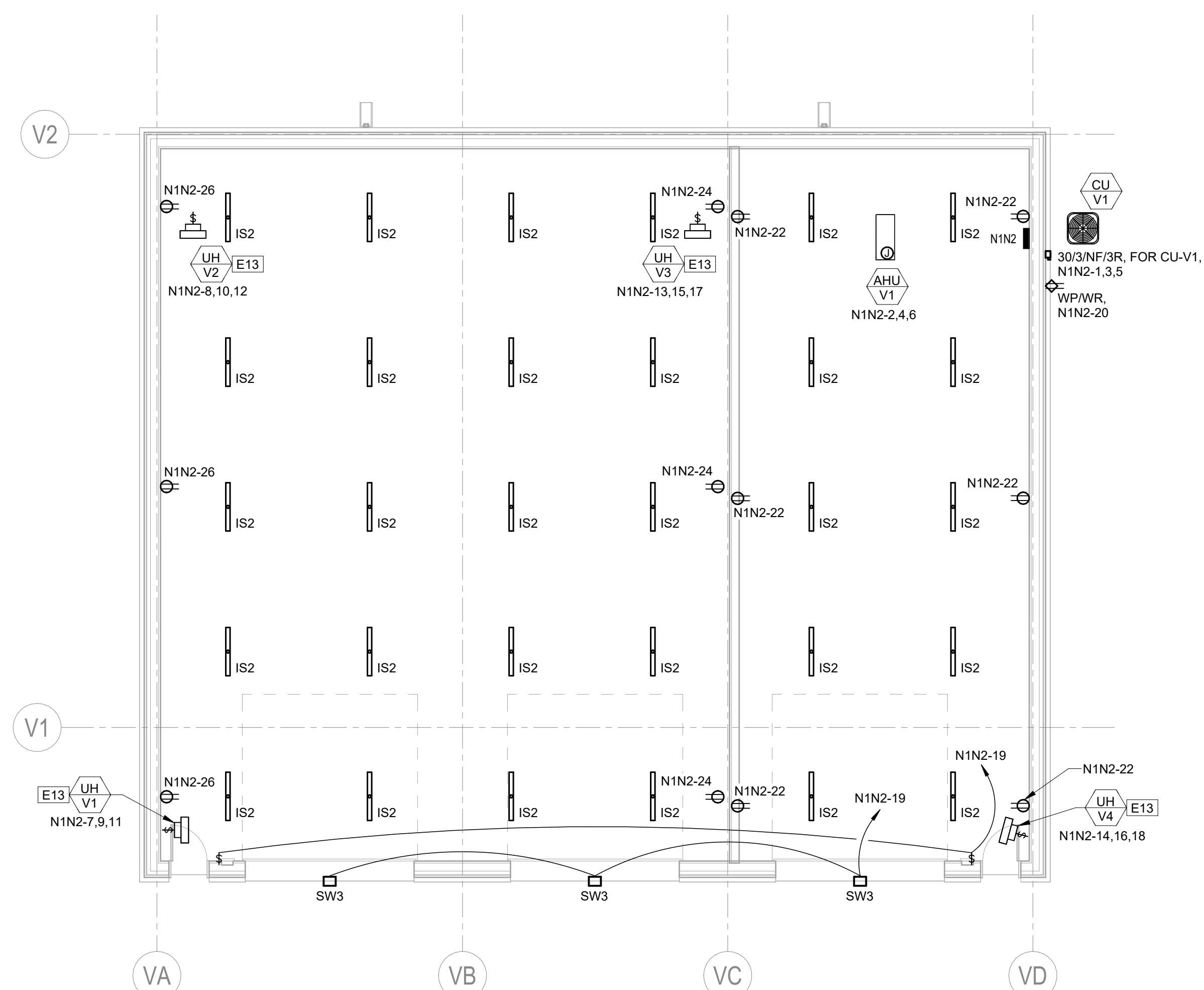
 **2** ENLARGED POWER PLAN - SERVERS (146)
1/4" = 1'-0"



 **7** ENLARGED POWER PLAN - MECH (157)
1/4" = 1'-0"



 **4** ENLARGED POWER PLAN - BREAK (148)
1/4" = 1'-0"



 1 ELECTRICAL PLAN - VEHICLE BUILDING
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.

ELECTRICAL PLAN NOTES:

E8 INSTALL RECEPTACLE ON LADDER RACK ABOVE CABINET/RACK. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 27.

E9 RECEPTACLE FOR WALL MOUNTED IT EQUIPMENT. COORDINATE EXACT LOCATIONS AND REQUIREMENTS WITH DIVISION 27 PRIOR TO ROUGH-IN.

E13 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E19 INSTALL COUNTER TOP AIR SWITCH (FURNISHED BY DIVISION 22) TO CONTROL GARBAGE DISPOSAL

E20 PROVIDE SHUNT TRIP DISCONNECT AND FINAL CONNECTION FOR MAIN ELEVATOR DISCONNECT. DISCONNECT SHALL HAVE AUXILIARY CONTACT THAT IS NORMALLY CLOSED WHEN

THAT IS NORMALLY CLOSED WHEN POWER IS ON AND NORMALLY OPEN WHEN POWER IS OFF. COORDINATE FIRE ALARM CONNECTION WITH FIRE ALARM CONTRACTOR. BASIS OF DESIGN IS KONE 300 SERIES. COORDINATE FINAL DISCONNECT RATING AND LOCATION WITH ELEVATOR MANUFACTURER SUBMITTALS.

E21 PROVIDE DISCONNECT AND FINAL CONNECTION FOR ELEVATOR CAB LIGHTS. BASIS OF DESIGN IS KONE 300 SERIES. COORDINATE FINAL DISCONNECT RATING AND LOCATION

E22 WITH ELEVATOR MANUFACTURER SUBMITTALS.
PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT AND INLINE FUSE BLOCK.

E30 PROVIDE POWER TO MOTORIZED DAMPER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

DIVISION 23.

HOFFER WEIKER

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hoeterwelker.com

LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:



PROFESSIONAL SEAL

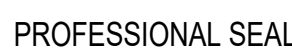
E-401

ISSUE DATE: NOVEMBER 1, 2024

HOEFER WELKER #:	138191
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ENLARGED ELECTRICAL PLANS

PACKAGE 2: CONSTRUCTION SET

[illegible]

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

NOTE: CONFIRM ALL BASE DIMENSIONS WITH STRUCTURAL DETAILS. STRUCTURAL ENGINEERING DRAWINGS SHALL GOVERN.

NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

NOTE:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION
2. ENGRAVED LABELS SHALL BE COLORED AS FOLLOWS:
 - A. HARDENED POWER: RED.
 - B. NON-HARDENED POWER: GREEN.

LINETYPE LEGEND	
————	HOT CONDUCTOR
-----	GROUND (NEUTRAL) CONDUCTOR
— — — —	GROUNDING (GROUND) CONDUCTOR

NOTE: CONFIRM ALL BASE DIMENSIONS WITH STRUCTURAL DETAILS. STRUCTURAL ENGINEERING DRAWINGS SHALL GOVERN.

10/29/2024 4:19:04 PM Autodesk Docs://138191-LeesSummitJointOpsCtr/138191 MEP23 LeesSummitJointOpsCtr.rvt

$1/16^\circ \approx 1^\circ 0'$	$1/8^\circ \approx 1^\circ 0'$	$1/4^\circ \approx 1^\circ 0'$	$3/8^\circ \approx 1^\circ 0'$	$1/2^\circ \approx 1^\circ 0'$	$3/4^\circ \approx 1^\circ 0'$	$1^\circ \approx 1^\circ 0'$	$1\ 1/2^\circ \approx 1^\circ 0'$	$3^\circ \approx 1^\circ$
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$1/16'' = 1 \cdot 0''$	$1/8'' = 1 \cdot 0''$	$1/4'' = 1 \cdot 0''$
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[illegible]

REVIEW

PROF

ISSUE

HOE

PROF

PANELBOARD NOTES:
THIS IS A MASTER LIST THAT APPLIES TO ALL
PANELBOARDS. NOT ALL NOTES MAY BE USED.

AF ARC FAULT CIRCUIT INTERRUPTER (AFCI)
BREAKER
C# ROUTE CIRCUIT THROUGH CONTACTOR #
EM EMERGENCY LIGHTING HANDLE ON CLAMP
EX EXISTING TO REMAIN
FA FIRE ALARM CIRCUIT. RED HANDLE, HANDLE
ON CLAMP
GF GROUND FAULT CIRCUIT INTERRUPTER (GFCI)
BREAKER
HT# PROVIDE HANDLE TIES TO COMPLY WITH NEC
210.4(B). # INDICATES GROUPING (I.E. GROUP
1 TOGETHER, ETC.).
LK HANDLE PADLOCKABLE OFF DEVICE.
LO HANDLE ON CLAMP.
NB PROVIDE NEW BREAKER IN EXISTING
PANELBOARD. AIC RATING OF NEW BREAKER
SHALL MATCH THE PANELBOARD AIC RATING.
TB# TANDEN 20A BREAKER. # INDICATES
GROUPING
OL REFER TO ONE-LINE DIAGRAM FOR FEEDER
INFORMATION
RB REUSE EXISTING BREAKER TO SERVE NEW
LOAD.
SD SPARE BREAKER AFTER DEMOLITION.

PANELBOARD: U02A																	BUS AMPS: 400 A MAIN SIZE/TYPE: 250A MCB VOLTS/PHASE: 208Y/120 V, 3PH, 4W SUPPLIED BY: UPSA																	AIC RATING: 10,000 AIC FAULT CURRENT: 5,130 A CUM. VOLT. DROP: 1.36% MOUNTING: SURFACE LOCATION: UPS 147																
CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A	B	C	P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.																																		
1	RCPT-004-POLICE CONSOLE 1A		20	1	500	2400				1	20				RCPT-146-CABINET 01	2																																		
3	RCPT-004-POLICE CONSOLE 1D		20	1			500	2400		1	20				RCPT-146-CABINET 02	4																																		
5	RCPT-004-POLICE CONSOLE 2A		20	1					500	2400	1	20			RCPT-146-CABINET 03	6																																		
7	RCPT-004-POLICE CONSOLE 2B		20	1	500	2400				1	20				RCPT-146-CABINET 04	8																																		
9	RCPT-004-POLICE CONSOLE 2C		20	1			500	2400		1	20				RCPT-146-CABINET 05	10																																		
11	RCPT-004-POLICE CONSOLE 2D		20	1					500	2400	1	20			RCPT-146-CABINET 06	12																																		
13	RCPT-004-POLICE CONSOLE 3A		20	1	500	2400				1	20				RCPT-146-CABINET 07	14																																		
15	RCPT-004-POLICE CONSOLE 3B		20	1			500	2400		1	20				RCPT-146-CABINET 08	16																																		
17	RCPT-004-POLICE CONSOLE 3C		20	1					500	2400	1	20			RCPT-146-CABINET 09	18																																		
19	RCPT-004-POLICE CONSOLE 3D		20	1	500	2400				1	20				RCPT-146-CABINET 10	20																																		
21	RCPT-004-POLICE CONSOLE 4A		20	1			500	500		1	20				RCPT-146-RACK 11	22																																		
23	RCPT-004-POLICE CONSOLE 4D		20	1					500	500	1	20			RCPT-146-RACK 12	24																																		
25	RCPT-005-FIRE CONSOLE 1A		20	1	500	500				1	20				RCPT-146-RACK 13	26																																		
27	RCPT-005-FIRE CONSOLE 1B		20	1			500	500		1	20				RCPT-146-RACK 14	28																																		
29	RCPT-005-FIRE CONSOLE 1C		20	1					500	500	1	20			RCPT-146-RACK 15	30																																		
31	RCPT-005-FIRE CONSOLE 1D		20	1	500	500				1	20				RCPT-146-RACK 16	32																																		
33	RCPT-005-FIRE CONSOLE 2B		20	1			500	500		1	20				RCPT-146-RACK 17	34																																		
35	RCPT-005-FIRE CONSOLE 2C		20	1					500	500	1	20			RCPT-146-RACK 18	36																																		
37	RCPT-005-FIRE CONSOLE 3B		20	1	500	2400				1	20				RCPT-146-CABINET 19	38																																		
39	RCPT-005-FIRE CONSOLE 3C		20	1			500	2400		1	20				RCPT-146-CABINET 20	40																																		
41	RCPT-005-FIRE CONSOLE 4A		20	1					500	2400	1	20			RCPT-146-CABINET 21	42																																		
43	RCPT-005-FIRE CONSOLE 4B		20	1	500	2400				1	20				RCPT-146-CABINET 22	44																																		
45	RCPT-005-FIRE CONSOLE 4C		20	1			500	2400		1	20				RCPT-146-CABINET 23	46																																		
47	RCPT-005-FIRE CONSOLE 4D		20	1					500	2400	1	20			RCPT-146-CABINET 24	48																																		
49	RCPT-017-TRAINING CONSOLE 1A		20	1	500	2400				1	20				RCPT-146-CABINET 25	50																																		
51	RCPT-017-TRAINING CONSOLE 1B		20	1			500	2400		1	20				RCPT-146-CABINET 26	52																																		
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55	RCPT-017-TRAINING CONSOLE 1D		20	1	500	2400				1	20				RCPT-146-CABINET 28	56																																		
57	RCPT-017-TRAINING CONSOLE 1E		20	1			500	600		1	20				RCPT-146-WALL POWER A	58																																		
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61	RCPT-017-TRAINING CONSOLE 2B		20	1	500	700				1	20				RCPT-146-WALL POWER C	62																																		
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71	SPARE	--	--	--	20	1				1	20	--	--		SPARE	72																																		
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79	SPARE	--	--	--	20	1	0	0		1	20	--	--		SPARE	80																																		
81	SPARE	--	--	--	20	1			0	0	1	20	--	--	SPARE	82																																		
83	SPARE	--	--	--	20	1				0	1	20	--	--	SPARE	84																																		
TOTAL LOAD:							26900 VA	23200 VA	23300 VA																																									
TOTAL AMPS:							224 A	193 A	194 A																																									
LOAD BALANCE:							10.09%	-5.11%	-4.63%																																									
LOAD CLASSIFICATION																	PANELBOARD GENERAL NOTES:																																	
RECEPTACLES																	A WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.																																	
CONN. LOAD 73400 VA																	DEMAND FACTOR 56.81%																																	
ESTIMATED DEMAND 41700 VA																	TOTAL CONN. LOAD: 73400 VA																																	
																	TOTAL EST. DEMAND LOAD: 41700 VA																																	
																	TOTAL CONN. CURRENT: 204 A																																	
																	TOTAL EST. DEMAND CURRENT: 116 A																																	

PANELBOARD: U02B															BUS AMPS: 400 A MAIN SIZE/TYPE: 250A MCB VOLTS/PHASE: 208Y/120 V, 3PH, 4W SUPPLIED BY: UPSB															AIC RATING: 10,000 AIC FAULT CURRENT: 5,178 A CUM. VOLT. DROP: 0.84% MOUNTING: SURFACE LOCATION: UPS 147															NOTE: PANELBOARDS U02A AND U02B ARE FULLY REDUNDANT. LOADS MAY BE ON U02A OR U02B BUT NOT BOTH.																																																																										
CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A	B	C	P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.																																																																																																							
1	RCPT-004-POLICE CONSOLE 1A		20	1	0	0				1	20				RCPT-146-CABINET 01	2																																																																																																							
3	RCPT-004-POLICE CONSOLE 1D		20	1				0	0		1	20			RCPT-146-CABINET 02	4																																																																																																							
5	RCPT-004-POLICE CONSOLE 2A		20	1					0	0		1	20		RCPT-146-CABINET 03	6																																																																																																							
7	RCPT-004-POLICE CONSOLE 2B		20	1	0	0				1	20				RCPT-146-CABINET 04	8																																																																																																							
9	RCPT-004-POLICE CONSOLE 2C		20	1				0	0		1	20			RCPT-146-CABINET 05	10																																																																																																							
11	RCPT-004-POLICE CONSOLE 2D		20	1						0	0	1	20		RCPT-146-CABINET 06	12																																																																																																							
13	RCPT-004-POLICE CONSOLE 3A		20	1	0	0				1	20				RCPT-146-CABINET 07	14																																																																																																							
15	RCPT-004-POLICE CONSOLE 3B		20	1				0	0		1	20			RCPT-146-CABINET 08	16																																																																																																							
17	RCPT-004-POLICE CONSOLE 3C		20	1						0	0	1	20		RCPT-146-CABINET 09	18																																																																																																							
19	RCPT-004-POLICE CONSOLE 3D		20	1	0	0				1	20				RCPT-146-CABINET 10	20																																																																																																							
21	RCPT-004-POLICE CONSOLE 4A		20	1				0	0		1	20			RCPT-146-RACK 11	22																																																																																																							
23	RCPT-004-POLICE CONSOLE 4D		20	1						0	0	1	20		RCPT-146-RACK 12	24																																																																																																							
25	RCPT-005-FIRE CONSOLE 1A		20	1	0	0				1	20				RCPT-146-RACK 13	26																																																																																																							
27	RCPT-005-FIRE CONSOLE 1B		20	1				0	0		1	20			RCPT-146-RACK 14	28																																																																																																							
29	RCPT-005-FIRE CONSOLE 1C		20	1						0	0	1	20		RCPT-146-RACK 15	30																																																																																																							
31	RCPT-005-FIRE CONSOLE 1D		20	1	0	0				1	20				RCPT-146-RACK 16	32																																																																																																							
33	RCPT-005-FIRE CONSOLE 2B		20	1				0	0		1	20			RCPT-146-RACK 17	34																																																																																																							
35	RCPT-005-FIRE CONSOLE 2C		20	1						0	0	1	20		RCPT-146-RACK 18	36																																																																																																							
37	RCPT-005-FIRE CONSOLE 3B		20	1	0	0				1	20				RCPT-146-CABINET 19	38																																																																																																							
39	RCPT-005-FIRE CONSOLE 3C		20	1				0	0		1	20			RCPT-146-CABINET 20	40																																																																																																							
41	RCPT-005-FIRE CONSOLE 4A		20	1						0	0	1	20		RCPT-146-CABINET 21	42																																																																																																							
43	RCPT-005-FIRE CONSOLE 4B		20	1	0	0				1	20				RCPT-146-CABINET 22	44																																																																																																							
45	RCPT-005-FIRE CONSOLE 4C		20	1				0	0		1	20			RCPT-146-CABINET 23	46																																																																																																							
47	RCPT-005-FIRE CONSOLE 4D		20	1						0	0	1	20		RCPT-146-CABINET 24	48																																																																																																							
49	RCPT-017-TRAINING CONSOLE 1A		20	1	0	0				1	20				RCPT-146-CABINET 25	50																																																																																																							
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53	RCPT-017-TRAINING CONSOLE 1C		20	1						0	0	1	20		RCPT-146-CABINET 27	54																																																																																																							
55	RCPT-017-TRAINING CONSOLE 1D		20	1	0	0				1	20				RCPT-146-CABINET 28	56																																																																																																							
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61	RCPT-017-TRAINING CONSOLE 2B		20	1	0	0				1	20	--	--		SPARE	62																																																																																																							
63	RCPT-017-TRAINING CONSOLE 2C		20	1				0	0		1	20			RCPT-146-SECURITY EQUIPMENT	64																																																																																																							
65	RCPT-017-TRAINING CONSOLE 2D		20	1						0	0	1	20		RCPT-156-AV RACK	66																																																																																																							
67	RCPT-017-TRAINING CONSOLE 2E		20	1	0	0				1	20	--	--		SPARE	68																																																																																																							
69	SPARE	-- --	20	1				0	0		1	20	--	--	SPARE	70																																																																																																							
71	SPARE	-- --	20	1						0	0	1	20	--	--	SPARE	72																																																																																																						
73	SPARE	-- --	20	1	0	0				1	20	--	--		SPARE	74																																																																																																							
75	SPARE	-- --	20	1							1	20	--	--	SPARE	76																																																																																																							
77	SPARE	-- --	20	1							0	0	1	20	--	--	SPARE	78																																																																																																					
79	SPARE	-- --	20	1	0	0				1	20	--	--		SPARE	80																																																																																																							
81	SPARE	-- --	20	1				0	0		1	20	--	--	SPARE	82																																																																																																							
83	SPARE	-- --	20	1						0	0	1	20	--	--	SPARE	84																																																																																																						
TOTAL LOAD:							0 VA	0 VA	0 VA																																																																																																														
TOTAL AMPS:							0 A	0 A	0 A																																																																																																														
LOAD BALANCE:																																																																																																																							
CONN. LOAD															DEMAND FACTOR															ESTIMATED DEMAND															PANELBOARD GENERAL NOTES:															PANELBOARD TOTALS																																																											
RECEPTILES															0 VA															0.00%															0 VA															A WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.															TOTAL CONN. LOAD:															0 VA																													
																																																																											TOTAL EST. DEMAND LOAD:															0 VA																													
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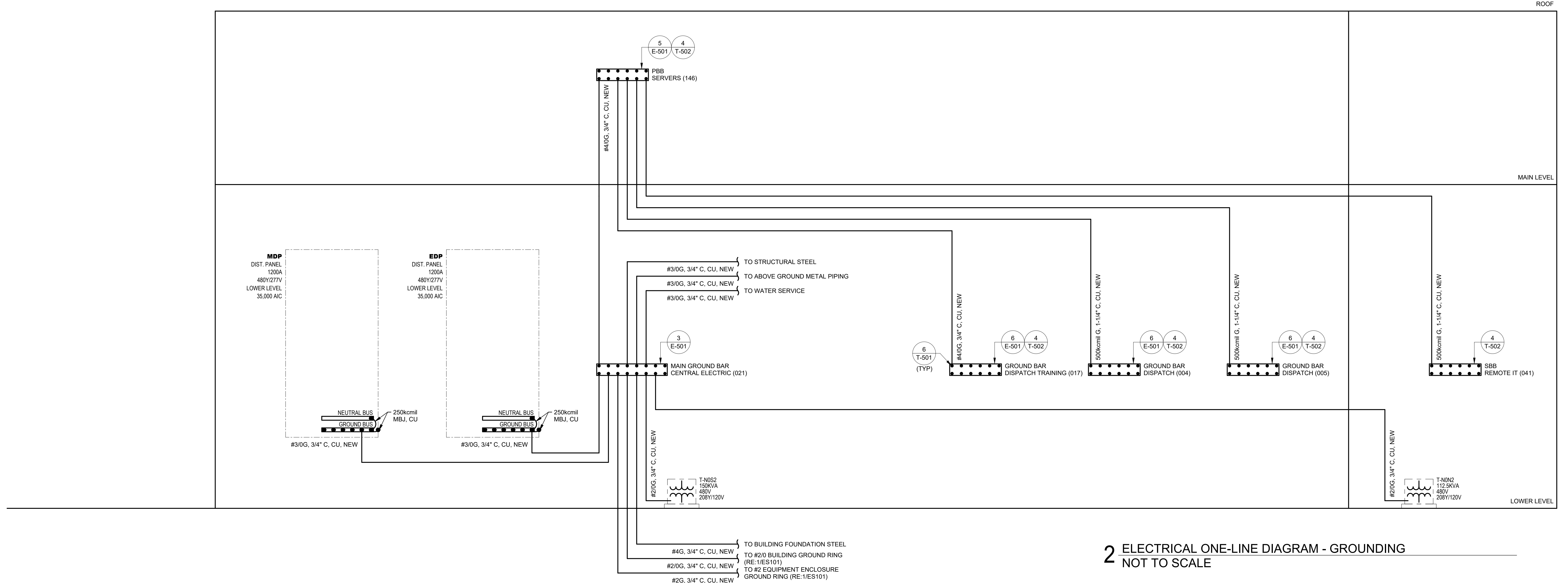


12 11 10

EECSGadmin@wintop3sca7100151-MEI 20_EECSGadmin@wintop3sca7100151-MEI

EDP LOAD SUMMARY			
VOLTAGE:			
480Y/277 V, 3PH, 4W			
CATEGORY	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
COOLING	20,590 VA	0%	0 VA
HEATING	83,897 VA	100%	83,897 VA
LIGHTING	29,924 VA	125%	37,405 VA
RECEPTACLES	267,380 VA	100% / 50%	133,690 VA
MOTORS	66,315 VA	100%	66,315 VA
LARGEST MOTOR	5,229 VA	125%	6,536 VA
SUPPLEMENTAL HEAT	0 VA	100%	0 VA
MISC EQUIP	260,195 VA	100%	260,195 VA
TOTAL LOAD	733,530 VA		593,039 VA
TOTAL AMPACITY	882 A		713 A
PANEL AMPACITY			1,200 A
SPARE AMPACITY			487 A

The diagram shows a 480Y/277V 3-phase 4-wire system. A 300A AIC busbar is connected to a 300A AIC breaker. The busbar is labeled with 60A 3P, 400A 3P, 400A 3P, and 800A 3P. The breaker is labeled with 300A AIC. The system is connected to a 480Y/277V 3-phase 4-wire system with a 300A AIC busbar and a 300A AIC breaker.



LEE'S SUMMIT JOINT OPERATIONS FACILITY
2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

[illegible]

ELECTRICAL ONE-LINE DIAGRAM

TECHNOLOGY SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

STANDARD MOUNTING HEIGHTS	
TELECOM BACKBOARD	100"
LADDER RACK IN TELECOM ROOMS	90"
TELEPHONE WALL OUTLET	48"
TELEPHONE, DATA OUTLET	SAME AS ADJACENT DEVICE, UNO
TELEVISION OUTLETS	REFER TO ARCH DRAWINGS
PBB/SBB	98"
WALL CLOCK	84"
INTERCOM	48"
CARD READER	48"

USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR OR ABOVE FINISHED GRADE TO TOP OF OUTLET BOX. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ABBREVIATIONS	
A AMPERES	LCC LIMITED COMBUSTIBLE
AC ABOVE COUNTER	LEC LOCAL EXCHANGE CARRIER
ACP ACCESS CONTROL PANEL	LED LIGHT-EMITTING DIODE
ADA AMERICANS WITH DISABILITIES ACT	LF LINEAR FEET
AFC ABOVE FINISHED CEILING	MAN METROPOLITAN AREA
AFF ABOVE FINISHED FLOOR	NETWORK
AFG ABOVE FINISHED GRADE	MASTER ANTENNA
AHJ AUTHORITY HAVING JURISDICTION	MATV TELEVISION
ANSI AMERICAN NATIONAL STANDARDS INSTITUTE	MBS MAINTENANCE BYPASS SWITCH
AP ACCESS POINT	MC MAIN CROSS-CONNECT
AV AUDIO-VIDEO	MDF MAIN DISTRIBUTION FRAME
AWG AMERICAN WIRE GAUGE	MFR MANUFACTURER
BAS BUILDING AUTOMATION SYSTEM	MH MAINTENANCE HOLE
BD BUILDING DISTRIBUTOR	MM MULTIMODE
BOF BUILDING DISTRIBUTION FRAME	MPOE MAIN POINT OF ENTRANCE
BFC BELOW FINISHED CEILING	MPOP MAIN POINT OF PRESENCE
BR BIOMETRIC READER	MTD MOUNTED
C CONDUIT	NIA NOT APPLICABLE
CC CENTRAL CONTROL DOOR CONTROL SYSTEM	NEC NATIONAL ELECTRICAL CODE
CAT CATEGORY	NFPA NATIONAL FIRE PROTECTION ASSOCIATION
CATV COMMUNITY ANTENNA TELEVISION	NIC NOT IN CONTRACT
CCTV CLOSED CIRCUIT TELEVISION	NM NANOMETER
CD CAMPUS DISTRIBUTOR	NRTL NATIONALLY RECOGNIZED TESTING LAB
CMP COMMUNICATIONS PLENUM JACKET	NVR NETWORK VIDEO RECORDER
CMR COMMUNICATIONS RISER JACKET	OC ON CENTER
DAS DISTRIBUTED ANTENNA SYSTEM	OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
dB DECIBELS	OSP OUTSIDE PLANT
DCS DOOR CONTROL SYSTEM	PBB PRIMARY BONDING BUSBAR
DEMO DEMOLITION	PBX PRIVATE BRANCH EXCHANGE
DSP DIGITAL VIDEO RECORDER	POE POWER OVER ETHERNET
DVR DIGITAL VIDEO RECORDER	PON PASSIVE OPTICAL NETWORK
E EXISTING	POTS PLAIN OLD TELEPHONE SERVICE
EC ELECTRICAL CONTRACTOR	PSST PUBLIC SWITCHED TELEPHONE NETWORK
ECIA ELECTRONIC COMPONENTS INDUSTRY ASSOCIATION	QTY QUANTITY
EMI ELECTROMAGNETIC INTERFERENCE	RCDQ REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
EMS ENERGY MANAGEMENT SYSTEM	RMC RIGID METAL CONDUIT
EMT ELECTRICAL METALLIC TUBING	RMS REMOTE MONITORING
ER EQUIPMENT ROOM	RU RACK UNIT
ETR EXISTING TO REMAIN	SBB SECONDARY BONDING
F DOOR FRAME MOUNTED DEVICE	SCS STRUCTURED CABLING SYSTEM
FAAP FIRE ALARM ANNUNCIATOR PANEL	SF SQUARE FEET
FACP FIRE ALARM CONTROL PANEL	SM SINGLEMODE
FD FLOOR DISTRIBUTOR	SP SCRAMBLE PAD
FMC FLEXIBLE METAL CONDUIT	TBB TELECOMMUNICATIONS BONDING BACKBONE
FOR FIBER OPTIC RACK	TBD TO BE DETERMINED
FS FIRE STOP SYSTEM	TIA TELECOMMUNICATIONS INDUSTRY ASSOCIATION
FLTR FLOOR	TGB TELECOMMUNICATIONS GROUND BUS BAR
FLUTP FLOOR TWISTED PAIR (SHIELDED)	TMGB TELECOMMUNICATIONS MAIN GROUND BUS BAR (SHIELDED)
GC GENERAL CONTRACTOR	TR TELECOMMUNICATIONS ROOM
GE GROUNDING EQUALIZER	TYP TYPICAL
GT GUARD TOUR CARD READER	UNO UNLESS NOTED OTHERWISE
GYP GYPSUM BOARD	UL UNDERWRITER LABORATORIES, INC.
HC HORIZONTAL CROSS-CONNECT	UPS UNINTERRUPTIBLE POWER SUPPLY
HCM HORIZONTAL CABLE MANAGER	UPSDP UNINTERRUPTIBLE POWER SUPPLY DISRTIBUTION PANEL
HH HAND HOLE	UJUTP UNSHIELDED TWISTED PAIR (VOLTS)
HZ HERTZ	V VERTICAL CABLE MANAGER
ICS INTERCOM CONTROL SYSTEM	VCS VIDEO CONTROL SYSTEM
IMC INTERMEDIATE METAL CONDUIT	VMS VIDEO MANAGEMENT SYSTEM
IP INTERNET PROTOCOL	W WIRE
ISP INTERNET SERVICE PROVIDER	WAO WIDE AREA NETWORK
ISP INSIDE PLANT CABLE	WAP WORK AREA OUTLET
K ELECTRICALLY OPERATED BY KEY	WAP WIRELESS ACCESS POINT
KP KEY PAD	WP WEATHER PROOF
KVM KEYBOARD VIDEO MOUSE SWITCH	WPO WALL PHONE OUTLET
JB JUNCTION BOX	WR WEATHER RESISTANT
JBOX JUNCTION BOX	WT WATERTIGHT
LAN LOCAL AREA NETWORK	XP EXPLOSION-PROOF

ANNOTATION	
	TECHNOLOGY PLAN CALLOUT
	EQUIPMENT DESIGNATION
	CONNECTION POINT OF NEW WORK TO EXISTING
	DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER. LOWER NUMBER INDICATES SHEET NUMBER
	SECTION CUT DESIGNATION

LINETYPE LEGEND	
THROUGHOUT THE DRAWINGS DIFFERENT LINE-TYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF THE NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.	
EXISTING	NEW
FUTURE	

PATHWAYS	
	WIRE MESH CABLE TRAY (W=WIDTH, "H=HEIGHT)
	UNDERGROUND CONDUIT ("F=QUANTITY, "D=CONDUIT DIAMETER)
	CONDUIT ("F=QUANTITY, "D=CONDUIT DIAMETER)
	CABLE SUPPORTS OR J-HOOKS
	CONDUIT SLEEVE ("F=QUANTITY, "D=CONDUIT DIAMETER) (PROVIDE 40% FILL FOR CABLING)
	UL FIRESTOP SYSTEM ASSEMBLY ("F=QUANTITY, "D=CONDUIT DIAMETER)
	PULL BOX
	SPLICE
	LADDER RACK (W=WIDTH, "H=HEIGHT)

ROUGH-IN OUTLETS	
	WALL BOX ROUGH-IN
	FLOOR BOX ROUGH-IN
	POKE THROUGH ROUGH-IN
	CEILING ROUGH-IN
DEVICE TAGGING AND INFORMATION: XX = DEVICE DESIGNATION(S)	
- AR	= RESCUE ASSISTANCE
- AV	= AUDIO/VIDEO
- CAM	= SECURITY CAMERA
- CR	= CARD READER
- D	= DATA
- F	= FURNITURE FEED
- IC	= VIDEO INTERCOM
- KCPAD	= KEYPAD
- MD	= MOTION DETECTOR
- MP	= MICROPHONE
- PB	= PANIC BUTTON
- RE	= REQUEST TO EXIT
- S	= SPEAKER
- TV	= TELEVISION

TELECOM SYMBOLS LEGEND	
	WALL PHONE OUTLET, "XX" INDICATES NUMBER OF PHONE PORTS.
	WALL PHONE/DATA OUTLET, "P" INDICATES NUMBER OF PHONE PORTS, "D" INDICATES NUMBER OF DATA PORTS.
	WALL DATA OUTLET, "XX" INDICATES TYPE/NUMBER OF DATA PORTS.
	CEILING DATA OUTLET, "XX" INDICATES TYPE/NUMBER OF DATA PORTS.
	WIRING DEVICE TAGGING AND INFORMATION: XX = DEVICE DESIGNATION(S)
- #D	= DISPATCH FEED, # INDICATES NUMBER OF PORTS
- #F	= FURNITURE FEED, # INDICATES NUMBER OF PORTS
- DW	= DISPLAY WALL AV BACKBOX
- TV	= 2 PORT DATA WITH 1 COAX FOR TELEVISION.
- WAP	= 2 PORT DATA FOR WIRELESS ACCESS POINT
- WPO	= WALL PHONE OUTLET
	FLOOR DATA OUTLET, "W" INDICATES NUMBER OF DATA PORTS.
	FLOOR PHONE/DATA OUTLET, "P" INDICATES NUMBER OF PHONE PORTS, "D" INDICATES NUMBER OF DATA PORTS.

EQUIPMENT SYMBOLS LEGEND	
	WALL PANEL, "XX" INDICATES TYPE. CHECK ABBREVIATIONS LIST FOR TYPE.
	4-POST RACK
	2-POST RACK

SECURITY SYMBOLS LEGEND	
	CAMERA, ARC REPRESENTS VIEWING ANGLE AND DIRECTION
	XX: CAMERA NUMBER
	YY: CAMERA TYPE
	ZZ: CAMERA HEIGHT (IF APPLICABLE)
	WALL MOUNT SYMBOL
	PEDESTAL MOUNT SYMBOL
	CEILING/SURFACE MOUNT SYMBOL
DEVICE TAGGING AND INFORMATION XX = DEVICE DESIGNATION(S)	
- AR	= RESCUE ASSISTANCE TWO-WAY COMMUNICATOR
- CR	= PROXIMITY CARD READER
- #	= CARD READER DESIGNATION(S)
- 1	= 1 MILLION MOUNT CARD READER
- 2	= SINGLE GANG CARD READER
- DR	= DOOR RELEASE
- DS	= DOOR CONTACT/DOOR POSITION SWITCH
- ER	= EMERGENCY PHONE
- GB	= GLASS BREAK SENSOR
- IC	= VIDEO INTERCOM
- #	= VIDEO INTERCOM DESIGNATION(S)
- 1	= 1 VIDEO INTERCOM
- 2	= 2 VIDEO INTERCOM W/ CARD READER
- IH	= INTRUSION ALARM HUB
- IK	= INTRUSION ALARM KEYPAD
- IS	= INTRUSION ALARM SPEAKER
- MD	= MOTION DETECTOR
- PB	= PANIC BUTTON
- RE	= REQUEST TO EXIT
- TP	= TRAFFIC ARM PUSHBUTTON - OPEN/CLOSE
- VD	= VEHICLE DETECTOR

AUDIO VISUAL DEVICES	
	WALL AUDIO VISUAL DEVICE
	CEILING/SURFACE AUDIO VISUAL DEVICE
	FLOOR AUDIO VISUAL DEVICE
DEVICE TAGGING AND INFORMATION: XX = DEVICE DESIGNATION(S)	
- AV	= HDMI WALL PLATE
- C	= AUDIO VISUAL CAMERA
- D1	= RECESSED DISPLAY BOX (1 DATA, 1 HDMI)
- M	= MICROPHONE
- RK	= AV RACK LOCATION
- S	= SPEAKER
- #	= SPEAKER ZONING INFORMATION
- Z1	= ZONE 1
- Z2	= ZONE 2
- Z3	= ZONE 3
- Z4	= ZONE 4
- SM	= SOUND MASKING SPEAKER
- TP	= TOUCH PANEL

INFRASTRUCTURE SCHEDULE			
DEVICE TYPE	DEVICE DESCRIPTION	INFRASTRUCTURE BOX	INFRASTRUCTURE CONDUIT
2	2 PORT DATA FLOOR OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
2	2 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
4	4 PORT DATA FLOOR OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
4F	4 PORT DATA FURNITURE FEED	N/A	(1) 1" C. TO ACCESSIBLE CEILING
5	5 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
7	7 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
8D	8 PORT DATA FLOOR FEED FOR DISPATCH STATION	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
8F	8 PORT DATA FURNITURE FEED	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
9D	9 PORT DATA FLOOR FEED FOR DISPATCH STATION	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
10	10 PORT DATA WALL OUTLET	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(2) 1" C. TO ACCESSIBLE CEILING	
11	11 PORT DATA WALL OUTLET	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(2) 1" C. TO ACCESSIBLE CEILING	
16F	16 PORT DATA FLOOR FURNITURE FEED	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(2) 1" C. TO ACCESSIBLE CEILING	
AV	AV BACKBOX	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(2) 1" C. TO ACCESSIBLE CEILING	
C	AUDIO VISUAL CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
CR1	MULLION CARD READER	N/A	(1) 1" C. TO ACCESSIBLE CEILING
CR2	SINGLE GANG CARD READER	1 GANG, FLUSH MOUNTED, 2-1/8" DEEP BACK BOX	(1) 1" C. TO ACCESSIBLE CEILING
DW	2 PORT DATA WALL OUTLET FOR DISPLAY WALL	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
ED	EXTERIOR DOME CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
IC2	VIDEO INTERCOM WITH CARD READER	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
ID	INTERIOR DOME CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
RK	AV RACK LOCATION	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
S	SPEAKER	INSTALL AV PROVIDER'S SPEAKER BACK CAN	(1) 3/4" C. BETWEEN DEVICES AND (1) 3/4" C. HOMERUN TO ACCESSIBLE CEILING
SM	SOUND MASKING SPEAKER	INSTALL AV PROVIDER'S SPEAKER BACK CAN	(1) 3/4" C. BETWEEN DEVICES AND (1) 3/4" C. HOMERUN TO ACCESSIBLE CEILING
TP	WALL MOUNT TOUCHPANEL	INSTALL AV PROVIDER'S BOX INCLUDED WITH TOUCH PANEL	(2) 1" C. TO ACCESSIBLE CEILING
TV	2 PORT DATA WALL OUTLET FOR TELEVISION	CHIEF #WMPAC526 BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
WAP	2 PORT DATA OUTLET FOR WIRELESS ACCESS POINT	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	
WPO	1 PORT DATA WALL PHONE OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1) 1" C. TO ACCESSIBLE CEILING	

SCOPE AND RESPONSIBILITY MATRIX							
CATEGORY	SYSTEM	DESCRIPTION	DESIGN	DOCUMENT	FURNISH	INSTALL	COMMENTS
SITE UTILITIES	ROUGH-IN CABLING	UNDERGROUND CONDUITS, MANHOLES	GC	HW	GC	GC	XX
	COORDINATION	COORDINATION WITH SERVICE PROVIDER	VENDOR	HW	VENDOR	VENDOR	XX
	ROUGH-IN CABLING	RACEWAYS, BOXES	HW	HW	GC	GC	XX
	CABLING	HORIZONTAL & VERTICAL CABLING, CABLE TERMINATIONS, FACE PLATES	HW	HW	GC	GC	XX
TELECOMMUNICATIONS	RACK INFRASTRUCTURE	RACKS, CABINETS, PATCH PANELS	HW	HW	GC	GC	XX
	EQUIPMENT	SERVERS AND SWITCHES	OWNER	OWNER	OWNER	OWNER	XX
	UPS	UPS EQUIPMENT	HW/OWNER	HW	GC	GC	XX
	FIBER	ROUTE/ACCESS TO BUILDING	VENDOR	HW	VENDOR	VENDOR	HW TO DOCUMENT CONDUIT ONLY, (4)-4" CONDUIT WITH INTERDUCT
DAS	PHONE SYSTEM	VOIP CABLING AND INFRASTRUCTURE	OWNER/HW	HW	GC	GC	XX
	WIRELESS DATA/INTERNET (WI-FI)	WIRELESS ACCESS POINTS	OWNER	HW	OWNER	OWNER	INFRASTRUCTURE AND CABLING BY GC
	CELLULAR WIRELESS (DAS)	ROUGH-IN, EQUIPMENT, AND CABLING	VENDOR	HW	VENDOR	VENDOR	XX
	RADIO TOWER	TOWER, STRUCTURE, ECT.	VENDOR	VENDOR	VENDOR	VENDOR	XX
SECURITY SYSTEMS	EMERGENCY RESPONDER (DAS)	ROUGH-IN, EQUIPMENT, AND CABLING FOR POLICE, FIRE, AMBULANCE COMMUNICATIONS	VENDOR	HW	VENDOR	VENDOR	XX
	ROUGH-IN CABLING	RACEWAYS, BOXES	HW	HW	GC	GC	XX
	POWER SUPPLIES	120V/24V OR 12V	VENDOR	HW	VENDOR	VENDOR	XX
	CABLING	SECURITY CABLING	VENDOR	HW	GC	GC	XX
AUDIO/VISUAL	EQUIPMENT	CAMERAS, CARD READERS, SENSORS, ECT.	VENDOR	HW	VENDOR	VENDOR	XX
	SOFTWARE	APPLICATIONS		OWNER			XX
	COMMISSIONING	VERIFY OPERATION AFTER INSTALLATION		OWNER			XX
	ROUGH-IN CABLING	RACEWAYS, BOXES	HW	HW	GC	GC	XX
SOUND MASKING	RACK INFRASTRUCTURE	RACKS, CABINETS, PATCH PANELS	HW	HW	GC	GC	XX
	EQUIPMENT	SERVERS, TELEVISIONS, PAGING, ECT.	HW	HW	GC	GC	XX
	SOFTWARE	APPLICATIONS, PROGRAMMING		OWNER			XX
	COMMISSIONING	VERIFY OPERATION AFTER INSTALLATION		GOVENDOR			XX
SOUND MASKING	ROUGH-IN CABLING	RACEWAYS, BOXES	HW	HW	GC	GC	SOUND MASKING IS AN ALTERNATE
	CABLING	CABLING, CABLE TERMINATIONS, FACE PLATES	HW	HW	GC	GC	SOUND MASKING IS AN ALTERNATE
	RACK INFRASTRUCTURE	DSPIAMP	HW	HW	GC	GC	SOUND MASKING IS AN ALTERNATE
	EQUIPMENT	SPEAKERS/EMITTERS	HW	HW	GC	GC	SOUND MASKING IS AN ALTERNATE
SOUND MASKING	SOFTWARE	APPLICATIONS, PROGRAMMING		OWNER			SOUND MASKING IS AN ALTERNATE
	COMMISSIONING	VERIFY OPERATION AFTER INSTALLATION		GOVENDOR			SOUND MASKING IS AN ALTERNATE

TECHNOLOGY SHEET INDEX	
SHEET NUMBER	SHEET NAME
TG001	TECHNOLOGY LEGEND AND GENERAL NOTES
TS100	TECHNOLOGY SITE PLAN
T-100	LOWER LEVEL - TECHNOLOGY PLAN
T-101	MAIN LEVEL - TECHNOLOGY PLAN
T-110	LOWER LEVEL - TECHNOLOGY CABLE TRAY PLAN
T-111	MAIN LEVEL - TECHNOLOGY CABLE TRAY PLAN
T-120	LOWER LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN
T-121	MAIN LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN
T-200	LOWER LEVEL - TECHNOLOGY ALTERNATE PLAN
T-201	MAIN LEVEL - TECHNOLOGY ALTERNATE PLAN
T-401	ENLARGED TECHNOLOGY PLANS
T-501	TECHNOLOGY DETAILS
T-502	TECHNOLOGY DETAILS

LEGEND	
OWNER	OWNER SUPPLY CHAIN
HW	HOEFER WELKER
GC	GENERAL CONTRACTOR/SUB CONTRACTORS
LV	LOW VOLTAGE DESIGNER
VENDOR	EQUIPMENT VENDOR
(BLANK)	NOT APPLICABLE TO THIS PROJECT

GENERAL LOW VOLTAGE NOTES:

- FEDERAL, STATE, LOCAL, MUNICIPAL AND UTILITY COMPANY CODES, RULES AND REGULATIONS APPLY UNLESS EXCEEDED BY THIS DESIGN.
- NO WORK SHALL BE PERFORMED PRIOR TO REVIEW AND APPROVAL OF ALL REQUIRED SHOP DRAWINGS, PRODUCT MATERIAL AND EQUIPMENT SUBMITTALS. ANY WORK INSTALLED PRIOR TO MEETING THESE REQUIREMENTS SHALL BE REMOVED BY CONTRACTOR WHERE DIRECTED BY CONTRACT ADMINISTRATOR.
- PRIOR TO SUBMITTING BID, THE CONTRACTOR AND SUB-CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY ACCQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR REVIEW OF THE GENERAL NOTES, SPECIFICATIONS AND ALL OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY CONTRACT ADMINISTRATOR OF ANY DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK.
- THE DRAWINGS REPRESENT THE BEST INFORMATION AVAILABLE TO THE ENGINEER. ALL DIMENSIONS AND SIZES SHALL BE FIELD VERIFIED. SMALL DEVIATIONS BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS ENCOUNTERED SHALL BE RECONCILED DURING THE PERFORMANCE OF THE WORK AND SHALL NOT CONSTITUTE REASON FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR. NOTIFY THE CONTRACT ADMINISTRATOR IF ACTUAL CONDITIONS DEVIATE SUBSTANTIALLY FROM THOSE INDICATED ON THE DRAWINGS.
- ALL FEES AND OTHER COSTS TO UTILITY COMPANIES, MUNICIPALITIES, INSPECTORS, REVIEWING AGENCIES, ETC. ARE TO BE INCLUDED AS A PART OF THIS CONTRACT.
- COORDINATE WITH ALL OTHER TRADES, MAKE ADJUSTMENTS AND OFFSETS WHERE NEEDED FOR CLEARANCE REQUIREMENTS. REFER TO ALL OTHER DISCIPLINE DRAWINGS FOR COORDINATION.
- COORDINATE ALL OPENINGS IN WALLS, FLOORS, ROOFS AND FOUNDATIONS WITH OTHER CONTRACTORS. PROVIDE UL RATED FIRE STOPPING ASSEMBLIES AT ALL PENETRATIONS OF FIRE RATED CONSTRUCTION. SEAL ALL PENETRATIONS OF SMOKE WALLS SMOKE TIGHT.
- CONTRACTOR SHALL REPAIR ALL DAMAGE TO THE BUILDING, FIXTURES AND FINISHES CAUSED BY CONTRACTOR DURING THE PERFORMANCE OF THE WORK. REPAIRS SHALL BE PERFORMED BY QUALIFIED TRADESMEN AND SHALL BE COMPLETED IN A MANNER ACCEPTABLE TO THE CONTRACT ADMINISTRATOR.
- REFER TO ARCHITECTURAL PLANS ELEVATIONS AND DETAILS FOR EXACT MOUNTING REQUIREMENTS OF LOW VOLTAGE DEVICES PRIOR TO ROUGH-IN.
- SPECIAL ATTENTION SHALL BE GIVEN TO ALL RACEWAYS WITHIN FINISHED AREAS WITHOUT CEILING AND EXPOSED TO STRUCTURE. IN GENERAL, ALL RACEWAYS SHALL BE CONCEALED WITHIN WALLS, BELOW FLOOR SLABS WHERE EXPOSED CONDITIONS ARE NECESSARY OR UNAVOIDABLE DUE TO OTHER CONDITIONS, THE BID SHALL INCLUDE ANY REASONABLE MEANS TO MINIMIZE THE AMOUNT OF SURFACE MOUNTED EQUIPMENT. PRIOR TO ROUGH-IN, COORDINATE ALL EXPOSED RACEWAY AND BOX CONDITIONS WITH ARCHITECT PRIOR TO CONSTRUCTION OF WALLS, FLOOR SLABS, OR ROOF DECK.
- NON-COMPLIANT INSTALLATIONS OF RACEWAY AND CABLE WILL NOT BE ACCEPTED AND WILL BE REQUIRED TO BE BROUGHT TO COMPLIANCE AT NO COST TO THE OWNER PRIOR TO COMPLETION OF WORK.
- ALL EXPOSED CONDUIT AND BOXES WITHIN EXPOSED CEILING SPACES SHALL BE PAINTED TO MATCH SURROUNDING CEILING AND STRUCTURE. PROVIDE CONDUIT PARALLEL TO STRUCTURAL LINES IN A NEAT MANNER.
- REQUEST DIMENSIONED LOCATIONS OF ALL FLOOR DEVICES FROM ARCHITECT PRIOR TO ROUGH-IN.
- ALL DEVICES SHOWN DIRECTLY ADJACENT TO EACH OTHER SHALL BE INSTALLED DIRECTLY ADJACENT TO EACH OTHER. ADJACENT DEVICES OF SIMILAR TYPE SHALL BE PROVIDED WITH SINGLE RACEPLATE WHERE FEASIBLE.
- DEVICES SHOWN BACK-TO-BACK SHALL BE OFFSET A MINIMUM OF TWELVE (12) INCHES TO REDUCE SOUND TRANSMISSION.
- PROVIDE PULL STRINGS IN ALL CONDUITS AND PROTECTIVE BUSHINGS AT OPENINGS. CAP CONDUITS WHERE LOCATED BELOW GRADE OR EXPOSED TO THE ELEMENTS IF RESERVES FOR FUTURE.
- VERIFY EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
- IF THE ENCLOSURE, BOXES, AND CABINETS SPECIFIED ARE NOT PROVIDED FROM THE MANUFACTURER WITH THE REQUIRED KNOCKOUTS FOR THE SPECIFIED CONDUIT, FIELD CUT ALL REQUIRED KNOCKOUTS TO TERMINATE THE QUANTITY AND SIZE OF THE SPECIFIED CONDUITS.
- INSTALL ALL EQUIPMENT IN COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS, SEISMIC CODES, AND INDUSTRY ACCEPTED RIGGING PRACTICES. SUPPORT EQUIPMENT WEIGHT FROM STRUCTURE ABOVE CEILINGS. DURING THE SUBMITTAL PROCESS, PROVIDE SHOP DRAWINGS WHICH DETAIL PROPOSED MOUNTING FOR ALL SUCH EQUIPMENT.

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:



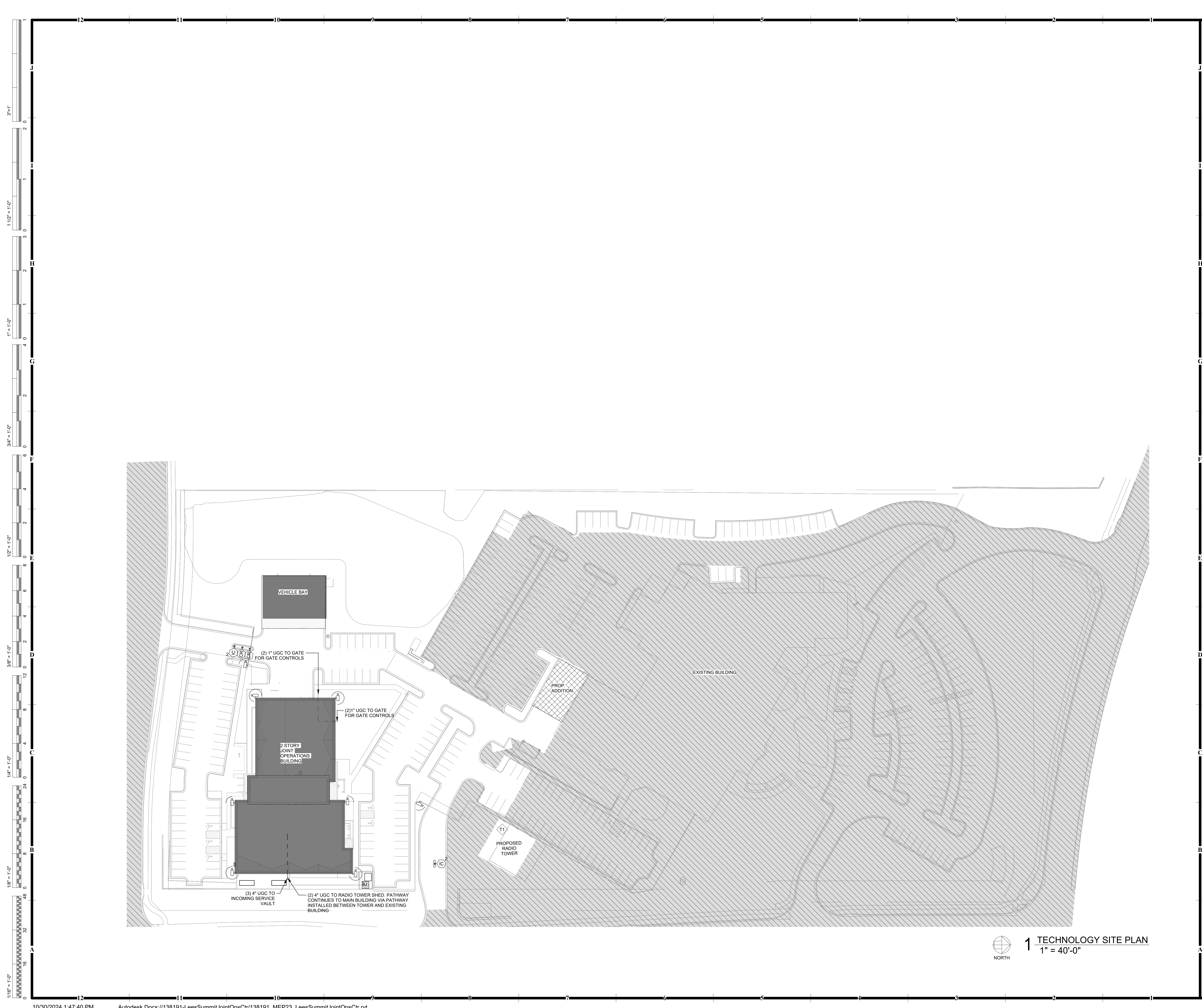
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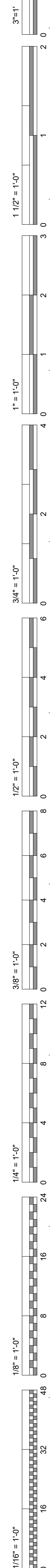
TG001

ISSUE DATE: NOVEMBER 1, 2024

HOEFER WELKER #: 138191

TECHNOLOGY LEGEND AND GENERAL NOTES





1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

PROVIDE (1) CAT5 DATA CABLES
 TOTAL TO DISPATCH LOCATION
 THROUGH FURNITURE LEAD TO (2)
 PATCH PANELS INSTALLED IN THE CPU
 CABINET. PROVIDE (1) RED CABLE AND
 TERMINATION FOR 911, (1) PURPLE
 CABLE AND TERMINATIONS FOR FIRE
 ALARM, (1) BLUE CABLE FOR PHONE, (1)
 BLUE CABLE AND TERMINATION FOR
 PO NETWORK, AND (1) BROWN CABLE
 AND TERMINATION FOR FIRE
 ALARM WORK TO DATA PATCH PANEL IN
 CPU CABINET. PROVIDE (2) YELLOW
 CABLES AND TERMINATIONS FOR
 RADIO CONSOLE, (1) WHITE CABLE
 AND TERMINATION FOR BACKUP RADIO
 ALARM, AND (1) WHITE CABLE AND
 TERMINATION TO RADIO PATCH
 PANEL IN CPU CABINET.

T3 PROVIDE (8) CAT5 DATA CABLES TOTAL TO DISPATCH LOCATION THROUGH FURNITURE FEED TO (2) PATCH PANELS INSTALLED IN THE CPU CABINET. PROVIDE (2) RED CABLE AND TERMINATION FOR 911, (1) ORANGE CABLE AND TERMINATION FOR PD CAD, (1) GREEN CABLE AND TERMINATION FOR PHONE, AND (1) BLUE CABLE AND TERMINATION FOR PD NETWORK TO DATA PATCH PANEL IN CPU CABINET. PROVIDE (2) YELLOW CABLES AND TERMINATION FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (1) BLACK SPARE CABLE AND TERMINATION TO RADIO PATCH PANEL IN CPU CABINET.

T4 PROVIDE (9) CAT5 DATA CABLES TOTAL TO DISPATCH LOCATION THROUGH FURNITURE (1) (2) PATCH PANELS INSTALLED IN THE CPU CABINET. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) ORANGE CABLE AND TERMINATION FOR PD C, (1) GREEN CABLE AND TERMINATION FOR PD E, (1) BLUE CABLE AND TERMINATION FOR PD NETWORK, AND (1) GREY CABLE AND TERMINATION FOR MOTOROLA ALARMS TO DATA PATCH PANEL IN CPU CABINET. PROVIDE (1) WHITE CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (1) BLACK SPARE CABLE AND TERMINATION TO DATA PATCH PANEL IN CPU CABINET.

T5 POLICE SUPERVISOR TO HAVE (10) CAT6 DATA CABLES TOTAL PROVIDED. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) ORANGE CABLE AND TERMINATION FOR PD CAD, (1) GREEN CABLE AND TERMINATION FOR PHONE, (1) BLUE CABLE AND TERMINATION FOR PD NETWORK, (1) GREY CABLE AND TERMINATION FOR MOTOROLA ALARMS, (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (2) BLACK SPARE CABLE AND TERMINATION.

T6 FIRE SUPERVISOR TO HAVE (1) CAT6 DATA CABLES TOTAL PROVIDED. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) CABLE FOR FIRE CAD, (1) GREEN CABLE AND TERMINATION FOR PHONE, (1) CABLE FOR PD NETWORK, (1) BROWN CABLE AND TERMINATION FOR FIRE NETWORK, (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, (1) GREY CABLE AND TERMINATIONS FOR MOTOROLA ALARMS, AND (2) SPARE BLACK CABLE AND TERMINATIONS.

T7 POLICE CAPTAIN TO HAVE (7) CAT6
DATA CABLES TOTAL PROVIDED.
PROVIDE (1) CABLE FOR 911, (1) CABLE
FOR PD CAD, (1) CABLE FOR PHONE,
(1) CABLE FOR PD NETWORK, (1)
CABLE FOR BACKUP RADIO REMOTE,
AND (2) SPARE CABLE.

T8 QA TO HAVE (5) CAT6 DATA CABLES TOTAL PROVIDED. PROVIDE (1) GREEN CABLE AND TERMINATION FOR PHONE, (1) BLUE CABLE AND TERMINATION FOR PD NETWORK, (1) BROWN CABLE AND TERMINATION FOR FIRE NETWORK, AND (2) SPARE BLACK

79 CABLES AND TERMINATIONS.

(1) CAT5 DATA CABLES TO (2) TO DISPATCH UNIT THROUGH FURNITURE FEED TO (2) PATCH PANELS INSTALLED IN THE CPU CABINET. PROVIDE (1) RED CABLE AND (1) TERMINATION FOR EACH DATA CABLE AND TERMINATION FOR FIRE CAD, (1) GREEN CABLE AND TERMINATION FOR PHONE, (1) BLUE CABLE AND TERMINATION FOR DATA NETWORK, AND (1) BROWN CABLE AND TERMINATION FOR FIRE NETWORK TO DATA PATCH PANEL IN CPU CABINET. PROVIDE (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (1) SPARE BLACK CABLE AND TERMINATION TO RADIO PATCH PANEL IN CPU CABINET.

100

LOWER LEVEL

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:



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T-100

ISSUE DATE: NOVEMBER 1, 2024
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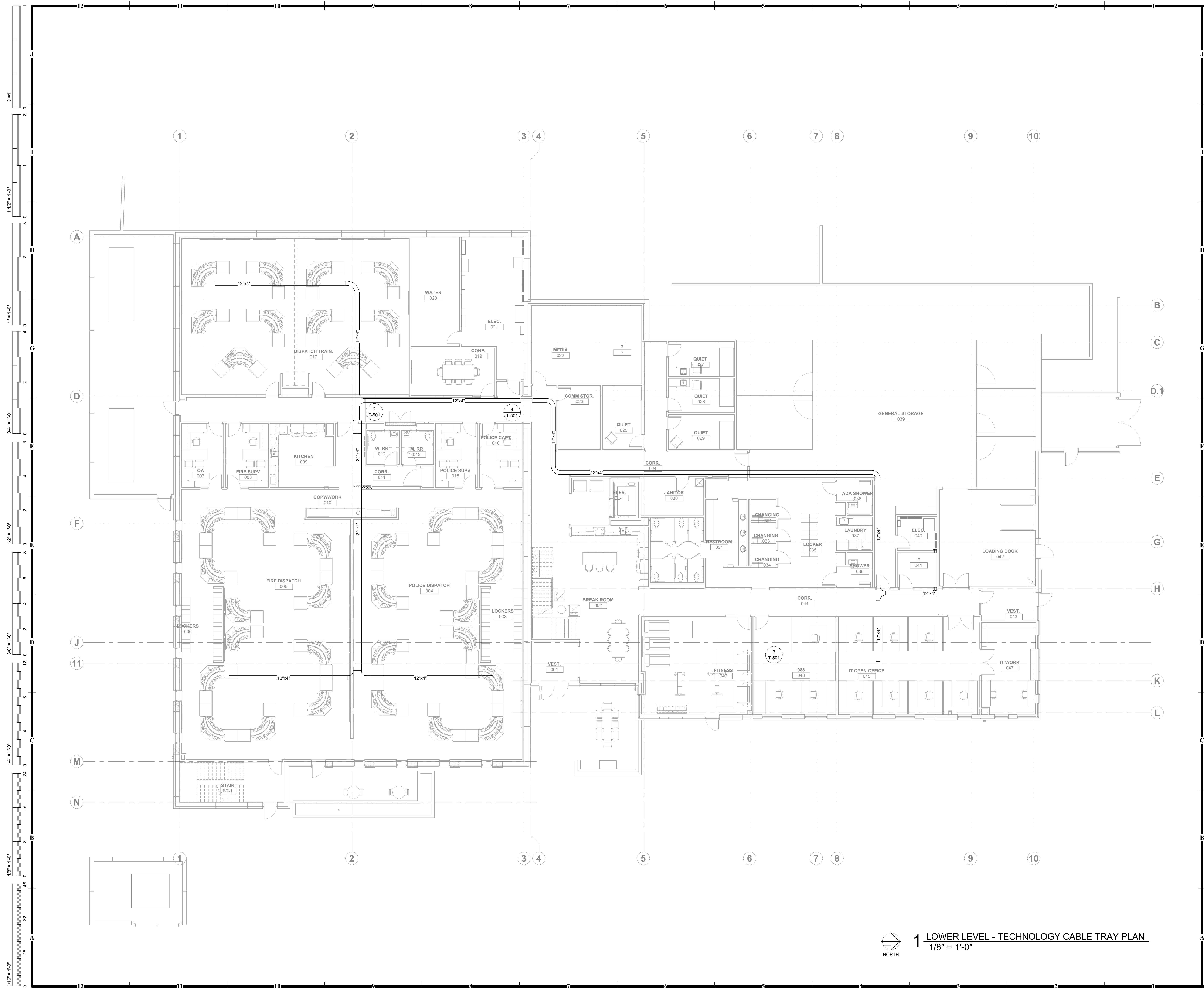
LOWER LEVEL - TECHNOLOGY PLAN

1 LOWER LEVEL - TECHNOLOGY PLAN



1 MAIN LEVEL - TECHNOLOGY PLAN

MAIN LEVEL - TECHNOLOGY PLAN



1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

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LOWER LEVEL - TECHNOLOGY CABLE TRAY PLAN



GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

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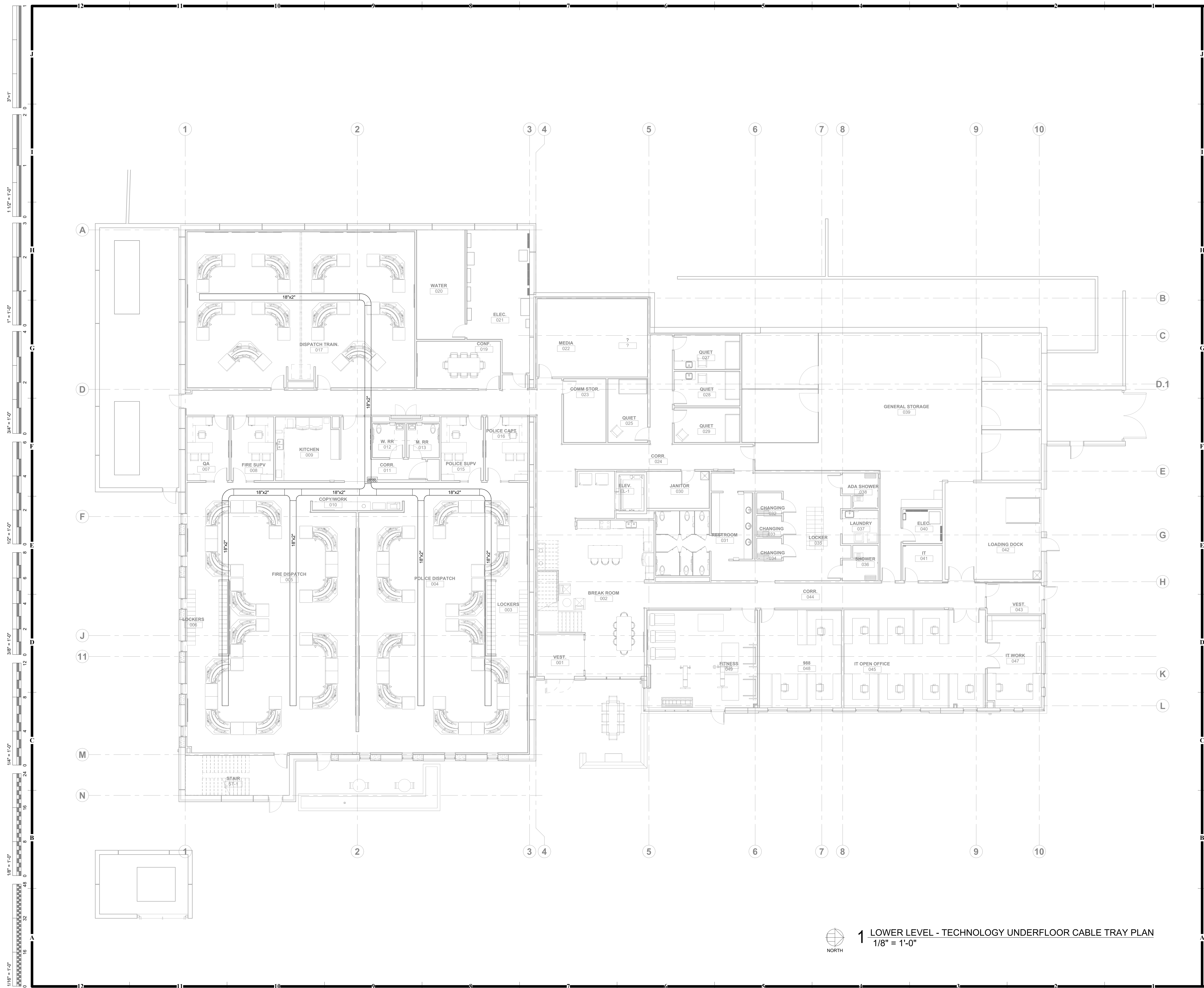
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T-111

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1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

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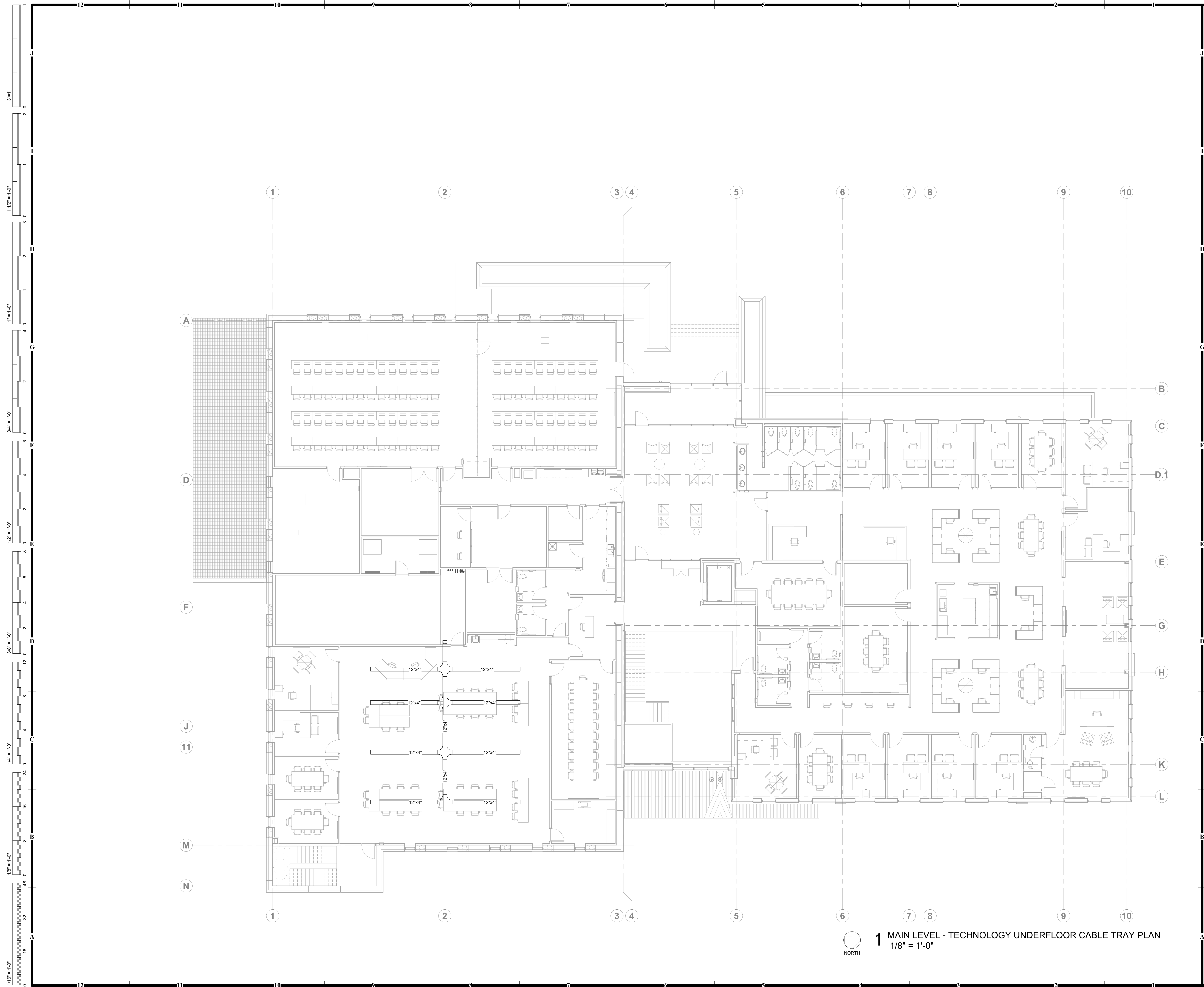
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ISSUE DATE: NOVEMBER 1, 2024
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LOWER LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN



1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

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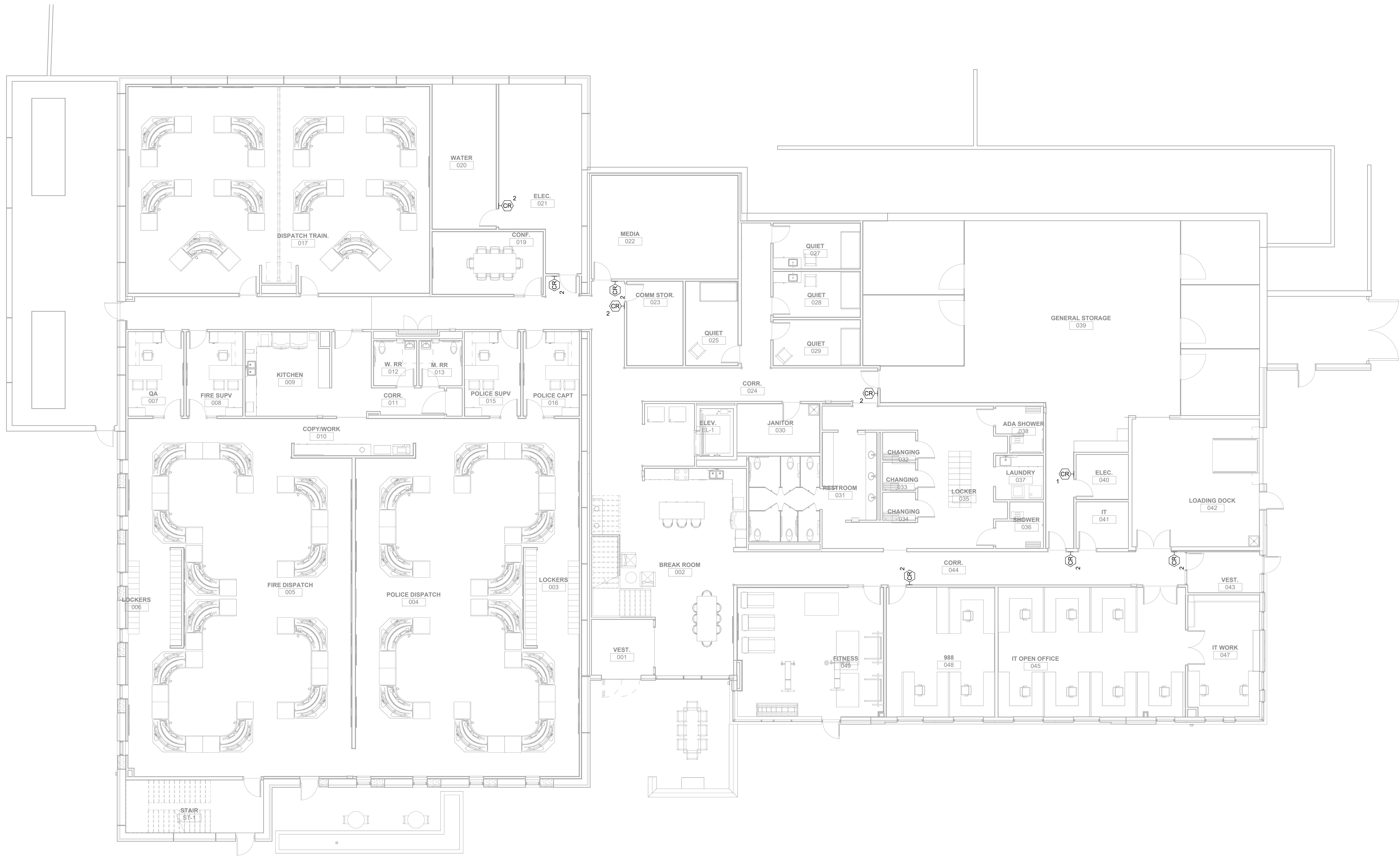
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HOEFER WELKER #: 138191

MAIN LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN



GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.
2. SOUND MASKING SYSTEM IS PART OF ALTERNATE 3.
3. CARD READERS SHOWN ARE PART OF ALTERNATE 2.

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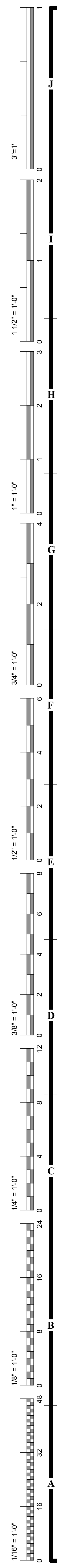
T-200

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

LOWER LEVEL - TECHNOLOGY
ALTERNATE PLAN



1 LOWER LEVEL - TECHNOLOGY ALTERNATE PLAN
1/8" = 1'-0"



1 MAIN LEVEL - TECHNOLOGY ALTERNATE PLAN
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.
2. SOUND MASKING SYSTEM IS PART OF ALTERNATE 3.
3. CARD READERS SHOWN ARE PART OF ALTERNATE 2.

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MAIN LEVEL - TECHNOLOGY
ALTERNATE PLAN



3 VEHICLE BUILDING - TECHNOLOGY PLAN



2 REMOTE IT 041 ENLARGED PLAN
1/4" = 1'-0"



1 EQUIPMENT/SERVERS 146 ENLARGED PLAN
1/4" = 1'-0"

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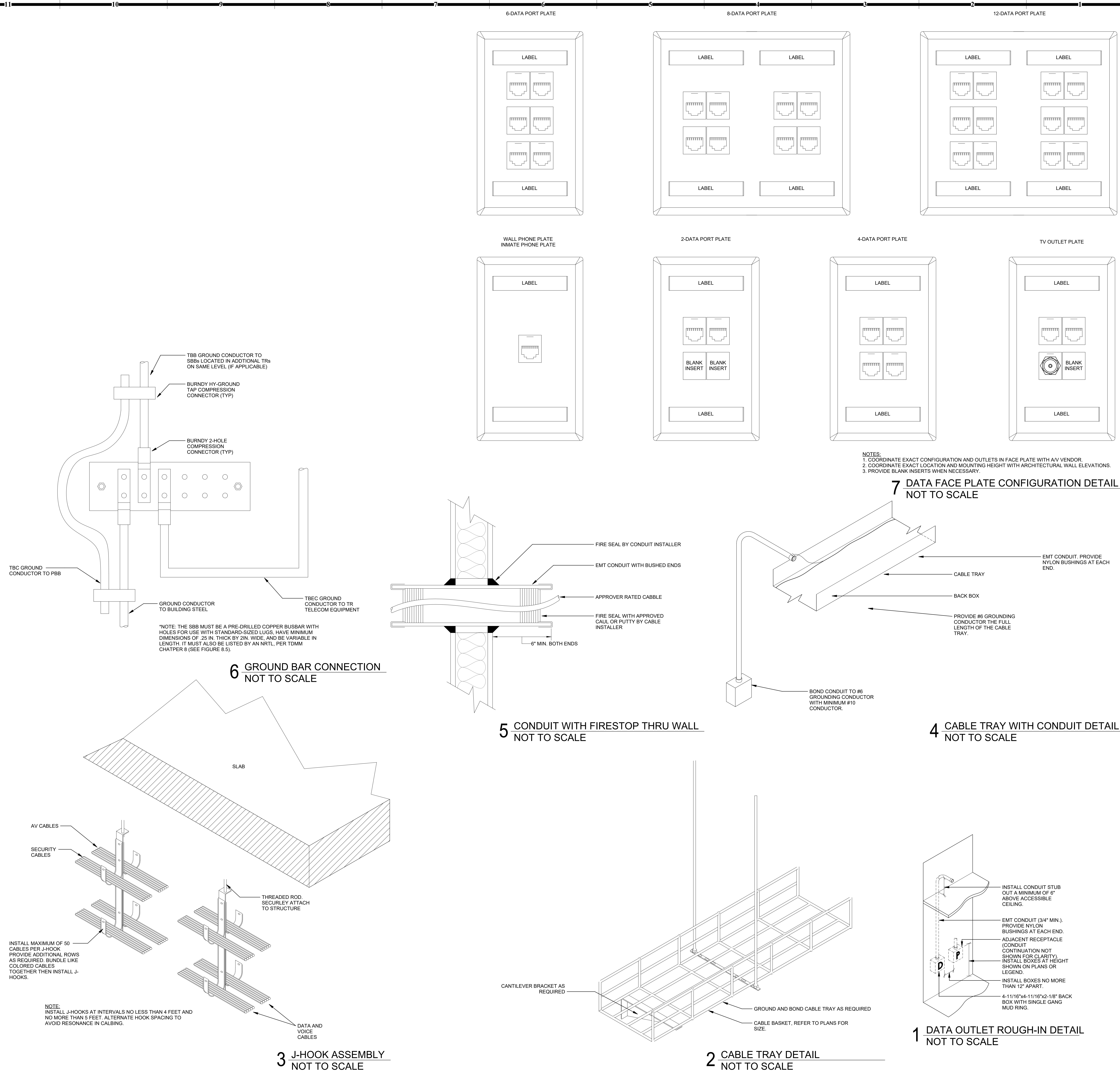


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TECHNOLOGY DETAILS



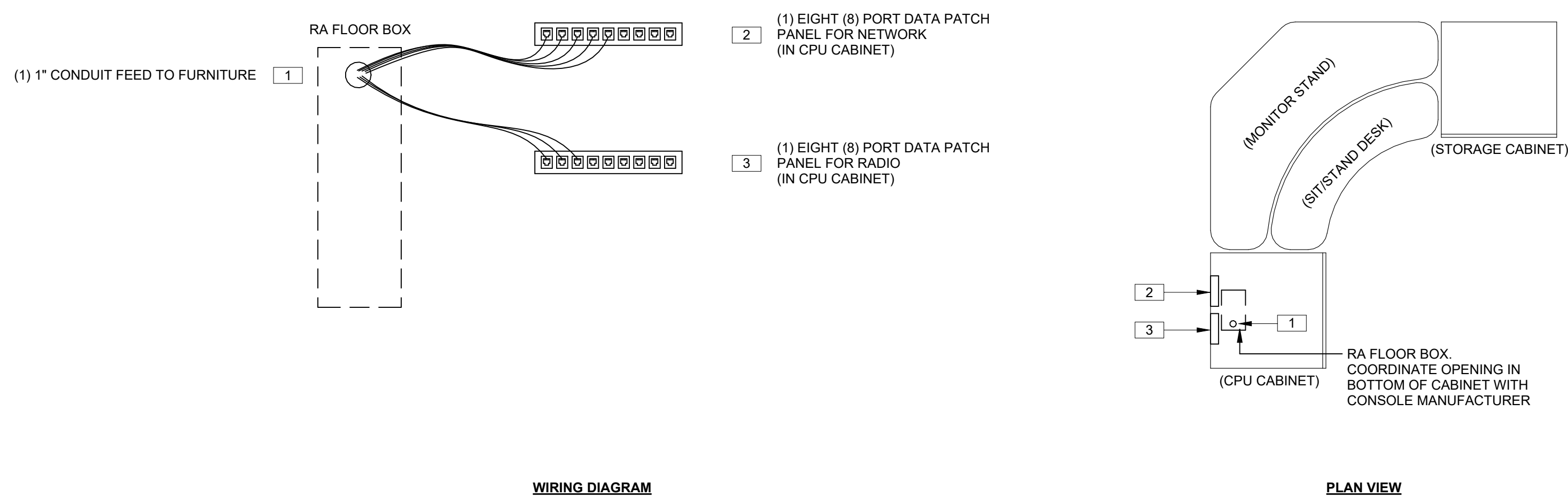
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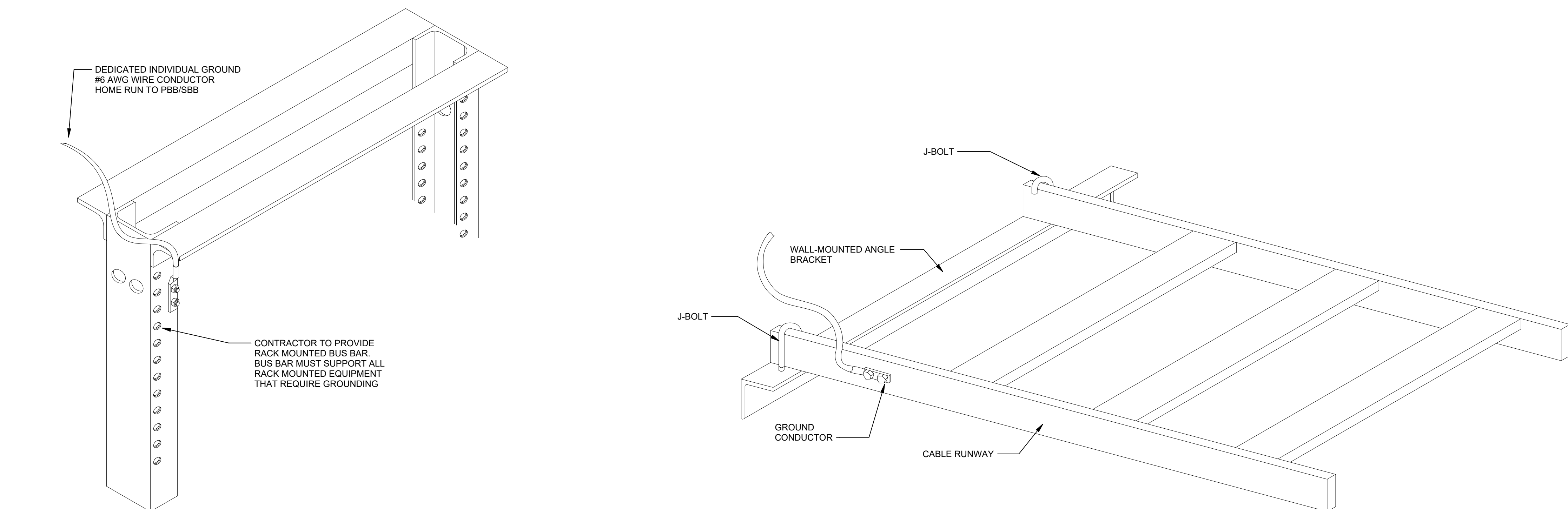
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INFRASTRUCTURE SCHEDULE			
DEVICE TYPE	DEVICE DESCRIPTION	INFRASTRUCTURE BOX	INFRASTRUCTURE CONDUIT
2	2 PORT DATA FLOOR OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
2	2 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
4F	4 PORT DATA FLOOR FEED	N/A	(1) 1" C. TO ACCESSIBLE CEILING
5	5 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
7B	7 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
8	8 PORT DATA FLOOR FEED FOR DISPATCH STATION	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
8F	8 PORT DATA FURNITURE FEED	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
9B	9 PORT DATA FLOOR FEED FOR DISPATCH STATION	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
10	10 PORT DATA WALL OUTLET	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(2)	1" C. TO ACCESSIBLE CEILING
11	11 PORT DATA WALL OUTLET	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(2)	1" C. TO ACCESSIBLE CEILING
15F	15 PORT DATA FLOOR FURNITURE FEED	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
AV	AV BACKBOX	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
C	AUDIO VISUAL CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
CR1	MULLION CARD READER	N/A	(1) 1" C. TO ACCESSIBLE CEILING
R2	SINGLE GANG CARD READER	4 GANG, FLUSH MOUNTED, 2-1/8" DEEP BACK BOX	(1) 1" C. TO ACCESSIBLE CEILING
2	2 PORT DATA WALL OUTLET FOR DISPLAY WALL	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
ED	EXTERIOR DOME CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
IC2	VIDEO INTERCOM WITH CARD READER	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
ID	INTERIOR DOME CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
RK	AV RACK LOCATION	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
S	SPEAKER	INSTALL AV PROVIDER'S SPEAKER BACK CAN	(1) 3/4" C. BETWEEN DEVICES AND (1) 3/4" C. HOMERUN TO ACCESSIBLE CEILING
SM	SOUND MASKING SPEAKER	INSTALL AV PROVIDER'S SPEAKER BACK CAN	(1) 3/4" C. BETWEEN DEVICES AND (1) 3/4" C. HOMERUN TO ACCESSIBLE CEILING
TP	WALL MOUNT TOUCHPANEL	INSTALL AV PROVIDER'S BOX INCLUDED WITH TOUCH PANEL	(2) 1" C. TO ACCESSIBLE CEILING
2	2 PORT DATA WALL OUTLET FOR TELEVISION	CHEF #WMPAC526 BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
WFO	2 PORT DATA OUTLET FOR WIRELESS ACCESS POINT	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING
WAP	1 PORT DATA WALL PHONE OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX(1)	1" C. TO ACCESSIBLE CEILING

NOTE: INFORMATION SHOWN IS BASED ON XYBIX SYSTEMS CONSOLE.
REFER TO XYBIX INSTALLATION MANUALS FOR ADDITIONAL INFORMATION.

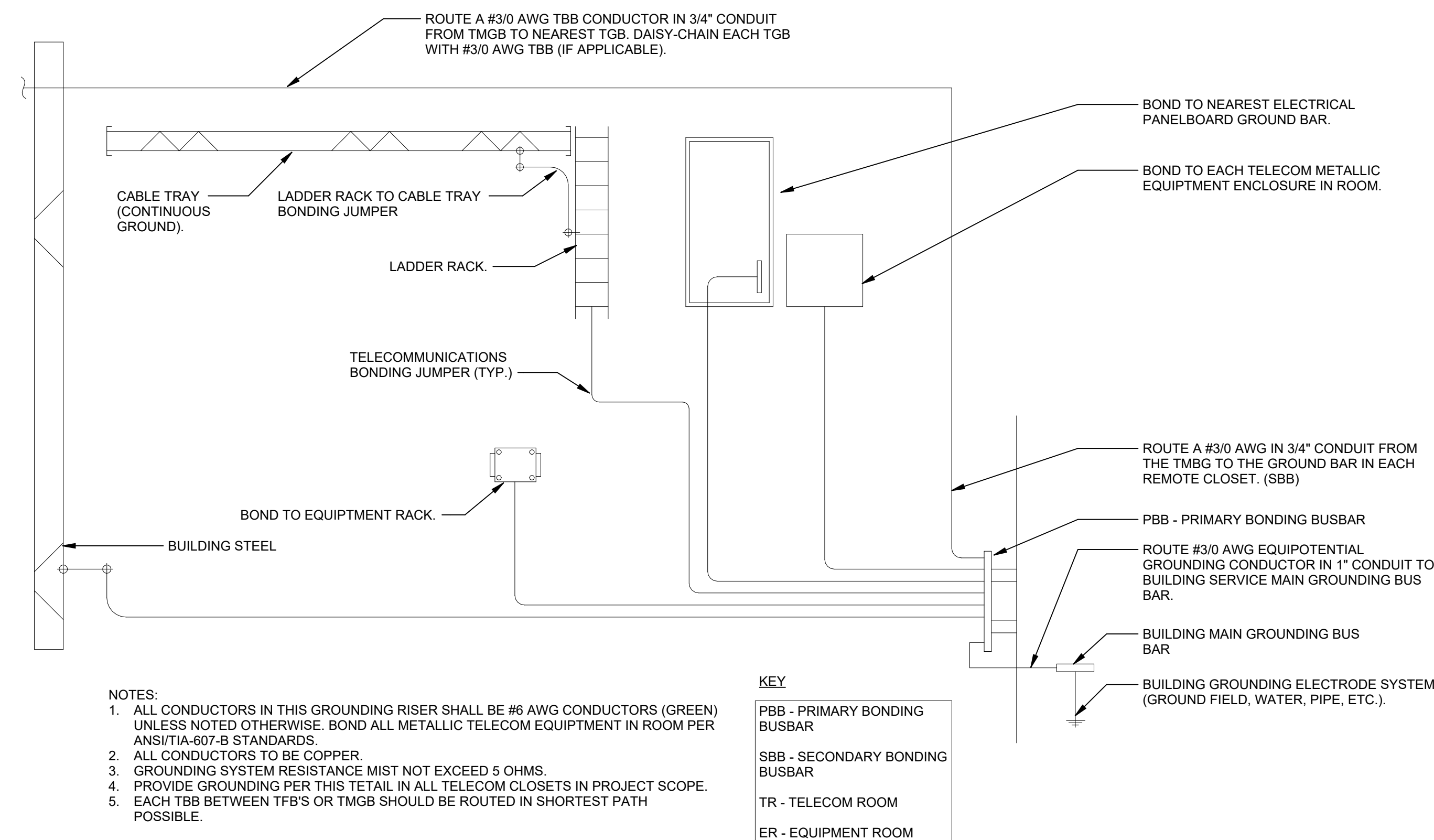


5 DISPATCH CONSOLE TELECOMMUNICATIONS WIRING DIAGRAM

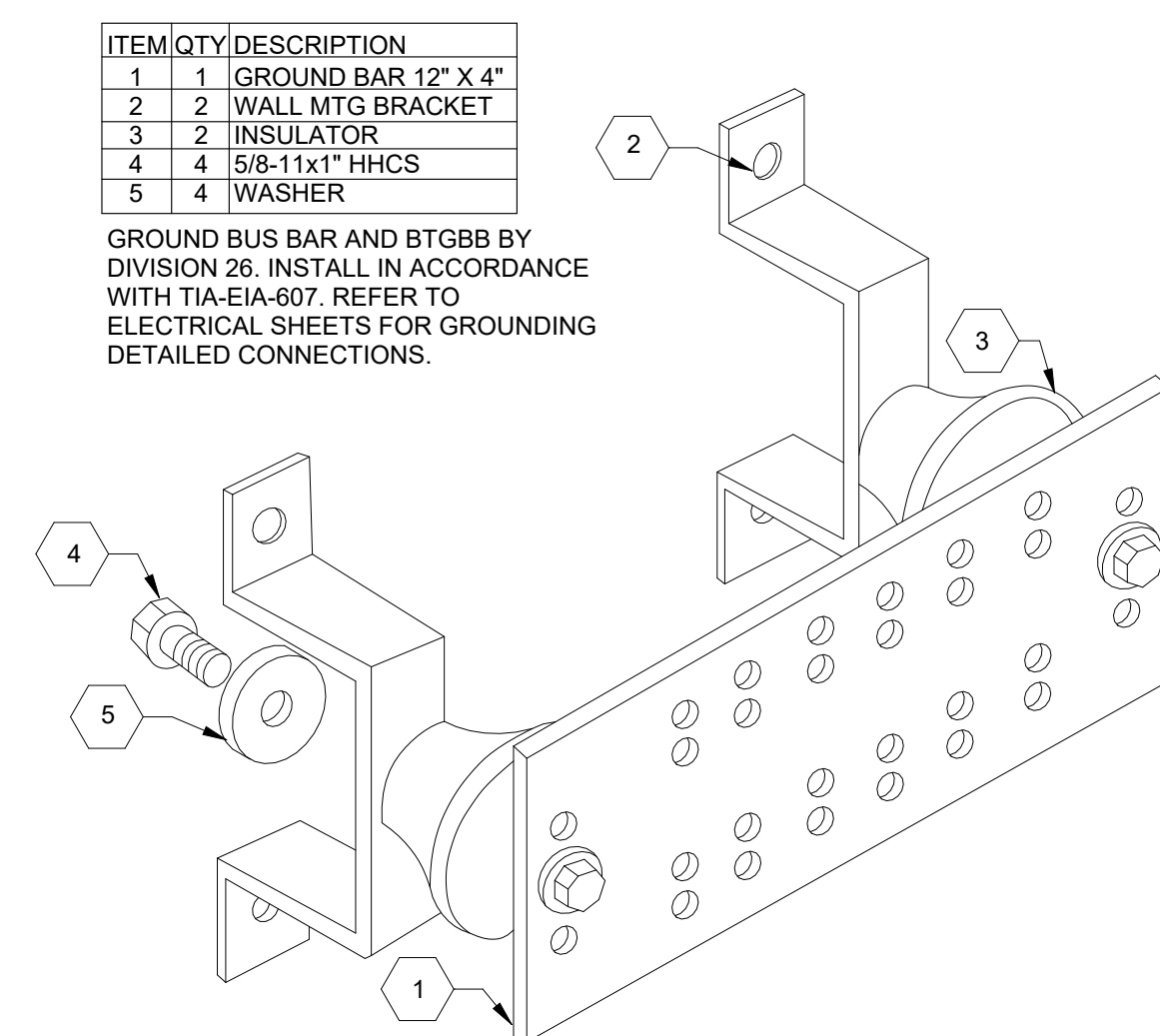


3 STANDING RACK GROUNDING ASSEMBLY

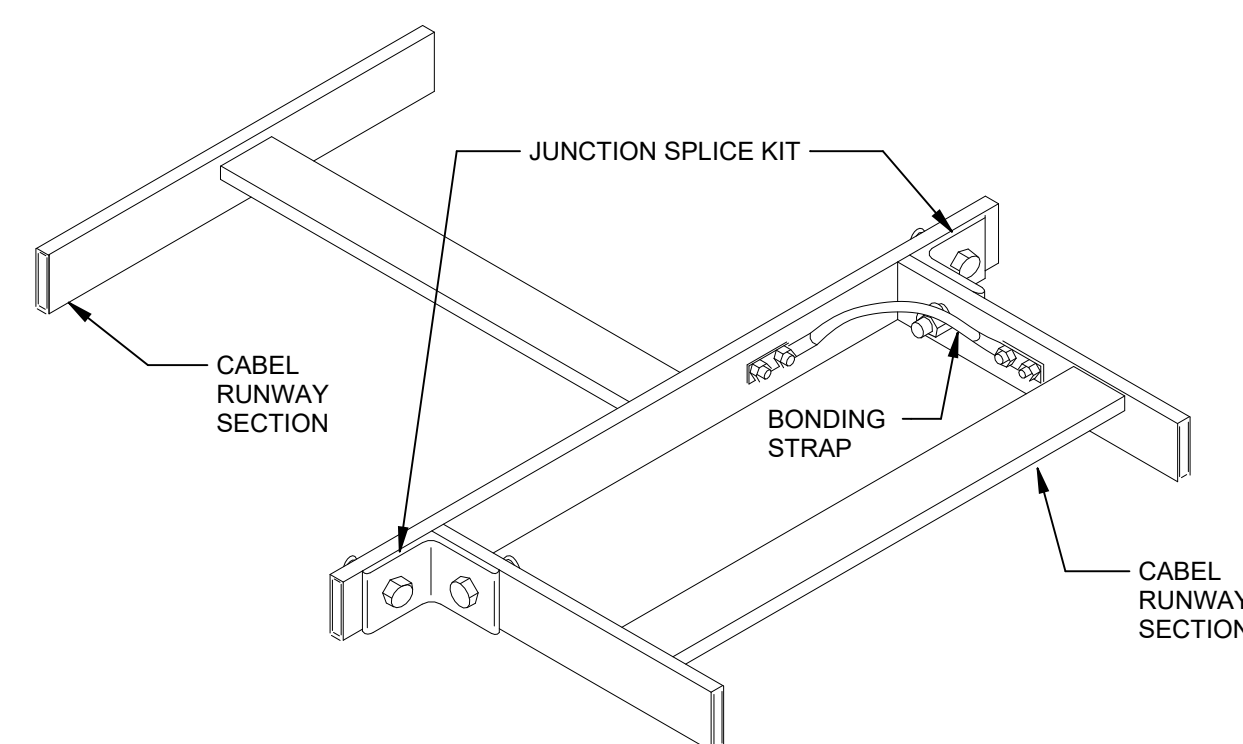
NOT TO SCALE



6 TELECOMMUNICATIONS ROOM GROUNDING RISER DIAGRAM
NOT TO SCALE



4 TELECOMMUNICATIONS GROUND BUS BAR
NOT TO SCALE



1 JUNCTION SPLICE GROUNDING ASSEMBLY