

slumberland[®]

FURNITURE

BLOOMINGTON

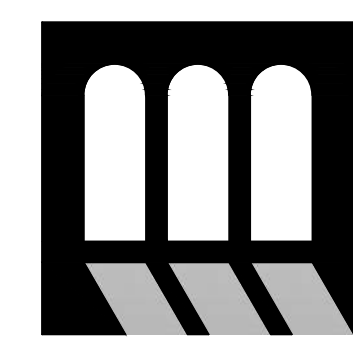
SLUMBERLAND
7961 SOUTHTOWN CTR.
BLOOMINGTON, MN 55431

DATE: 10/25/24

JOB NO: 2431.01

DRAWN: STAFF

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SLUMBERLAND
7961 SOUTHTOWN CTR.
BLOOMINGTON, MN 55431



REVISIONS

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	10/25/24	PERMIT

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DOOR TYPES

SCALE: 1/2" = 1'-0"

1. START DOOR OPENING 4" FROM ADJACENT WALL ON HINGE SIDE, UNLESS OTHER
2. DOORS AND FRAMES TO BE PAINTED SHALL HAVE SEMI-GLOSS SHEEN.

The top drawing is a vertical section of a wall and door assembly. It shows two doors with diagonal hatching indicating they are insulated. The doors are separated by a vertical mullion. To the left of the first door is a window with a height of 10'-0" WF and a width of 6'-0" WF. To the right of the second door is another window with a height of 10'-0" WF and a width of 6'-0" WF. The doors are labeled "SEE DOOR SCHEDULE FOR DOOR TYPE". The windows are labeled "1/2\" E LOW-E INSULATED TEMPERED GLAZING, TYP.". The wall is labeled "1/2\" E LOW-E INSULATED TEMPERED GLAZING, TYP.". The bottom drawing is a horizontal section of a wall with four windows. The windows are separated by vertical mullions. The dimensions are: 2" (wall thickness), 3'-10 1/4" GLAZING (window width), 2" (wall thickness), 3'-10 1/4" GLAZING (window width), 2" (wall thickness), 3'-10 1/4" GLAZING (window width), 2" (wall thickness), 3'-10 1/4" GLAZING (window width), and 2" (wall thickness). The total width is 16'-3" WF. The height is 5'-10" WF. The windows are labeled "1/2\" E LOW-E INSULATED TEMPERED GLAZING, TYP.". The wall is labeled "1/2\" E LOW-E INSULATED TEMPERED GLAZING, TYP.". A section line A-A is shown at the bottom of the top drawing.

MULLION:	2" HIGH TOP MULLION 2" HIGH BOTTOM MULLION 4" DEEP
DOOR (MEDIUM STYLE):	3 1/2" HIGH TOP AND SIDE RAIL 10" HIGH BOTTOM RAIL HARDWARE PER SCHEDULE
GLAZING:	SEE GLAZING ELEVATIONS BELOW
FINISH:	TBD - COORDINATE W/ SLUMBERLAND
MFR:	OLD CASTLE, KAWNEER, OR SIMILAR

Diagram illustrating the elevation view of a window assembly. The assembly consists of a central door unit flanked by two large glass panels. The door unit is labeled "SEE DOOR SCHEDULE FOR DOOR TYPE". The glass panels are labeled "GLAZING". The assembly is framed by a series of vertical and horizontal members. The vertical members are labeled "20'-10 1/2\" V.F." (Vertical Fin) and "2\" V.F.". The horizontal members are labeled "3'-1 1/4\" GLAZING", "6'-0\" GLAZING", and "3'-1 1/4\" GLAZING". The bottom of the assembly is labeled "6\" V.F.". The overall height of the assembly is labeled "10'-0\" V.F.". The overall width of the assembly is labeled "20'-10 1/2\" V.F.". The diagram also shows a "1/2\" LOW-E INSULATED GLAZING, TYP." label on the right side.

2 GLAZING ELEVATION
T200 SCALE: 1/2" = 1'-0"

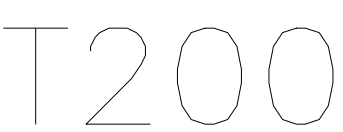
LEGEND	GENERAL NOTE
GC = GENERAL CONTRACTOR / SUBS	THE 'RESPONSIBILITY SCHEDULE' IS INTENDED TO BE USED AS A GUIDE ONLY, AND IS NOT ALL-INCLUSIVE. ALL PERSONS BIDDING WORK OR CONTRACTED FOR WORK ARE TO REVIEW THESE DOCUMENTS, THE LL CRITERIA, AND THE EXECUTED LEASE AGREEMENT, IN THEIR ENTIRETY.
LL = LANDLORD	
T = TENANT / TENANT'S VENDOR	

[illegible]

GENERAL NOTE

THE 'RESPONSIBILITY SCHEDULE' IS INTENDED TO BE USED AS A GUIDE ONLY, AND IS NOT ALL-INCLUSIVE. ALL PERSONS BIDDING WORK OR CONTRACTED FOR WORK ARE TO REVIEW THESE DOCUMENTS, THE LL CRITERIA, AND THE EXECUTED LEASE AGREEMENT, IN THEIR ENTIRETY.

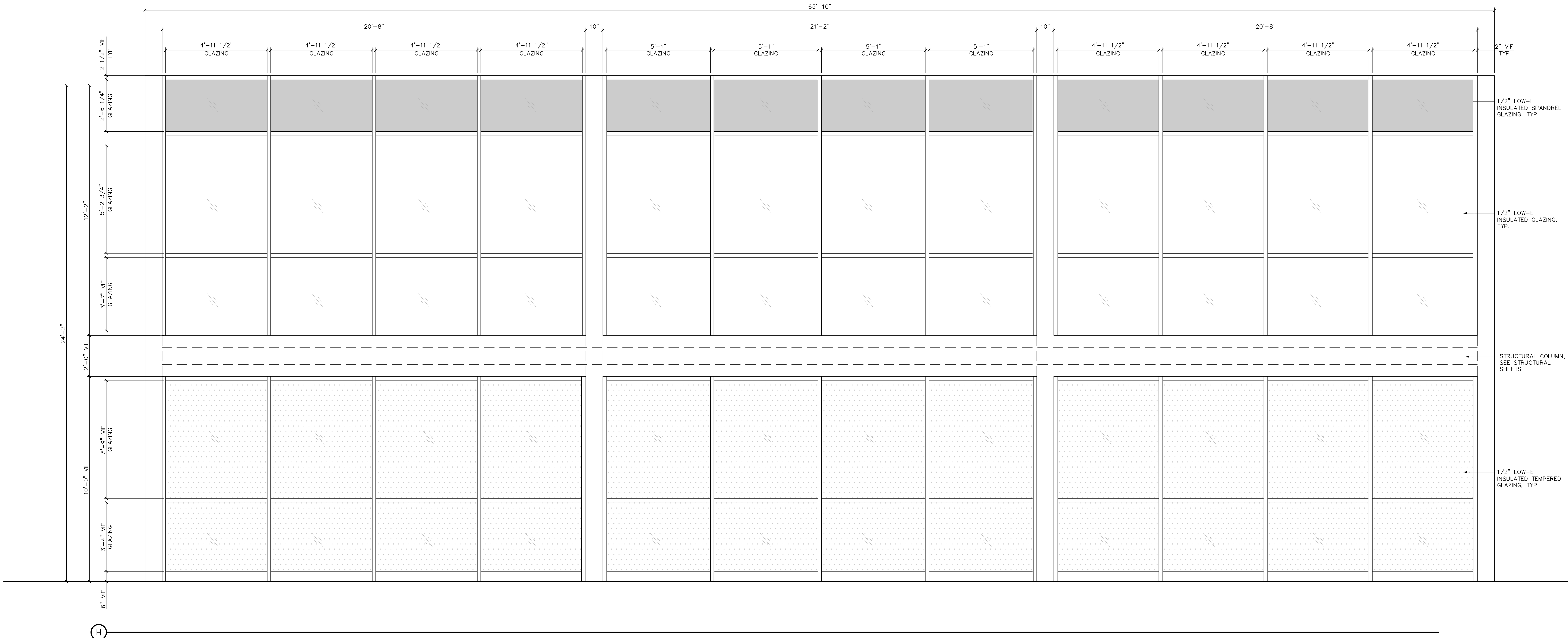
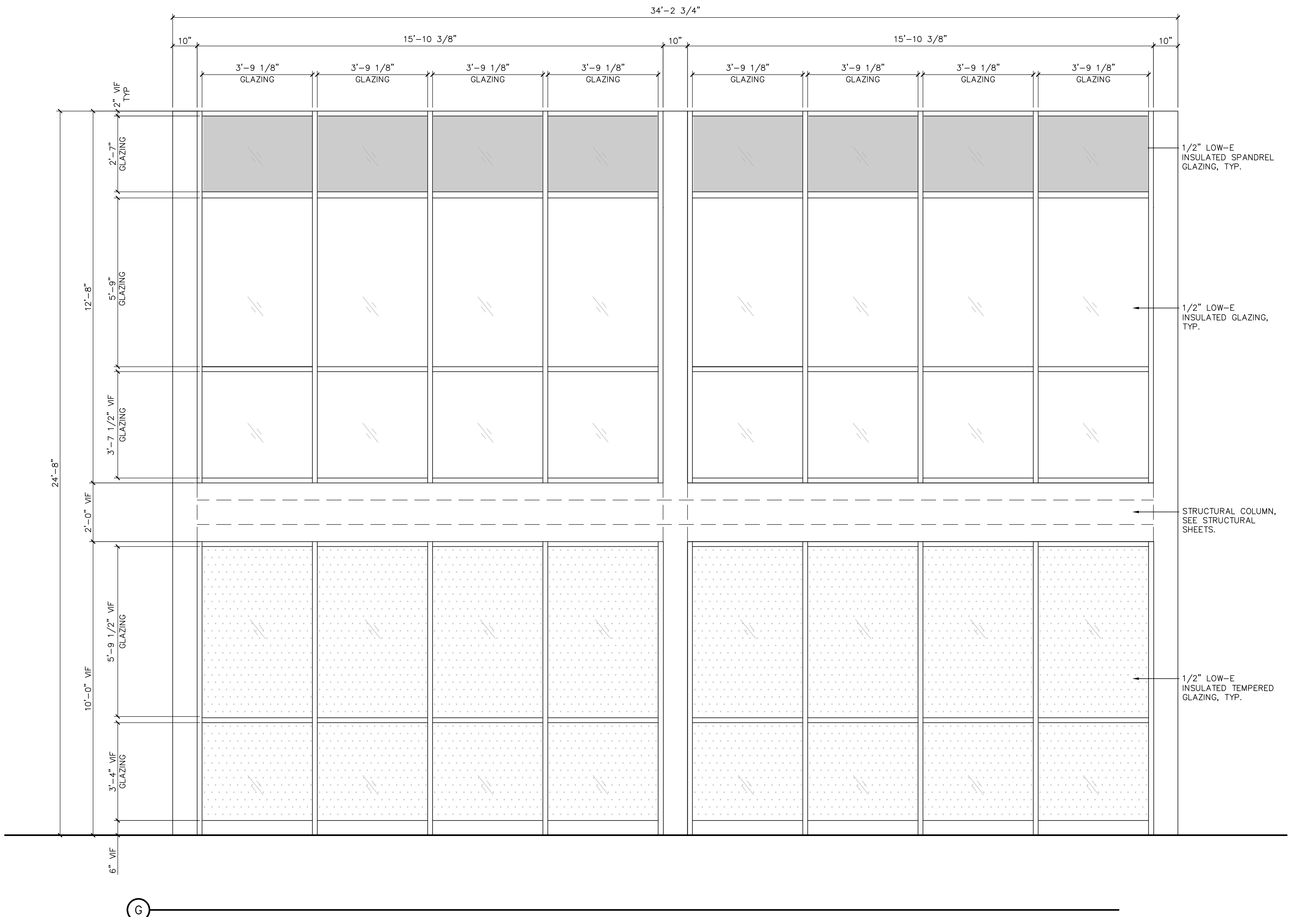
BLOOMINGTON, MN 55431



STOREFRONT SYSTEM									
MULLION:	2 1/2" HIGH TOP MULLION								
	2 1/2" HIGH BOTTOM MULLION								
	5" DEEP								
DOOR (MEDIUM STYLE):	3 1/2" HIGH TOP AND SIDE RAIL								
	10" HIGH BOTTOM RAIL								
	HARDWARE PER SCHEDULE								
GLAZING:	SEE GLAZING ELEVATIONS BELOW								
FINISH:	TBD - COORDINATE W/ SLUMBERLAND								
MFR:	OLD CASTLE, KAWNEER, OR SIMILAR								

STOREFRONT SCHEDULE										FRAME		
TAG	ROOM	TYPE	SIZE	MAT	FIN	RATE	CMMT	MAT	FIN	RATE		
103	EXTERIOR	A	20'-2 1/2" x 10'-0"	GLZ	MFR	--	1,2	ALUM	MFR	--		
101	EXTERIOR	B	16'-2 3/4" x 10'-0"	GLZ	MFR	--	1,2	ALUM	MFR	--		
102	VESTIBULE	C	21'-0 1/2" x 10'-0"	GLZ	MFR	--	1,2	ALUM	MFR	--		
103	VESTIBULE	D	7'-8" x 10'-0"	GLZ	MFR	--	1,2	ALUM	MFR	--		
104	VESTIBULE	D	7'-8" x 10'-0"	GLZ	MFR	--	1,2	ALUM	MFR	--		
105	EXTERIOR	G	SEE GLAZING ELEV 'G'	GLZ	MFR	--	1,2	ALUM	MFR	--		
106	EXTERIOR	H	SEE GLAZING ELEV 'H'	GLZ	MFR	--	1,2	ALUM	MFR	--		
209	MEZZANINE	E	6'-5" x 6'-0"	GLZ	MFR	--	1	ALUM	MFR	--		
210	OFFICE	F	10'-5" x 6'-0"	GLZ	MFR	--	1	ALUM	MFR	--		

1. MULLION SYSTEM COLOR: TBD - COORDINATE W/ SLUMBERLAND.
2. STOREFRONT SYSTEM TO MATCH EXISTING. GC TO VERIFY ALL DIMENSIONS WITH EXISTING STOREFRONT TO REMAIN.



1 GLAZING ELEVATIONS
T201 SCALE: 1/2" = 1'-0"

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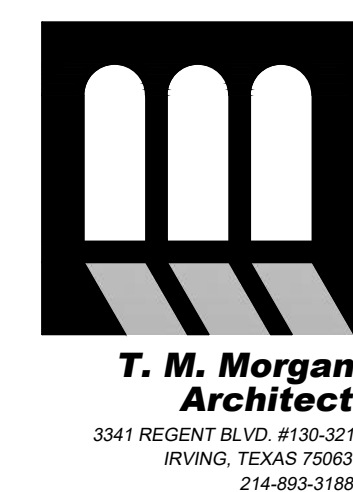


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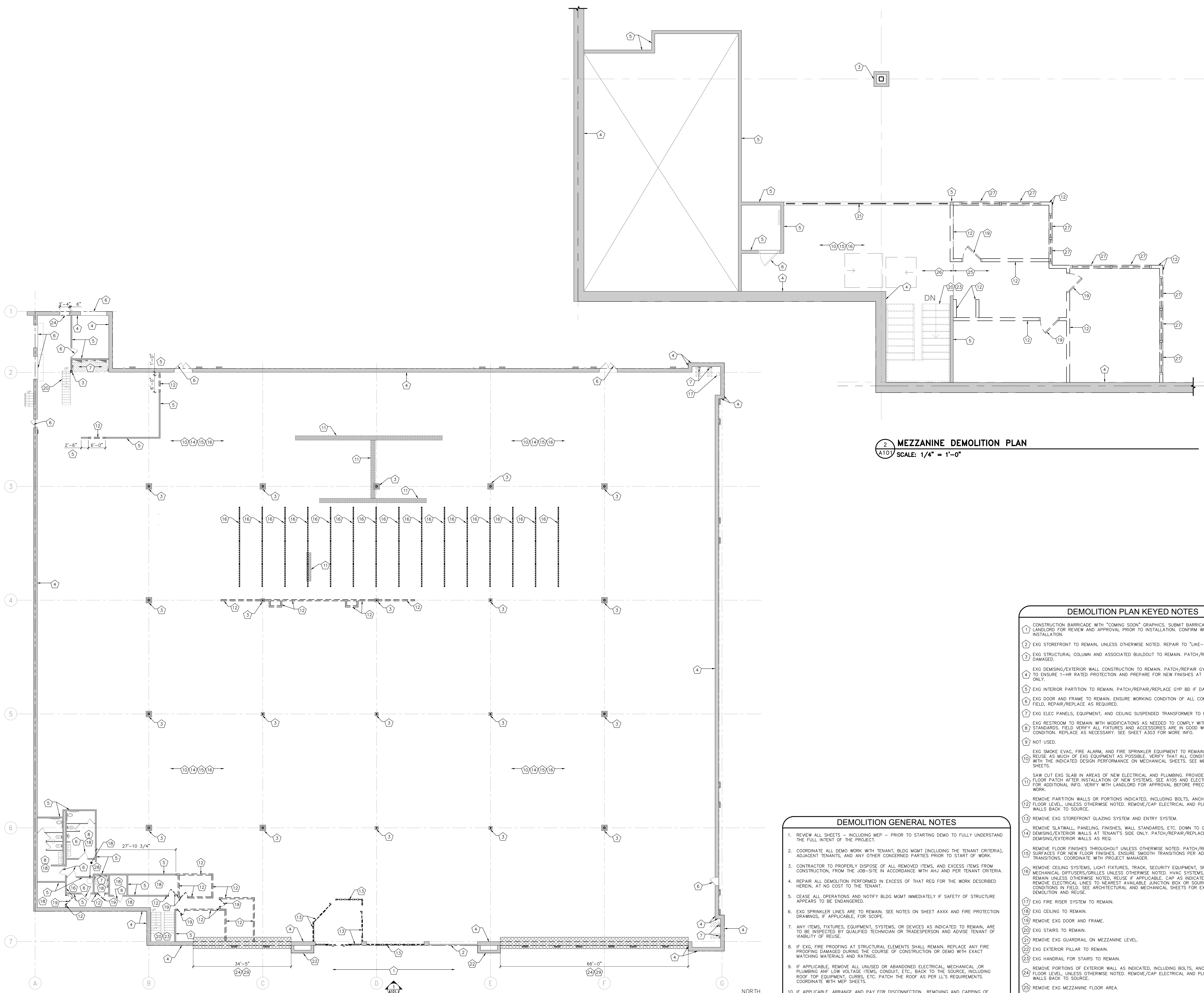
SCHEDULE SHEET

SHEET NUMBER

T201



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

1 DEMOLITION PLAN
SCALE: 3/32" = 1'-0"

DEMOLITION PLAN KEYED NOTES

- CONSTRUCTION BARRICADE WITH "COMING SOON" GRAPHICS. SUBMIT BARRICADE GRAPHICS TO LANDLORD FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. CONFIRM WITH LL ON INSTALLATION.
- EXG STOREFRONT TO REMAIN, UNLESS OTHERWISE NOTED. REPAIR TO "LIKE-NEW" CONDITION.
- EXG STRUCTURAL COLUMN AND ASSOCIATED BUILDOUT TO REMAIN. PATCH/REPAIR GYP BD IF DAMAGED.
- EXG DEMISING/EXTERIOR WALL CONSTRUCTION TO REMAIN. PATCH/REPAIR GYP BD AS REQ TO ENSURE 1-HR RATED PROTECTION AND PREPARE FOR NEW FINISHES AT TENANT'S SIDE ONLY.
- EXG INTERIOR PARTITION TO REMAIN. PATCH/REPAIR/REPLACE GYP BD IF DAMAGED.
- EXG DOOR AND FRAME TO REMAIN. ENSURE WORKING CONDITION OF ALL COMPONENTS IN FIELD. REPAIR/REPLACE AS REQUIRED.
- EXG ELEC PANELS, EQUIPMENT, AND CEILING SUSPENDED TRANSFORMER TO REMAIN.
- EXG RESTROOM TO REMAIN WITH MODIFICATIONS AS NEEDED TO COMPLY WITH ADA STANDARDS. FIELD VERIFY ALL FIXTURES AND ACCESSORIES ARE IN GOOD WORKING CONDITION. REPLACE AS NECESSARY. SEE SHEET A303 FOR MORE INFO.
- NOT USED.
- EXG SMOKE EVAC, FIRE ALARM, AND FIRE SPRINKLER EQUIPMENT TO REMAIN IF APPLICABLE. REUSE AS MUCH OF EXG EQUIPMENT AS POSSIBLE. VERIFY THAT ALL CONDITIONS COMPLY WITH THE INDICATED DESIGN PERFORMANCE ON MECHANICAL SHEETS. SEE MECHANICAL SHEETS.
- SAW CUT EXG SLAB IN AREAS OF NEW ELECTRICAL AND PLUMBING. PROVIDE CONCRETE FLOOR PATCH AFTER INSTALLATION OF NEW SYSTEMS. SEE A105 AND ELECTRICAL SHEETS FOR ADDITIONAL INFO. VERIFY WITH LANDLORD FOR APPROVAL BEFORE PRECEDING WITH THIS WORK.
- REMOVE PARTITION WALLS OR PORTIONS INDICATED, INCLUDING BOLTS, ANCHORS, ETC. AT FLOOR LEVEL, UNLESS OTHERWISE NOTED. REMOVE/CAP ELECTRICAL AND PLUMBING WITHIN WALLS BACK TO SOURCE.
- REMOVE EXG STOREFRONT GLAZING SYSTEM AND ENTRY SYSTEM.
- REMOVE SLATWALL, PANELING, FINISHES, WALL STANDARDS, ETC. DOWN TO GYP BD AT DEMISING/EXTERIOR WALLS AT TENANT'S SIDE ONLY. PATCH/REPAIR/REPLACE GYP BD AT DEMISING/EXTERIOR WALLS AS REQ.
- REMOVE FLOOR FINISHES THROUGHOUT UNLESS OTHERWISE NOTED. PATCH/REPAIR EXG SURFACES FOR NEW FLOOR FINISHES. ENSURE SMOOTH TRANSITIONS PER ADA GUIDELINES AT TRANSITIONS. COORDINATE WITH PROJECT MANAGER.
- REMOVE CEILING SYSTEMS, LIGHT FIXTURES, TRACK, SECURITY EQUIPMENT, SPEAKERS, AND MECHANICAL DIFFUSERS/GRILLES UNLESS OTHERWISE NOTED. HVAC SYSTEMS/EQUIPMENT TO REMAIN UNLESS OTHERWISE NOTED. REUSE IF APPLICABLE. CAP AS INDICATED/REQUIRED AND REMOVE ELECTRICAL LINES TO NEAREST AVAILABLE JUNCTION BOX OR SOURCE. VERIFY ALL CONDITIONS IN FIELD. SEE ARCHITECTURAL AND MECHANICAL SHEETS FOR EXTENT OF DEMOLITION AND REUSE.
- EXG FIRE RISER SYSTEM TO REMAIN.
- EXG CEILING TO REMAIN.
- REMOVE EXG DOOR AND FRAME.
- EXG STAIRS TO REMAIN.
- REMOVE EXG GUARDRAIL ON MEZZANINE LEVEL.
- EXG EXTERIOR PILLAR TO REMAIN.
- EXG HANDRAIL FOR STAIRS TO REMAIN.
- REMOVE PORTIONS OF EXTERIOR WALL AS INDICATED, INCLUDING BOLTS, ANCHORS, ETC. AT FLOOR LEVEL, UNLESS OTHERWISE NOTED. REMOVE/CAP ELECTRICAL AND PLUMBING WITHIN WALLS BACK TO SOURCE.
- REMOVE EXG MEZZANINE FLOOR AREA.
- EXG MEZZANINE FLOOR AREA TO REMAIN.
- REMOVE EXG INTERIOR WINDOW.
- EXG WATER HEATER TO REMAIN.
- EXCAVATE FOR NEW FOOTINGS. SEE STRUCTURAL SHEETS FOR MORE INFO.

DEMOLITION GENERAL NOTES

- REVIEW ALL SHEETS — INCLUDING MEP — PRIOR TO STARTING DEMO TO FULLY UNDERSTAND THE FULL INTENT OF THE PROJECT.
- COORDINATE ALL DEMO WORK WITH TENANT, BLDG MGMT (INCLUDING THE TENANT CRITERIA), ADJACENT TENANTS, AND ANY OTHER CONCERNED PARTIES PRIOR TO START OF WORK.
- CONTRACTOR TO PROPERLY DISPOSE OF ALL REMOVED ITEMS, AND EXCESS ITEMS FROM CONSTRUCTION, FROM THE JOB-SITE IN ACCORDANCE WITH AHJ AND PER TENANT CRITERIA.
- REPAIR ALL DEMOLITION PERFORMED IN EXCESS OF THAT REQ FOR THE WORK DESCRIBED HEREIN, AT NO COST TO THE TENANT.
- CEASE ALL OPERATIONS AND NOTIFY BLDG MGMT IMMEDIATELY IF SAFETY OF STRUCTURE APPEARS TO BE ENDANGERED.
- EXG SPRINKLER LINES ARE TO REMAIN. SEE NOTES ON SHEET AXXX AND FIRE PROTECTION DRAWINGS, IF APPLICABLE, FOR SCOPE.
- ANY ITEMS, FIXTURES, EQUIPMENT, SYSTEMS, OR DEVICES AS INDICATED TO REMAIN, ARE TO BE INSPECTED BY QUALIFIED TECHNICIAN OR TRADESPERSON AND ADVISE TENANT OF VIABILITY OF REUSE.
- IF EXG, FIRE PROOFING AT STRUCTURAL ELEMENTS SHALL REMAIN. REPLACE ANY FIRE PROOFING DAMAGED DURING THE COURSE OF CONSTRUCTION OR DEMO WITH EXACT MATCHING MATERIALS AND RATINGS.
- IF APPLICABLE, REMOVE ALL UNUSED OR ABANDONED ELECTRICAL, MECHANICAL, OR PLUMBING AND LOW VOLTAGE ITEMS, CONDUIT, ETC., BACK TO THE SOURCE, INCLUDING ROOF TOP EQUIPMENT, CURBS, ETC. PATCH THE ROOF AS PER LL'S REQUIREMENTS. COORDINATE WITH MEP SHEETS.
- IF APPLICABLE, ARRANGE AND PAY FOR DISCONNECTION, REMOVING AND CAPPING OF UTILITY SERVICES WITHIN AREAS OF DEMO. DISCONNECT AND STUB OFF ALL UTILITIES AFFECTED BY THE DEMO WORK. NOTIFY THE AFFECTED UTILITY COMPANY AND BLDG MGMT IN ADVANCE AND OBTAIN APPROVAL PRIOR TO THIS WORK.
- IF APPLICABLE, PLACE MARKERS TO INDICATE LOCATION OF DISCONNECTED SERVICES. IDENTIFY SERVICE LINES AND CAPPING LOCATIONS ON PROJECT RECORD DOCUMENTS.



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DEMOLITION PLAN

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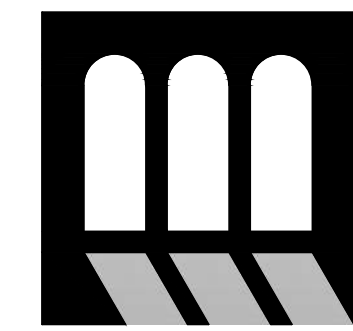
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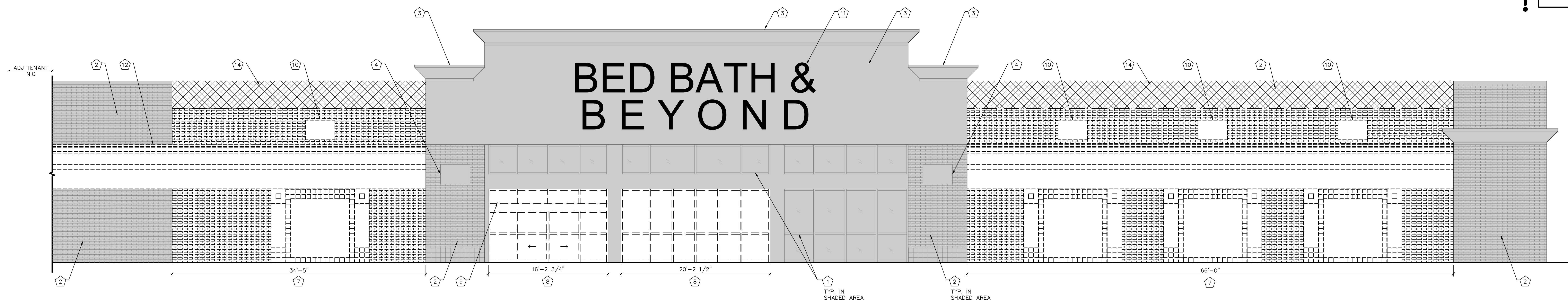


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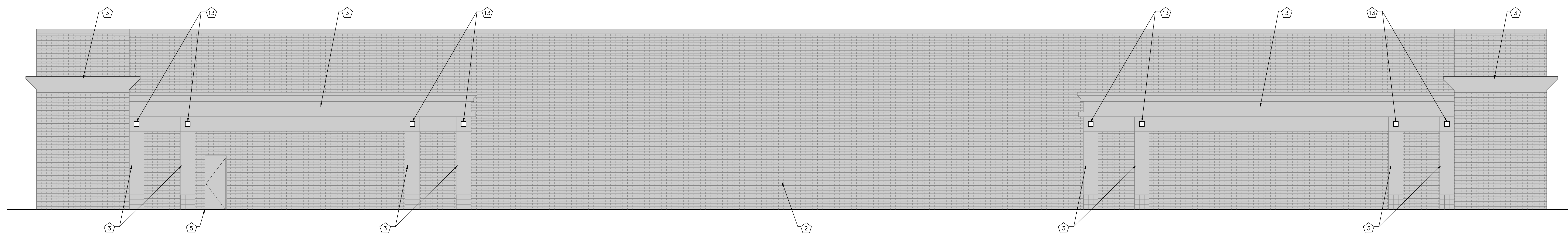
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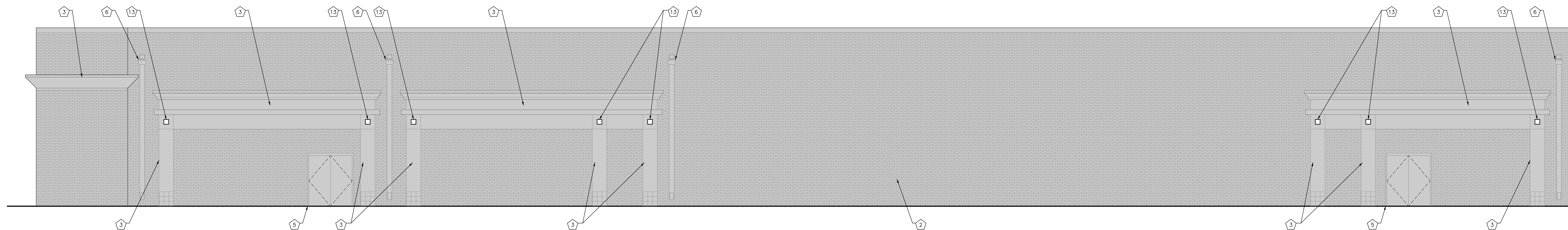
1 STOREFRONT ELEVATION

SCALE: 3/16" = 1'-0"



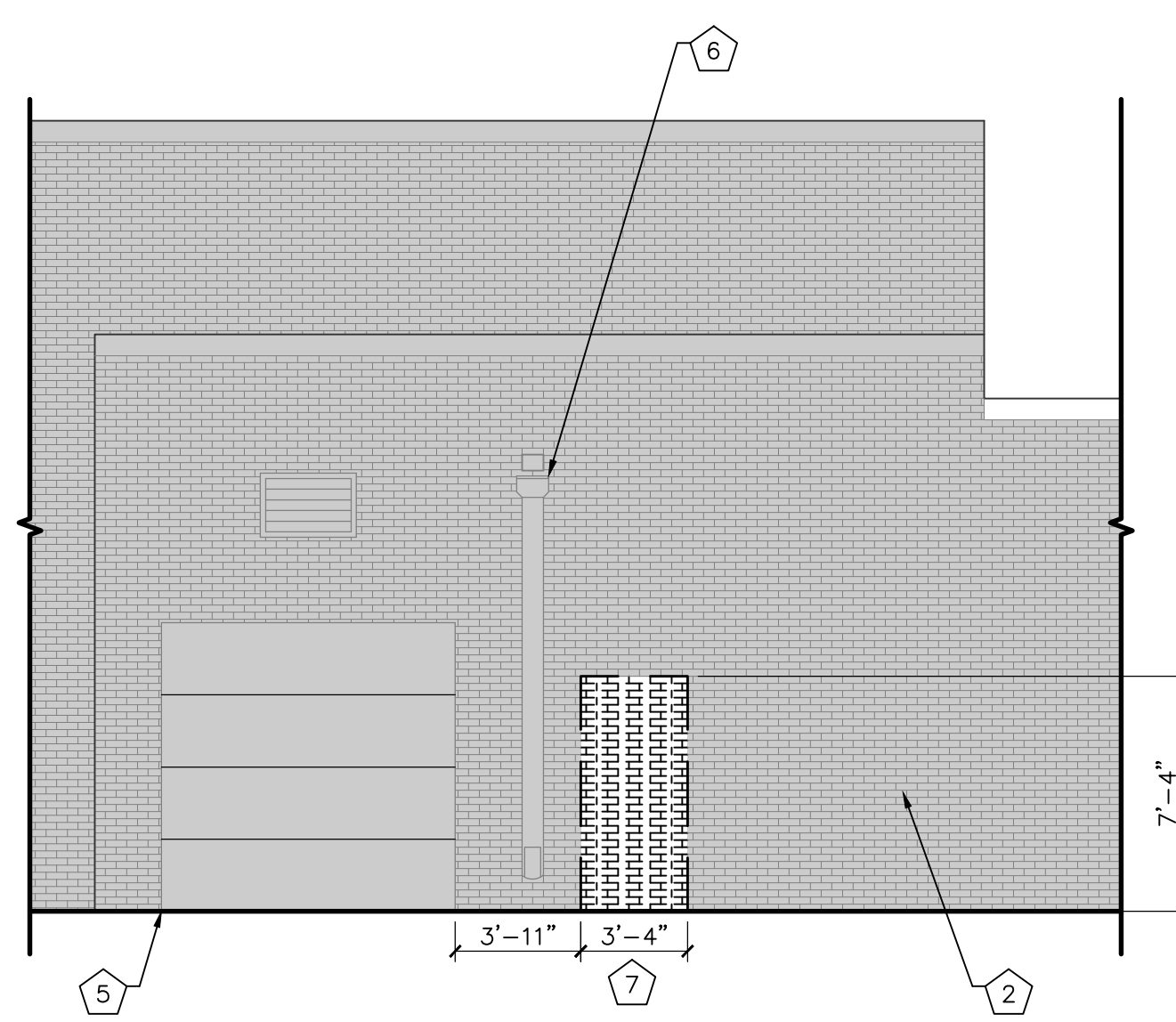
2 ELEVATION

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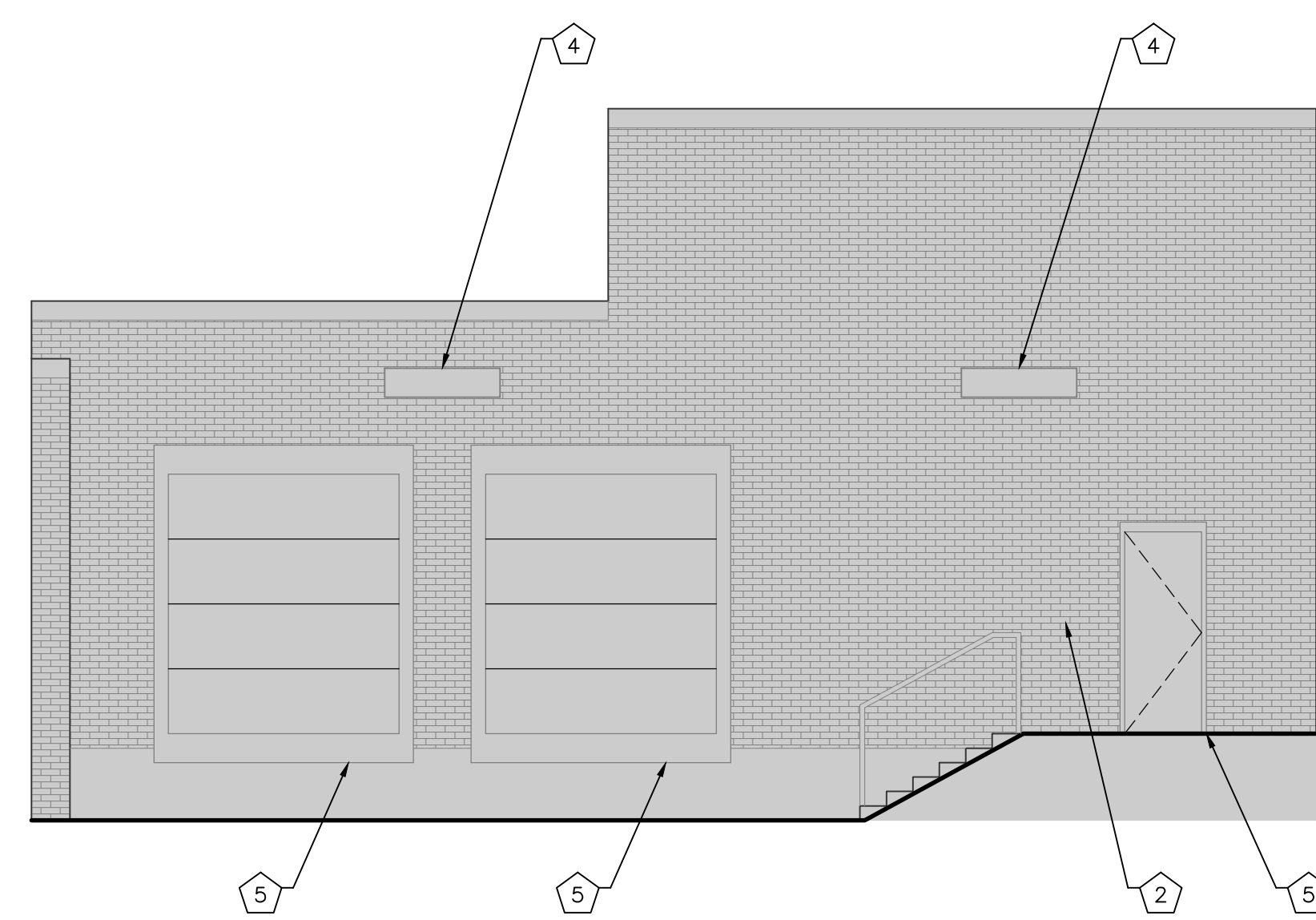
3 ELEVATION

SCALE: 3/16" = 1'-0"



4 ELEVATION

SCALE: 3/16" = 1'-0"



5 ELEVATION

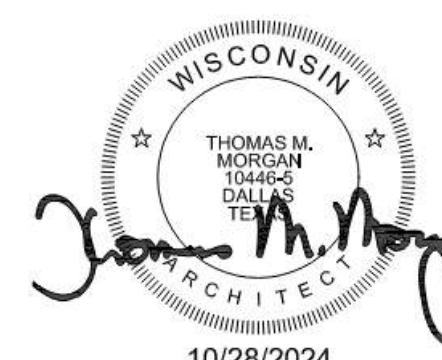
SCALE: 3/16" = 1'-0"

DEMOLITION ELEVATION KEYED NOTES

- EXG STOREFRONT TO REMAIN. REPAIR TO "LIKE-NEW" CONDITION.
- EXG EXTERIOR WALL CONSTRUCTION TO REMAIN. PATCH/REPAIR FINISH AS REQ.
- PREPARE EXG SURFACE FOR PAINTING.
- EXG LIGHT FIXTURE TO REMAIN. PREPARE SURFACE FOR PAINTING.
- EXG DOOR AND FRAME TO REMAIN.
- EXG DOWNSPOUT TO REMAIN. CLEAN AS REQ.
- REMOVE EXTERIOR PARTITION OR PORTIONS INDICATED, INCLUDING BOLTS, ANCHORS, ETC. AT FLOOR LEVEL, UNLESS OTHERWISE NOTED.
- REMOVE/CAP ELECTRICAL AND PLUMBING WITHIN WALLS BACK TO SOURCE. EXG STRUCTURAL COLUMNS AND BEAMS WITHIN WALL TO REMAIN.
- REMOVE EXG STOREFRONT GLAZING SYSTEM AND ENTRY SYSTEM.
- REMOVE EXG AWNING.
- REMOVE EXG LIGHT FIXTURE.
- REMOVE EXG TENANT SIGNAGE.
- REMOVE EXG CORNICE FINISH.
- REMOVE BLUE BURNISHED CMU FINISH.
- REMOVE EXG BRICK FINISH - EXG BOND BEAM FOR STRUCTURAL JOIST TO REMAIN IN HATCHED AREA, VIF. SEE STRUCTURAL SHEETS FOR MORE INFO.

DEMOLITION GENERAL NOTES

- REVIEW ALL SHEETS - INCLUDING MEP - PRIOR TO STARTING DEMO TO FULLY UNDERSTAND THE FULL INTENT OF THE PROJECT.
- COORDINATE ALL DEMO WORK WITH TENANT, BLDG MGMT (INCLUDING THE TENANT CRITERIA), ADJACENT TENANTS, AND ANY OTHER CONCERNED PARTIES PRIOR TO START OF WORK.
- CONTRACTOR TO PROPERLY DISPOSE OF ALL REMOVED ITEMS, AND EXCESS ITEMS FROM CONSTRUCTION, FROM THE JOB-SITE IN ACCORDANCE WITH AIA AND PER TENANT CRITERIA.
- REPAIR ALL DEMOLITION PERFORMED IN EXCESS OF THAT REQ FOR THE WORK DESCRIBED HEREIN, AT NO COST TO THE TENANT.
- CEASE ALL OPERATIONS AND NOTIFY BLDG MGMT IMMEDIATELY IF SAFETY OF STRUCTURE APPEARS TO BE ENDANGERED.
- EXG SPRINKLER LINES ARE TO REMAIN, SEE NOTES ON SHEET AXXX AND FIRE PROTECTION DRAWINGS, IF APPLICABLE, FOR SCOPE.
- ANY ITEMS, FIXTURES, EQUIPMENT, SYSTEMS, OR DEVICES AS INDICATED TO REMAIN, ARE TO BE INSPECTED BY QUALIFIED TECHNICIAN OR TRADESPERSON AND ADVISE TENANT OF VIABILITY OF REUSE.
- IF EXG. FIRE PROOFING AT STRUCTURAL ELEMENTS SHALL REMAIN. REPLACE ANY FIRE PROOFING DAMAGED DURING THE COURSE OF CONSTRUCTION OR DEMO WITH EXACT MATCHING MATERIALS AND RATINGS.
- IF APPLICABLE, REMOVE ALL UNUSED OR ABANDONED ELECTRICAL, MECHANICAL, OR PLUMBING AND LOW VOLTAGE ITEMS, CONDUIT, ETC., BACK TO THE SOURCE, INCLUDING ROOF TOP EQUIPMENT, CURBS, ETC. PATCH THE ROOF AS PER LL'S REQUIREMENTS. COORDINATE WITH MEP SHEETS.
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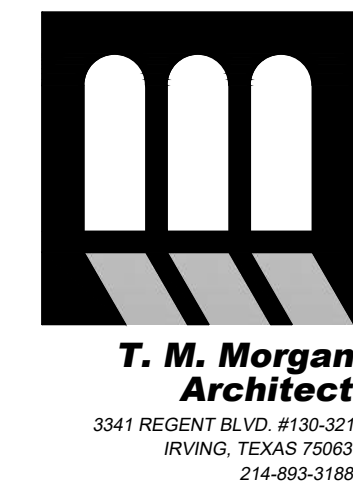
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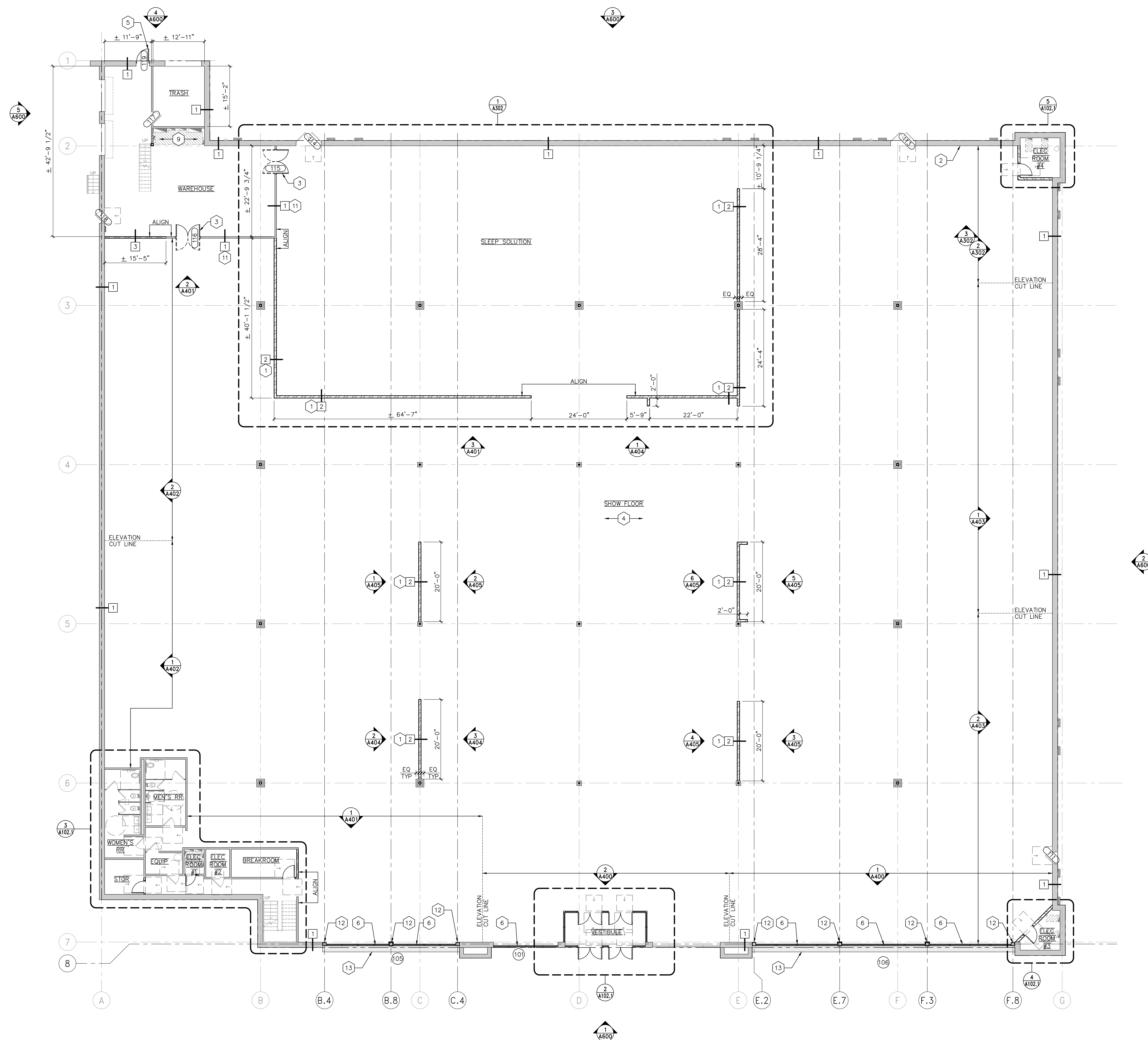
EXTERIOR
ELEVATION
DEMOLITION

SHEET NUMBER

A101.1



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BLOOMINGTON, MN 55431



1 FLOOR PLAN
SCALE: 3/32" = 1'-0"

FLOOR PLAN KEYED NOTES

- NEW INTERIOR WALLS GYP TO BE 12'-0" HIGH, UNLESS NOTED OTHERWISE.
- LA-Z-BOY AREA - SEE ELEVATIONS FOR MORE INFO.
- NEW DOUBLE SWINGING WAREHOUSE TRAFFIC DOOR, SEE DOOR SCHEDULE FOR MORE INFO.
- COORDINATE WITH SLUMBERLAND IF ANY THERMOSTATS REQUIRE RELOCATION DUE TO WALL/FIXTURE CHANGES.
- NEW DOOR, SEE DOOR SCHEDULE AND STRUCTURAL SHEETS FOR MORE INFO.
- NEW STOREFRONT GLAZING SYSTEM, SEE SHEET T200 FOR MORE INFO.
- NEW VESTIBULE AND DOORS, SEE SHEET T200 FOR MORE INFO.
- EXG RESTROOMS - GC TO FIELD VERIFY EXG CONDITIONS, SEE SHEET A303 FOR MORE INFO.
- EXG ELECTRICAL PANELS AND EQUIPMENT TO REMAIN.
- GC TO FIELD VERIFY EXG HALLWAY WIDTH IS 4'-0" WIDE MIN. NOTIFY ARCHITECT / BLUEOX IF WIDTH IS LESS THAN 4'-0".
- EXTEND GYP BD AND METAL STUDS UP TO DECK IF NOT ALREADY EXISTING.
- PROVIDE AND INSTALL STRUCTURAL COLUMN - SEE STRUCTURAL SHEETS FOR MORE INFO.
- INFILL PAVEMENT AS NEEDED, SEE STRUCTURAL SHEETS FOR MORE INFO.

WALL PARTITION SCHEDULE

TAG	PLAN VIEW	DESCRIPTION	CMMS
1		EXG DEMISING OR PARTITION WALL TO REMAIN. AT DEMISING WALL, REPAIR GYP BD ON TENANT SIDE ONLY AS REQ TO ACHIEVE LEVEL 4 FINISH, UNLESS OTHERWISE NOTED.	A
2		6" MTL STUDS UP TO DECK W/ 5/8" TYPE 'X' GYP BD ON BOTH SIDES UP TO 12'-0" AFF.	
3		3 5/8" MTL STUDS W/ 5/8" TYPE 'X' GYP BD ON BOTH SIDES: - UP TO CEILING IF AT GYP BD CEILING - UP TO 6" ABOVE IF AT ACT CEILING - UP TO DECK IF AT OPEN CEILING	
4		1 1/2" MTL HAT CHANNEL W/ 5/8" TYPE 'X' GYP BD UP ON ONE SIDE UP TO 12'-0" AFF.	
5		6" MTL STUDS W/ 5/8" TYPE 'X' GYP BD ON BOTH SIDES: - UP TO CEILING IF AT GYP BD CEILING - UP TO 6" ABOVE IF AT ACT CEILING - UP TO DECK IF AT OPEN CEILING	

COMMENTS

A. GC TO ENSURE DEMISING WALLS ARE 1-HR RATED PER UL# U419.

GENERAL NOTES

- ALL GYP BD TO BE TAPED AND SPACKLED (3) COATS (SAND IN-BETWEEN COATS), PRIME (1) COAT, AND PAINT (2) COATS, LEVEL 4 FINISH IS REQ.
- FOR METAL STUD SPEC, REFERENCE GUIDELINES IN CURRENT ICC-ES EVALUATION REPORT ESR-3064P.
- FOR STUD SPACING AND WALL HEIGHT LIMITATIONS, CONFIRM WITH MANUFACTURER GUIDELINES.

STUD SPACING SCHEDULE

WALL HEIGHT	STUD SPEC	MAXIMUM SPACING
0'-0" TO 10'-10"	362S125-18 (25 GA)	16" OC
10'-10" TO 12'-5"	362S125-33 (20 GA)	24" OC
12'-5" TO 13'-6"	362S125-33 (20 GA)	16" OC
13'-6" TO 15'-6"	362S125-33 (20 GA)	12" OC
15'-6" TO 16'-11"	362S125-33 (20 GA)	12" OC
16'-11" TO 19'-8"	362S125-54 (16 GA)	12" OC
19'-8" TO 26'-7"	600S162-54 (16 GA)	16" OC



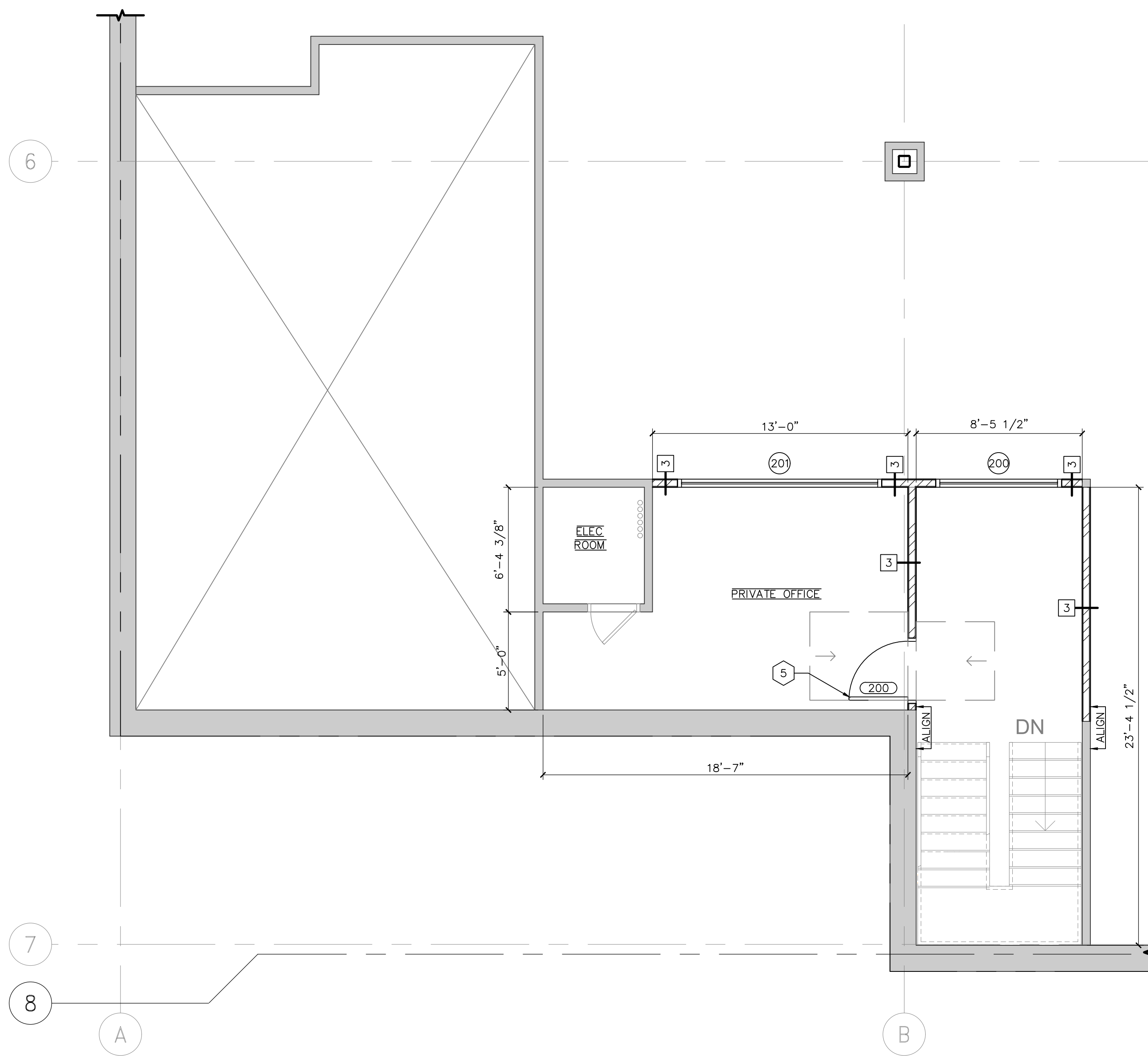
REVISIONS

TAG	DATE	DESCRIPTION
	10/25/24	PERMIT

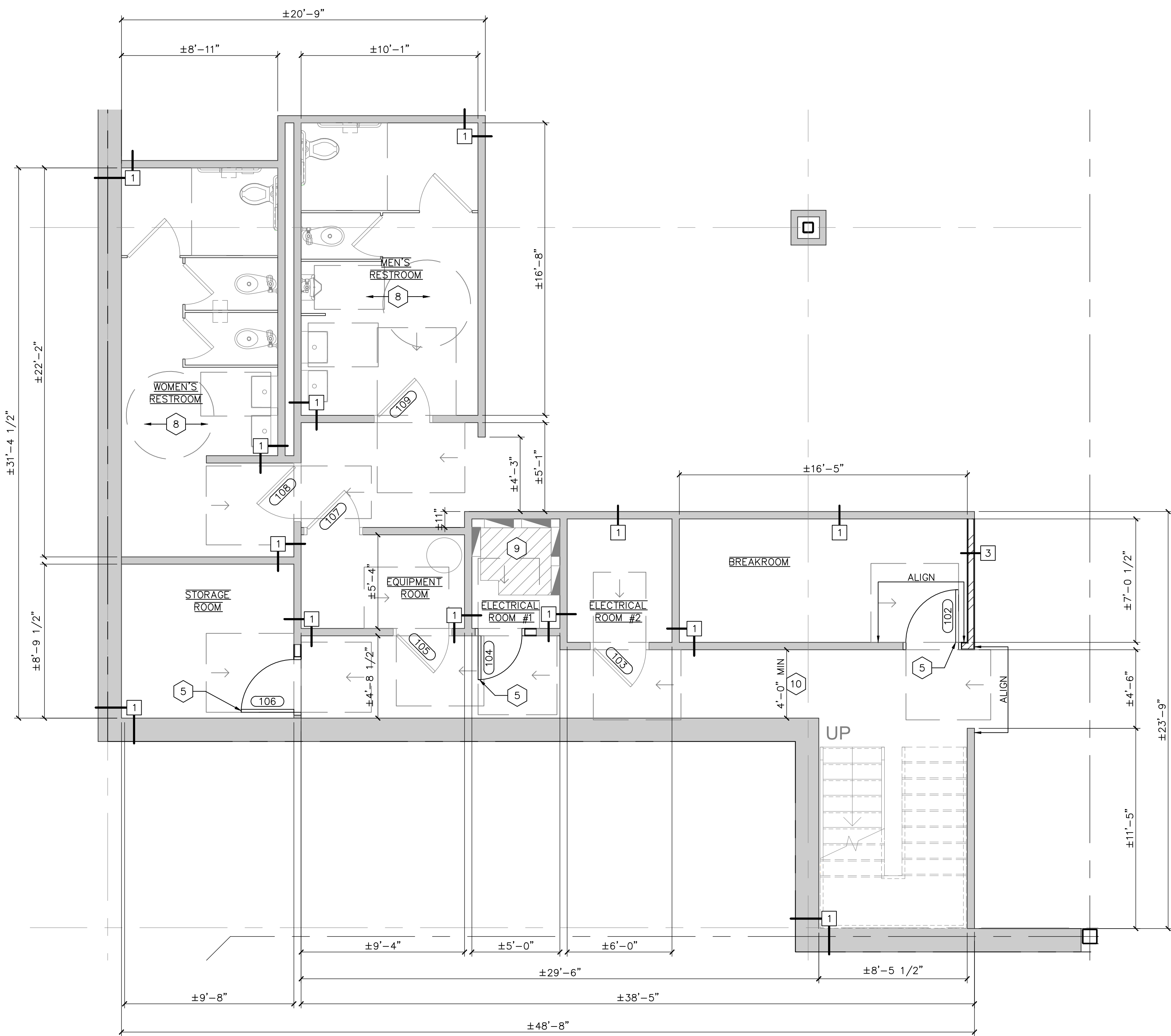
FLOOR PLAN

SHEET NUMBER

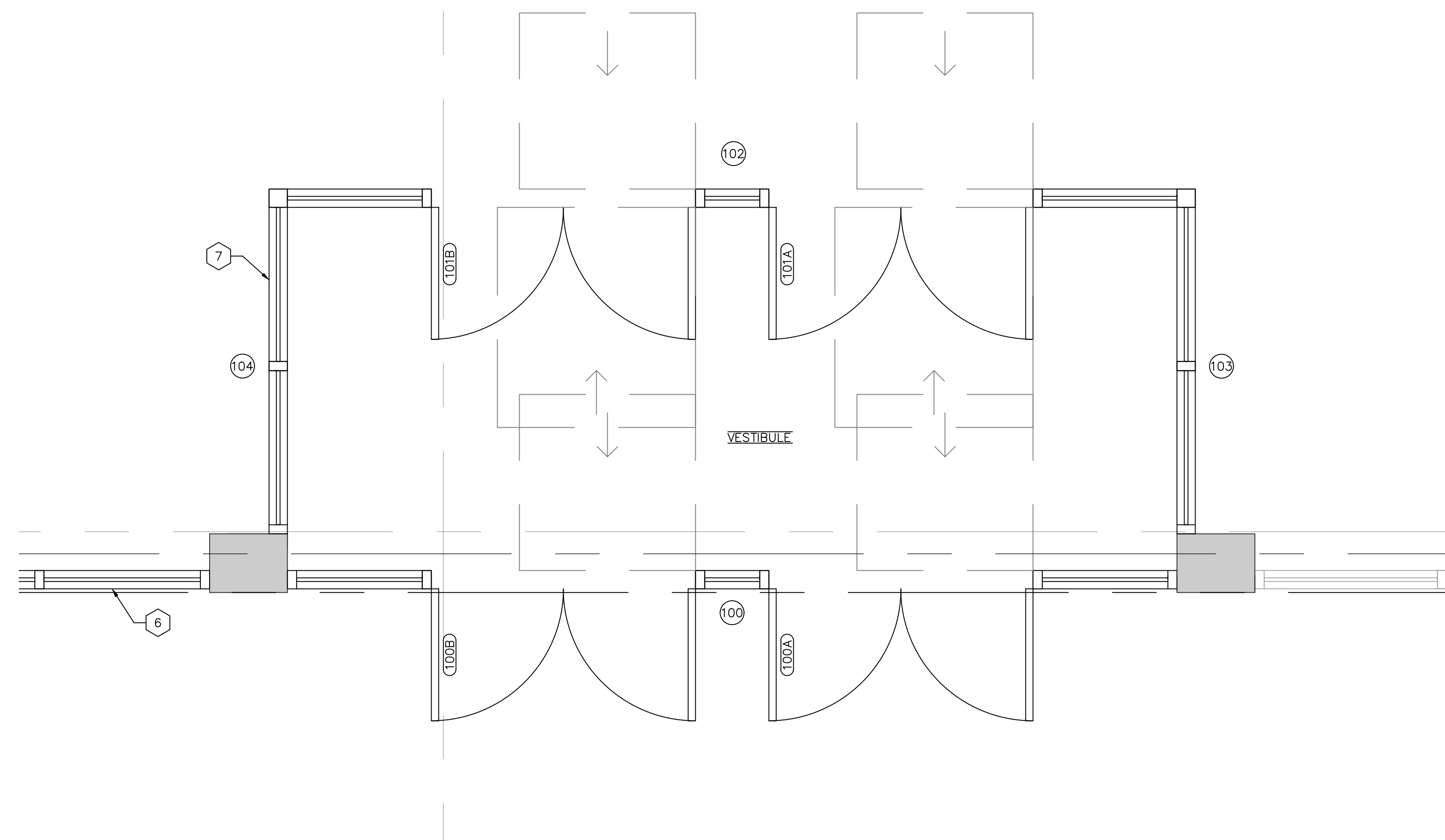
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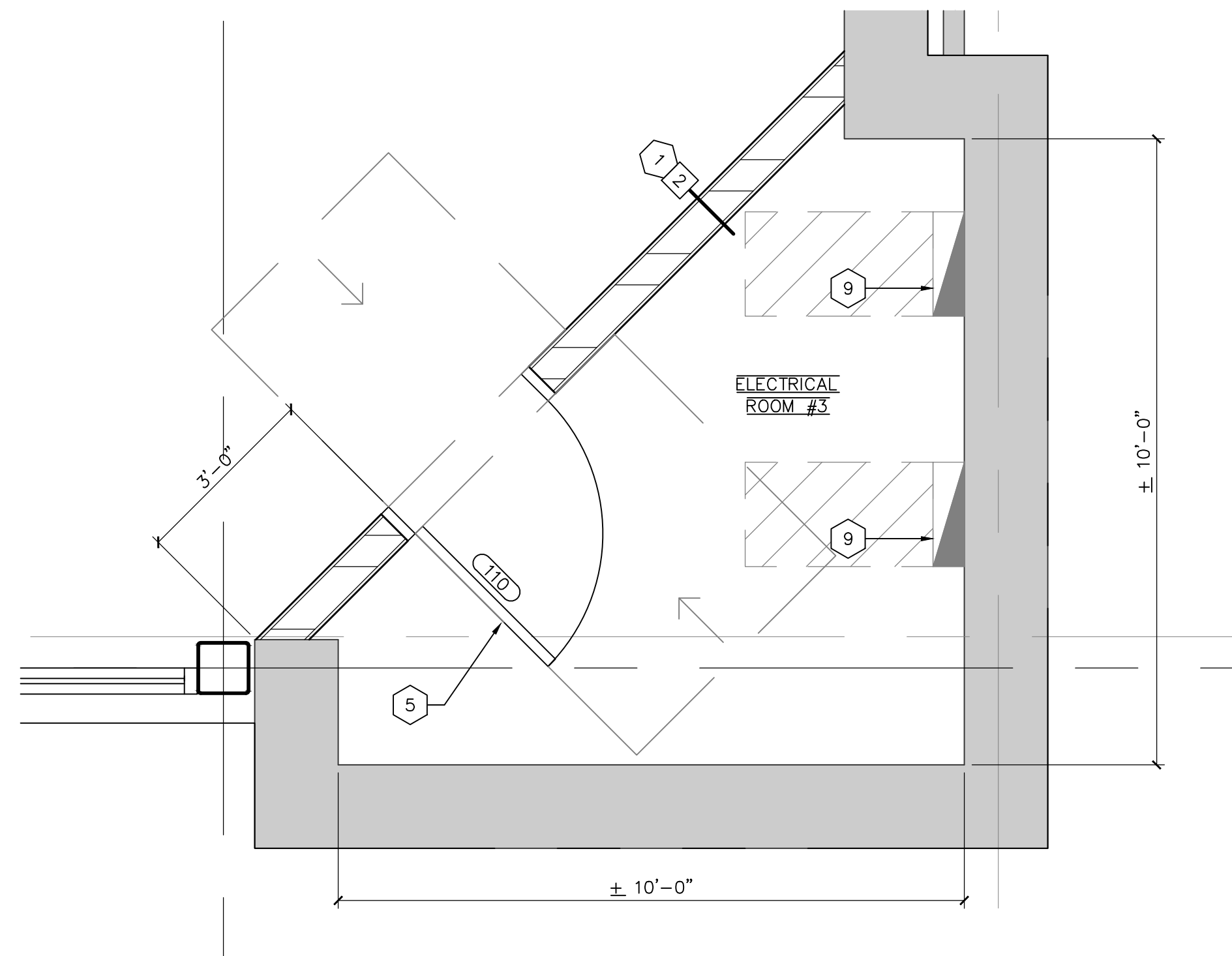
1 ENLARGED MEZZANINE FLOOR PLAN
SCALE 1/4" = 1'-0"



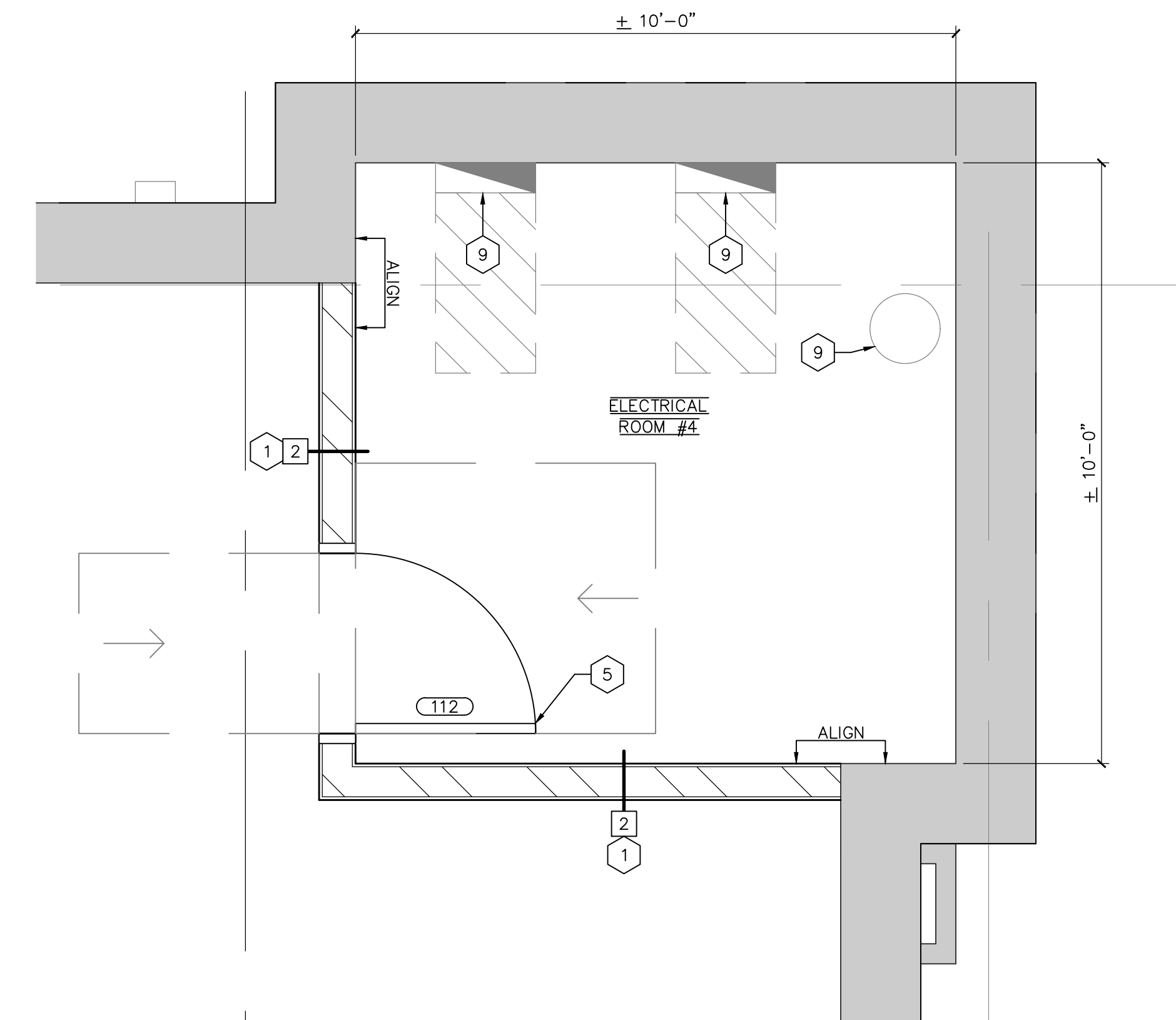
3 ENLARGED FIRST LEVEL FLOOR PLAN
SCALE 1/4" = 1'-0"



2 ENLARGED VESTIBULE PLAN
SCALE 1/2" = 1'-0"



4 ENLARGED ELEC ROOM PLAN
SCALE 1/2" = 1'-0"



5 ENLARGED ELEC ROOM PLAN
SCALE 1/2" = 1'-0"

- FLOOR PLAN KEYED NOTES**
- NEW INTERIOR WALLS GYP TO BE 12'-0" HIGH, UNLESS NOTED OTHERWISE.
 - LA-2-BOY AREA - SEE ELEVATIONS FOR MORE INFO.
 - NEW DOUBLE SWINGING WAREHOUSE TRAFFIC DOOR, SEE DOOR SCHEDULE FOR MORE INFO.
 - COORDINATE WITH SLUMBERLAND IF ANY THERMOSTATS REQUIRE RELOCATION DUE TO WALL/FIXTURE CHANGES.
 - NEW DOOR, SEE DOOR SCHEDULE FOR MORE INFO.
 - NEW STOREFRONT GLAZING SYSTEM, SEE SHEET T200 FOR MORE INFO.
 - NEW VESTIBULE AND DOORS, SEE SHEET T200 FOR MORE INFO.
 - EXG RESTROOMS - GC TO FIELD VERIFY EXG CONDITIONS, SEE SHEET A303 FOR MORE INFO.
 - EXG ELECTRICAL PANELS AND EQUIPMENT TO REMAIN.
 - GC TO FIELD VERIFY EXG HALLWAY WIDTH IS 4'-0" WIDE MIN. NOTIFY ARCHITECT / BLUEOX IF WIDTH IS LESS THAN 4'-0".
 - EXTEND GYP BD AND METAL STUDS UP TO DECK IF NOT ALREADY EXISTING.
 - PROVIDE AND INSTALL STRUCTURAL COLUMN - SEE STRUCTURAL SHEETS FOR MORE INFO.
 - INFILL PAVEMENT AS NEEDED. SEE STRUCTURAL SHEETS FOR MORE INFO.

WALL PARTITION SCHEDULE			
TAG	PLAN VIEW	DESCRIPTION	CMNTS
1		EXG DEMISING OR PARTITION WALL TO REMAIN. AT DEMISING WALL, REPAIR GYP BD ON TENANT SIDE ONLY AS REQ TO ACHIEVE LEVEL 4 FINISH, UNLESS OTHERWISE NOTED.	A
2		6" MTL STUDS UP TO DECK W/ 5/8" TYPE "X" GYP BD ON BOTH SIDES UP TO 12'-0" AFF.	
3		3 5/8" MTL STUDS W/ 5/8" TYPE "X" GYP BD ON BOTH SIDES: • UP TO CEILING IF AT GYP BD CEILING • UP TO 6" ABOVE IF AT ACT CEILING • UP TO DECK IF AT OPEN CEILING	
4		1 1/2" MTL HAT CHANNEL W/ 5/8" TYPE "X" GYP BD ON ONE SIDE UP TO 12'-0" AFF.	
5		6" MTL STUDS W/ 5/8" TYPE "X" GYP BD ON BOTH SIDES: • UP TO CEILING IF AT GYP BD CEILING • UP TO 6" ABOVE IF AT ACT CEILING • UP TO DECK IF AT OPEN CEILING	
COMMENTS			
A. GC TO ENSURE DEMISING WALLS ARE 1-HR RATED PER UL# U419.			
GENERAL NOTES			
1. ALL GYP BD TO BE TAPED AND SPACKLED (3) COATS (SWAND IN-BETWEEN COATS), PRIME (1) COAT, AND PAINT (2) COATS. LEVEL 4 FINISH IS REQ.			
2. FOR METAL STUD SPEC, REFERENCE GUIDELINES IN CURRENT ICC-ES EVALUATION REPORT ESR-1304P.			
3. FOR STUD SPACING AND WALL HEIGHT LIMITATIONS, CONFIRM WITH MANUFACTURER GUIDELINES.			
WALL HEIGHT		STUD SPEC	MAXIMUM SPACING
0'-0" TO 10'-10"		3625125-18 (25 GA)	16" OC
10'-10" TO 12'-5"		3625125-33 (20 GA)	24" OC
12'-5" TO 13'-6"		3625125-33 (20 GA)	16" OC
13'-6" TO 15'-6"		3625125-33 (20 GA)	12" OC
15'-6" TO 16'-11"		3625125-33 (20 GA)	12" OC
16'-11" TO 19'-8"		3625125-54 (16 GA)	12" OC
19'-8" TO 26'-7"		6005162-54 (16 GA)	16" OC



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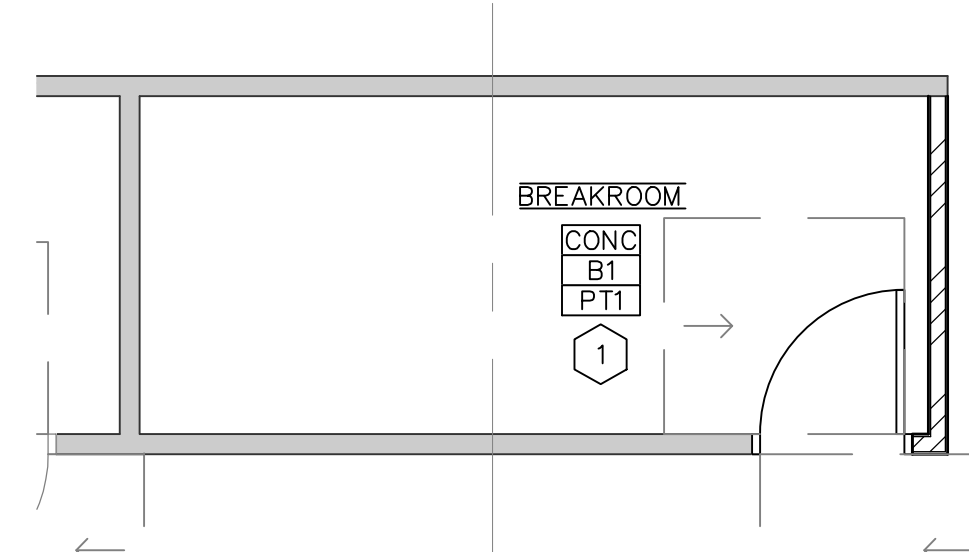
REVISIONS

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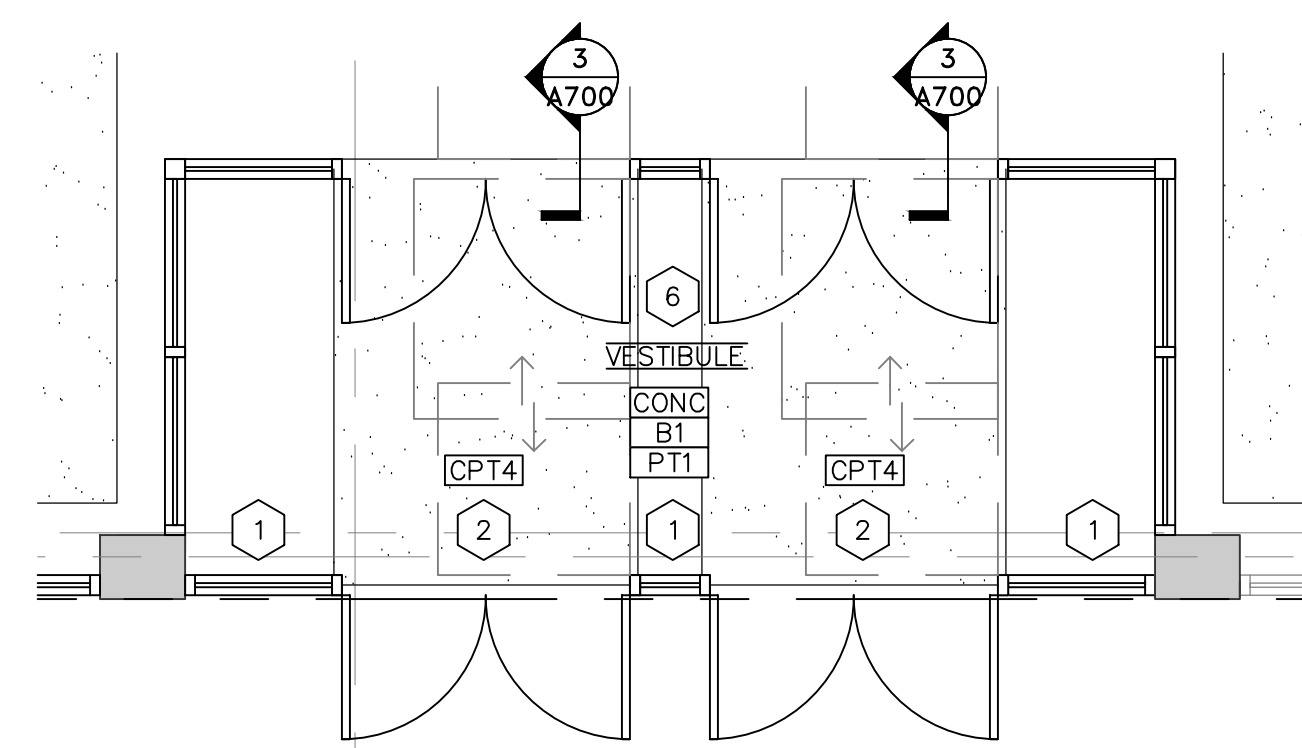
FINISH PLAN

SHEET NUMBER

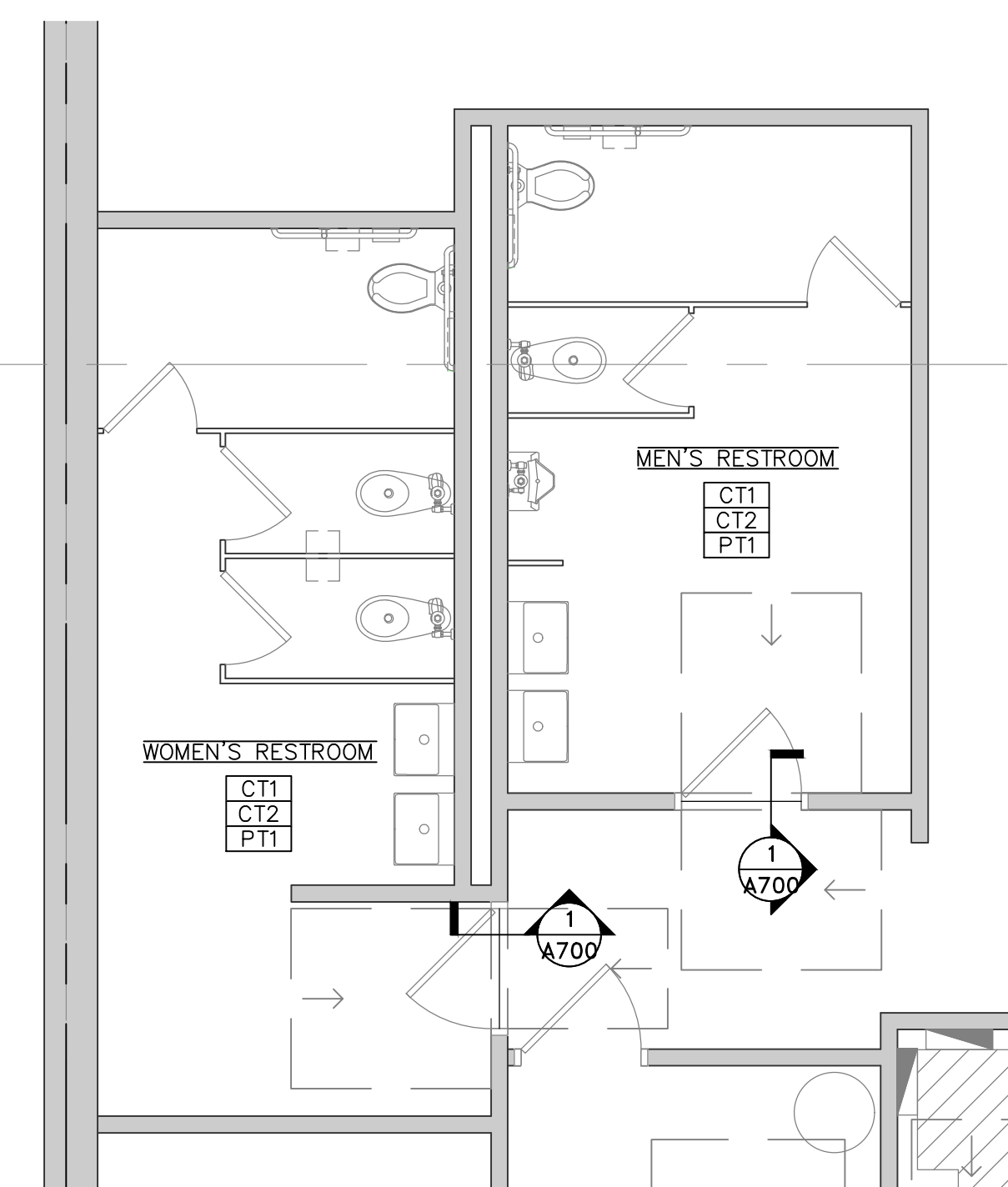
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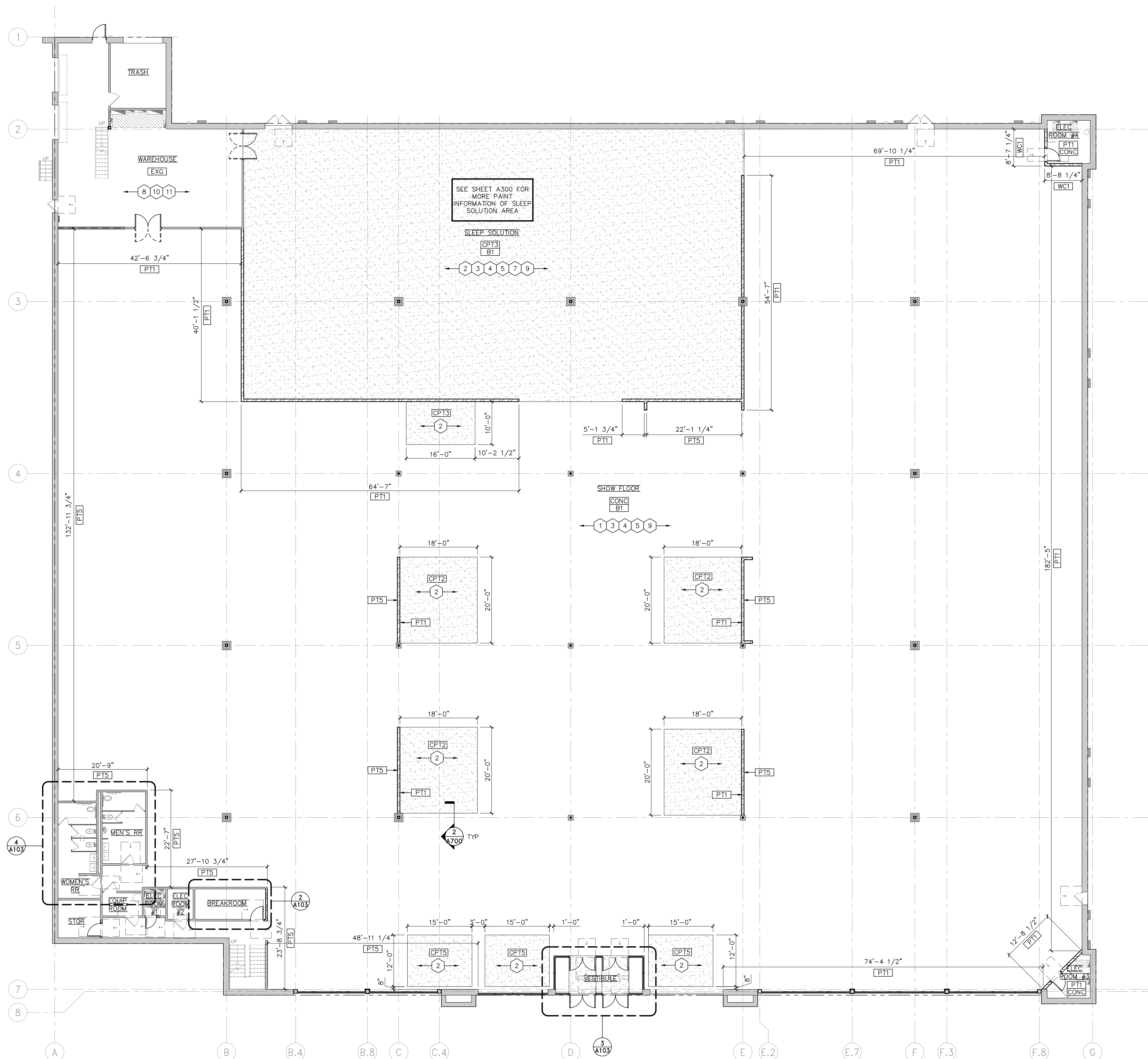
2 ENLARGED BREAKROOM PLAN
SCALE 1/4" = 1'-0"



3 ENLARGED VESTIBULE PLAN
SCALE 1/4" = 1'-0"



4 ENLARGED RESTROOM PLAN
SCALE 1/4" = 1'-0"



1 FINISH PLAN
SCALE: 3/32" = 1'-0"

FINISH PLAN KEYED NOTES

- ALL FLOORS TO BE PREPARED FOR A LEVEL 4 HIGHLY POLISHED CONCRETE.
- PREPARE FLOORS TO RECEIVE CARPET ON SPECIFIC LOCATIONS, USE THE PROPER MTL TRANSITION FOR ADA PROFILE.
- ALL COLUMNS TO BE PAINTED [PTI].
- WALLS TO BE PAINTED [PTI] OR [PTS] UP TO BOTTOM OF ROOF JOIST AND [PTS] STARTING AT ROOF JOIST UP TO ROOF UNO.
- ALL WALL TO RECEIVE VINYL BASE [BT] JOHNSONITE 20 CHARCOAL UNO.
- VESTIBULE CEILING TO BE PAINTED [PTI].
- SEE SHEET A300 FOR SLEEP SOLUTION PAINTING INFORMATION.
- WAREHOUSE WALLS TO RECEIVE NO PAINTING UNO.
- EXG AND NEW DOORS WITHIN SALES AREA TO BE PAINTED TO MATCH WALLS.
- EXG FLOOR TO BE REPAIRED AND PATCHED IF NEEDED.
- PAINTER TO LEAVE BEHIND 1 GAL (NOT 5 GAL) OF EACH COLOR.
- NO ORANGE PEEL FINISH ALLOWED.

FINISH SCHEDULE

TAG	USAGE	MANUFACTURER	SPECIFICATION	FINISH/NOTES
FLOORING				
[CONG]	THROUGHOUT THE STORE	EXG/NEW	LEVEL 4 HIGHLY POLISHED CONCRETE	
[EXG]	EXISTING FLOORS THROUGHOUT THE STORE	EXG	EXG	
[CPT1]	WALL BUNKER & GALLERY FIXTURES	MOHAWK	MINDFUL26 - CHARCOAL 979	
[CPT2]	FLOORING - MAIN FOCAL AREAS	MOHAWK	RESTORATIVE INSIGHTS - COLLECTIVE HARMONY BC639 - 747 JUTE	
[CPT3]	FLOORING - SLEEP SOLUTION & SALES COUNTER	MOHAWK	SIGNATURE - CUSTOM STRIKE OFF - Z69225	
[CPT4]	FLOORING - VESTIBULE - WALK-OFF	MOHAWK	STEP IN STYLE II - 983 IRON ORE	SUPPLIED BY SLUMBERLAND INSTALLED BY GC
[CPT5]	FLOORING - STOREFRONT FOCAL AREAS	MOHAWK	RESTORATIVE INSIGHTS - COLLECTIVE BALANCE BC640 - 747 JUTE	
[CPT6]	RESTROOMS - WALL FLOOR TILES	DALTILE	FABRIQUE - GRIS LINEN - P690 - 12x24 GROUT MAPEI D2 PEWTER	
[CPT7]	RESTROOMS - WALL TILES	DALTILE	WANDERWISE - DRIFT - WW02 - 12x24 GROUT MAPEI D2 PEWTER	
[CPT8]	RESTROOMS - BULLNOSE TILES	DALTILE	WANDERWISE - DRIFT - WW02 - 3x12 BULLNOSE GROUT MAPEI D2 PEWTER	
WALLS				
[BT]	VINYL WALL BASE	TARKETT	JOHNSONITE 20 CHARCOAL	
[PT1]	GENERAL WALL PAINT - RESTROOMS - EXTERIOR	SHERWIN WILLIAMS	SW# - 9166 SLUMBERLAND DRIFT OF MIST	PROMAR 200 LOW SHEEN E/S
[PT2]	ACCENT PAINT - WALL TRIMS - EXTERIOR TRIM	SHERWIN WILLIAMS	SW# - 7006 SLUMBERLAND EXTRA WHITE	PROMAR 200 SEMI-GLOSS
[PT3]	NOT USED			
[PT4]	VESTIBULE CEILING	SHERWIN WILLIAMS	SW# - 7646 SLUMBERLAND FIRST STAR	PROMAR 200 LOW SHEEN E/S
[PT5]	ACCENT PAINT (INTERIOR & EXTERIOR)	SHERWIN WILLIAMS	SW# - 7069 SLUMBERLAND IRON ORE	PROMAR 200 LOW SHEEN E/S
[PT6]	SHEEX WOOD TRIM	SHERWIN WILLIAMS	SLUMBERLAND PECAN WOODLINE	WOOD STAIN
[PT7]	CLEARANCE ACCENT	SHERWIN WILLIAMS	SW# - 6905 SLUMBERLAND GOLDFINCH	PROMAR 200 LOW SHEEN E/S
[PT8]	LA-Z-BOY FOCAL WALL	SHERWIN WILLIAMS	LZB BRAND BLUE	PROMAR 200 LOW SHEEN E/S
[PT9]	ACCENT PAINT - STEARNS WALL 8FT HEIGHT	SHERWIN WILLIAMS	SW# - 9178 - SLUMBERLAND IN THE NAVY	PROMAR 200 LOW SHEEN E/S
[PT10]	ACCENT PAINT - OUTRIGGERS WALL 8FT HEIGHT	BENJAMIN MOORE	SLUMBERLAND KENSINGTON BLUE - 840	PROMAR 200 LOW SHEEN E/S
MISCELLANEOUS				
[PL1]	LAMINATE - FIXTURES	FORMICA	#949-58 WHITE	MATTE
[PL2]	LAMINATE - FIXTURES	FORMICA	#5883-58 PECAN WOODLINE	MATTE
[PL3]	LAMINATE - FIXTURES	FORMICA	#912-58 STORM - 928-58 MOUSE (ALT)	MATTE
[PL4]	LAMINATE - FIXTURES	FORMICA	#837-58 GRAPHITE	MATTE
[PL5]	LAMINATE - YOUTH FIXTURES	WILSONART	#7975 RAW CHESTNUT	MATTE
[PL6]	LAMINATE - RESTROOM CABINETS	FORMICA	#2770-58 SARUM GREY	MATTE
[PL7]	LAMINATE - BREAKROOM CABINETS	WILSONART	#8201 GREY ELM	MATTE
[PL8]	LAMINATE - BREAKROOM COUNTERTOP	WILSONART	#091-60 SLATE GREY	MATTE
[SST]	SOLID SURFACE - RESTROOMS COUNTERTOP	WILSONART	MORNING ICE 9204CE	
[SFT]	ABOVE WALL TRIMS - SALES COUNTER WALL	ALPINA	BRUSHED ALUMINUM SNAP FRAMES	SUPPLIED BY SLUMBERLAND INSTALLED BY GC
[WCT]	WALL COVERING	FEDERAL HEALTH	FAUX BRICK - DELVAN WALLPAPER	
[ACC1]	RESTROOMS ACCESSORIES	SHLUTER	DESIGNLINE 1" BORDER TRIM 3/4" ALUM BRUSH CHROME	
[ACC2]	RESTROOMS ACCESSORIES	SHLUTER	DILEX-AHK COVE BASE 3/4" ALUM BRUSH CHROME	

GENERAL NOTES

- INTERIOR FINISHES TO HAVE A MIN FLAME SPREAD OF CLASS C, MAX SMOKE DENSITY OF 450.
- WALLS TO BE PREPARED TO LEVEL 4 FINISH - AS DESCRIBED BY THE NATIONAL GYPSUM COMPANY - PRIOR TO PAINTING. PRIME (1) COAT, PAINT (2) COATS.
- PAINTER IS RESPONSIBLE FOR REMOVAL AND REINSTALLATION OF ALL HARDWARE, SWITCH AND OUTLET PLATES.
- PAINTER TO LEAVE BEHIND 1 GAL (NOT 5 GAL) OF EACH COLOR.
- NO ORANGE PEEL FINISH ALLOWED.

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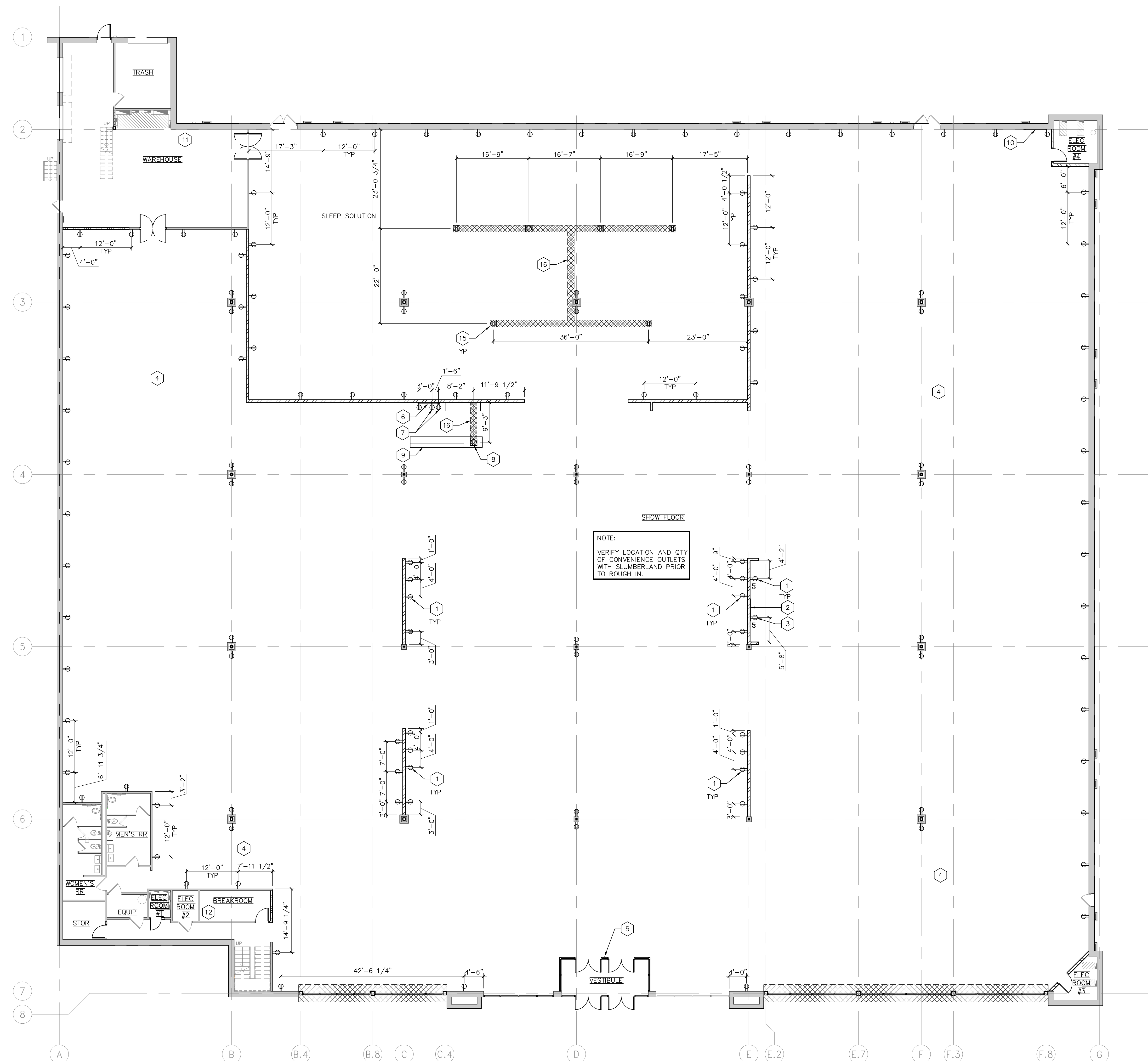
FIXTURE SCHEDULE			
TAG	DESCRIPTION	QUANTITY	NOTES
(F-21)	ACCENT WOOD PANEL - 9F	1	BY SALES COUNTER
(F-21B)	ACCENT WOOD PANEL - 9F	1	BY SALES COUNTER
(F-22)	ACCENT WOOD PANEL - 8F	6	BY CENTER STRIKE ZONES
(F-22B)	ACCENT WOOD PANEL - 8F	2	BY CENTER STRIKE ZONES
(F-22B)	ACCENT WOOD PANEL - 8F	6	BY CENTER STRIKE ZONES
(F-31)	STYLE FOCAL ACCESSORIES DISPLAY	6	BY CENTER STRIKE ZONES
(F-31B)	STYLE FOCAL ACCESSORIES DISPLAY	6	BY CENTER STRIKE ZONES
(F-31W)	STYLE FOCAL ACCESSORIES DISPLAY	4	BY CENTER STRIKE ZONES
(F-32)	FREE STANDING ACCESSORIES DISPLAY	2	BY FRONT STRIKE ZONE
(F-5)	GUEST SERVICE FRONT COUNTER	1	ONE 4FT LOW CABINET
(F-5S)	GUEST SERVICE BACK COUNTER	1	
(F-6S)	SMALL SERVICE DESK	1	
(F-7S)	SPARKLE - LIGHTING FOCAL	1	
(F-7)	CREATE - WALL ART FOCAL	1	
(F-7A)	GATHER - BAR STOOL FOCAL - 22FT	1	WING WALLS BY GC
	ACCESSORIES PLATFORM SMALL	4	
(F-8)	ACCESSORIES PLATFORM MEDIUM	2	
	ACCESSORIES PLATFORM LARGE	2	
(F-8S)	ART DISPLAY DOUBLE SIDED	2	
(F-82B)	ART DISPLAY EXTENSION	4	
(F-9)	WALL BUNKER (6'-0" WIDE)	28	
(F-10)	RUG PLATFORM (8'-6"x5'-8")	1	
(F-10-2)	SMALL RUG LADDER DISPLAY	2	
(F-11)	GET COZY SHELF (10'-0"Lx6"Dx4"H)	1	ABOVE RUG LADDERS
(F-11.3)	CANADEL SHELF (4'-0"Lx2"Dx4"H)	3	
	FRONT ENTRANCE HALO	1	
	SLEEP SOLUTIONS HALO	1	

REVISIONS		
TAG	DATE	DESCRIPTION
	10/25/24	PERMIT

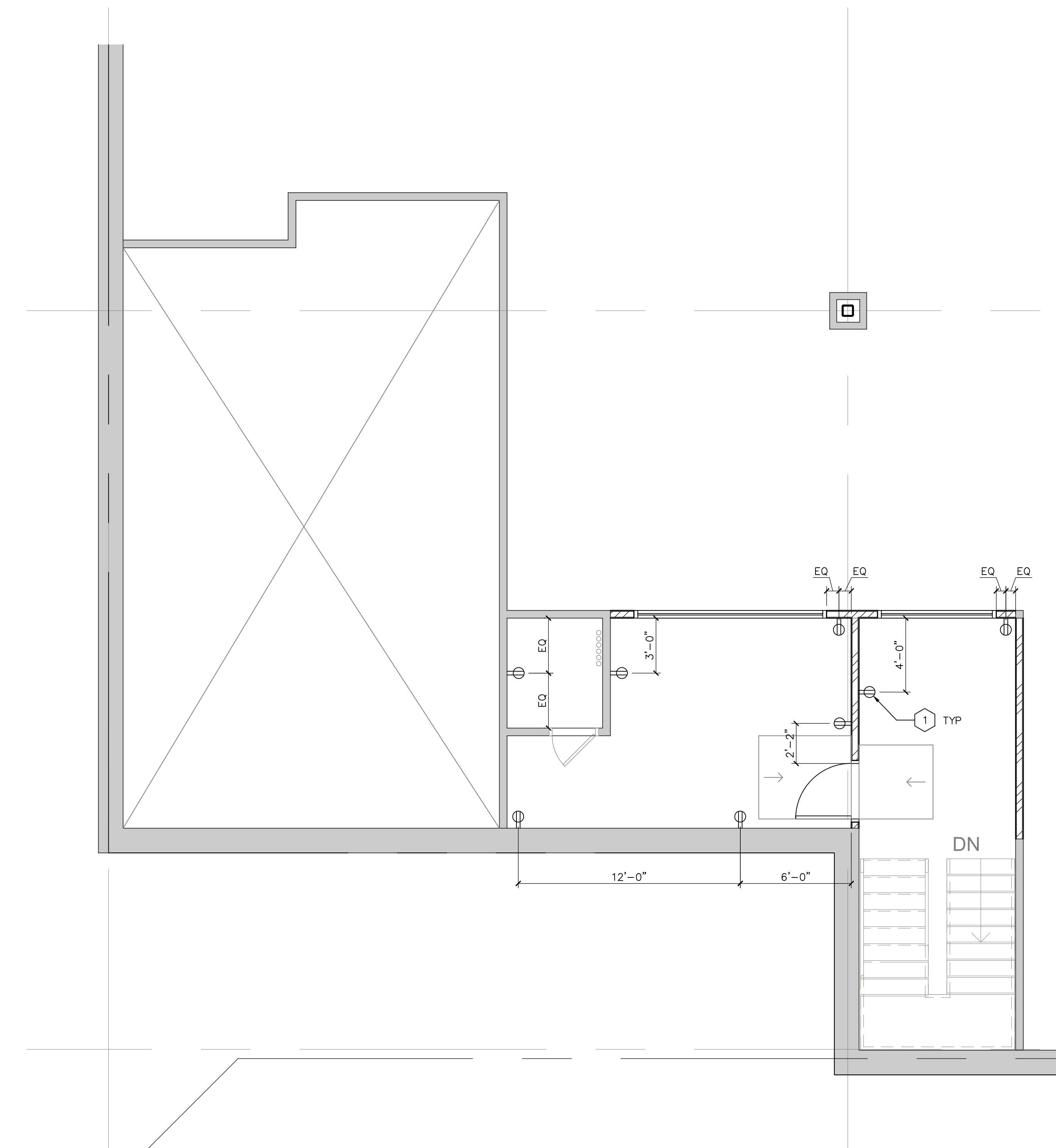
FIXTURE PLAN

SHEET NUMBER

A104



1 IT & POWER FLOOR PLAN
A105 SCALE: 3/32" = 1'-0"



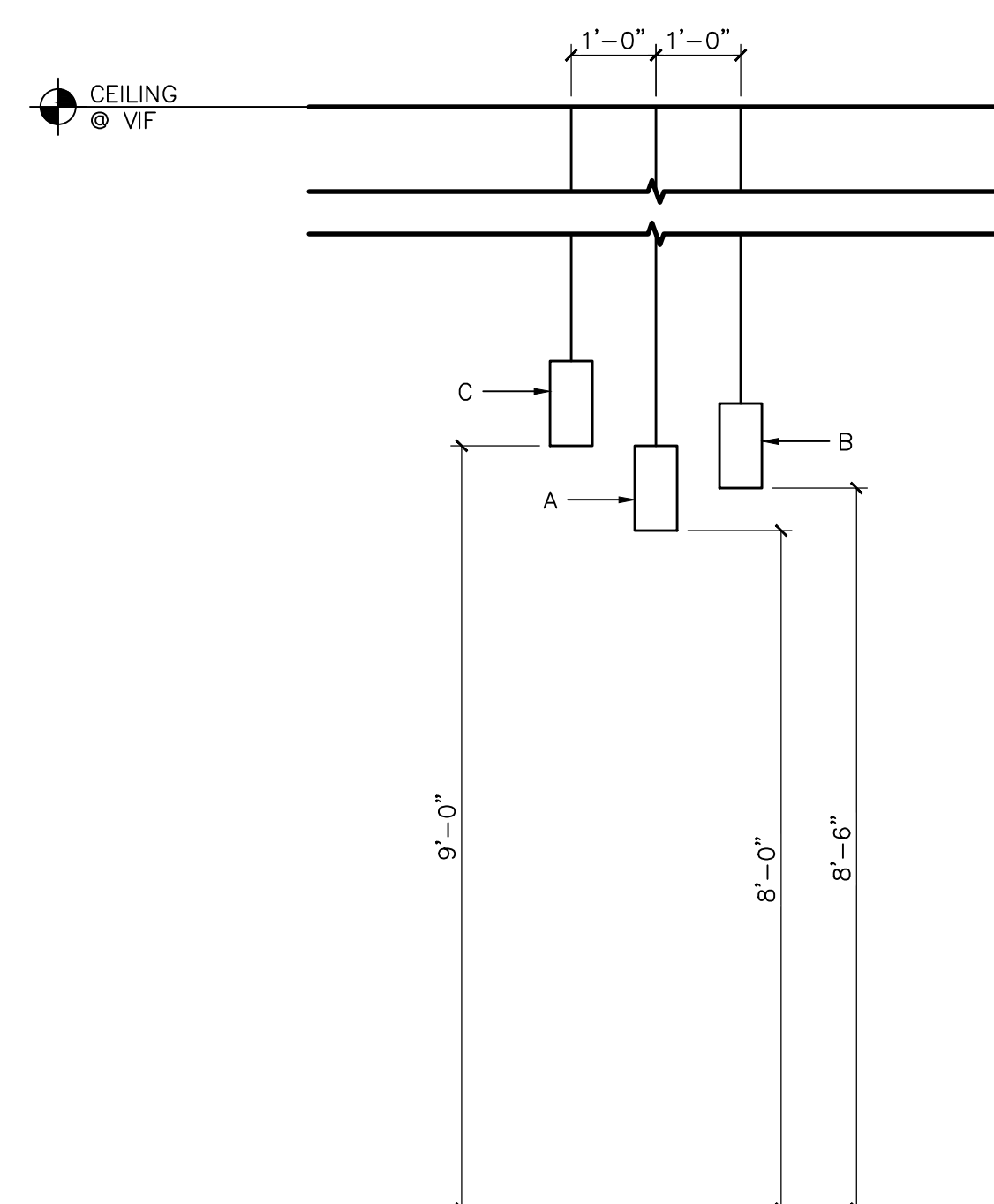
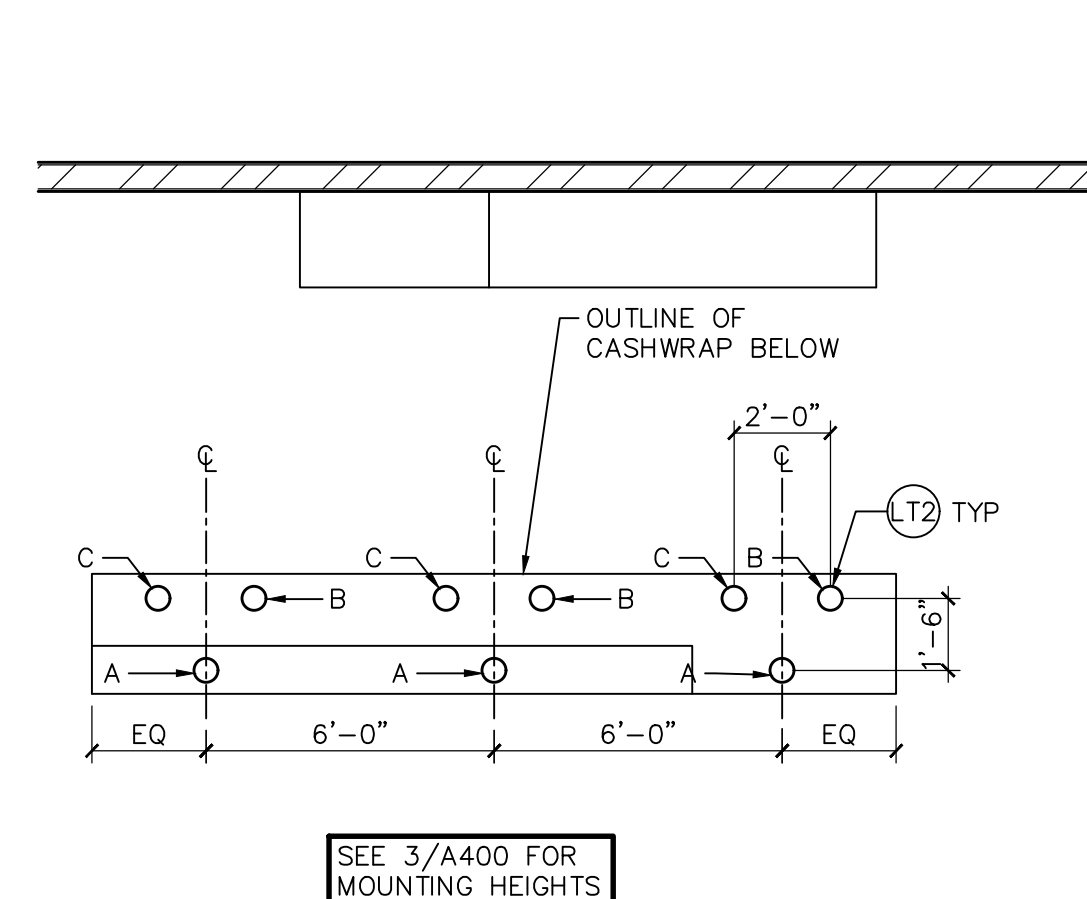
2 ENLARGED MEZZANINE IT & POWER PLAN
A105 SCALE: 1/4" = 1'-0"

FLOOR PLAN KEYED NOTES

- DUPLEX OUTLETS, SEE ELEVATIONS FOR MORE INFO.
- 43" TV SCREEN.
- CANADEL WORK STATION PORT.
- WIRELESS ACCESS POINT IN CEILING.
- SENSOR COUNTER MOUNTED ABOVE ENTRY DOOR.
- 70" TV SCREEN.
- ABOVE COUNTER OUTLETS FOR CREDIT CARD MACHINES & PRINTER.
- FLOOR OUTLET FOR SALES COUNTER DISTRIBUTION
- 4 WORK STATION OVER THE SALES COUNTER.
- 65" TV SCREEN FOR LA-Z-BOY FOCAL POINT.
- WORKSTATION FOR WAREHOUSE MANAGER OFFICE.
- BREAKROOM WORKSTATION (PHONE ONLY).
- NOT USED.
- NOT USED.
- FLOOR OUTLET. COORDINATE FINAL LOCATION W/ SLUMBERLAND.
- SAW CUT EXG. SLAB IN AREAS OF NEW ELECTRICAL. PROVIDE CONCRETE FLOOR PATCH AFTER INSTALLATION OF NEW SYSTEMS. SEE ELECTRICAL SHEETS FOR MORE INFO. VERIFY WITH LANDLORD FOR APPROVAL BEFORE PRECEEDING WITH THIS WORK. COORDINATE TRENCH LOCATION W/ SLUMBERLAND.

IT REQUIREMENTS

- IT TEAM (KEITH) CAN PULL ALL LOW VOLTAGE WIRING THROUGH CONDUIT PLACED.
- COMPUTER WORKSTATION**
- PC WILL NEED POWER BOX AND LOW VOLTAGE BOX (SINGLE GANG WITH 2HDM).
- CUSTOMER PICKUP WORKSTATION/PHONE**
- WILL NEED POWER AND LOW VOLTAGE BOX WITHIN 6' OF WHERE DECK WILL BE.
- BACK SALES COUNTER**
- BACK COUNTER NEEDS DOUBLE GANG POWER OUTLET AND LOW VOLTAGE FOUR PORT ETHERNET.
 - TV 75" NEEDS POWER AND LOW VOLTAGE BOX FOR HDMI.
 - BELOW TV ON BACK COUNTER WE SHOULD HAVE A LOW VOLTAGE BOX WITH HDMI THAT WILL RUN FROM THE BOX ABOVE SO WE DO NOT HAVE CHORDS HANGING DO OVER THE PRINTER.
- FRONT SALES COUNTER**
- EACH WORKSTATION LOCATION (TOTAL OF 4) NEEDS SINGLE GANG POWER AND LOW VOLTAGE BOXES.
- FLOOR WORKSTATIONS**
- EACH REGULAR WORKSTATION NEEDS POWER AND LOW VOLTAGE ETHERNET.
- FRONT DOOR ENTRYWAY**
- NEEDS TO RUN ETHERNET ABOUT THE FRONT DOOR FOR SENSOURCE CUSTOMER COUNTER.
- BREAKROOM**
- LOW VOLTAGE RUN FOR PHONE ONLY.
- NOTE:**
- ANY OTHER LOCATION THAT WILL HAVE A PHONE ONLY NEEDS A LOW VOLTAGE RUN NO POWER.



2 SALES COUNTER ENLARGED PLAN
SCALE: 1/4" = 1'-0"

3 LIGHT FIXTURES ELEVATION
SCALE: 1/2" = 1'-0"

TRACK LIGHTING QTY SCHEDULE		
TAG	LENGTH	LIGHT QUANTITY
01	177'-3"	59
02	16'-6"	6
03	36'-6"	12
04	56'-6"	19
05	76'-6"	26
06	46'-7 1/2"	16
07	42'-2 1/2"	14
08	116'-6"	39
09	129'-9 1/2"	43
10	44'-10 1/2"	15
11	176'-6"	59
12	196'-6"	66
13	50'-1 1/2"	16
14	45'-6 1/2"	15
15	87'-2 1/4"	29
16	61'-4 1/4"	20
17	144'-0 1/2"	48
18	78'-6 1/2"	26
19	30'-10 1/2"	10
20	134'-10 1/4"	45
21	119'-3"	39
22	107'-8 3/4"	36
23	119'-3"	36
24	67'-8"	23
25	152'-10 3/4"	45
26	61'-1 3/4"	20
27	135'-0 3/4"	36
28	205'-11 1/2"	58
29	194'-8 1/4"	54
30	174'-8 1/4"	47
31	42'-10 1/2"	15
32	48'-3"	12
33	46'-11 1/2"	10
34	134'-7 3/4"	34
35	114'-8 1/4"	30
36	94'-8 1/4"	26
37	39'-0 1/4"	13
38	19'-0 1/4"	7
39	34'-9"	12
40	119'-5"	40
41	16'-5 3/4"	4
42	62'-2"	21
43	36'-5 3/4"	12
44	46'-7 1/2"	16
45	45'-6 1/2"	15
46	140'-0 1/2"	48
47	78'-6 1/2"	26

NOTES:

1. TRACK LIGHTING TO BE SPACED 3'-0" O.C. UNO.
2. TRACK LIGHTING AT SLEEP SOLUTION TO BE SPACED 5'-0" O.C. AS SHOWN IN HATCHED AREA.
3. ALL DIAGONAL TRACK LIGHTING FIXTURES TO BE SPACED 10 FEET APART.
4. DISTANCE BETWEEN WALL AND TRACK BAR TO BE 4 FEET.
5. DISTANCE BETWEEN TRACK BAR TO THE DIAGONAL TRACK TO BE 2 FEET.
6. DISTANCE BETWEEN TRACK BAR TO THE COLUMN IS 2 FEET.
7. DISTANCE BETWEEN TRACK BAR TO THE COLUMN IS 2 FEET.
8. LIGHTING WILL BE PROVIDED BY SLUMBERLAND THROUGH VENDOR.

REFLECTED CEILING PLAN KEYED NOTES

1. 'HALO' FIXTURE SUSPENDED AT 10'-0" - PROVIDED BY SLUMBERLAND, INSTALLED BY GC.

CEILING TYPE SCHEDULE

TAG	DESCRIPTION
CL1	'ARMSTRONG' 24"x24" 'DUNE' TILES W/ ANGLED REGULAR 15/16" EXPOSED SUSPENSION SYSTEM.
CL1a	EXG ACOUSTICAL CEILING SYSTEM TO REMAIN. REPLACE ANY DAMAGED TILES.
CL2	5/8" TYPE 'X' GYP BD OVER 3 5/8" MTL STUD FRAMING OR SUSPENSION SYSTEM.
CL3	OPEN-TO-DECK CONDITION. ALL CONDUIT TO BE GANGED OR PARALLEL TO WALLS.

LIGHT FIXTURE / ACCESSORY SCHEDULE

TAG	SYMBOL	DESCRIPTION	COLOR	MOUNT TYPE	EXG	RELO	NEW
A	→	'BRUCK' 6x10 2" SPOT TRACK LIGHT	WHITE	SUSPENDED 14'-0"			
D	⊞	'DAY-BRITE' #2LP305231U6R	WHITE	LAY-IN	--	--	10
EM	⊞	EMERGENCY LIGHT	--	TOP 24" ABOVE DOOR OR SUSPEND BOT 12'-0" AT OPEN CEILING			SEE ELEC SHEETS
TL	⊞	'ALPHABET' NU6 6" ROUND DOWNLIGHT	WHITE	RECESSED	--	--	61
TL2	⊞	ALPHABET BETA6 6" CYLINDER STANDARD WHITE	WHITE	SUSPENDED SEE 3/A200	--	--	9
TS	—	'PHILIPS' 4" LINEAR STRIP LED	WHITE	UNISTRUT RAILS 11'-0"	--	--	3
X	→	EXIT SIGN	WHITE	TOP 24" ABOVE DOOR OR SUSPEND BOT 12'-0" AT OPEN CEILING	--	--	20
XA	→	DIRECTIONAL EXIT SIGN	WHITE	TOP 24" ABOVE DOOR OR SUSPEND BOT 12'-0" AT OPEN CEILING	--	--	20
XA	→	EXIT SIGN / EM COMBO	WHITE	TOP 24" ABOVE DOOR OR SUSPEND BOT 12'-0" AT OPEN CEILING	--	--	20

NOTES:

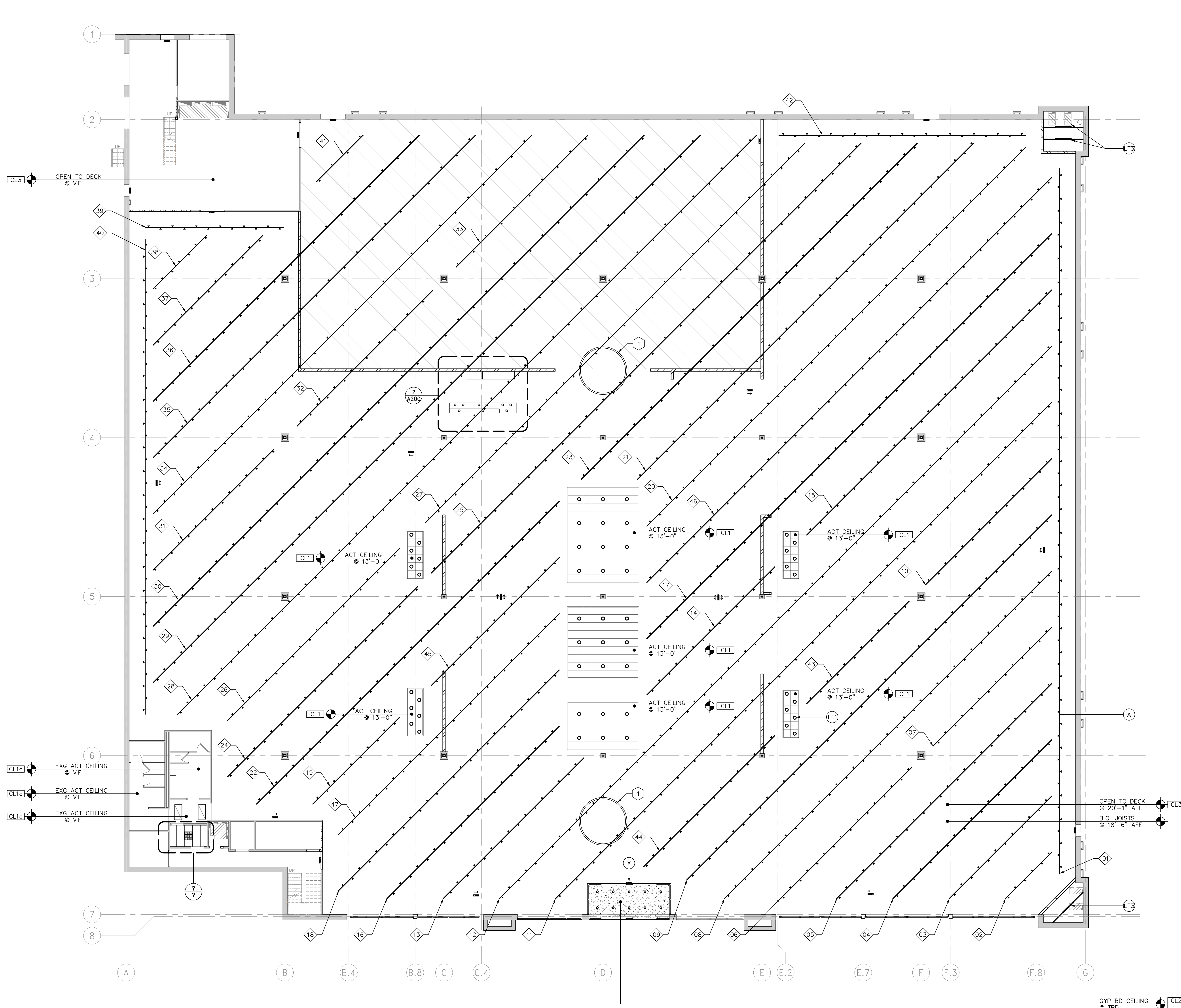
1. "N/L" INDICATES NIGHT LIGHT FIXTURES. COORDINATE WITH ELEC SHEETS.
2. ALL LIGHT FIXTURES PROVIDED AND INSTALLED BY GC.
3. ALL TRACK LIGHTING (FIXTURE 'A') PROVIDED BY SLUMBERLAND AND INSTALLED BY GC.
4. EXG FIXTURES TO BE CLEANED TO "LIKE-NEW" CONDITION AND RELAMPED BY GC. REBALLAST AS REQUIRED.

CEILING GENERAL NOTES

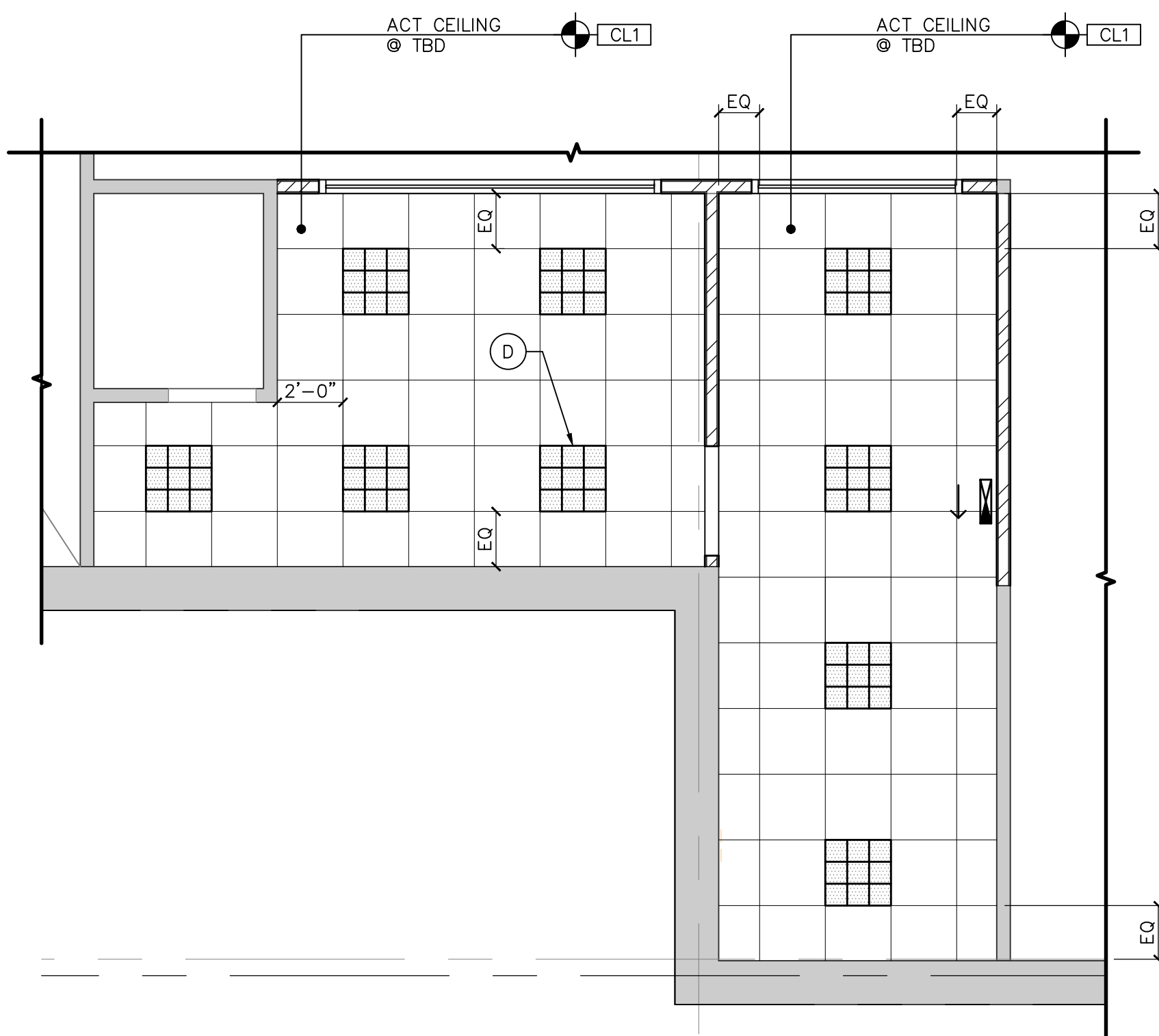
1. ARCHITECTURAL DRAWINGS DETERMINE LUMINAIRE LOCATION AND OTHER ARCHITECTURAL ITEMS AND SUPERSEDE ALL OTHER CEILING APPURTENANCES, SUCH AS DIFFUSER LOCATIONS.
2. PROVIDE ADEQUATE CLEARANCES FOR DUCTS AND RELATED APPURTENANCES NECESSARY TO MAINTAIN THE SPECIFIED HEIGHTS FOR CLG SYSTEMS AND LIGHT FIXTURES.
3. PROVIDE CEILING ACCESS PANELS IN GYP BD CEILINGS AS REQ BY ENGINEERS AND FOR ANY EXG LANDLORD EQUIPMENT, PAINT TO MATCH ADJACENT CEILING FINISH.
4. PROVIDE HANGER AND SAFETY WIRE FOR LIGHT FIXTURES, SPEAKERS, AND AIR SUPPLY/RETURN DIFFUSERS (AS REQUIRED PER LOCAL CODE).
5. ALL PIPES/CONDUIT/DUCTWORK IS TO BE GANGED TOGETHER AND PARALLEL AND PERPENDICULAR TO DEMISING WALLS. ANGLED ITEMS ARE NOT ALLOWED.

FIRE PROTECTION GENERAL NOTES

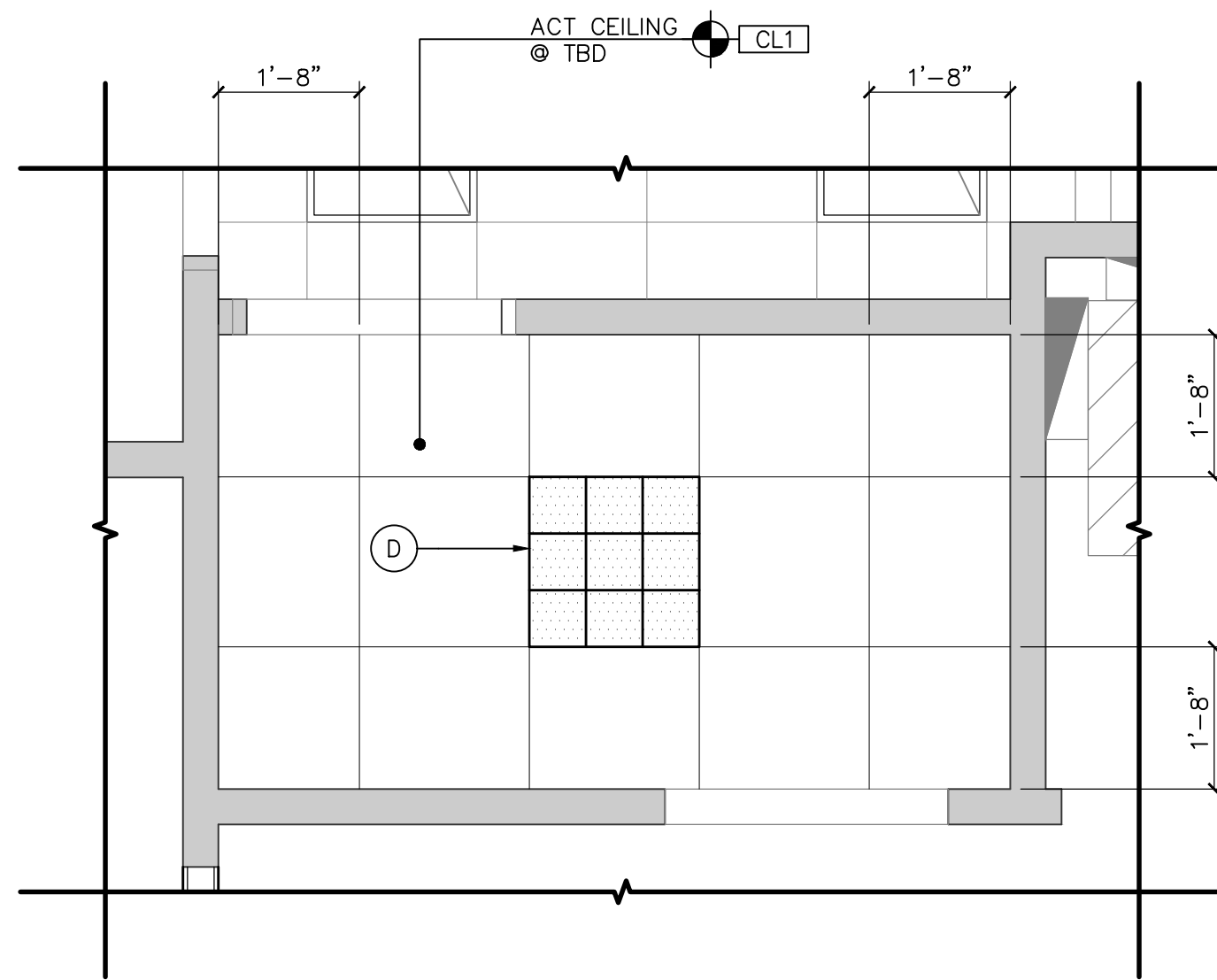
1. FIRE SPRINKLER / FIRE ALARM DESIGN, IF REQ, SHALL BE CONDUCTED BY A STATE CERTIFIED DESIGNER. USE LANDLORD REQ VENDOR.
2. FIRE PROTECTION CONTRACTOR (SPRINKLER/ALARM) SHALL SUBMIT SHOP DRAWINGS TO LANDLORD AND ALL APPLICABLE CODE OFFICIALS AS REQ FOR APPROVAL/PERMITS.
3. SPRINKLER UPGRADES MAY BE REQUIRED FOR CLASS A PLASTICS, RACK STORAGE AND HIGH PILED STORAGE.
4. DESIGNER SHALL USE THE CEILING PLAN FOR LAYOUT TO COORDINATE SPRINKLER HEAD LOCATIONS AND ALTERATIONS TO AVOID CONFLICTS WITH EXG CONDITIONS AND MECH/ELEC SYSTEMS.
5. IT IS THE INTENTION THAT WHERE POSSIBLE, EXG HEADS AND HEAD TYPES ARE TO REMAIN REGARDLESS OF PREFERRED HEAD TYPE AS DESCRIBED HEREIN. COORDINATE WITH TENANT IF DISCREPANCIES EXIST.
6. IT IS THE INTENT THAT SPRINKLER MAIN AND BRANCH LINES WILL NOT BE RELOCATED. SPRINKLER HEADS WILL NEED TO BE (RE)LOCATED AS REQ BY CHANGES IN THE CEILING/STORE DESIGN FROM THE CURRENT STANDARDS.
7. WHERE NEW HEADS ARE REQ, PROVIDE CONCEALED/FULLY-RECESSED HEADS WITH WHITE COVERS AT ALL GYP BD AND ACT CEILING AREAS.
8. WHERE NEW HEADS ARE REQ, PROVIDE UPTURNED HEADS AND EXTENSIONS AS NECESSARY AT LOCATIONS WHERE SPRINKLER MAIN AND BRANCH LINES ARE BELOW THE CEILING AND AT OPEN-TO-DECK CONDITIONS.
9. ANY NEW WORK TO SPRINKLER HEADS OR OTHER NEW WORK PENETRATIONS OF THE SUSPENDED CEILING SHALL HAVE A 2" DIA OVERSIZE RING, SLEEVE, OR ADAPTOR THROUGH THE CEILING TILE FOR FREE MOVEMENT OF AT LEAST 1" IN ALL HORIZONTAL DIRECTIONS.



1 REFLECTED CEILING PLAN
SCALE: 3/32" = 1'-0"



1 SECOND LEVEL REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"



2 ENLARGED EQUIP ROOM RCP
SCALE: 1/2" = 1'-0"

REFLECTED CEILING PLAN KEYED NOTES

- 1 'HALO' FIXTURE SUSPENDED AT 10'-0" - PROVIDED BY SLUMBERLAND, INSTALLED BY GC.

CEILING TYPE SCHEDULE

TAG	DESCRIPTION
CL1	'ARMSTRONG' 24"x24" 'DUNE' TILES W/ ANGLED REGULAR 15/16" EXPOSED SUSPENSION SYSTEM.
CL1a	EXG ACOUSTICAL CEILING SYSTEM TO REMAIN. REPLACE ANY DAMAGED TILES.
CL2	5/8" TYPE 'X' GYP BD OVER 3 5/8" MTL STUD FRAMING OR SUSPENSION SYSTEM.
CL3	OPEN--TO--DECK CONDITION. ALL CONDUIT TO BE GANGED OR PARALLEL TO WALLS.

LIGHT FIXTURE / ACCESSORY SCHEDULE

TAG	SYMBOL	DESCRIPTION	COLOR	MOUNT TYPE	EXG	RELO	NEW
A	▼	'BRUCK' GX 10 2" SPOT TRACK LIGHT	WHITE	SUSPENDED 14'-0"			SEE QTY SCHEDULE
D	■	'DAY-BRITE' #2LP305231U6R	WHITE	LAY-IN	--	--	10
EM	⬆	EMERGENCY LIGHT	--	TOP 24" ABOVE DOOR OR SUSPEND BOT 12'-0" AT OPEN CEILING			SEE ELEC SHEETS
LT	○	'ALPHABET' NU6 6" ROUND DOWNLIGHT	WHITE	RECESSED	--	--	61
LTa	○	ALPHABET BETAB 6" CYLINDER STANDARD WHITE	WHITE	SUSPENDED SEE 3/A200	--	--	9
LS	—	'PHILIPS' 4' LINEAR STRIP LED	WHITE	UNISTRUT RAILS 11'-0"	--	--	3
X	→	EXIT SIGN	WHITE	TOP 24" ABOVE DOOR OR SUSPEND BOT 12'-0" AT OPEN CEILING	--	--	20
XA	↔	DIRECTIONAL EXIT SIGN	WHITE	TOP 24" ABOVE DOOR OR SUSPEND BOT 12'-0" AT OPEN CEILING	--	--	20
		EXIT SIGN / EM COMBO	WHITE	TOP 24" ABOVE DOOR OR SUSPEND BOT 12'-0" AT OPEN CEILING	--	--	--

NOTES:

- "N/L" INDICATES NIGHT LIGHT FIXTURES. COORDINATE WITH ELEC SHEETS.
- ALL LIGHT FIXTURES PROVIDED AND INSTALLED BY GC.
- ALL TRACK LIGHTING (FIXTURE 'A') PROVIDED BY SLUMBERLAND AND INSTALLED BY GC.
- EXG FIXTURES TO BE CLEANED TO "LIKE-NEW" CONDITION AND RELAMPED BY GC. REBALLAST AS REQUIRED.

CEILING GENERAL NOTES

- ARCHITECTURAL DRAWINGS DETERMINE LUMINAIRE LOCATION AND OTHER ARCHITECTURAL ITEMS AND SUPERSEDE ALL OTHER CEILING APPURTENANCES, SUCH AS DIFFUSER LOCATIONS.
- PROVIDE ADEQUATE CLEARANCES FOR DUCTS AND RELATED APPURTENANT ITEMS NECESSARY TO MAINTAIN THE SPECIFIED HEIGHTS FOR CLG SYSTEMS AND LIGHT FIXTURES.
- PROVIDE CEILING ACCESS PANELS IN GYP BD CEILINGS AS REQ BY ENGINEERS AND FOR ANY EXG LANDLORD EQUIPMENT. PAINT TO MATCH ADJACENT CEILING FINISH.
- PROVIDE HANGER AND SAFETY WIRE FOR LIGHT FIXTURES, SPEAKERS, AND AIR SUPPLY/RETURN DIFFUSERS (AS REQUIRED PER LOCAL CODE).
- ALL PIPES/CONDUIT/DUCTWORK IS TO BE GANGED TOGETHER AND PARALLEL AND PERPENDICULAR TO DEMISING WALLS. ANGLED ITEMS ARE NOT ALLOWED.

FIRE PROTECTION GENERAL NOTES

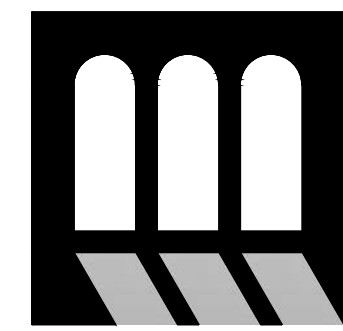
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- WHERE NEW HEADS ARE REQ, PROVIDE CONCEALED/FULLY-RECESSED HEADS WITH WHITE COVERS AT ALL GYP BD AND ACT CEILING AREAS.
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DATE: 8/19/24

JOB NO: 2431.01

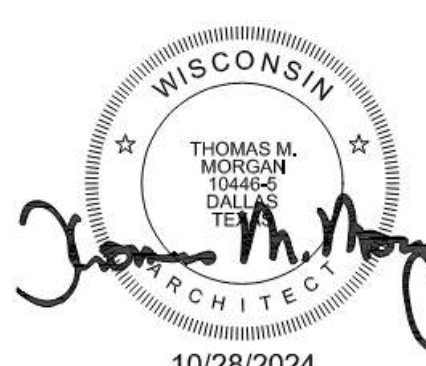
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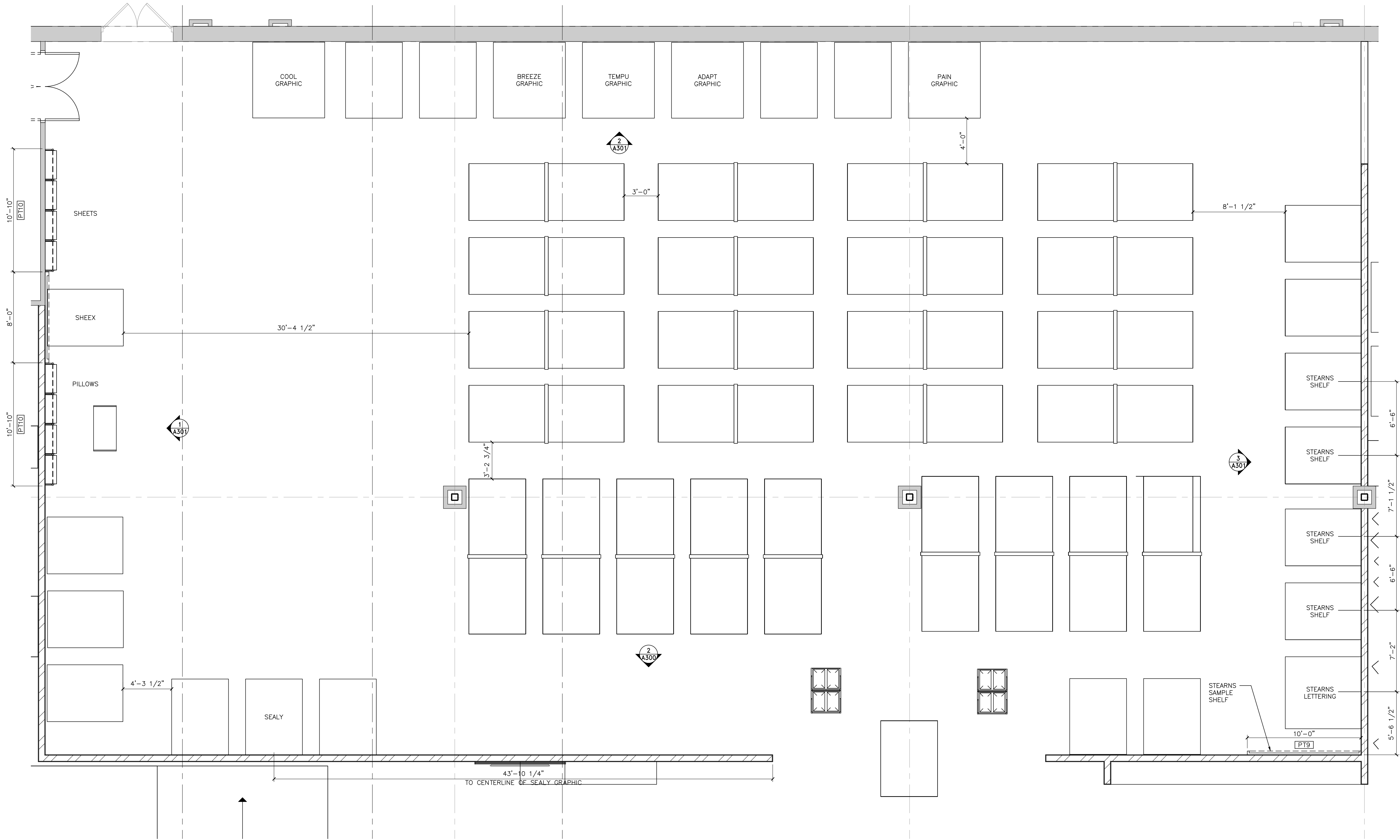
REVISIONS

TAG	DATE	DESCRIPTION
	10/25/24	PERMIT

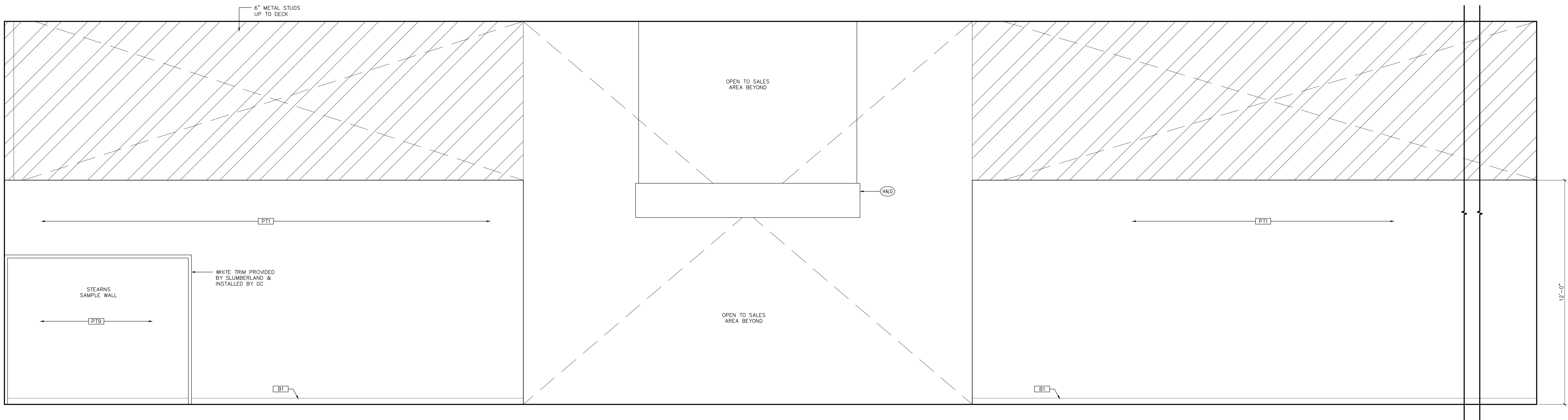
ENLARGED
REFLECTED CEILING
PLAN

SHEET NUMBER

A201



1 SLEEP SOLUTION ENLARGED PLAN
SCALE: 1/4" = 1'-0"



2 INTERIOR ELEVATION - SLEEP SOLUTION
SCALE: 1/2" = 1'-0"

INSTALLATION TEAM GENERAL NOTES

- INSTALLATION TEAM TO VERIFY MEASUREMENTS & LAYOUT PRIOR TO INSTALLATION.
- PILLOWS & SHEETS OUTRIGGERS ARE TO BE CENTERED WITHIN DESIGNATED PAINTED AREA.
- ALL TOP OF SEG/S TO BE INSTALLED @ 8'-6" AFF, OR JUST BELOW THE WOODEN TRIM LINE IF EXISTS.
EXCEPT THE CENTER OF TEMPU SEG WILL BE @ 9'-0".
- SEALY SEG/S TO BE CENTERED ACCORDING TO THE FLOOR PLAN.
- CENTRAL TEMPU SEGs TO BE CENTERED ACCORDING TO THE FLOOR PLAN.
- COOL & PAIN TEMPU GRAPHICS TO BE CENTERED TO THE MATTRESS BELOW.
- TRIM KITS, IF APPLICABLE, TO BE CENTERED ACCORDING TO THE FLOOR PLAN.
- BOTTOM OF THE SHEETS TO BE INSTALLED @ 4'-6" AFF.
- BOTTOM OF THE HALO IS TO BE INSTALLED @ 10'-0" AFF, UNO.
- STEARNS SHELVING TO BE 52" AFF.
- STACKED STEARNS & FOSTER LETTERING TO BE 68" AFF TO CENTER, ABOVE BED DIRECTLY ADJACENT TO STEARNS WALL. (KING SIZE BED)
- BOTH STEARNS SHELVING AND LETTERING TO BE CENTERED ABOVE BEDS.

IMPORTANT NOTES

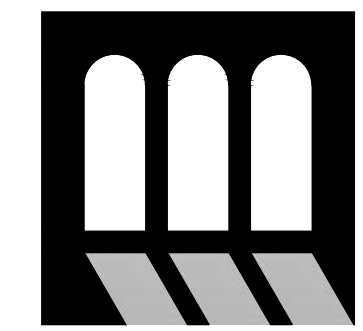
- ALL DIMENSIONS ARE FROM FINISH TO FINISH.

DATE: 10/25/24

JOB NO: 2431.01

DRAWN: STAFF

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REVISIONS

TAG	DATE	DESCRIPTION
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SLEEP SOLUTION
ENLARGED PLAN &
ELEVATION

SHEET NUMBER

A300

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REVISIONS		
TAG	DATE	DESCRIPTION
	10/25/24	PERMIT

KEEP SOLUTION ELEVATIONS

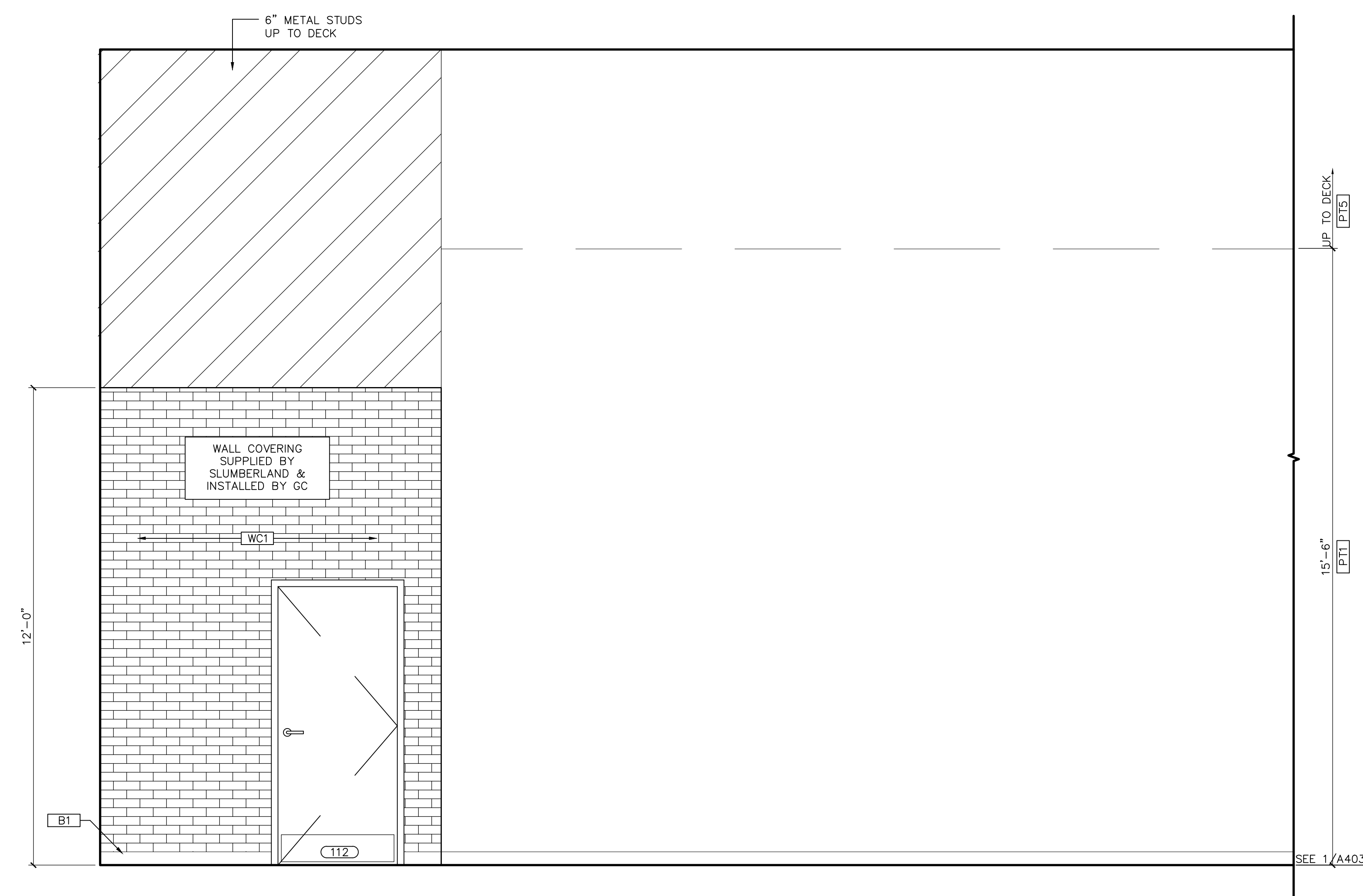
SHEET NUMBER

A301



- * INSTALLATION TEAM TO VERIFY MEASUREMENTS & LAYOUT PRIOR TO INSTALLATION.
- * PILLOWS & SHEETS OUTRIGGERS ARE TO BE CENTERED WITHIN DESIGNED PAINTED AREA.
- * ALL TOP OF SEG/G TO BE INSTALLED @ 8'-6" AFF, OR JUST BELOW THE WOODEN TRIM LINE IF EXISTS:
EXCEPT THE CENTER OF TEMPUS SEG WILL BE 9'-0"
- * SEALY SEG/G TO BE CENTERED ACCORDING TO THE FLOOR PLAN.
- * CENTRAL TEMPUS SEG/G TO BE CENTERED ACCORDING TO THE FLOOR PLAN.
- * COOL & PAIN TEMP GRAPHICS TO BE CENTERED TO THE MATTRESS BELOW.
- * TRIM KITS, IF APPLICABLE, TO BE CENTERED ACCORDING TO THE FLOOR PLAN.
- * BOTTOM OF THE SHEERS TO BE INSTALLED @ 4'-6" AFF.
- * BOTTOM OF THE HALO IS TO BE INSTALLED @ 10'-0" AFF, UNO.
- * STEARNS SHELIVING TO BE 52" AFF.
- * STACKED STEARNS & FOSTER LETTERING TO BE 68" AFF TO CENTER, ABOVE BED DIRECTLY ADJACENT TO STEARNS WALL. (KING SIZE BED)
- * BOTH STEARNS SHELIVING & LETTERING TO BE CENTERED ABOVE BEDS.

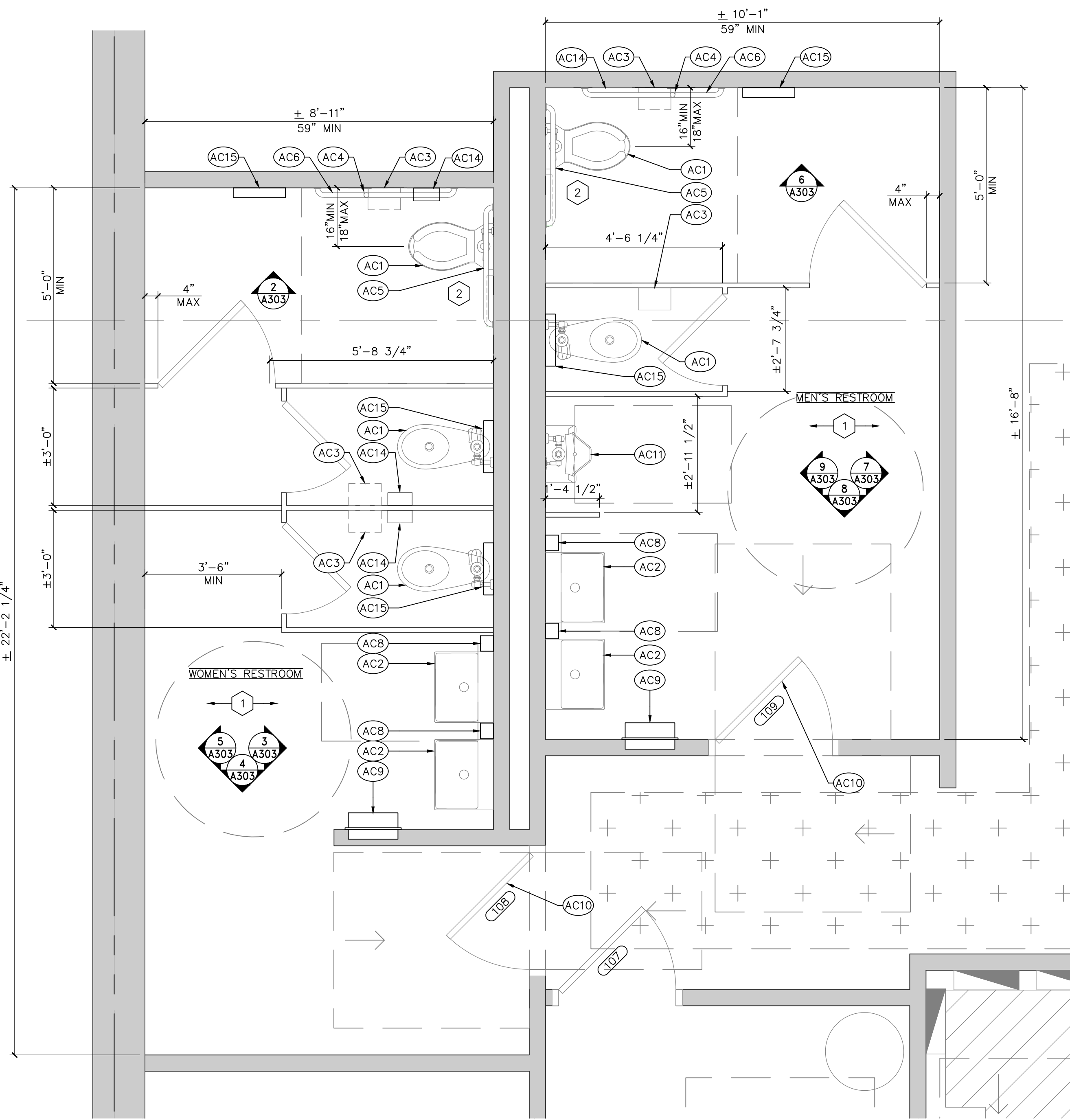
• ALL DIMENSIONS ARE FROM FINISH TO FINISH.



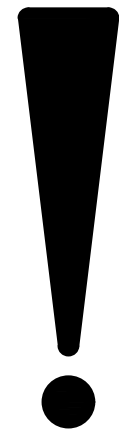
1 RECLINER GALL
A302 SCALE: 1/4" = 1'-0"

3 INTERIOR ELEV.
A302 SCALE: 1/2" = 1'-0"





GC SHALL VERIFY PLACEMENT OF ALL TOILET ROOM PLUMBING FIXTURES, ACCESSORIES, AND PARTITIONS. ADA GOVERNS EXACT LOCATION OF THESE ITEMS. RELOCATE/PLACE ITEMS PRECISELY AS LOCATED.



- RESTROOM KEYED NOTES**
- VERIFY CONDITION OF EXO TOILET PARTITIONS AND REPLACE PER PLAN IF IN POOR CONDITION. COORDINATE W/ TENANT.
 - FIELD VERIFY FLUSH CONTROL IS LOCATED ON THE OPEN SIDE OF WATER CLOSET. IF NOT COMPLIANT, FIXTURE SHALL BE REPLACED.

TOILET ROOM ACCESSORY SCHEDULE					
TAG	ITEM	MODEL #	NOTES	EXO	RELO/NEW
AC1	TOILET	---	---	M/W	
AC2	SINK	---	INSULATE LAVATORY PIPE	M/W	
AC3	TOILET PAPER DISPENSER	BOBRICK #B-2885	---	M/W	
AC4	18" GRAB BAR	BOBRICK #B-6806x18	---	M/W	
AC5	36" GRAB BAR	BOBRICK #B-6806x36	---	M/W	
AC6	42" GRAB BAR	BOBRICK #B-6806x42	---	M/W	
AC7	MIRROR	BOBRICK #B-2906-1830	---	M/W	
AC8	SOAP DISPENSER	AIKE AUTOMATIC SOAP DISPENSER	PROVIDED BY SLUMBERLAND AND INSTALLED BY GC.	M/W	
AC9	PAPER TOWEL DISPENSER	BOBRICK #B-29744	SEE DETAIL ON THIS SHEET FOR MOUNTING HEIGHT	M/W	
AC10	ADA SIGNAGE	---	SEE DETAIL ON THIS SHEET	M/W	
AC11	URINAL	---	---	M	W
AC12	NOT USED	---	---		
AC13	NOT USED	---	---		
AC14	SANITARY NAPKIN DISPOSAL	BOBRICK #B-254	ONLY IN WOMEN'S		W M
AC15	TOILET SEAT COVER DISPENSER	BOBRICK #B-4221	---	M/W	

- GENERAL NOTES**
- PLACEMENT OF ALL TOILET ROOM FIXTURES AND ACCESSORIES IS CRITICAL. ADA GOVERNS EXACT LOCATION OF MANY OF THESE ITEMS. PLACE ITEMS PRECISELY AS INDICATED.
 - M = MEN'S / W = WOMEN'S

ACCESSIBLE TOILET ROOM SIGNAGE

RESTROOM SIGNS TO BE COMPLIANT AND LOCATED PER 2020 MN ACCESSIBILITY CODE, CHAPTER 7

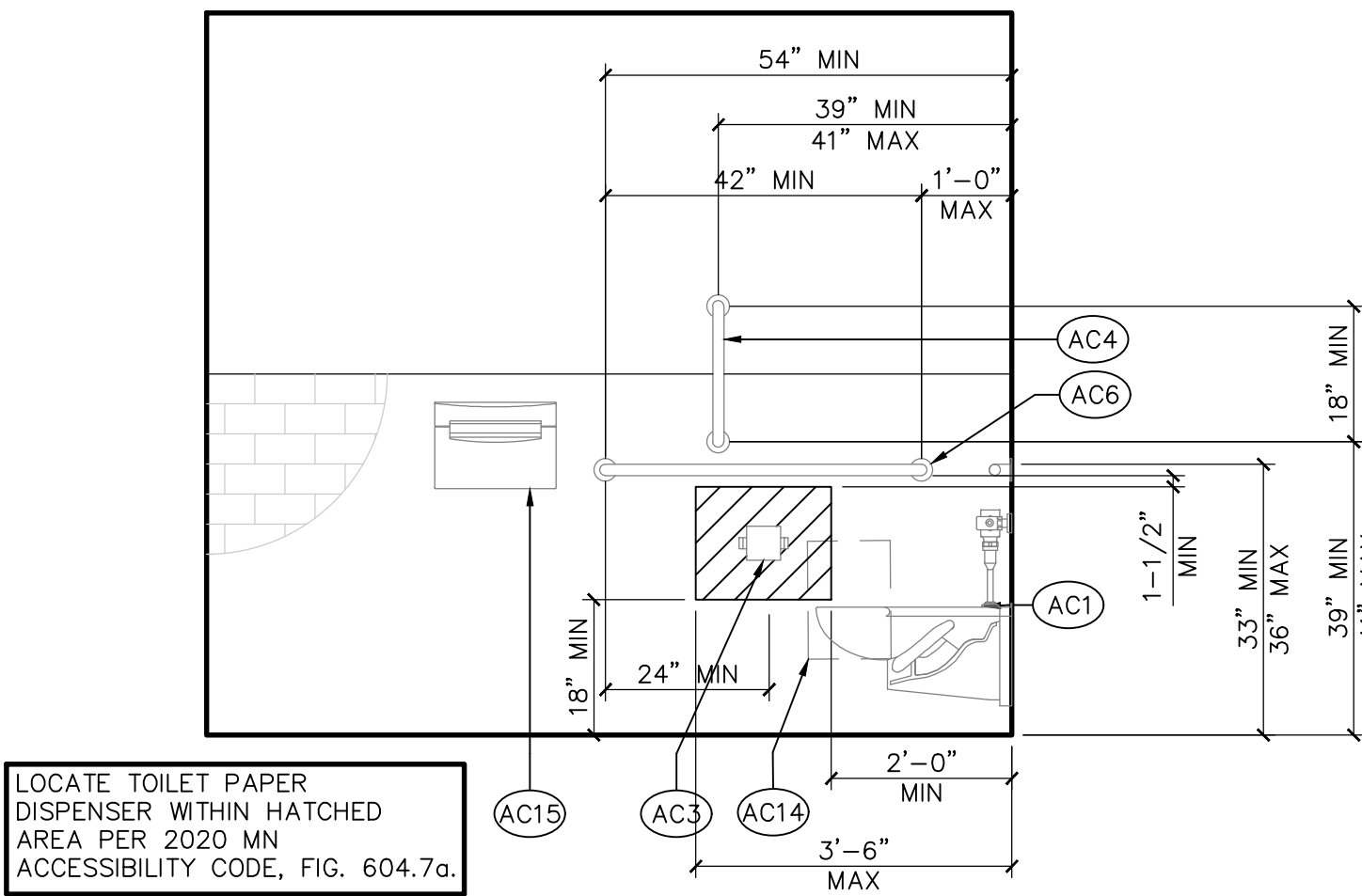
1/4" THICK SIGNS
GRADE 2 BRAILLE

NOTES:

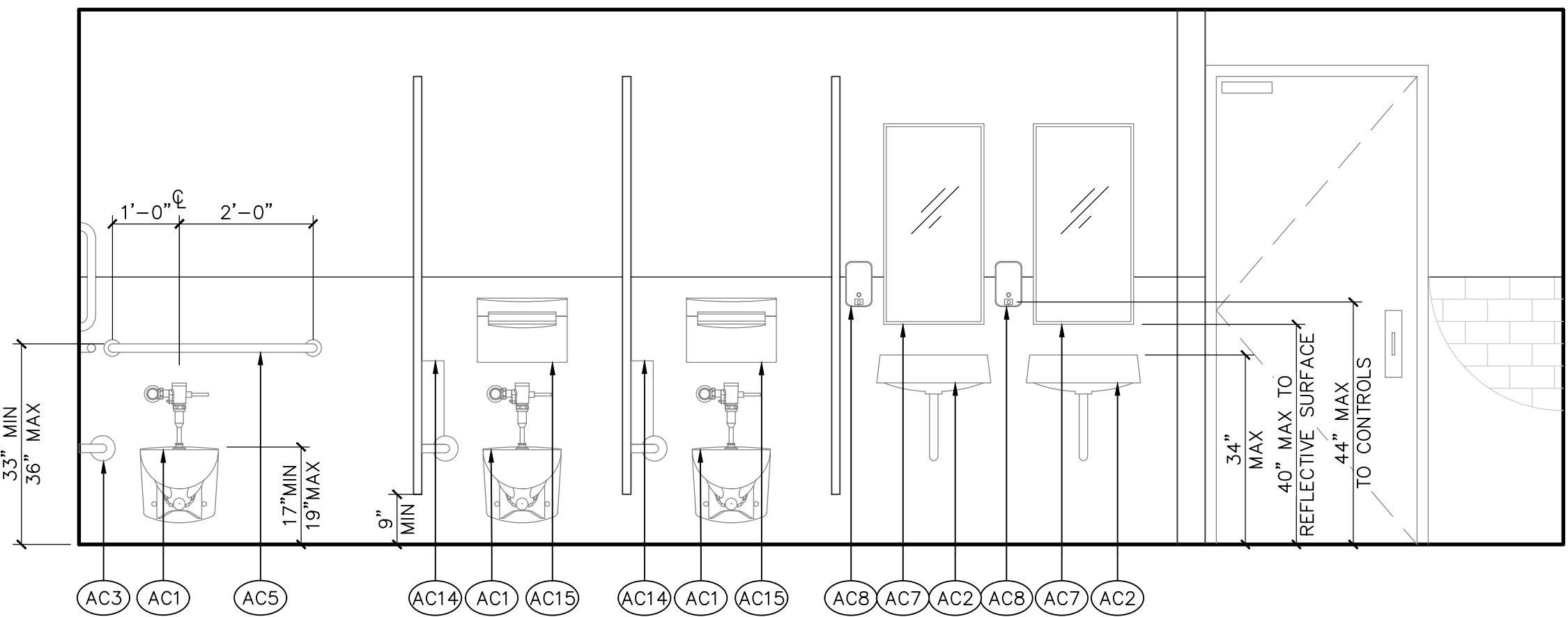
- CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND
- RAISED CHARACTERS SHALL BE 48" MIN. ABOVE THE FLOOR MEASURED TO THE BASELINE OF THE LOWEST RAISED CHARACTER AND 60" MAXIMUM ABOVE THE FLOOR. MEASURED TO THE BASELINE OF THE HIGHEST RAISED CHARACTER.
- SYMBOLS ARE TO BE DISTINCTLY DIFFERENT FROM THE DOOR IN COLOR AND CONTRAST
- PROVIDE ROOM IDENTIFICATION SIGN ON LATCH SIDE OF DOOR. LETTERS AND NUMBERS ON SIGNS SHALL BE RAISED 1/32" MIN. AND SHALL BE A MIN. OF 5/8" TALL. LETTERS SHALL BE SANS-SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE
- LOCATE RAISED AND BRAILLE CHARACTERS, SIGNS ON THE WALL NEAREST TO THE LATCH SIDE OF THE DOOR
- EXCEPTION: SIGNS CONTAINING RAISED CHARACTERS AND BRAILLE SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICES.

10 SIGNAGE
A303 NOT TO SCALE

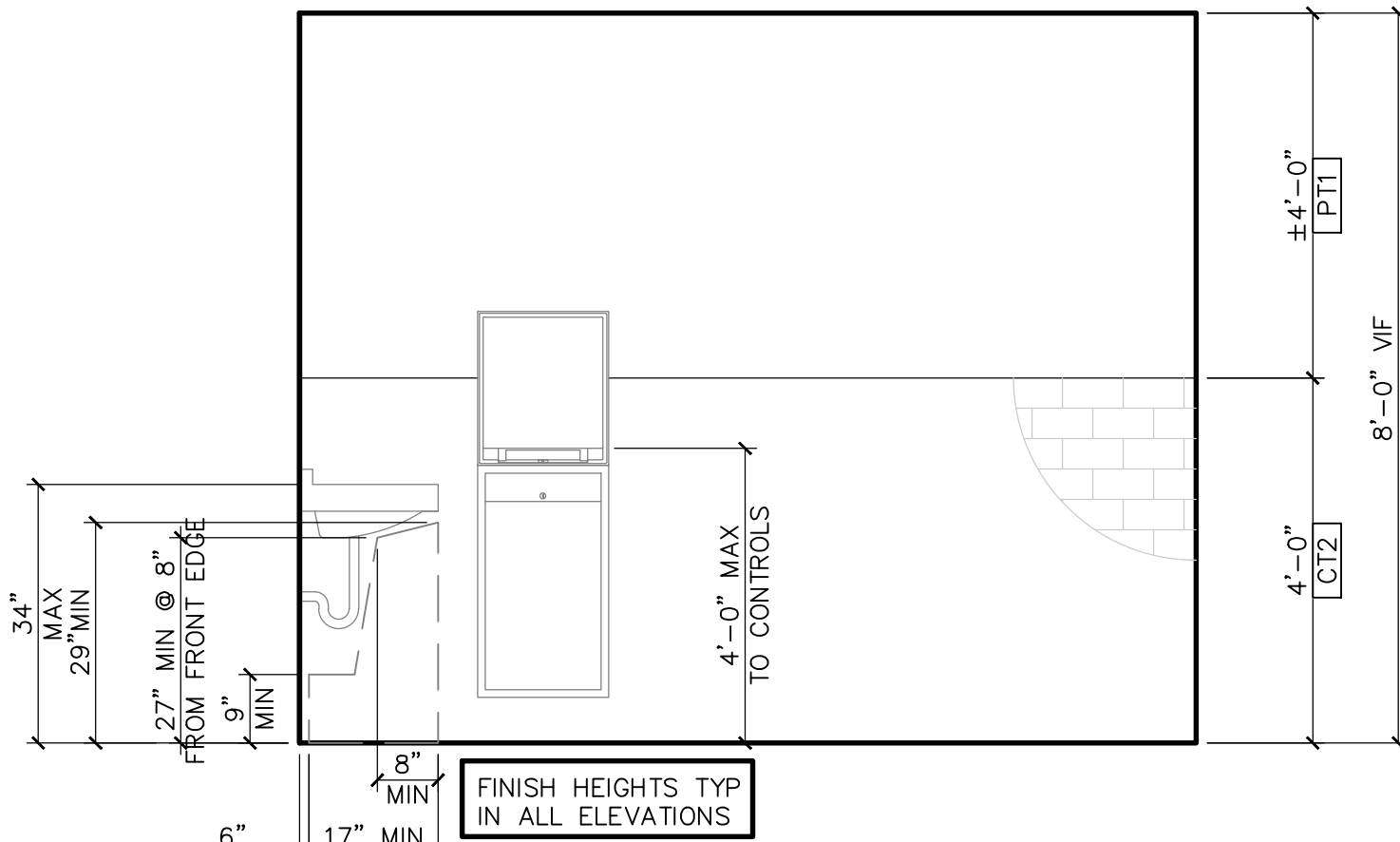
1 ENLARGED TOILET ROOM PLAN
A303 SCALE: 1/2" = 1'-0"



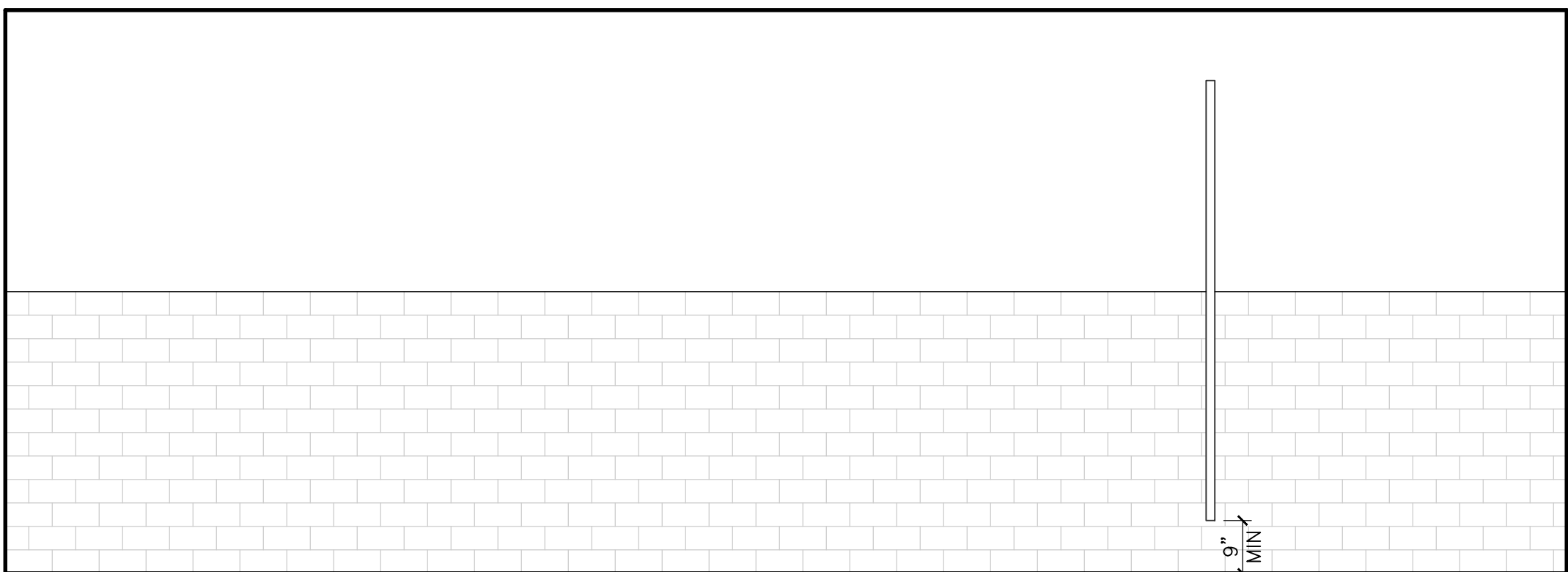
2 WOMEN TOILET ROOM ELEVATION
A303 SCALE: 1/2" = 1'-0"



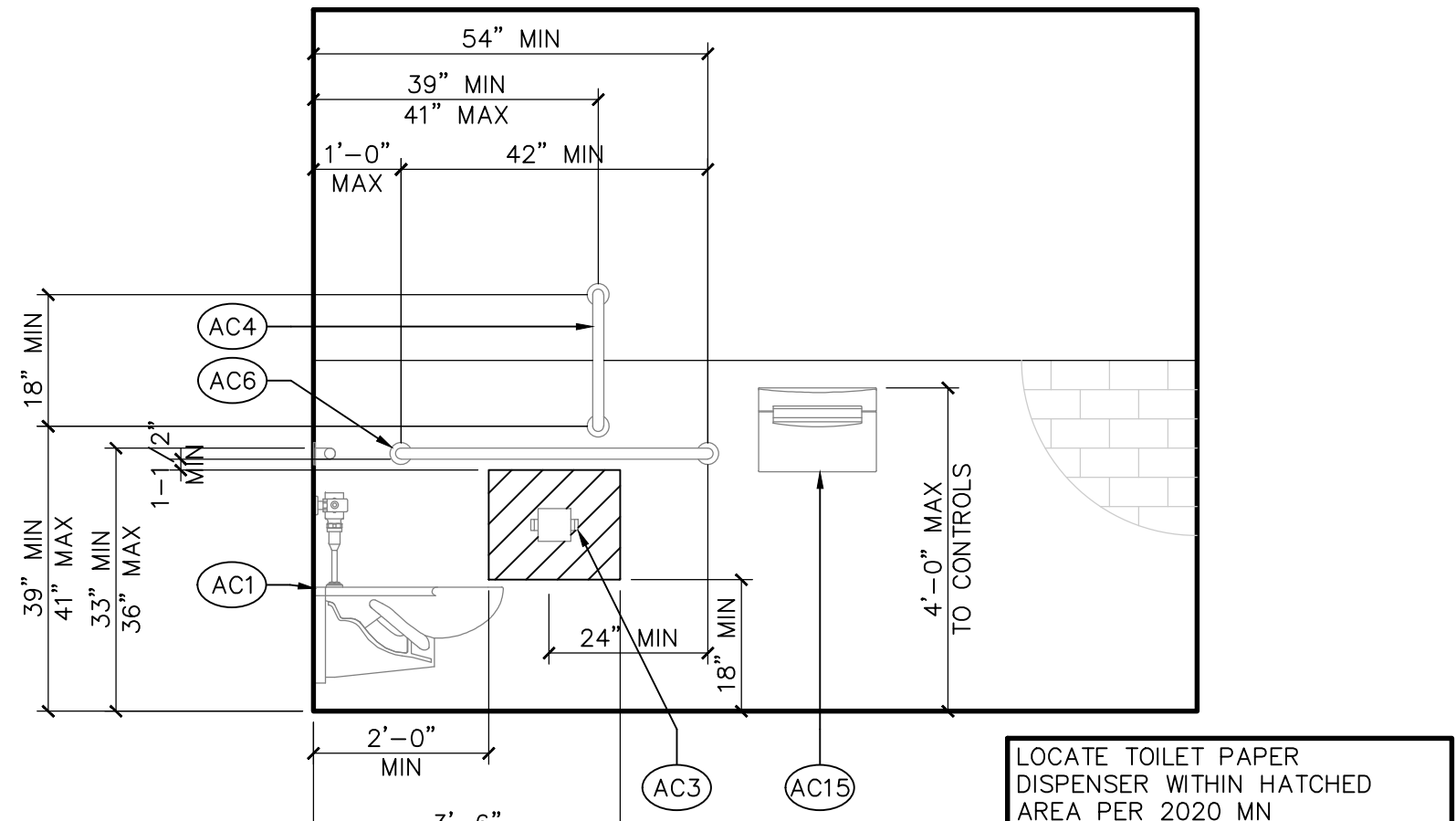
3 WOMEN TOILET ROOM ELEVATION
A303 SCALE: 1/2" = 1'-0"



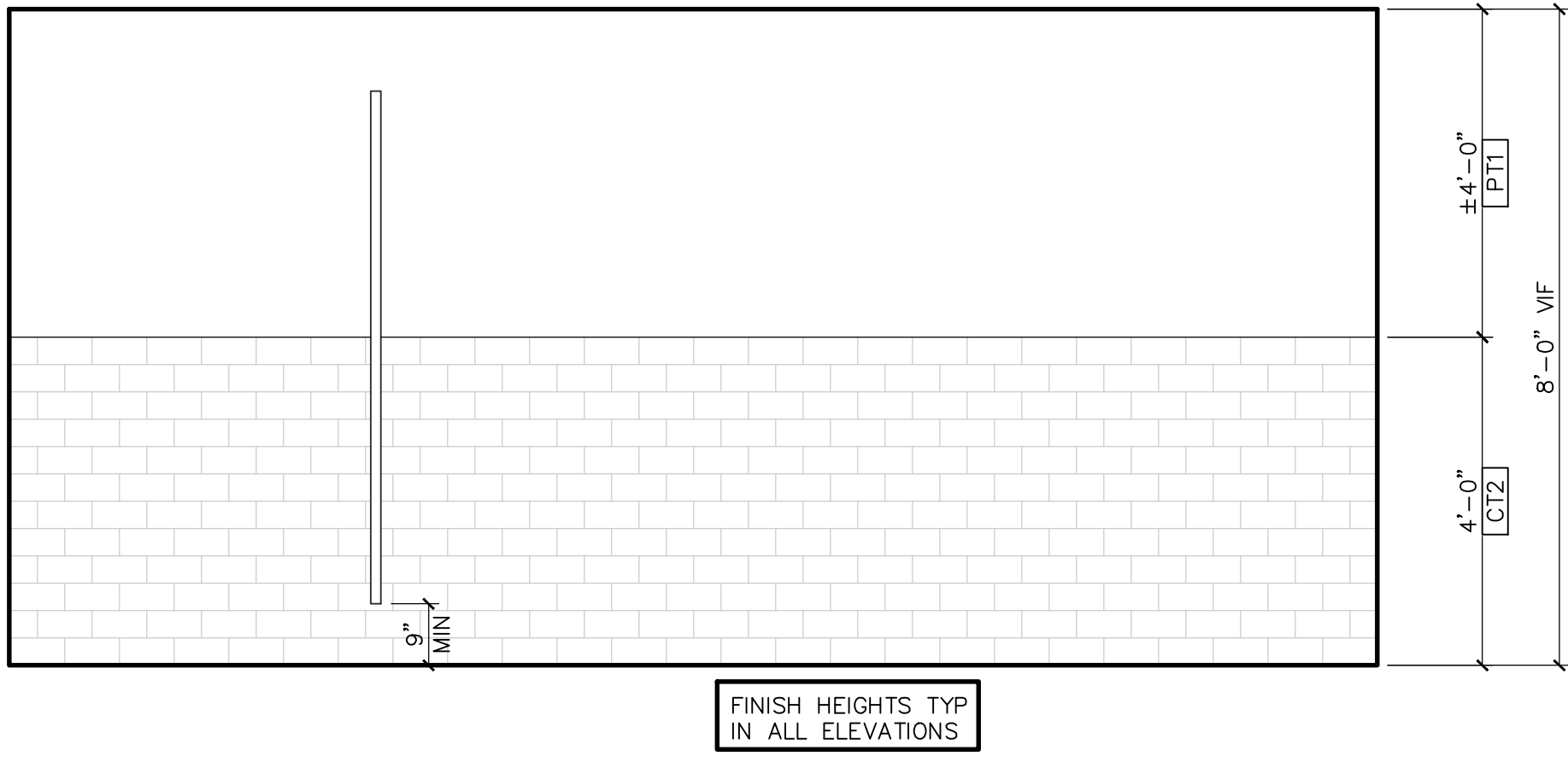
4 WOMEN TOILET ROOM ELEVATION
A303 SCALE: 1/2" = 1'-0"



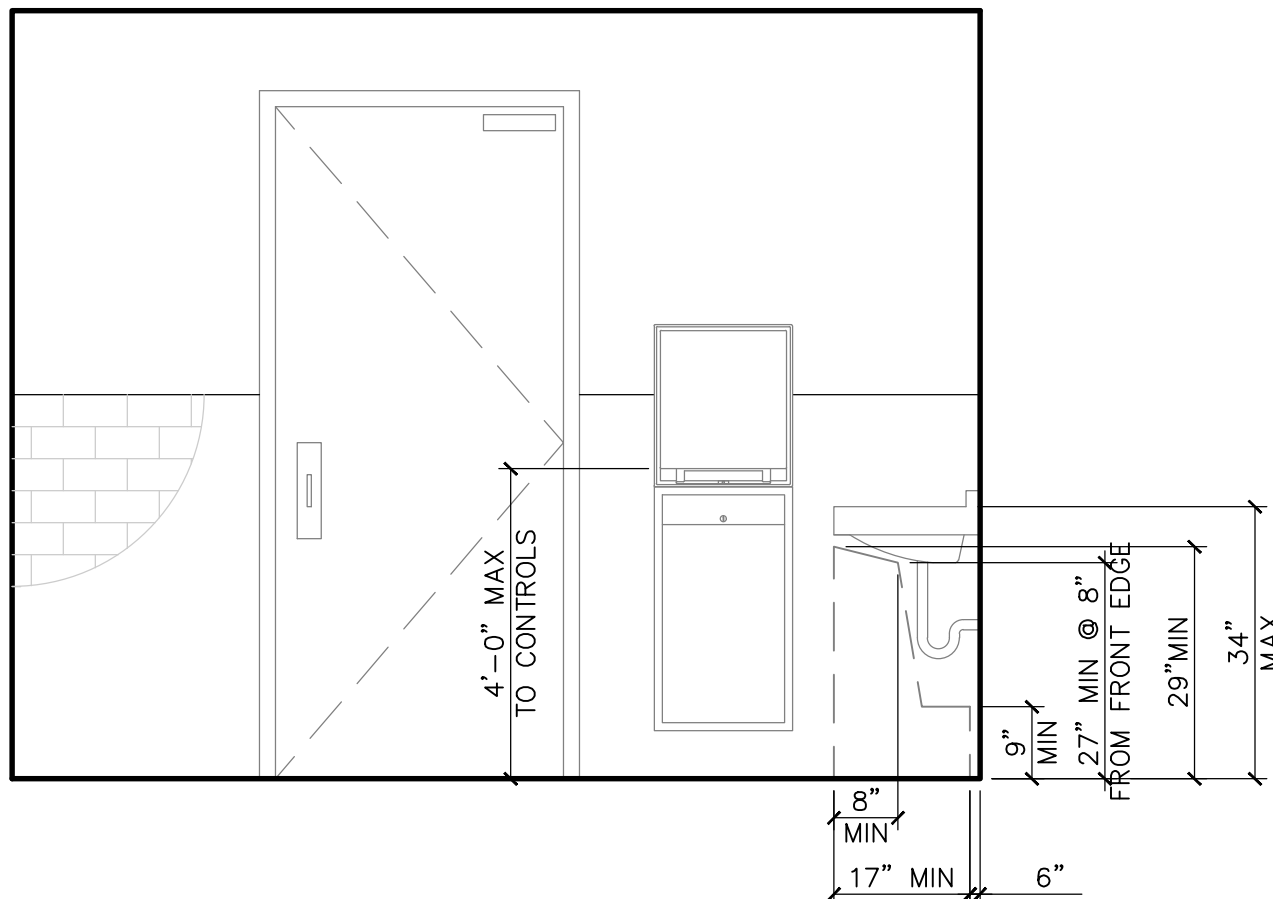
5 WOMEN TOILET ROOM ELEVATION
A303 SCALE: 1/2" = 1'-0"



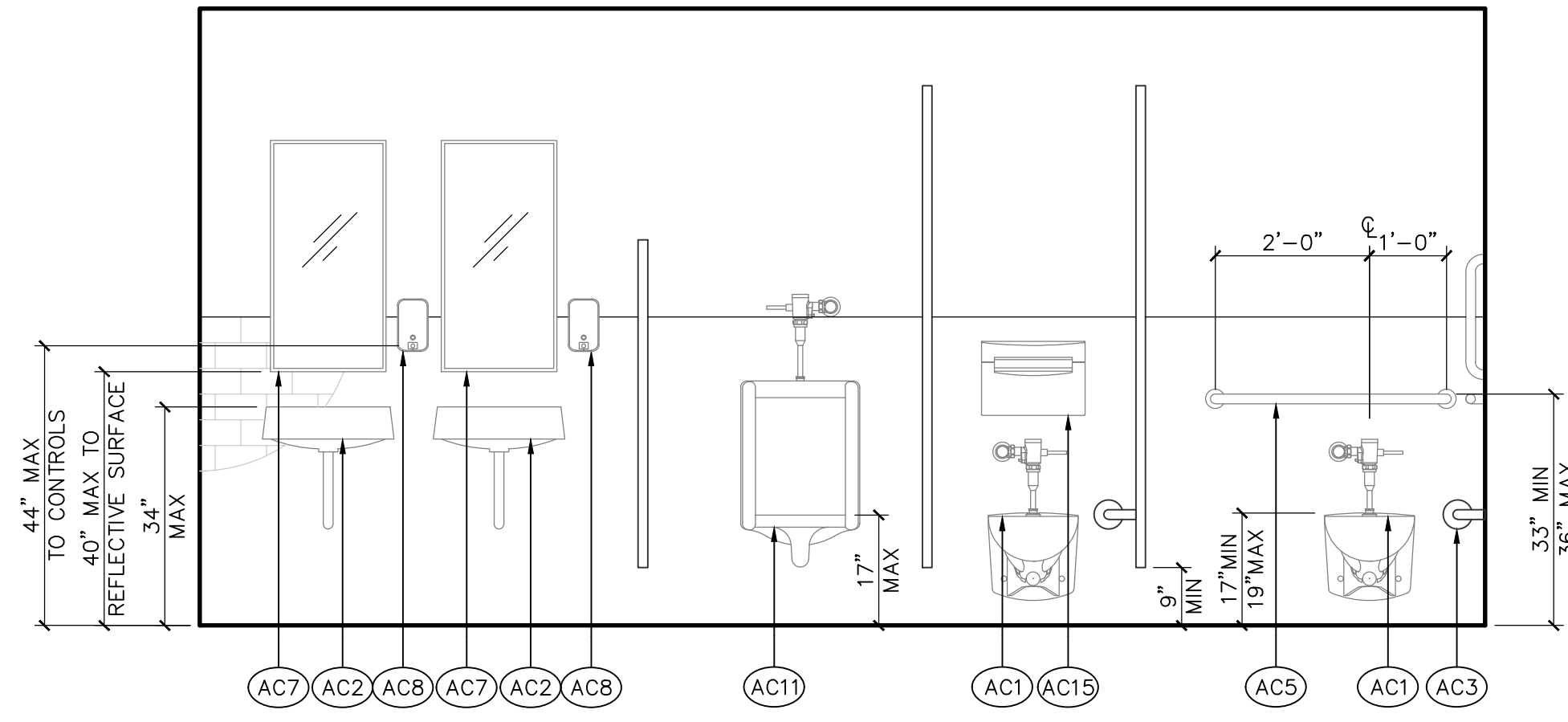
6 MEN TOILET ROOM ELEVATION
A303 SCALE: 1/2" = 1'-0"



7 MEN TOILET ROOM ELEVATION
A303 SCALE: 1/2" = 1'-0"

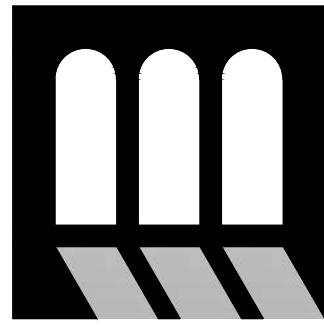


8 MEN TOILET ROOM ELEVATION
A303 SCALE: 1/2" = 1'-0"



9 MEN TOILET ROOM ELEVATION
A303 SCALE: 1/2" = 1'-0"

DATE: 9/19/24
JOB NO: 2431.01
DRAWN: STAFF
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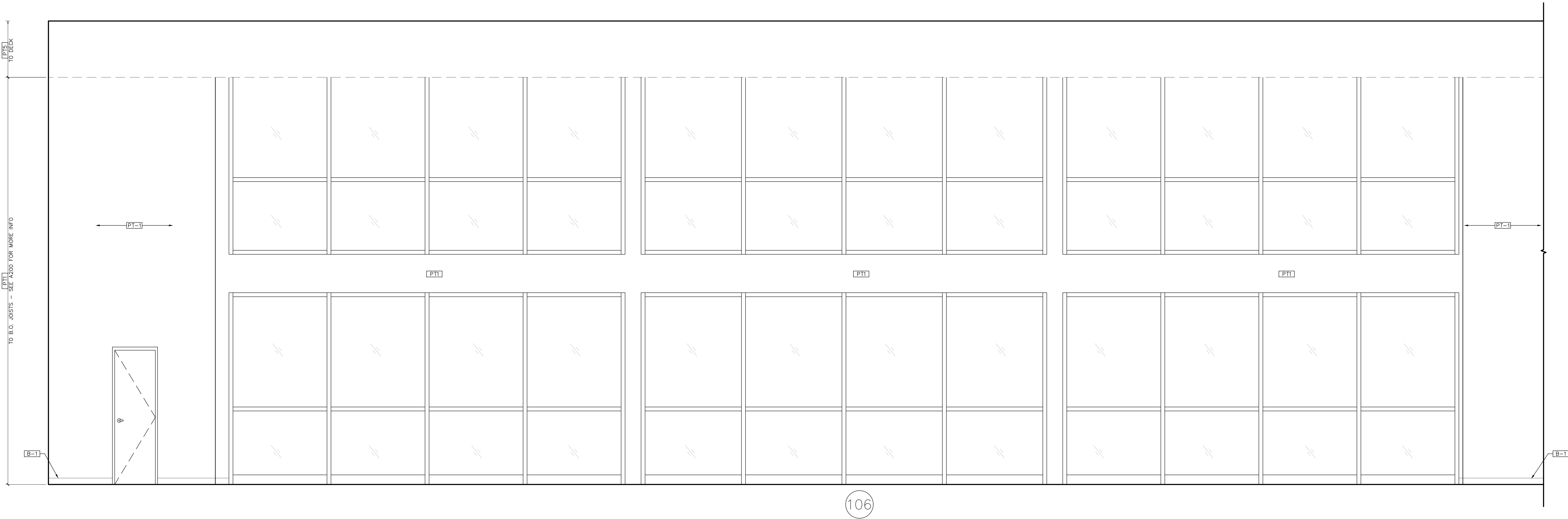


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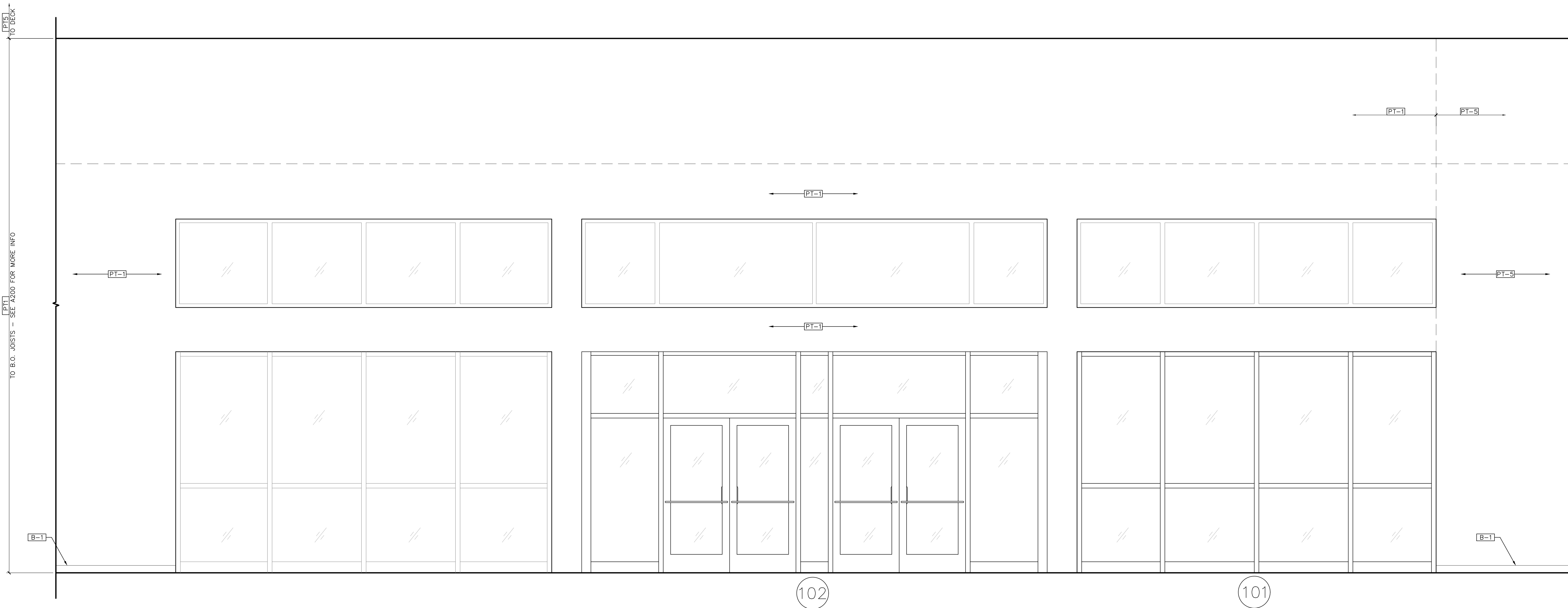
RESTROOM PLAN
&
ELEVATIONS

SHEET NUMBER

A303



1
A400
INTERIOR ELEVATION - FRONT ENTRANCE
SCALE: 1/2" = 1'-0"



2
A400
INTERIOR ELEVATION - FRONT ENTRANCE
SCALE: 1/2" = 1'-0"

IMPORTANT NOTES
• ALL DIMENSIONS ARE FROM FINISH TO FINISH.

DATE: 8/19/24
JOB NO: 2431.01
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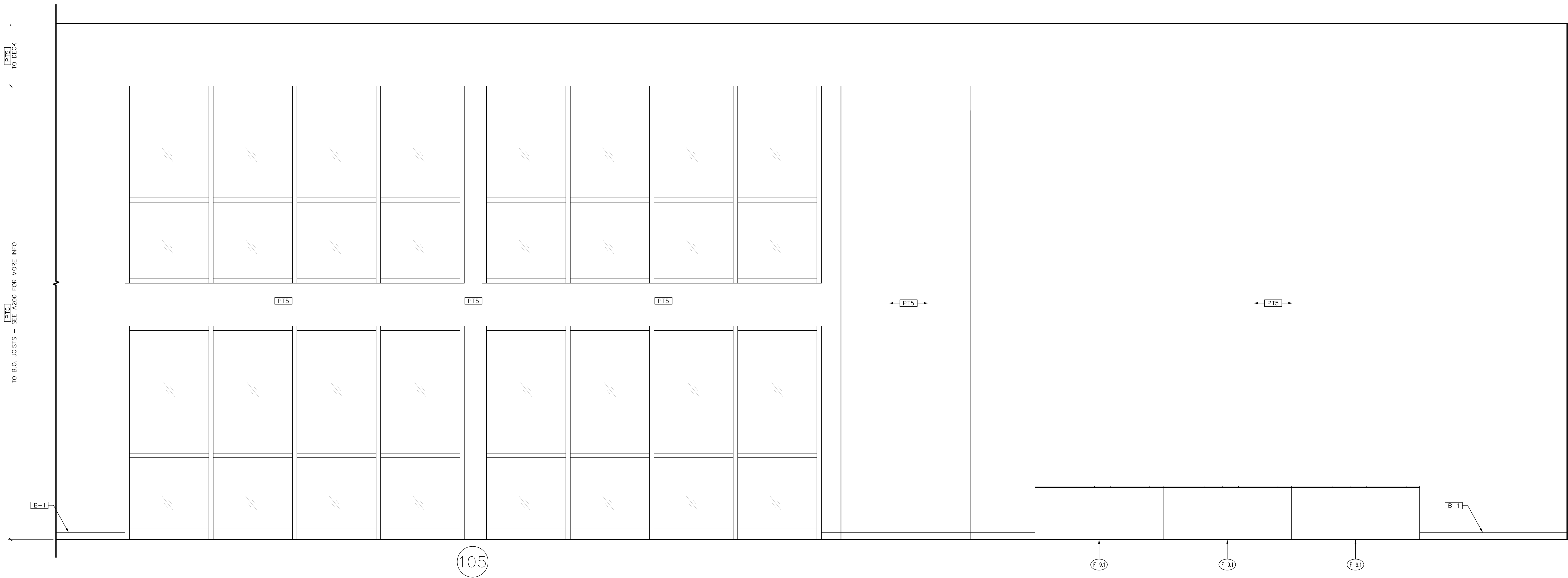


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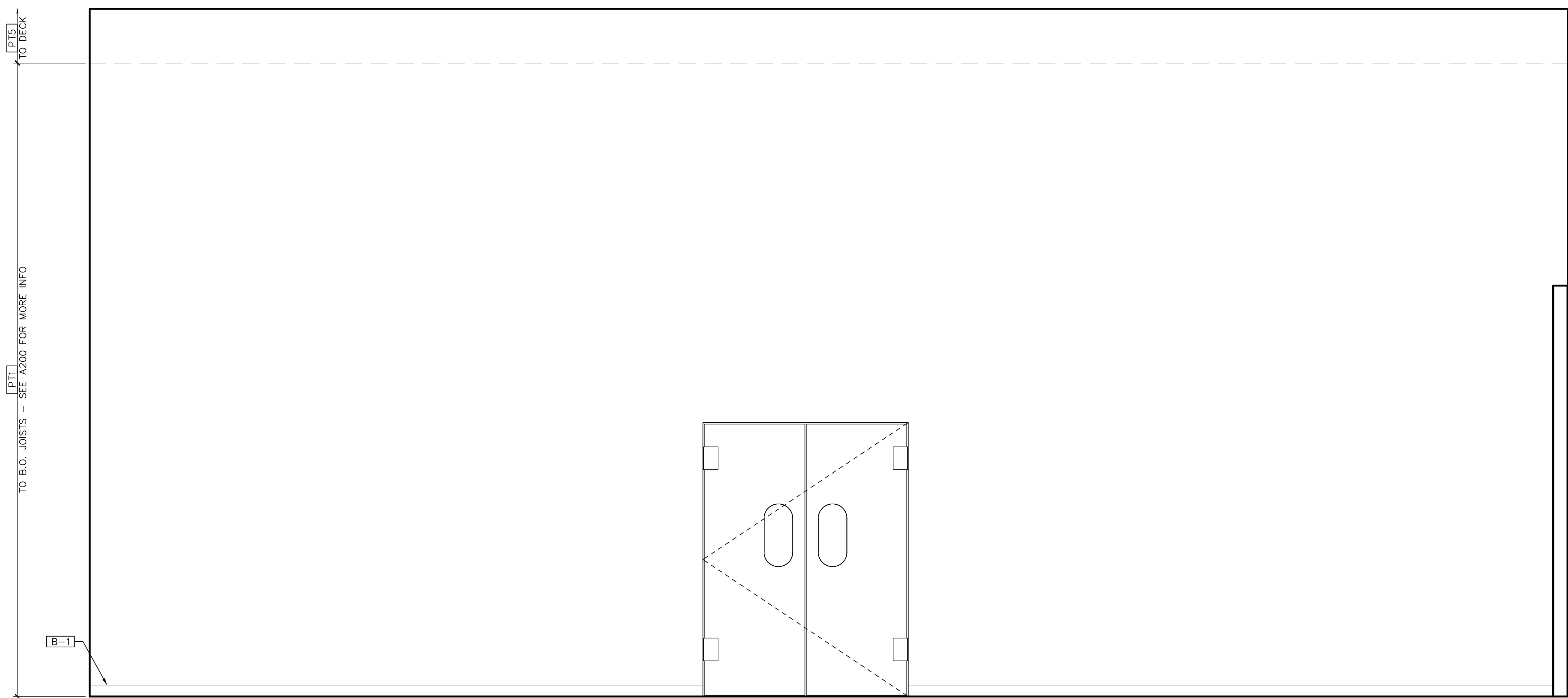
INTERIOR
ELEVATIONS

SHEET NUMBER

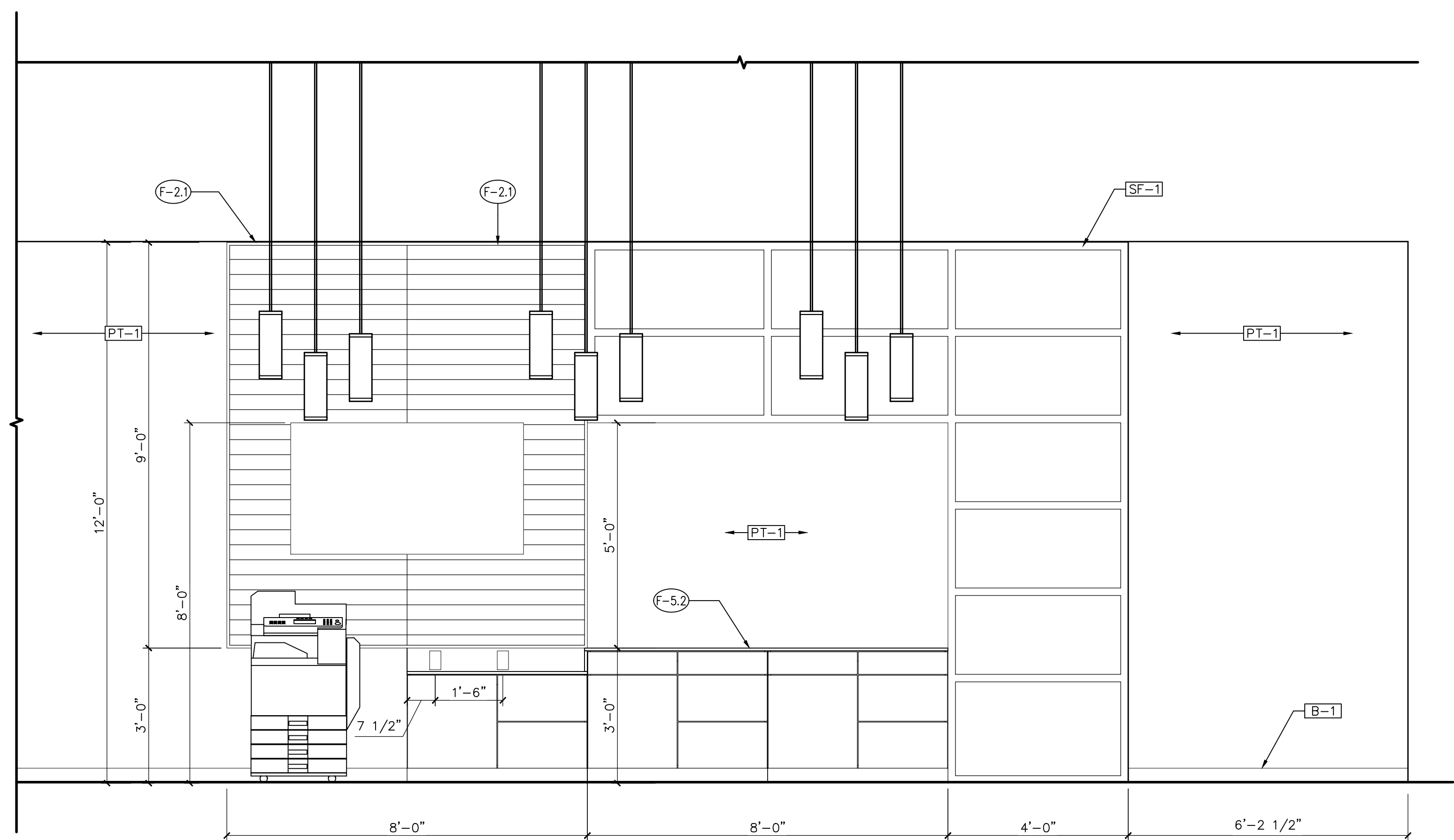
A400



1 INTERIOR ELEVATION - FRONT ENTRANCE
SCALE: 1/2" = 1'-0"



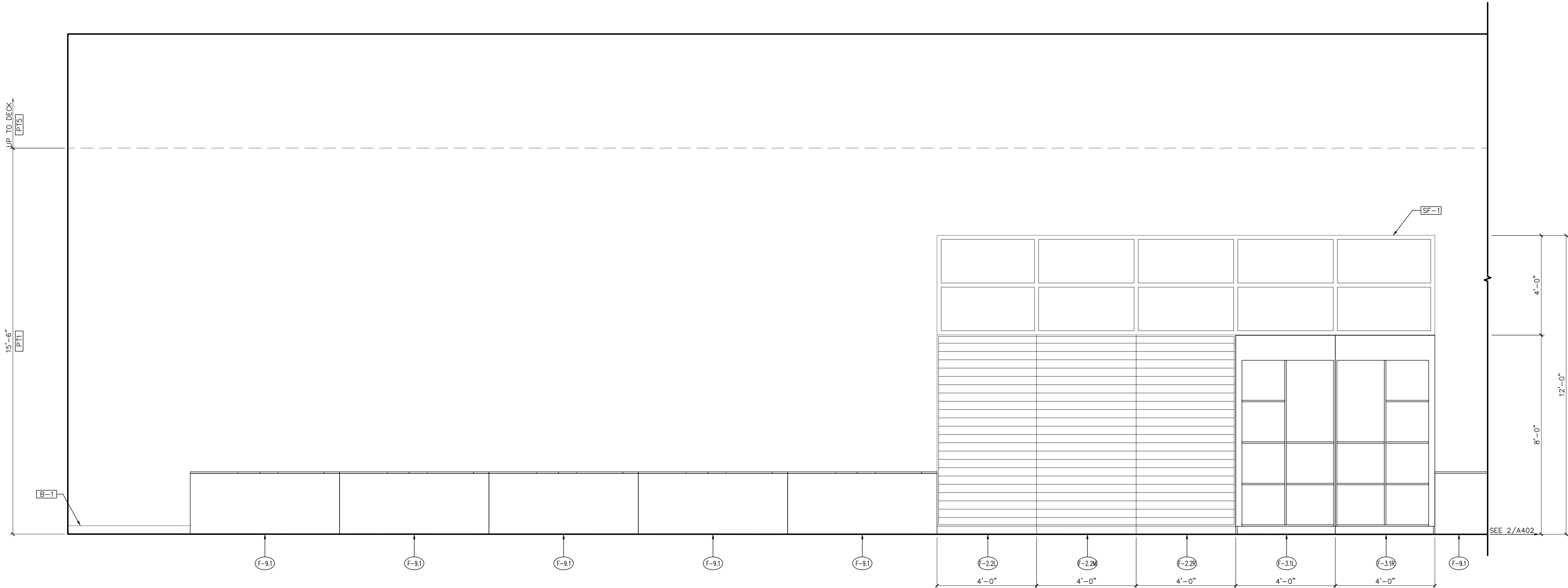
2 INTERIOR ELEVATION - CLEARANCE
SCALE: 1/2" = 1'-0"



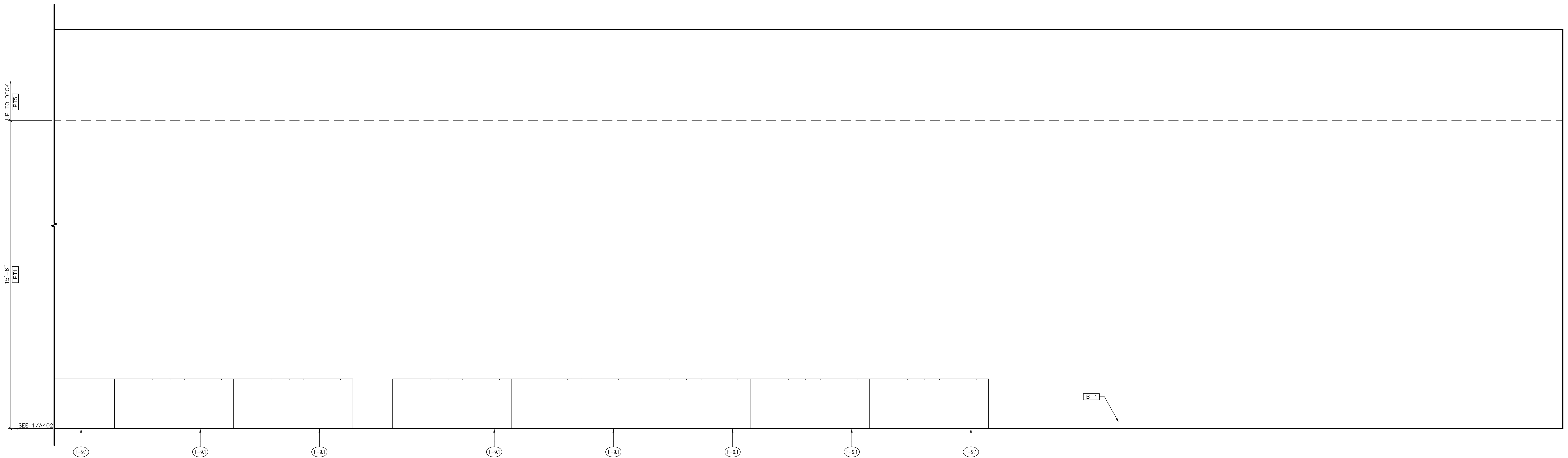
3 SOUTH ELEVATION - SALES COUNTER
SCALE: 1/2" = 1'-0"

IMPORTANT NOTES
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REVISIONS		
TAG	DATE	DESCRIPTION
	10/25/24	PERMIT



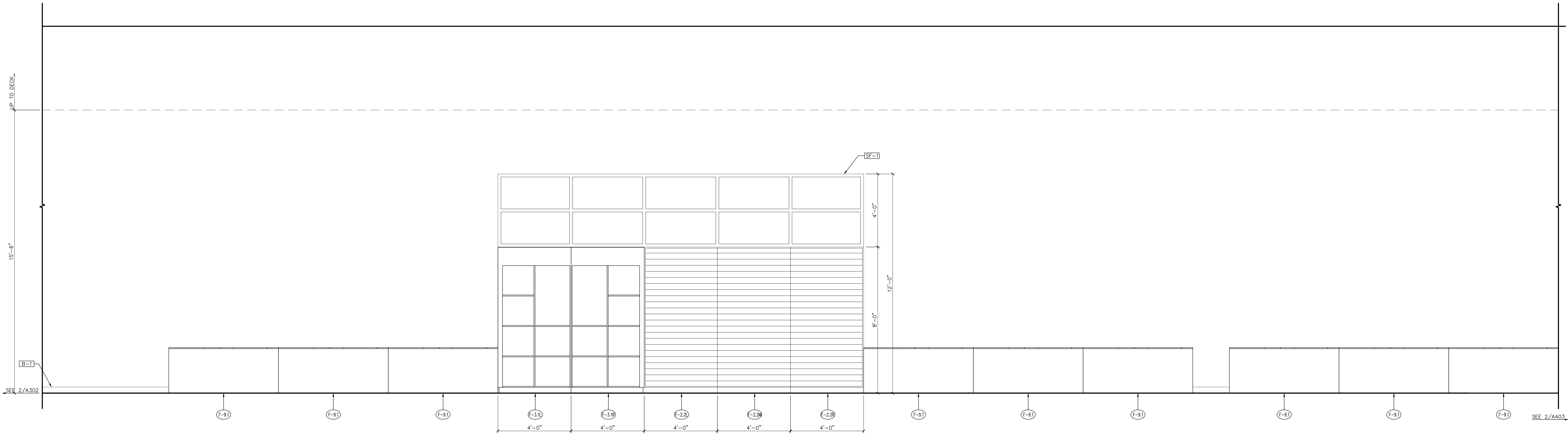
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A402
INTERIOR ELEVATION - MASTER BEDROOMS
SCALE: 1/2" = 1'-0"



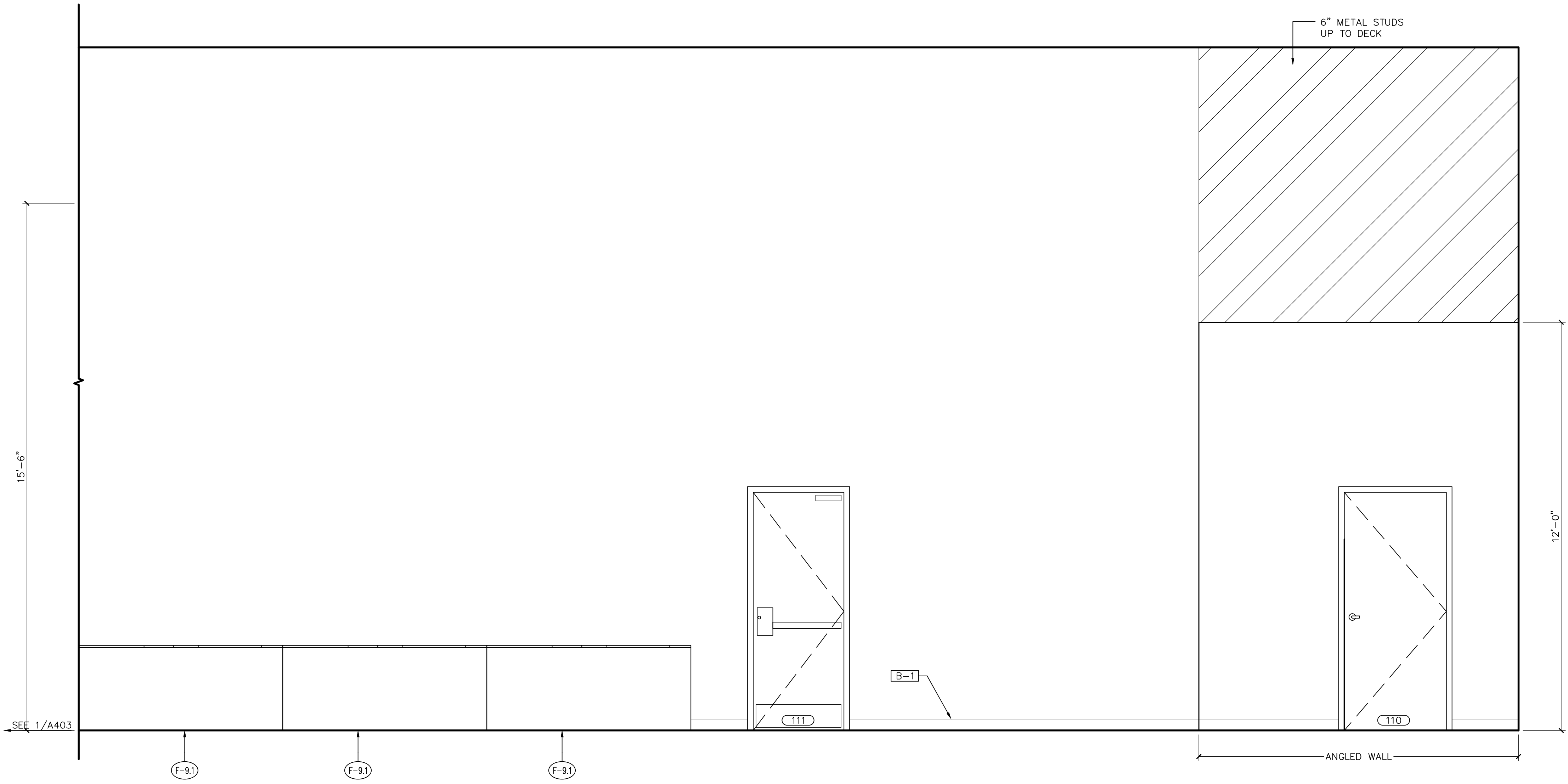
2
A402
INTERIOR ELEVATION - MASTER BEDROOMS
SCALE: 1/2" = 1'-0"

IMPORTANT NOTES
• ALL DIMENSIONS ARE FROM FINISH TO FINISH.

REVISIONS		
TAG	DATE	DESCRIPTION
	10/25/24	PERMIT



1 WEST ELEVATION A - MASTER BEDROOMS
SCALE: 1/2" = 1'-0"



2 WEST ELEVATION B - MASTER BEDROOMS
SCALE: 1/2" = 1'-0"

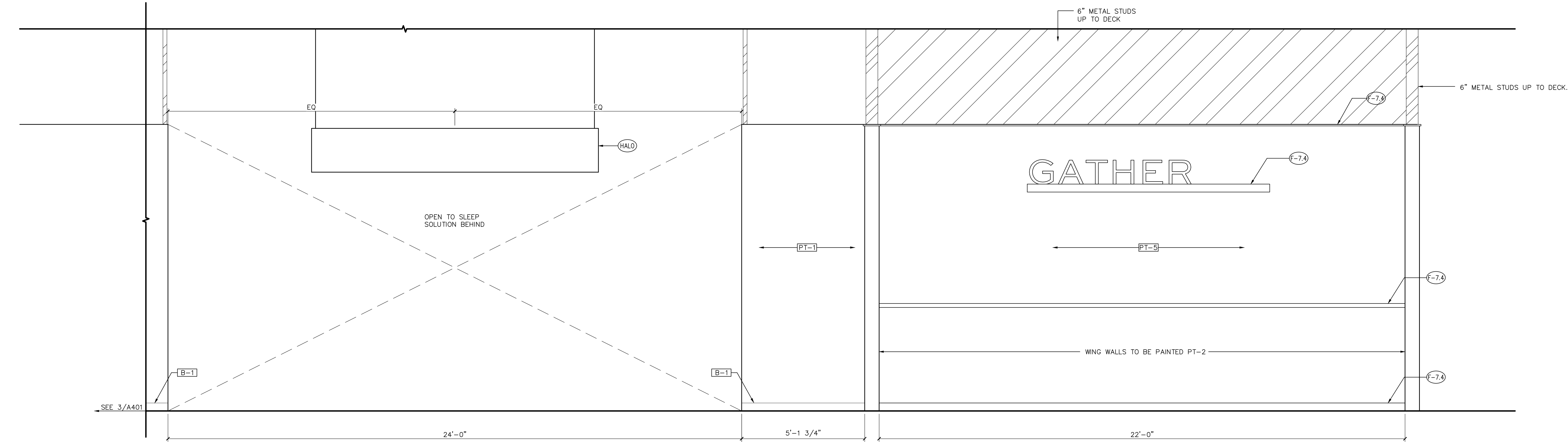
IMPORTANT NOTES
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REVISIONS		
TAG	DATE	DESCRIPTION
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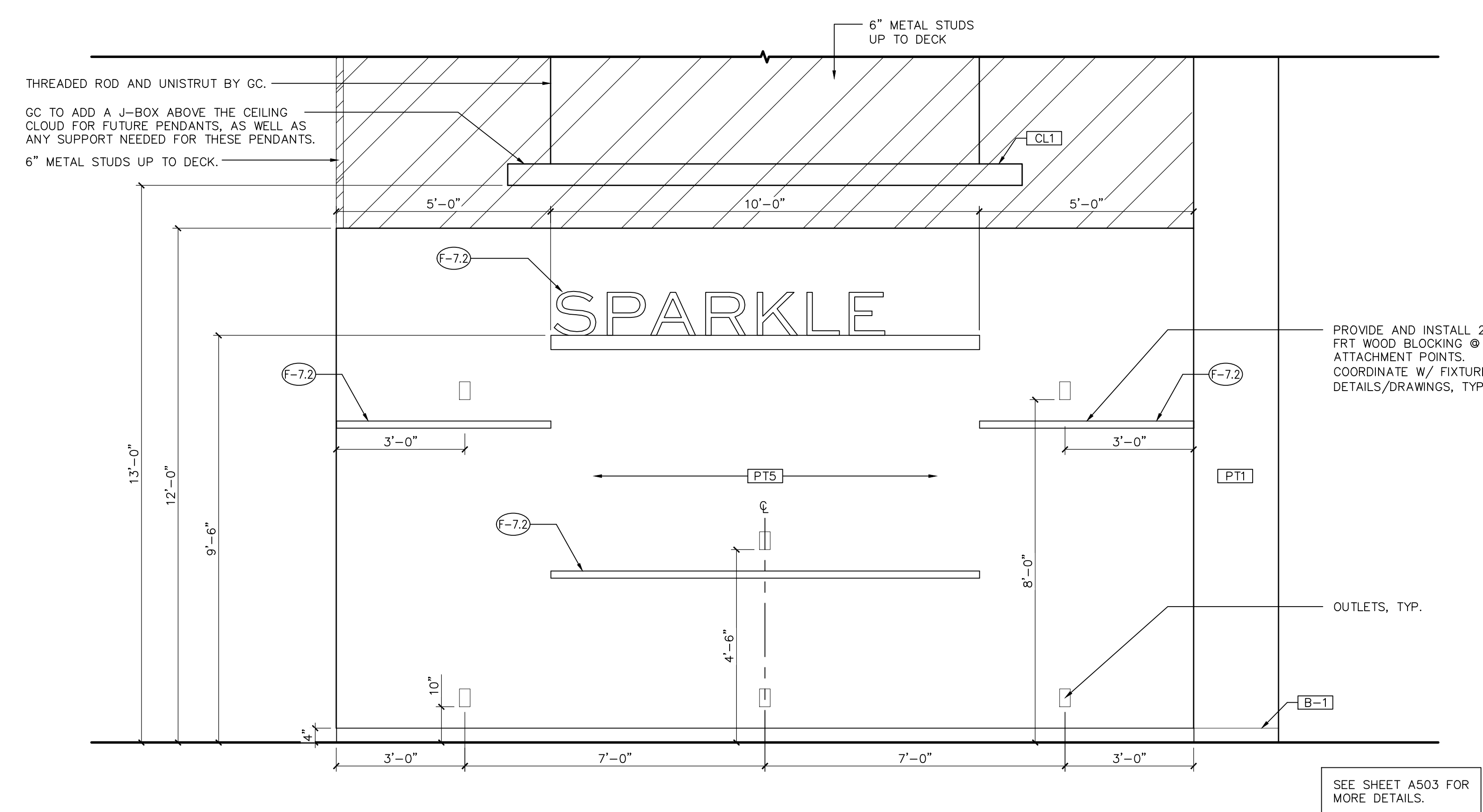
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TAG	DATE	DESCRIPTION	PERMIT
	10/25/24	PERMIT	

INTERIOR
ELEVATIONS

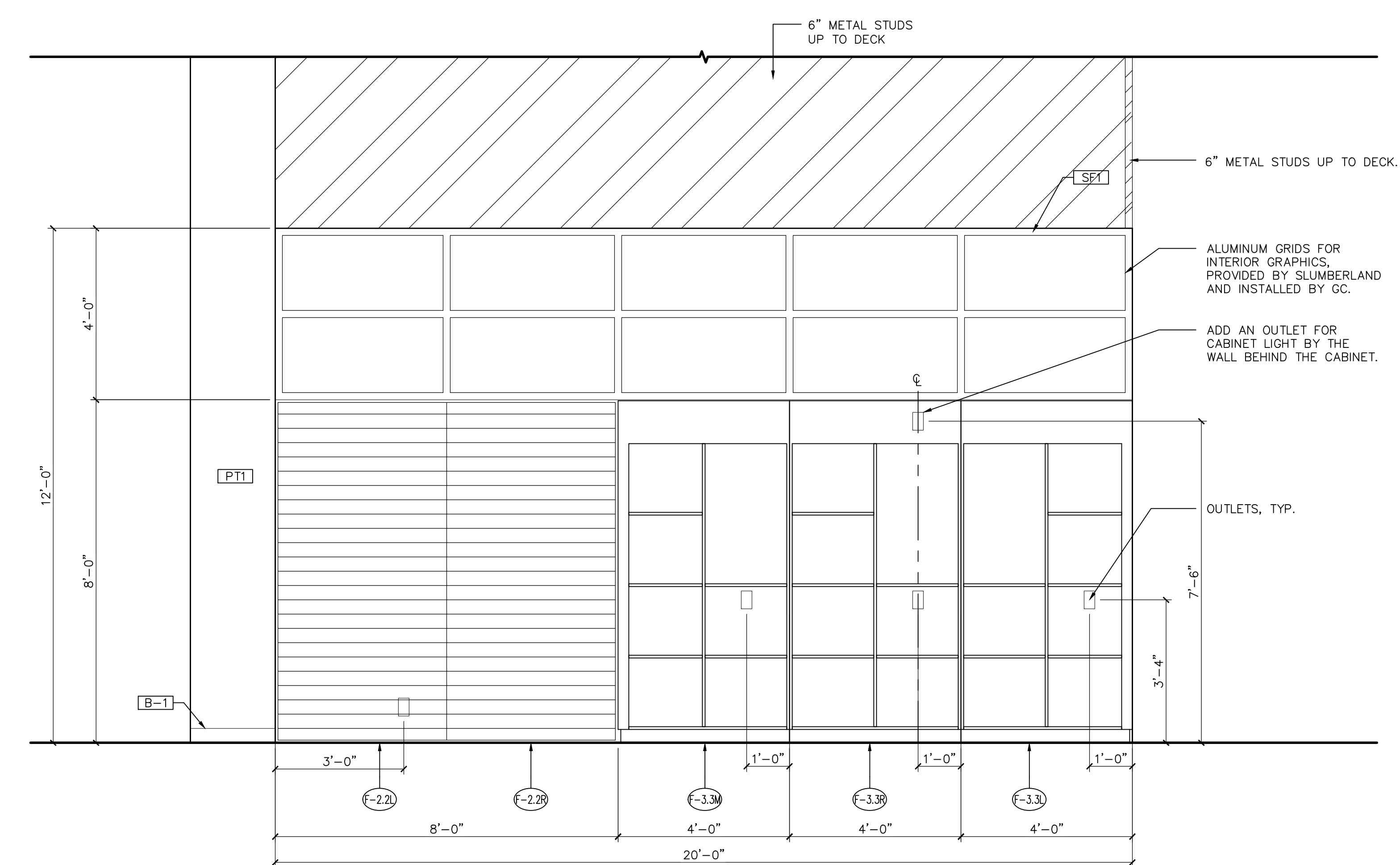
SHEET NUMBER
A404



1 SOUTH ELEVATION - GATHER STRIKE ZONE
A404 SCALE: 1/2" = 1'-0"



2 SPARKLE STRIKE ZONE ELEVATION
A404 SCALE: 1/2" = 1'-0"



3 LEFT SIDE 1 ELEVATION - COPPER RANCH STRIKE ZONE
A404 SCALE: 1/2" = 1'-0"

IMPORTANT NOTES
• ALL DIMENSIONS ARE FROM FINISH TO FINISH.



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INTERIOR ELEVATIONS

T NUMBER

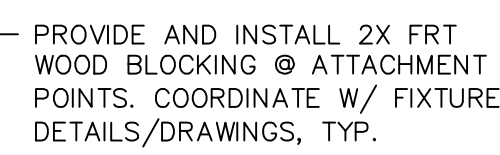
A 405



SCALE: 1/2" = 1'-0"



SCALE: 1/2" = 1'-0"



A405 SCALE: 1/2" = 1'-0"



A405 SCALE: 1/2" = 1'-0"

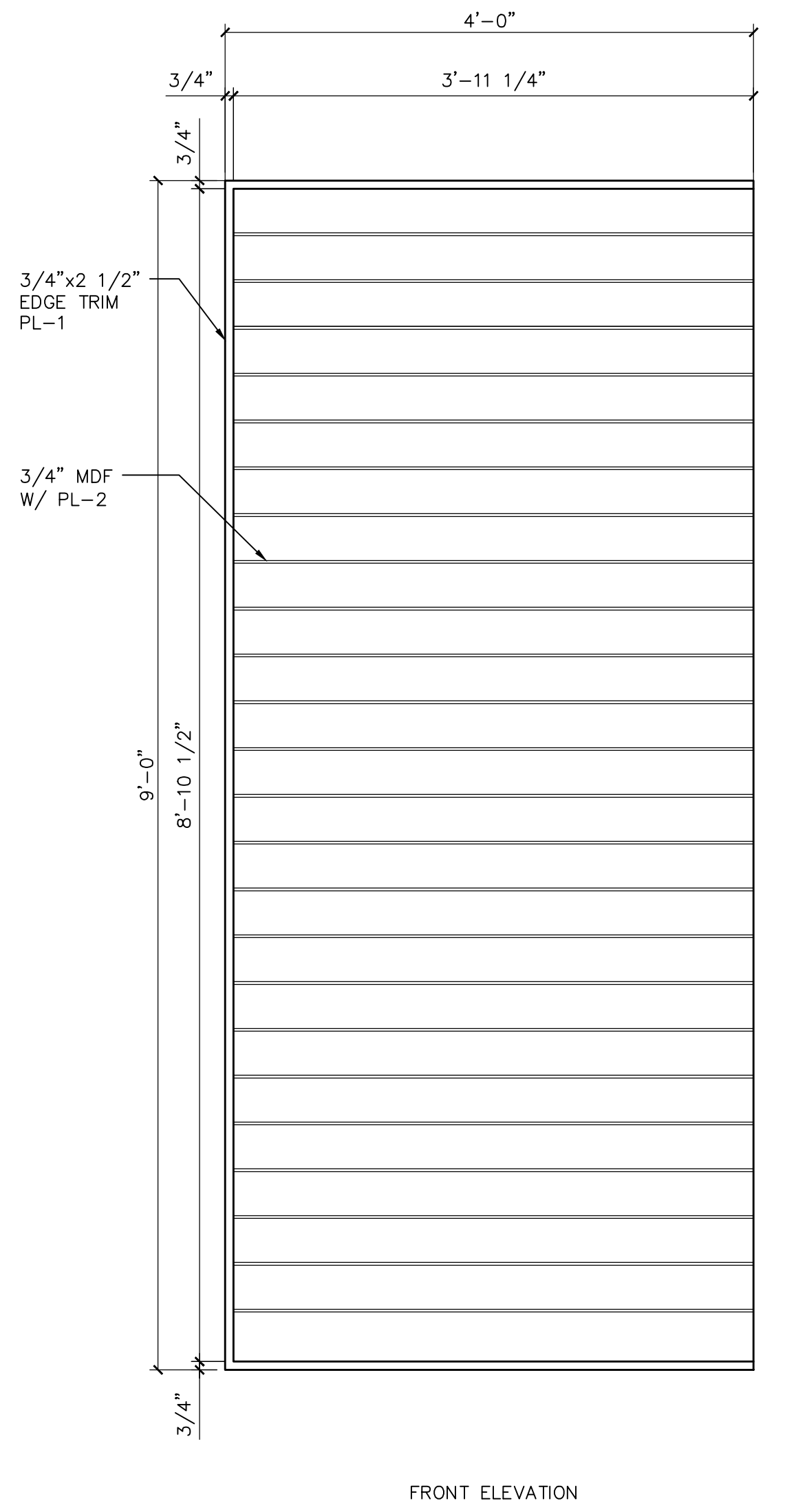
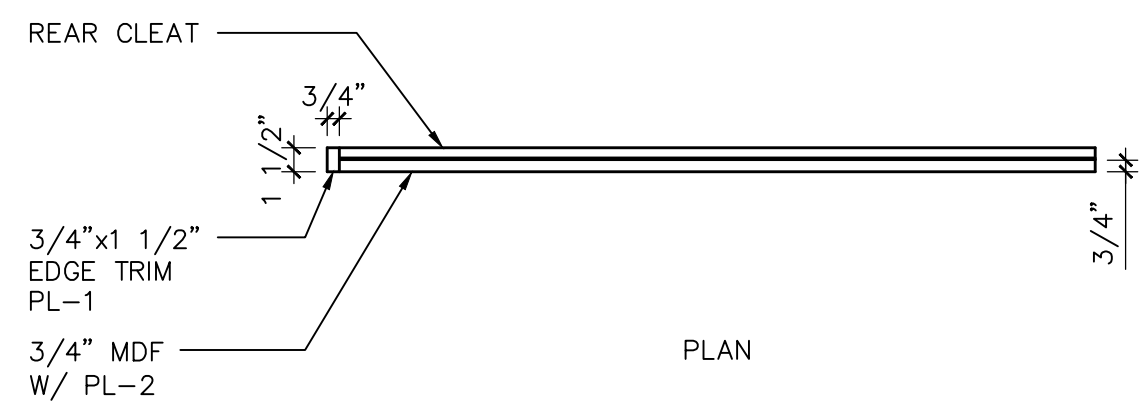


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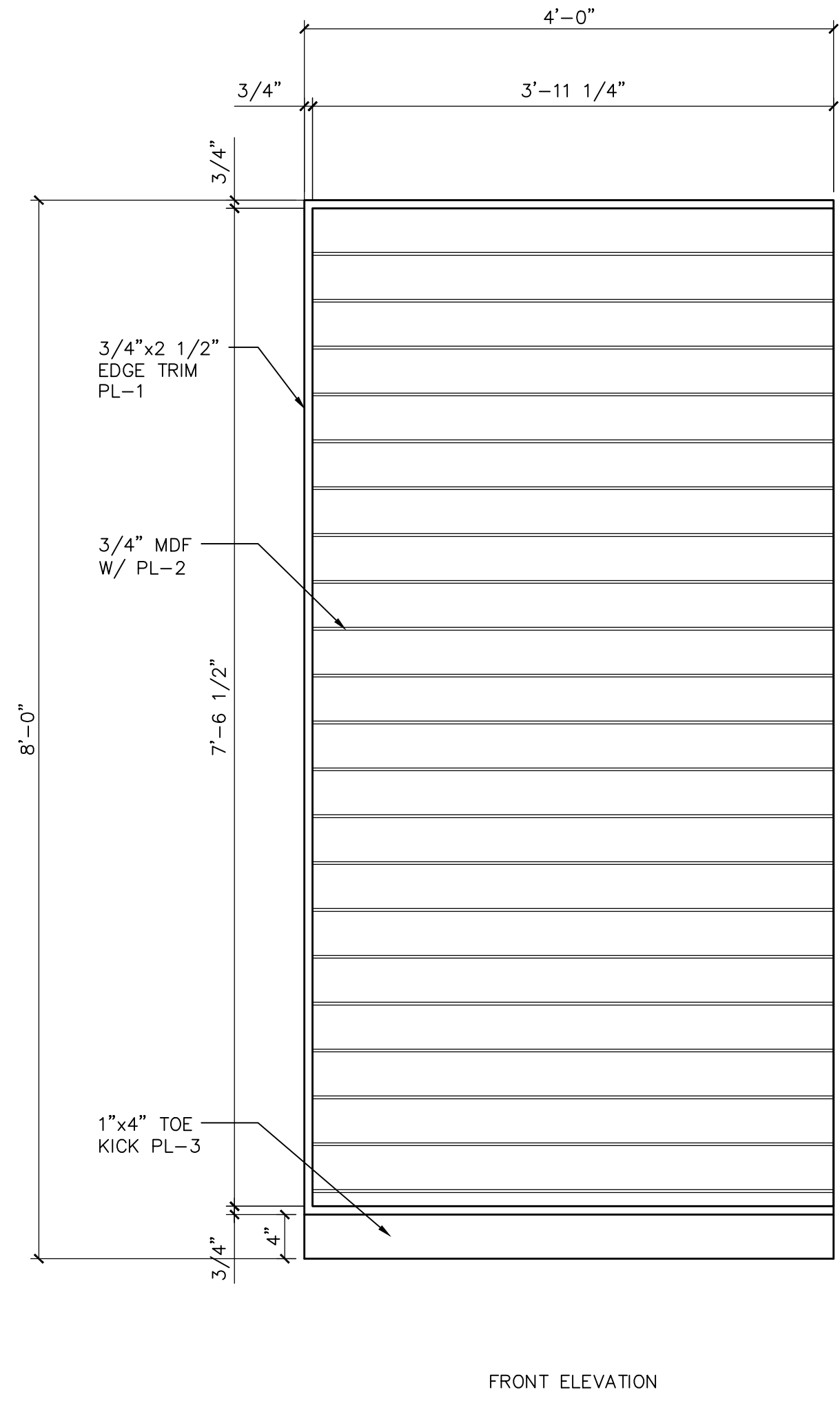
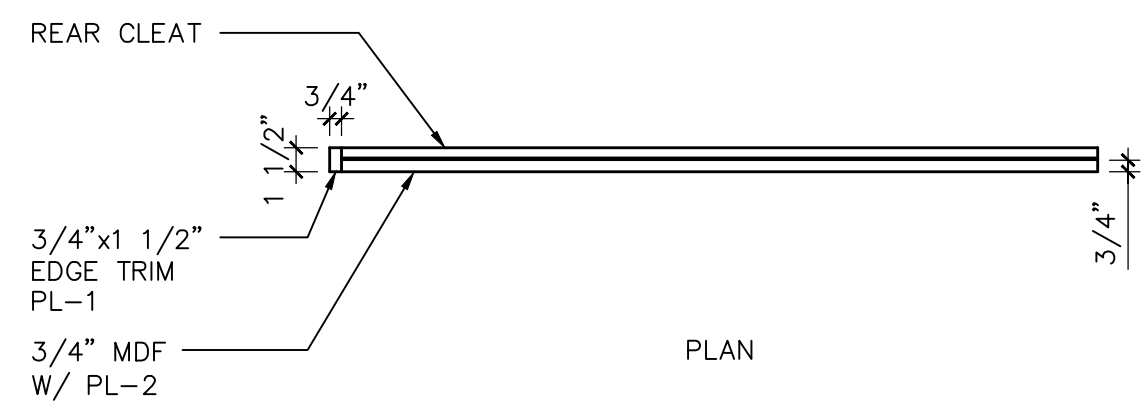


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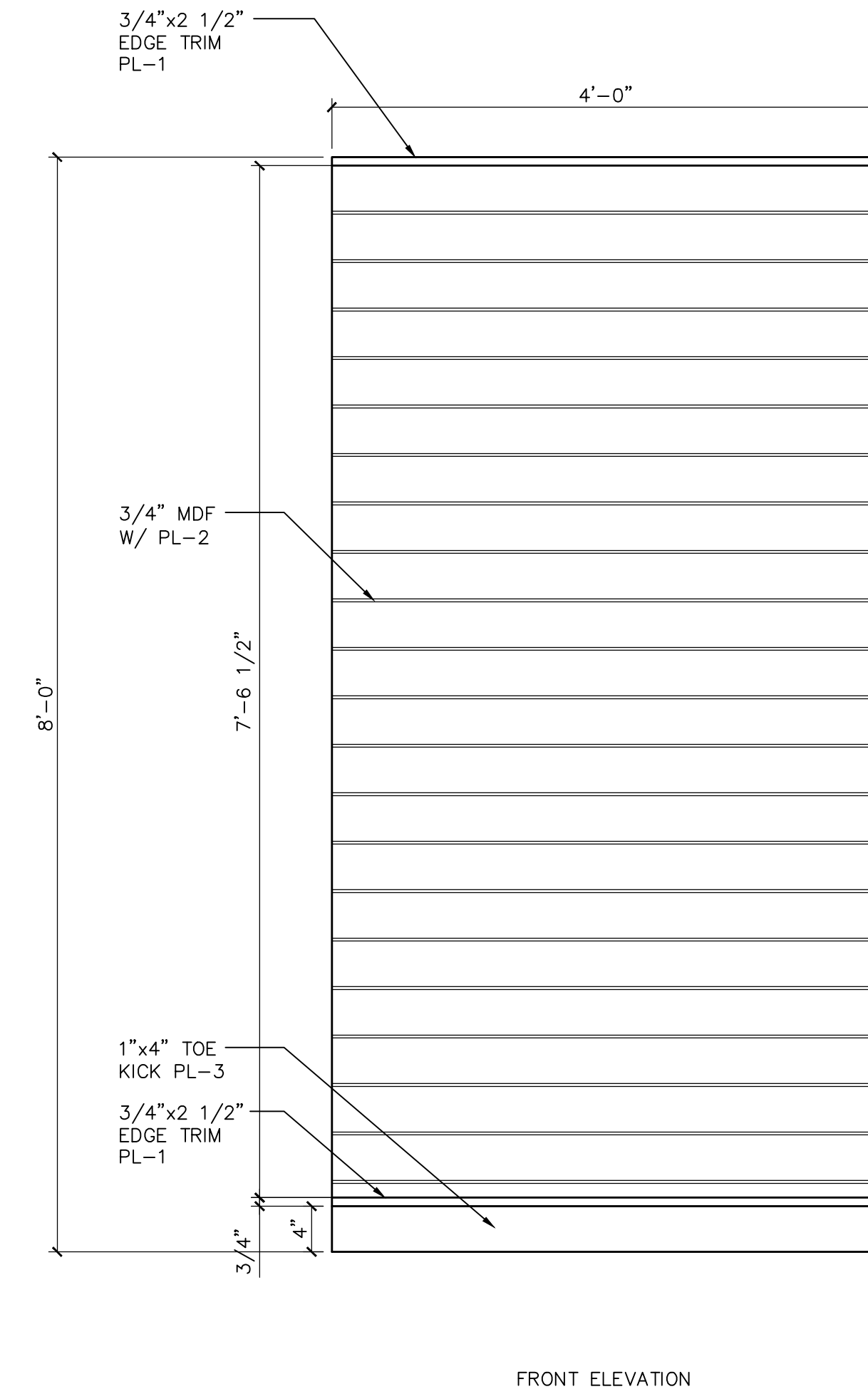
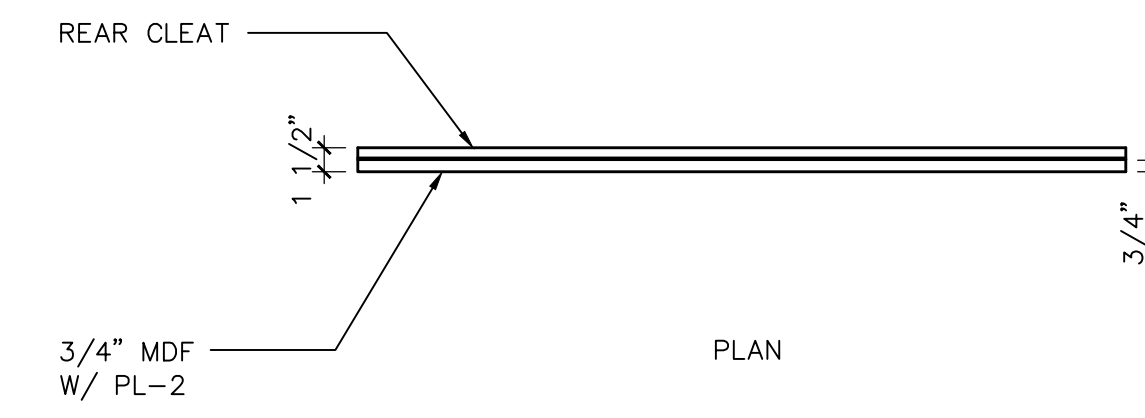
• ALL DIMENSIONS ARE FROM FINISH TO FINISH.



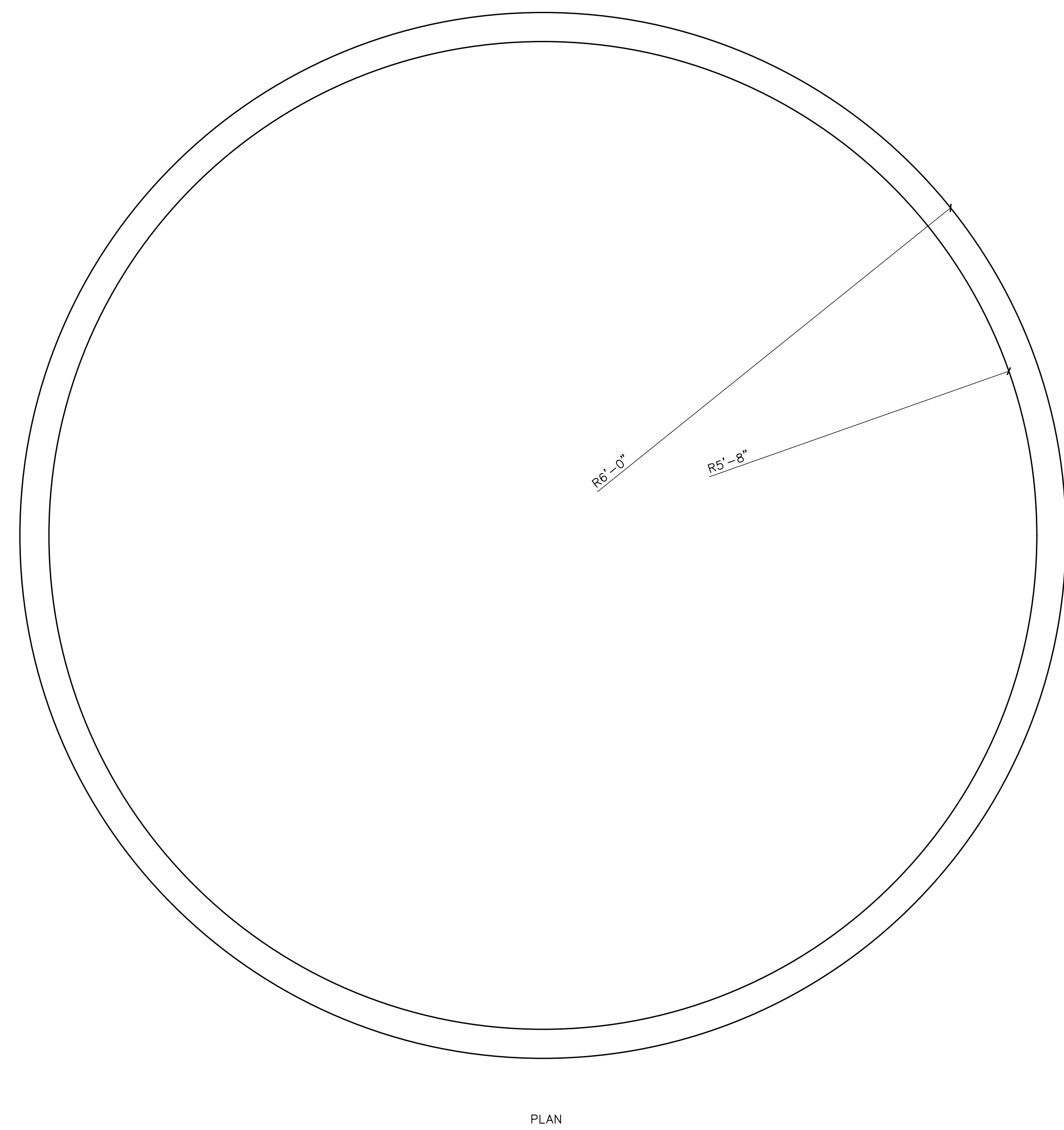
1 F-2.1 L/R - ACCENT WOOD PANEL
SCALE: 1" = 1'-0"



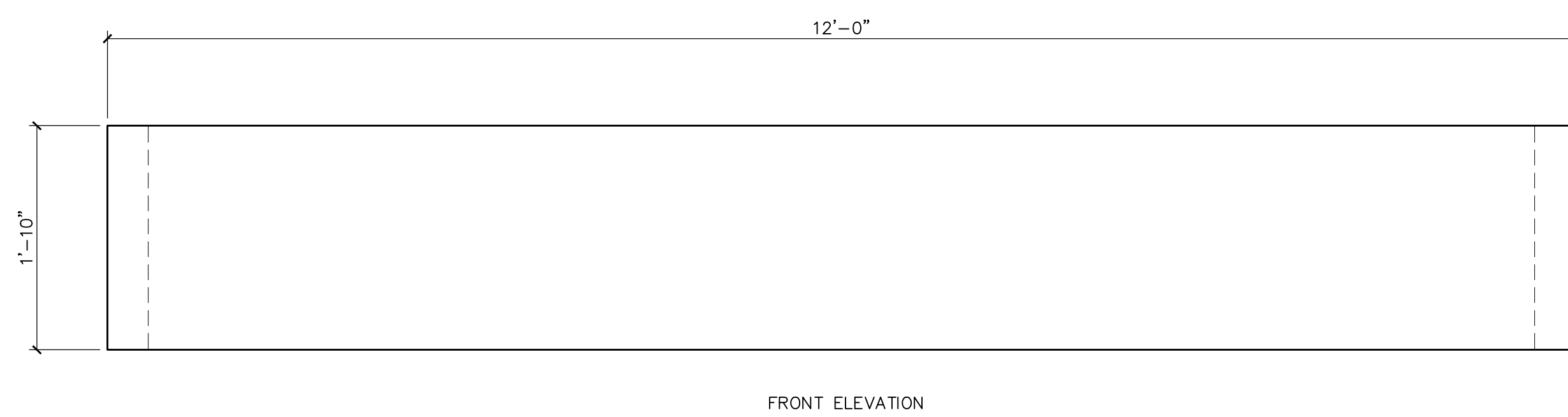
2 F-2.2 L/R - ACCENT WOOD PANEL
SCALE: 1" = 1'-0"



3 F-2.2 M - ACCENT WOOD PANEL
SCALE: 1" = 1'-0"

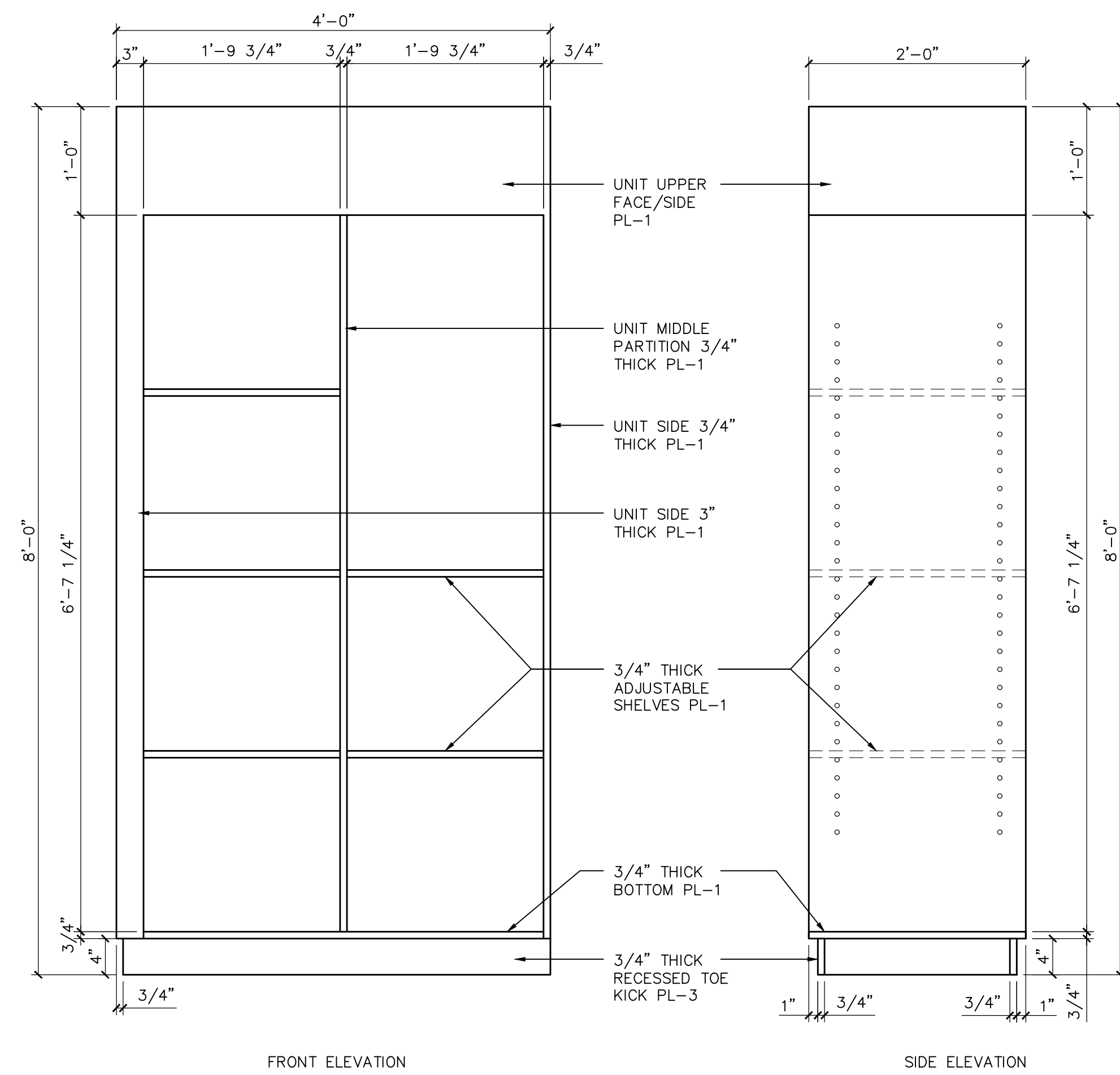
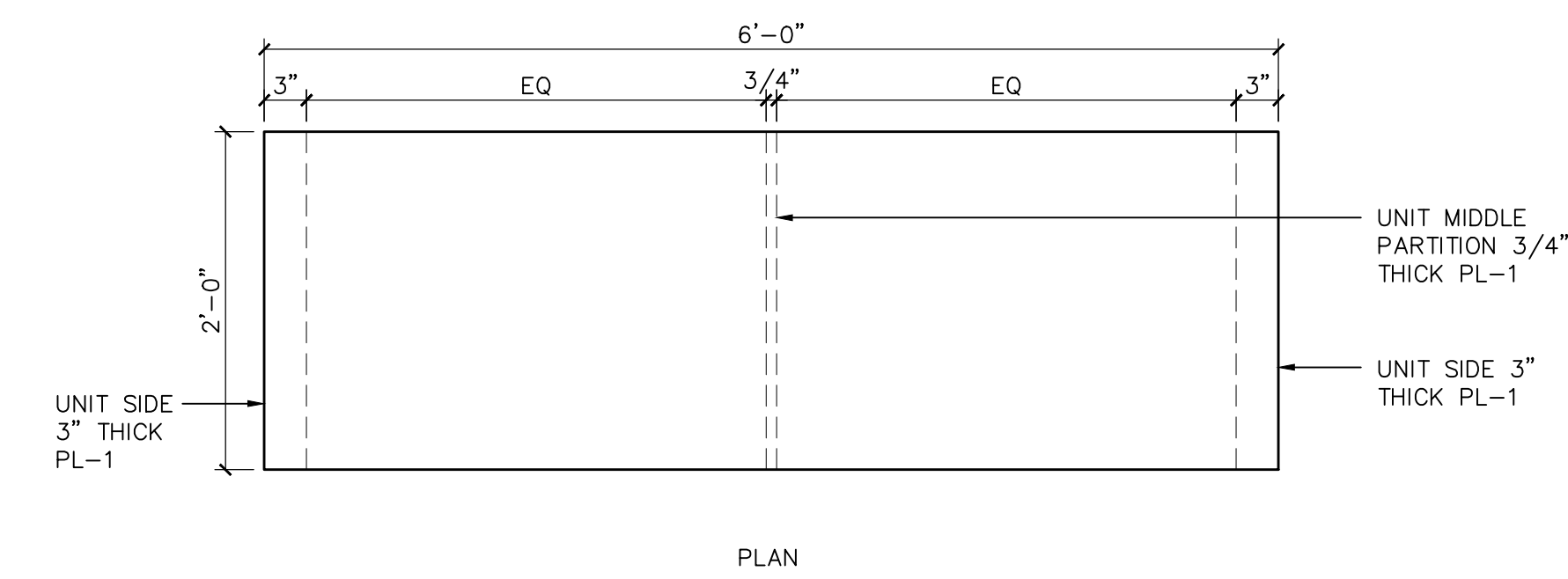
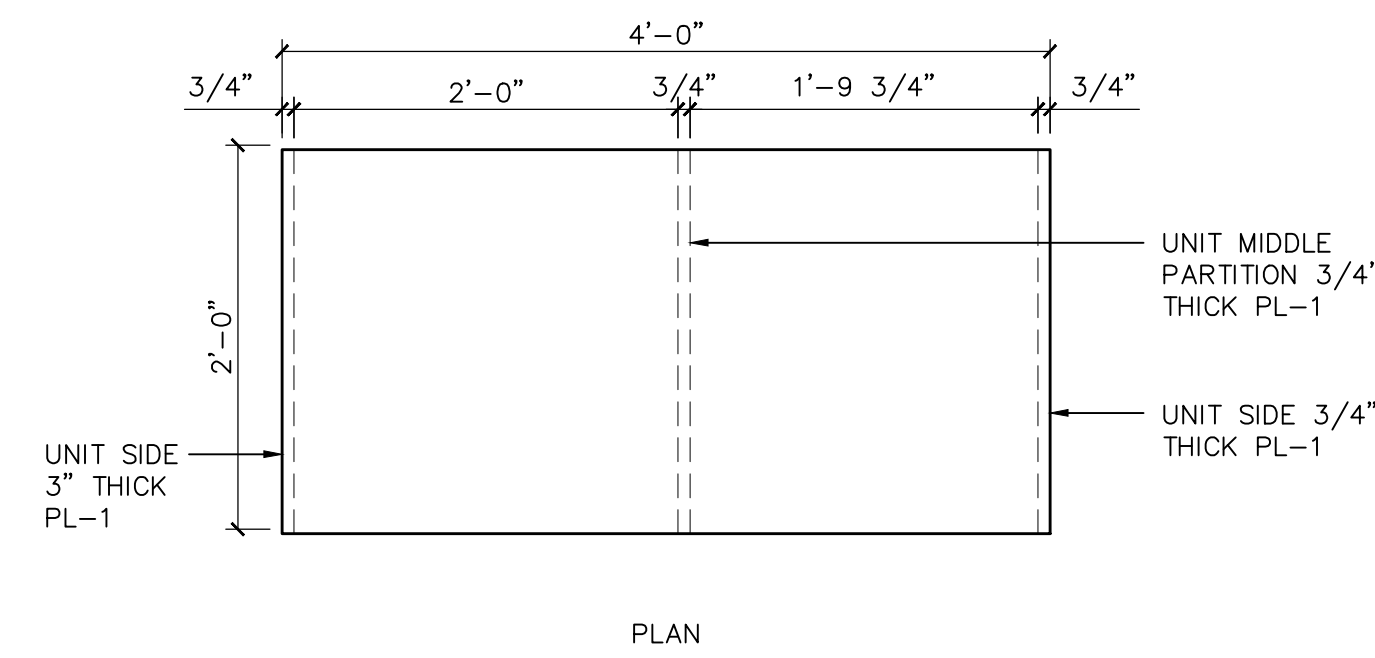
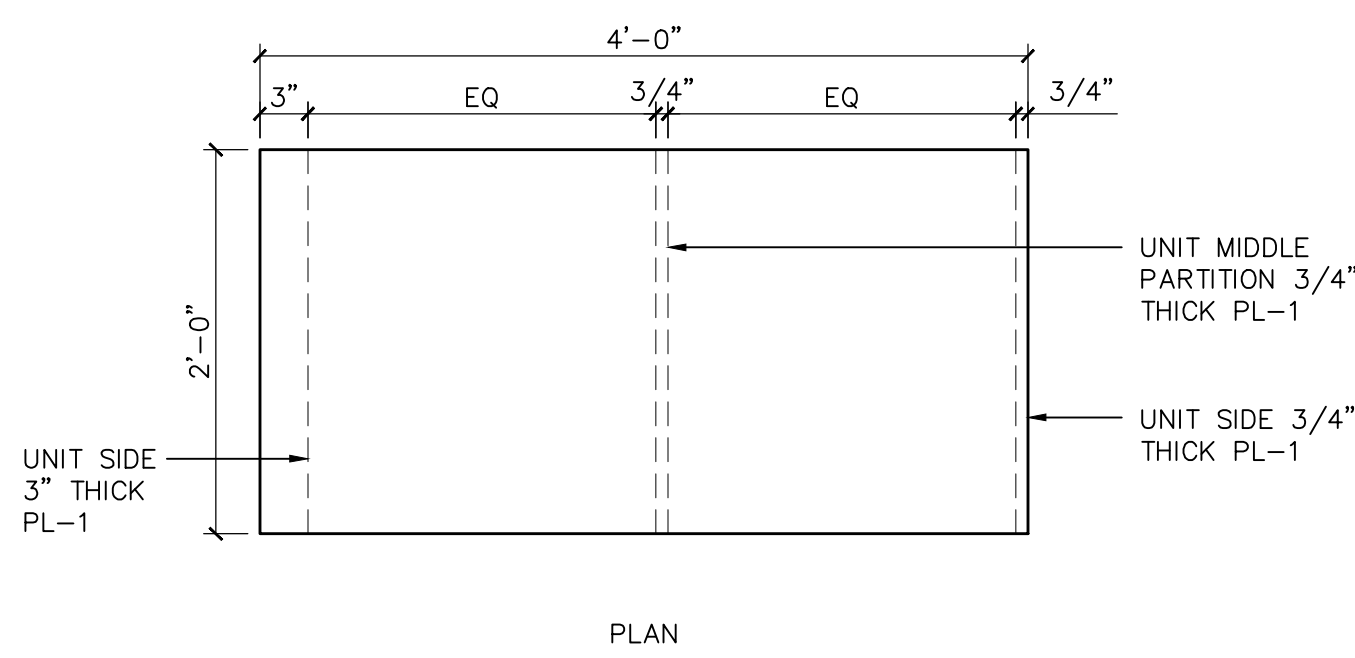


4 F-?? - SLEEP SOLUTIONS HALO
SCALE: 1" = 1'-0"

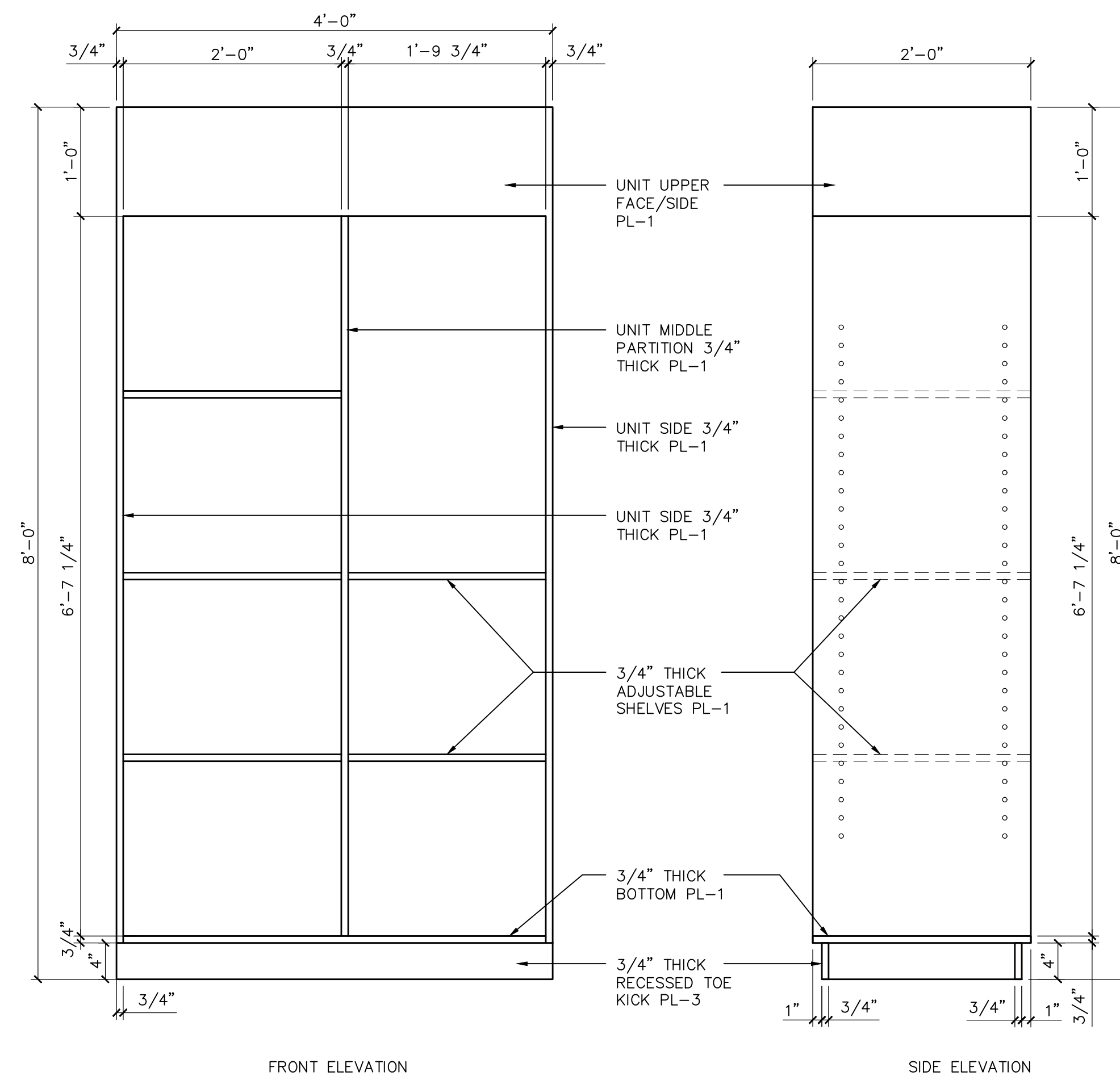


- GENERAL NOTES**
- FIXTURES CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
 - FIXTURES CONTRACTOR TO PROVIDE ANY NECESSARY BLOCKING FOR CABINETRY.
 - FIXTURES CONTRACTOR TO COORDINATE WITH GC ANY NECESSARY WORK NEEDED PRIOR TO INSTALLATION.
 - FIXTURES CONTRACTOR TO PROVIDE SAMPLES AND/OR SPECIFICATIONS FOR HARDWARE TO BE APPROVED PRIOR TO INSTALLATION.
 - ALL 3/4" MDF REVEALS TO BE 1/4" WIDE x 1/4" DEEP, PAINTED BLACK.

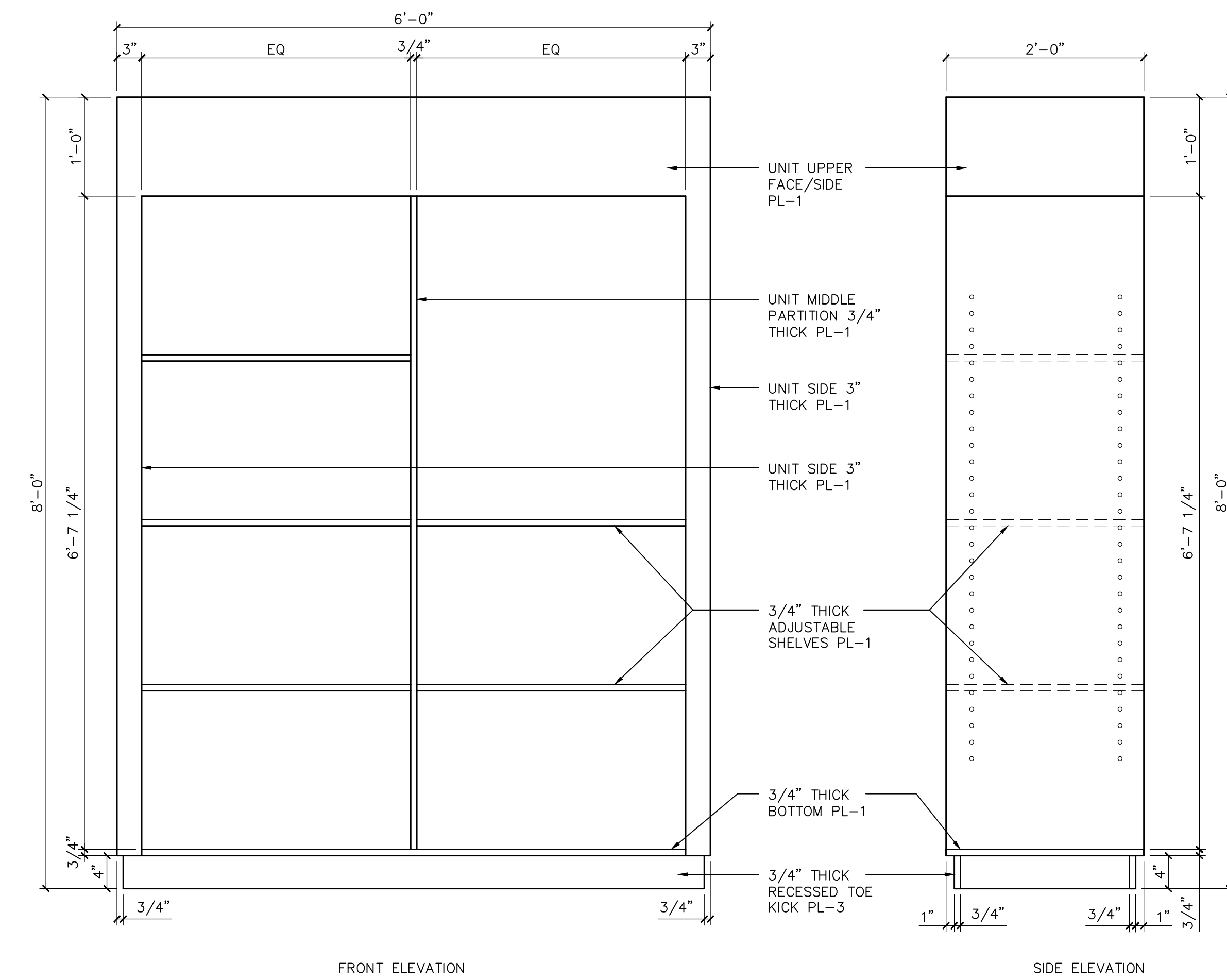
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1 F-3.1 L/R - STYLE FOCAL ACCESSORIES DISPLAY
AS01 SCALE: 1" = 1'-0"



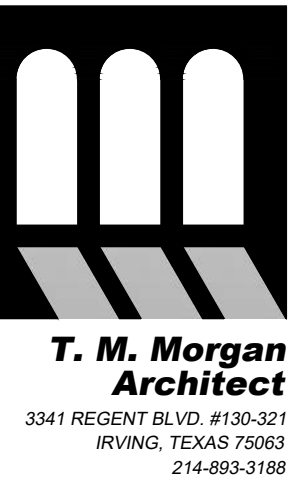
2 F-3.1 M - STYLE FOCAL ACCESSORIES DISPLAY
AS01 SCALE: 1" = 1'-0"



3 F-3.2 - FREESTANDING ACCESSORIES DISPLAY
AS01 SCALE: 1" = 1'-0"

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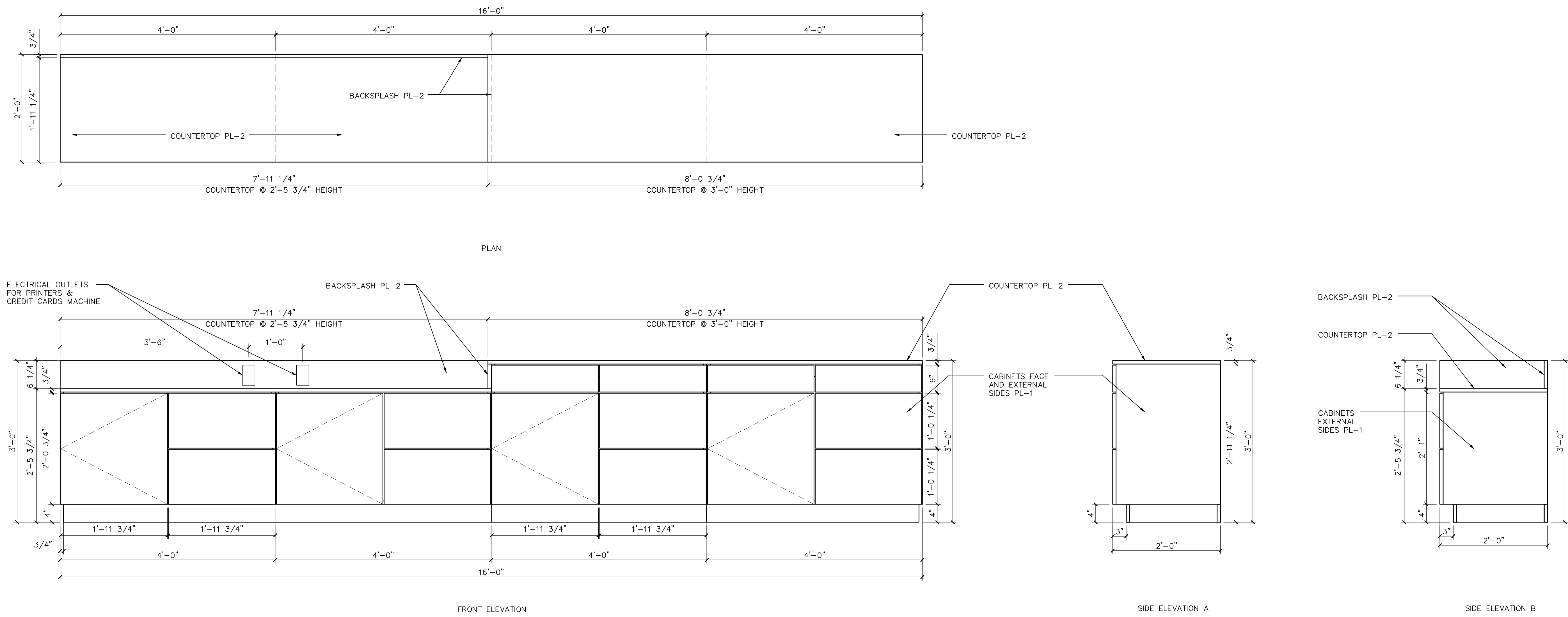


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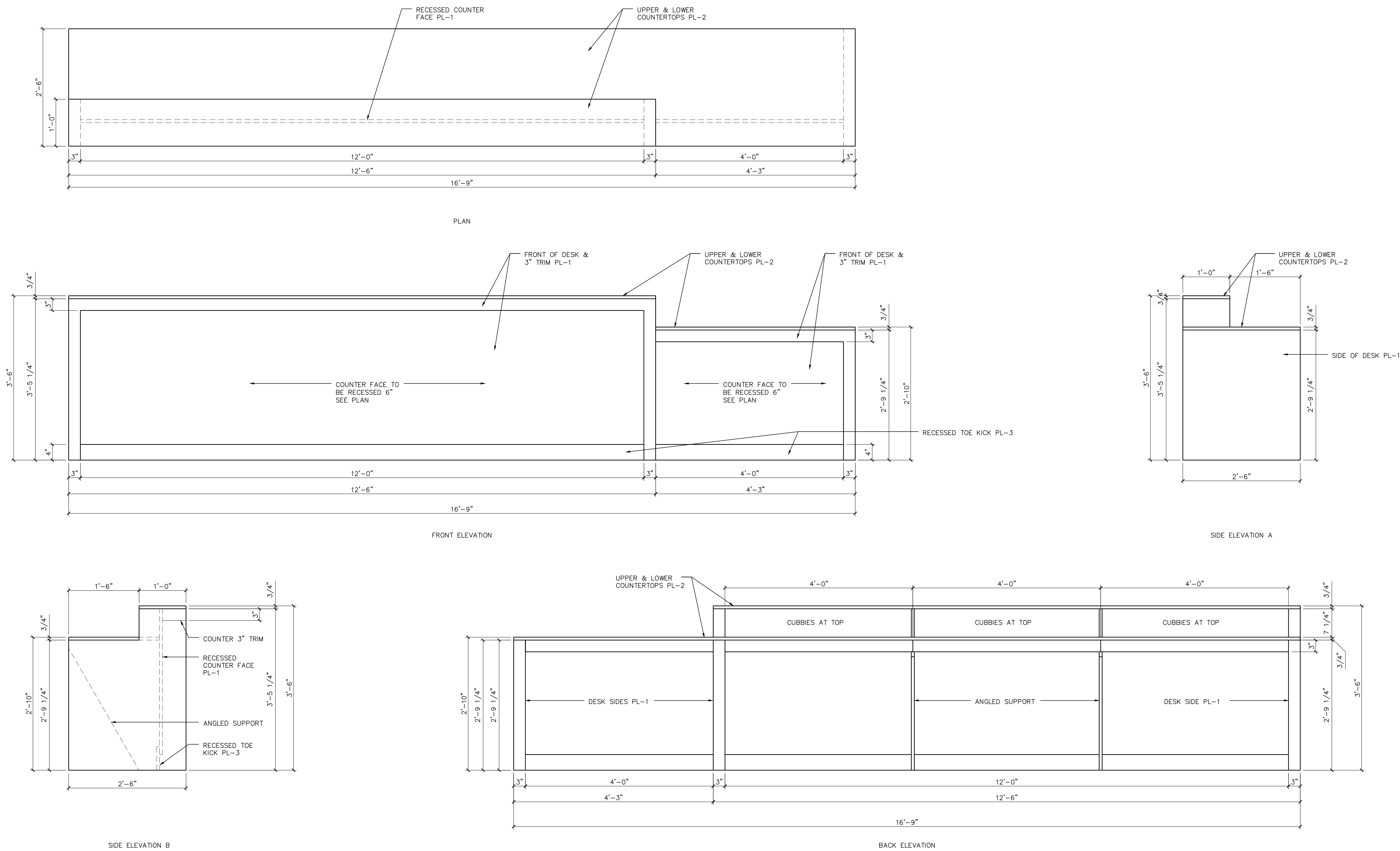
FIXTURES DETAILS

SHEET NUMBER

A501



1 F-5.2 - GUEST SERVICE BACK COUNTER
SCALE: 1" = 1'-0"



2 F-5.1 - GUEST SERVICES FRONT COUNTER
SCALE: 1" = 1'-0"

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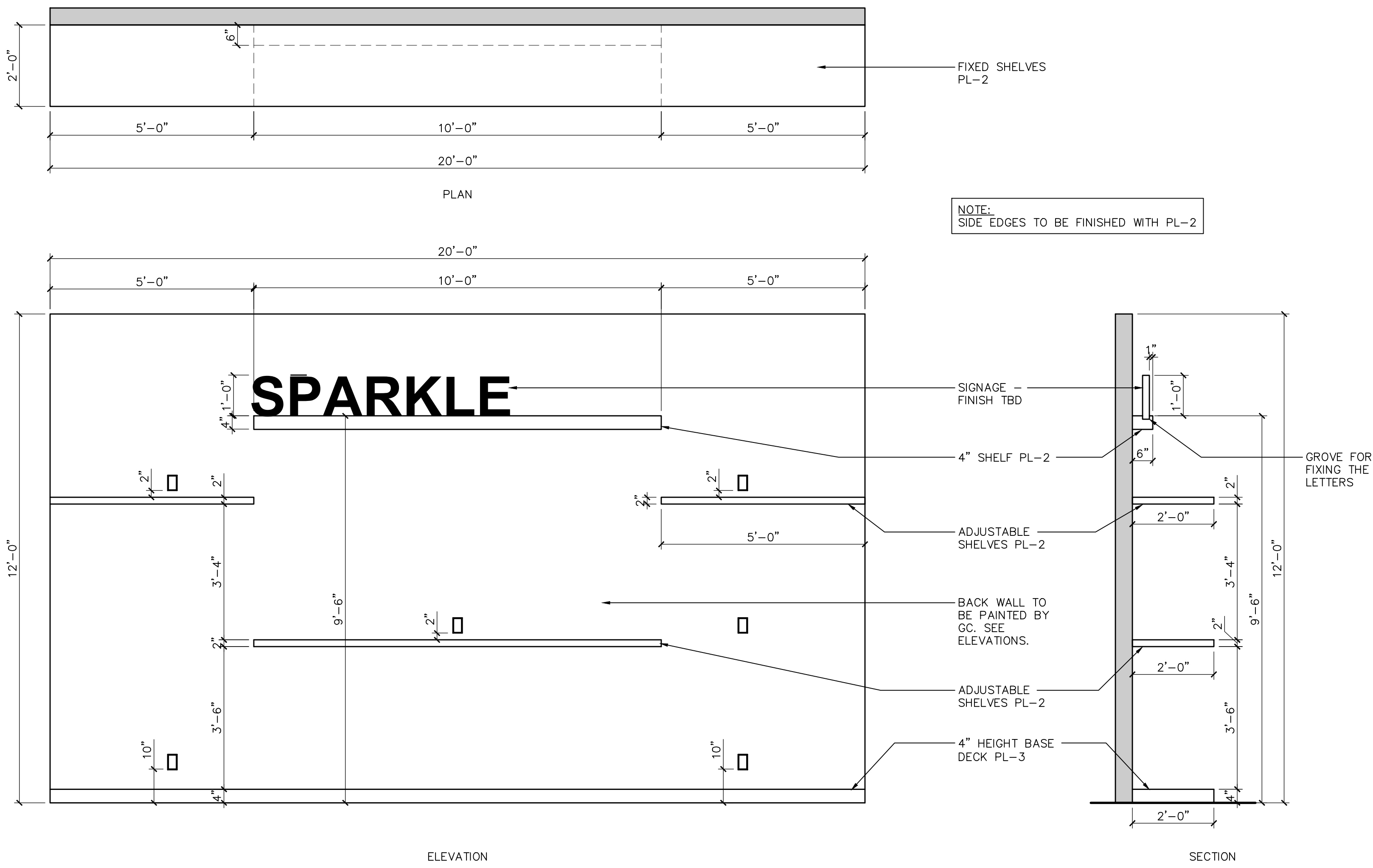


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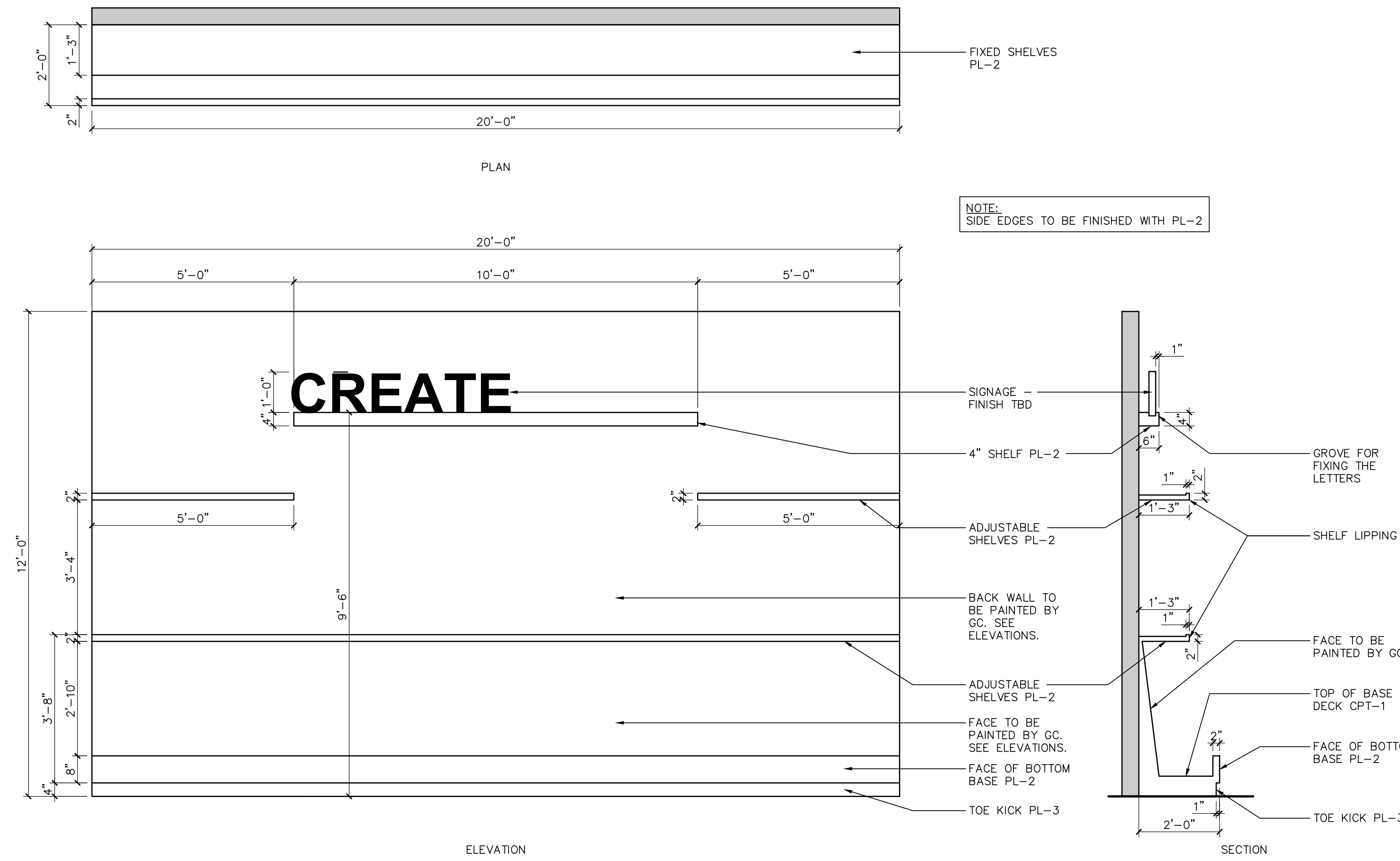
FIXTURES DETAILS

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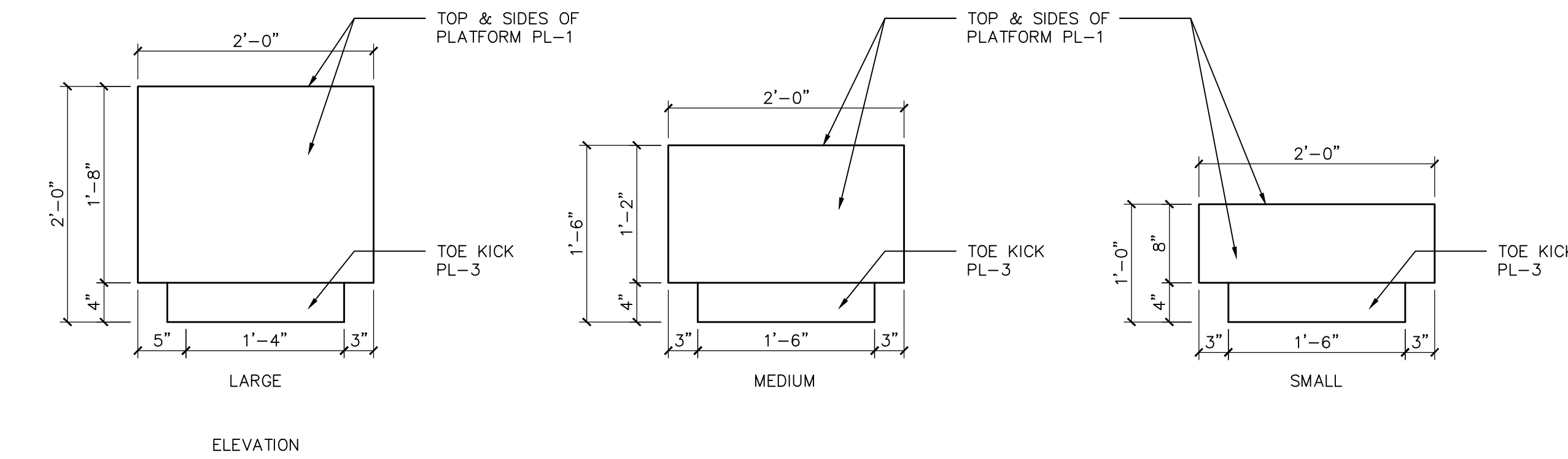
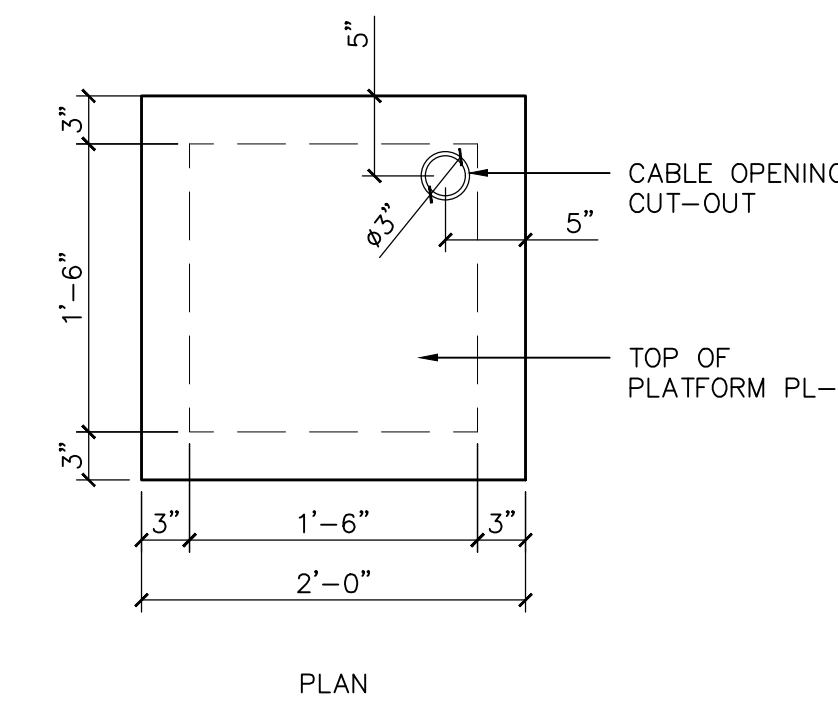
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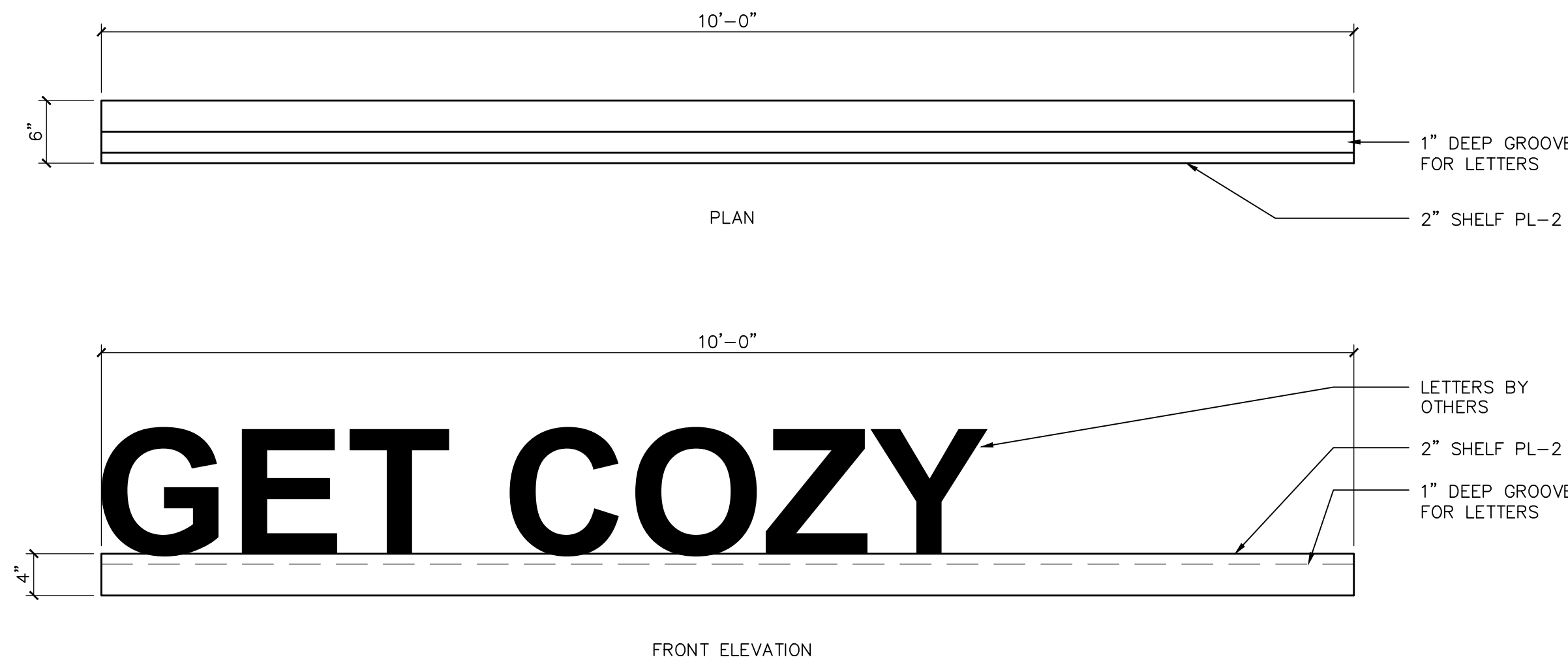
1 F-7.2 - SPARKLE-LIGHTING FOCAL
A503 SCALE: 1/2" = 1'-0"



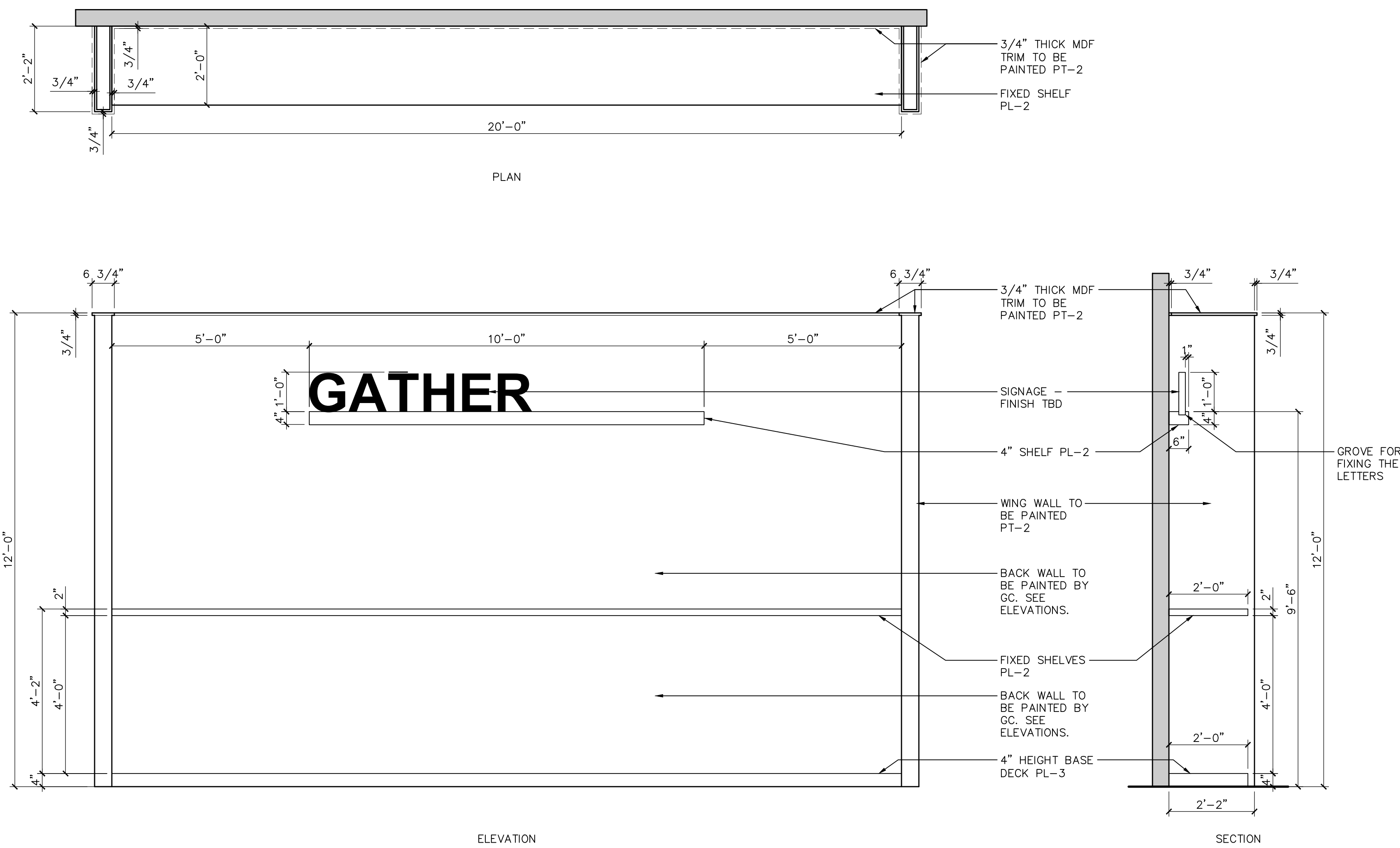
2 F-7.3 - CREATE-ART FOCAL
A503 SCALE: 1/2" = 1'-0"



4 F-8.1 - ACCESSORIES PLATFORM
A503 SCALE: 1" = 1'-0"

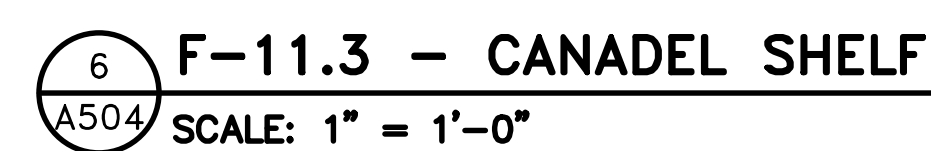
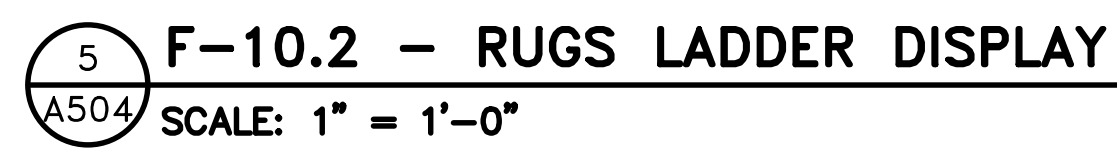
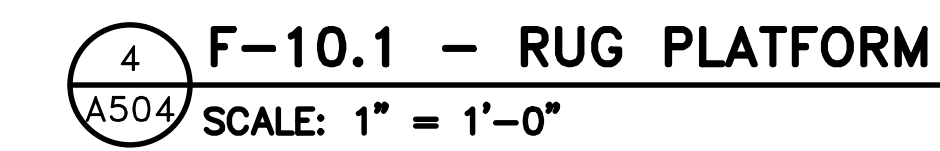
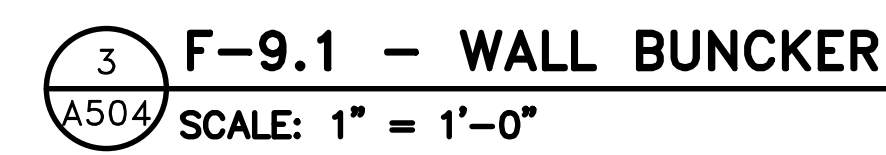


5 F-11.1 - GET COZY SHELF
A503 SCALE: 1" = 1'-0"

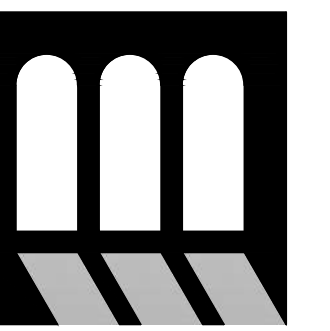


3 F-7.4 - GATHER-BAR STOOL FOCAL
A503 SCALE: 1/2" = 1'-0"

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AWN: STAFF
ECKED: TM



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Architect**
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214-893-3188

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A504

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A600



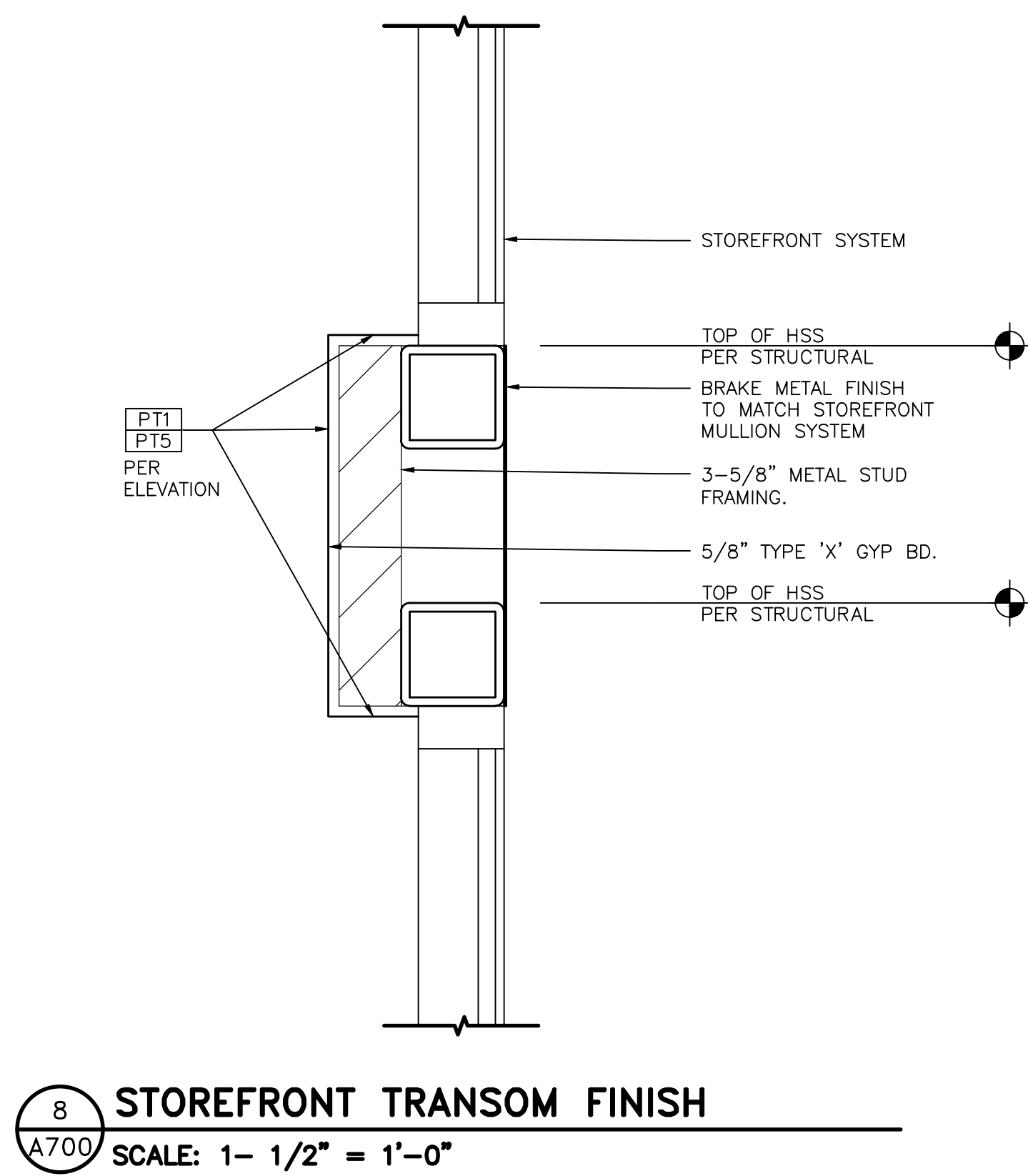
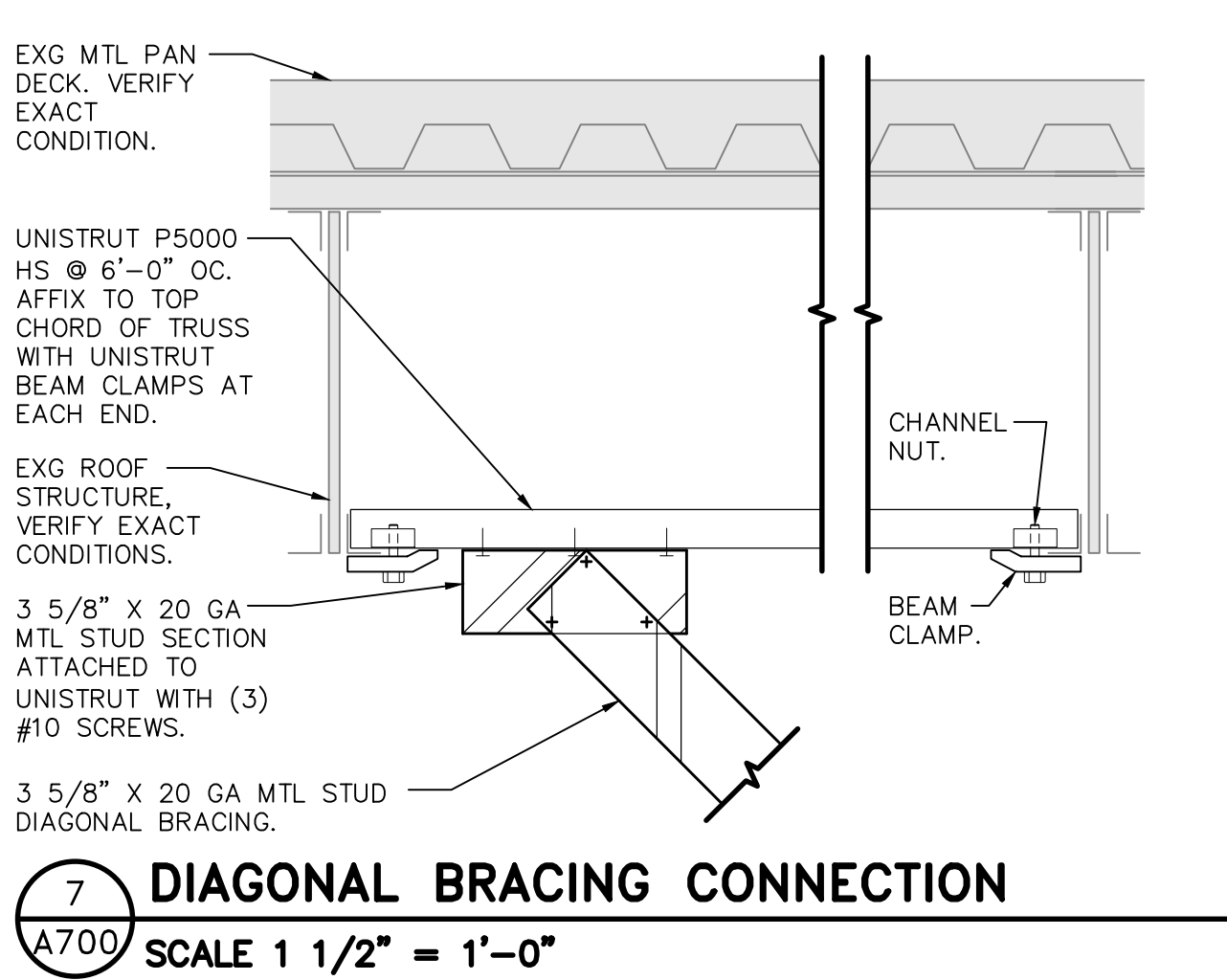
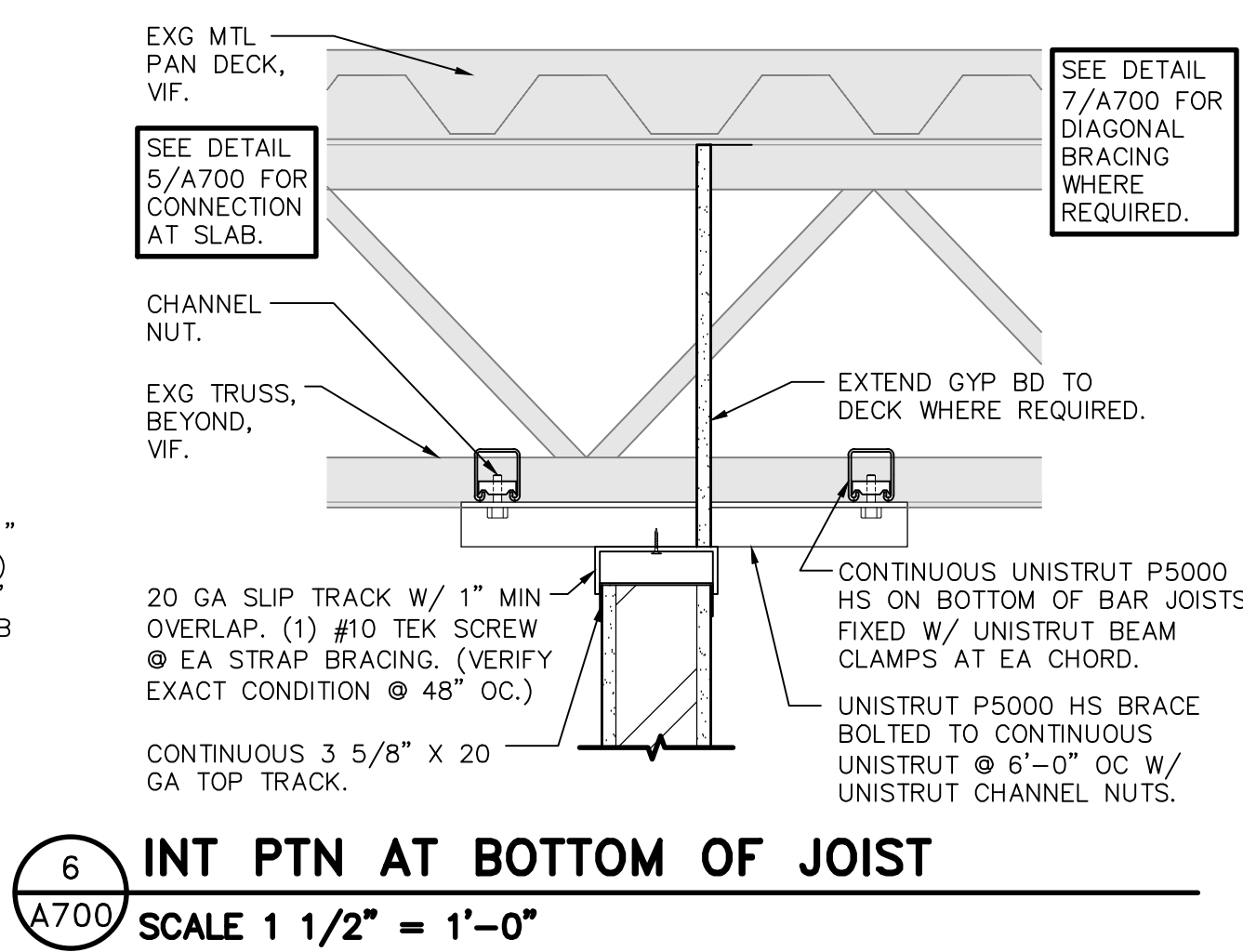
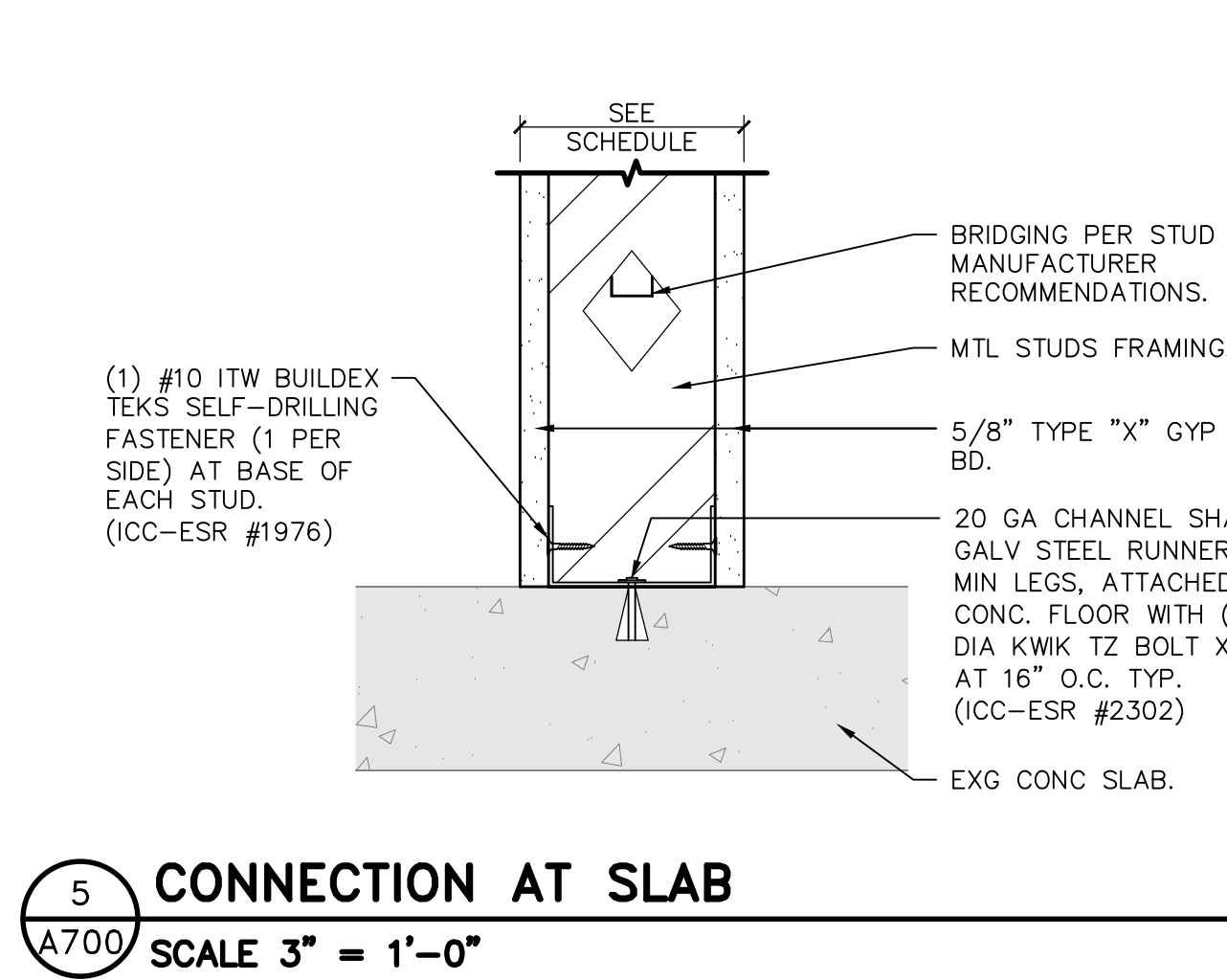
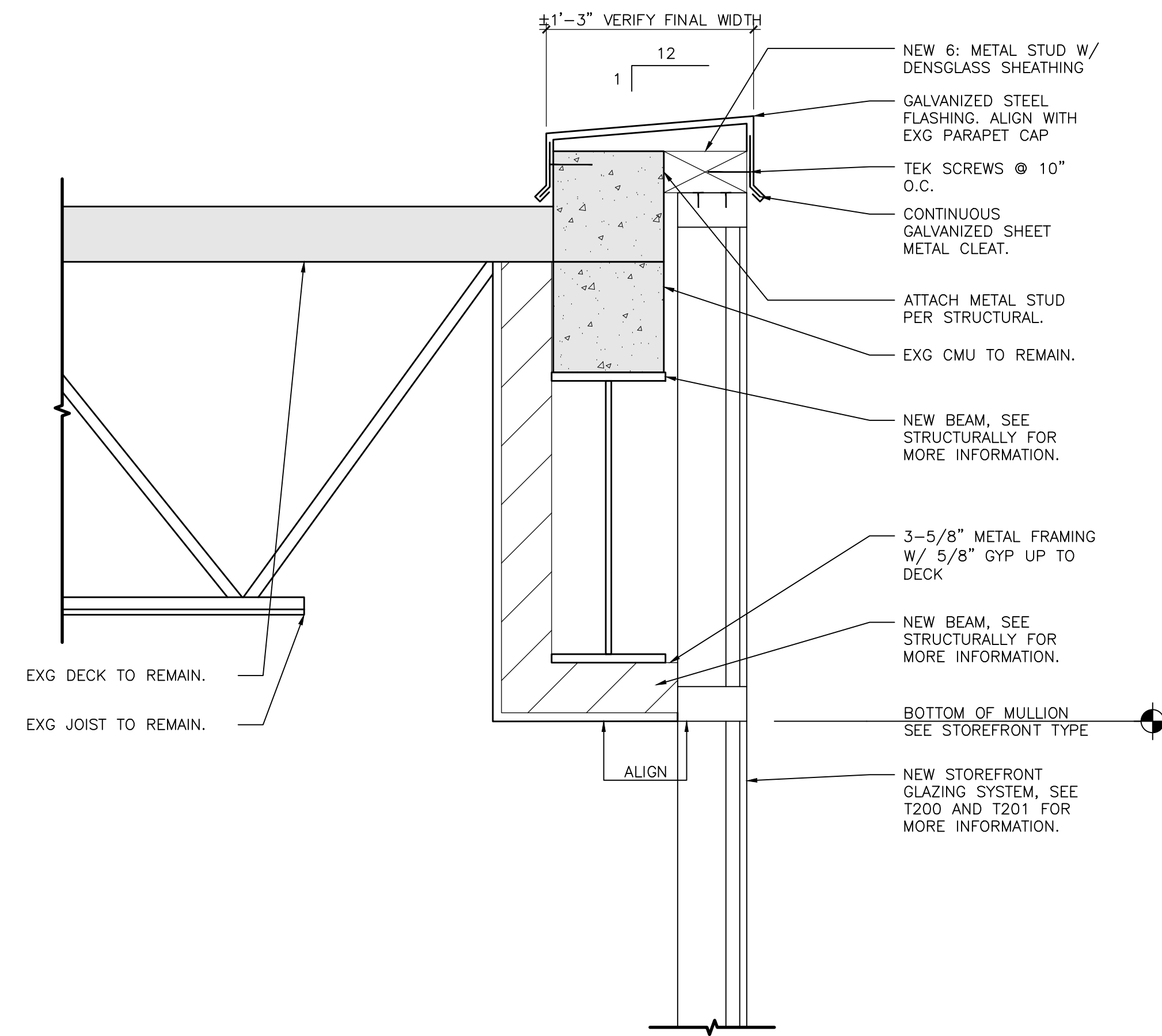
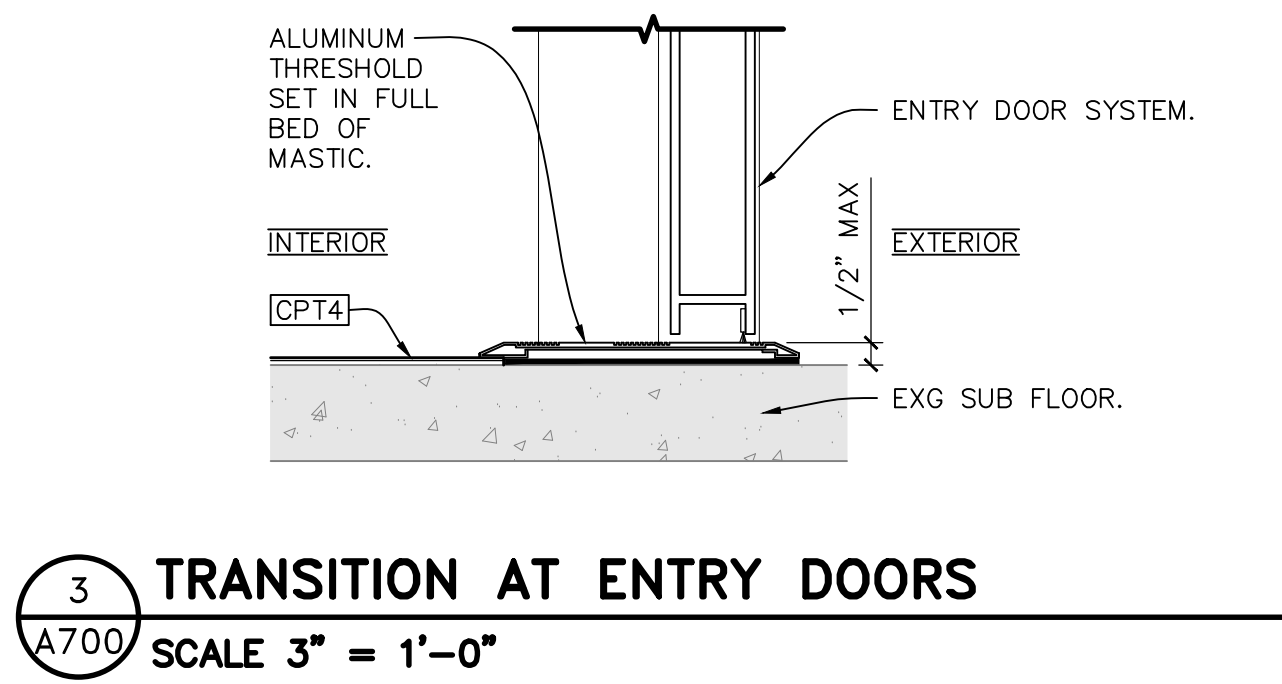
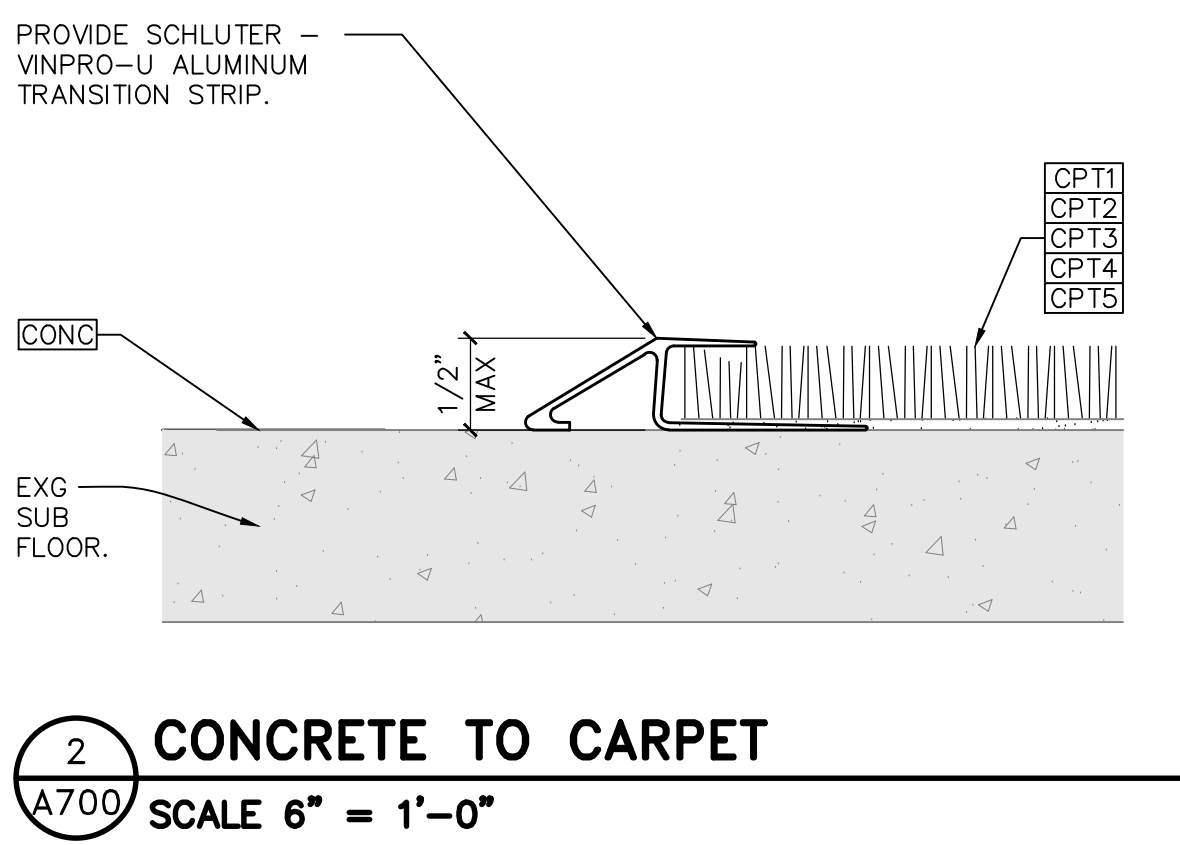
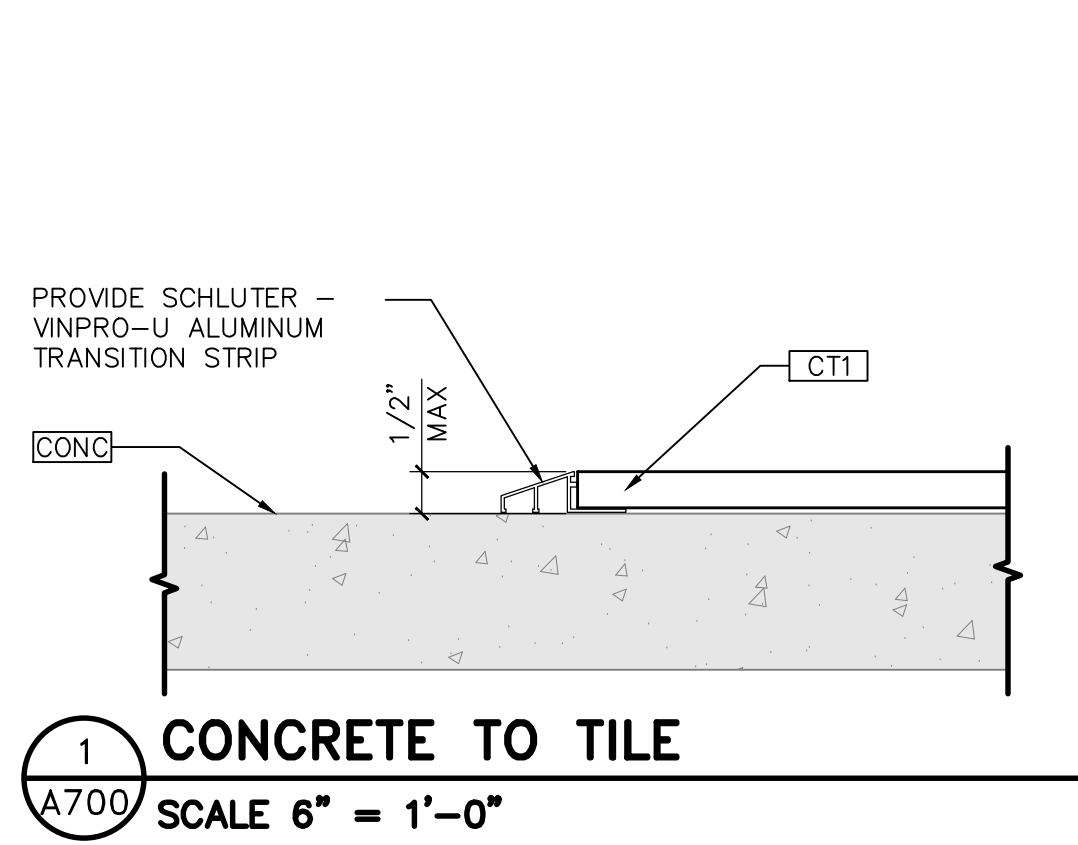
SIGNAGE IN THESE DRAWINGS ARE FOR REFERENCE ONLY, SIGNAGE VENDOR TO COORDINATE WITH MARKETING TEAM FOR VECTOR ART WORK AND LOGOS TO BE USED.

SIGNAGE VENDOR TO FIELD VERIFY ALL DIMENSIONS PRIOR CONSTRUCTION.

SIGNAGE VENDOR TO COORDINATE WITH THE GC FOR ANY PREPARATION, ELECTRICAL WORK, ETC. AS NEEDED.

COORDINATE FINAL LOCATION WITH TENANT AND LANDLORD

FINISH SCHEDULE					
TAG	USAGE	MANUFACTURER	SPECIFICATION		FINISH/NOTES
			WALLS		
PT1	GENERAL WALL PAINT – RESTROOMS – EXTERIOR	SHERWIN WILLIAMS	SW#	9166 SLUMBERLAND DRIFT OF MIST	PROMAR 200 LOW SHEEN E/S
PT2	ACCENT PAINT – WALL TRIMS – EXTERIOR TRIM	SHERWIN WILLIAMS	SW#	7006 SLUMBERLAND EXTRA WHITE	PROMAR 200 SEMI-GLOSS
PT5	ACCENT PAINT (INTERIOR & EXTERIOR)	SHERWIN WILLIAMS	SW#	7069 SLUMBERLAND IRON ORE	PROMAR 200 LOW SHEEN E/S
GENERAL NOTES					
1. INTERIOR FINISHES TO HAVE A MIN FLAME SPREAD OF CLASS C, MAX SMOKE DENSITY OF 450. 2. WALLS TO BE PREPARED TO LEVEL 4 FINISH – AS DESCRIBED BY THE NATIONAL GYPSUM COMPANY – PRIOR TO PAINTING. PRIME (1) COAT, PAINT (2) COATS. 3. PAINTER IS RESPONSIBLE FOR REMOVAL AND REINSTALLATION OF ALL HARDWARE, SWITCH AND OUTLET PLATES. 4. PAINTER TO LEAVE BEHIND 1 GAL (NOT 5 GAL) OF EACH COLOR. 5. NO ORANGE PEEI FINISH ALLOWED.					



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WORK TO BE ACCOMPLISHED ON THESE DRAWINGS AND THE ACCOMPANYING SPECIFICATIONS INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR THE PROPER COMPLETION OF ALL MECHANICAL WORK. BEFORE SUBMITTING A PROPOSAL, THE WORKER CONSULTED ON THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS, EACH BIDDER SHALL EXAMINE THE SITE, CHECK AS TO THE MEANS OF MAKING CONNECTIONS TO SERVICES, AND SHALL BE RESPONSIBLE FOR THE PROPER INTERPRETATION OF THE DRAWINGS AND SPECIFICATIONS TO THE AMOUNT OF WORK INVOLVED OR HIS LACK OF KNOWLEDGE OF ANY SITE CONDITIONS WHICH MAY AFFECT HIS WORK. ANY APPARENT VARIANCE OF THE PLAN OR SPECIFICATION FROM EXISTING CONDITIONS AT THE SITE SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER DURING THE BID PERIOD SO CLARIFICATION CAN BE OBTAINED BEFORE THE BIDDING PROCESS BEGINS.

C. EXISTENCE OF ANY WIRES, CONDUITS, PIPES, DUCTS, OR OTHER FACILITIES ARE SHOWN IN A GENERAL WAY. IT WILL BE THE DUTY OF THE CONTRACTOR TO VISIT THE SITE AND MAKE EXACT DETERMINATION OF THE EXISTENCE OF ANY SUCH FACILITIES PRIOR TO THE SUBMISSION OF HIS BID. IT IS UNDERSTOOD THAT HE WILL BE RESPONSIBLE FOR MAKING THE EXACT DETERMINATION OF THE LOCATION AND CONDITION OF SUCH FACILITIES.

D. ALL REQUIRED TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNDER THE SECTION OF THE SPECIFICATIONS FOR WHICH THEY ARE REQUIRED.

E. REQUIRED INSPECTIONS SHALL BE ARRANGED BY THE CONTRACTOR AS REQUIRED BY ANY AND ALL REGULATIONS. ALL CHARGES FROM REGULATING AGENCIES FOR INSPECTIONS OF INSTALLATIONS OR REVIEW OF PLANS AND SPECIFICATIONS SHALL BE PAID BY THE CONTRACTOR.

F. INSPECTION. UNDER EACH APPLICABLE SECTION OF THE SPECIFICATIONS, CONTRACTOR SHALL, UPON COMPLETION OF THE WORK UNDER THAT SECTION, FURNISH A CERTIFICATE OF FINAL INSPECTION TO THE ENGINEER FROM THE INSPECTION DEPARTMENT HAVING JURISDICTION.

G. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL CURRENT AND APPLICABLE CODES, SPECIFICATIONS, ORDINANCES, LAWS, REGULATIONS, INDUSTRY STANDARDS, AND UTILITY COMPANY REGULATIONS.

H. CASE OF DIFFERENCE AMONG BUILDING CODES, SPECIFICATIONS, STATE LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND UTILITY COMPANY REGULATIONS AND THE CONTRACT DOCUMENTS, THE MOST STRINGENT SHALL GOVERN. CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DIFFERENCE.

I. ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES SHALL BE ADHERED TO AND COMPLIANCE WITH THE REQUIREMENTS OF THE APPLICABLE BUILDING CODES, STATE LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND UTILITY COMPANY REGULATIONS, WHICH SHALL BEAR ALL COSTS ARISING TO CORRECT THE DEFICIENCIES.

J. CONTRACTOR SHALL INITIATE MAINTENANCE OF RECORD DRAWINGS OF THE PRE-CONSTRUCTION REQUIRED FOR HIS WORK, INCLUDING REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

K. DRAWINGS ARE TO SCALE AS NOTED, BUT THE CONTRACTOR SHALL REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXACT LOCATION OF PARTITIONS, WALLS, BEAMS, SHAFTS, EQUIPMENT, ETC.

L. EACH TRADE SHALL OBTAIN DRAWINGS AND SPECIFICATIONS OF ALL OTHER TRADES AND COORDINATE HIS WORK WITH ALL OTHER TRADES.

M. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, AND APPURTENANCES AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONDITIONS AND WORK OF OTHER TRADES WILL PERMIT. MECHANICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS. DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. IT IS NOT POSSIBLE TO INDICATE ALL ORIFICES, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED.

N. CONTRACTOR SHALL RESERVE THE RIGHT TO MAKE ANY CHANGES REQUIRED FOR THE ATTENTION OF THE ENGINEER IMMEDIATELY, AND THE ENGINEER RESERVES THE RIGHT TO REQUIRE MAJOR CHANGES IN THE WORK OF ANY CONTRACTOR TO ELIMINATE SUCH DISCREPANCIES WITH NO CHANGE IN CONTRACT COST.

O. PLANS AND SPECIFICATIONS ARE COMPLEMENTARY, AND WHAT IS CALLED FOR IN ONE IS THERE SHOWN AS BEING AS IF CALLED FOR IN BOTH.

P. ANY DISCREPANCY EXISTS BETWEEN THE SPECIFICATIONS, THE PLAN OR ARCHITECTURE, OR THE HIGHER COST QUALITY, GREATER QUALITY, OR HIGHER COST SHALL BE ATTENDED TO IN THE BID.

Q. ALL TIMES OF THE FACILITY SHALL NOT BE DISTURBED, EXCEPT WITHIN THE IMMEDIATE CONSTRUCTION AREA. ALL WALKS, DRIVEWAYS, AND ENTRANCES SHALL BE KEPT CLEAR AND FREE OF ALL CONTRACTOR'S EQUIPMENT, MATERIAL, AND DEBRIS AT ALL TIMES.

R. MATERIALS AND EQUIPMENT SHALL BE STORED IN SUCH A PLACE AND IN SUCH A MANNER THAT A MINIMUM OF CONGESTION WILL RESULT. THE PLACING OF SUCH MATERIALS AND EQUIPMENT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER.

S. CONTRACTOR SHALL THOROUGHLY EXAMINE EXISTING BUILDING WITH REGARD TO WHAT TEMPORARY MEASURES HE MUST TAKE IN ORDER TO PERMIT THE OWNER TO OCCUPY SPECIFIC AREAS OF THE BUILDING DURING THE VARIOUS CONSTRUCTION PHASES. IN GENERAL, SYSTEMS MUST REMAIN IN USE IN THOSE DESIGNATED AREAS TO PERMIT THE OWNER TO FUNCTION IN A PRE-CONSTRUCTION MANNER.

T. EACH CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES IN THE INSTALLATION OF EQUIPMENT, PIPING, CONDUIT, AND DUCTWORK.

U. HVAC/SHEET-METAL CONTRACTOR SHALL INITIATE THE COORDINATION BY PROVIDING RESPONSIBLE PLAN DRAWINGS SHOWING DUCTWORK AND EQUIPMENT.

V. DRAWINGS WILL BE FORWARDED TO THE PIPING CONTRACTOR AND ELECTRICAL CONTRACTOR FOR INCLUSION OF THEIR SYSTEMS WORK.

X. CONTRACTOR SHALL SOLVE ALL COORDINATION QUESTIONS AMONG THEMSELVES WHEN POSSIBLE. ENGINEER WILL ARBITRATE WHEN NECESSARY, AND HIS JUDGMENT WILL STAND, WITH NO ADDITIONAL COST TO THE OWNER.

Y. ACCESS PANELS SHALL BE FURNISHED BY THE TRADE REQUIRING THEM AND DELIVERED TO THE GENERAL CONTRACTOR FOR INSTALLATION.

Z. ACCESS PANELS SHALL BE MAINTAINED OPEN UNTIL THE WORK IS COMPLETE. THERE IS NO COMPATIBILITY WITH CONSTRUCTION AND FINISH OF THE WALL AND/OR CEILING.

AA. EACH TRADE SHALL PERFORM ALL CUTTING AND PATCHING NECESSARY IN ORDER TO PERFORM THE WORK, UNLESS SUCH WORK HAS BEEN DELEGATED TO THE GENERAL CONTRACTOR/ANOTHER TRADE. HOWEVER, SPECIAL PERMISSION SHALL BE OBTAINED FROM THE ENGINEER BEFORE CUTTING STRUCTURAL MEMBERS OR FINISHED MATERIALS. ALL PATCHING SHALL BE PERFORMED IN SUCH MANNER AS TO LEAVE NO VISIBLE TRACE AND TO RETURN THE PART AFFECTED TO THE CONDITION OF THE ORIGINAL. PATCHING SHALL BE DONE IN SUCH A MANNER AS TO BE UNNOTICABLE TO THE EYE. WORK WILL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS AND DRAWINGS. PATCHING SHALL BE DRILLED WITH ROTARY DRILLS. IMPACT TOOLS SHALL NOT BE USED.

AB. IF THE EXISTING WALL, CEILING, OR FLOORING IS TO BE REPAIRED, OR REPLACING OF THE WORK OF OTHER TRADES REQUIRED BECAUSE OF ITS FAULT, ERROR, OR TARDINESS OF WHICH OF ANY DAMAGE DONE BY THEM.

AC. EACH TRADE SHALL PROVIDE ALL HOLES AND OPENINGS REQUIRED FOR WORK, UNLESS SUCH HOLES AND OPENINGS ARE SHOWN TO BE PROVIDED ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS.

AD. EACH TRADE SHALL REMOVE EXISTING WORK THAT IS SHOWN, SPECIFIED, OR OBVIOUSLY NECESSARY FOR COMPLETION OF HIS WORK. OWNER SHALL HAVE THE OPTION OF RETAINING ANY ITEM OR MATERIAL REMOVED UNDER THIS CONTRACT. ITEMS TO BE REMOVED SHALL BE REMOVED IN SUCH A MANNER AS TO BE UNNOTICABLE TO THE EYE.

AE. EACH TRADE SHALL PERIODICALLY CLEAR AWAY ALL DEBRIS, SURPLUS MATERIALS, ETC., RESULTING FROM HIS WORK OR OPERATIONS, LEAVING THE JOB AND THE EQUIPMENT FURNISHED UNDER OR AT ALL REMOVED IN A CLEAN CONDITION.

AF. EACH TRADE SHALL TEST THE EQUIPMENT PROVIDED AND/OR INSTALLED UNDER THE SPECIFICATION AND SHALL DEMONSTRATE ITS PROPER OPERATION TO THE OWNER'S OPERATING ENGINEER.

AG. EACH TRADE SHALL FURNISH, WITHOUT ADDITIONAL EXPENSE TO THE OWNER, THE SERVICES OF COMPETENT INSTRUCTORS, WHO WILL GIVE FULL INSTRUCTION IN THE CARE, ADJUSTMENT, AND OPERATION AND MAINTENANCE OF ALL PARTS OF THE EQUIPMENT.

AH. HVAC SUBCONTRACTOR SHALL BE RESPONSIBLE FOR TESTED & RATED FIRE STOP SYSTEMS FOR ALL THIRD-PENETRATION OF WALLS, FLOORS & ROOF ASSEMBLIES RESULTING FROM PIPING & OTHER WORK UNDER HIS CONTRACT. REFER TO SPECIFICATION SECTION FOR SYSTEMS TO BE USED.

AI. ALL WOOD NAULERS AND OTHER LUMBER WHICH IS INSTALLED IN CONTACT WITH METAL, CONCRETE, OR MASONRY SHALL BE PRESSURE TREATED AGAINST DECAY (UNLESS OTHERWISE NOTED).

AJ. MATERIAL EXPOSED WITHIN RETURN AIR PLenum CEILING SHALL COMPLY WITH MC SECTION 602.2.

AK. HVAC CONTRACTOR SHALL LINE THE INSIDE OF ALL RETURN/EXHAUST PLenum BOXES PER SPECIFICATIONS, IF NO LINING IS REQUIRED, HVAC CONTRACTOR SHALL PAINT THE INSIDE PLAT BLACK.

AL. HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF FIRE STOP SYSTEMS FOR ALL THIRD PENETRATIONS OF THE WALLS, FLOORS, AND ROOF ASSEMBLIES RESULTING FROM PIPING AND OTHER WORK UNDER HIS CONTRACT. REFER TO SPECIFICATION SECTION 0784.1 - FIRESTOPPING FOR REQUIREMENTS.

AM. ALL DUCT SIZES ARE NOMINAL DIMENSIONS. CONTRACTOR SHALL INCREASE SCHED METAL SIZE, IF DUCT REDUCES INTERNAL LUNG, SEE SPECIFICATIONS FOR INSULATION REQUIREMENTS.

AN. ALL DUCT PENDING FERTILIZATION USES TO INSULATE OTHER THAN DUCT MAIN, THE TRANSITION TO DUCT CONNECTION SYSTEMS WITHIN PENDING FERTILIZATION SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS.

AO. LOCATIONS OF ORIFICES/-VENTS FOR FAN/BLADE CURBS ARE ORIENTED WHEN TAKING THE DIRECTION OF AIRFLOW.

AP. MAINTAIN A MINIMUM OF 10'-0" HORIZONTAL DISTANCE FROM ANY INTAKE TO EXHAUST OUTLET.

PRIOR TO BID, THE CONTRACTOR SHALL REVIEW THE MECHANICAL, ELECTRICAL AND EQUIPMENT DRAWINGS. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL RELEVANT WORK IN THE ENTIRE SET OF DOCUMENTS AND REPORT ALL DISCREPANCIES BETWEEN THESE DRAWINGS TO THE ENGINEER PRIOR TO BIDDING FOR CLARIFICATION. IF DISCREPANCIES REMAIN UNRESOLVED DUE TO A SHORT TIME FRAME, THE CONTRACTOR SHALL INCLUDE THE MOST WORK AND THE HIGHER COSTS IN THE BID. SOLUTIONS TO UNREPORTED DISCREPANCIES WILL BE DETERMINED BY THE ARCHITECT/ENGINEER, WITH NO ADDITIONAL COMPENSATION DUE TO THE CONTRACTOR.

[illegible]

A diagram of a diffuser register. It is a rectangular box divided into three horizontal sections. The top section is labeled 'A' and '24x6 / 8ø'. The middle section is labeled '450'. The bottom section is labeled 'TYP. 2'. Arrows point from the labels to the corresponding parts of the register: 'SIZES (INCHES) OR DIFFUSER NECK SIZE' points to the top section, 'CFM' points to the middle section, and 'QUANTITY OF DRG IN GENERAL AREA' points to the bottom section. A note at the bottom states: 'NOTE: SEE DIFFUSER, REGISTER, AND GRILLE SCHEDULE FOR FURTHER DETAILS'.

A

24x6 / 8ø

450

TYP. 2

→ SIZES (INCHES) OR DIFFUSER NECK SIZE

→ CFM

→ QUANTITY OF DRG IN GENERAL AREA

→ DRG TAG, SEE SCHEDULE

NOTE:
SEE DIFFUSER, REGISTER, AND GRILLE SCHEDULE
FOR FURTHER DETAILS

ALL FLEX DUCT MUST BE INSTALLED PER THE ADC (AIR DIFFUSION COUNCIL) INSTALLATION STANDARDS (MOST CURRENT EDITION), INCLUDING A BEND RADIUS OF ONE DUCT DIAMETER OR GREATER, PROPERLY SEALED AND SECURED WITH 2 INCH BEADED COLLARS, PROPERLY SUPPORTED AND FULLY EXTENDED DUCT. FAN CAULING SHALL BE INSTALLED PER THE ADC (AIR DIFFUSION COUNCIL) INSTALLATION STANDARDS. FLEX DUCT SHOWN ON PLANS IS FOR SCHEMATIC PURPOSES ONLY AND SHALL IN NO INSTANCE EXCEED 4 FOOT.

— CW	DOMESTIC COLD WATER (SOFT)
— H	DOMESTIC COLD WATER (HARD)
— FCW	DOMESTIC FILTERED COLD WATER
— CW-FF	DOMESTIC COLD WATER (FLUSHING FIGURES)
— NP	DOMESTIC COLD WATER (NON-ROTABLE)
— T	TEMPERED DOMESTIC HOT WATER
— HW	DOMESTIC HOT WATER
— CHW	RECIRCULATION HOT WATER
— 140°F HW	DOMESTIC HOT WATER (140° F)
— 140°F CHW	RECIRCULATION DOMESTIC HOT WATER (140° F)
— W	SANITARY WASTE
— GW	GREASE WASTE
— V	VENT
— AW	SANITARY WASTE (ACID)
— AV	VENT (ACID)
— SD	STORM DRAIN (PRIMARY)
— OSO	OVERFLOW STORM DRAIN (OVERFLOW)
— DT	DRAIN TILE
— POOL	POOL DRAINAGE
— G	NATURAL GAS
— HWS	HEATING WATER SUPPLY
— HWR	HEATING WATER RETURN
— CWS	CHILLED WATER SUPPLY
— CWR	CHILLED WATER RETURN
— CD	CONDENSATE DRAIN PIPING
— RL	REFRIGERANT LIQUID
— RS	REFRIGERANT SUCTION
— CA	COMPRESSED AIR
— FW	FIRE PROTECTION (WET)
— FD	FIRE PROTECTION (DRY)
— FPA	FIRE PROTECTION (PRE-ACTION)

A	24x6	SIZE (INCHES) OR DIFFUSER NECK
	#80	CFM
	TYP.	QUANTITY OF DRG IN GENERAL
		AREA
	2	DRG TAG, SEE

NOTE:
SEE DIFFUSER, REGISTER, AND GRILLE SCHEDULE FOR FURTHER DETAILS

 RECESSED WHITE PENDANT HEAD W/ WHITE ESCUTCHEON CUP
 CONCEALED WHITE PENDANT HEAD W/ WHITE DISC
 UPRIGHT BRASS HEAD ON EXPOSED PIPING
 UPRIGHT WHITE HEAD ON EXPOSED PIPING
 CHROME SIDEWALL HEAD W/ CHROME WALL FLANGE
 CHROME EXTENDED THROW HEADS W/ CHROME WALL FLANGE
 CHROME EXTENDED THROW SIDEWALL HEADS W/ HIGH-TEMP WALL FLANGE & HIGH-TEMP SCOT
 WHITE PENDANT HEAD, HENS IN POOL SHALL BE A MANUFACTURED HEAD FOR CORROSIVE ENVIRONMENTS TO PREVENT RUSTING
 CHROME (BRG) RECESSED WHITE PENDANT HEAD W/ WHITE ESCUTCHEON CUP
 SWAPPER FIRE DEPT. CONNECTION
 OS & V VALVE
 OS&Y VALVE WIRED
 RPZ VALVE (REDUCED PRESSURE BACKFLOW)

M000	MECHANICAL TITLE SHEET
M100	MECHANICAL PLAN
M300	SCHEDULES & DETAILS
M400	SPECIFICATIONS

HVAC CONTROL NOTES

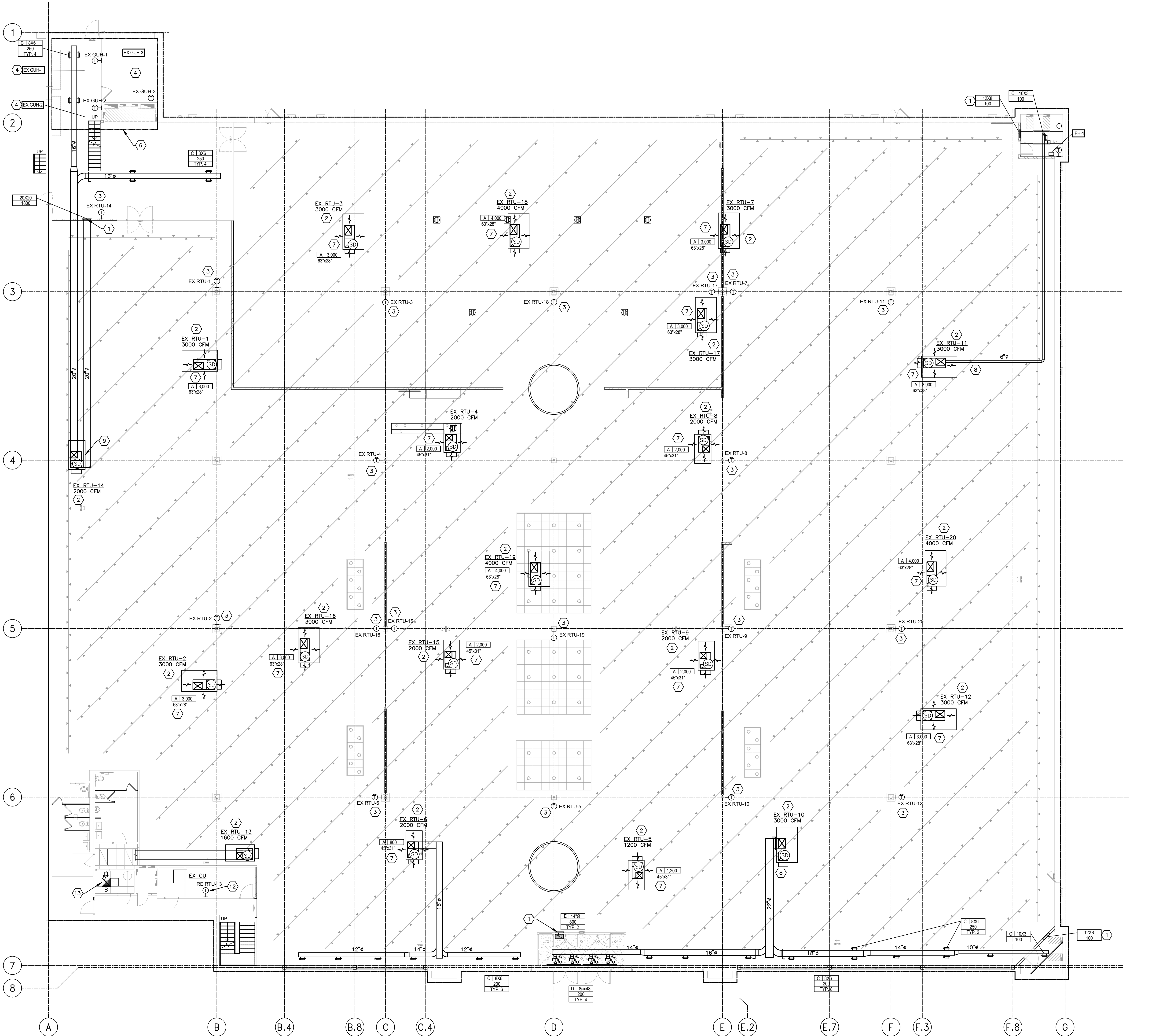
CONTRACTOR SHALL COORDINATE EXISTING CONDITIONS ON-SITE PRIOR TO SUBMITTING A BID. COORDINATE WITH PROJECT MANAGER.
CONTRACTOR SHALL EMPLOY A CERTIFIED MECHANICAL CONTRACTOR TO PROVIDE CUT SHEETS AND SCHEMATIC DESIGN FOR REVIEW BY CITY PRIOR TO ORDERING AIR EQUIPMENT.
CONTRACTOR SHALL INSTALL A COMMERCIAL SERIES THERMOSTAT AT 48" AFF. THERMOSTAT TO BE MOUNTED TO STRUCTURE WITH LOCK BOX AS PROVIDED WITH THERMOSTAT. COORDINATE LOCATION WITH ARCHITECTURAL SHEETS AND ON-SITE WITH PROJECT MANAGER PRIOR TO INSTALLATION AND SETTING. TECHNIQUE TO SET AIR CONDITIONING TO OWNER SPECIFICATIONS-VERIFY WITH PROJECT MANAGER TECH TO REFER TO MANUAL FOR OTHER THERMOSTAT SETTINGS.

HVAC GENERAL NOTES

- ALL INSTALLATIONS, EQUIPMENT AND MATERIAL SHALL COMPLY WITH ALL APPLICABLE CODES.
- CONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS, SPECIFICATIONS, EXISTING CONDITIONS AND LANDLORD CRITERIA FOR BIDDING PURPOSES. FAILURE TO ACQUAINT THEMSELVES WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING THEIR WORK PROPERLY.
- NOT ALL EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. IS SHOWN ON THE PLANS. ALL EXISTING EQUIPMENT AND PIPING SHOWN DOES NOT REFLECT ALL OFFSETS, LENGTHS AND LOCATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT AND PIPING TO BE REMOVED AND/OR CONNECTED TO PRIOR TO BID.
- NO FIBERGLASS DUCT BOARD SHALL BE ALLOWED. NO EXCEPTIONS.
- THE HVAC CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR ON ANY ADDITIONAL STRUCTURAL STEEL REQUIRED TO SUPPORT MECHANICAL EQUIPMENT PER STRUCTURAL STANDARD DETAILS. THIS CONTRACTOR SHALL COORDINATE LOCATIONS AND REQUIREMENTS WITH THE GENERAL CONTRACTOR AND LANDLORD. VERIFY SCOPE OF WORK WITH THE GENERAL CONTRACTOR PRIOR TO BID AND INCLUDE ALL COSTS IN BID AS DIRECTED BY THE GENERAL CONTRACTOR.
- HVAC CONTRACTOR SHALL PROVIDE TWO (2) COPIES OF A CERTIFIED AIR BALANCE REPORT WITH AIR TEMPERATURES AND PRESSURES TO TENANT AT TIME OF FINAL PUNCH FOR APPROVAL AS REQUIRED BY MECHANICAL INSPECTOR, LANDLORD AND OWNER'S REPRESENTATIVE.
- CEILING CONTRACTOR MUST PROVIDE ACCESS IN CEILING AT DIFFUSERS AND DAMPERS FOR AIR BALANCING.
- HVAC CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT, PIPING AND DUCTWORK, NOT BEING USED IS FULLY REMOVED AND NOT ABANDONED. COORDINATE REQUIREMENTS WITH THE GENERAL CONTRACTOR AND LANDLORD. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. VERIFY SCOPE OF WORK WITH THE GENERAL CONTRACTOR PRIOR TO BID AND INCLUDE ALL COSTS IN BID AS DIRECTED BY THE GENERAL CONTRACTOR.
- MATERIAL EXPOSED WITHIN RETURN AIR PLENUM CEILINGS SHALL COMPLY WITH IMC SECTION 602.2.
- HVAC SUBCONTRACTOR SHALL BE RESPONSIBLE FOR TESTED & RATED FIRE STOP SYSTEMS FOR ALL THRU-PENETRATION OF WALLS, FLOORS & ROOF ASSEMBLIES RESULTING FROM PIPING & OTHER WORK UNDER HIS CONTRACT. REFER TO FIRESTOPPING SPEC SECTION FOR REQUIREMENTS.
- ALL NEW DUCTWORK TO BE INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS.
- HOLD ALL NEW DUCTWORK AS HIGH AS POSSIBLE/PRACTICAL. MOUNT TIGHT TO BOTTOM OF STRUCTURE. COORDINATE WITH LIGHTS PRIOR TO INSTALLATION. AVOID CONTACT. PROVIDE TRANSITIONS AS REQUIRED. DUCT DIMENSIONS ARE CLEAR INTERNAL AIR PATH DIMENSIONS. PAINT UNINSULATED EXPOSED DUCTWORK COLOR DETERMINED BY ARCHITECT.

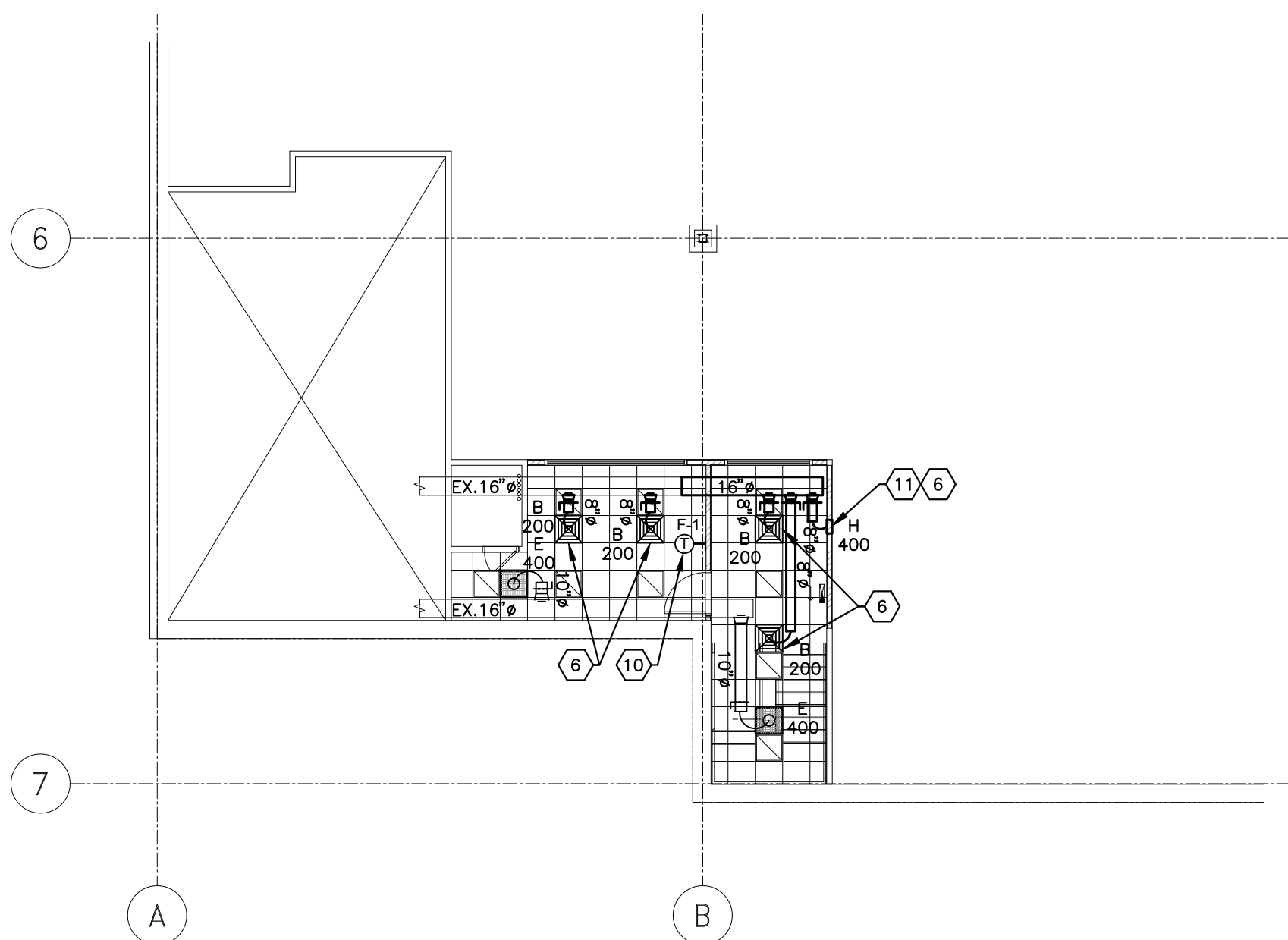
HVAC KEY NOTES

- CONTRACTOR TO FURNISH AND INSTALL TRANSFER AIR GRILLES MOUNTED HIGH IN WALL.
- APPROXIMATE LOCATION OF EXISTING ROOFTOP UNIT ON ROOF ABOVE AND EXISTING DUCT DROPS. VERIFY RTU HAS POWER EXHAUST AND INSTALL IF NONE.
- CONTRACTOR TO FURNISH AND INSTALL NEW COMMERCIAL 7-DAY PROGRAMMABLE THERMOSTAT WITH CONTROL FOR UP TO 2-STAGES OF HEATING AND 2-STAGES OF COOLING. VERIFY COMPATIBILITY WITH LANDLORDS REQUIREMENTS PRIOR TO INSTALLATION. CONTRACTOR TO INSTALL AT 48" AFF AND WIRE TO EQUIPMENT PER MANUFACTURERS INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL PROGRAM THERMOSTAT SET POINTS, COORDINATE SETTINGS AND LOCATIONS WITH TENANT'S PROJECT MANAGER. PROVIDE CLEAR LOCK BOX FOR THERMOSTAT.
- APPROXIMATE LOCATION OF EXISTING UNIT HEATER AND EXISTING THERMOSTAT TO REMAIN.
- APPROXIMATE LOCATION OF EXISTING DUCTWORK TO REMAIN.
- EXTEND DUCTWORK FROM NEW DIFFUSER/RETURN TO EXISTING DUCTWORK.
- FURNISH AND INSTALL DUCTWORK TO CONCENTRIC DIFFUSER AS INDICATED. HOLD CONCENTRIC DIFFUSER 12" ABOVE SUPPORT CONCENTRIC DIFFUSER FROM STRUCTURE ABOVE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO DETAIL.
- CONNECT TO DUCTWORK WITH CONICAL BELL MOUTH SPIN-IN TAKE-OFF WITH VOLUME DAMPER. BRANCH TO CFM INDICATED. DAMPER IN SUPPLY DROP AFTER TAKE-OFF PRIOR TO CONNECTION TO CONCENTRIC DIFFUSER. REFER TO DETAIL 4/M400. EXTEND TO FRONT OF STORE AND VISIBLE AS SHOWN. HOLD DUCTWORK ABOVE LIGHTS.
- DISCONNECT AND REMOVE EXISTING DUCTWORK. PROVIDE NEW DUCTWORK AS SHOWN. MOUNT DUCTWORK AS HIGH AS PRACTICAL/POSSIBLE. COORDINATE TO AVOID LIGHTING, GARAGE DOORS, AND UNIT HEATERS OUTPUT.
- PROVIDE NEW 7-DAY PROGRAMMABLE T-STAT HONEYWELL MODEL #T83026B FOR EXISTING FURNACE F-1.
- PROVIDE NEW SIDEWALL DIFFUSER.
- INSTALL RELOCATED THERMOSTAT FOR EXISTING RTU-13.
- BEFORE REMOVAL OF EXISTING DIFFUSER, MEASURE EXISTING CFM. EXTEND DUCTWORK TO NEW LOCATION AND SET NEW CFM TO PREVIOUS CFM.



1 FIRST FLOOR MECHANICAL PLAN

SCALE: 1/8" = 1'-0"



2 MEZZANINE MECHANICAL PLAN

SCALE: 1/8" = 1'-0"

DATE: 10/25/24

JOB NO: 5035.0001

DRAWN: DMS/HB

CHECKED: WLW

emanuelson-podas
consulting engineers

Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
952.930.0050 | www.epinc.com

SLUMBERLAND
7961 SOUTHTOWN CTR.
BLOOMINGTON, MN 55431

5046.0001
I HEREBY CERTIFY THAT
THIS PLAN, SPECIFICATION,
OR REPORT WAS PREPARED
BY ME OR UNDER MY
DIRECT SUPERVISION AND
THAT I AM A DULY
REGISTERED ENGINEER
UNDER THE LAWS OF THE
STATE MINNESOTA.

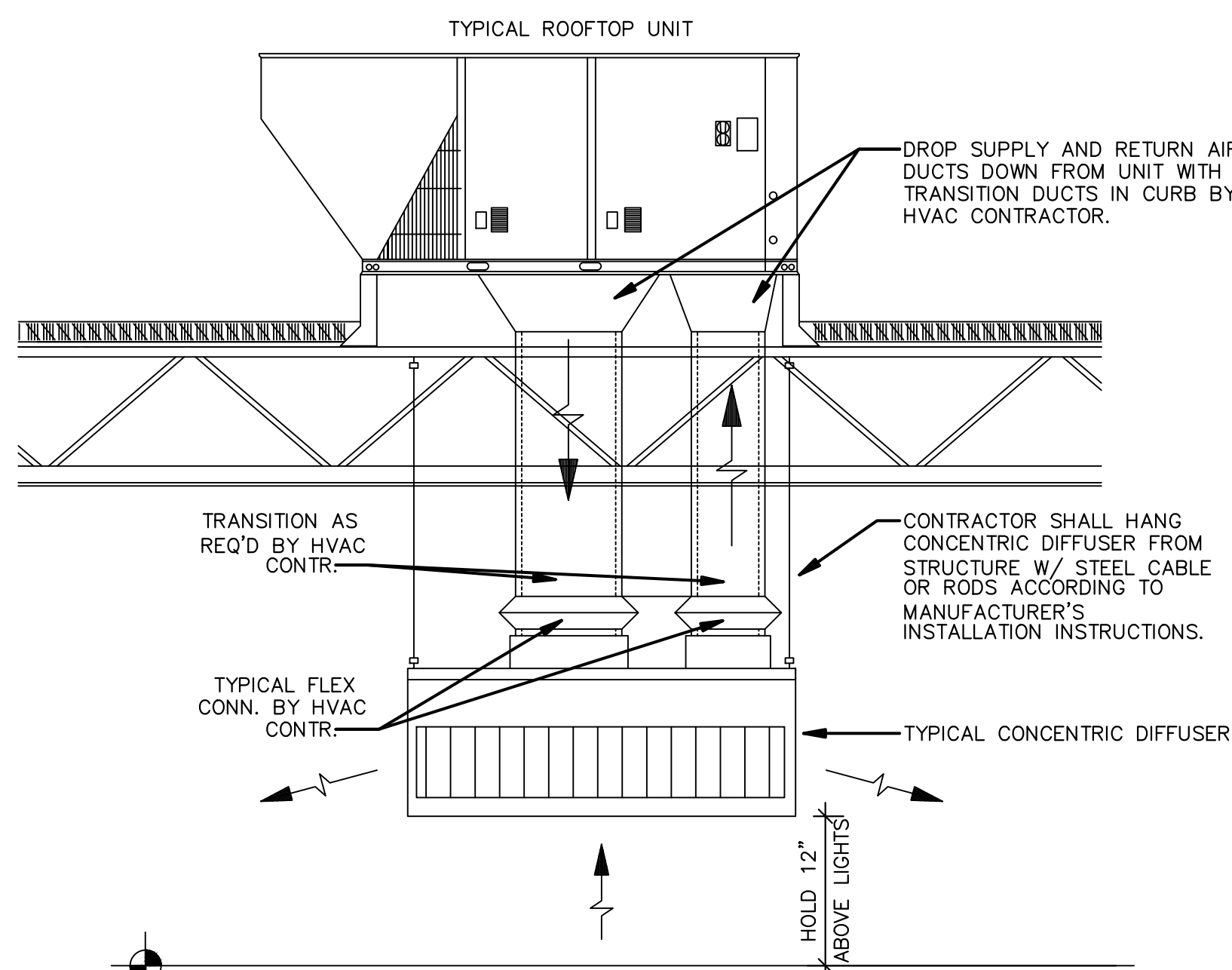
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DATE ISSUED 10/25/24
REG. NO. 22883

REVISIONS		
TAG	DATE	DESCRIPTION
	10/25/24	PERMIT

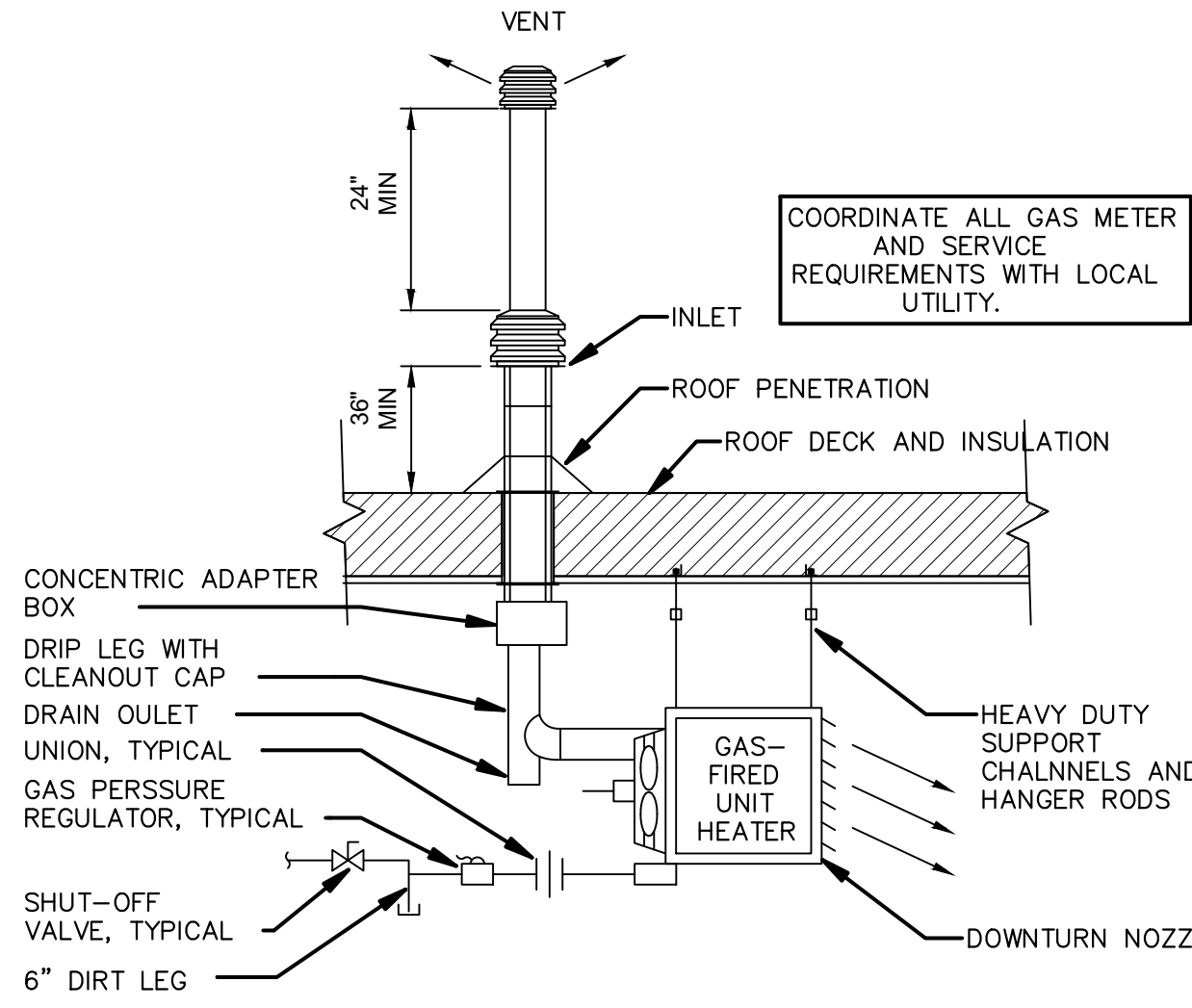
MECHANICAL PLAN

SHEET NUMBER

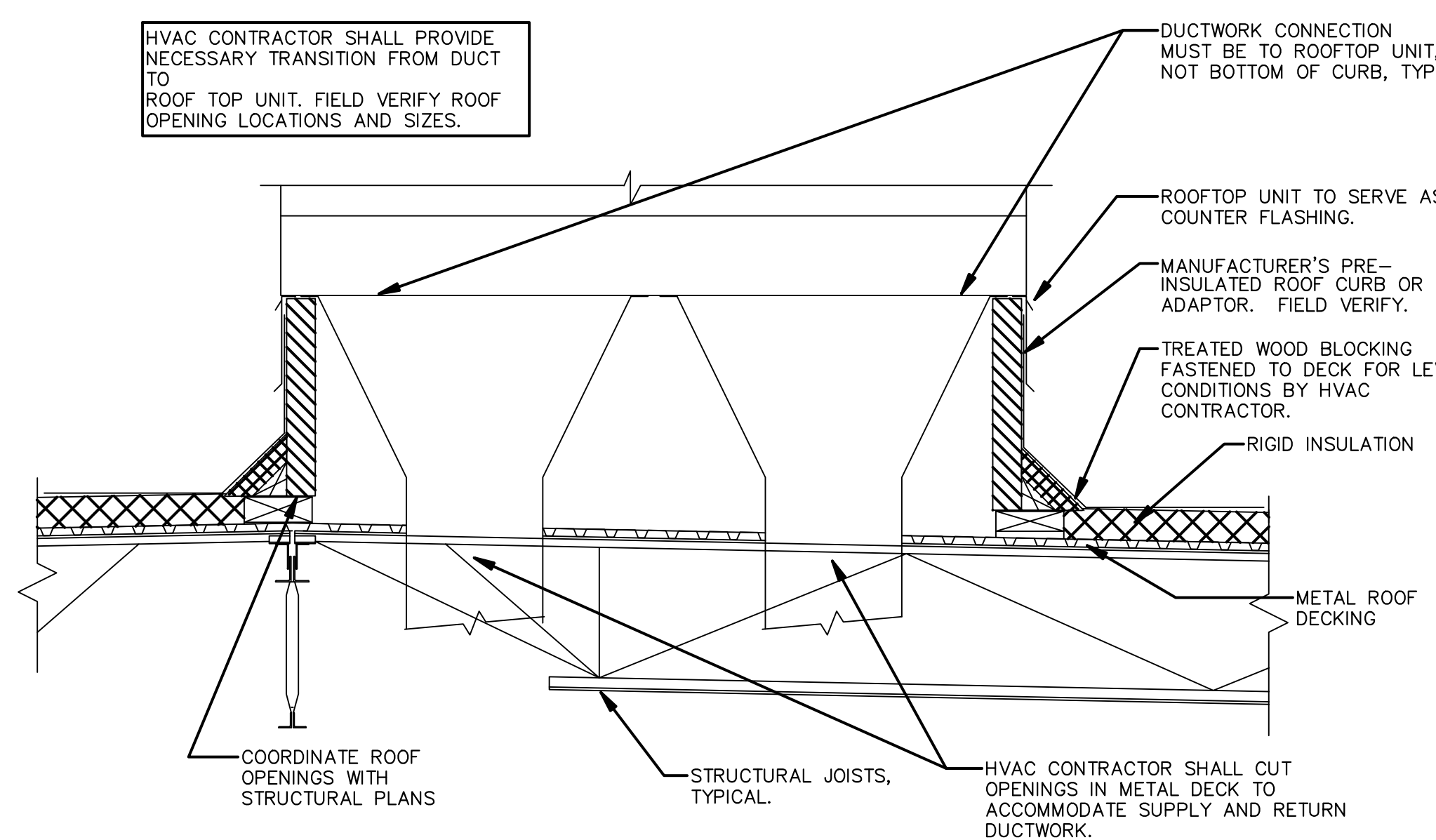
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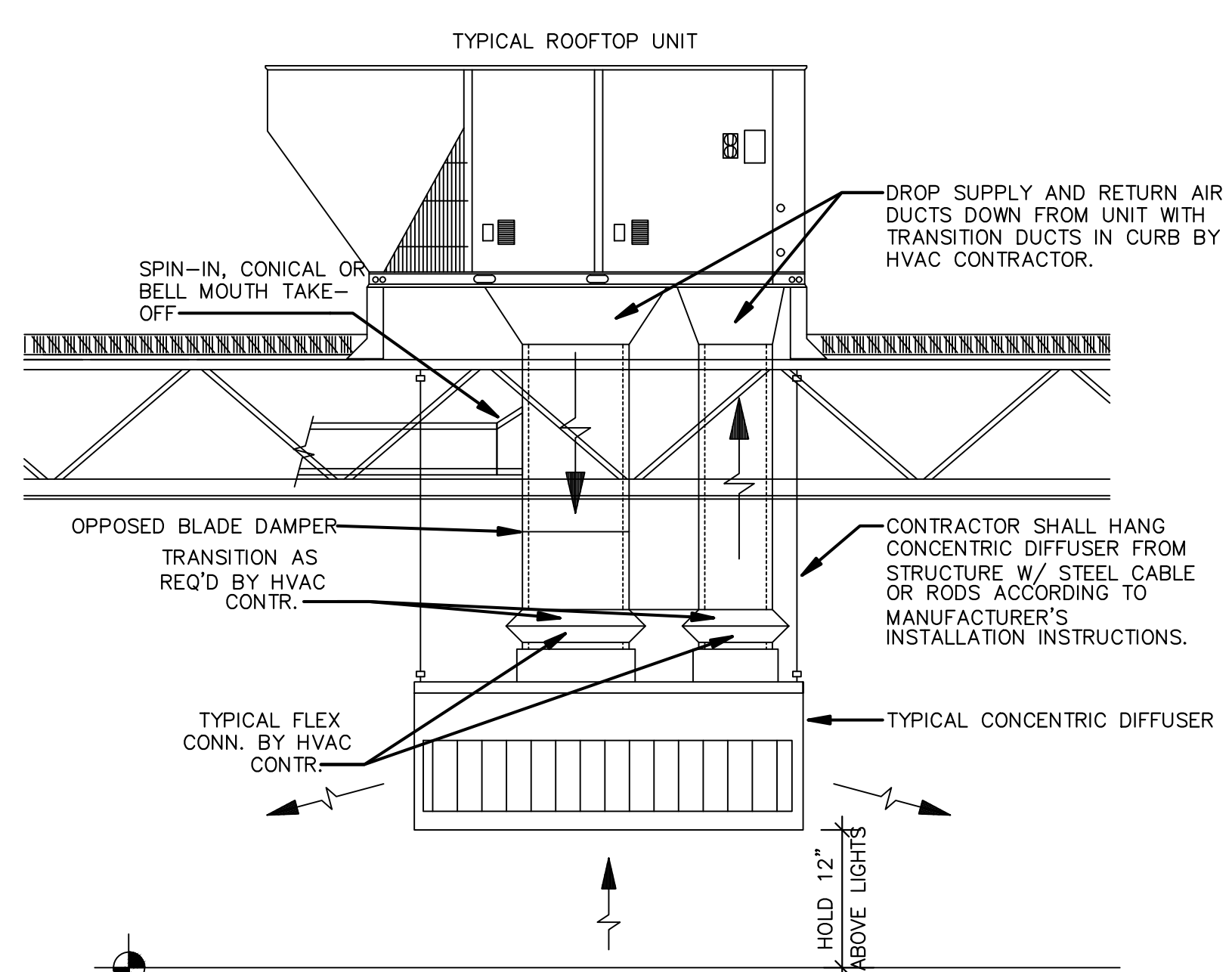
1 CONCENTRIC DIFFUSER DETAIL
SCALE: NTS



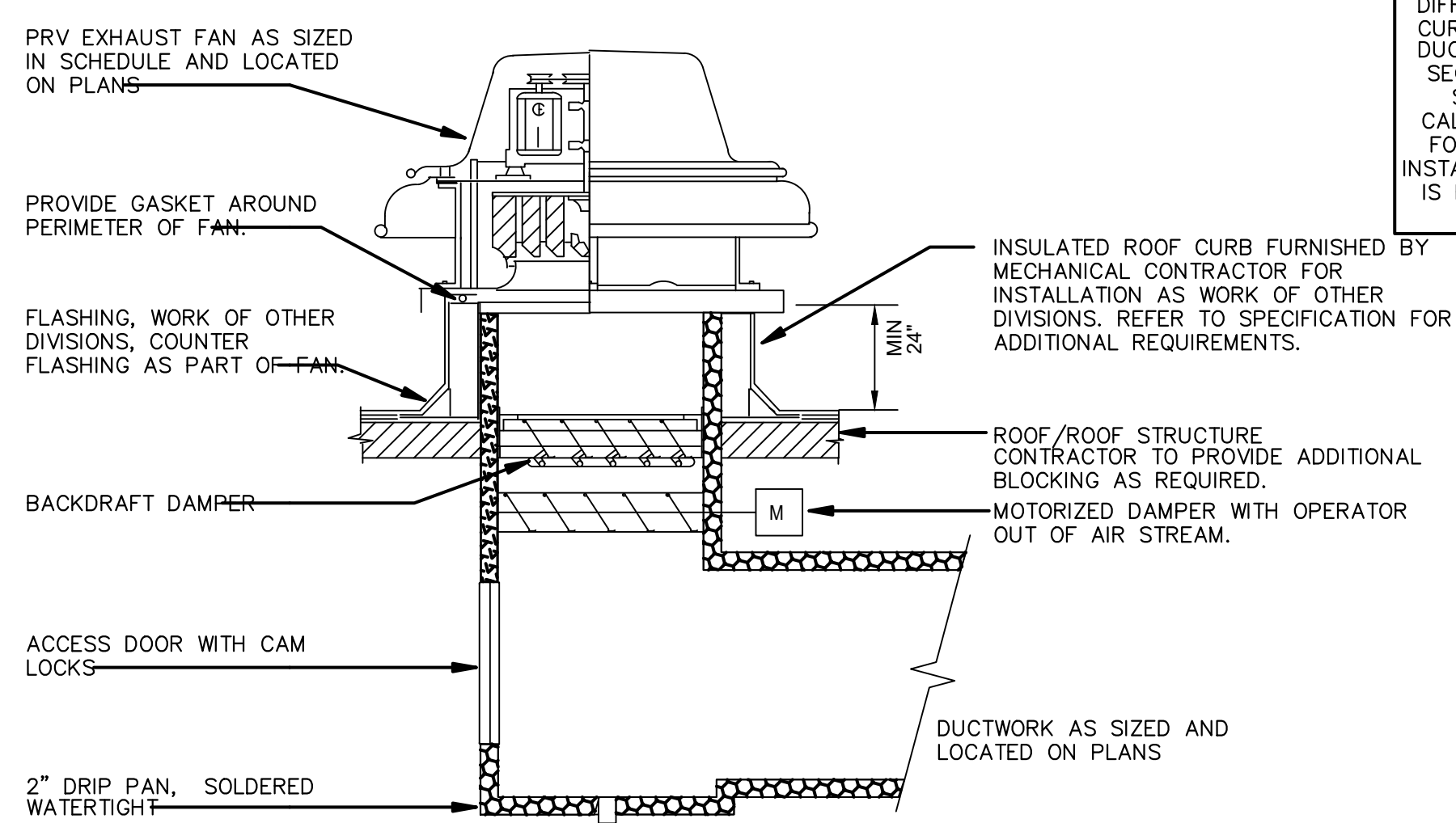
2 GAS UNIT HEATER DETAIL
SCALE: NTS



3 ROOFTOP UNIT CURB DETAIL
SCALE: NTS



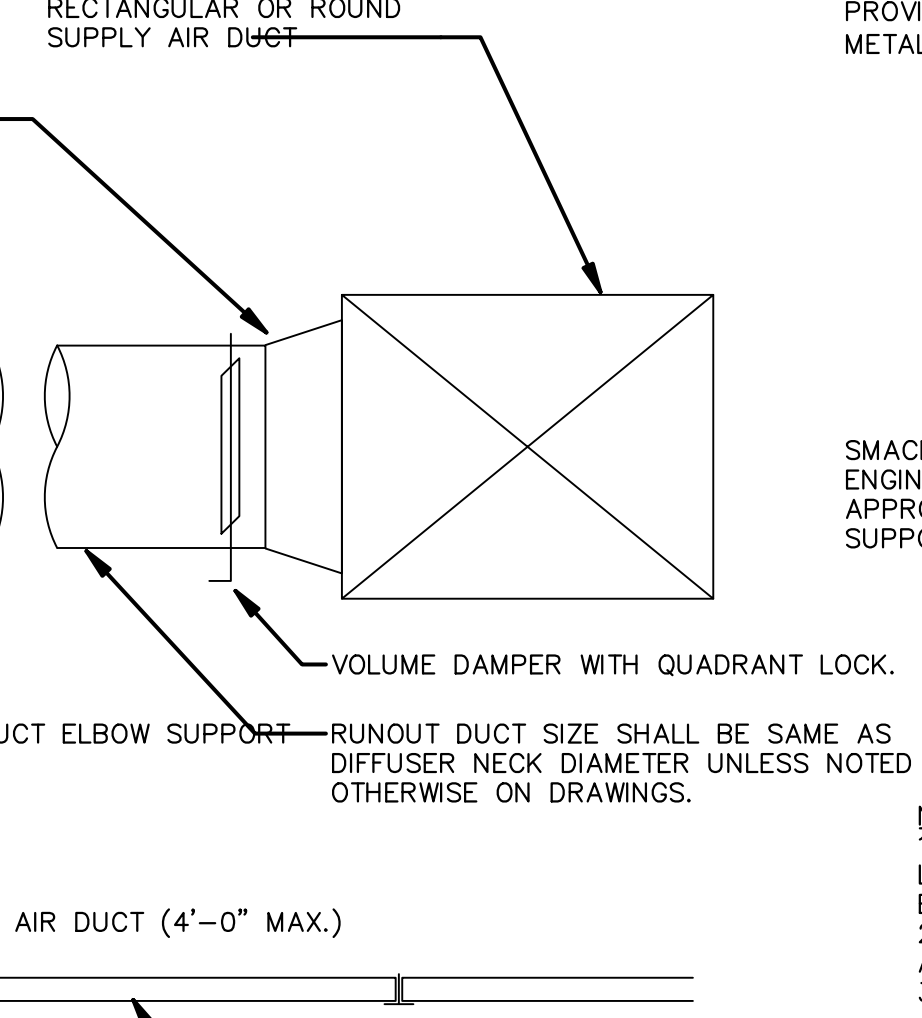
4 CONCENTRIC DIFFUSER W/ TAP DETAIL
SCALE: 1/8" = 1'-0"



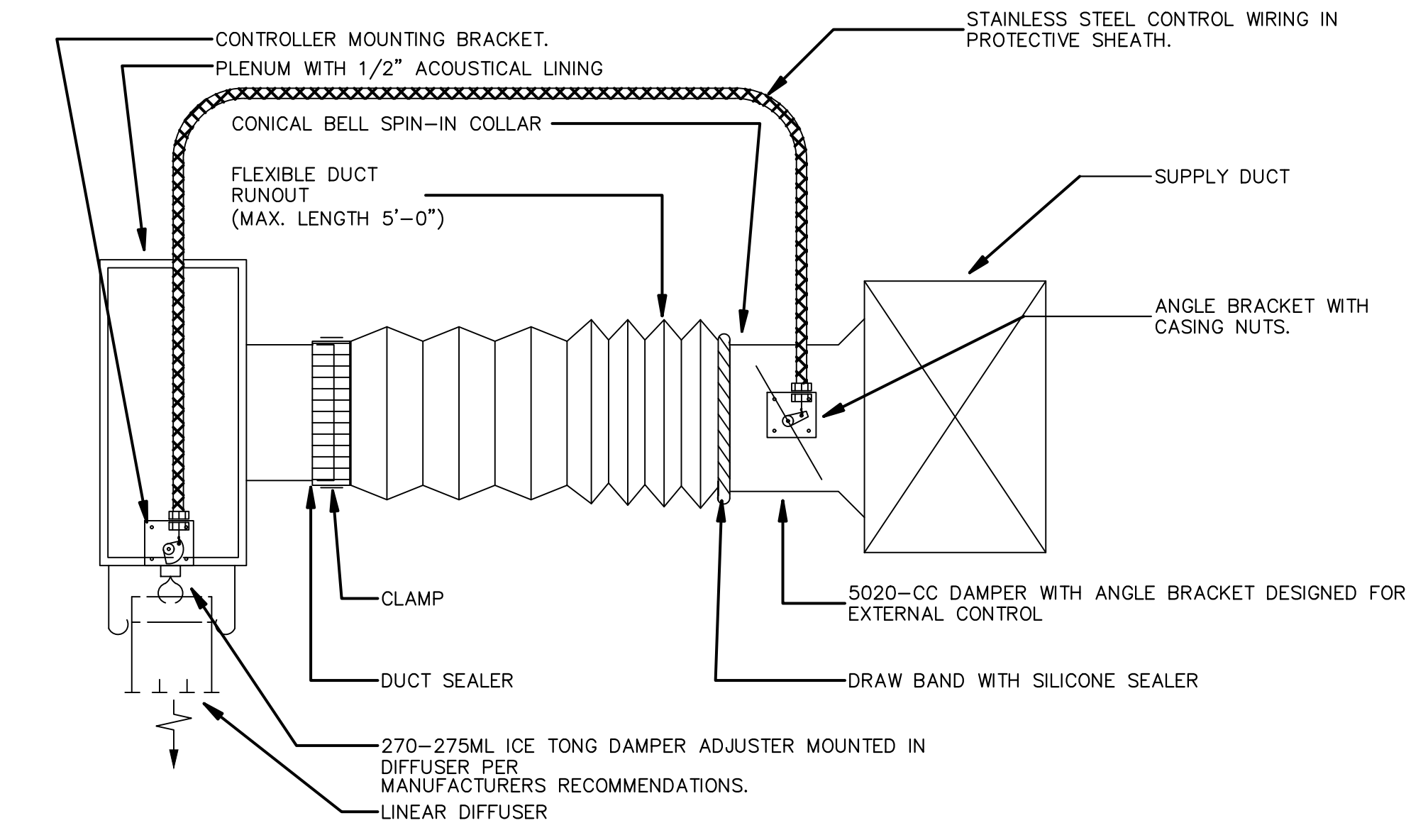
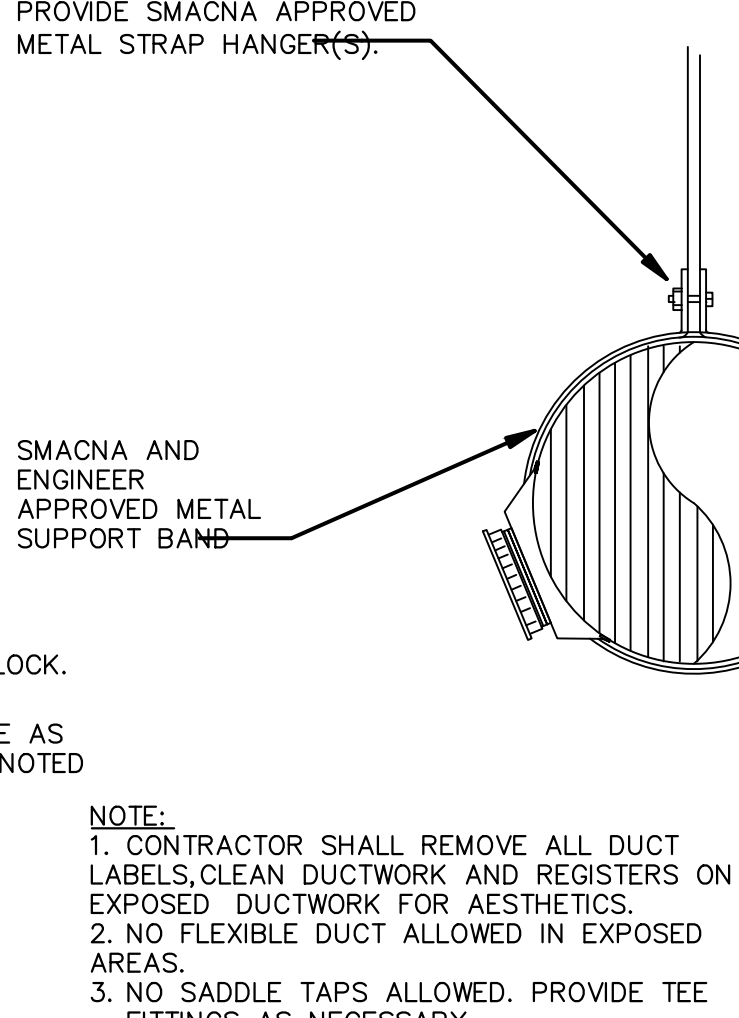
5 EXHAUST FAN PRV
SCALE: 1/8" = 1'-0"

ALL FLEX DUCT MUST BE INSTALLED PER THE ADC (AIR DIFFUSION COUNCIL) INSTALLATION STANDARDS (MOST CURRENT EDITION), INCLUDING A BEND RADIUS OF ONE DUCT DIAMETER OR GREATER, PROPERLY SEALED AND SECURED WITH 2 INCH BEADED COLLARS, PROPERLY SUPPORTED AND FULLY EXTENDED DUCT. FAN CALCULATIONS FOR THIS PROJECT WERE SIZED FOR 4 FOOT MAXIMUM FLEX DUCT INSTALLED PER THE ADC INSTALLATION STANDARDS. FLEX DUCT SHOWN ON PLANS IS FOR SCHEMATIC PURPOSES ONLY AND SHALL IN NO INSTANCE EXCEED 4 FOOT.

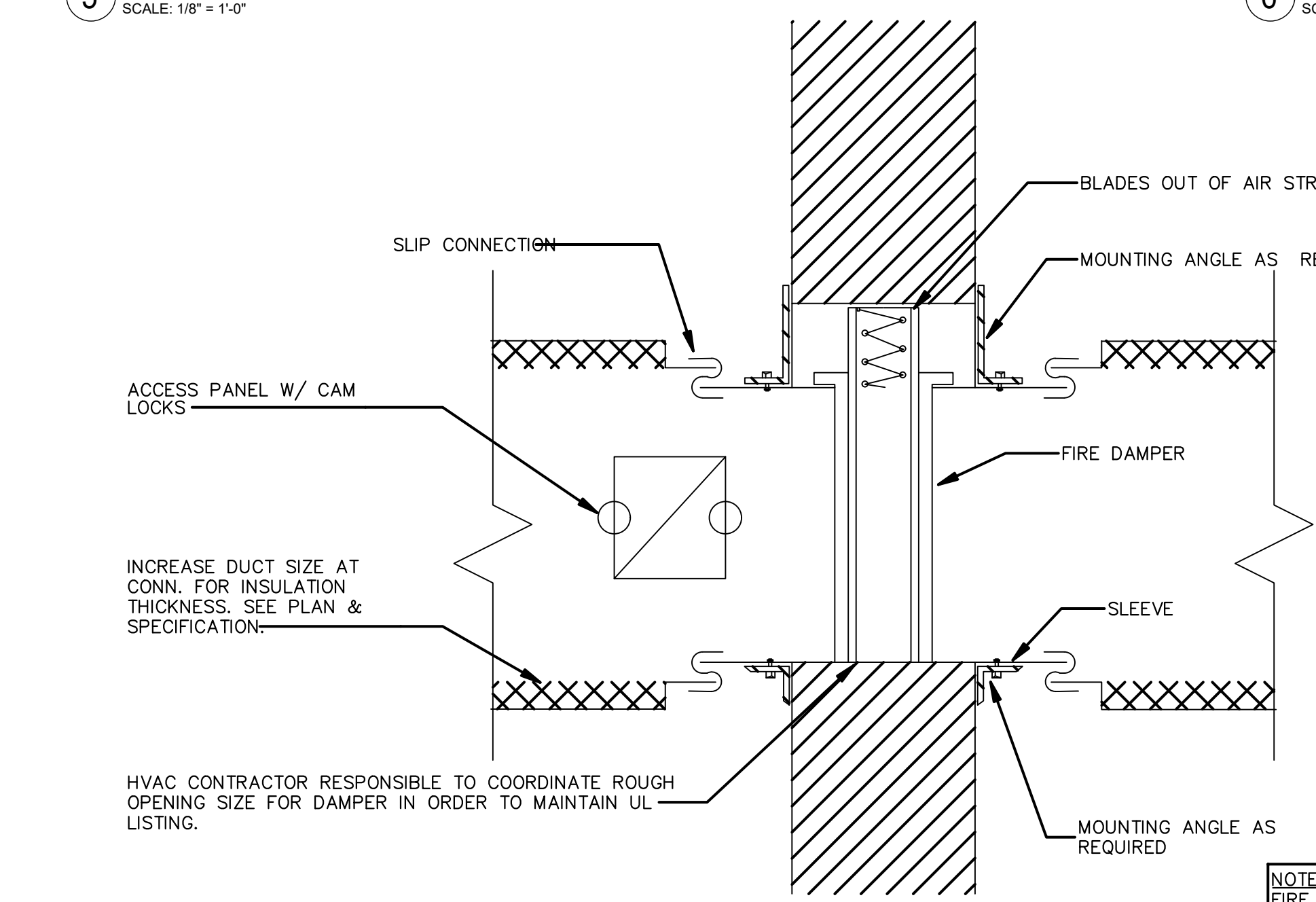
6 DIFFUSER CONNECTION - FLEX ELBOW
SCALE: 1/8" = 1'-0"



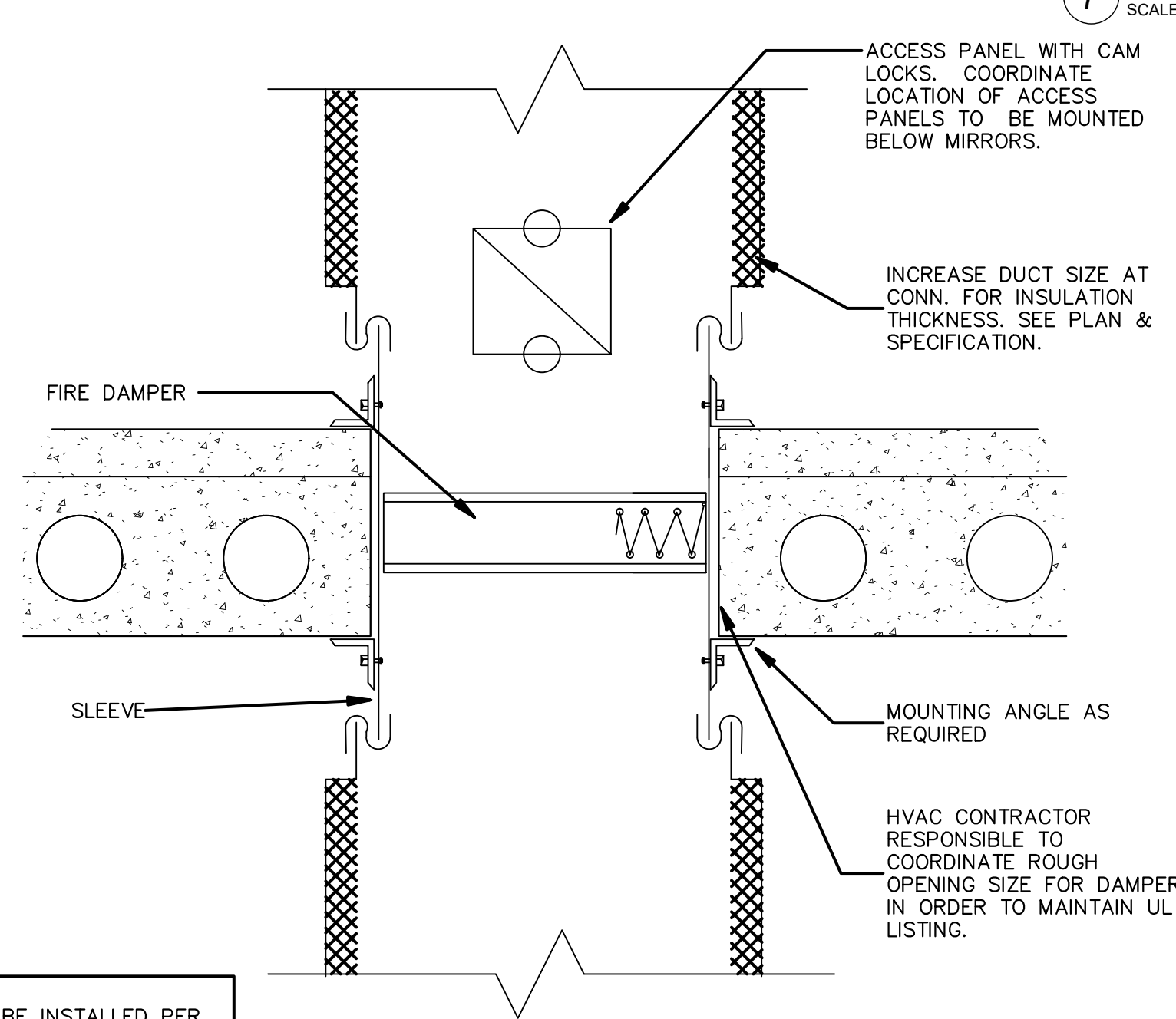
7 DUCT MOUNTED DIFFUSER - ROUND
SCALE: 1/8" = 1'-0"



8 CABLE DAMPER DETAIL
SCALE: 1/8" = 1'-0"



9 FIRE DAMPER
SCALE: 1/8" = 1'-0"



NOTE: FIRE DAMPERS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

2018 IMC SECTION 403.3 - VENTILATION SCHEDULE													
UNIT	AREA SERVED	AREA FT ² (A2)	CFM/PER SON (Rp)	CFM/FT ² (R2)	PEOPLE OR PEOPLE/100 FT ² (P2)	UNCORRECTED REQUIRED O/A CFM (Vbz)	Ex*	Ev**	REQUIRED O/A CFM (Vbz)***	ACTUAL O/A CFM	UNIT	REQUIRED EXHAUST/SQL FT.	REQUIRED EXHAUST CFM
EX RTU-14	WAREHOUSE/RECEIVING	1477	-	0.12	11	177	0.8	0.96	185	200		-	-
EX RTU-1	SPRINKLER ROOM	100	-	0.06	1	6						-	-
THRU 12, 15 THRU 20	ELECTRICAL ROOM	68	-	0.06	0	4	0.8	0.96				-	-
	SHOWFLOOR	46403	7.5	0.12	731	11051			11522	11,923		-	-
						11061						0	0

* Zone Air Distribution Effectiveness Based on ASHRAE 62.1 Table 6.2 for Ceiling Supply of Warm Air 15°F or More Above Space Temperature and Ceiling Return (IMC Table 403.3.1.2)
** Ventilation System Efficiency Based on ASHRAE 62.1 Table 6.3 and Section 6.2.5 (IMC Section 403.3.2.3 M2)
*** Corrected Required O/A Intake Required for System Calculated Based on ASHRAE 62.1 Section 6.2 (IMC Section 403.3)

DIFFUSER, REGISTER & GRILLE SCHEDULE									
UNIT	MANUFACTURER	MODEL	LOCATION	AIR	TYPE	FEATURES		FINISH	NOTES
A	RUSKIN	CDS	SALES	SUPPLY	CONCENTRIC	4-WAY DIFFUSER WITH CENTERED RETURN, SEE PLANS FOR DUCT CONNECTION SIZE AND CFM.		WHITE	1.5
B	TITUS	TMS	CEILING	SUPPLY	DIFFUSER	24"x24", NECK SIZE ON PLAN		WHITE	1.3
C	TITUS	S300-FL-ASD	DUCT	SUPPLY	REGISTER	DUCT MOUNTED SUPPLY REGISTER, SIZE ON PLAN		WHITE	1.6
D	TITUS	ML 38	VESTIBULE	SUPPLY	LINEAR SLOT	MODULAR LINEAR SLOT DIFFUSER WITH 3/4" SLOT		WHITE	1.3, 4
E	TITUS	508	CEILING	RETURN	EGGCRATE	RETURN AIR GRILLE: SIZE ON PLAN, PROVIDE ROUND DUCT ADAPTER		WHITE	1.2
G	TITUS	TMS	CEILING	SUPPLY	DIFFUSER	12"x12", NECK SIZE ON PLAN		WHITE	1.3
H	TITUS	271FL	WALL	SUPPLY	REGISTER	12"x8"		WHITE	1.3

NOTES:
1. CONTRACTOR IS RESPONSIBLE TO VERIFY LOCATIONS, INSTALLATION METHODS, AND QUANTITIES PRIOR TO ORDERING MATERIALS.
2. PROVIDE TITUS MODEL TRM FLANGED FRAME FOR GYP. BOARD MOUNTING OF LAY-IN FRAME.
3. PROVIDE OPPOSED BLADE DAMPER.
4. PROVIDE YOUNG REGULATOR 270-275ML DAMPER CONTROLLER WITH ACCESSORIES AND 5020-CC DAMPER FOR INACCESSIBLE HARD LID CEILINGS.
5. DROP CONCENTRIC DIFFUSER WITH SIDE DISCHARGE DOUBLE DEFLECTOR SUPPLY REGISTERS, CENTER DROP FACE RETURN, AND INTERNAL INSULATION.
6. PROVIDE AIR SCOOP DAMPER.

AIR BALANCE SCHEDULE					
UNIT	SUPPLY AIR	RETURN AIR	OUTDOOR AIR	EXHAUST/RELIEF AIR	PRESSURE
EX RTU-1	3,000	2,288	713		713
EX RTU-2	3,000	2,288	713		713
EX RTU-3	3,000	2,288	713		713
EX RTU-4	2,000	1,525	475		475
EX RTU-5	1,200	915	285		285
EX RTU-6	2,000	1,525	475		475
EX RTU-7	3,000	2,288	713		713
EX RTU-8	2,000	1,525	475		475
EX RTU-9	2,000	1,525	475		475
EX RTU-10	3,000	2,288	713		713
EX RTU-11	3,000	2,288	713		713
EX RTU-12	3,000	2,288	713		713
EX RTU-13	1,600	1,200	400		400
EX RTU-14	2,000	1,800	200		200
EX RTU-15	2,000	1,525	475		475
EX RTU-16	3,000	2,288	713		713
EX RTU-17	3,000	2,288	713		713
EX RTU-18	4,000	3,050	950		950
EX RTU-19	4,000	3,050	950		950
EX RTU-20	4,000	3,050	950		950
RTU POWER EXHAUST				12373	-12373
TOTALS	39,200	14,640	4,560	12,373	150

ELECTRIC UNIT HEATER SCHEDULE									
MARK	LOCATION	MANUFACTURER	MODEL NUMBER	NOMINAL AIRFLOW (CFM)	CAPACITY (KW)	HEATER DATA CAPACITY (MBH)	EAT (°F)	VOLT	PHASE/FLA
EX-1		BERKO	HUH-AA3-27	350	3	10.2	65	208	1 14.5 1-3

NOTES:
1. SUPPORT FROM STRUCTURE PER MANUFACTURER'S INSTRUCTIONS.
2. PROVIDE WITH UNIT-MOUNTED DISCONNECT SWITCH.
3. TAMPER-PROOF INTEGRAL THERMOSTAT.
6. SURFACE MOUNTED.

ROOFTOP UNIT SCHEDULE																			
GENERAL				AIRFLOW (CFM)				DESIGN CONDITIONS (°F)				HEATING (GAS)				ARI RATING			
TAG	MFR.	MODEL	NOMINAL CAPACITY	WEIGHT (LBS)	S.A.	E.S.P.	R.A.	O.A.	M.A.(S) DB/WB	L.A.T.(S) DB	M.A.(W) DB	L.A.T.(W) DB	TOTAL	SENS	LAT	INPUT (MBH)	OUTPUT (MBH)	STAGES	NOTES
EX RTU-1	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	90	EX	EX			2	EX
EX RTU-2	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	90	EX	EX			EX	EX
EX RTU-3	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	90	EX	EX			EX	EX
EX RTU-4	LENNOX	LGH0604MH3G	5	EX	2,000	1.00	1,525	475	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-5	LENNOX	LGH0604MH3G	3	EX	1,200	1.00	915	285	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-6	LENNOX	LGH0604MH3G	5	EX	2,000	1.00	1,525	475	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-7	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-8	LENNOX	LGH0604MH3G	5	EX	2,000	1.00	1,525	475	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-9	LENNOX	LGH0604MH3G	5	EX	2,000	1.00	1,525	475	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-10	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-11	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-12	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-13	LENNOX	LGH0484MH3G	4	EX	1,600	1.00	1,220	380	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-14	LENNOX	LGH0604MH3G	5	EX	2,000	1.00	1,800	200	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-15	LENNOX	LGH0604MH3G	5	EX	2,000	1.00	1,525	475	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-16	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-17	LENNOX	LGH0924MH3G	7.5	EX	3,000	1.00	2,288	713	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-18	LENNOX	LGH1204MH3G	10	EX	4,000	1.00	3,050	950	EX	EX	EX	EX	118	EX	EX			EX	EX
EX RTU-19	LENNOX	LGH1204MH3G	10	EX	4,000	1.00	3,050	950	EX	EX	EX	EX	EX	EX	EX			EX	EX
EX RTU-20	LENNOX	LGH1204MH3G	10	EX	4,000	1.00	3,050	950	EX	EX	EX	EX	EX	EX	EX			EX	EX

Notes:
1. LANDLORD PROVIDED UNIT. CONTRACTOR TO ENSURE POWER EXHAUST IS INSTALLED. IF NOT INSTALLED, PROVIDE POWER EXHAUST.

SPLIT SYSTEM UNIT SCHEDULE													
INDOOR UNIT													
UNIT	LOCATION	MANUFACTURER	MODEL	NOMINAL SIZE (TONS)	AIRFLOW (CFM/OA CFM)	TOTAL COOLING (MBH)	SENSIBLE COOLING (MBH)	HEATING (MBH)	ARI RATING SEER/EEER/EEER	MOTOR HP	RPM	V	PH
EX-FC-1	MEZZANINE	GOODMAN	EX	3.5	EX	EX	-	-	EX	EX	EX	EX	EX
EX-F-1	MEZZANINE	LENNOX	EX	EX	EX	-	-	-	EX	EX	EX	EX	EX
OUTDOOR UNIT													
UNIT	LOCATION	MANUFACTURER	MODEL	NOMINAL SIZE (TONS)	REFRIGERANT TYPE	TYPE	RLA	LRA	V	PH	HZ	MCA	MOCAP
EX-CU-1	ROOF	LENNOX	TS403H4N43Y	3	410A	EX	9	71	208	3	60	12.4	20

TAG	DATE	DESCRIPTION
	10/25/24	PERMIT

DATE:10/25/24

JOB NO: 5035.0001

DRAWN: DMS/HB

CHECKED: WLW



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I HEREBY CERTIFY THAT
THIS PLAN, SPECIFICATION,
OR REPORT WAS PREPARED
BY ME OR UNDER MY
DIRECT SUPERVISION AND
THAT I AM A DULY
REGISTERED ENGINEER
UNDER THE LAWS OF THE
STATE MINNESOTA.



SIGNATURE

DATE ISSUED

10/25/24

REG. NO.

22883

REVISIONS

TAG	DATE	DESCRIPTION
	10/25/24	PERMIT

SPECIFICATIONS

SHEET NUMBER

M400

DIVISION 15000 – MECHANICAL

SECTION 15001 – BASIC MECHANICAL REQUIREMENTS

- GENERAL CONDITIONS
- THE DRAWINGS AND GENERAL CONDITIONS, INCLUDING SUPPLEMENTARY GENERAL CONDITIONS SHALL APPLY TO ALL WORK IN DIVISION 15000.
- THE CONTRACTOR FOR THIS DIVISION SHALL REVIEW THE DRAWINGS AND ACCOMPANYING SPECIFICATIONS, EXAMINE THE SITE, CHECK AS TO THE MEANS OF MAKING CONNECTIONS TO SERVICES, AND SHALL BECOME FAMILIAR WITH ALL THE EXISTING CONDITIONS AND LIMITATIONS BEFORE SUBMITTING A PROPOSAL. ANY APPARENT VARIANCES OF THE PLAN OR SPECIFICATION FROM THE EXISTING CONDITIONS AT THE SITE SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER DURING THE BID PERIOD SO THAT CLARIFICATION CAN BE MADE BY ADDENDUM. ITEMS KNOWN TO BE INCONSISTENT WITH THE BID DOCUMENTS INTENT MUST BE LISTED AND QUALIFIED ON THE CONTRACTORS BID FORM. NO EXTRAS WILL BE ALLOWED BECAUSE OF THE CONTRACTORS MISUNDERSTANDING AS TO THE AMOUNT OF WORK INVOLVED OR HIS LACK OF KNOWLEDGE OF ANY SITE CONDITIONS WHICH MAY AFFECT HIS WORK.
- COORDINATION OF SCHEDULING FOR COMPLETION AND ALL INSPECTIONS OF THEIR WORK AND WORK OF SUBCONTRACTORS IS THE RESPONSIBILITY OF THIS CONTRACTOR.
- BEFORE SUBMITTING A PROPOSAL ON THE WORK CONTEMPLATED ON THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS, EACH BIDDER SHALL EXAMINE THE SITE, CHECK AS TO THE MEANS OF MAKING CONNECTIONS TO SERVICES, AND SHALL BECOME FAMILIAR WITH ALL THE EXISTING CONDITIONS AND LIMITATIONS. MECHANICAL EQUIPMENT AND SYSTEMS SHOWN AS EXISTING ON THE PLANS HAVE BEEN BASED ON EXISTING DRAWINGS. NO EXTRAS WILL BE ALLOWED BECAUSE OF THE CONTRACTOR'S MISUNDERSTANDING AS TO THE AMOUNT OF WORK INVOLVED OR HIS LACK OF KNOWLEDGE OF ANY SITE CONDITIONS WHICH MAY AFFECT HIS WORK. ANY APPARENT VARIANCE OF THE PLAN OR SPECIFICATION FROM EXISTING CONDITIONS AT THE SITE SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER DURING THE BID PERIOD SO CLARIFICATION CAN BE MADE BY ADDENDUM.

SECTION 15002 – GENERAL REQUIREMENTS

- WORK TO BE ACCOMPLISHED ON THESE DRAWINGS AND SPECIFICATIONS INCLUDES FURNISHING ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES FOR THE COMPLETION OF ALL MECHANICAL WORK. ALL MECHANICAL WORK UNLESS NOTED TO BE SPECIFICALLY BY THE LANDLORD IS THE RESPONSIBILITY OF THIS CONTRACTOR.
- THIS CONTRACTOR AND THEIR SUB CONTRACTORS SHALL WORK CLOSELY WITH THE TENANT PROJECT MANAGER FOR COORDINATION OF TRADES AND COMPLETION OF THE PROJECT.
- PLANS AND SPECIFICATIONS ARE COMPLEMENTARY AND WHAT IS CALLED FOR IN EITHER ONE SHALL BE AS BINDING AS IF CALLED FOR IN BOTH. ANY ITEM OR LABOR THAT IS NECESSARY TO COMPLETE THE WORK AND IS TYPICALLY INCLUDED IN SIMILAR WORK SCOPE SHALL BE FURNISHED AND INSTALLED AS PART OF THE CONTRACT WHETHER OR NOT IT IS SHOWN ON THE PLANS OR IN THE SPECIFICATIONS.
- WHEN THE INCLUDED DRAWINGS AND/OR SPECIFICATIONS CALL OF ITEMS WHICH EXCEED THE LANDLORDS TENANT CRITERIA OR EXCEED CODE, IT'S THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL THE MORE STRINGENT REQUIREMENTS NOTED ON THE PLANS AND/OR SPECIFICATIONS. IF THE PLANS AND SPECIFICATIONS HAVE DISCREPANCIES BETWEEN THEM, THE CONTRACTOR SHALL ASSUME IN THEIR BID THAT THE MORE STRINGENT ITEM IS REQUIRED AT NO ADDITIONAL COST.
- ALL PIPING, DUCTWORK AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED TO PRESENT A NEAT AND CLEAN APPEARANCE USING GOOD CONSTRUCTION PRACTICES. EQUIPMENT SHALL BE INSTALLED FOR PROPER ACCESS TO OPERATE, SERVICE AND MAINTAIN THE EQUIPMENT WITHOUT HAVING TO MOVE OTHER EQUIPMENT FOR ACCESS. ANY MECHANICAL EQUIPMENT (OR EXISTING EQUIPMENT TO REMAIN) THAT REQUIRES ACCESS PANELS SHALL HAVE THOSE PANELS FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- UNLESS SPECIFICALLY NOTED ON THE PLANS/SPECIFICATIONS ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND BEST QUALITY TO CONFORM TO THE REQUIREMENTS OF THE LANDLORDS TENANT CRITERIA, LOCAL AND STATE CODES GOVERNING THE WORK INVOLVED AND BE MADE BY NATIONALLY RECOGNIZED MANUFACTURES WITH UL LISTINGS AND LABELS.

SECTION 15003 – CODES

- ALL WORK SHALL BE INSTALLED IN CONFORMITY OF THE LANDLORDS TENANT CRITERIA, AND APPLICABLE LOCAL CODES AND ORDINANCES AND STATE STATUTES. ALL REQUIREMENTS OF THE CURRENT PLUMBING CODES, HEATING AND VENTILATION CODES, HEALTH AND SAFETY CODES, NFPA CODES AND ENERGY CODES MUST BE MET. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE INTO AND COMPLY WITH ALL LOCAL ORDINANCES AND INCLUDE ANY ADDITIONAL ITEMS NOT NOTED IN THE PLANS/SPECIFICATIONS IN THEIR BID. ANY CHANGES TO THE MECHANICAL SYSTEM AS REQUIRED BY LOCAL STATE OR TENANT CRITERIA THAT ARE NOT QUALIFIED ON THE CONTRACTORS BID FORM ARE ASSUMED TO BE INCLUDED IN THE ORIGINAL BID AND ADDITIONAL COSTS WILL NOT BE DUE TO COMPLETE THOSE ITEMS AFTER THE CONTRACT IS ISSUED.

SECTION 15004 – LICENSES, PERMITS, INSPECTIONS & FEES

- THIS CONTRACTOR IS RESPONSIBLE FOR ALL FEES, CHARGES AND OBLIGATIONS FOR OBTAINING PERMITS AND INSPECTIONS FOR PLUMBING, HEATING AND VENTILATION AND FIRE EXTINGUISHING WORK.
- ALL CERTIFICATES OF INSPECTION AND FINAL INSPECTIONS SHALL BE TURNED OVER TO THE TENANT'S PROJECT MANAGER AT THE COMPLETION OF THE PROJECT.

SECTION 15005 – TRADE NAMES, MANUFACTURERS AND SHOP DRAWINGS

- IN ANY CASE WHERE A SPECIFIC MAKE OF EQUIPMENT OR MATERIAL IS MENTIONED ON THE DRAWINGS OR SPECIFICATIONS THE EXACT EQUIPMENT SHALL BE USED FOR THE BASE BID. EQUIPMENT OF EQUAL GRADE AND QUALITY WILL BE SUBJECT TO PRIOR APPROVAL BY THE TENANT'S PROJECT MANAGER AND THE ENGINEER IN WRITING THRU THE SHOP DRAWING SUBMITTAL PROCESS. ANY EQUIPMENT INSTALLED WITHOUT WRITTEN APPROVAL WILL BE CHANGED OUT TO THE SPECIFIED EQUIPMENT AT THE CONTRACTORS EXPENSE.
- MECHANICAL CONTRACTOR SHALL SUBMIT 3 COPIES OF SHOP DRAWINGS TO THE TENANT'S PROJECT MANAGER FOR APPROVAL. IF APPROVED, COPIES WILL BE STAMPED "NO EXCEPTIONS" OR "APPROVED AS NOTED" AND WILL BE RETURNED TO THE CONTRACTOR. IF NOTATIONS AND MARKS INDICATE THAT REVISED INFORMATION IS REQUIRED, THEN CORRECTED INFORMATION SHALL BE SUBMITTED.

SECTION 15006 – GUARANTEE

- THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR AND DEFECTS WHICH MAY DEVELOP IN ANY PART OF THE SYSTEMS CAUSED BY FAULTY WORKMANSHIP, MATERIAL OR EQUIPMENT, AND AGREE TO REPLACE ANY SUCH FAULTY WORKMANSHIP, MATERIAL OR EQUIPMENT DURING A PERIOD OF 12 MONTHS FROM THE DATE OF FINAL ACCEPTANCE WITHOUT ANY COST TO THE OWNER. ANY EXTENDED WARRANTIES (LONGER THAN 12 MONTHS) FOR EQUIPMENT WILL BE NOTED ON THE SCHEDULES, PLANS OR SPECIFICATIONS.

- EACH PIECE OF EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL HAVE A 12 MONTH WARRANTY FOR MATERIAL AND LABOR AT STARTS UPON THE DATE OF FINAL ACCEPTANCE AS DESIGNATED BY THE TENANT'S PROJECT MANAGER. ALL COSTS FOR THE WARRANTY (MATERIAL AND LABOR) SHALL BE INCLUDED IN THE ORIGINAL BID.

SECTION 15007 – RECORD DRAWINGS

- THIS CONTRACTOR SHALL MAINTAIN AT THE JOB SITE A SET OF DRAWINGS TO BE USED SPECIFICALLY FOR RECORDING CHANGES FROM THE CONTRACT DOCUMENTS. THE INFORMATION SUCH AS VALVES, DUCT AND PIPE DEVIATIONS SHOULD BE DIMENSIONED FROM EASILY RECOGNIZABLE REFERENCE POINTS INDICATING BOTH HORIZONTAL AND VERTICAL DISTANCES.
- THE CONTRACTOR SHALL SUBMIT A FINAL SIGNED SET OF AS-BUILT DRAWINGS TO THE TENANT'S PROJECT MANAGER AT THE COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL SUBMIT TO THE TENANT'S PROJECT MANAGER AT THE END OF THE PROJECT (2) COMPLETE HARD BOUND SET OF CATALOG DATA, MANUFACTURERS LITERATURE, DETAIL MANUALS COVERING THE OPERATION AND MAINTENANCE OF ALL EQUIPMENT SPECIFIED.

SECTION 15008 – DISCREPANCIES IN DOCUMENTS

- THE DRAWINGS OF PIPING AND DUCTWORK SYSTEMS SHALL BE INSTALLED SUBSTANTIALLY AS SHOWN ON THE PLANS. THE EXACT POSITION OF EACH AND EVERY PIPE, DUCT, OFFSET AND TRANSITION CANNOT BE GIVEN BY SCALING THE DRAWINGS BUT SHALL IN EVERY CASE BE PLACED SO AS TO AVOID INTERFERENCE WITH OTHER WORK. ALL NECESSARY CHANGES IN THE LOCATION OF PIPE OR TRACES SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL CHARGE.

SECTION 15009 DEMOLITION

- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE DEMOLITION OF EXISTING WORK AND THE DEMOLITION PROVIDED BY THE GENERAL CONTRACTOR. COORDINATE WITH THE GENERAL CONTRACTOR ANY EXISTING REQUIREMENTS REQUIRED TO BE LEFT INTACT.
- EACH CONTRACTOR SHALL VERIFY SCOPE OF WORK WITH THE GENERAL CONTRACTOR FOR THE REMOVAL OF ALL EXISTING FIRE PROTECTION, PLUMBING FIXTURES, PIPING, HVAC UNITS, REFRIGERANT RECAPTURE, EXHAUST FANS, ETC. AND ASSOCIATED ROOF CURBS NOT BEING REUSED ON THIS PROJECT, UNLESS SPECIFICALLY NOTED OTHERWISE.
- CONTRACTOR MUST VERIFY WITH THE LANDLORD ALL PRESUMED ABANDONED EQUIPMENT, PIPES, DUCTWORK, AND EQUIPMENT PRIOR TO REMOVAL. ROOF CURBS SHALL BE REMOVED AND THE ROOF PATCHED. ALL EXTRANEOUS ITEMS IN THE SPACE OR ON THE ROOF NOT APPLICABLE TO THE NEW WORK MUST BE REMOVED AND ROOF/REPAIRED TO MATCH EXISTING STRUCTURE.
- EXISTING ABANDONED PIPES, DUCTS, OR EQUIPMENT IN THE FLOOR, EMBEDDED IN CONCRETE, OR OTHERWISE INACCESSIBLE ARE TO BE CUT OFF AND SEALED BELOW OR WITHIN FLOOR OR WALL LEVEL WHEN THEY ARE NOT TO BE REUSED IN THIS PROJECT.
- IF REQUIRED BY LANDLORD OR CODES, ABANDONED PIPING AND/OR DUCTWORK MUST BE REMOVED TO POINT OF ORIGIN, CONFIRM THE EXTENT OF DEMOLITION WITH THE GENERAL CONTRACTOR AND TENANT PRIOR TO BID AND INCLUDE IN BID PROPOSAL AS DIRECTED BY THE GENERAL CONTRACTOR AND TENANT.

SECTION 15010 – CUTTING AND PATCHING

- THIS CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF HIS EQUIPMENT IN THE BUILDING WALLS, PARTITIONS, FLOORS, CEILING, ETC., UNLESS OTHERWISE NOTED. ALL CUTTING AND PATCHING SHALL BE SUBJECT TO THE DIRECTION OF THE LANDLORD, ARCHITECT OR ENGINEER.
- THIS CONTRACTOR SHALL NOT ENDANGER THE STABILITY OF THE STRUCTURE BY CUTTING, DIGGING OR OTHERWISE ALTERING THE STRUCTURE AND SHALL NOT AT ANY TIME CUT OR ALTER WORK OF ANY OTHER CONTRACTOR.
- PATCHING OF WALLS, FLOORS AND ROOF SHALL BE OF SAME MATERIAL AND WORKMANSHIP OF THE SURROUNDING MATERIAL WITH FINISHED SURFACE APPEARING THE SAME AS THE SURROUNDING AREAS. ALL PATCHING SHALL BE PERFORMED BY WORKMEN SKILLED IN THAT PARTICULAR TRADE.
- DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR IN A SUITABLE MANNER ACCEPTABLE TO THE LANDLORD AND TENANT'S PROJECT MANAGERS.

SECTION 15011 – SLEEVES

- THIS CONTRACTOR SHALL INSTALL SLEEVES IN CONNECTION WITH ALL PIPES PASSING THROUGH ALL WALLS, PARTITIONS AND FLOORS. SLEEVES SHALL EXTEND THROUGH FULL THICKNESS OF WALLS AND FLOORS AND SHALL BE CUT FLUSH WITH THE FINISHED SURFACES. SLEEVES IN SLABS SHALL BE CUT 2" ABOVE THE FLOOR SURFACE.
- ALL SLEEVES SHALL BE 22 GAUGE GALVANIZED STEEL MINIMUM FINISHED WITH A SMOOTH EDGE AND PROPERLY SUPPORTED.
- CORE DRILLING FLOORS AND WALLS MUST BE COORDINATED WITH THE LANDLORD AND THE TENANT'S PROJECT MANAGER.
- THIS CONTRACTOR SHALL FURNISH AND INSTALL FIRE STOPPING AT ALL PENETRATIONS THRU RATED FLOORS TO MAINTAIN THE FIRE RATING. 3M FIRE BARRIER SYSTEMS, FLAME SAFE FIRE RETARDANT SYSTEMS, DOW CORNING, SPOCKAL OR EQUAL. THE CONTRACTOR MUST PRESENT UL LISTING DATA SHEETS TO THE TENANT'S PROJECT MANAGER AND LANDLORD TO SHOW THAT THE PENETRATIONS MAINTAIN THE FIRE RATING.

SECTION 15012 – HANGERS

- FURNISH AND INSTALL BRACKETS, BRACES OR REINFORCING ANGLES AS REQUIRED FOR ALL PARTITIONS NOT SUFFICIENT IN THEMSELVES TO SUPPORT PLUMBING FIXTURES OR OTHER EQUIPMENT.
- PIPING SHALL BE SUSPENDED FROM CONSTRUCTION ABOVE WITH ANGLE IRON, CLAMPS, UNISTRUT, OR HANGER RODS. NO PIPING SHALL BE HUNG FROM OTHER PIPING EXISTING OR NEW. CONTRACTOR SHALL COORDINATE WITH LANDLORD CRITERIA AND ALL CODES.
- ALL PIPES WHICH ARE SPECIFIED TO BE INSULATED SHALL HAVE PREFABRICATED INSULATED METAL SADDLES SIZED FOR THE INSULATION THICKNESS AND CONTINUOUS INSULATION THROUGH THE HANGER. ALL DISSIMILAR METALS MUST BE SEPARATED WITH DIELECTRIC MATERIAL.

DIVISION 15500 – HEATING, VENTILATING, AIR CONDITIONING

SECTION 15501 – SUMMARY OF WORK

- THIS CONTRACTOR SHALL FURNISH, INSTALL, TEST AND BALANCE ALL NECESSARY EQUIPMENT FOR A COMPLETE WORKING SYSTEM. SEE PLAN FOR DUCTWORK AND SCHEDULES.
- CONTROL
- VERIFY COMPLETE OPERATION OF ALL MODES: HEAT, COOL, ECONOMIZER, OCCUPIED, UNOCCUPIED, ETC. CONTRACTOR SHALL PROVIDE FULLY FUNCTIONAL SYSTEM AS APPROVED BY TENANT, ASSIST IN ANY NECESSARY TRAINING AND/OR PROGRAMMING PER TENANTS REQUIREMENTS.

SECTION 15502 – MATERIALS

- SEE PLANS FOR SCHEDULES AND DETAILS OF EQUIPMENT. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE ALL REQUIREMENTS WITH LANDLORD.
- THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY PARTS AND LABOR INCLUDING BUT NOT LIMITED TO FANS, BELTS, PULLEYS, BEARINGS, DAMPERS, COILS AND MOTORS AS REQUIRED TO OBTAIN A FULLY OPERATIONAL UNIT THAT MEETS OR EXCEEDS THE DESIGN QUANTITIES SET FORTH IN THESE DOCUMENTS INCLUDING BUT NOT LIMITED TO CAPACITY, CFM AND EXTERNAL STATIC PRESSURE.
- DUCTWORK – FIBERGLASS DUCT BOARD IS NOT APPROVED.
- ALL SUPPLY, RETURN, EXHAUST AND RELIEF DUCTWORK SHALL BE GALVANIZED STEEL SHALL BE MANUFACTURED (GAUGES, REINFORCEMENT AND CONNECTIONS), AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- ALL ELBOWS SHALL HAVE A MINIMUM THROAT RADIUS OF ONE HALF THE DUCT WIDTH OR SHALL BE PROVIDED WITH TURNING VANES.
- HANG DUCTWORK FROM STRUCTURE ACCORDING TO SMACNA STANDARDS. CONTRACTOR SHALL BE REQUIRED TO INSTALL SEISMIC BRACING AS REQUIRED BY LANDLORD CRITERIA AND/OR LOCAL CODES.
- ALL DUCT JOINTS AND LONGITUDINAL SEAMS SHALL BE SEALED WITH A WATER BASED DUCT SEALER, DURO DYNE "DURORSEAL" OR APPROVED EQUAL.
- ALL RTU SUPPLY AIR DUCTWORK SHALL BE WRAPPED (NO INTERNAL LINER ALLOWED) WITH R-5 INSULATION WRAP WITH FOIL VAPOR BARRIER. ALL JOINTS SHALL BE TAPE AND INSTALLED ACCORDING TO THE MANUFACTURERS INSTALLATION REQUIREMENTS IN ORDER TO MAINTAIN THE R-VALUE RATING.
- GREASE EXHAUST AIR DUCTWORK SHALL BE WRAPPED (NO INTERNAL LINER ALLOWED) WITH R-5 INSULATION WRAP WITH FOIL VAPOR BARRIER. ALL JOINTS SHALL BE TAPE AND INSTALLED ACCORDING TO THE MANUFACTURERS INSTALLATION REQUIREMENTS IN ORDER TO MAINTAIN THE R-VALUE RATING.
- ALL RTU RETURN AIR DUCTWORK SHALL BE RATED WITH R-5 INSULATION WRAP WITH FOIL VAPOR BARRIER. ALL JOINTS SHALL BE TAPE AND INSTALLED ACCORDING TO THE MANUFACTURERS INSTALLATION REQUIREMENTS IN ORDER TO MAINTAIN THE R-VALUE RATING.
- PROVIDE FLEXIBLE DUCT CONNECTIONS CONSTRUCTED OF NEOPRENE-COATED FLAMEPROOF FABRIC AT EQUIPMENT INLET AND OUTLET TO ISOLATE VIBRATION.
- THE FINAL 4" OF DUCTWORK TO THE AIR DEVISE MAY BE FLEXIBLE CLASS 1 DUCT WITH R-5 INSULATION AND FOIL VAPOR BARRIER. DUCTWORK MUST MEET LOCAL REQUIREMENTS AND LANDLORDS CRITERIA.
- ALL SUPPLY TAKE-OFFS SHALL HAVE AIR SCOOP AND MANUAL VOLUME DAMPER WITH QUADRANT LOOKING HANDLE FOR BALANCING. WHERE DUCTWORK IS LOCATED ABOVE A GYPSUM BOARD CEILING AND UNABLE TO ACCESS THROUGH DIFFUSER PLASTER FRAME, A CABLE CONTROLLED DAMPER OPERATOR SHALL BE FURNISHED, YOUNG REGULATOR COMPANY OR EQUAL.

C. TESTING, ADJUSTING, AND BALANCING

- THE ADJUSTING AND BALANCING OF THE AIR FLOW THROUGHOUT THE FACILITY SHALL BE PERFORMED BY AN NEBB OR ASBC CERTIFIED AIR BALANCER AS HIRED BY THE MECHANICAL CONTRACTOR. THE BALANCING SHALL TAKE PLACE AFTER THE FINAL PUNCH LIST. THE BALANCING CONTRACTOR SHALL VERIFY THAT ITEMS ON THE PUNCH LIST EFFECTING THE AIR BALANCE REPORT ARE COMPLETED PRIOR TO STARTING THE AIR BALANCE. THE MECHANICAL CONTRACTOR SHALL PROVIDE ASSISTANCE TO THE TESTING AND BALANCING CONTRACTOR BY MAKING ADJUSTMENTS TO THE SYSTEM AND SYSTEM COMPONENTS REQUIRED FOR ACHIEVING DESIGN PERFORMANCE. THE BALANCING REPORT SHALL INCLUDE AT MINIMUM THE FOLLOWING:
- CERTIFICATION NUMBER OF THE AIR BALANCER
- CALIBRATION DATES AND INFORMATION ON THE EQUIPMENT USED FOR BALANCING.
- ITEM BEING TESTED WITH MAKE, MODEL AND SERIAL NUMBERS
- AIR CFM AT INLET AND OUTLET OF SUPPLY UNIT (PRELIMINARY READING, FIRST ADJUSTMENT, SECOND ADJUSTMENT)
- AIR CFM AT DISTRIBUTION POINT (PRELIMINARY READING, FIRST ADJUSTMENT, SECOND ADJUSTMENT). EACH GRILLE, REGISTER, DIFFUSER SHALL BE LABELED ON A MASTER PLAN THAT SHOULD BE INCLUDED IN THE FINAL REPORT.
- MOTOR AMP READINGS AFTER EACH ADJUSTMENT.
- MOTORS AND FAN RPM READINGS AFTER EACH ADJUSTMENT.
- STATIC PRESSURE AT UNIT INCLUDING, INLET, OUTLET AND TOTAL.
- OUTSIDE AIR CFM.
- SUBMIT (4) COPIES OF THE AIR BALANCE REPORT TO THE TENANT'S PROJECT MANAGER.
- SUBMIT (1) DIGITAL COPY TO ENGINEER OF RECORD

D. GAS PIPING

- FURNISH AND INSTALL A FUNCTIONAL GAS PIPING SYSTEM WITH NECESSARY VALVES, FITTINGS, UNIONS, DIRT LEGS, REGULATORS, METERS, ETC. REFER TO PLANS FOR EXACT REQUIREMENTS.
- GAS PIPE SHALL BE SCHEDULE 40 BLACK STEEL WITH MALLEABLE THREADED FITTINGS FOR 2" AND SMALLER, AND WITH WELDED JOINTS FOR 2-1/2" AND LARGER.
- PROVIDE A SHUT-OFF VALVE, 6" DIRT LEG, AND UNION AT EACH EQUIPMENT CONNECTION.
- PROVIDE LANDLORD APPROVED PIPING SUPPORTS EVERY 5 FEET OR AS REQUIRED BY LANDLORD OR LOCAL AUTHORITY HAVING JURISDICTION. INCHES/CS IS MORE STRINGENT.
- PAINT AND PRIME ALL EXPOSED GAS PIPING ON ROOF & EXTERIOR OF BUILDING WITH RUST-INHIBITING PAINT. COORDINATE COLOR REQUIREMENTS WITH LANDLORD.
- TESTING AND PURGING OF GAS PIPING SHALL BE DONE PER THE REQUIREMENTS OF THE LOCAL GAS COMPANY, LOCAL CODES, AND APPLICABLE NFPA 54 CODES.
- CONTACT AND COORDINATE GAS SERVICE AND METER REQUIREMENTS WITH THE LOCAL GAS COMPANY AND THE WALL'S OPERATIONS MANAGER PRIOR TO BID. INCLUDE INSTALLATION OF VALVES, FITTINGS, UNIONS, DIRT LEGS, REGULATORS, METERS, ETC. COSTS IN BID.



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GENERAL NOTES:

- BOUNDARY LINES INDICATE AREAS FED BY EACH PANELBOARD, UNLESS NOTED OTHERWISE. CONTRACTOR TO DETERMINE BEST ROUTE FOR CONDUIT AND WIRING.
- PROVIDE MINIMUM #10 AWG FOR POWERING THAT EXCEED 100 FEET FOR 120V.
- MAINTAIN FIRE RATING WHERE CONDUIT, FIXTURES, ETC. PENETRATE A FIRE RATED STRUCTURE. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS AND CEILINGS. FIREPROOF ALL PENETRATIONS AS REQUIRED.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR TESTED AND RATED FIRESTOP SYSTEMS FOR THROUGH-ROOF PENETRATIONS OF FIRE RATED WALLS, FLOORS, AND ROOF ASSEMBLIES RESULTING FROM CONDUIT AND OTHER WORK UNDER HIS CONTRACT. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
- COORDINATE EXACT LOCATIONS AND CONDUIT ROUTING FOR DEVICES MOUNTED IN OR ADJACENT TO MILKWORK WITH MILKWORK CONTRACTOR.
- ALL INSTALLATION, MATERIALS, AND METHODS SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR UPDATING ALL PANEL DIRECTORIES. AT THE COMPLETION OF THE PROJECT, SUBMIT ALL UPDATED TYPEDWRITTEN PANEL DIRECTORIES TO THE FACILITY SUPERVISOR AND POST IN EACH PANELBOARD.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ROUGH-IN (OUTLET BOX AND 1"CL) TO ACCESSIBLE CEILING SPACE FOR ALL VOICE/DATA, AND AUDIO/VISUAL DEVICES MOUNTED IN WALL OR INACCESSIBLE CEILING. IN EXPOSED AREAS, PROVIDE CONDUIT TO NEAREST ACCESSIBLE CEILING.
- DATA, PHONE, TELEVISION, PAGING, BACKGROUND MUSIC, AND SECURITY SYSTEMS ARE SUPPLIED BY OWNER. PROVIDE ROUGH-IN AS INDICATED ON DRAWINGS AND COORDINATE WITH OWNER'S VENDORS DURING CONSTRUCTION.
- FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS, AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
- WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE ENGINEER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INCORRECT FIELD WIRING OR FACTORY WIRING IN EQUIPMENT PROVIDED BY THIS CONTRACTOR.
- CONTRACTOR'S FAILURE TO ORDER OR RELEASE ORDER FOR MATERIALS AND/OR EQUIPMENT WILL NOT BE ACCEPTED AS A REASON TO SUBSTITUTE ALTERNATE MATERIALS, EQUIPMENT, OR INSTALLATION METHODS.
- ALL BRANCH CIRCUIT AND FEEDER CONDUITS SHALL HAVE A CODE SIZED GROUNDING CONDUCTOR.
- FINAL CONNECTIONS TO MOTORS, TRANSFORMERS, AND OTHER VIBRATING EQUIPMENT SHALL BE WITH LIGHTDUTY FLEX METAL CONDUIT AND FITTINGS.
- DO NOT SECURE CONDUITS, DISCONNECTS, OR DEVICES TO DUCTWORK OR MECHANICAL EQUIPMENT.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE LABELING OF ALL ELECTRICAL EQUIPMENT PER SPECIFICATIONS EVEN IF EQUIPMENT IS SUPPLIED BY OWNER.

LIGHTING GENERAL NOTES:

- COORDINATE ALL LIGHTING LOCATIONS WITH MECHANICAL DUCTWORK PRIOR TO INSTALLATION.
- UNLESS SPECIFICALLY NOTED, REFER TO ARCHITECTURAL EXTERIOR ELEVATIONS FOR EXACT EXTERIOR FIXTURE HEIGHTS AND LOCATIONS.
- MOUNT ALL EXTERIOR LIGHTS DIRECTLY ABOVE DOOR 1'-0" TO CENTER FROM TOP OF OPENING, WHEREVER POSSIBLE. WHERE CEILING HANGS 10'-0" OR BELOW, MOUNT IN CEILING ABOVE DOOR.
- IN AREAS WHERE SWITCHING OCCURS, FIXTURES DESIGNATED WITH SWITCH LEG "N" TO BE UNWIRING LIGHTS.
- MOUNTING HEIGHTS SHOWN FOR WALL MOUNTED FIXTURES ARE TO CENTER. MOUNTING HEIGHTS FOR PENDANT FIXTURES ARE TO BOTTOM MOUNTING HOLE.
- REFER TO DETAIL SHEETS FOR OCCUPANCY SENSOR WIRING.
- OCCUPANCY SENSORS SHALL CONTROL ALL LIGHTS IN ROOM SERVED, UNLESS NOTED OTHERWISE. ELECTRICAL CONTRACTOR TO PROVIDE RELAY RACKS AS REQUIRED FOR DIFFERENT VOLTAGES.
- DO NOT SHARE NEUTRALS ON LIGHTING CIRCUITS.
- EMERGENCY LIGHTING FIXTURES SHALL BE MOUNTED IN AN ACCESSIBLE CEILING SPACE WHERE POSSIBLE. RELAY LED SHALL BE VISIBLE.

POWER GENERAL NOTES:

- REFER TO THE MECHANICAL DRAWINGS AND COORDINATE WITH HVAC AND PLUMBING CONTRACTORS FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT.
- ALL SLEEVES AND EMPTY CONDUIT SHOWN SHALL BE 1"CL, UNLESS INDICATED OTHERWISE.
- ALL SLEEVES AND EMPTY CONDUIT SHOWN SHALL BE EMT WITH BUSHINGS AND SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- ALL JUNCTION BOXES SHOWN ARE TO BE 4"x4" WITH SINGLE GANG BOX AND 3/4" CONDUIT BACK TO UNIT CONTROLLED. CABLING BY THE MECH CONTRACTOR.
- CONDUIT SLEEVES MUST BE USED FOR PENETRATING THROUGH WALL AND FOR TRANSITIONING FROM FIRST TO SECOND FLOOR. ALL CONDUIT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

FIRE ALARM GENERAL NOTES:

- THE FIRE ALARM SYSTEM SHALL BE DESIGN BUILD, BY THE ELECTRICAL CONTRACTOR. COMPLY WITH ALL CODE AND AHJ REQUIREMENTS.
- ALL DEVICES IN FINISHED AREAS SHALL BE INSTALLED PLUMB, WITH CONDUIT TO ACCESSIBLE CEILING.
- ALL DEVICES IN UNFINISHED AREAS MAY BE INSTALLED SURFACE MOUNTED, WITH BACKBOXES DESIGNED SPECIFICALLY FOR THE DEVICE. DO NOT INSTALL DEVICES ON BOXES WITH EXPOSED KNOCK OUTS. THE BOX DIMENSIONS SHALL MATCH THAT OF THE DEVICE.
- ALL WALL PENETRATIONS OF FIRE ALARM WIRING ARE REQUIRED TO BE IN CONDUIT.
- PROVIDE 120V POWER TO ALL LOCATIONS NECESSARY, INCLUDING BUT NOT LIMITED TO: FAN LOCATION, WALL PANELS, MAGNETIC HOLD-OPENS, SHUNT TRIP CIRCUIT BREAKERS, AND ALL FIRE/SMOKE DAMPER LOCATIONS.
- WALL MOUNTED FIRE ALARM NOTIFICATION DEVICES SHALL BE LOCATED AT 90° APT TO CEILING OF BOX, UNLESS OTHERWISE NOTED. CONFIRM MOUNTING HEIGHT WITH LOCAL FIRE MARSHAL PRIOR TO ROUGH-IN.
- FIRE ALARM WIRING SHALL BE RUN IN RACEWAYS DEDICATED TO FIRE ALARM ONLY. DO NOT SHARE RACEWAYS WITH OTHER LOW VOLTAGE SYSTEMS.

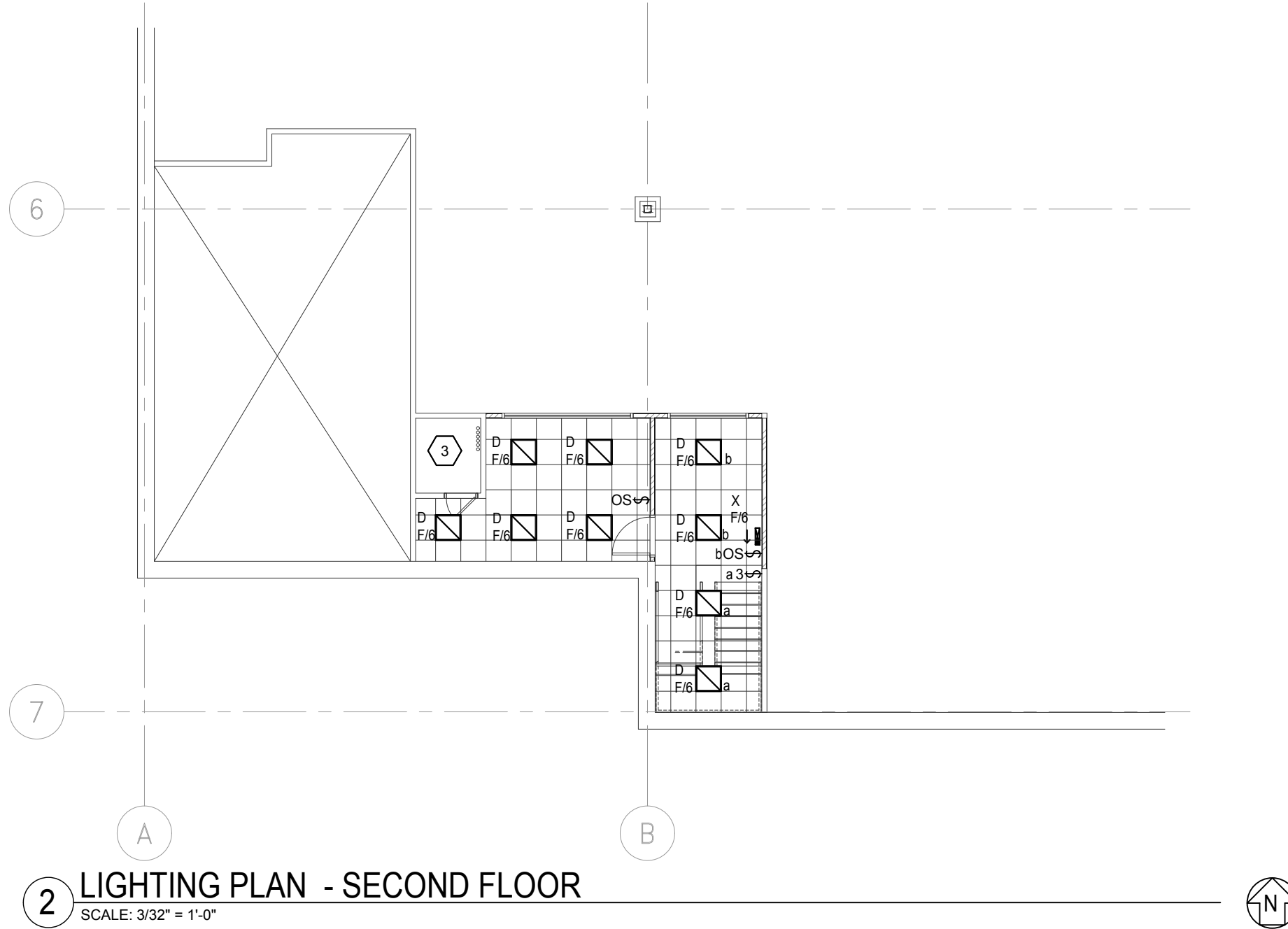
TEMP CONTROL GENERAL NOTES:

- PROVIDE ROUGH-IN FOR ALL THERMOSTAT AND SENSORS. PROVIDE SINGLE GANG BOX AND 3/4" CONDUIT BACK TO UNIT CONTROLLED. CABLING BY THE MECH CONTRACTOR.
- CONDUIT SLEEVES MUST BE USED FOR PENETRATING THROUGH WALL AND FOR TRANSITIONING FROM FIRST TO SECOND FLOOR. ALL CONDUIT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

ELECTRICAL SHEET INDEX

NO	TITLE SHEET
1000	LIGHTING PLAN
1100	POWER & SYSTEMS PLAN
1200	POWER & SYSTEMS PLAN
1300	POWER & SYSTEMS PLAN
1400	POWER & SYSTEMS PLAN
1500	POWER & SYSTEMS PLAN
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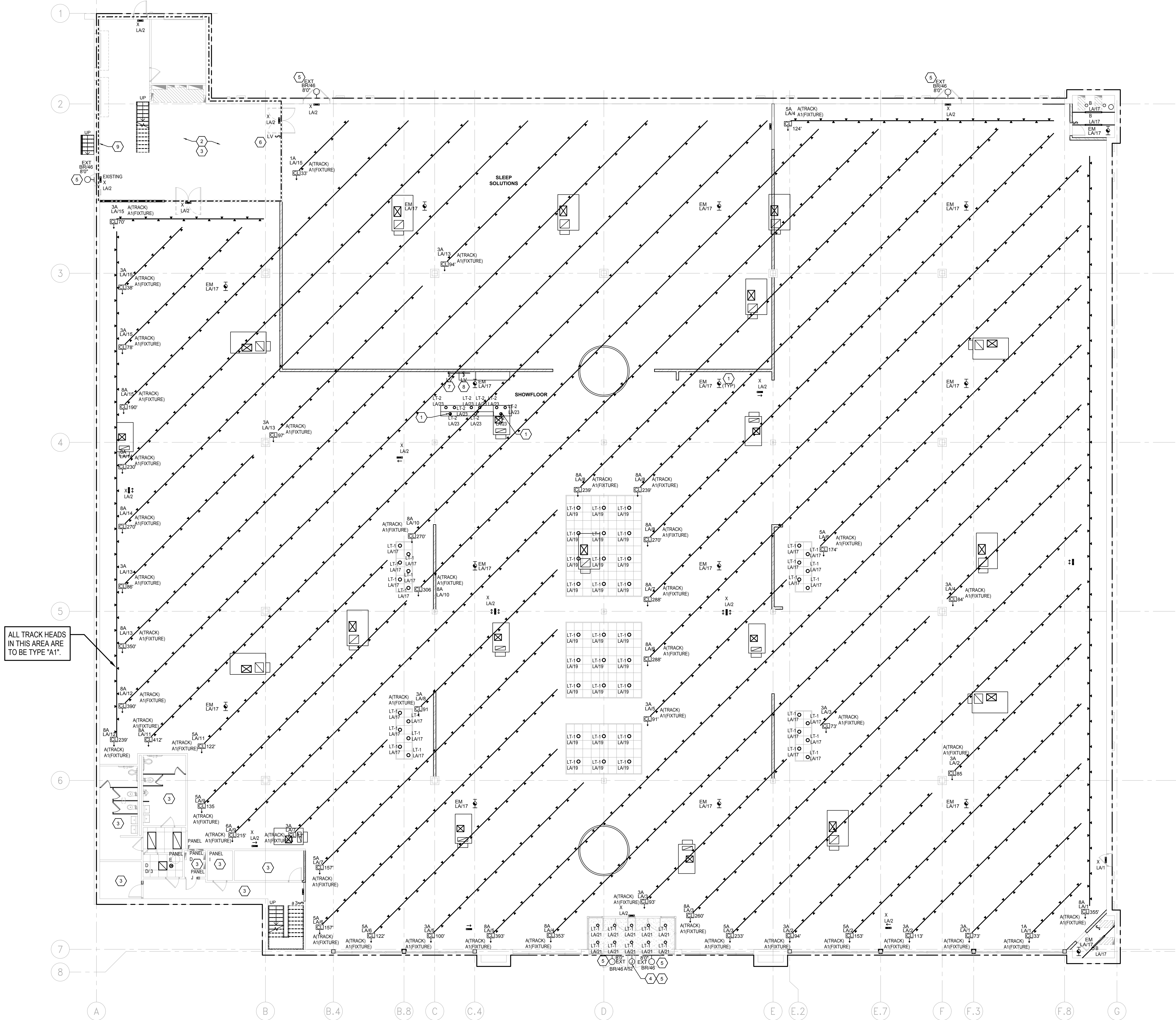
ELECTRICAL SYMBOLS SCHEDULE											
LIGHTING			POWER DISTRIBUTION			FIRE ALARM			TECHNOLOGY		
SYMBOL	DESCRIPTION	MTG HT	SYMBOL	DESCRIPTION	MTG HT	SYMBOL	DESCRIPTION	MTG HT	SYMBOL	DESCRIPTION	MTG HT
	RECESSED MOUNTED FIXTURE	CEILING		GROUND			FIRE ALARM CONTROL PANEL			WALL MOUNT SECURITY CAMERA	
	RECESSED MOUNTED LIGHT FIXTURE ON EMERGENCY CIRCUIT	CEILING		METER			REMOTE FIRE ALARM ANNUNCIATOR PANEL			CEILING MOUNT SECURITY CAMERA	CEILING
	SURFACE MOUNTED FIXTURE	CEILING		MANHOLE			MAGNETIC DOOR HOLD OPEN	90"		CEILING MOUNT HEMISPHERICAL SECURITY CAMERA	CEILING
	SURFACE MOUNTED FIXTURE ON EMERGENCY CIRCUIT	CEILING		HANDHOLE			FIRE ALARM BELL AND LIGHT	90"		CEILING MOUNT DATA OUTLET	54"
	STRIP TYPE LIGHT FIXTURE			AUTOMATIC TRANSFER SWITCH			FIRE ALARM HORN	90"		CEILING MOUNT DATA OUTLET	18"
	STRIP TYPE LIGHT FIXTURE ON EMERGENCY CIRCUIT			PANELBOARD, SURFACE MOUNTED	TOP AT 6'-6"		FIRE ALARM SPEAKER	90"		CEILING MOUNT DATA OUTLET	18"
	WALL MOUNTED STRIP LIGHT FIXTURE	WALL		PANELBOARD, FLUSH MOUNTED	TOP AT 6'-6"		FIRE ALARM SPEAKER, CEILING	CEILING		CEILING MOUNT DATA OUTLET	18"
	WALL MOUNTED STRIP LIGHT FIXTURE ON EMERGENCY CIRCUIT	WALL		DISTRIBUTION PANELBOARD	WALL OR FLOOR		FIRE ALARM STROBE - NUMBER INDICATES CANDELA RATING	90"		WALL MOUNT TELEVISION OUTLET	18"
	STAGGERED STRIP LIGHT FIXTURE			SWITCHBOARD	WALL OR FLOOR		FIRE ALARM HORN/STROBE - NUMBER INDICATES CANDELA RATING	90"		CEILING MOUNT TELEVISION OUTLET	CEILING
	DOWNLIGHT FIXTURE	CEILING		CT CABINET			FIRE ALARM SPEAKER/STROBE - NUMBER INDICATES CANDELA RATING	90"		WALL MOUNT SPEAKER/HORN/OUTLET	18"
	DOWNLIGHT ON EMERGENCY CIRCUIT			CT			FIRE ALARM MINI HORN	90"		WALL MOUNT SPEAKER	CEILING
	WALL MOUNTED LIGHT FIXTURE	WALL		UTILITY CO. TRANSFORMER	GRADE		FIRE ALARM HORN, CEILING	CEILING		CEILING MOUNT SPEAKER HORN	CEILING
	WALL MOUNTED LIGHT FIXTURE ON EMERGENCY CIRCUIT	WALL		T			FIRE ALARM STROBE, CEILING - NUMBER INDICATES CANDELA RATING	CEILING		CEILING MOUNT SOUND REINFORCEMENT	CEILING
	PENDANT LIGHT FIXTURE			TRANSFORMER			FIRE ALARM SPEAKER/STROBE, CEILING - NUMBER INDICATES CANDELA RATING	CEILING		CEILING MOUNT IR RECEIVER	CEILING
	HIGHBAY LIGHT FIXTURE			GENERATOR			FIRE ALARM MINI HORN, CEILING	CEILING		WALL MOUNT CLOCK	CEILING
	EXIT LIGHT FACE/DIRECTIONAL ARROWS AS INDICATED	WALL		G			COMBINATION FIRE/SMOKE DAMPER			WALL MOUNT HORN	
	EXIT LIGHT FACE/DIRECTIONAL ARROWS AS INDICATED	CEILING		G			FIRE ALARM ADDRESSABLE MODULE			WALL MOUNT AUDIO SYSTEM OUTLET	18"
	EXIT LIGHT WITH EMERGENCY HEADS DIRECTION ARROWS AS INDICATED	WALL		G			FIRE ALARM MANUAL PULL STATION	44"		WALL MOUNT SYSTEM AMPLIFIER OUTLET	
	EXIT LIGHT WITH EMERGENCY HEADS DIRECTION ARROWS AS INDICATED	CEILING		G			FIRE ALARM SMOKE DETECTOR - PHOTOELECTRIC TYPE			WALL MOUNT AUDIO SYSTEM OUTLET	18"
	SELF-CONTAINED EMERGENCY LIGHTING UNIT	WALL		G			FIRE ALARM SMOKE DETECTOR - IONIZATION TYPE			WALL MOUNT ZONE CONTROL OUTLET	46"
	SELF-CONTAINED EMERGENCY LIGHTING UNIT	CEILING		G			CARBON MONOXIDE DETECTOR			WALL MOUNT ZONE CONTROL OUTLET, 2-GANG BOX WITH 2-GANG MOUNTING	46"
	EXTERIOR POLE MOUNTED FIXTURE	GRADE		G			FIRE ALARM DUCT SMOKE DETECTOR			WALL MOUNT VOLUME CONTROL OUTLET	46"
	EXTERIOR BOLLARD FIXTURE	GRADE		G			FIRE ALARM HEAT DETECTOR	135 / 135 DEG. RATE OF RISE HEAT DETECTOR 200 / 200 DEG. RATE OF RISE HEAT DETECTOR R = 135 DEG. RATE OF RISE HEAT DETECTOR OR = 200 DEG. RATE OF RISE HEAT DETECTOR		WALL MOUNT MICROPHONE OUTLET	18"
	EXTERIOR BOLLARD FIXTURE	GRADE		G			FIRE ALARM BEAM DETECTOR - TRANSMITTER			CEILING MOUNTED AMBIENT NOISE MICROPHONE	CEILING
	EXTERIOR BOLLARD FIXTURE	GRADE		G			FIRE ALARM BEAM DETECTOR - RECEIVER			DOORBELL	
	EXTERIOR BOLLARD FIXTURE	GRADE		G			FIRE ALARM BEAM DETECTOR - RECEIVER			CEILING MOUNT SHORT-THROW PROJECTOR	CEILING
	EXTERIOR BOLLARD FIXTURE	GRADE		G			FIRE ALARM BEAM DETECTOR - RECEIVER			CEILING MOUNT PROJECTOR	CEILING
	EXTERIOR BOLLARD FIXTURE	GRADE		G			FIRE ALARM BEAM DETECTOR - RECEIVER			CARD READER	
	EXTERIOR BOLLARD FIXTURE	GRADE		G			FIRE ALARM BEAM DETECTOR - RECEIVER			DATA RACK	
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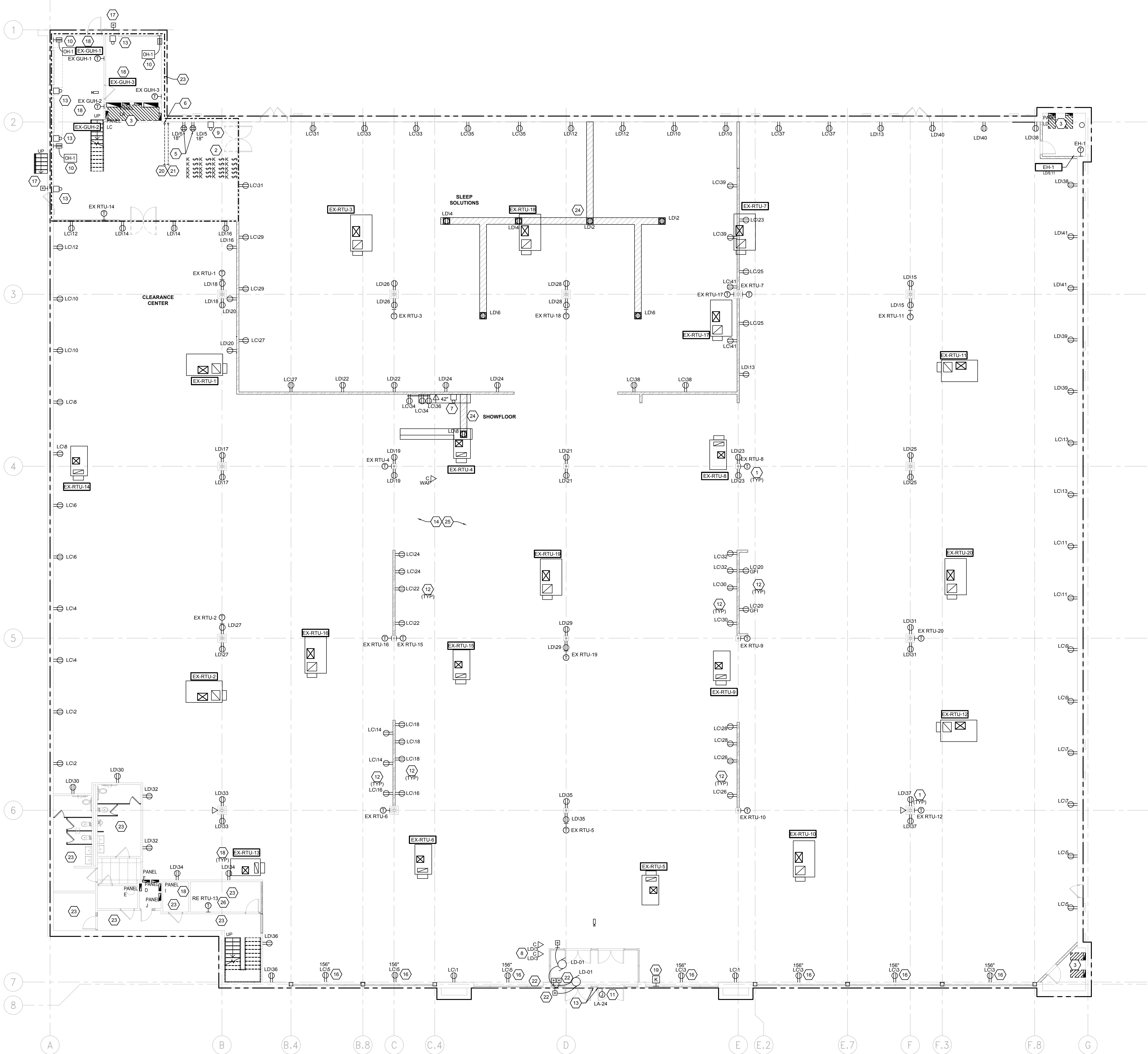
LIGHT FIXTURE SCHEDULE									
TYPE	DESCRIPTION	VOLT	LUMENS	VA / FXT.	MANUFACTURER	CATALOG NUMBER	EQUAL MANUFACTURERS	NOTES	
A	WHITE, SINGLE CIRCUIT TRACK, PENDANT MOUNTED TO 14'-0" AFF. WITH CURRENT LIMITERS AS SHOWN. PROVIDE ALL ACCESSORIES FOR A COMPLETE BY STEM. SEE PLANS FOR TRACK LENGTHS.	120	N/A	0	ECO TRACK/VALDO POWER TRAC TRACK AND JUNG	ECO10R ECU	NONE	1	
A1	SMALL SCALE 12W CYLINDER TRACK FIXTURE, CONSTRUCTED OF MACHINED OR EXTRUDED ALUMINUM, SLEEK & MODERN LOOK.	120	3500K LED 1110 LUMENS 80 CR MINIMUM	12		OX10	NONE	1	
B	STRIP FIXTURE	UNV.	2500K LED 4000 LUMENS 80 CR MINIMUM	32	PHILIPS	PFSS6Z-4-40L-840-LMV	-		
C	24"x24" HIGH BAY	120	3500K LED 7 LUMENS MINIMUM 80 CR MINIMUM	96	DAY BRITE	24"x24" HIGH BAY FIX-12LL350WVWFLPA	COOPER HUBBELL INDY LO SERIES PHILIPS		
D	2' X 2' 9" CELL	120	2800 LUMENS MINIMUM 80 CR MINIMUM	57	DAY BRITE	ASLPS08S21UR	COOPER HUBBELL INDY LO SERIES PHILIPS		
EM	EMERGENCY LIGHT	120	25' LED 1W	2	ASTRA LITE	RELI-A-LED-LW	NONE		
LT1	6" ROUND DOWN LIGHT	120	3500K LED 4225 LUMENS MINIMUM 80 CR MINIMUM	43	ALPHABET 6" CAN	NUG-RED-SAY-50LM35K-90-5540-NL-VH-VH-NC-UNV-DIM0	NONE	1	
LT2	ALPHABET 6" CYLINDER PENDANT	120	3500K LED 7 LUMENS MINIMUM 80 CR MINIMUM	35	ALPHABET 6" CAN	BETA-6R-40LM35K-90-5540-WH-VH-RP10-UNV-DIM0	NONE	1	
EXT	LED EXTERIOR WALL PACK, TWO PRISM DIE CAST ALUMINUM HOUSING, ACRYLIC LENSES.	UNV.	3500K-4000K LED 4561 LUMENS MINIMUM 70 CR MINIMUM	47	LITHONIA	LEDWHT LED-20C-700/40K-TAM-MVCL7-000X0	COOPER HUBBELL LITHONIA WILLIAM PHILIPS		
X	EXIT LIGHT, POLYCARBONATE, RED LETTERING, WHITE FACE.	120	LED	3	MAXILUX	ELX-300-X-W			

GENERAL NOTES:
A. PROVIDE ALL NECESSARY COMPONENTS (CABLING, POWER SUPPLIES, DRIVERS, CONTROLS, ACCESSORIES, ETC.) AS REQUIRED FOR A COMPLETE INSTALLATION.
B. VERIFY CEILING TYPE AND CONDITIONS FOR COMPATIBILITY WITH FIXTURE MOUNTING HARDWARE.
C. VERIFY CLEARANCES FOR ALL RECESSED FIXTURES PRIOR TO ORDERING LIGHTING FIXTURES.
D. VERIFY ALL COLOR FINISHES, LENSES, BEAM SPREADS WITH ARCHITECT PRIOR TO ORDERING.
E. ALL FIXTURES SHALL BE SUPPORTED BY BUILDING STRUCTURE.
F. ALL FIXTURES SUPPLIED BY OWNER ARE ELECTRICALLY INSTALLED.
ELECTRICAL NOTES:
1. OWNER SUPPLIED, CONTRACTOR INSTALLED FIXTURE.

2 LIGHTING PLAN - SECOND FLOOR
SCALE: 3/32" = 1'-0"



2 POWER & SYSTEMS PLAN - SECOND FLOOR
SCALE: 3/32" = 1'-0"



1 POWER & SYSTEMS PLAN - FIRST FLOOR
SCALE: 3/32" = 1'-0"

POWER GENERAL NOTES

- CIRCUIT NUMBER FOR REFERENCE ONLY. IF CIRCUIT IS USED BY EXISTING EQUIPMENT USE SPARE CIRCUIT INSTEAD.
- ALL RECEPTACLES SHALL BE 18" AFF UNLESS NOTED OTHERWISE.

POWER KEY NOTES

- PROVIDE WIRING FOR THERMOSTATS REFER TO MECHANICAL DRAWING SHEET FOR THERMOSTAT & SENSORS.
- DUCT SMOKE DETECTOR TEST/RESET SWITCH, TYPICAL EACH SUPPLY FAN PROVIDED BY DIV. 15, WIRED BY DIV. 16. SWITCH MAY BE LOCATED AT SUPPLY FAN IF ACCEPTABLE TO LOCAL FIRE INSPECTOR.
- EXISTING PANEL TO REMAIN.
- NOT USED.
- VERIFY IF REQUIRED PROVIDE 3/4"x4"x8" FIRE RATED PLYWOOD BACKBOARD FOR TELEPHONE SERVICE.
- VERIFY IF REQUIRED PHONE DATA STUB-UPS FOR SITE UTILITIES.
- PROVIDE TRANSFORMER/CHIME. EDWARDS #EDW338-GS. CONNECT TO FRONT DOOR ELECTRONIC EYE.
- PROVIDE ROUGH-IN FOR PEDESTRIAN TRAFFIC COUNTER ABOVE DOOR. COORDINATE WITH OWNER'S IT PERSONNEL.
- PROVIDE 120V HORN/STROBE (SPRINKLER BELL). CONNECT TO SPRINKLER FLOW SWITCH. VERIFY LOCATION WITH SPRINKLER CONTRACTOR AND LOCAL INSPECTOR.
- OVERHEAD DOOR OPERATOR, 1/2 HP, 120V. PROVIDE MOTOR RATED TOGGLE SWITCH AT OPERATOR, WIRE PUSHBUTTON AND ALL SAFETY CONTROLS.
- CONNECT TO BUILDING MOUNTED SIGN. VERIFY LOCATION WITH ARCHITECT/OWNER. VERIFY ROUGH-IN REQUIREMENTS WITH SIGN MANUFACTURER.
- VERIFY LOCATION AND HEIGHT WITH MILLWORK.
- PROVIDE 1/2" CONDUIT FROM DOOR HEAD UP TO CEILING FOR SECURITY SYSTEM WIRING FURNISHED BY OTHERS.
- LOCATE T-STATS FACING BACK OF BUILDING IN UNABTRUSIVE MANNER, TYPICAL.
- VOICE/DATA OUTLET, STUB 1" CONDUIT FROM EACH UP TO CEILING, TYPICAL ALL LOCATIONS.
- PROVIDE RECEPTACLES IN WALL ABOVE SHOW WINDOWS.
- PROVIDE EXTERIOR PUSHBUTTON DOOR BELL.
- EXISTING MECHANICAL EQUIPMENT TO REMAIN AS IS FOR CIRCUITING.
- PROVIDE SINGLE GANG BOX FOR OWNERS KEY PAD, STUB 3/4" CONDUIT UP INTO CEILING SPACE. COORDINATE FINAL LOCATION WITH SLUMBERLAND.
- PROVIDE 2" CONDUIT FROM TELCO COMMUNICATIONS CLOSET TO CASEWORK.
- PROVIDE 2" CONDUIT BETWEEN SECTIONS OF CASEWORK.
- HC DOOR OPERATOR. PROVIDE ROUGH-IN TO DOOR OPERATORS, BUTTONS & WIRE COMPLETE. VERIFY EXACT LOCATION WITH OWNER/ARCHITECT.
- EXISTING RECEPTACLES SHALL REMAIN. VERIFY IF IN GOOD WORKING CONDITION. REPAIR AS NECESSARY. REUSE CIRCUITS AS MUCH AS POSSIBLE.
- TRENCH EXISTING FLOOR TO FEED FLOORBOX. COORDINATE WITH SLUMBERLAND FOR FINAL LOCATION PRIOR TO TRENCHING.
- COORDINATE QTY OF OUTLETS AND LOCATIONS WITH SLUMBERLAND PRIOR TO ROUGH-INS.
- RELOCATE RT1H-13 THERMOSTAT. COORDINATE LOCATION WITH MECHANICAL.

DATE:10/25/24

JOB NO: 5035.0001

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STATE MINNESOTA.

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POWER AND
SYSTEMS PLAN

SHEET NUMBER

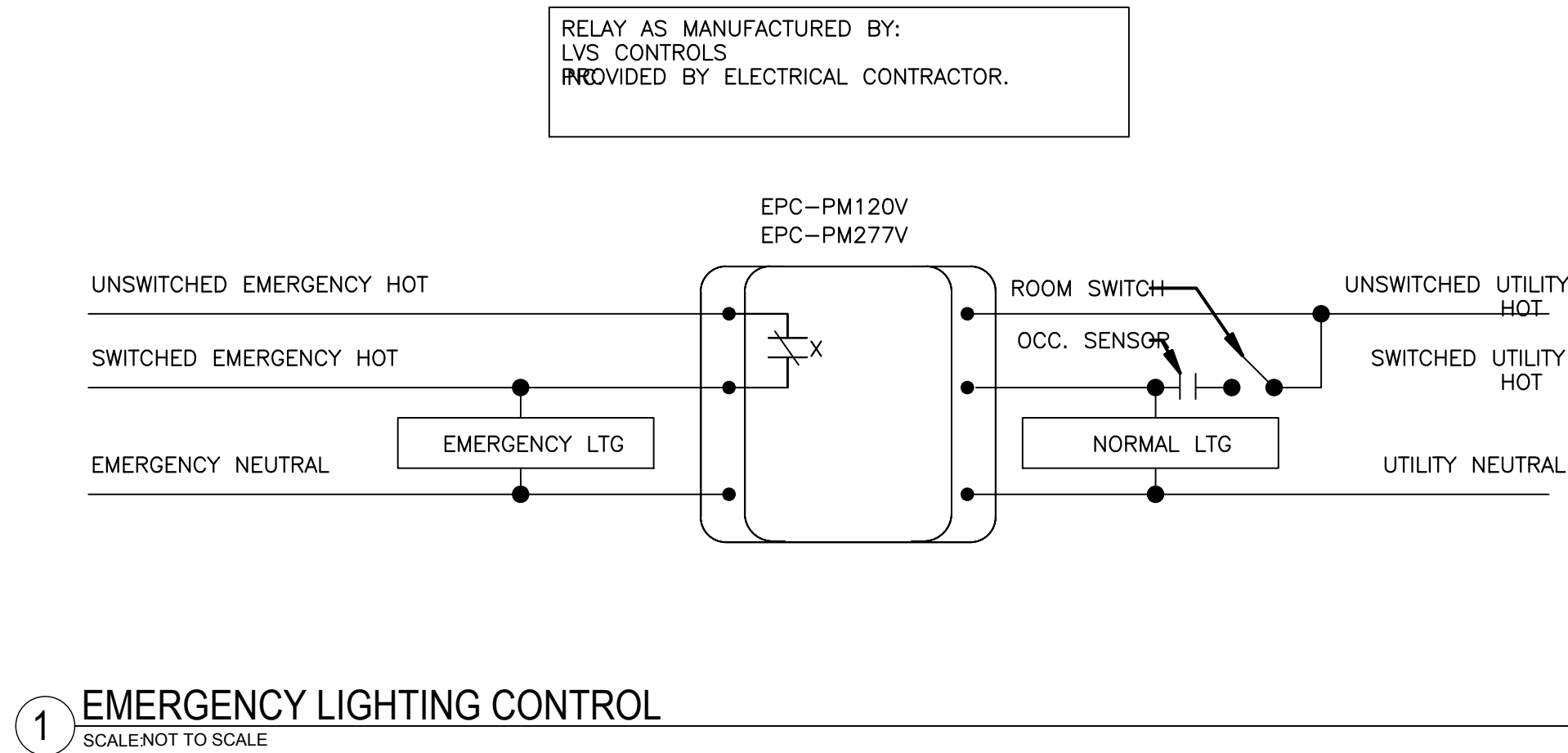
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MOTOR SCHEDULE																						
ABBREVIATIONS: MAG – MAGNETIC, HOA – HAND/OFF/AUTOMATIC, SS – START/STOP, TT – THERMAL TOGGLE, PB – PUSHBUTTON, START – STARTER, EMS – ENERGY MANAGEMENT SYSTEM, BCE – BUILDING CONTROLLER ENCLOSURE, F.A. – FIRE ALARM, DSD – DUCT SMOKE DETECTOR																						
GENERAL NOTES: A. CONFIRM ALL CONNECTIONS TO MECHANICAL EQUIPMENT WITH SHOP DRAWINGS PRIOR TO ROUGH-IN.																						
NOTES: 1. PROVIDE ADDITIONAL POWER PACK ON LIGHTING CONTROL OCCUPANCY SENSOR FOR CONTROL FAN. 2. INSTALL AND WIRE COMPLETE ALL SAFETY DEVICES ON DEVICE. 3. EC TO PROVIDE DELAY FOR FAN SHUT DOWN ON ACTIVATION OF SMOKE DUCT DETECTOR. 4. PROVIDE REMOTE TEST / RESET SWITCHES FOR EACH UNIT. 5. PROVIDE 45 AMP FUSES IN EXISTING DISTRIBUTION PANEL.																						
MOTOR NO.	EQUIPMENT	LOCATION	LOCATION SERVED	KW	UNIT HP	UNIT MCA	VOLTS	PHASE	DISC FU/SW	DISC BY	CONTROL DEVICE		INTERLOCK		PANEL	CIRCUIT	BREAKER	FEEDER PH-G-C	NOTES	MOTOR NO.		
											DEVICE	FURNISHED BY WIRED BY	DEVICE	FURNISHED BY WIRED BY								
GP-1	CIRCULATION PUMP		RESTROOM/BREAKROOM	0.13	-	1	120 V	1	-	-	-	-	-	-	-	A	44	20	12-12-1/2"		GP-1	
EF-1	FAN	ROOF	STORAGE	0.31	312w	2.6	120 V	1	-	-	OCCUPANCY SENSOR	ELEC	ELEC	-	-	-	A	64	20	12-12-1/2"		EF-1
EF-2	FAN	ROOF	STORAGE	0.31	312w	2.6	120 V	1	-	-	OCCUPANCY SENSOR	ELEC	ELEC	-	-	-	A	64	20	12-12-1/2"		EF-2
EF-3	EXHAUST FAN		COMM ROOM	0.22	224w	0	120 V	1	-	-	THERMOSTAT	-	-	-	-	-	RP-1NE	4	20	12-12-1/2"		EF-3
EF-4	EXHAUST FAN		COMM ROOM	0.22	224w	0	120 V	1	-	-	THERMOSTAT	-	-	-	-	-	RP-1NE	4	20	12-12-1/2"		EF-4
EH-1	ELECTRIC UNIT HEATER		FIRE PANEL ROOM	2	-	7.2	277 V	1	TT	ELEC	INTEGRATED	MFR	ELEC	-	-	-	LP-1NE	1	20	12-12-1/2"		EH-1
EH-2	ELECTRIC UNIT HEATER		SPRINKLER ROOM	2	-	7.2	277 V	1	TT	ELEC	INTEGRATED	MFR	ELEC	-	-	-	LP-1NE	3	20	12-12-1/2"		EH-2
EH-3	ELECTRIC UNIT HEATER		STAIRWELL	3	-	10.8	277 V	1	TT	ELEC	INTEGRATED	MFR	ELEC	-	-	-	LP-1NE	2	20	12-12-1/2"		EH-3
EH-4	ELECTRIC UNIT HEATER		STAIRWELL	3	-	10.8	277 V	1	TT	ELEC	INTEGRATED	MFR	ELEC	-	-	-	LP-1NE	4	20	12-12-1/2"		EH-4
EH-5	ELECTRIC UNIT HEATER		STAIRWELL	3	-	10.8	277 V	1	TT	ELEC	INTEGRATED	MFR	ELEC	-	-	-	LP-1NE	5	20	12-12-1/2"		EH-5
GUH-1	UNIT HEATER		STORAGE	0.28	1/30	1	120 V	1	TT	ELEC	THERMOSTAT	MECH	ELEC	-	-	-	RP-1NE	24	20	12-12-1/2"		GUH-1
GUH-2	UNIT HEATER		STORAGE	0.28	1/30	1	120 V	1	TT	ELEC	THERMOSTAT	MECH	ELEC	-	-	-	RP-1NE	23	20	12-12-1/2"		GUH-2
GUH-3	UNIT HEATER		STORAGE	0.28	1/30	1	120 V	1	TT	ELEC	THERMOSTAT	MECH	ELEC	-	-	-	RP-1NE	5	20	12-12-1/2"		GUH-3
GUH-4	UNIT HEATER		STORAGE	0.28	1/30	1	120 V	1	TT	ELEC	THERMOSTAT	MECH	ELEC	-	-	-	RP-1NE	6	20	12-12-1/2"		GUH-4
OH-1	OVERHEAD DOOR		STORAGE	1.2	1/2	12	120 V	1	TT	ELEC	PUSHBUTTON	MFR	ELEC	-	-	-	RP-1NE	3	20	12-12-1/2"	2	OH-1
RTU-1	ROOFTOP UNIT	ROOF	SALES	29.51	-	42	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC	DP-1NE-2	1,3,5	45	6-10-1"	3,4	RTU-1
RTU-2	ROOFTOP UNIT	ROOF	SALES	29.51	-	42	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC	DP-1NE-2	2,4,6	45	6-10-1"	3,4	RTU-2
RTU-3	ROOFTOP UNIT	ROOF	SALES	30.62	-	54	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC	DP-1NE-2	7,9,11	60	4-10-1"	3,4	RTU-3
RTU-4	ROOFTOP UNIT	ROOF	SALES	29.51	-	42	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC	DP-1NE-2	8,10,12	45	6-10-1"	3,4	RTU-4
RTU-5	ROOFTOP UNIT	ROOF	SALES	29.51	-	42	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC	DP-1NE-2	13,15,17	45	6-10-1"	3,4	RTU-5
RTU-6	ROOFTOP UNIT	ROOF	OFFICES	10.72	-	14	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC	DP-1NE-2	14,16,18	15	12-12-1/2"	3,4	RTU-6
RTU-7	ROOFTOP UNIT	ROOF	SECOND FLOOR	29.51	-	42	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC	DP-2SE	1,3,5	45	6-10-1"	3,4,5	RTU-7
RTU-8	ROOFTOP UNIT	ROOF		29.51	-	0	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC				2-8-1 1/2"	3,4	RTU-8
RTU-9	ROOFTOP UNIT	ROOF		29.51	-	0	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC				2-8-1 1/2"	3,4	RTU-9
RTU-10	ROOFTOP UNIT	ROOF		29.51	-	0	480 V	3	INTEGRAL	MFR	THERMOSTAT	MECH	ELEC	DSD SUPPLY / RETURN	MECH	ELEC				2-8-1 1/2"	3,4	RTU-10
WH-1	WATER HEATER		STORAGE	3	-	11	208 V	3	TT	ELEC	-	-	-	-	-	-	RP-1NE	11,13,15	20	12-12-1/2"		WH-1



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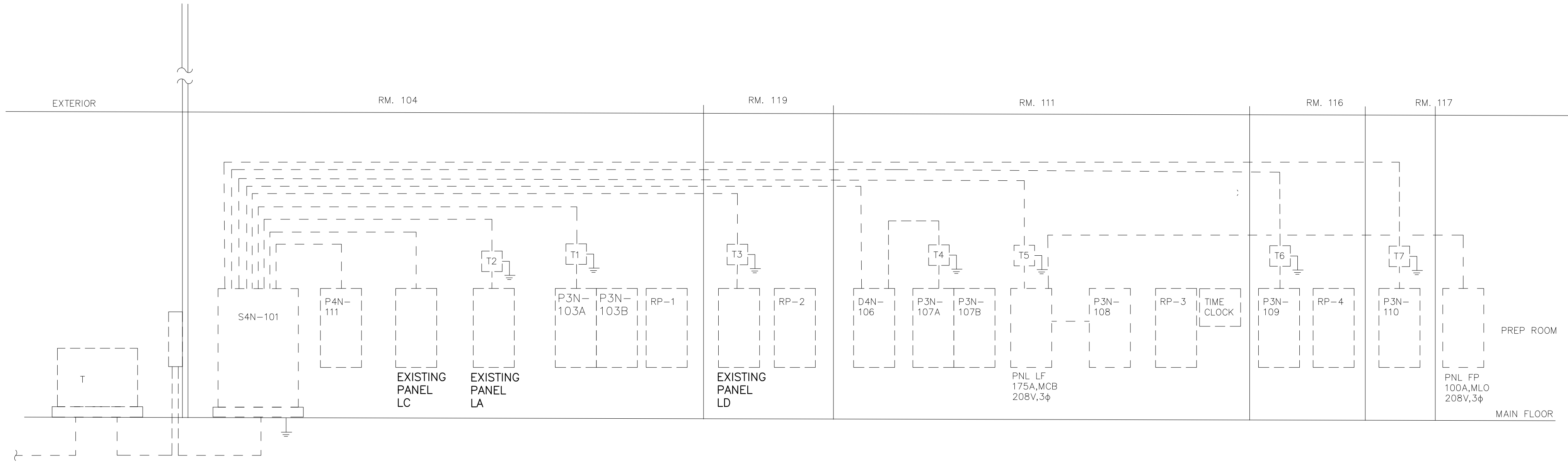
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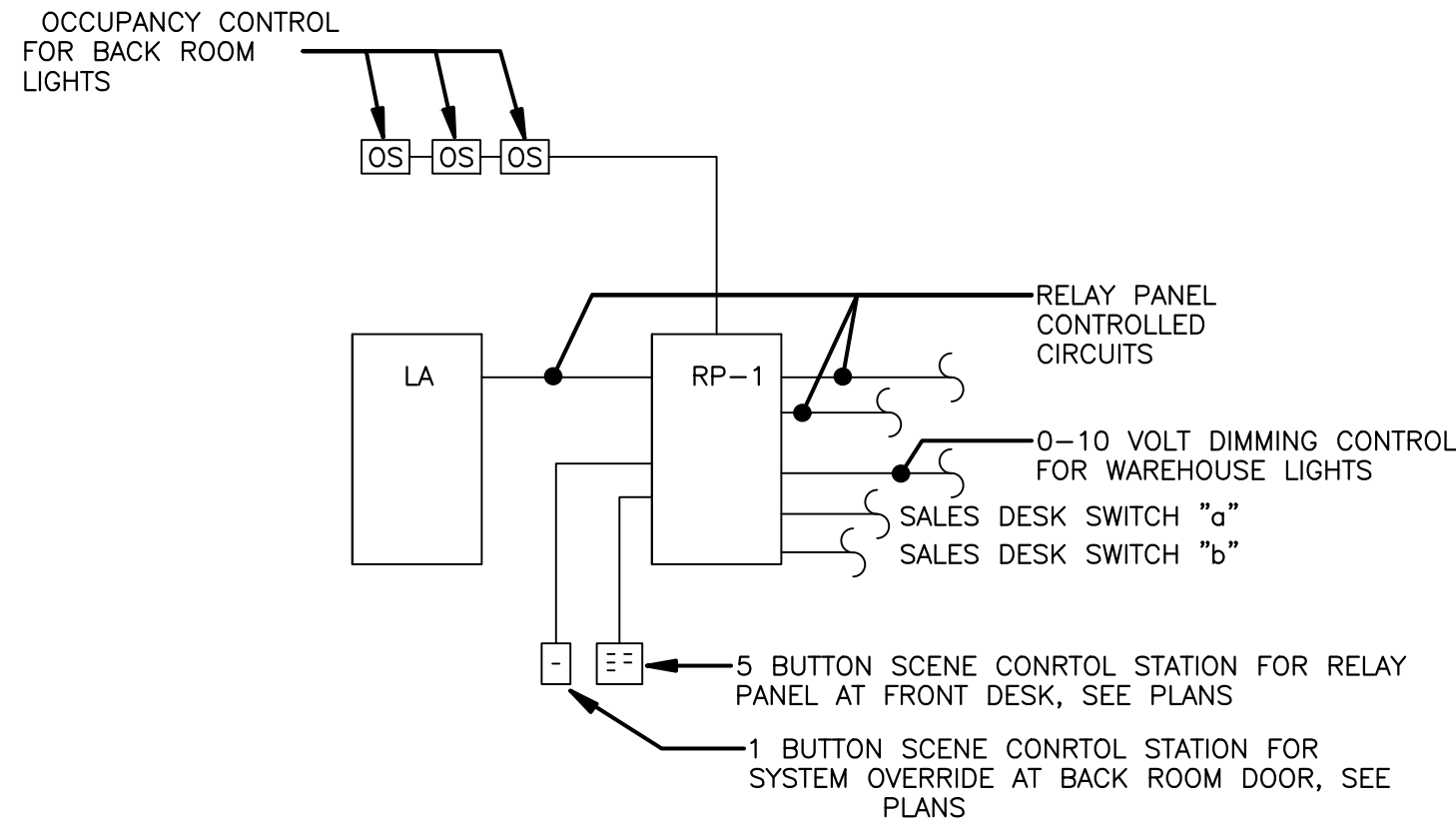
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AND DETAIL

SHEET NUMBER

E400



1 EXISTING ONE LINE
SCALE NOT TO SCALE



RELAY CONTROL PANEL (RP-1)									
RELAY #	DESCRIPTION	PANEL/ CIRCUIT#	VOLTAGE	AMPS	LOAD TYPE	ON CONTROL	OFF CONTROL	OVERRIDE CONTROL ENABLED	NOTES
1	BUILDING MOUNTED SIGN	A/52	120	20		TIME CLOCK	TIME CLOCK		
2	EXTERIOR LIGHTING	EM-LP/2	120	20	LED	PHOTO CELL	TIME CLOCK		1
3	ENTRY VESTIBULE LIGHTING	A/43	120	20	LED	TIME CLOCK	TIME CLOCK	YES	2
4	FRONT DISPLAY LIGHTING	A/43	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
5	SALES DESK LIGHTING	A/45	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
6	SALES DESK LIGHTING	A/47	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
7	CLEARANCE CENTER LIGHTING	A/54	120	20	LED	TIME CLOCK	TIME CLOCK	YES	1
8	INTERIOR EMERGENCY LIGHTING	EM-LP/1	120	20	LED	TIME CLOCK	TIME CLOCK	YES	1
9	TRACK LIGHTING	B/1	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
10	TRACK LIGHTING	B/2	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
11	TRACK LIGHTING	B/3	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
12	TRACK LIGHTING	B/4	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
13	TRACK LIGHTING	B/5	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
14	TRACK LIGHTING	B/6	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
15	TRACK LIGHTING	B/7	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
16	TRACK LIGHTING	B/8	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
17	TRACK LIGHTING	B/9	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
18	TRACK LIGHTING	B/10	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
19	TRACK LIGHTING	B/11	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
20	TRACK LIGHTING	B/12	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
21	TRACK LIGHTING	B/13	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
22	TRACK LIGHTING	B/14	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
23	TRACK LIGHTING	B/15	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
24	TRACK LIGHTING	B/16	120	20	LED	TIME CLOCK	TIME CLOCK	YES	

RELAY #	DESCRIPTION	PANEL/ CIRCUIT#	VOLTAGE	AMPS	LOAD TYPE	ON CONTROL	OFF CONTROL	OVERRIDE CONTROL ENABLED YES	NOTES
25	TRACK LIGHTING	B/17	120	20	LED	TIME CLOCK	TIME CLOCK		
26	TRACK LIGHTING	B/18	120	20	LED	PHOTO CELL	TIME CLOCK	YES	
27	TRACK LIGHTING	B/19	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
28	TRACK LIGHTING	B/20	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
29	TRACK LIGHTING	B/21	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
30	TRACK LIGHTING	B/22	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
31	PENDANT LIGHTING	B/23	120	20	LED	TIME CLOCK	TIME CLOCK	YES	
32	SPARE								
33	SPARE								
34	SPARE								
35	SPARE								
36	SPARE								
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									

GENERAL NOTES:
A. ROUTE POWER FROM PANEL CIRCUIT NOTED THROUGH RELAY TO FIXTURES. BYPASS LIGHTING CONTROL PANEL TO FEED UNSWITCHED LOADS SUCH AS EXIT SIGNS AND SECURITY LIGHTS.
B. EMERGENCY PANEL EM-LP IS 277V. PROVIDE DIVIDERS WITHIN PANEL AS REQUIRED.
SPECIFIC NOTES:
1. PROVIDE EMERGENCY BYPASS RELAY FOR CIRCUIT. MOUNT ADJACENT TO RELAY CONTROL PANEL.
2. PROVIDE EMERGENCY BYPASS RELAY FOR EMERGENCY FIXTURES. LOCATE NEAR LIGHT FIXTURES.

200A MLO A/C 11,000				EXISTING PANEL 'L'D						208Y120 VAC, 3PH, 4W, CB TYPE BL or BLH						
WATTS			DESCRIPTION	BRKR	TRIP	CCT	CCT	TRIP	BRKR	DESCRIPTION			WATTS			
A	B	C		REQ	POLES	NO.	NO.	POLES		A	B	C				
360			Door opener	20A-1	1	2	20A-1			Floor Box				1440		
	360		Pedestrian Counter	20A-1	3	4	20A-1			Floor Box				1440		
		360	Telephone Board	20A-1	5	6	20A-1			Floor Box					1440	
360			TV Receivables	20A-1	7	8	20A-1			Floor Box				720		
	1508		EP-1	20A-2	9	10	20A-1			Rec Sleep top						
		1508				11	12	20A-1		Rec Sleep top					360	
360			Rec Show floor Right	20A-1	13	14	20A-1			Rec Clear Gen Top				360		
	360		Rec Show floor Cal	20A-1	15	16	20A-1			Rec Clear Gen Top				360		
		360	Rec Show floor Cal	20A-1	17	18	20A-1			Rec Clear Gen Right					360	
			Rec Show floor Cal	20A-1	19	20	20A-1			Rec Clear Gen Right				360		
	360		Rec Show floor Cal	20A-1	21	22	20A-1			Rec Sleep bottom						
		360	Rec Show floor Cal	20A-1	23	24	20A-1			Rec Sleep bottom						
			Rec Show floor Cal	20A-1	25	26	20A-1			Rec Clear Gen Cal				360		
	360		Rec Show floor Cal	20A-1	27	28	20A-1			Rec Clear Gen Cal				360		
		360	Rec Show floor Cal	20A-1	29	30	20A-1			Rec Show floor bottom					360	
			Rec Show floor Cal	20A-1	31	32	20A-1			Rec Show floor bottom				360		
	360		Rec Show floor Cal	20A-1	33	34	20A-1			Rec Show floor bottom						
		360	Rec Show floor Cal	20A-1	35	36	20A-1			Rec Show floor bottom					360	
			Rec Show floor Cal	20A-1	37	38	20A-1			Rec Show floor right				360		
	360		Rec Show floor right	20A-1	39	40	20A-1			Rec Show floor right					360	
		360	Rec Show floor right	20A-1	41	42	20A-1			Rec Show floor right						360
											Total Connect	6480	7268	7268		
											Connect Amps			60	Amps	
											Demand Amps			60	Amps	

400A MLO A/C 11,000				EXISTING PANEL 'L'C						277/480V 3PH 4W				
WATTS				BRKR	TRP	CCT	CCT	TRP	BRKR	WATTS				
A	B	C	DESCRIPTION	REQ	PLS	NO.	NO.	PLS	REQ	DESCRIPTION	A	B	C	
360			Rec Front of Building	20A-1	1	2	20A-1			Rec Show floor Left	360			
	360		Rec Front of Building	20A-1	3	4	20A-1			Rec Show floor Left		360		
		360	Rec Show floor right	20A-1	5	6	20A-1			Rec Show floor Left			360	
			Rec Show floor right	20A-1	7	8	20A-1			Rec Show floor Left	360			
	360		Rec Show floor right	20A-1	9	10	20A-1			Rec Show floor Left		360		
			Rec Show floor right	20A-1	11	12	20A-1			Rec Show floor Left			360	
360			Rec Show floor right	20A-1	13	14	20A-1			Rec Show floor Low er Left Group	1400			
			Spare	20A-1	15	16	20A-1			Rec Show floor Low er Left Group			700	
			Spare	20A-1	17	18	20A-1			Rec Show floor Low er Left Group			700	
			Spare	20A-1	19	20	20A-1			Rec Show floor Upper Left Group	700			
			Spare	20A-1	21	22	20A-1			Rec Show floor Upper Left Group			200	
			Spare	20A-1	23	24	20A-1			Rec Show floor Upper Left Group			200	
360			Rec Show floor right	20A-1	25	26	20A-1			Rec Show floor Low er Right Group	200			
	360		Rec Sleep Solutions Left	20A-1	27	28	20A-1			Rec Show floor Low er Right Group			400	
			Rec Sleep Solutions Left	20A-1	29	30	20A-1			Rec Show floor Upper Right Group			400	
			Rec Sleep Solutions Left	20A-1	31	32	20A-1			Rec Show floor Upper Right Group	400			
			Rec Sleep Solutions Left	20A-1	33	34	20A-1			Rec Show floor Upper Group				
	360		Rec Sleep Solutions Left	20A-1	35	36	20A-1			Rec Show floor Upper Group			900	
		360	Rec Sleep Solutions Right	20A-1	37	38	20A-1			Rec Sleep Solutions Right	360			
			Rec Sleep Solutions Right	20A-1	39	40	20A-1			Office		360		
			Rec Sleep Solutions Right	20A-1	41	42	20A-1			Breakroom			360	
											Total Connect	9940	4980	4980
											Connect Amps		45	Amps
											Demand Amps		41	Amps

200A MLO				PANEL 'L'						208Y120 VAC, 3PH, 4W, CB TYPE BL or BLH					
WATTS			DESCRIPTION	BRKR	TRP	CCT	CCT	TRP	BRKR	WATTS					
A	B	C		REQ	PLS	NO.	NO.	PLS	REQ	A	B	C			
924	1308		Track Lighting	S	20A-1P	1	2	20A-1P	S	Track Lighting	888				
			Track Lighting	S	20A-1P	3	4	20A-1P	S	Track Lighting		888			
		1032	Track Lighting	S	20A-1P	5	6	20A-1P	S	Track Lighting			1152		
966	1176		Track Lighting	S	20A-1P	7	8	20A-1P	S	Track Lighting	1188				
			Track Lighting	S	20A-1P	9	10	20A-1P	S	Track Lighting		1152			
		1080	Track Lighting	S	20A-1P	11	12	20A-1P	S	Track Lighting			1248		
1272	125		Track Lighting	S	20A-1P	13	14	20A-1P	S	Track Lighting	1008				
		600	Track Lighting	S	20A-1P	15	16	20A-1P	S	Communications Office		600			
			LT-1	S	20A-1P	17	18	20A-1P	S	Office			600		
600	600		LT-1	S	20A-1P	19	20	20A-1P	S	Mechanical Room	600				
			LT-1	S	20A-1P	21	22	20A-1P	S	Exterior Lights		423			
		600	LT-2	S	20A-1P	23	24	20A-1P	S	Exterior Sign			0		
			Spare	S	20A-1P	25	26	20A-1P	S	Spare			0		
0	0		Spare	S	20A-1P	27	28	20A-1P	S	Spare		0	0		
		0	Spare	S	20A-1P	29	30	20A-1P	S	Spare			0		
0	0		Spare	S	20A-1P	31	32	20A-1P	S	Spare		0	0		
			Spare	S	20A-1P	33	34	20A-1P	S	Spare			0		
0	0		Spare	S	20A-1P	35	36	20A-1P	S	Spare			0		
			Spare	S	20A-1P	37	38	20A-1P	S	Spare		0	0		
0	0		Spare	S	20A-1P	39	40	20A-1P	S	Spare			0		
			Spare	S	20A-1P	41	42	20A-1P	S	Spare			0		
											Total Connect	7476	6147	6312	
											Connect Amps			55	Amps
											Demand Amps			55	Amps

"G" - DENOTES CLASS A GFCI TYPE CIRCUIT BREAKER
"IG" - DENOTES ISOLATED GROUND
"S" - DENOTES SWITCH TYPE
"SH" - DENOTES CIRCUIT BREAKER WITH SHUNT TRIP MODULE
"L" - DENOTES BREAKER LOCK-ON DEVICE
"LO" - DENOTES BREAKER LOCK-OFF COMPLIANT WITH NEC 110.25

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GENERAL NOTES

- REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES AND DEVICES.
 - LETTER THUS: "X" - INDICATES TYPE OF LIGHTING FIXTURES. REFER TO LIGHTING FIXTURE TYPES AS NOTED ON THE LIGHTING FIXTURE SCHEDULE.
 - VERIFY LOCATION OF ALL FLOOR OUTLETS WITH ARCHITECT PRIOR TO ROUGH-IN. EXISTING CONCRETE FLOOR TO BE CUT AND TRENCHED AS REQUIRED.
 - DATA TELEPHONE AND TELEVISION CONDUIT SHALL BE MINIMUM 3/4" INCH UNLESS OTHERWISE NOTED ON LAWNINGS.
 - DO NOT SCALE LAWNINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO COMMENCEMENT OF WORK.
 - FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS, AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
 - ALL EMPTY RACEWAY SYSTEMS SHALL HAVE A PULLWIRE OR EQUAL AND SHALL BE IDENTIFIED AT ALL JUNCTION, PULL, AND TERMINATION POINTS, USING PERMANENT METALLIC TAGS. TAG SHALL INDICATE INTENDED USE OF CONDUIT, ORIGINATION AND TERMINATION POINTS OF EACH INDIVIDUAL CONDUIT.
 - IT IS THE INTENT OF THESE LAWNINGS AND SPECIFICATIONS TO ESTABLISH A STANDARD OF QUALITY. THE ENGINEER RESERVES THE RIGHT TO APPROVE METHODS AND MATERIALS NOT REFLECTED HEREIN.
 - CONTRACTOR SHALL REVIEW ARCHITECTURAL, STRUCTURAL, AND MECHANICAL LAWNINGS AND SHALL PROVIDE SWITCHES, RECEPTACLES, TELEPHONE OUTLETS, EQUIPMENT CONNECTIONS, ETC., AND ASSOCIATED CIRCUITING IN NEW AND REDEVELOPED AREAS, EVEN IF SUCH AREAS ARE NOT SHOWN ON ELECTRICAL LAWNINGS, LAYOUTS, FIXTURE TYPES, QUANTITIES, AND SPACING SHALL BE IN ACCORDANCE WITH SIMILAR AREAS ON THIS PROJECT. CONTRACTOR SHALL INCLUDE COSTS FOR THE ABOVE IN HIS BID.
 - WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE OWNER.
 - WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL, STATE OF MINNESOTA, AND NATIONAL CODES AND ORDINANCES.
 - PROVIDE PERMITS AND INSPECTIONS REQUIRED.
 - GUARANTEE THE INSTALLATION AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP WHICH MAY OCCUR UNDER NORMAL USAGE FOR A PERIOD OF ONE YEAR AFTER OWNER'S ACCEPTANCE. DEFECTS SHALL BE PROMPTLY REACHED WITHOUT COST TO THE OWNER.
 - VERIFY EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
 - SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, CONTRACTOR SHALL MAKE CORRECTIONS NECESSARY AT NO COST TO OWNER.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INDIRECT FIELD WIRING OR FACTORY WIRING IN EQUIPMENT PROVIDED BY THIS CONTRACTOR.
 - SYSTEMS SHALL BE COMPLETE, OPERABLE, AND READY FOR CONTINUOUS OPERATION. LIGHTS, SWITCHES, RECEPTACLES, MOTORS, ETC. SHALL BE CONNECTED AND OPERABLE.
 - ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC RACEWAYS. RACEWAYS IN SLAB-ON-GRADE OR BELOW GRADE SHALL BE SCHEDULE 40 PVC. ELBOWS FROM BELOW TO ABOVE GRADE SHALL BE WITH RIGID STEEL ELBOWS WITH PVC JACKET OR PROVIDED EQUAL PROTECTION. EMT FITTINGS SHALL BE MALLEABLE IRON OR STEEL. CONNECTORS SHALL BE INSULATED THROAT TYPE.
 - FINAL CONNECTIONS TO MOTORS, TRANSFORMERS, AND OTHER VIBRATING EQUIPMENT SHALL BE WITH LIQUID-TIGHT FLEX METAL CONDUIT AND FITTINGS. DO NOT SECURE CONDUITS, DISCONNECTS, OR DEVICES TO DUCWORK OR MECHANICAL EQUIPMENT.
 - ALL ELECTRICAL SYSTEMS COMPONENTS SHALL BE LISTED OR LABELED BY UL OR OTHER RECOGNIZED TESTING FACILITY.
 - ELECTRICAL CONTRACTOR SHALL PROPERLY BALANCE ALL BRANCH CIRCUITS BETWEEN ALL PHASES OF THE SYSTEM, REGARDLESS OF CIRCUITING INDICATED.
 - ELECTRICAL CONTRACTOR SHALL OBTAIN A COPY OF LANDLORD'S DESIGN CRITERIA. THIS GUIDE SUPERSEDES LAWNINGS AND SPECIFICATION (I.e. MANUFACTURER, ETC.).
 - MULTI-PHASE LOADS SHALL BE PROTECTED BY MULTI-POLE CIRCUIT BREAKERS HAVING COMMON TRIP AND SINGLE HANDLIE. HANDLE TIES AND TROUGH CLIPS OR PINS ARE UNACCEPTABLE.
 - MULTI-WIRE BRANCH CIRCUITS SHALL REQUIRE A MULTI-POLE BREAKER AS A MEANS TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES PER NEC 210.4(B).
 25. ALL CONDUCTORS SHALL BE COPPER, TYPE 75 DEGREES C, MINIMUM SIZE #12.
- EMERGENCY LIGHTING UNITS
 - General Requirements for Emergency Lighting Units: Self-contained units complying with UL 924.
 - Battery: Sealed, maintenance-free, lead-acid type.
 - Charger: Fully automatic, solid-state type with sealed transfer relay.
 - Operation: Relay automatically turns lamp on when power-supply circuit voltage drops to 85 percent of nominal voltage or below. Lamp automatically disconnects from battery when voltage approaches deep-discharge level. When normal voltage is restored, relay disconnects lamps from battery, and battery is automatically recharged and floated on charger.
 - Test Push Button: Push-to-test type, in unit housing, simulates loss of normal power and demonstrates unit operability.
 - LED Indicator Light: Indicates normal power on. Normal glow indicates trouble charge; bright glow indicates charging of end of discharge cycle.
 - Wire Guard: Heavy-chrome-plated wire guard protects lamp heads or fixtures.
 - 1.10 FLUORESCENT LAMPS
 - 18 rapid-start lamps, 2950 initial lumens (minimum), CRI 85 (minimum), color temperature 3500 K, and average rated life 30,000 hours unless otherwise indicated.
 - 1.11 HD LAMPS
 1. Ceramic, Pulse-Start, Metal-Halide Lamps: Minimum CRI 80, and color temperature 4000 K.

SLUMBERLAND
7961 SOUTHTOWN CTR.
BLOOMINGTON, MN 55431

FIRE ALARM

FIRE ALARM SYSTEM. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF AUTHORITY HAVING JURISDICTION.

COMMUNICATIONS

- BOXES FOR TELEPHONE, TV, DATA, WIRING DEVICES, ETC. SHALL BE MINIMUM TWO GANGS WITH SINGLE GANG MID RING, 3/4" CONDUIT WITH BUSHING AND PULL-STRING, STUBBED INTO ACCESSIBLE CEILING SPACE. CABLING AND FINAL CONNECTIONS NOT IN CONTACT.
- SOUND SYSTEM. CONTRACTOR SHALL PROVIDE ALL CONDUIT, J-BOXES, AND WIRING FOR SOUND SYSTEM SPEAKERS TO AMPLIFIER LOCATION. CONDUIT SHALL BE A MINIMUM OF 3/4" UNLESS NOTED. OWNER TO FURNISH MID-RINGS FOR SPEAKERS FOR CONTRACTOR TO INSTALL. COORDINATE WITH TENDANT.
- IF APPLICABLE SECURITY SYSTEM. CONTRACTOR SHALL PROVIDE ALL CONDUIT, AND J-BOXES (MINIMUM TWO-GANG) FOR A COMPLETE RACEWAY SYSTEM. CONDUIT SHALL BE A MINIMUM OF 3/4" UNLESS NOTED. SECURITY SYSTEM CONTRACTOR SHALL INSTALL SECURITY PANELS, CAMERAS, WIRE, SECURITY DEVICES, ETC.

5046.0001

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE

DATE ISSUED 10/25/24

REG. NO. 40887

REVISIONS

TAG	DATE	DESCRIPTION
	10/25/24	PERMIT

SPECIFICATIONS

SHEET NUMBER

E600

SECTION 16 0500 - COMMON WORK RESULTS FOR ELECTRICAL

1.1 SUMMARY

- Section Includes:

- Common electrical installation requirements.
- COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION
- Comply with NECA 1.
- Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.
- Installation Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.
- Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.
- Right of Way: Give to piping systems installed at a required slope.
- Contractor shall provide rough-in for and connect to the following equipment furnished by others. Equipment will be provided by other contractors or owner. Secure rough-in information, connector requirements, and templates from equipment supplier. Verify all equipment voltage and power requirements:

- Plumbing and HVAC equipment.

- Electric motors.

- FIRE-STOPPING

- Apply fire-stopping to penetrations of fire-rated floor and wall assemblies for electrical installations to restore original fire-resistance rating of assembly.
- Fire-stopping materials and installation requirements are specified in Division 07 Section "Penetration Fire-Stopping."

1.4 SEISMIC REQUIREMENTS

- Provide bracing and supports to meet code required seismic ratings.

SECTION 16 0510 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

1.1 SUMMARY

- This Section includes the following:

- Building wires and cables rated 600 V and less.

- Connectors, splices, and terminations rated 600 V and less.

1.2 QUALITY ASSURANCE

- Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

- Comply with NFPA 70.

1.3 CONDUCTORS AND CABLES

- Copper and Aluminum Conductors: Comply with NEMA WD 70.

- Conductor Insulation: Comply with NEMA WC 70 for Types THHN-THHN and XHHW.

- Multi-conductor Cable: Comply with NEMA WC 70 for metal-clad cable, Type MC with ground wire.

1.4 CONDUCTOR MATERIAL APPLICATIONS

- Feeders: Copper for feeders smaller than No. 3 AWG; copper or aluminum for feeders No. 4 AWG and larger. Solid for No. 12 AWG and smaller; stranded for No. 10 AWG and larger.

- Branch Circuits: Copper. Solid for No. 12 AWG and smaller; stranded for No. 10 AWG and larger.

1.5 CONDUCTOR INSULATION AND MULTI-CONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

- Service Entrance: Type THHN-THHN, single conductors in raceway or Type XHHW, single conductors in raceway.

- Exposed Feeders: Type THHN-THHN, single conductors in raceway.

- Feeder Concoiled in Ceilings, Walls, Partitions, and Overlamps: Type THHN-THHN, single conductors in raceway.

- Cables Concealed in Concrete, below Slab-on-Grade, and Underground: Type THHN-THHN, single conductors in raceway.

- Exposed Branch Circuits, Including in Concrete: Type THHN-THHN, single conductors in raceway.

- Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THHN, single conductors in raceway or Metal-clad cable, Type MC.

- Branch Circuits Concealed in Concrete, below Slab-on-Grade, and Underground: Type THHN-THHN, single conductors in raceway.

1.6 INSTALLATION OF CONDUCTORS AND CABLES

- Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated.

- Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

SECTION 16 0520 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

1.1 SUMMARY

- This Section includes methods and materials for grounding systems and equipment.

1.2 QUALITY ASSURANCE

- Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

- Comply with UL 467 for grounding and bonding materials and equipment.

1.3 APPLICATIONS

- Conductors: Install solid conductor for No. 12 AWG and smaller, and stranded conductors for No. 10 AWG and larger, unless otherwise indicated.

1.4 EQUIPMENT GROUNDING

- Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:

- Feeders and branch circuits.

- Lighting circuits.

- Single-phase motor and appliance branch circuits.

- Three-phase motor and appliance branch circuits.

SECTION 16 0520 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

1.1 SUMMARY

- Section includes methods and materials for grounding systems and equipment.

1.2 QUALITY ASSURANCE

- Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

- Comply with UL 467 for grounding and bonding materials and equipment.

- Conductors: Install solid conductor for No. 12 AWG and smaller, and stranded conductors for No. 10 AWG and larger, unless otherwise indicated.

- Three-phase motor and appliance branch circuits.

SECTION 16 0520 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

1.1 SUMMARY

- Section includes methods and materials for grounding systems and equipment.

- Conductors: Install solid conductor for No. 12 AWG and smaller, and stranded conductors for No. 10 AWG and larger, unless otherwise indicated.

- Three-phase motor and appliance branch circuits.

SECTION 16 0530 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

1.1 SUMMARY

- This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.

1.2 QUALITY ASSURANCE

- Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

- Comply with NFPA 70.

SECTION 16 0530 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

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- This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.

- Conductors: Install solid conductor for No. 12 AWG and smaller, and stranded conductors for No. 10 AWG and larger, unless otherwise indicated.

- Three-phase motor and appliance branch circuits.

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- Three-phase motor and appliance branch circuits.

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- Three-phase motor and appliance branch circuits.

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- Three-phase motor and appliance branch circuits.

SECTION 16 0530 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

STRUCTURAL NOTES

1	BUILDING CODE:
1.1	2018 INTERNATIONAL BUILDING CODE (IBC) WITH LOCAL AMENDMENTS
2	DESIGN LOADS:
2.1	ROOFS:
	LIVE:..... 25 PSF
	SNOW:..... 50 PSF
	GROUND SNOW LOAD, P_g 38 PSF
	FLAT ROOF SNOW LOAD, P_f 1.00
	EXPOSURE CATEGORY, C_e 1.00
	IMPORTANCE FACTOR, I 1.00
2.2	FLOORS:
	LIVE:..... SEE SHEETS S.02 & S.03
2.3	WIND:
	BASIC WIND SPEED, V 109 MPH ULTIMATE
	EXPOSURE..... 3B
	COMPONENT PRESSURE COEFFICIENT, G_c -0.18
	COMPONENT DESIGN PRESSURE..... SEE TABLE BELOW AND SHEET S4.02
2.4	SEISMIC DATA:
	SITE CLASS..... D
	OCCUPANCY CATEGORY..... II
	IMPORTANCE FACTOR, I 1.00
	SEISMIC RESPONSE COEFFICIENT, C_s 0.07
	SEISMIC DESIGN CATEGORY..... A

* ROOF LIVE LOADS ARE REDUCED IN ACCORDANCE WITH SECTION 1607.11 OF THE IBC.
** PLUS SNOW ACCUMULATION IN ACCORDANCE WITH SECTION 1608 OF THE IBC.

COMPONENT AND CLADDING WIND PRESSURE TABLE IN PSF		
LOCATION	TRIUTARY AREA	
	10 SQ. FT.	500 SQ. FT.
TYPICAL	+33.0	+23.7
WITHIN 8'-0" OF BUILDING CORNER	+38.3	+23.7

1. LINEAR INTERPOLATION MAY BE USED FOR TRIBUTARY AREAS BETWEEN THOSE SHOWN
2. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE PROJECTED SURFACES

3 GENERAL NOTES:

- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE SAFETY OF PERSONS AND PROPERTY. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.
- THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED STRUCTURE. DURING ERECTION OF THE STRUCTURE, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TEMPORARY GUYING, SHORING, BRACING, FORMING, ETC. TO HOLD THE STRUCTURE IN PROPER ALIGNMENT AND TO WITHSTAND ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING LATERAL LOADS, TEMPERATURE DIFFERENTIALS, STOCKPILES OF MATERIAL, AND EQUIPMENT. SUCH MEASURES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED FOR SAFETY AND UNTIL ALL FRAMING AND CONNECTIONS INCLUDING ROOF DECK ARE IN PLACE. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF SUCH TEMPORARY MEASURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION, WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW BY THE ENGINEER.
- ARCHITECTURAL DRAWINGS, MECHANICAL DRAWINGS, ELECTRICAL DRAWINGS, TELECOMMUNICATION DRAWINGS, FIRE PROTECTION DRAWINGS, EQUIPMENT DRAWINGS AND RELATED ITEMS ARE BY OTHERS.
- CONTRACTOR SHALL SUBCONTRACTORS SHALL THOROUGHLY REVIEW ALL DRAWINGS AND SPECIFICATIONS PRIOR TO SUBMITTING BIDS. MISCELLANEOUS FASTENERS, CLIPS, ETC. THAT ARE NOT DETAILED ON THE DRAWINGS BUT ARE PART OF THE REQUIREMENTS FOR FULL INSTALLATION OF ALL STRUCTURAL SYSTEMS ARE TO BE PART OF THE BID. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE BID TO ASCERTAIN CONDITIONS WHICH MAY ADVERSELY AFFECT THE BID.
- ALL OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONSTRUCTION DRAWINGS AND/OR SPECIFICATIONS AND/OR EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL COORDINATE ALL DEPRESSIONS, DIMENSIONS, ELEVATIONS, SLEEVES, CHASES, HANGERS, OPENINGS, BLOCK OUTS, INSERTS, ANCHORS, EQUIPMENT SUPPORTS, AND DETAILS WITH THE ENTIRE CONSTRUCTION PACKAGE INCLUDING ARCHITECTURAL DRAWINGS, MECHANICAL DRAWINGS, ELECTRICAL DRAWINGS, TELECOMMUNICATION DRAWINGS, FIRE PROTECTION DRAWINGS AND EQUIPMENT DRAWINGS. FOR CONCRETE AND MASONRY CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE ALL DEPRESSIONS, DIMENSIONS, ELEVATIONS, SLEEVES, CHASES, HANGERS, OPENINGS, BLOCK OUTS, INSERTS, ANCHORS, EQUIPMENT SUPPORTS, AND DETAILS WITH THE ENTIRE CONSTRUCTION PACKAGE INCLUDING ARCHITECTURAL DRAWINGS, MECHANICAL DRAWINGS, ELECTRICAL DRAWINGS, TELECOMMUNICATION DRAWINGS, FIRE PROTECTION DRAWINGS, EQUIPMENT DRAWINGS AND RELATED ITEMS ARE BY OTHERS.
- ALL MANUFACTURED STRUCTURAL SYSTEMS WHICH ARE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH THE SUPPLIER'S INSTRUCTIONS AND REQUIREMENTS.
- MECHANICAL UNITS SUPPORTED BY ROOF OR FLOOR STRUCTURE ARE SUBJECT TO THE ACCEPTANCE OF THE STRUCTURAL ENGINEER.

4 FOOTINGS AND SOIL DATA:

- FOOTINGS SHALL BEAR ON COMPETENT NATURAL SOIL OR ON COMPACTED, ENGINEERED FILL. PREPARED AND COMPACTED FOOTINGS TO THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT.
- ALL TOPSOIL, FILL AND OTHER UNSUITABLE BEARING MATERIAL SHALL BE REMOVED. A GEOTECHNICAL ENGINEER SHALL INSPECT THE EXCAVATED AREA TO ENSURE ALL MATERIALS REQUIRING REMOVAL HAVE BEEN REMOVED AND TO VERIFY THE SOIL BEARING CAPACITY USED FOR DESIGN PRIOR TO CONCRETE PLACEMENT.
- EMBEDMENT DEPTH FROM EXTERIOR GRADE TO BOTTOM OF FOOTING SHALL NOT BE LESS THAN 3'-6" HEATED AND UNHEATED STRUCTURES). DURING WINTER CONSTRUCTION, ALL FOOTINGS SHALL BE CONSIDERED UNHEATED STRUCTURES UNLESS INDICATED OTHERWISE IN THE GEOTECHNICAL REPORT. BOTTOM OF FOOTING ELEVATION SHALL BE LOWERED AS REQUIRED TO MEET THIS MINIMUM.
- BACKFILL SHALL BE PLACED AND COMPACTED AGAINST BOTH SIDES OF FOUNDATION WALLS (OTHER THAN BASEMENT WALLS) SIMULTANEOUSLY.
- PRIOR TO COMMENCING ANY FOUNDATION WORK, COORDINATE WITH ALL EXISTING UTILITIES. FOUNDATIONS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES.
- MUD SLABS, FOOTINGS OR SLABS SHALL NOT BE PLACED ONTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST OR ICE. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY FROST OR ICE FROM PENETRATING ANY FOOTING OR SLAB SUBGRADE BEFORE AND AFTER PLACING CONCRETE UNTIL SUCH SUBGRADES ARE FULLY PROTECTED BY THE PERMANENT BUILDING STRUCTURE OR PROPER DEPTH OF BURY.
- FOOTING ELEVATIONS SHOWN IN DRAWINGS ARE ESTIMATED FROM SOIL BORING DATA. FINAL ELEVATION MAY BE LOWERED AS DETERMINED BY TESTING AGENT DURING CONSTRUCTION.

5 REINFORCED CONCRETE:

- DESIGN CODE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318), LATEST ADOPTION.
- MATERIAL STRENGTHS:
- PROVIDE THE FOLLOWING CONCRETE PROPERTIES:

DESCRIPTION	COMPRESSIVE STRENGTH (FCI) AT 28 DAYS	MAX AGGREGATE SIZE	SLUMP	W/M RATIO (W/C) ¹
FOOTINGS	3000 PSI	1 1/2"	4" ± 1"	0.57
FOUNDATION WALLS	4000 PSI	3/4"	4" ± 1"	0.45
INTERIOR SLABS ON GRADE	4000 PSI	3/4"	3" ± 1"	0.43
ANY CONCRETE SUBJECT TO FREEZE-THAW CYCLES (SEE ENTRAINED AIR)	4000 PSI	3/4"	4" ± 1"	0.45
ALL OTHER CONCRETE	4000 PSI	3/4"	4" ± 1"	0.43

¹ TOLERANCE ON AIR CONTENT AS DELIVERED SHALL BE ± 1.5%.

² PRIOR TO ADDITION OF PLASTICIZER OR HIGH-RANGE WATER-REDUCER.

³ THESE W/C RATIOS MAY BE LOWER THAN NECESSARY TO PROVIDE THE SPECIFIED STRENGTHS.

- REINFORCING STEEL:
- WELDABLE BARS..... ASTM A706, GR. 60
- ALL OTHER BARS, STRIPS AND TIES..... ASTM A615, GR. 60
- WELDED WIRE FABRIC..... ASTM A1064
- PROVIDE 3/4" CHAIRS AT ALL EXPOSED CORNERS.
- FURNISH THE FOLLOWING CONCRETE COVER ON REINFORCING BARS UNLESS SHOWN OTHERWISE ON DRAWINGS:
 - SLABS ON GRADE..... 1" COVER ON TIES
 - PIERS..... 3" COVER ON BOTTOM AND SIDES
 - WALLS..... 2" COVER WHERE EXPOSED TO SOIL OR WEATHER AND 3/4" OTHERWISE

- DO NOT FIELD BEND BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE UNLESS SPECIFICALLY INDICATED OR ACCEPTED BY THE ENGINEER.
- PROVIDE CORNER BARS EQUAL IN SIZE AND SPACING TO WALL HORIZONTAL REINFORCEMENT UNLESS OTHERWISE DETAILED.
- IN SLABS PROVIDE (2) #4x4'-0" DIAGONAL BARS AT 45 DEGREES AT ALL CORNERS OF OPENINGS AND RE-ENTRANT CORNERS.
- COLD WEATHER CONCRETING SHALL FOLLOW PROCEDURES IN ACI 308.
- HOT WEATHER CONCRETING SHALL FOLLOW PROCEDURES IN ACI 305.
- PROVIDE 3/8" BAR DIAMETER LAP LENGTHS FOR WALL FOOTINGS UNLESS NOTED OTHERWISE. FOR OTHER LAP LENGTHS PROVIDE CLASS B LAP SPLICES IN ACCORDANCE WITH ACI 318.
- BAR SUPPORTS AND HOLDING BARS SHALL BE PROVIDED FOR ALL REINFORCING STEEL TO ENSURE COMPLIANCE WITH MINIMUM CONCRETE COVER. BAR SUPPORTS SHALL BE PLASTIC, PLASTIC TYPED, EPOXY COATED OR STAINLESS STEEL FOR UNCOATED STEEL. BARS SUPPORTED BY COATED STEEL SHALL BE PLASTIC, PLASTIC COATED OR EPOXY COATED.
- SPECIAL ADDITIONAL REQUIREMENTS FOR SLABS ON GRADE:
- DESIGN STANDARD: GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION (ACI 302.1)
- REFER TO GEOTECHNICAL REPORT FOR VAPOR BARRIER, ENGINEERED FILL AND SUBGRADE COMPACTION REQUIREMENTS.
- LAP JOINTS WELDED WIRE FABRIC AT LEAST TWO FULL MESHES.
- SEE DRAWINGS FOR LOCATIONS OF SLAB CONTROL JOINTS. UNLESS OTHERWISE INDICATED, JOINTS SHALL BE PROVIDED AT 10'-0" OC MAX. FOR 4" SLABS, SAWN CONTROL JOINTS SHALL BE MADE WITHIN 12 HOURS AND AS SOON AS POSSIBLE WITHOUT CAUSING RAVELING OR OTHER DAMAGE.
- SEE THE SITE PLAN, CIVIL DRAWINGS AND ARCHITECTURAL DRAWINGS FOR LOCATIONS, DIMENSIONS, ELEVATIONS, JOINTING DETAILS AND FINISH DETAILS.
- SEE THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF DEPRESSIONED SLABS AND DRAINS. SLOPE SLAB TO DRAINS WHERE SHOWN.
- FINISH TOLERANCE OF ALL SLABS SHALL BE IN ACCORDANCE WITH ACI 302.1 R.
- FLATNESS/LEVELNESS REQUIREMENTS:
- COMPOSITE OVERALL FLATNESS (FF) OF 25, MINIMUM LOCAL VALUE OF 17.
- COMPOSITE OVERALL LEVELNESS (FL) OF 20, MINIMUM LOCAL VALUE OF 15.

6 POST-INSTALLED FASTENING:

POST-INSTALLED SYSTEMS ARE BASED ON THE FOLLOWING (UNLESS NOTED OTHERWISE):

DESCRIPTION	ANCHOR/ADHESIVE ¹	APPLICATIONS
ADHESIVES	HELIX-IT-HY-200	CONCRETE
EXPANDER	HELIX-IT-HY-70	MASONRY
ANCHOR	HLTI-KWIK-BOLT 3	---
SCREW ANCHOR	HLTI-HUS-EZ	---

¹ SUBSTITUTIONS WILL BE CONSIDERED PROVIDED THE CONTRACTOR SUPPLIES DOCUMENTATION OF EQUAL OR GREATER CAPACITY BASED ON ANCHOR SIZE, EMBEDMENT DEPTH, SPACING AND EDGE DISTANCE.

- POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
- INSTALLATION REQUIREMENTS FOR ADHESIVE ANCHORS:
- HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS
- INSTALLATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED IN ACCORDANCE WITH ACI 0818I ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM.
- ALL OTHER ORIENTATIONS
- INSTALLATION SHALL BE PERFORMED BY PERSONNEL TRAINED TO INSTALL ADHESIVE ANCHORS. TRAINING SHALL INCLUDE PRODUCT SPECIFIC TRAINING OFFERED BY THE ADHESIVE MANUFACTURER AND SHALL BE INSPECTED IN ACCORDANCE WITH THE ICC REPORT.

7 STRUCTURAL STEEL:

DESIGN CODE: SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 360), LATEST ADOPTION.

- STRUCTURAL STEEL (UNLESS NOTED OTHERWISE):
- STRUCTURAL STEEL WIDE FLANGE..... ASTM A992
- OTHER STRUCTURAL STEEL ROLLED SHAPES, PLATES & BARS..... ASTM A588
- HOLLOW STRUCTURAL SECTION..... ASTM A500, GR. B
- CONNECTION BOLTS..... ASTM A325
- THREADED RODS..... ASTM A308
- STEEL HEADED STUD ANCHORS (GRADE B)..... ASTM A108
- ANCHOR RODS..... ASTM F1554, GR. 36
- WELDS (E70XX ELECTRODES)..... AWS D1.1
- NON-SHRINK GROUT (7,000 PSI)..... AWS D1.107, GR. A
- ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED ACCORDING TO THE SPECIFICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), LATEST ADOPTION, PROVISIONS A4 AND APPENDIX A OF THE AISC CODE OF STANDARD PRACTICE ARE SPECIFICALLY DELETED FROM THE PROJECT CONTRACT DOCUMENTS. THE FABRICATOR SHALL PROVIDE ITS SCHEDULE FOR THE SUBMITTAL OF SHOP AND ERECTION DRAWINGS A MINIMUM OF 14 DAYS PRIOR TO FIRST SUBMITTAL.
- ALL COLUMN, ANCHOR BOLTS, BASE PLATES, ETC. HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING STEEL ERECTION AND CONSTRUCTION. CONFORMANCE TO OR DEVIATION FROM ALLOWABLE CAPACITIES DURING ERECTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR (SEE GENERAL NOTES).
- STRUCTURAL STEEL SUPPLIER IS RESPONSIBLE FOR THE DESIGN OF ALL CONNECTIONS UNLESS DETAILLED ON THE DRAWINGS. UNLESS DETAILLED OTHERWISE, BEAM CONNECTIONS SHALL BE SELECTED TO SUPPORT 50% OF THE UNIFORM LOAD TABULATED IN PART 3 OF THE AISC STEEL CONSTRUCTION MANUAL FOR A GIVEN SPAN, SPAN AND STEEL. CONNECTIONS TO OR FROM BEAMS SHALL BE DESIGNED TO SUPPORT 50% OF THE BEAM. SHOP CONNECTIONS MAY BE WELDED OR BOLTED USING 3/4" MIN. DIAMETER A325 BOLTS. FIELD CONNECTIONS SHALL BE BOLTED USING SNUG-TIGHTENED (ST) 3/4" MIN. DIAMETER A325 BOLTS. BOLTS NOTED AS TENSIONED (PT) OR SLIP CRITICAL (SC) SHALL BE INSTALLED ACCORDING TO THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
- BEAMS SHALL BE FABRICATED AND ERECTED FOR PLACEMENT WITH THE NATURAL CAMBER UP.
- STRUCTURAL STEEL SUPPLIER SHALL FURNISH BOLTS FOR OSHA COLUMN ANCHOR RODS.
- ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1. UNLESS OTHERWISE NOTED, PROVIDE CONTINUOUS FILLET WELDS PER AISC REQUIREMENTS MEETING MINIMUM THICKNESSES ALLOWED PER THICKNESS OF MATERIAL.
- WELDED ALL FILLER MATERIAL SHALL HAVE A MINIMUM YIELD STRENGTH OF 58 KSI.
- HOLES IN STEEL SHALL BE DRILLED OR PUNCHED. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES.
- BURNING OF HOLES AND TORCH CUTTING AT THE SITE ARE NOT PERMITTED.
- STRUCTURAL STEEL PERMANENTLY EXPOSED TO VIEW SHALL BE SHOP-PRIMED WITH ONE COAT OF SSPC 15-66, TYPE 1 (RED OXIDE) PAINT. DAMAGE DURING TRANSPORTING, ERECTING AND FIELD WELDING PROCESSES SHALL BE REPAIRED TO MATCH THE SHOP APPLIED COATING. STRUCTURAL STEEL PERMANENTLY EXPOSED TO WEATHER INCLUDING BRICK SHELF ANGLES AND ALL OTHER EXTERIOR WALL LINTELS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123. REPAIR OF GALVANIZED SURFACES SHALL BE PERFORMED WITH COLD-GALVANIZING PRODUCT.

8 SUBMITTALS:

- GENERAL SUBMITTAL REQUIREMENTS
- CONTRACTOR SHALL REVIEW, STAMP, SIGN AND DATE ALL SUBMITTALS PRIOR TO FORWARDING TO ARCHITECT/ENGINEER. THE ENGINEER'S REVIEW IS FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK AND COORDINATE THE SUBMITTALS. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS IN THE SUBMITTALS.
- SHOP DRAWINGS SHALL BE IN THE FORM OF BLACK-LINE PRINTS OR PORTABLE DOCUMENT FORMAT (PDF) FOR REVIEW. DRAWINGS LISTED BELOW AS "CERTIFIED" SHALL BEAR THE SIGNED AND DATED SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. IN NO CASE SHALL REPRODUCTIONS OF THE CONTRACT DRAWINGS BE USED AS SHOP DRAWINGS. DRAWINGS SHALL SHOW ERECTION PLANS, DIMENSIONS, BRACING AND BRIDGING REQUIREMENTS, DETAILS, SUPPORTED MECHANICAL, EQUIPMENT AND PIPING. SUBMITTALS ARE REQUIRED.
- CALCULATIONS FOR SPECIALTY STRUCTURAL AND/OR MANUFACTURED ITEMS SHALL BEAR THE SIGNED AND DATED SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. CALCULATIONS SHALL INCLUDE DESIGN CRITERIA, REACTION FORCES, LOAD CAPACITIES, LAYOUTS SHOWING SPAN AND PITCH, AND CONNECTIONS.
- SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED PRIOR TO FABRICATION.
- REQUIRED SUBMITTALS
- CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW. A SIGNED CERTIFICATION STATING COMPLIANCE WITH ACI 318, CHAPTER 19, SHALL BE SUBMITTED WITH EACH MIX DESIGN.
- REINFORCING STEEL SHOP DRAWINGS
- STRUCTURAL STEEL SHOP DRAWINGS

9 SPECIAL INSPECTION AND TESTING

- SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH 2009 IBC SECTION 1701 FOR THE FOLLOWING PORTIONS OF CONSTRUCTION:
- CONCRETE (EXCLUDING SLAB-ON-GRADE).
- DURING TAKING OF TEST SPECIMENS.
- CONCRETE (EXCLUDING SLAB-ON-GRADE).
- REINFORCEMENT - PRIOR TO PLACING CONCRETE.
- BOLTS INSTALLED IN CONCRETE.
- STRUCTURAL WELDING.
- ONLY APPROVED FABRICATORS IN ACCORDANCE WITH IBC 1704.2.2 SHALL BE USED.
- FULL TIME INSPECTION SHALL BE REQUIRED EXCEPT FOR THE FOLLOWING ITEMS WHICH REQUIRE PERIODIC INSPECTION, INCLUDING 100% VISUAL INSPECTION:
 - SINGLE-PASS FIELD-PERFORMED FILLET WELDS NOT EXCEEDING 5/16"
 - WELDING OF REINFORCING STEEL.
 - VERIFICATION OF WELDER QUALIFICATIONS, WELDING PROCEDURES AND MATERIALS.
 - HIGH STRENGTH BOLTING (ASIS).
 - VERIFICATION OF MATERIALS.
 - VERIFICATION OF TIGHTENING METHOD.
 - PERIODIC INSPECTION, INCLUDING RANDOM VERIFICATION OF PROPER TIGHTENING.
- EXPANSION AND ADHESIVE ANCHORS
- REPORTS FOR THE ABOVE SHALL BE SUBMITTED TO THE ENGINEER. ALL REPORTS SHALL CLEARLY INDICATE COMPLIANCE OR NON-COMPLIANCE.

ABBREVIATIONS			
AA	THE ALUMINUM ASSOCIATION	CRSI	CONCRETE REINFORCING STEEL INSTITUTE
ACI	AMERICAN CONCRETE INSTITUTE	MSMA	METAL BUILDING MANUFACTURERS ASSOCIATION
AFPA	AMERICAN FOREST & PAPER ASSOCIATION	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
ASCE	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	PCI	PRESTRESSED CONCRETE INSTITUTE
ASB	AMERICAN IRON AND STEEL INSTITUTE	SOS	STEEL DECK INSTITUTE
AWA	ENGINEERED WOOD ASSOCIATION	SJI	STEEL JOIST INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	SSMA	STEEL STUD MANUFACTURER ASSOCIATION
AWPA	AMERICAN WOOD PROTECTION ASSOCIATION	TPI	TRUSS PLATE INSTITUTE
AWS	AMERICAN WELDING SOCIETY	WTCA	WOOD TRUSS COUNCIL OF AMERICA
CMAA	CRANE MANUFACTURERS ASSOCIATION OF AMERICA		



PROJECT NAME:

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Professional Engineer

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Anthony M. Radtke
Signature
ANTHONY M. RADTKE, P.E.
Printed Name
10/22/2024
Date
48023
License Number

PROJECT NUMBER: 240590
DRAWN BY: TAH
CHECKED BY: AMR/ EISH
ISSUED DATE: 10.22.2024

REVISION:
ISSUE FOR PERMIT 10.22.2024

STRUCTURAL SHEET INDEX	
SHEET #	SHEET DESCRIPTION
S1001	STRUCTURAL NOTES
S101	FOUNDATION PLAN
S121	FRAMING PLAN @ 16'-0" & ROOF FRAMING PLAN

OPTION 4 - FULL GLASS

SHEET TITLE:
STRUCTURAL NOTES

SHEET NO.:

S001

