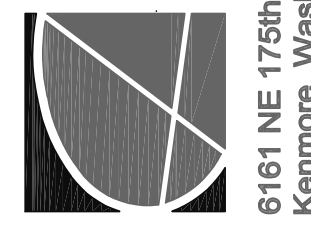


# UNITED STATES POSTAL SERVICE®

## TUKWILA RETAIL AQ 1233 ANDOVER PARK E TUKWILA, WA. 98188

# 100% SET



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**Cornerstone**  
ARCHITECTURAL GROUP  
6161 NE 175th Street, Suite 101  
Kenmore, Washington 98026  
Phone: 206.682.5000  
cornerstonearch.com

GENERAL NOTES	ABBREVIATIONS	PROJECT INFORMATION	CONSULTANTS	INDEX OF DRAWINGS
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**A. DRAWINGS:** THE DRAWINGS ARE INTENDED TO DESCRIBE THE OVERALL SCOPE OF WORK. CONTRACTORS SHALL FIELD VERIFY EXISTING CONDITIONS AND ALERT OWNER TO ANY UNFORESEEN CONSTRUCTION DIFFICULTIES BEFORE BEGINNING WORK.

**B. REPEITIVE ITEMS:** TYPICAL WALL SECTIONS, FINISHES, AND DETAILS ARE NOT INDICATED EVERYWHERE THEY OCCUR ON PLANS, ELEVATIONS AND SECTIONS. REFER TO DETAIL DRAWINGS. CONTRACTOR TO PROVIDE AS IF DRAWN IN FULL.

**C. CODES / PERMITS / REGULATIONS:** CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NECESSARY. A BUILDING PERMIT IS REQUIRED. CONTRACTOR SHALL ALSO PAY FOR ALL OTHER CHARGES, FEES OR COSTS CHARGED BY UTILITY AGENCIES OR PRIVATE COMPANIES WHICH REQUIRE SUCH COSTS FOR OR PRIOR TO INSTALLATIONS. INCLUDE PERMIT FEES IN THE BID.

NOTHING IN THE DRAWINGS SHALL BE CONSTRUED TO PERMIT AN INSTALLATION IN VIOLATION OF APPLICABLE CODES AND/OR RESTRICTIONS. SHOULD ANY CHANGE IN THE DRAWINGS BE NECESSARY IN ORDER TO COMPLY WITH APPLICABLE CODES AND/OR REQUIREMENTS, THE CONTRACTOR SHALL NOTIFY THE OWNER AT ONCE. ALL PARTS PERFORMED UNDER THIS CONTRACT SHALL BE IN FULL ACCORDANCE WITH THE LATEST RULES, REGULATIONS, RESTRICTIONS, REQUIREMENTS AND CODES.

ALL WORK SHALL CONFORM TO THE 2015 IBC & MECHANICAL CODES. AND ALL LOCAL JURISDICTION RULES AND REGULATIONS.

**D. DIMENSIONS:** DIMENSIONS ARE SHOWN TO FACE OF STUD UNLESS DETAILED OTHERWISE ON DRAWINGS.

**E. EXISTING ITEMS:** ON ELEVATIONS, PLANS & DETAIL DRAWINGS ANY ITEM NOT CALLED OUT AS "EXISTING" OR INDICATED AS "(E)" SHALL BE ASSUMED TO BE NEW.

**F. OCCUPANT & PEDESTRIAN PROTECTIONS:** BUILDING WILL BE OCCUPIED DURING THE WORK. CONTRACTOR SHALL MAINTAIN OVERHEAD PROTECTION WHERE AN OVERHEAD HAZARD EXISTS.

**G. INTERIOR PROTECTIONS, DUST CONTROL & HOUSEKEEPING:** PRIOR TO COMMENCING, CONTRACTOR SHALL PROTECT INTERIOR SPACES AGAINST DUST, DEBRIS & OVERHEAD FALLING HAZARD BY INSTALLATION OF PLYWOOD BARRIERS & POLY SHEETING OR OTHER METHODS THAT PERMIT OCCUPANTS TO MAINTAIN NORMAL ACTIVITIES AS MUCH AS POSSIBLE DURING THE WORK.

**H. ODOOR CONTROL:** CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO MINIMIZE IMPACT OF ODOOR-CAUSING OPERATIONS ON BUILDING OCCUPANTS. CONTRACTOR SHALL NOTE LOCATION OF BUILDING AIR INTAKES & BE PRO-ACTIVE IN ARRANGING FOR SHUT-DOWN, FILTERING, OFF-HOUR WORK OR OTHER MEANS OF CONTROL. SCHEDULE ALL ACTIVITIES WITH OWNER.

**I. NOISE CONTROL:** CONTRACTOR SHALL SCHEDULE ANY EXCESSIVE NOISE PRODUCING ACTIVITIES (SUCH AS CORE DRILLING AND CONCRETE CUTTING) FOR EARLY MORNING, EVENING OR WEEKEND HOURS.

**J. BUILDING ACCESS & WORK HOURS:** CONTRACTOR ACCESS TO BUILDING FOR WORK SHALL OCCUR DURING NORMAL DAYTIME WORK HOURS.

ACP	ACOUSTICAL CLG. PANEL	LOC	LOCATION
AFF	ABOVE FINISHED FLOOR ARCHITECTURAL	MAX	MAXIMUM
ARCH		MTL	METAL
BLKG	BLOCKING	MIN	MINIMUM
BR	BICYCLE RACK	MJ	MASONRY JOINT
C'FLSHG	COUNTERFLASHING	NIC	NOT IN THIS CONTRACT
CJ	CONTROL JOINT	NO.	NUMBER
CL	CENTER LINE	NTS	NOT TO SCALE
CLG	CEILING	O.C.	ON CENTER
CMU	CONCRETE BLOCK	OD	OUTSIDE DIMENSION
CONC	CONCRETE	OH	OPPOSITE HAND
CONST	CONSTRUCTION	PC	POWDER COAT
CONT	CONTINUOUS	PERF.	PERFORATED
DB	DOCK BUMPERS	PLYWD	PLYWOOD
DIA	DIAMETER	PREF.	PREFINISHED
DIM	DIMENSION	PT	PAINT
DN	DOWN	P.T.	PRESSURE TREATED
DTL	DETAIL	R	RISER, RADIUS
DR	DOOR OPENING	RM.	ROOM, ROOMS
DS	DOWNSPOUT	RMS	ROUGH OPENING
DWG	DRAWING	RO	
EA	EACH	S.A.F.	SELF-ADHESIVE FLASHING
ELEV	ELEVATION	S.A.M.	SELF-ADHESIVE MEMBRANE
EJ	EXPANSION JOINT	SEAL	SEALED CONCRETE
(E), E	EXIST, EXISTING	SF	SQUARE FEET
EXT	EXTERIOR	SG	SAFETY GLAZING
FAC	FACTORY FINISH	SHT	SHEET
FAP	FIRE ALARM PANEL	SM	SIMILAR
FIN FL	FINISH FLOOR	SPEC, SPECS	SPECIFICATIONS
FLSHG	FLASHING	SS	STAINLESS STEEL
FT	FOOT	ST	STEEL
GA	GAUGE	STOR	STORAGE
GALV	GALVANIZED	STRUCT	STRUCTURAL
GB	GRAB BAR	SUSP	SUSPENDED
GL	GLASS	TJ	TOOLED JOINT
GLB	GLU-LAM BEAM	TYP	TYPICAL
GWB	GYPSUM WALLBOARD	WC	WATER CLOSET
HM	HOLLOW METAL	WD	WOOD
HT	HEIGHT	WP	WATERPROOFING
INSUL	INSULATION	WRB	WEATHER RESISTIVE BARRIER
INT	INTERIOR		

**CODES USED:**  
2018 INTERNATIONAL BUILDING CODE WAC 51-50  
2018 INTERNATIONAL MECHANICAL CODE WAC 51-52  
2018 INTERNATIONAL FIRE CODE WAC 51-54  
2018 UNIFORM PLUMBING CODE WAC 51-56, 51-57  
2018 WASHINGTON STATE ENERGY CODE WAC 51-11  
ICC A117.1-2017 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

**BUILDING INFORMATION:**  
NAME: TUKWILA RETAIL AQ  
DEVELOPMENT NAME: LANTERN LANDING  
SITE ADDRESS: 1233 ANDOVER PARK E  
PARCEL NUMBER: 3523049084

**LEGAL DESCRIPTION:**  
POR GL 1 IN NE 1/4 BEG ON W LN ANDOVER PK E 869.87 FT S OF N LN SD GL & TPOB TH S 01-51-39 W 170.13 FT TH ALG CURVE TO RGT RAD 50 FT ARC DIST 74.97 FT TH ALG CURVE TO LFT RAD 560 FT ARC DIST 125.96 FT TH N 01-51-39 E TO PT N 88-08-21 W FR TPOB TH S 88-08-21 E 170 FT TO TPOB TGV POR SD GL 1 DAF BEG ON W LN OF ANDOVER PK E 1040 FT S OF N LN OF SD GL 1 & THOB TH ALG CRV TO RGT RAD OF 50 FT TO NLY MGN OF S 180TH ST TH ELY ALG SD NLY MGN TO WLY MGN OF ANDOVER PK E TH NLY ALG SD WLY MGN TO TPOB ZONING: NCP-55(M)

BUILDING TYPE: IIB  
OCCUPANCY: RETAIL  
SITE AREA: 39,204 SF (0.9 ACRES)  
BUILDING AREA: 13,380 SF (EXISTING)  
AREA OF WORK: 7,514 SF  
OCCUPANCY: B (BUSINESS)  
FIRE SPRINKLER: FULLY SPRINKLERED  
OCCUPANCY LOAD: 13,380 SF / 100 = 134

**ARCHITECT**  
CORNERSTONE ARCHITECTURAL GROUP  
6161 NE 175TH STREET, SUITE 101  
KENMORE, WA 98028  
206-682-5000  
STEVE BARNES

**MECHANICAL & ELECTRICAL**  
HULTZ BHU ENGINEERS, INC.  
111 FAWCETT AVE., SUITE 100  
TACOMA, WA 98402  
253-383-3257  
PHIL CRAWFORD, ELECTRICAL  
JOHN MERRILL, MECHANICAL

T1.1	TITLE SHEET
A1.1	EXISTING SITE PLAN AND DETAILS
<b>ARCHITECTURAL</b>	
A2.1	FLOOR PLAN
A2.2	EQUIPMENT PLAN
A2.3	LARGE SCALE PLANS & DETAILS
A3.1	EXTERIOR ELEVATIONS
A4.1	BUILDING SECTIONS
A5.1	ELEVATIONS AND DETAILS
A6.1	DOOR AND ROOM SCHEDULES AND DETAILS
A6.2	DETAILS
A6.3	TYPICAL P.O. DETAILS
A7.1	INTERIOR ELEVATIONS
A7.2	INTERIOR DETAILS
A7.3	P.O. BOX DETAILS
A9.1	REFLECTED CEILING PLAN AND DETAILS
<b>MECHANICAL</b>	
M0.1	MECHANICAL LEGEND AND NOTES
M0.2	MECHANICAL ENERGY CODE NOTES
M0.3	MECHANICAL SCHEDULES
M2.1	PLUMBING FOUNDATION PLAN
M3.1	PLUMBING MECHANICAL PLAN
M3.2	PLUMBING MECHANICAL DETAILS
M4.1	HVAC MECHANICAL PLAN
<b>ELECTRICAL</b>	
E0.1	ABBREVIATIONS, LEGEND & GENERAL NOTES
E2.1	LIGHTING PLAN
E3.1	POWER & SYSTEMS PLAN
E4.1	SECURITY PLAN
E5.1	SCHEDULES

### SCOPE OF WORK

TENANT IMPROVEMENT OF EXISTING BUILDING.  
INTERIOR WORK INCLUDES NEW INTERIOR WALLS, FINISHES, HOLLOW METAL, OVERHEAD COILING DOOR, FOLDING CLOSURE AND WOOD DOORS WITH HM JAMBS AND HARDWARE, CEILINGS, SECURITY FILM ON EXISTING WINDOWS INSTALLATION OF SCISSORS LIFT WITH BOLLARDS, AND INSTALLATION OF POSTAL SUPPLIED EQUIPMENT. SAWCUT AND REMOVE THEN REPLACE PORTION OF SLAB REQUIRED TO ACCESS UNDERFLOOR WASTE.

EXTERIOR WORK INCLUDES REMOVAL OF SECTIONAL OVERHEAD DOOR AND TRACKS, ENLARGE OPENING IN EXISTING CMU WALL, METAL CANOPY OVER OPENING, STEEL CHANNEL JAMBS AND STEEL STRUCTURE FOR NEW OPENING, INSTALLATION OF FLAG POLE.

POSTAL EQUIPMENT INCLUDES NEW USPS LIGHTED SIGN ON EXTERIOR WALL AND INTERIOR SIGNAGE PACKAGE, POSTAL BOXES, POSTAL PARCEL LOCKERS, CASEWORK FOR SERVICE LOBBY, AND ALL ASSOCIATED MOUNTING HARDWARE.

FIRE SPRINKLER SYSTEM WORK INCLUDES RELOCATION OF HEADS AS REQUIRED TO COVER NEW CONFIGURATION.

MECHANICAL SCOPE OF WORK INCLUDES INSTALLATION OF NEW DUCTWORK AND CONTROLS CONNECTED TO EXISTING ROOF TOP UNITS.

PLUMBING SCOPE OF WORK INCLUDES CONSTRUCTION OF NEW TOILET ROOM, JANITORS SINK AND BREAK AREA PLUMBING, CONTRACTOR RESPONSIBLE TO LOCATING CONNECTION POINTS TO EXISTING WATER AND SEWER SERVICE TO SPACE.

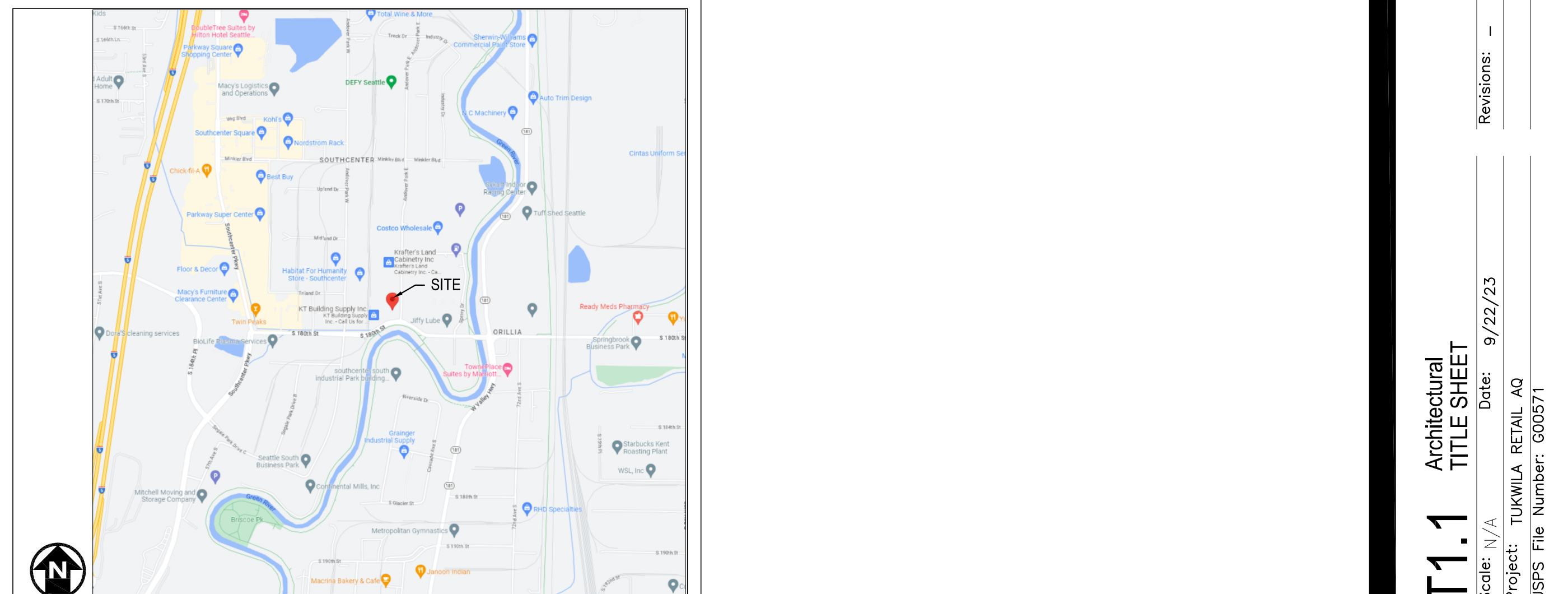
ELECTRICAL SCOPE OF WORK INCLUDES INSTALLATION OF NEW LIGHTING, POWER DISTRIBUTION SYSTEM, FROM EXISTING ELECTRICAL PANEL, ETC.

LOW VOLTAGE ELECTRICAL INCLUDES A COMPLETE NEW SYSTEM AND HEAD END.

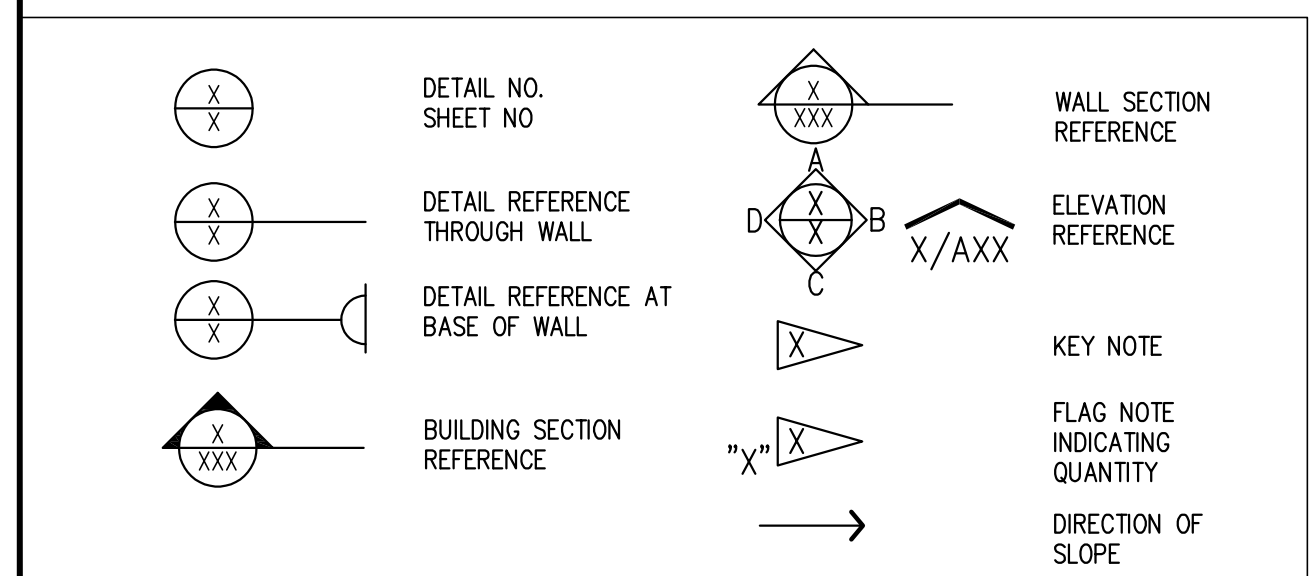
FIRE ALARM SYSTEM INCLUDES INSTALLATION OF BIDDER DESIGNED FIRE ALARM INTERFACED WITH EXISTING BUILDING SYSTEM AS REQUIRED TO ACCOMMODATE NEW CONFIGURATION.

INTRUSION DETECTION SYSTEM IS A COMPLETE NEW SYSTEM UTILIZING USPS PROTOCOL AND PANELS AS SPECIFIED.

### VICINITY MAP



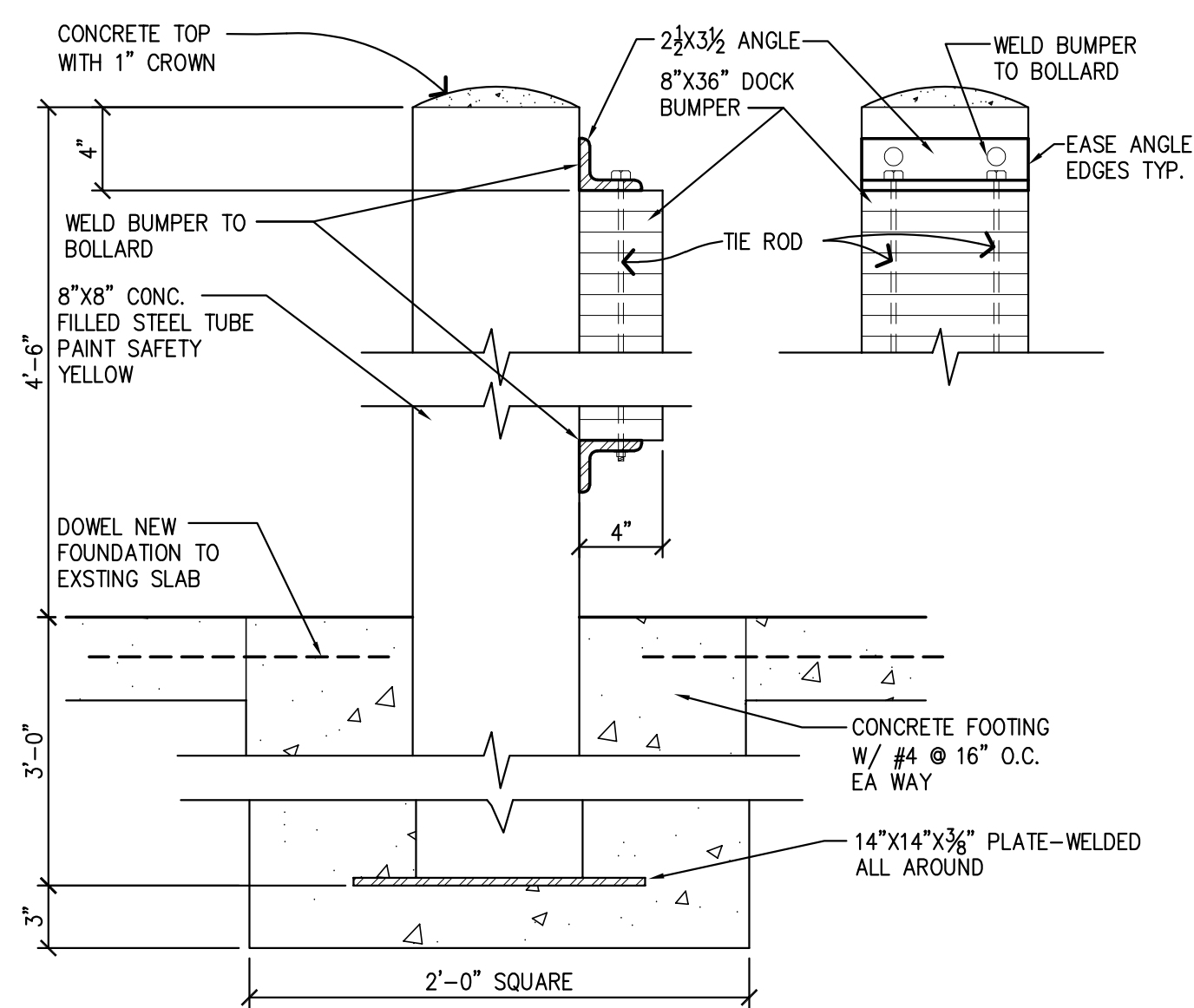
### REFERENCE SYMBOLS



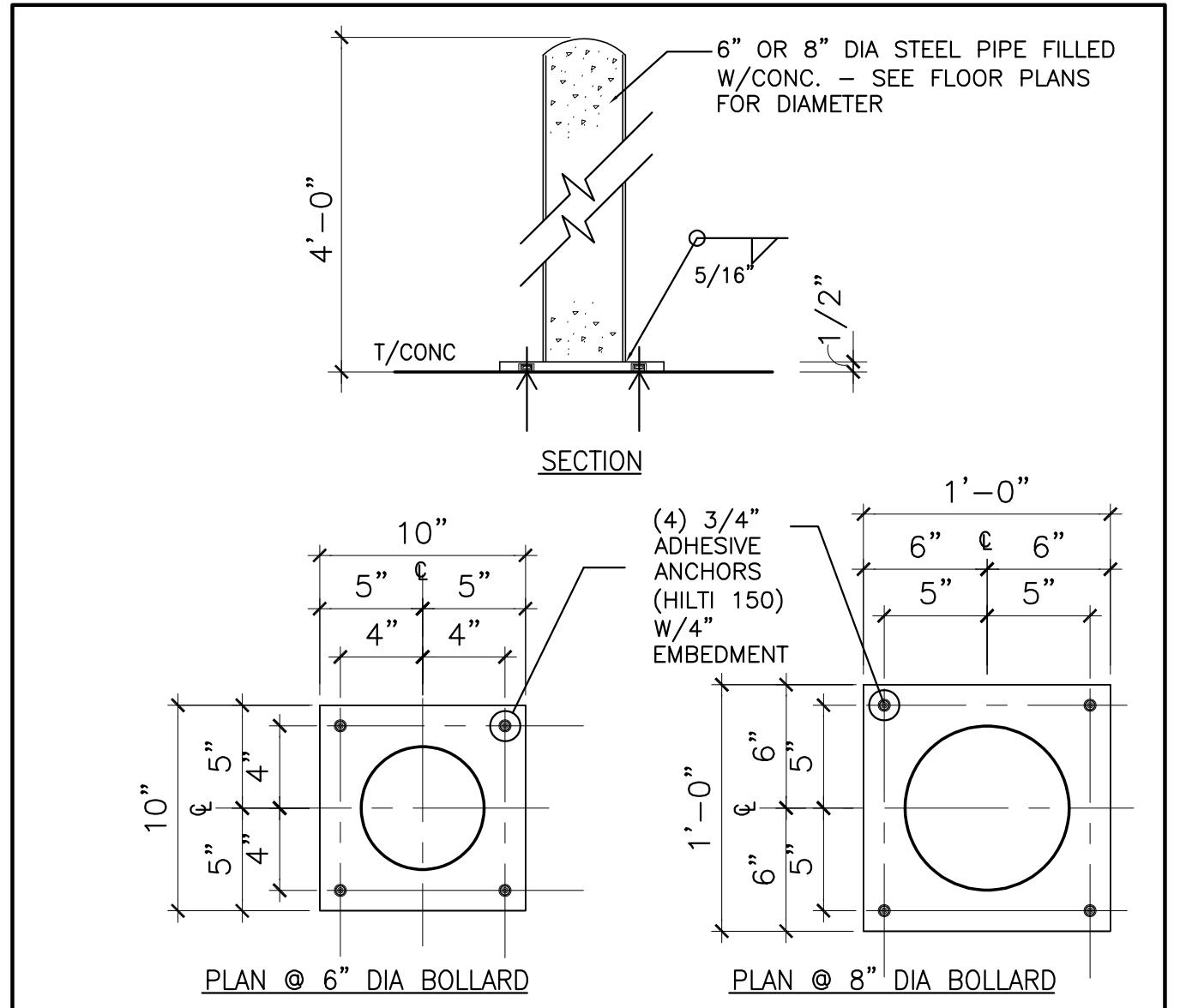
**T1.1** Architectural TITLE SHEET  
Scale: N/A Date: 9/22/23  
Project: TUKWILA RETAIL AQ  
USPS File Number: 600571

Facilities, 4301 Wilson Blvd., Suite 300, Arlington, VA 22203-1861

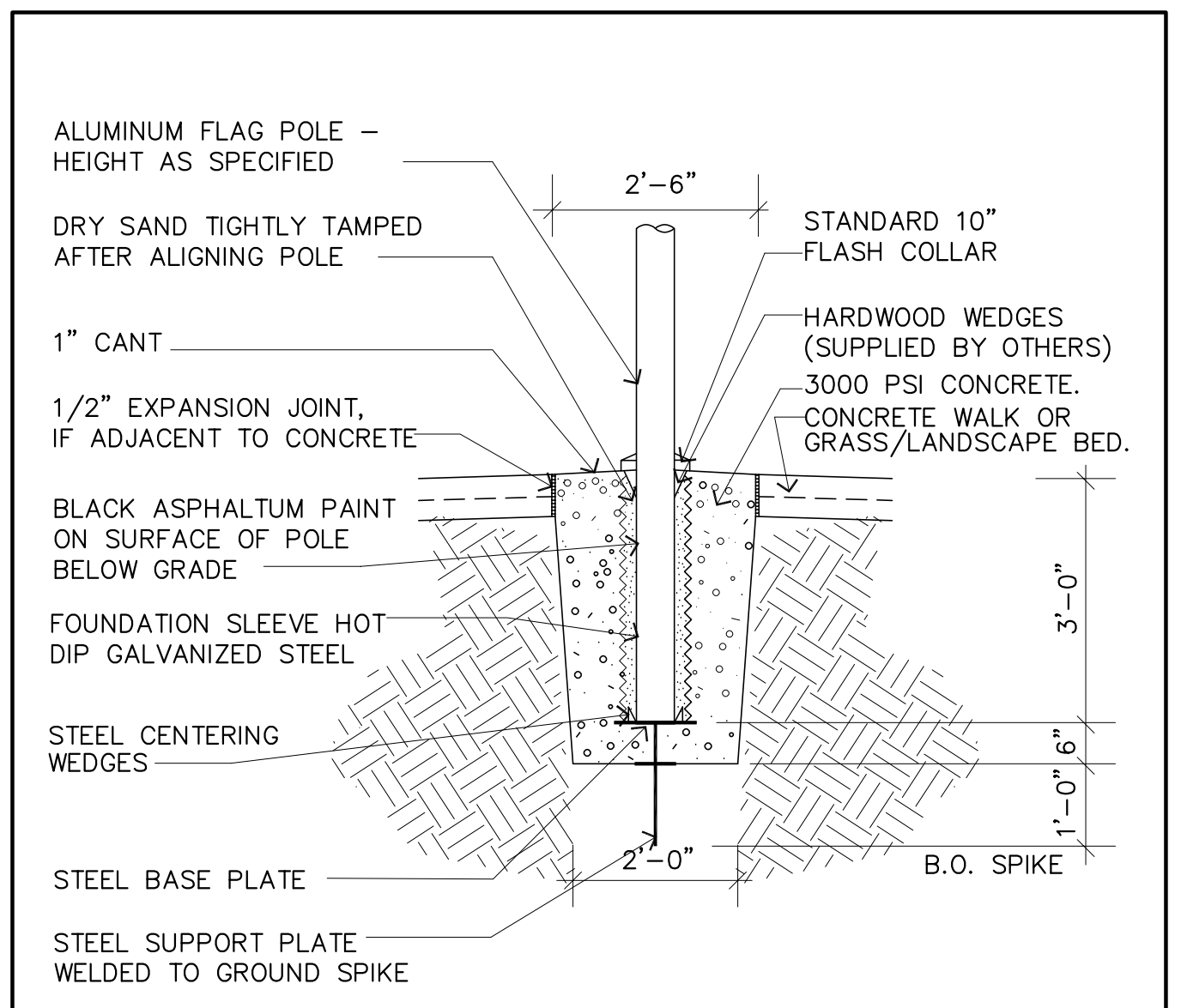




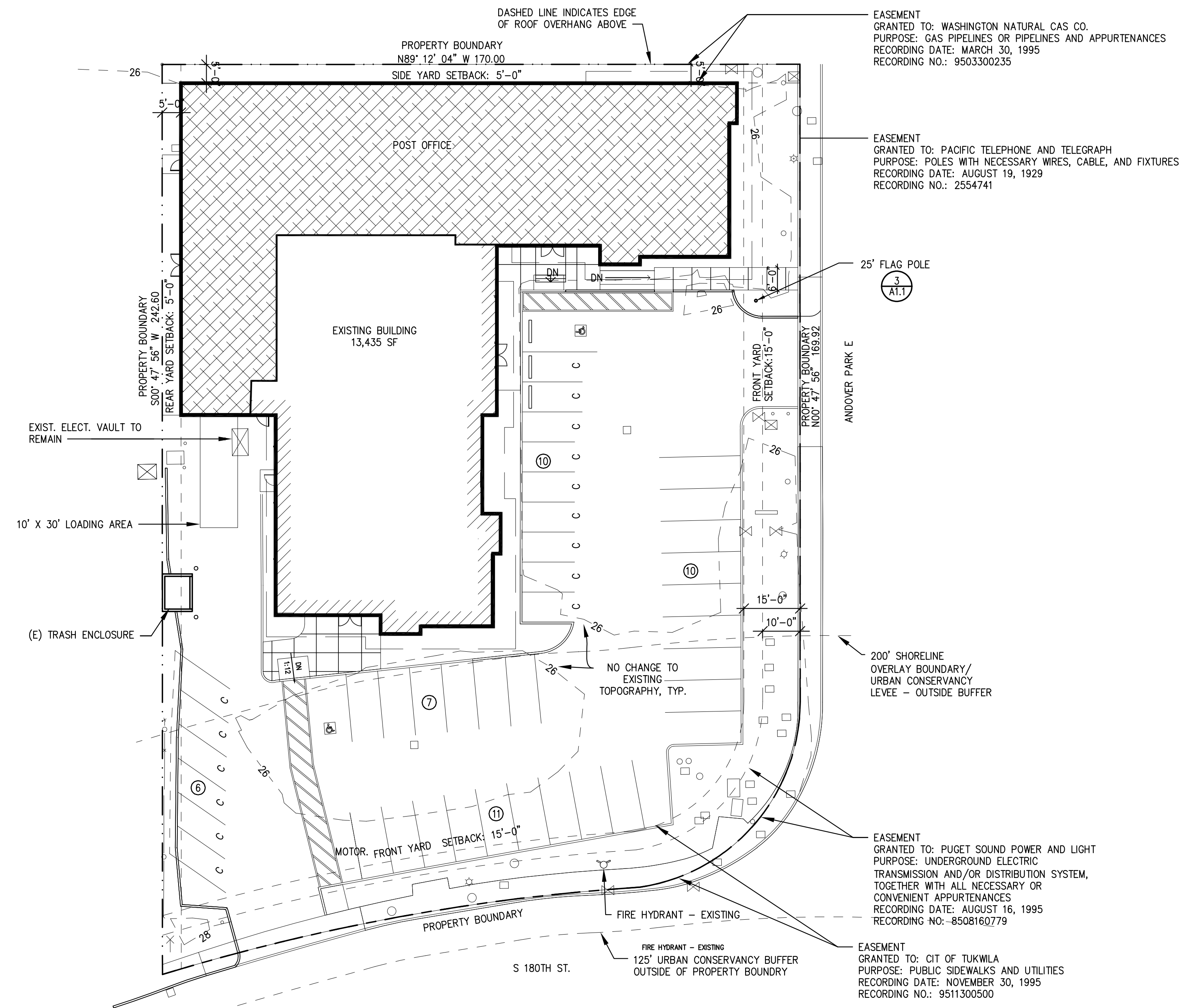
**1 DOCK BOLLARD**  
 C1310A SCALE: 1 1/2" = 1'-0"



**2 PROTECTIVE BARRIERS - PIPE BOLLARDS (SURFACE MOUNTED)**  
 G2-7-4 a  
 Scale: 1 1/2" = 1'-0"

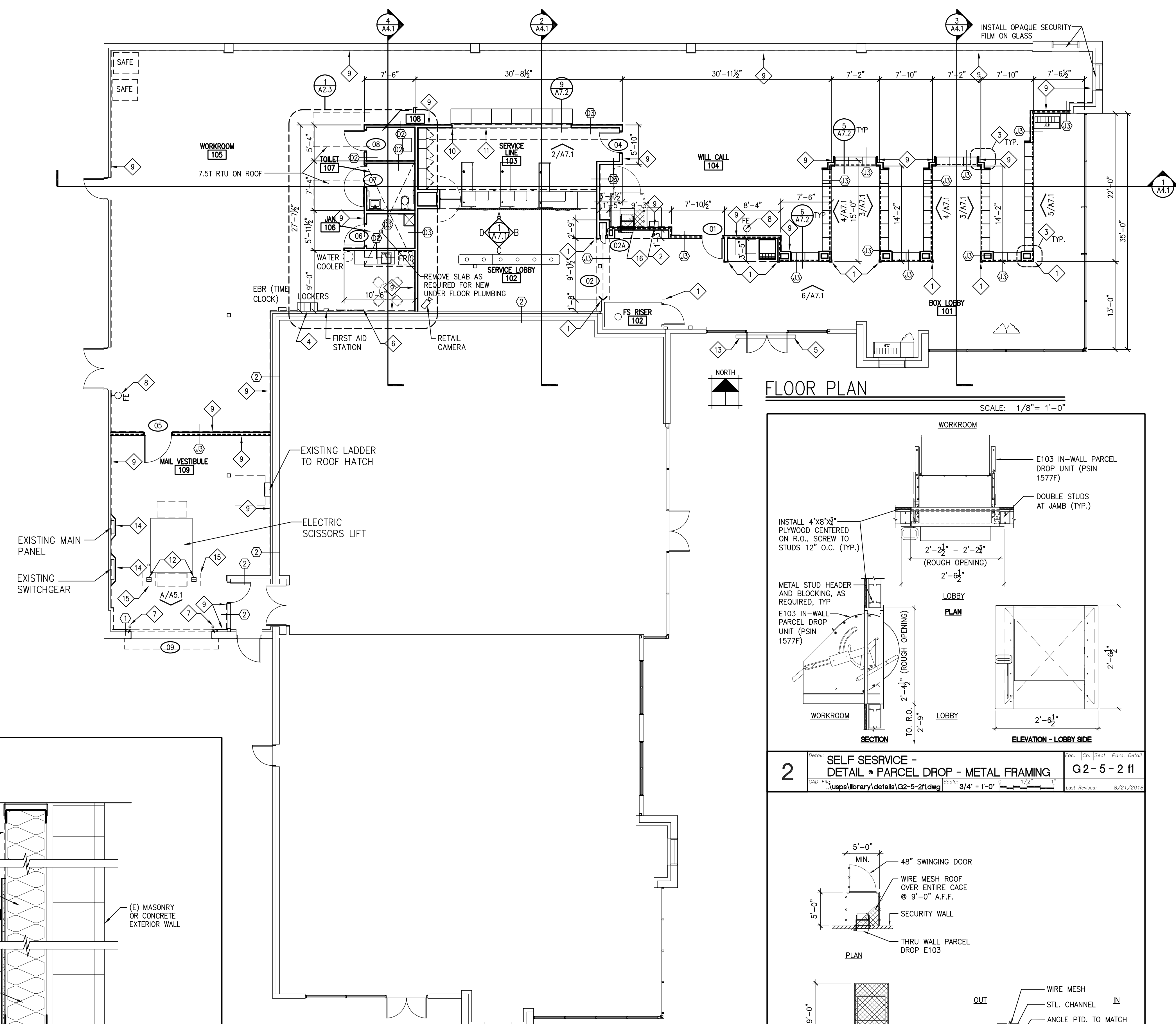


**3 SITE DESIGN-FLAGPOLE BASE**  
 G1-2-0 c  
 Scale: 1/2" = 1'-0"



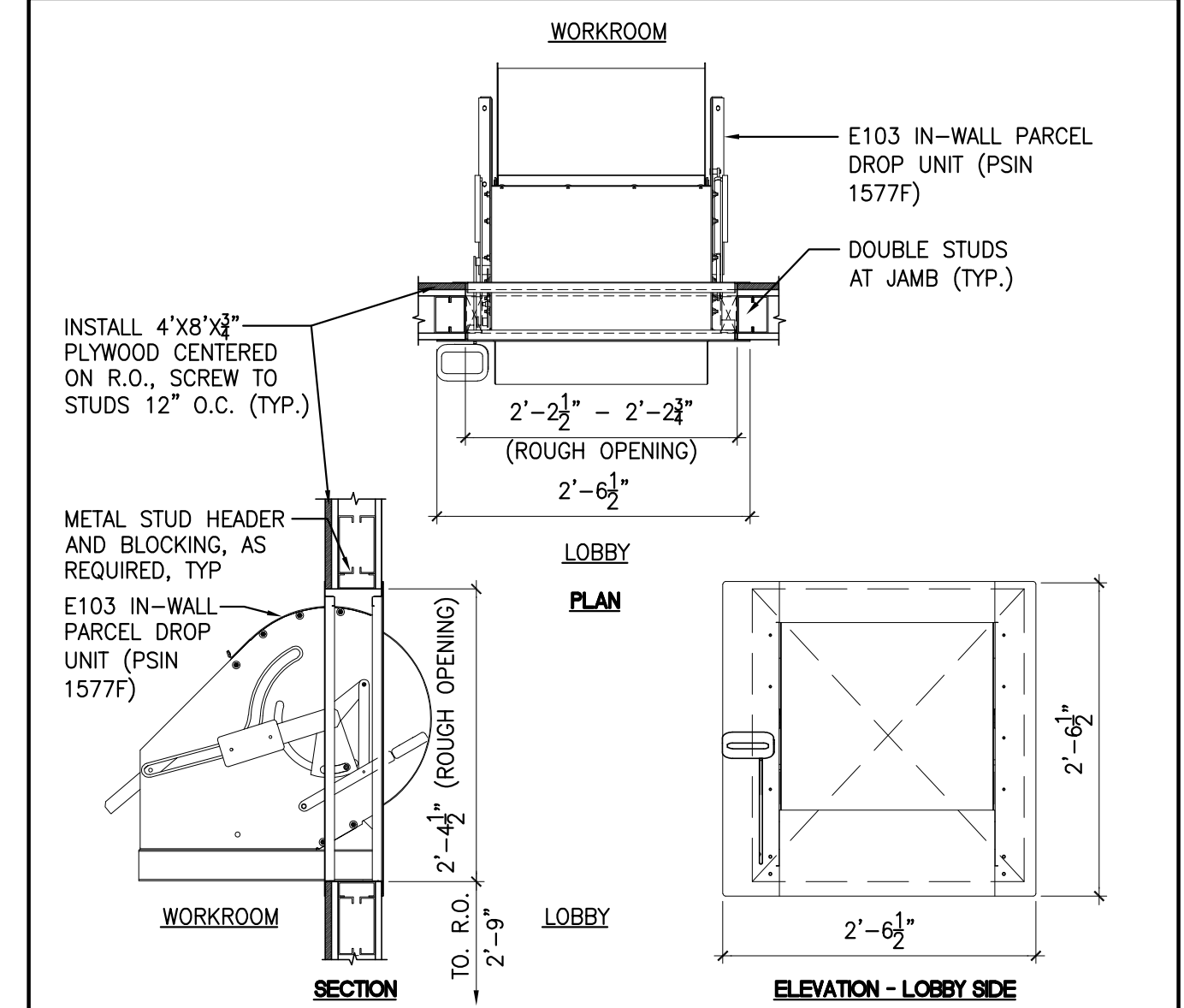
**EXISTING SITE PLAN**  
 SCALE: 1" = 20'-0"

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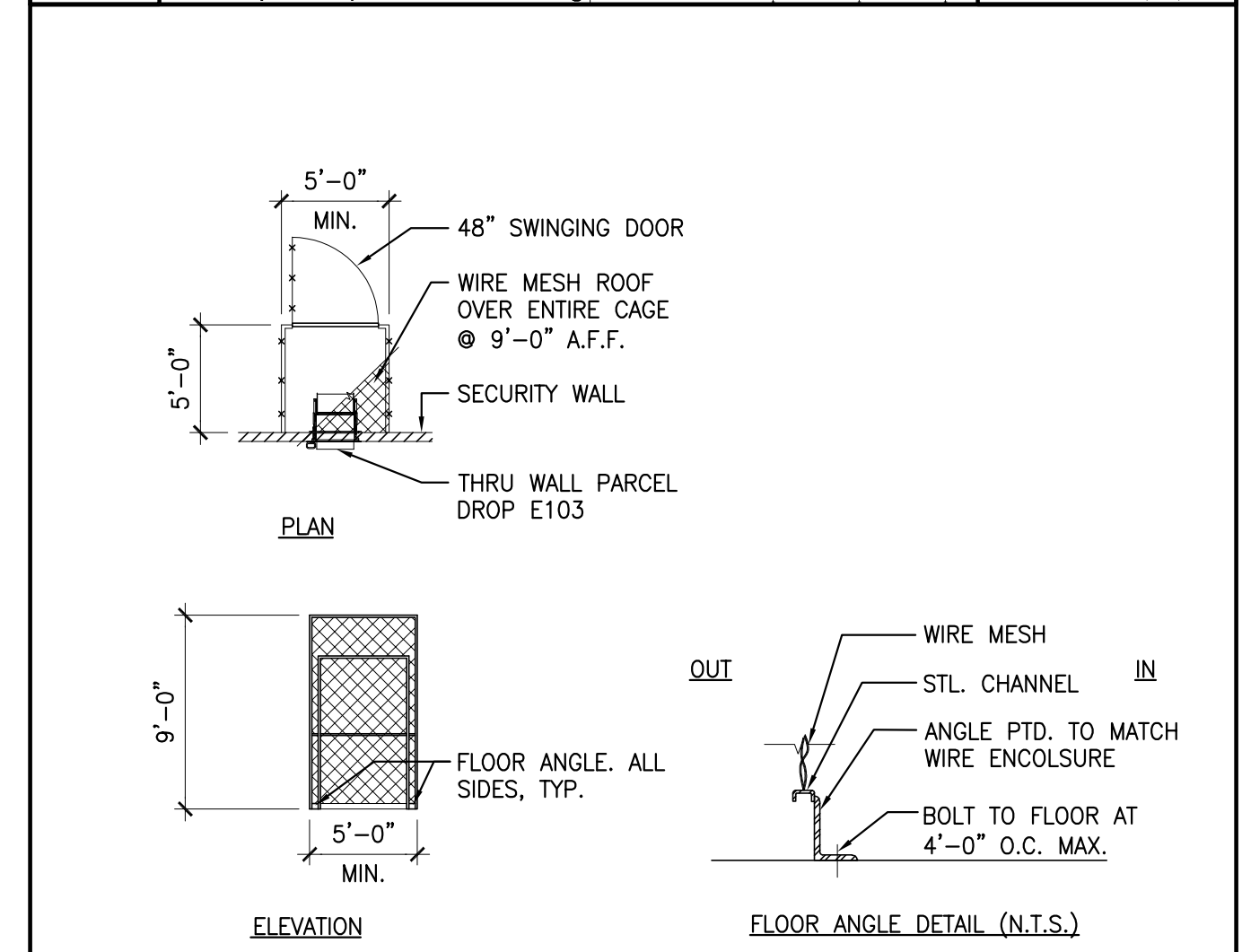


**FLOOR PLAN**

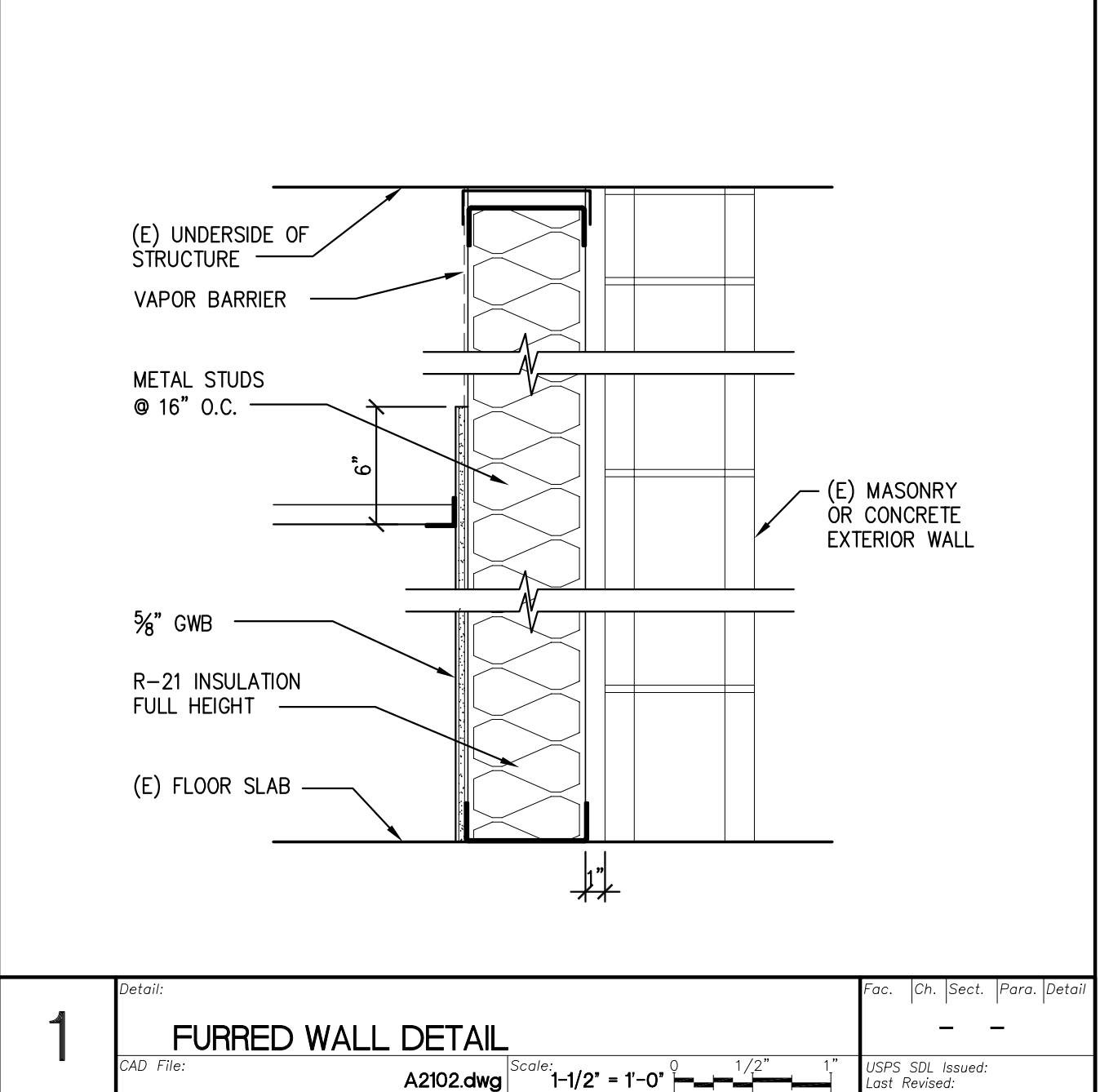
SCALE: 1/8" = 1'-0"



**2** SELF SERVICE - DETAIL • PARCEL DROP - METAL FRAMING G2-5-2 fl  
 CAD File: \usps\library\details\G2-5-2fl.dwg Scale: 3/4" = 1'-0" 1/2" 1" Last Revised: 8/21/2010



**3** WIRE SCREEN ENCLOSURES - PARCEL DROP CAGE G2-2-2 a2  
 CAD File: \usps\library\details\G2-2-2a2.dwg Scale: 1/8" = 1'-0" 1/2" 1" Last Revised: 8/5/2010



**1** FURRED WALL DETAIL A2102.dwg  
 CAD File: A2102.dwg Scale: 1-1/2" = 1'-0" 1/2" 1" USPS SOL Issued: Last Revised:

**FLOOR PLAN LEGEND**

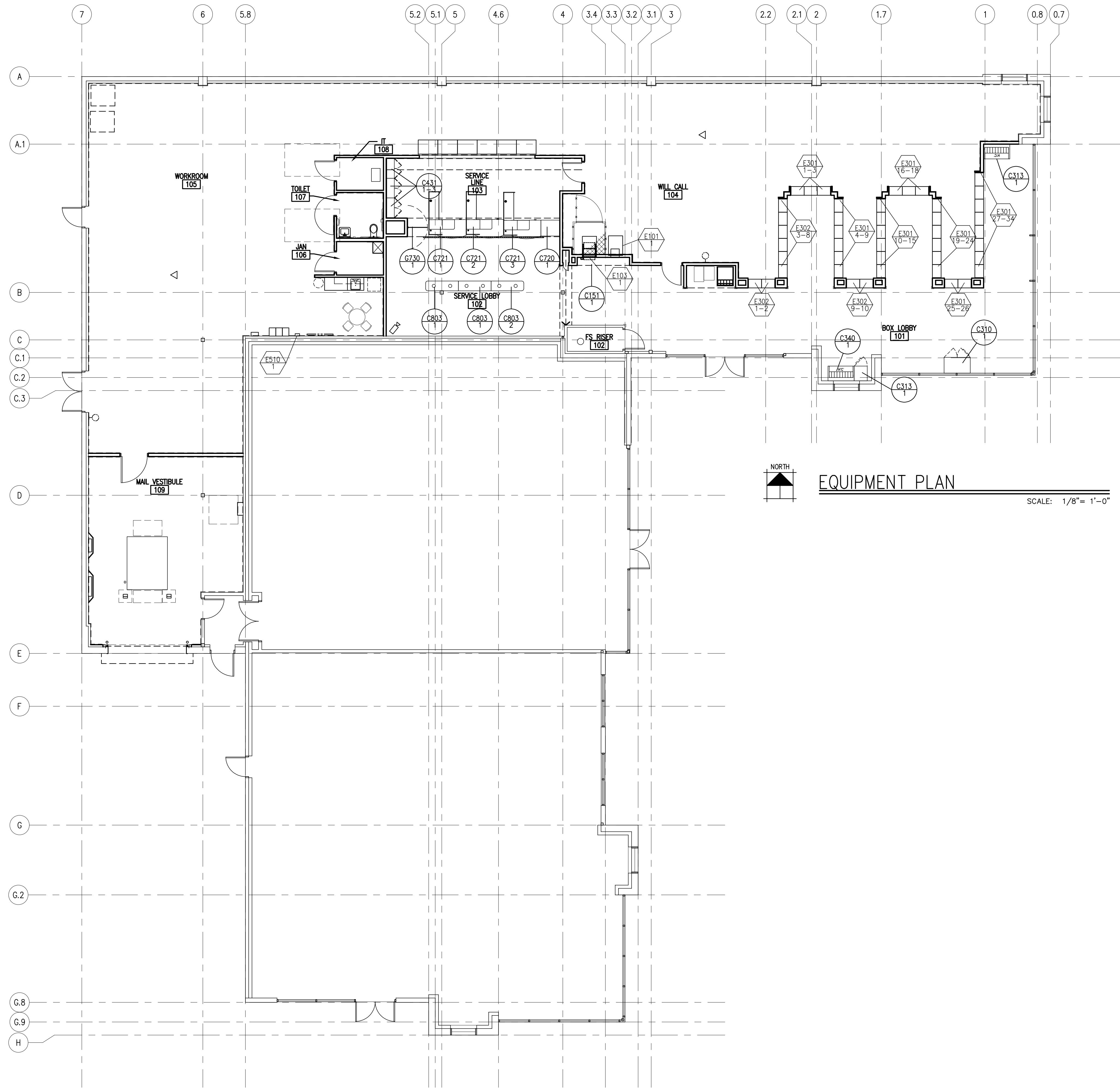
- BUILDING SECTION
- INTERIOR ELEVATION - SEE SHEET A7.1
- DOOR NUMBER - SEE SHEET A6.1 FOR DOOR SCHEDULE
- WINDOW TYPE - SEE SHEET A6.1 FOR WINDOW TYPES
- VESTIBULE ROOM NAME & NUMBER - SEE SHEET A6.1 FOR FINISH SCHEDULE
- CASEWORK/EQUIPMENT TYPE REFER TO CORRESPONDING NUMBER IN RESPONSIBILITY SCHEDULE FOR ADDITIONAL INFORMATION
- ITEM NUMBER THIS IS A PLAN REFERENCE NUMBER UTILIZED IN LOCATING A SPECIFIC FIXTURE
- WALL MOUNTED FIRE EXTINGUISHER
- PARTITION - SEE SHEET A6.2 FOR WALL TYPE DETAILS.
- SECURITY PARTITION - SEE SHEET A6.2 FOR WALL TYPE DETAILS.
- FURRED WALL - SEE 1/A2.1
- EXISTING 1 HR DEMISING WALL

**GENERAL NOTES**

1. ALL DIMENSIONS ARE TO FACE OF PLYWOOD, FACE OF STUD, FACE OF MASONRY, OR CENTERLINE OF STEEL UNLESS NOTED AS "FINISH", IN WHICH CASE THEY ARE CRITICAL DIMENSIONS TO HOLD TO FACE OF FINISHED WALL SURFACE.
2. ROOM SIGNAGE SEE A6.2.

**FLOOR PLAN NOTES**

- 1 CORNER GUARDS, TYP.
- 2 MAIL DROP SEE 10/A7.2.
- 3 SEE DETAIL 7/A7.3 FOR TYPICAL CORNER LAYOUT AT RENT-A-BOX ALCOVES.
- 4 LOCKERS SEE 11/A7.2
- 5 LIGHTED SIGN TYPE RC-4 SEE 4/A6.3
- 6 4' BULLETIN BOARD SEE 8/A7.3.
- 7 8" BOLLARD SEE 2/A1.1.
- 8 WALL MOUNTED FIRE EXTINGUISHER, FOR SIGNAGE SEE 9/A6.2.
- 9 48" HIGH FRP WAINSCOT W/OUT COVERED BASE. SEE 1/A7.2.
- 10 PLASTIC LAMINATE WAINSCOT PL2 SEE 9/A7.2.
- 11 BLACK VINYL SLATS AT OPENING IN WALL LINE ALL SIDES OF OPENING WITH MDO WOOD TRIM AND PAINT.
- 12 STEEL TUBE BOLLARDS WITH DOCK BUMPERS AT SCISSORS LIFT SEE 1/A1.1. REMOVE PORTION OF SLAB AS REQUIRED FOR INSTALLATION AND REINSTALL SLAB TO MATCH EXISTING. DOWEL EDGES OF PATCH TO EXISTING SLAB.
- 13 VINYL ON ENTRY DOOR SEE 12/A6.2
- 14 PROTECTION RAILS SEE 7/A6.3.
- 15 REMOVE PORTION OF SLAB NEW DOCK BALLARDS WITH DOCK BUMPER.
- 16 PARCEL DROP & SECURITY CAGE SEE 2&3/A2.1.

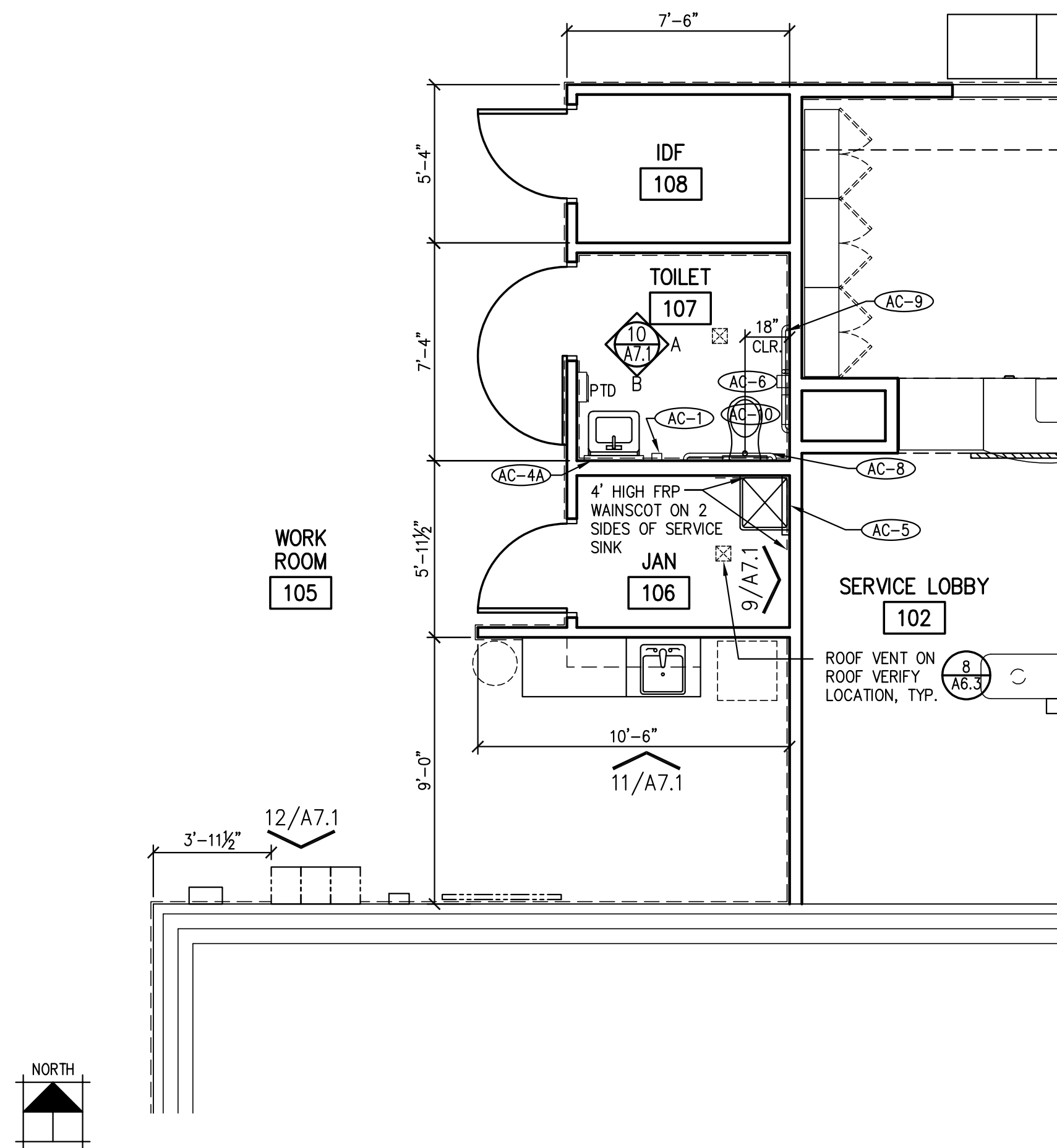


### FLOOR PLAN LEGEND

- BUILDING SECTION
- INTERIOR ELEVATION - SEE SHEET A7.1
- DOOR NUMBER - SEE SHEET A6.1 FOR DOOR SCHEDULE
- WINDOW TYPE - SEE SHEET A6.1 FOR WINDOW TYPES
- VESTIBULE ROOM NAME & NUMBER - SEE SHEET A6.1 FOR FINISH SCHEDULE
- CASEWORK/EQUIPMENT TYPE REFER TO CORRESPONDING NUMBER IN RESPONSIBILITY SCHEDULE FOR ADDITIONAL INFORMATION
- ITEM NUMBER THIS IS A PLAN REFERENCE NUMBER UTILIZED IN LOCATING A SPECIFIC FIXTURE
- WALL MOUNTED FIRE EXTINGUISHER
- PARTITION - SEE SHEET A6.2 FOR WALL TYPE DETAILS.
- SECURITY PARTITION - SEE SHEET A6.2 FOR WALL TYPE DETAILS.
- FURRED WALL - SEE 1/A2.1
- EXISTING 1 HR DEMISING WALL

**EQUIPMENT PLAN**  
SCALE: 1/8" = 1'-0"





1 LARGE SCALE FLOOR PLAN  
SCALE: 1/4" = 1'-0"

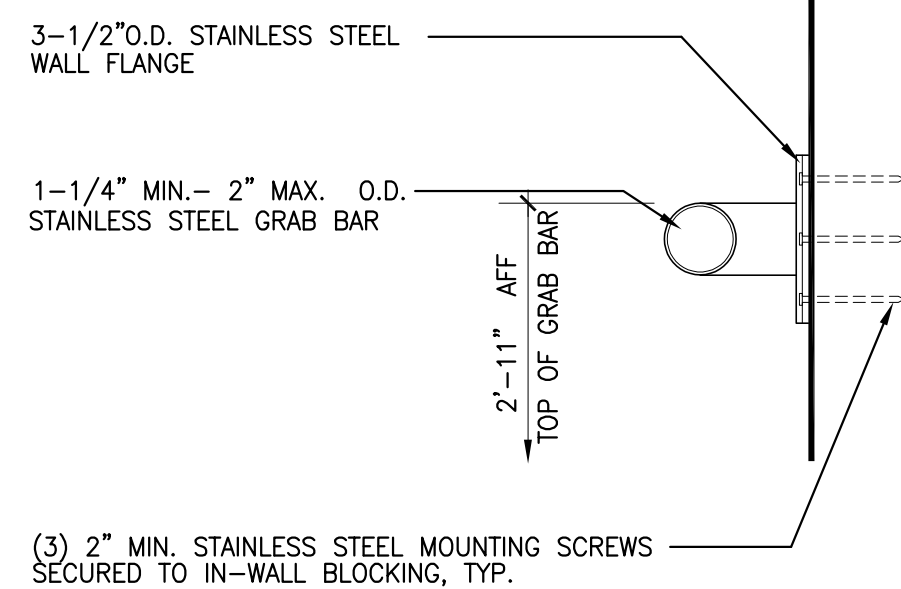
TOILET ACCESSORIES

- PRODUCTS PER SPECIFICATION SECTION 102813.
- AC-1 SURFACE MOUNTED LIQUID SOAP DISPENSER
  - AC-4A MIRROR WITH SS CHANNEL FRAME, 18" X 36"
  - AC-5 MOP & BROOM HOLDER
  - AC-6 SURFACE MOUNTED MULTI-ROLL TISSUE DISPENSER
  - AC-7 PAPER TOWEL DISPENSER/RECEPTAL
  - AC-8 36" GRAB BAR
  - AC-9 42" GRAB BAR
  - AC-10 RECESSED SANITARY NAPKIN DISPOSAL
  - AC-14 VERTICAL GRAB BAR

NOTES:  
1. SEE 5/A2.2 (02-4-2a) FOR STANDARD FIXTURE MOUNTING HEIGHTS.

KEY NOTES

- 1 FRP WAINSCOT - SEE 11/A7.2
- 2 4" STEEL BOLLARDS - SEE 2/A10.2
- 3 PICTOGRAPH - SEE 7/A7.2
- 4 2" TRIM MIRROR W/ STAINLESS STEEL FRAME
- 5 GRAB BAR - SEE 1/A2.2
- 6 PAPER TOWEL DISP./RECEP.
- 7 TOILET TISSUE DISPENSER
- 8 MOP/BROOM HOLDER
- 9 MOP SINK
- 10 POWER UNIT BRACKET
- 11 ELECTRIC WATER COOLERS
- 12 DOUBLE TIER LOCKERS W/ SLOPED TOP - SEE 10/A7.2
- 13 FRP FULL HEIGHT WITH COVERED EPOXY BASE SEE 12/A7.2



NOTE:  
1. INSTALLATION MUST WITHSTAND 250 LB. FORCE IN ANY DIRECTION.

1 TOILET FACILITIES - SECTION 4 GRAB BAR  
G2-4-2 b  
Scale: 3" = 1'-0"

- RESILIENT FLOOR TILE
- RFT-1 ALTRO, 24"x24"x0.08" THICK, 9306 CHARCOAL CD
  - RFT-2 ALTRO, 24"x24"x0.08" THICK, 9302 ROCK SALT CD
  - RFT-1 RICKETT, 24"x24"x0.080" THICK, 8806 FLY ASH
  - RFT-2 RICKETT, 24"x24"x0.080" THICK, 8804 TRIBECA
  - RFT-1 UPOFLOOR, 24"x24"x0.080" THICK, 619306
  - RFT-2 UPOFLOOR, 24"x24"x0.080" THICK, 619302
  - RFT-1 PROCEDO, 24"x24"x0.098" THICK, NORFOLK QNOR (SEE NOTE 2)
  - RFT-2 PROCEDO, 24"x24"x0.098" THICK, RENO QREN (SEE NOTE 2)

BASE  
VB-1 STANDARD 4" WALL BASE, BLACK

EPOXY FLOOR AND WALL COATING  
LIGHT GRAY

PAINT (SEE NOTE 1)

- P-1 (WHITE) GLIDDEN (ICI) #50YY 83/057
- P-2 (LIGHT GRAY) GLIDDEN (ICI) #50BG 62/007
- P-3 NOT USED
- P-4 (RED) PMS 485 C "POSTAL RED"
- P-5 (BLUE) PMS 301 C "POSTAL BLUE"
- P-6 (MD. GRAY) SHERWIN WILLIAMS, #SW1232, "DUBLIN GRAY"
- P-7 (BLACK) EGGSHELL SEMI-GLOSS BLACK

ACOUSTICAL CEILING TILE & GRID

- ACT-1 ARMSTRONG, Fine Fissured #1729, White, 2'x4'x5/8" LAY-IN
- CG-1 ARMSTRONG, PRELUDE 15/16" WHITE, EXPOSED TEE SYSTEM CEILING GRID

PLASTIC LAMINATE

- PL-1 NEVAMAR, #S-7-27T, TEXTURED FINISH, "SMOKEY WHITE"
- PL-2 FORMICA #839-58 "STOP RED"
- PL-3 FORMICA, #914-58 "MARINE BLUE"
- PL-4 WILSONART, #4142-60, "GREY GLACE"
- PL-5 FORBO, WALTON, UNI #186, "LEAD"

SOLID SURFACING

- S-1 SAMSUNG STARON "SOLID BRIGHT WHITE"

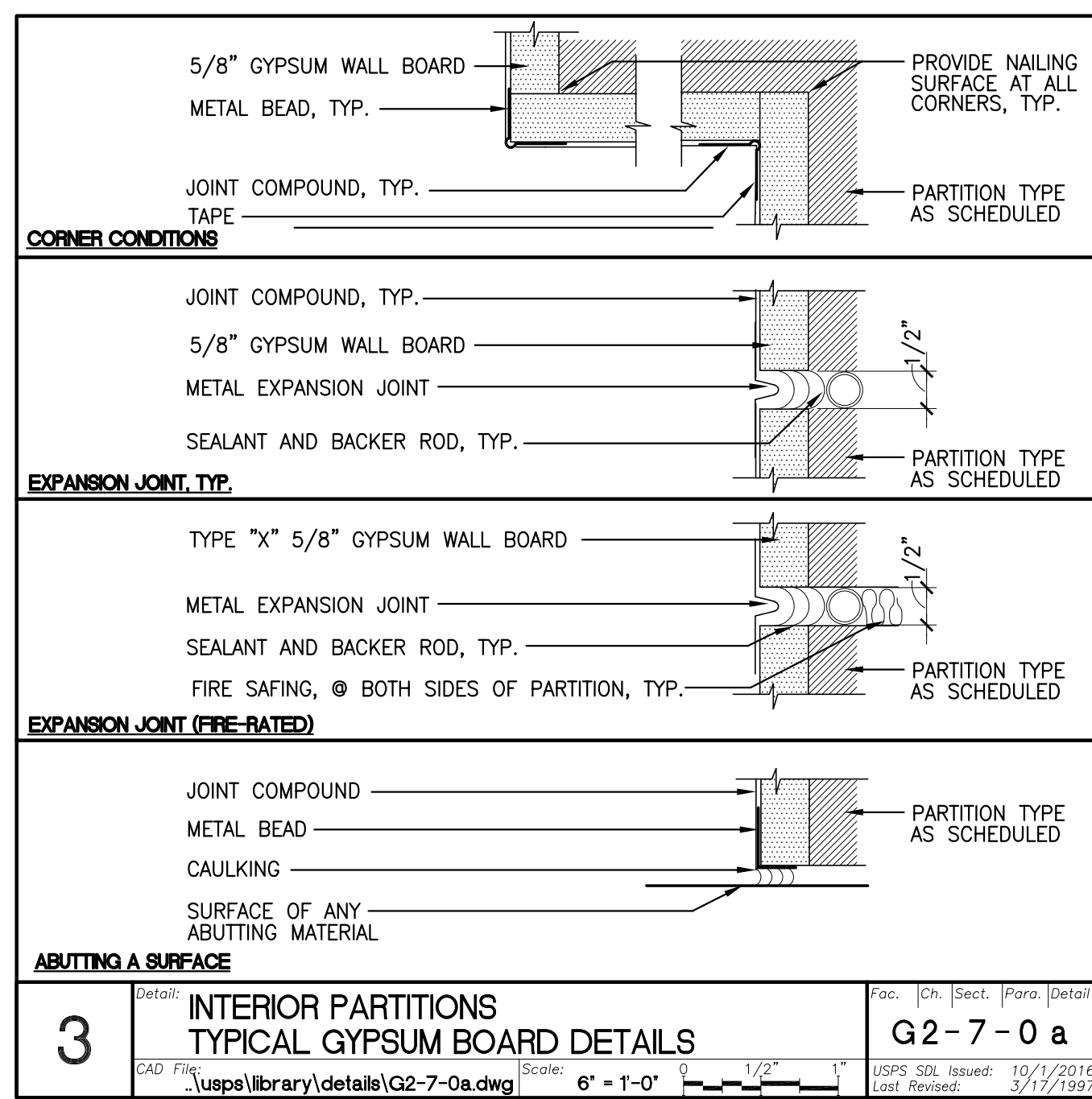
FIBERGLASS REINFORCED PLASTIC PANELS

- FRP STRUCTOGLAS FRP 1207 GRAY OR EQUAL

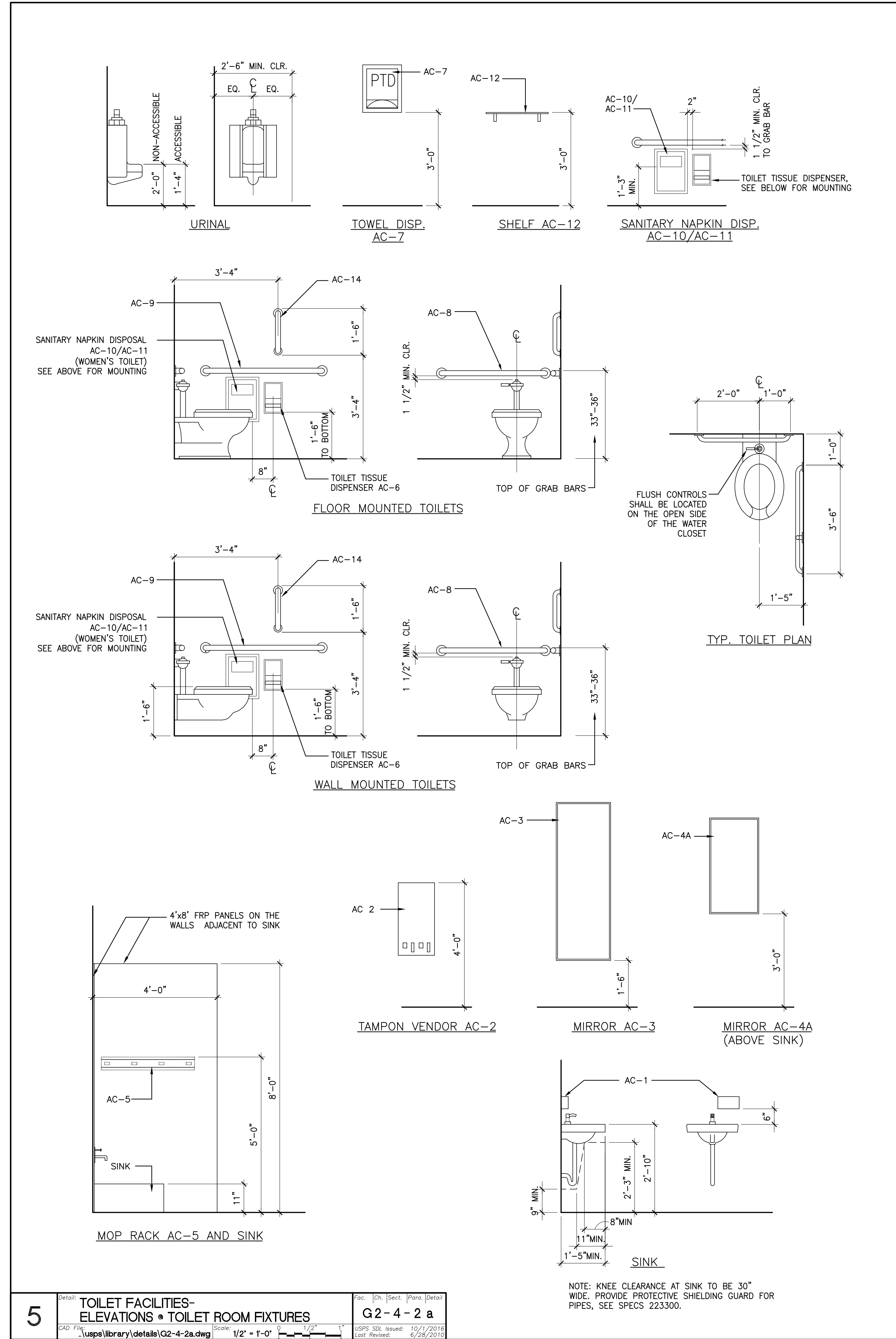
KEYED NOTES:

1. FINISHES LISTED THE PREFERRED OPTION. ACCEPTABLE ALTERNATES ARE LISTED IN THE APPROPRIATE SPECIFICATION SECTIONS.
2. PROCEDO QUARTZ TILE MAY BE ONLY BE USED AS PART OF THE NAFES ASBESTOS CONTAINMENT SYSTEM.

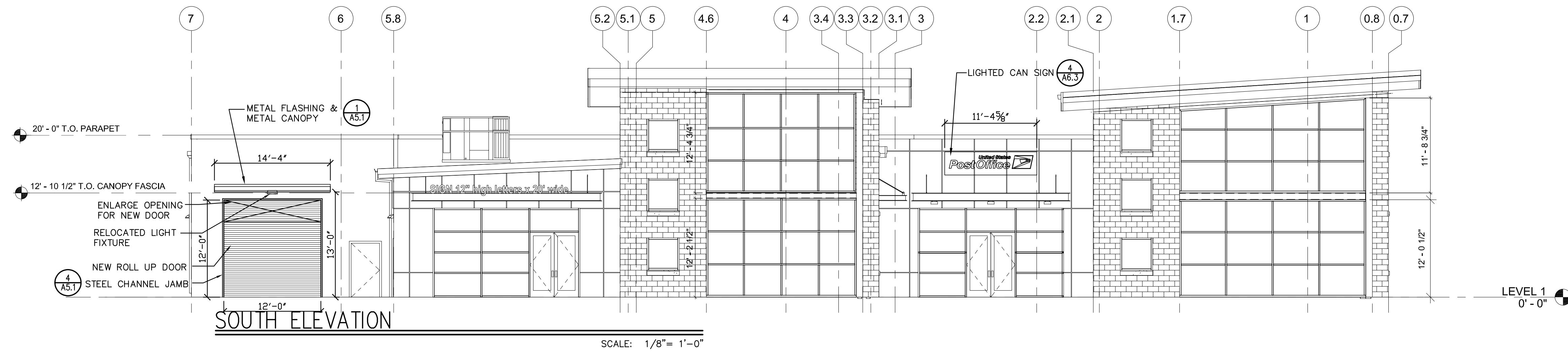
4 USPS STANDARD COLOR AND MATERIAL LIST  
G2-5-1 a  
Scale: N/A



3 INTERIOR PARTITIONS TYPICAL GYPSUM BOARD DETAILS  
G2-7-0 a  
Scale: 6" = 1'-0"

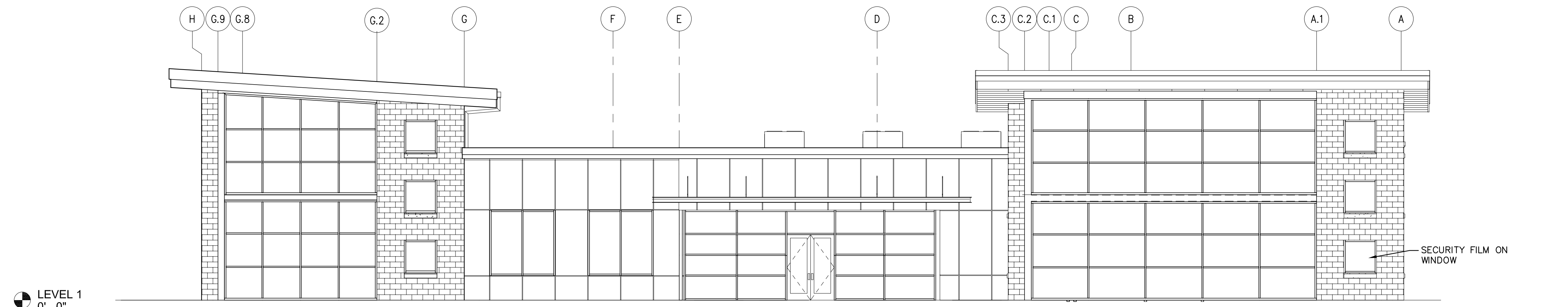


5 TOILET FACILITIES - ELEVATIONS \* TOILET ROOM FIXTURES  
G2-4-2 a  
Scale: 1/2" = 1'-0"



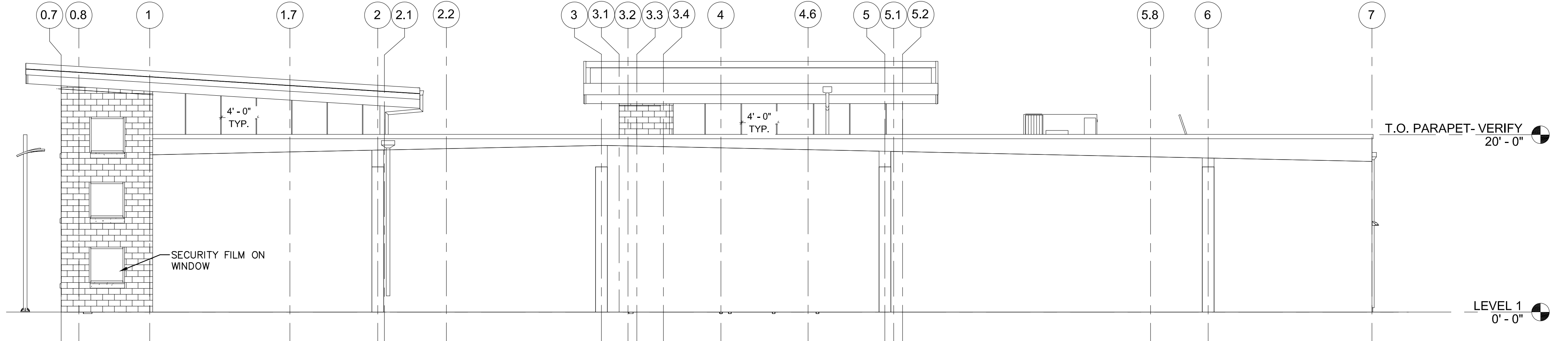
**SOUTH ELEVATION**

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



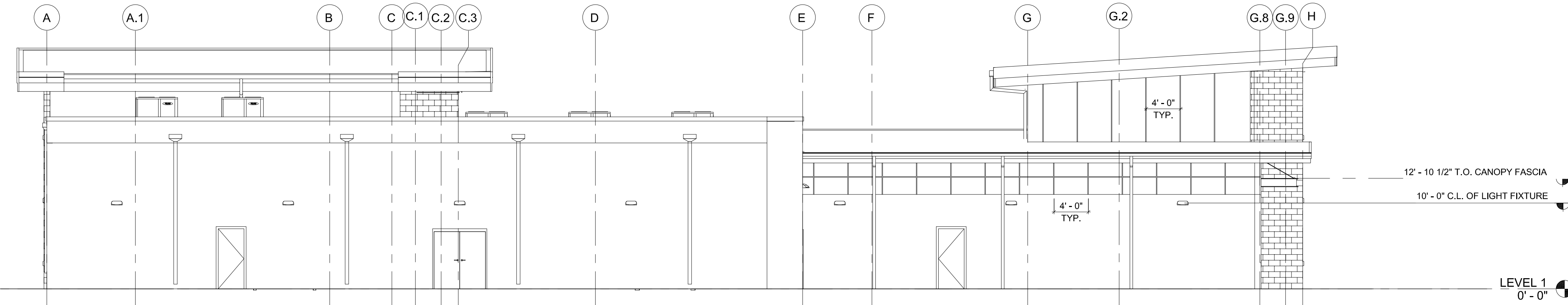
**EAST ELEVATION**

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



**NORTH ELEVATION**

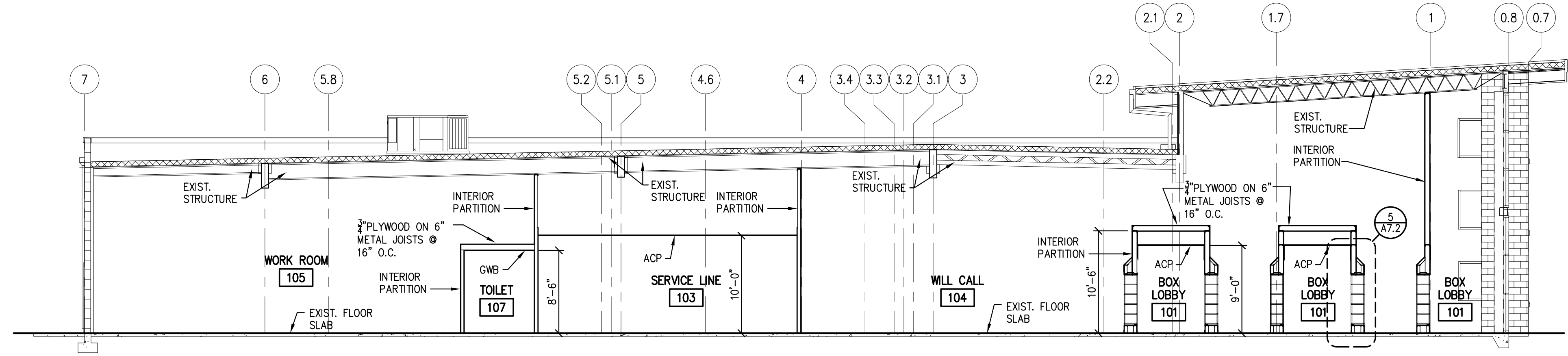
SCALE: 1/8" = 1'-0"



**WEST ELEVATION**

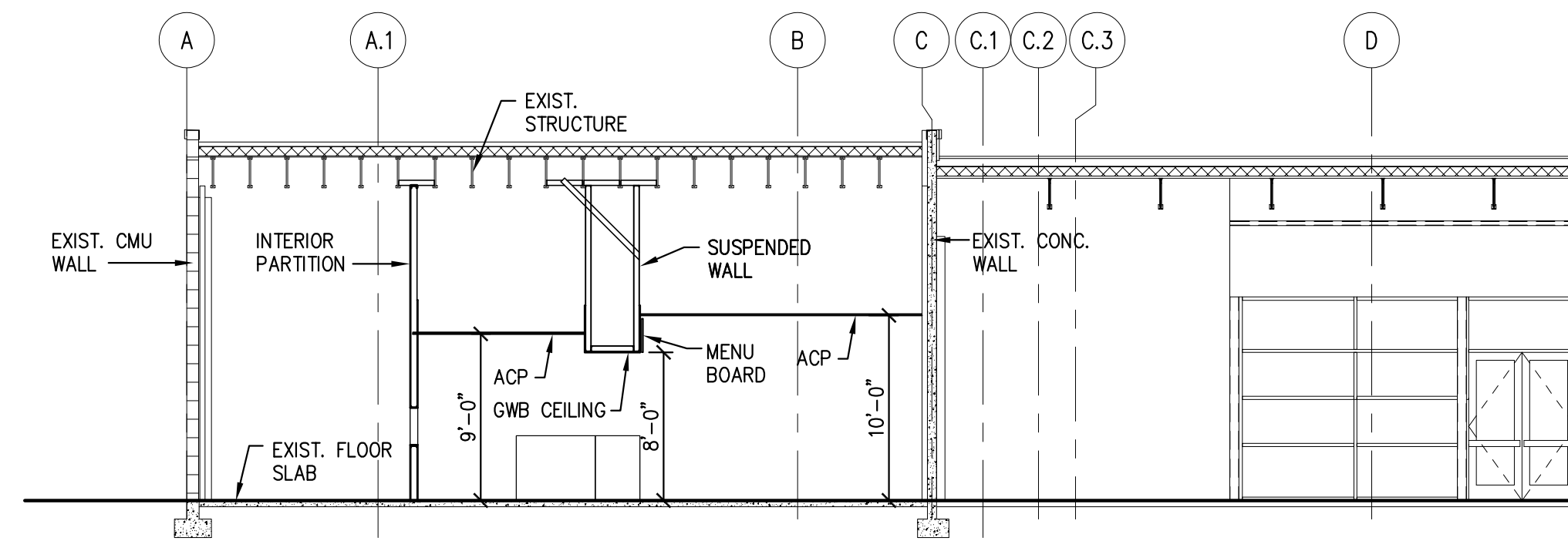
SCALE: 1/8" = 1'-0"





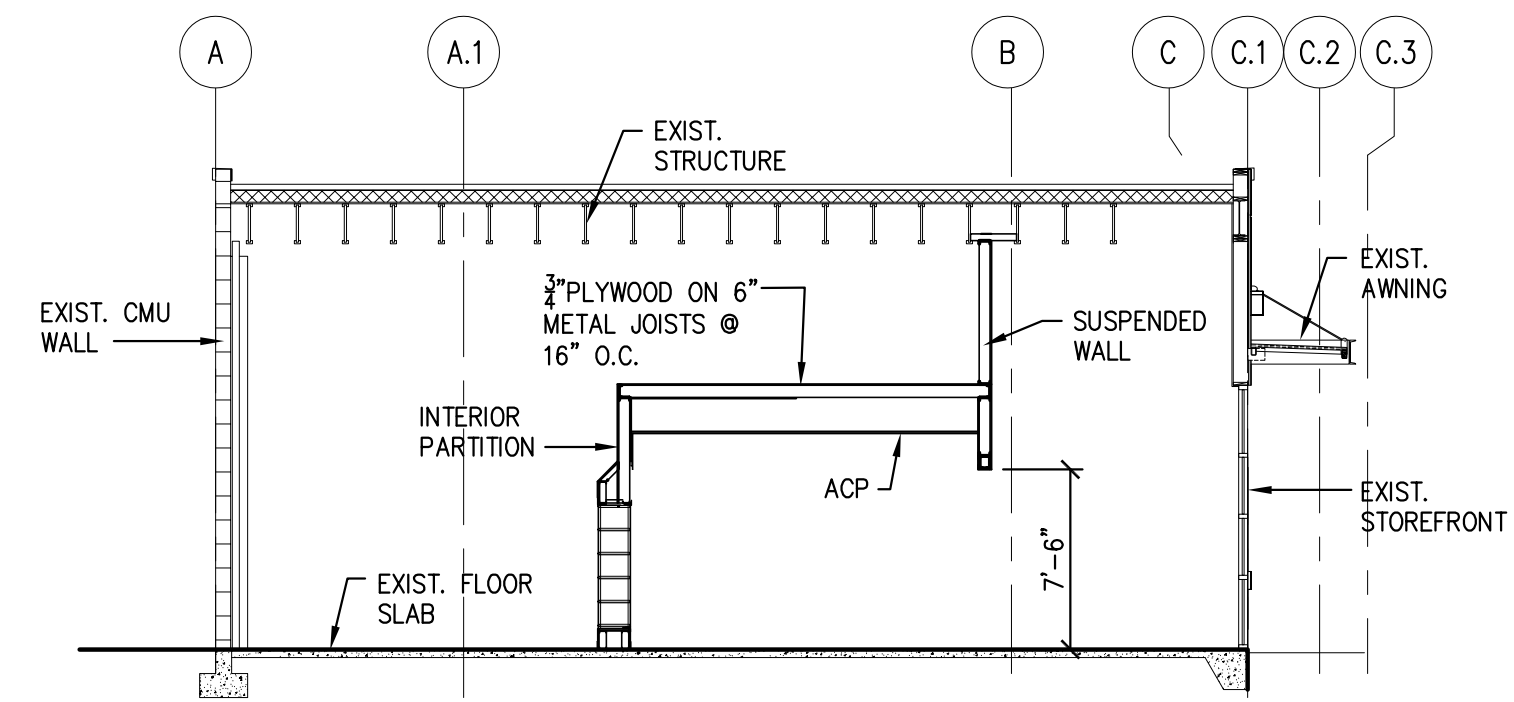
1 BUILDING SECTIONS  
A4.1

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



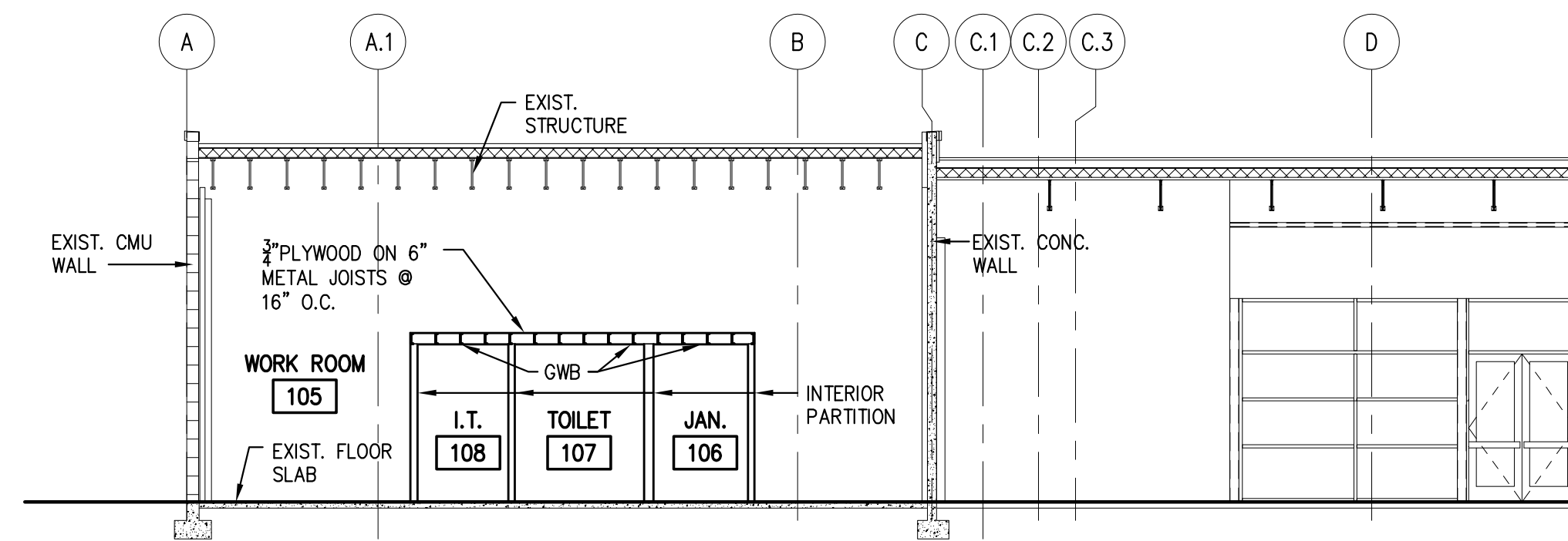
2 BUILDING SECTIONS  
A4.1

SCALE: 1/4" = 1'-0"



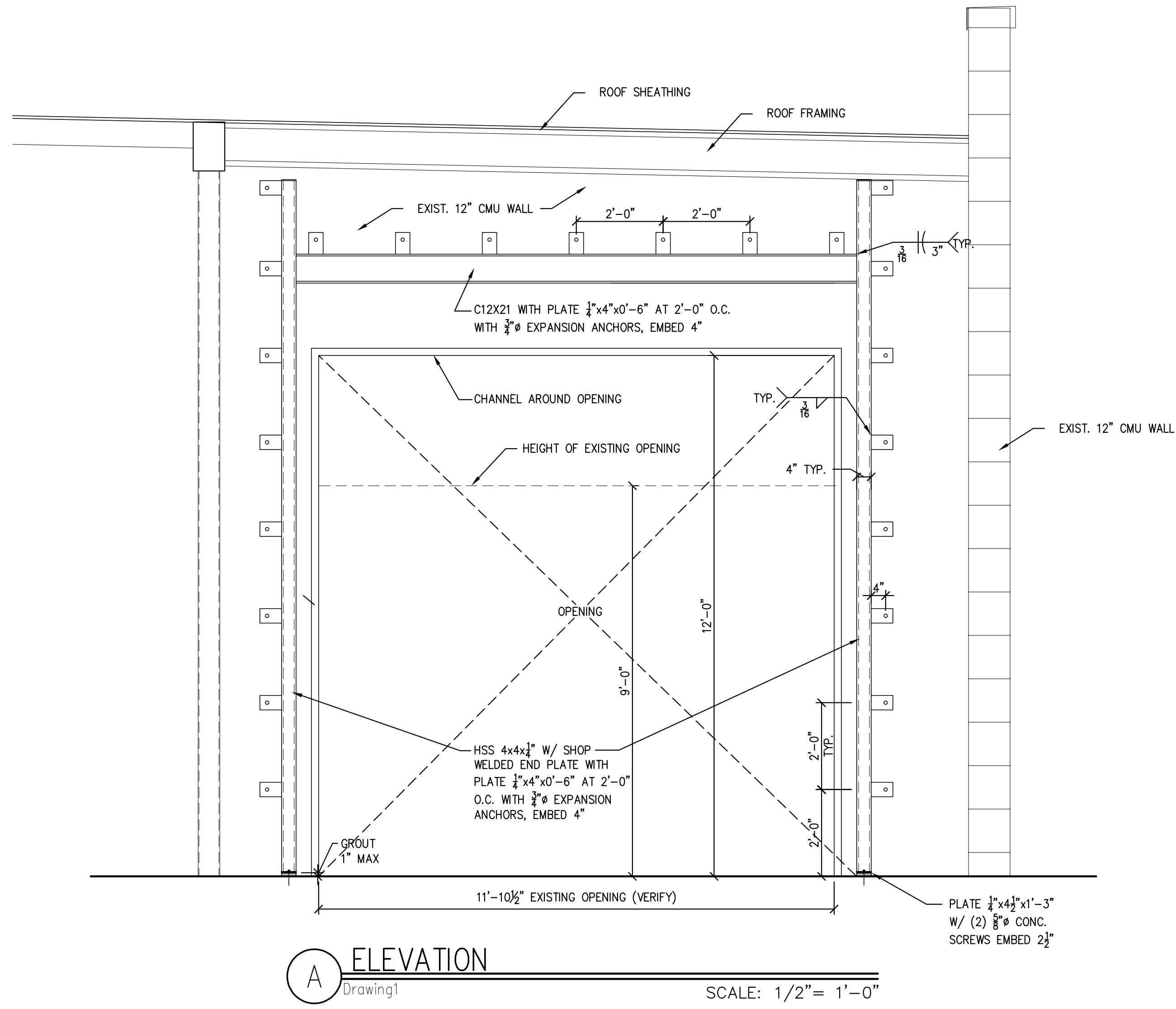
3 BUILDING SECTIONS  
A4.1

SCALE: 1/4" = 1'-0"

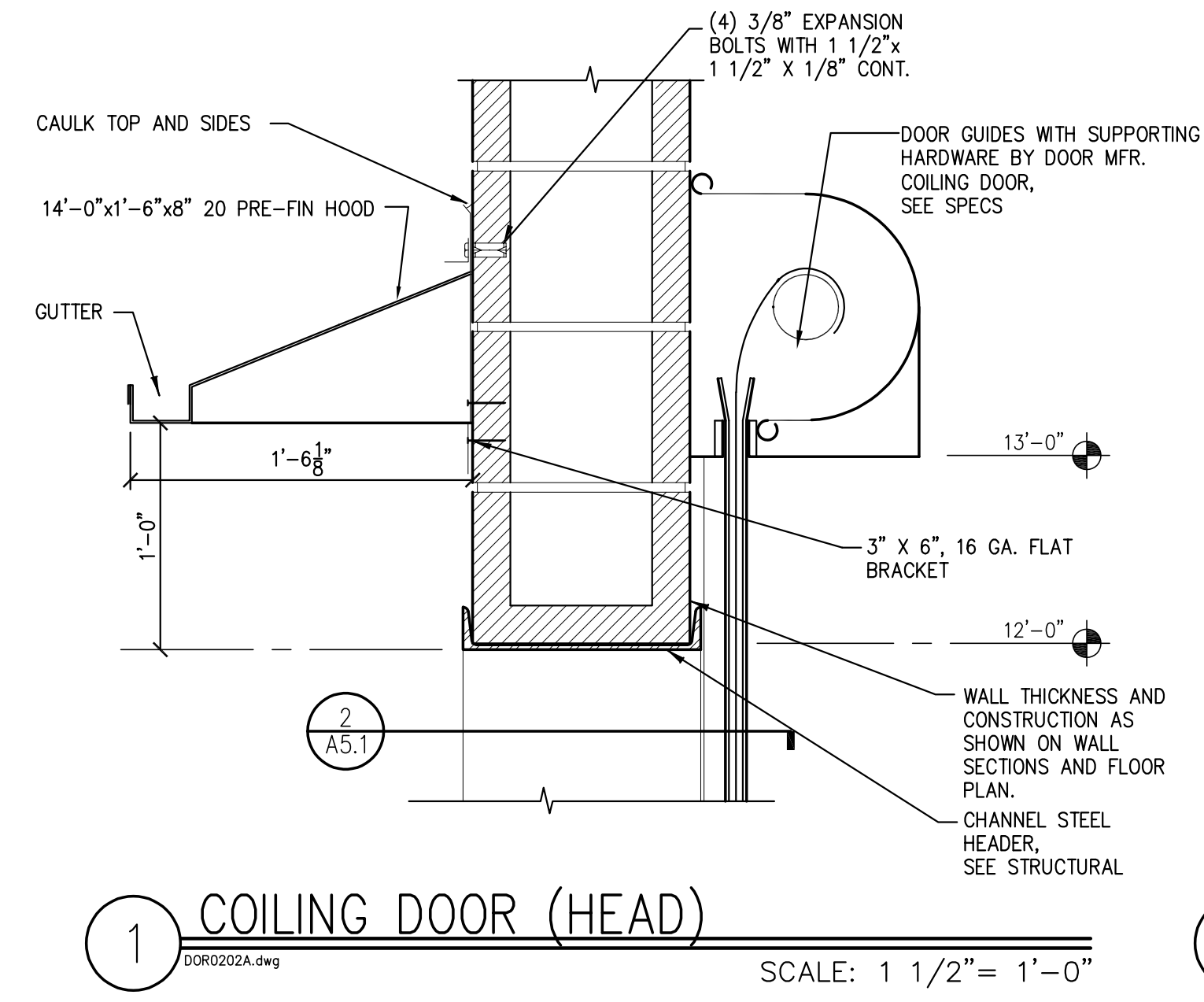


4 BUILDING SECTIONS  
A4.1

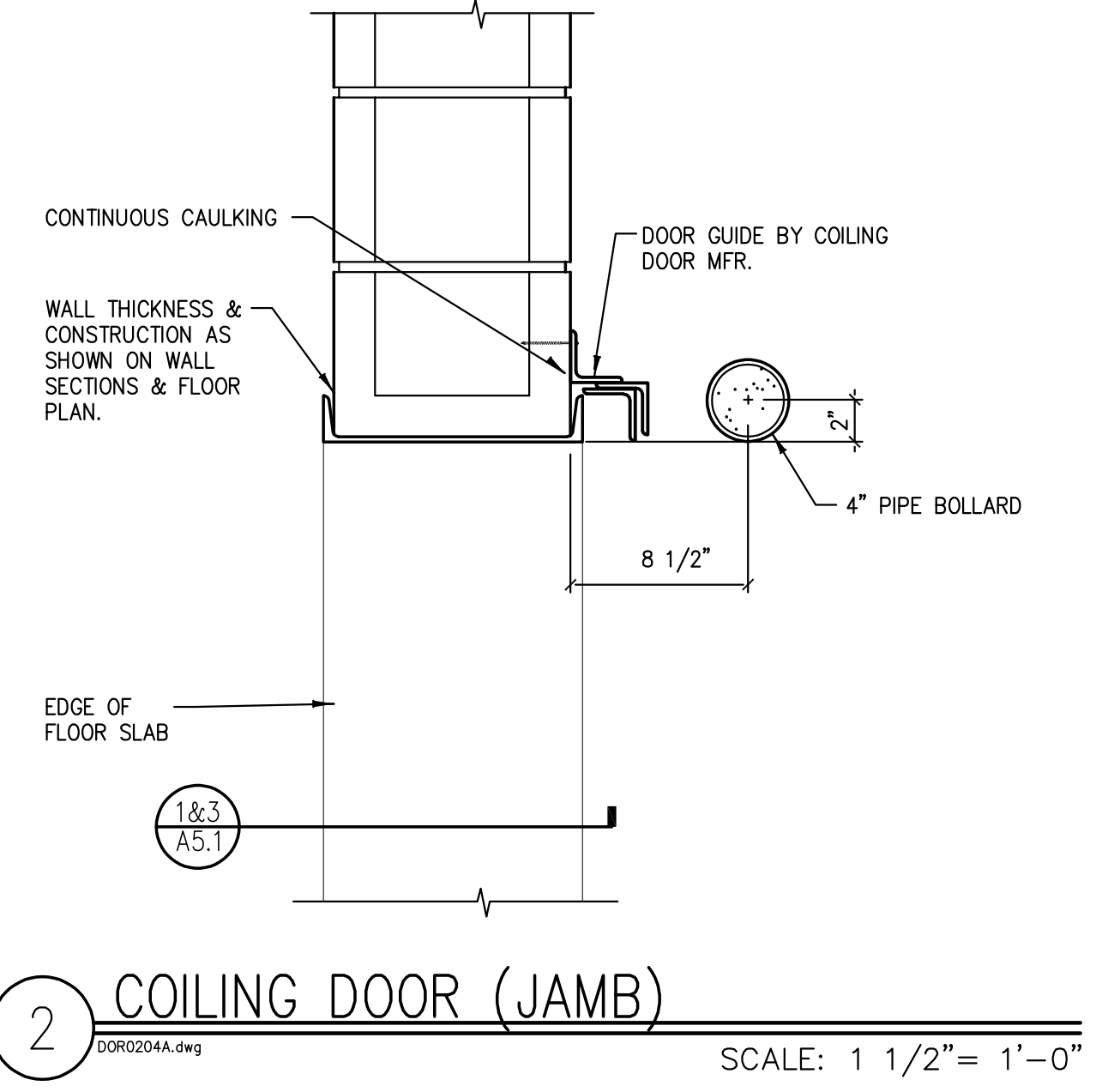
SCALE: 1/4" = 1'-0"



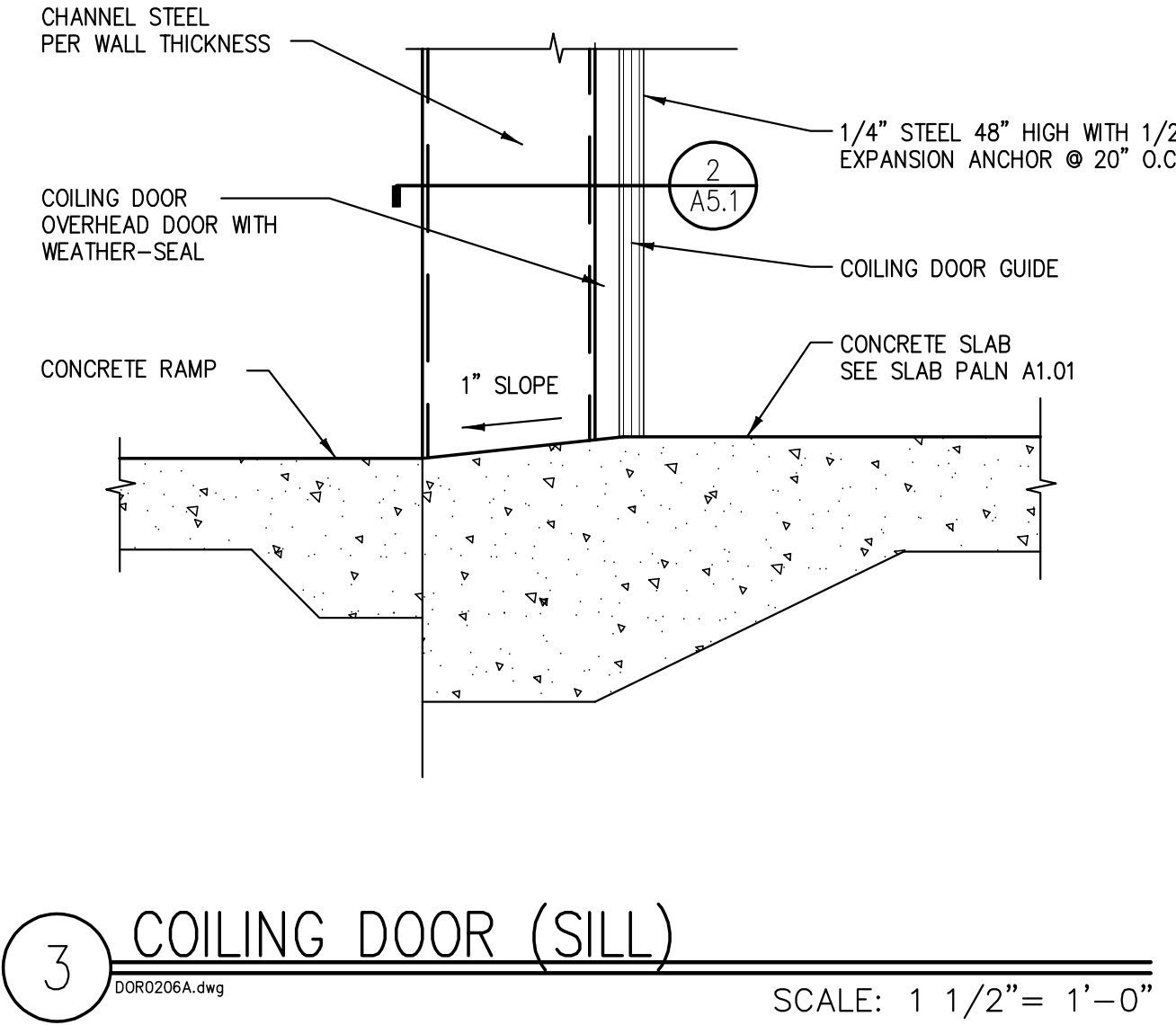
**A ELEVATION**  
Drawing1 SCALE: 1/2" = 1'-0"



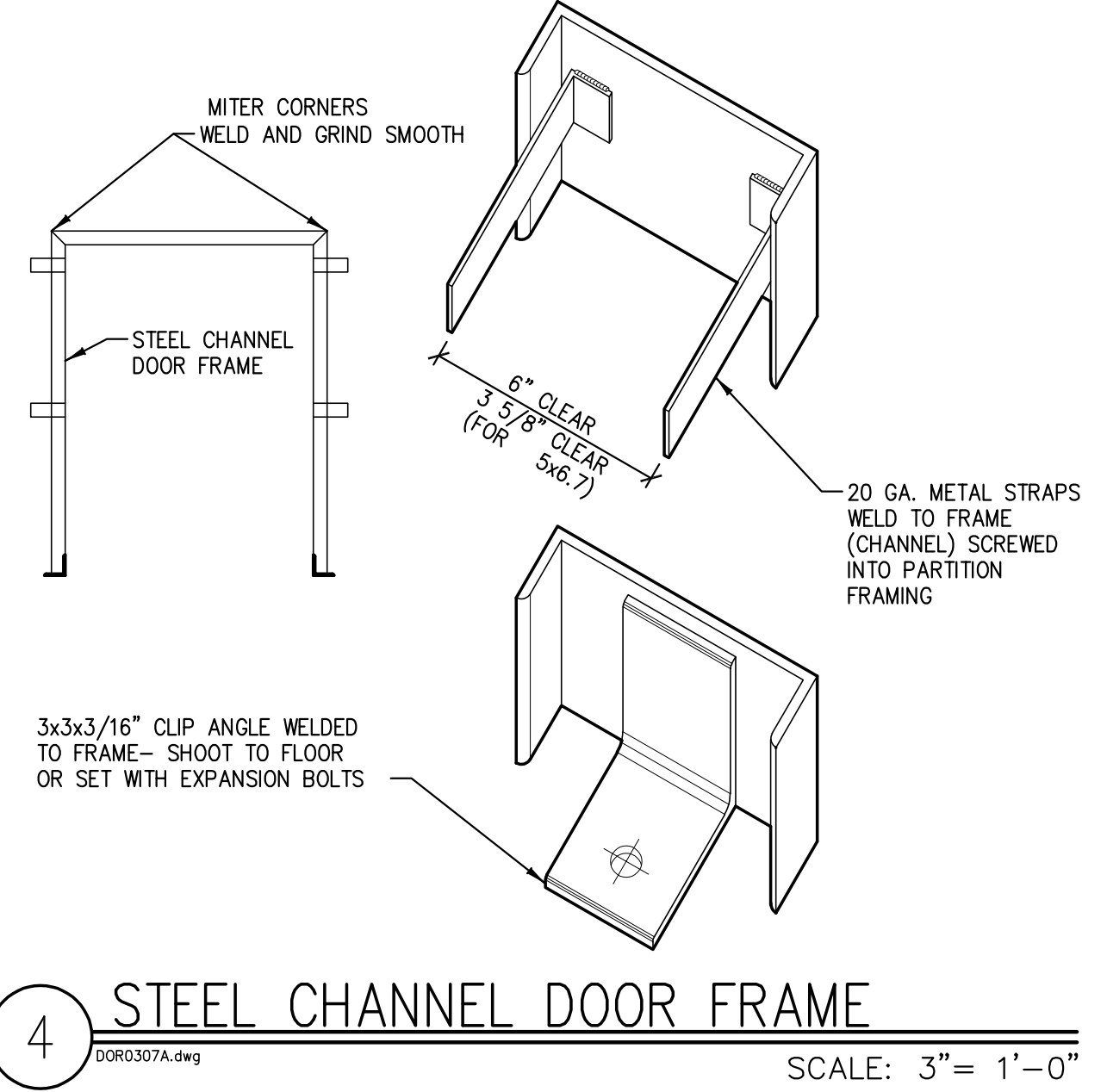
**1 COILING DOOR (HEAD)**  
DOR0202A.dwg SCALE: 1 1/2" = 1'-0"



**2 COILING DOOR (JAMB)**  
DOR0204A.dwg SCALE: 1 1/2" = 1'-0"

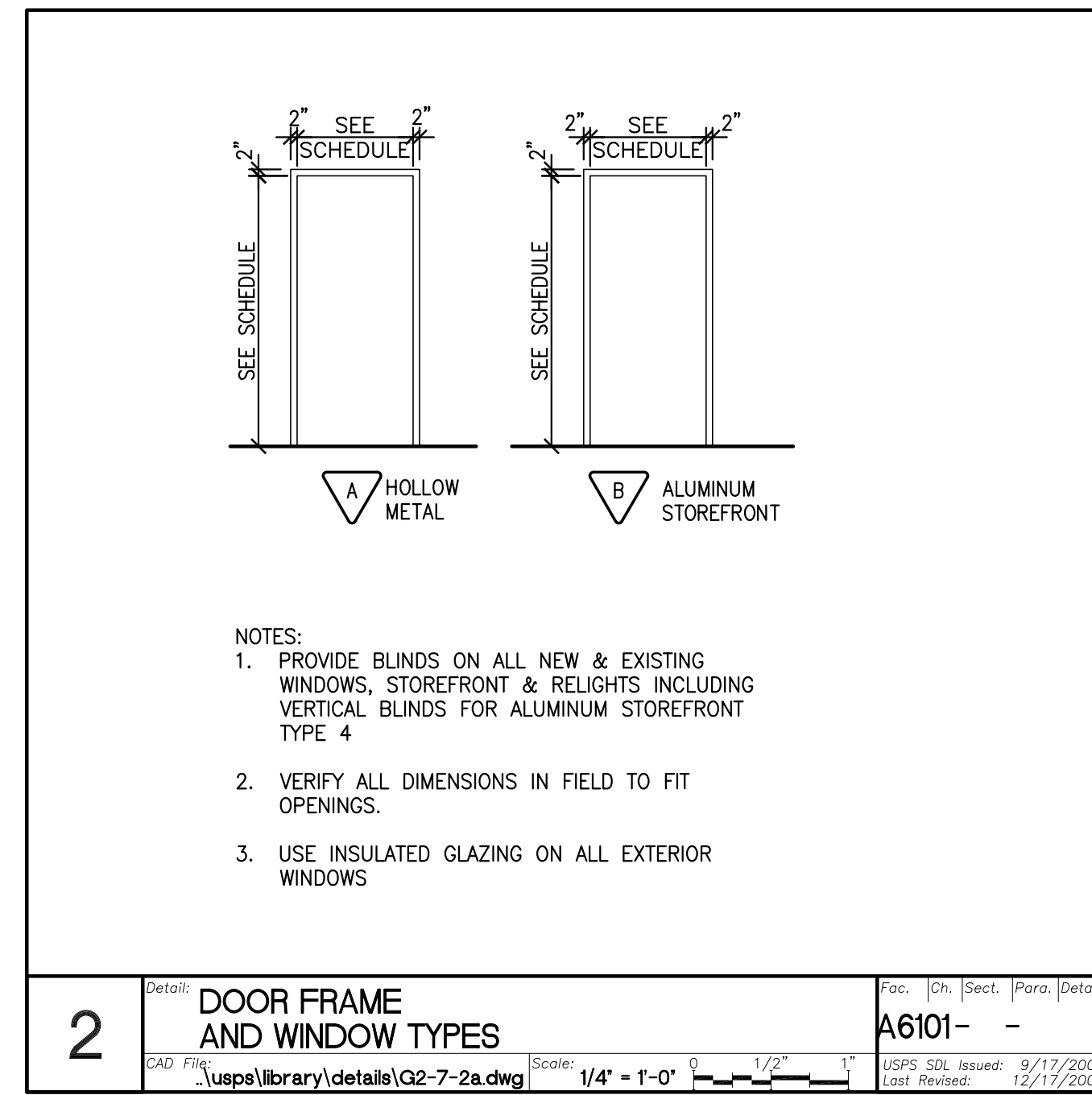
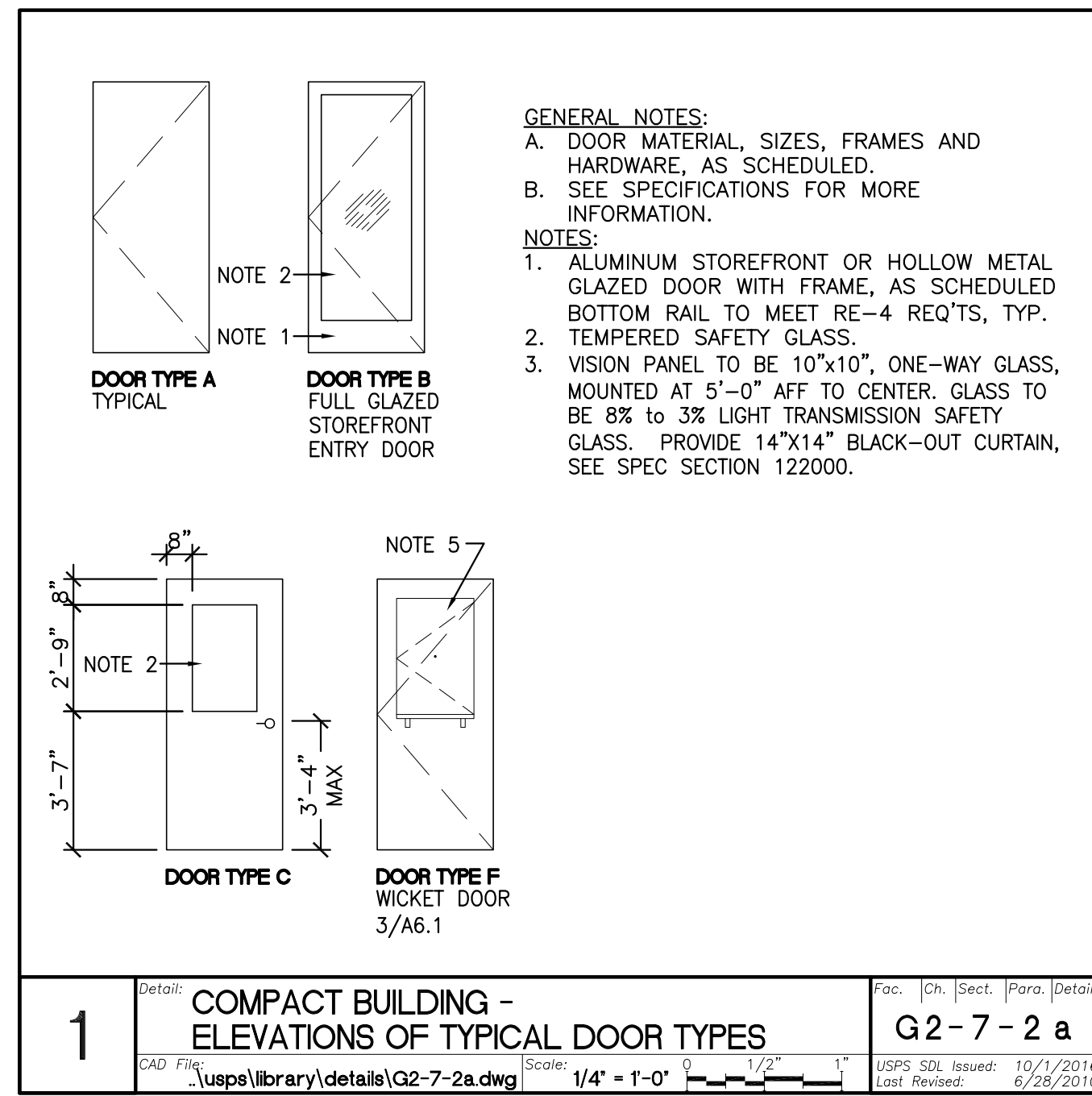


**3 COILING DOOR (SILL)**  
DOR0206A.dwg SCALE: 1 1/2" = 1'-0"



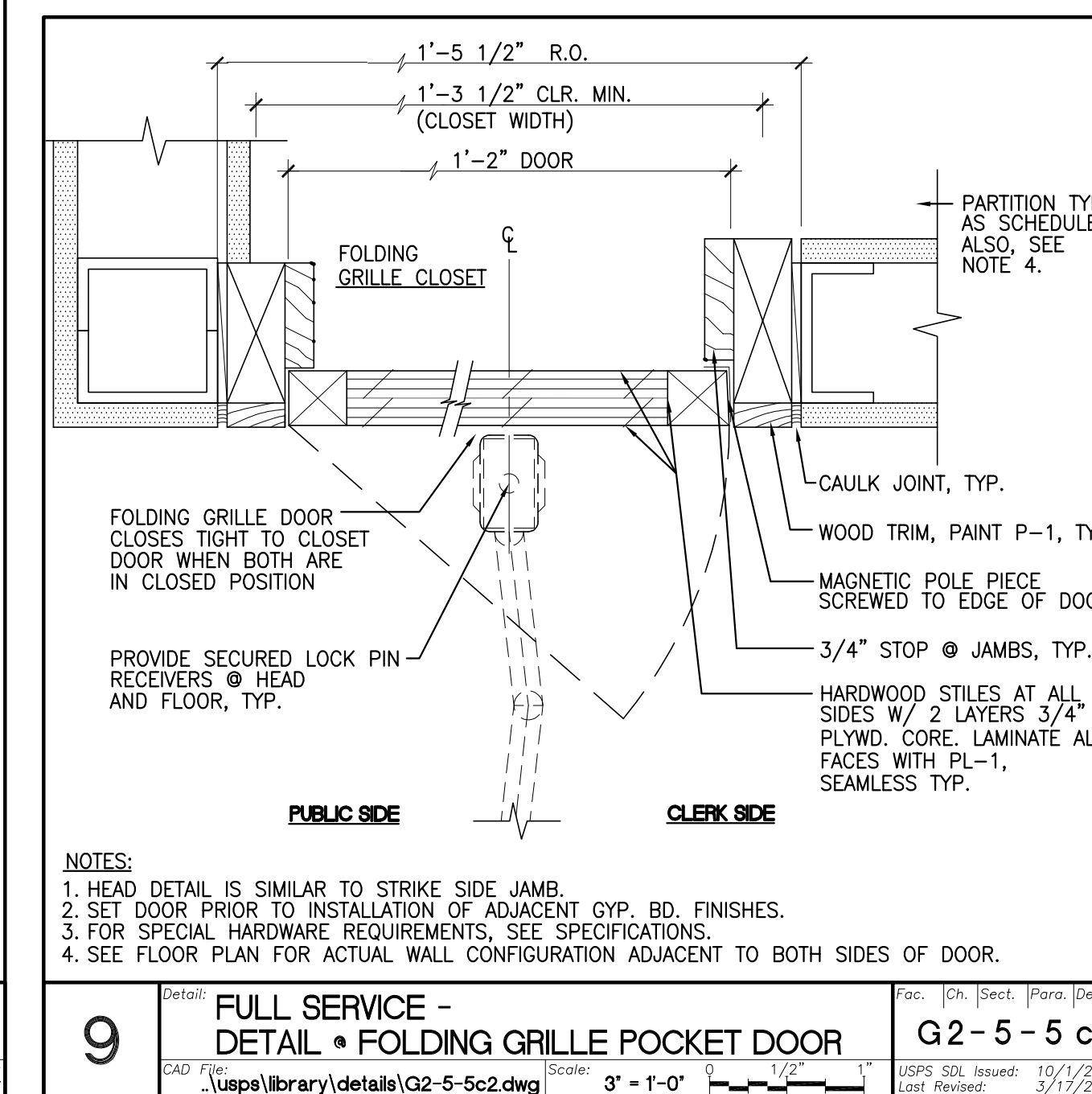
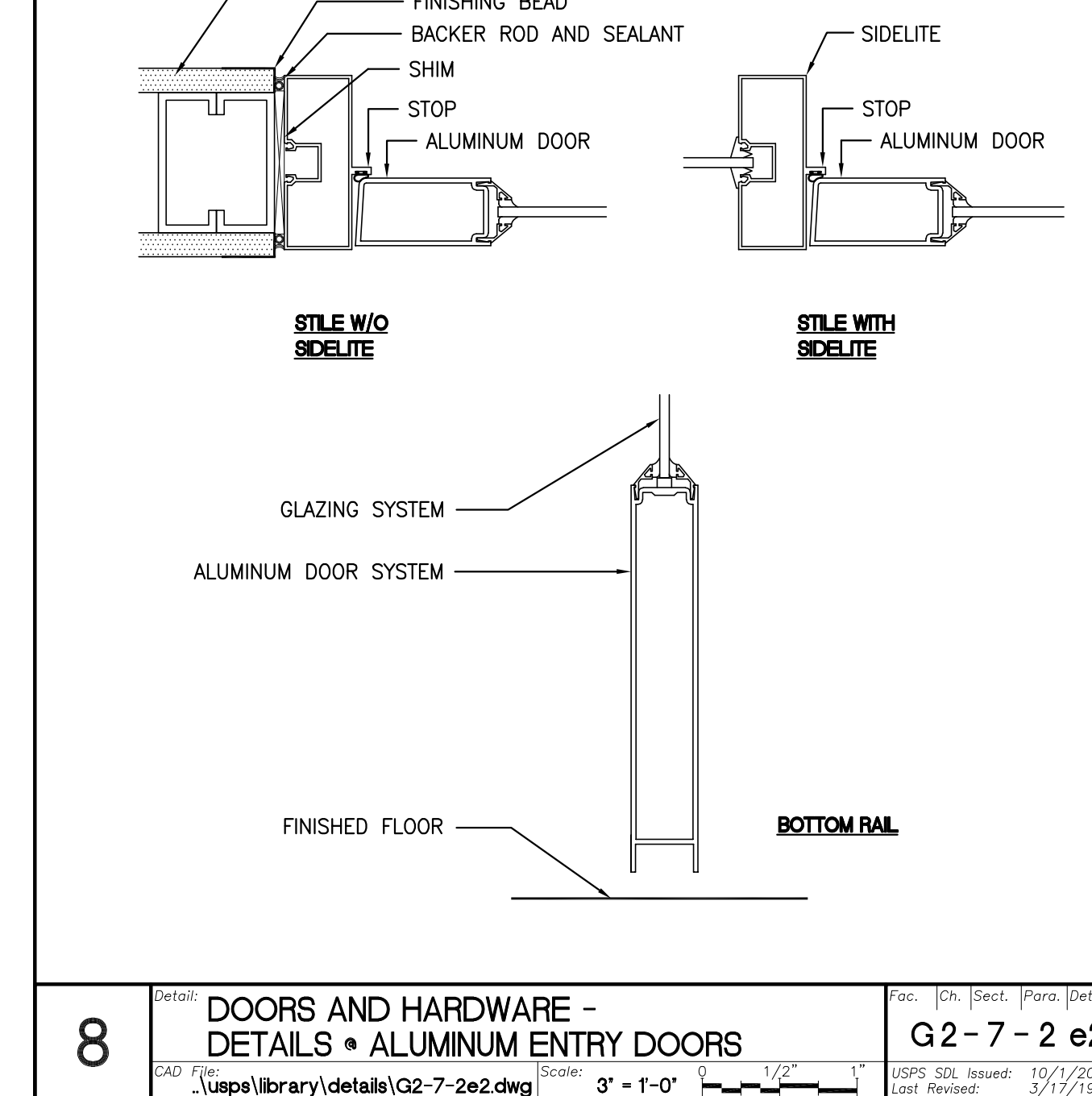
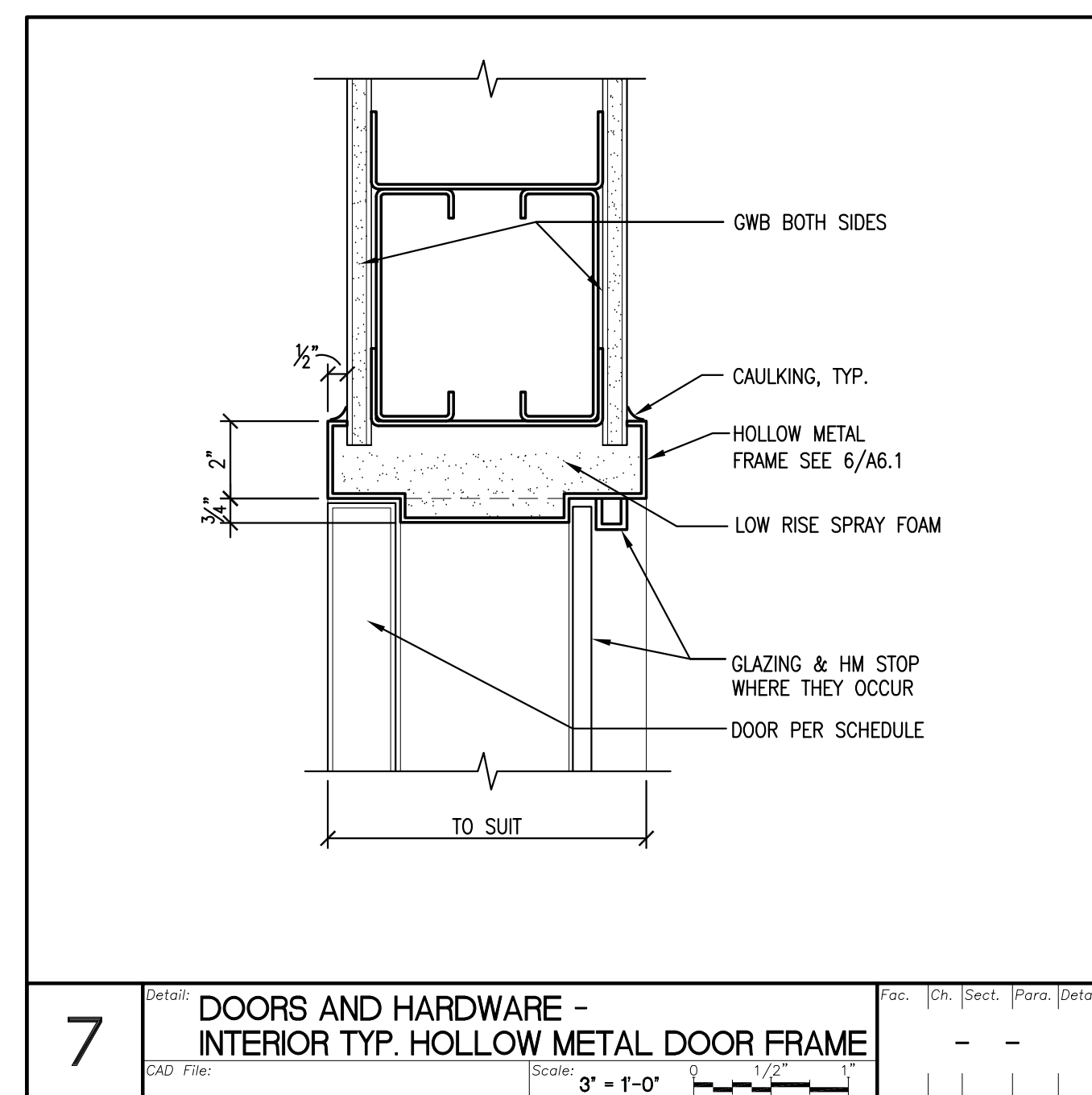
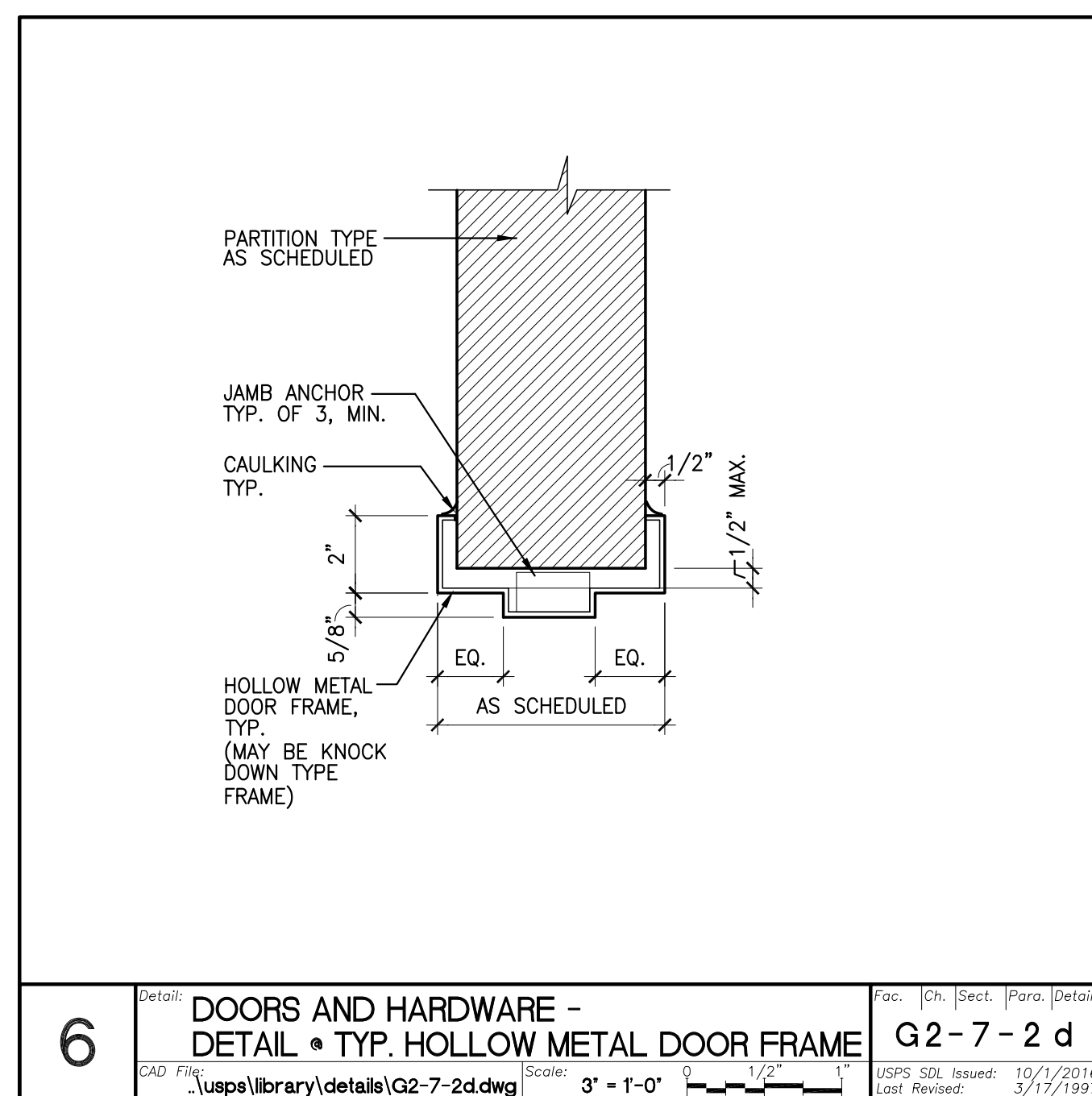
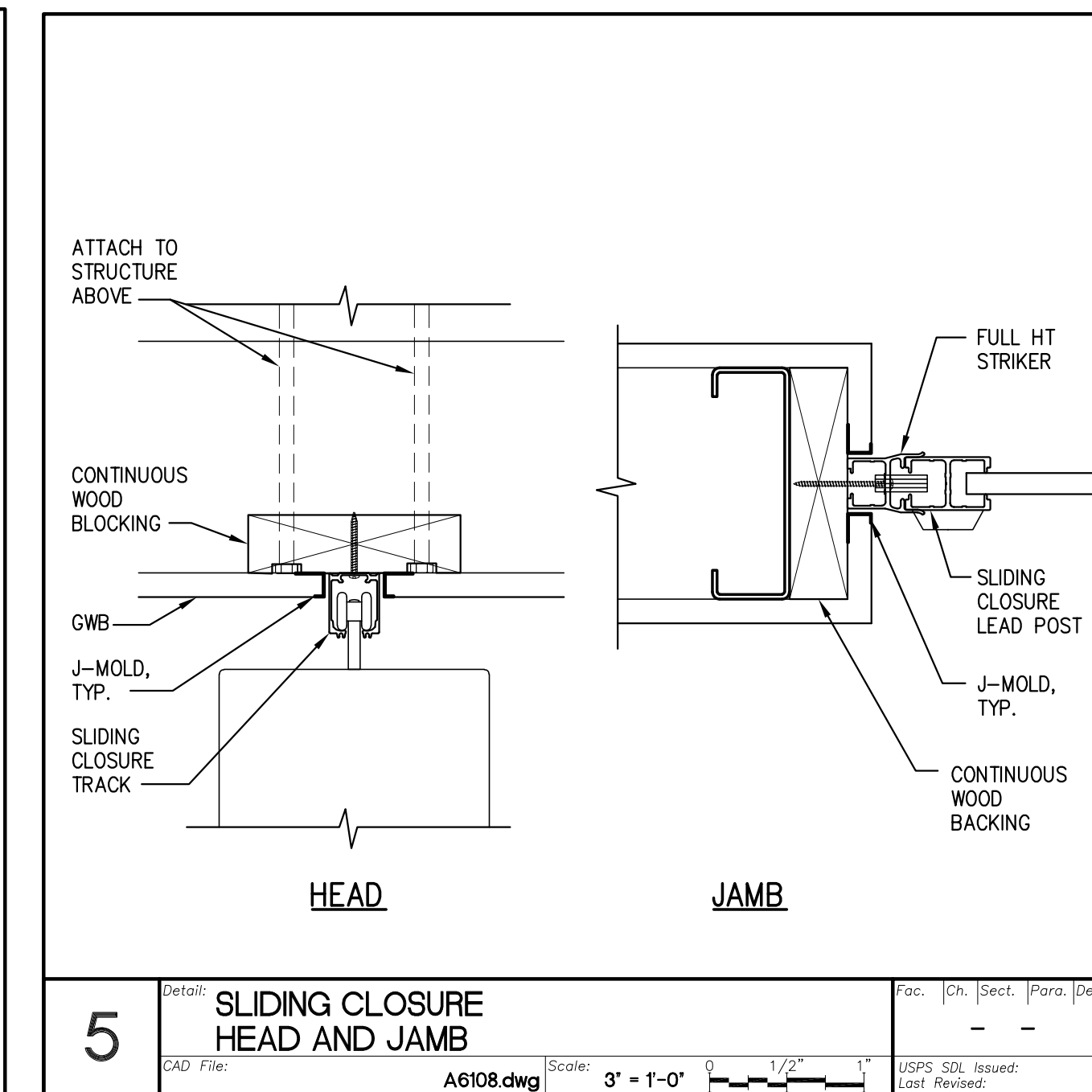
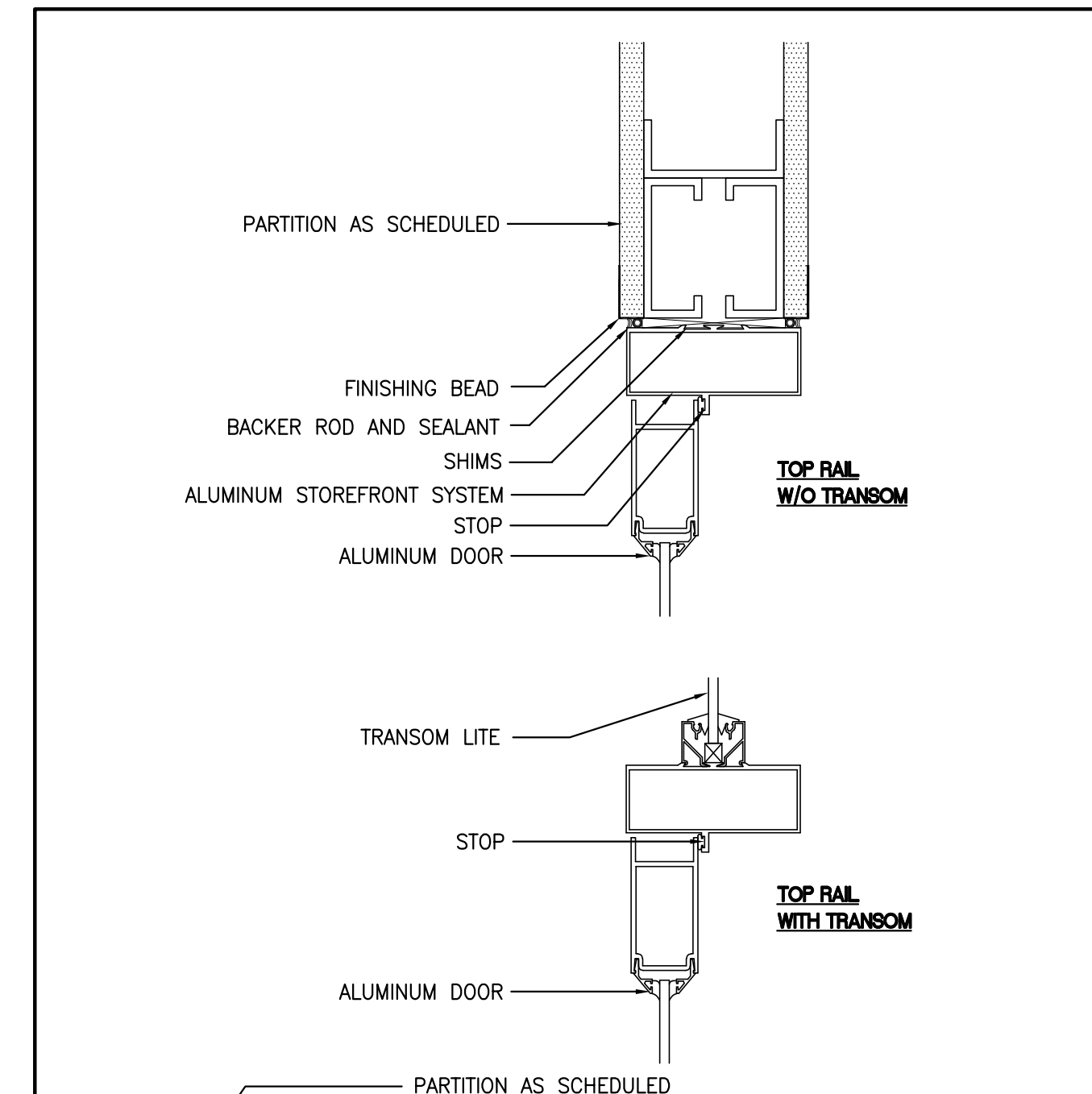
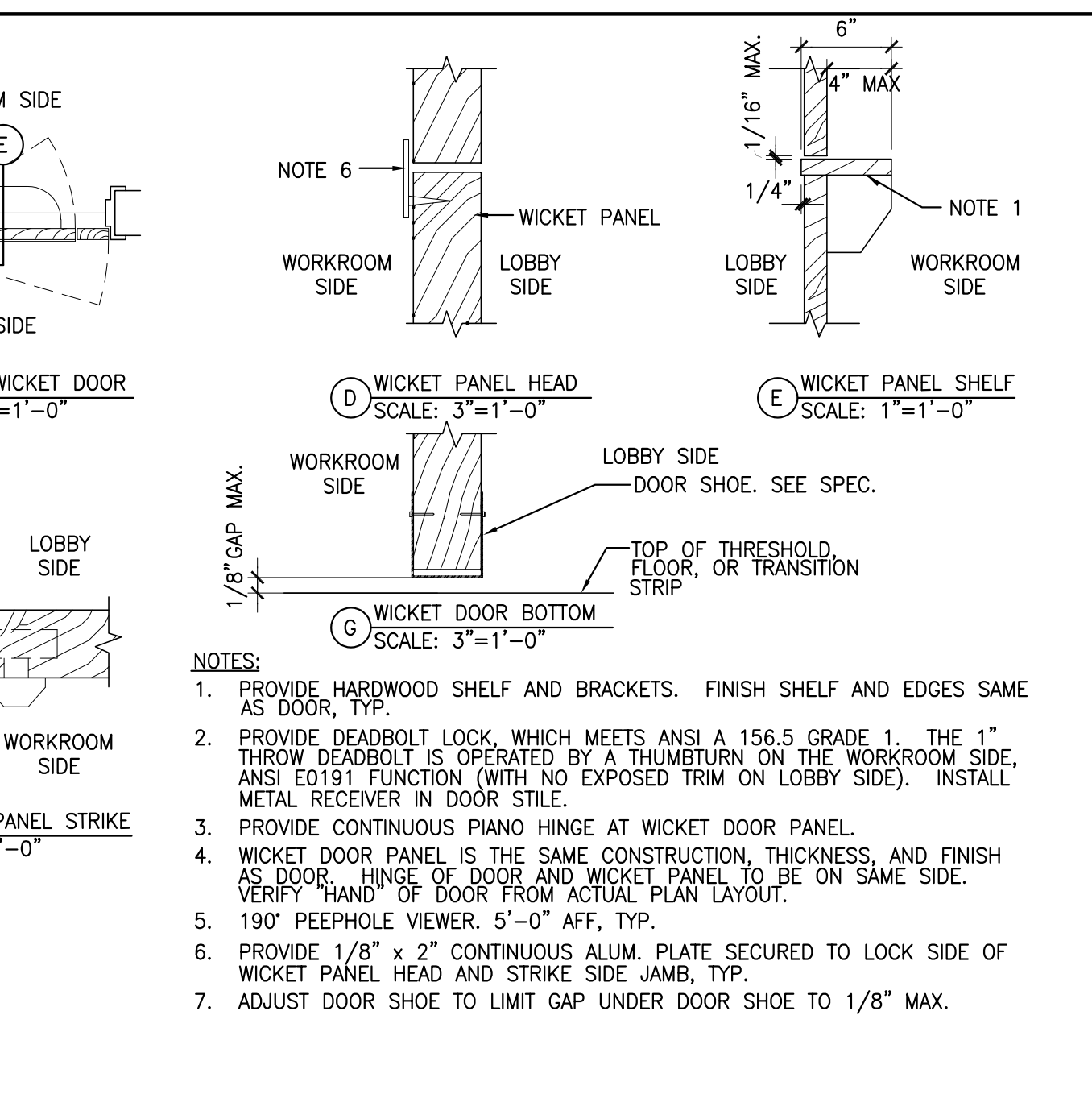
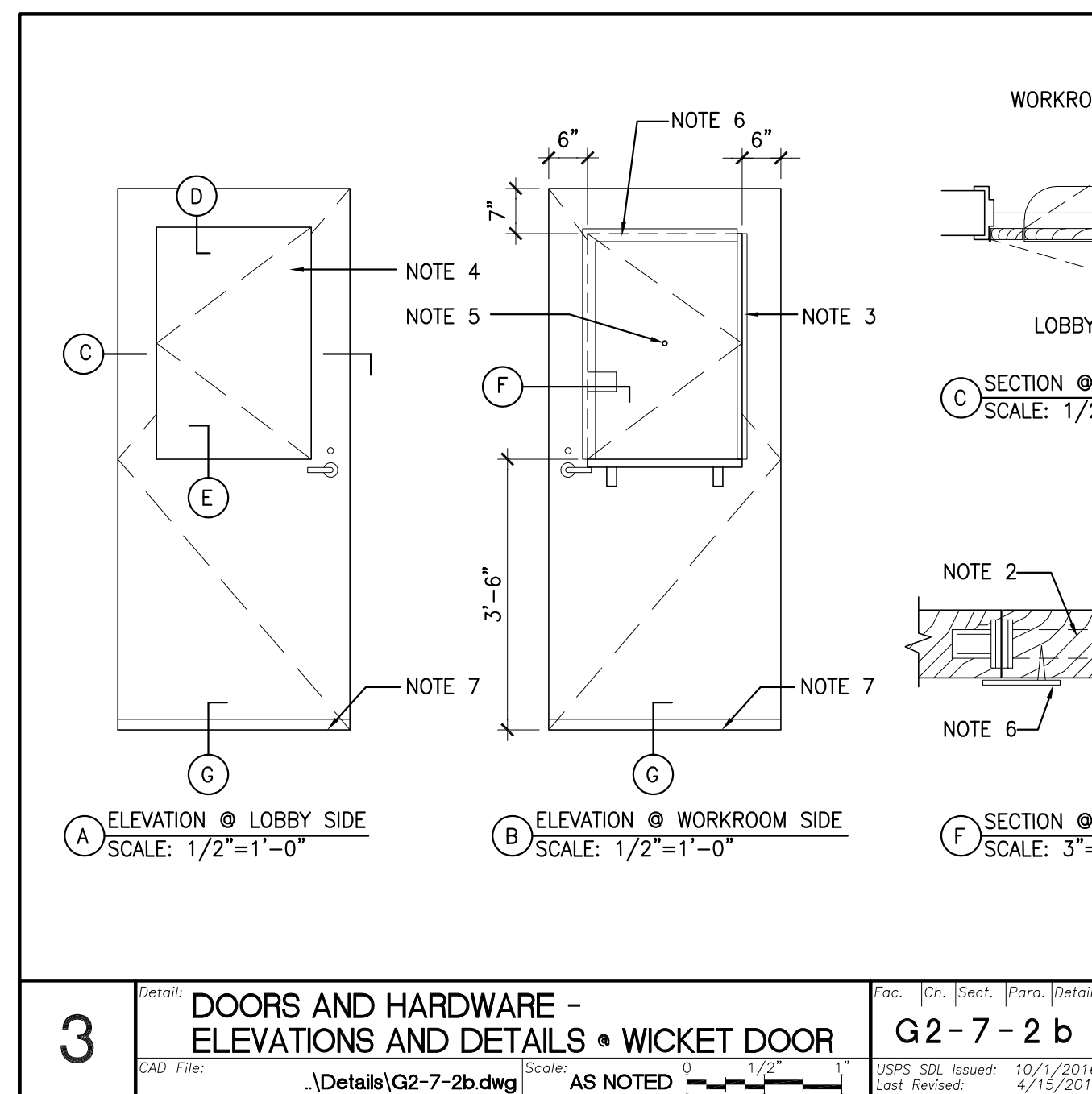
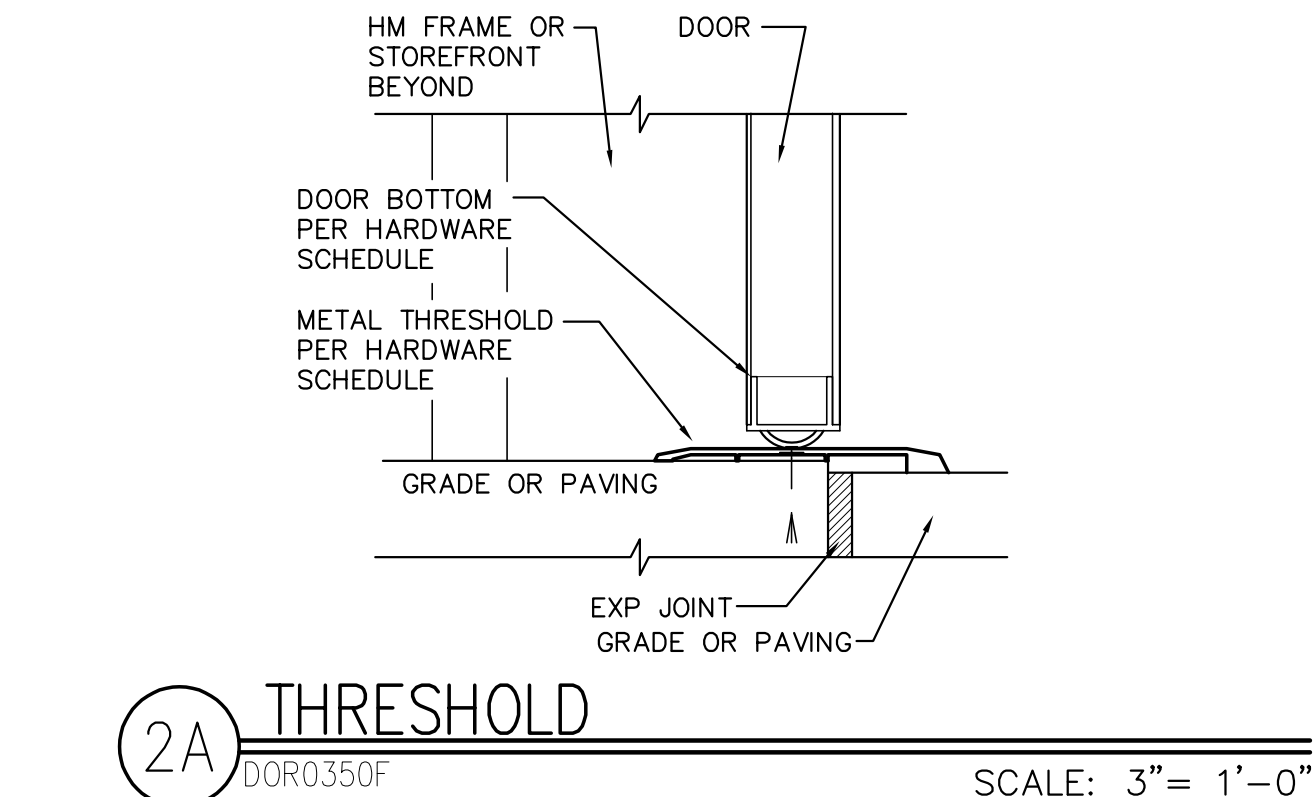
**4 STEEL CHANNEL DOOR FRAME**  
DOR0307A.dwg SCALE: 3" = 1'-0"

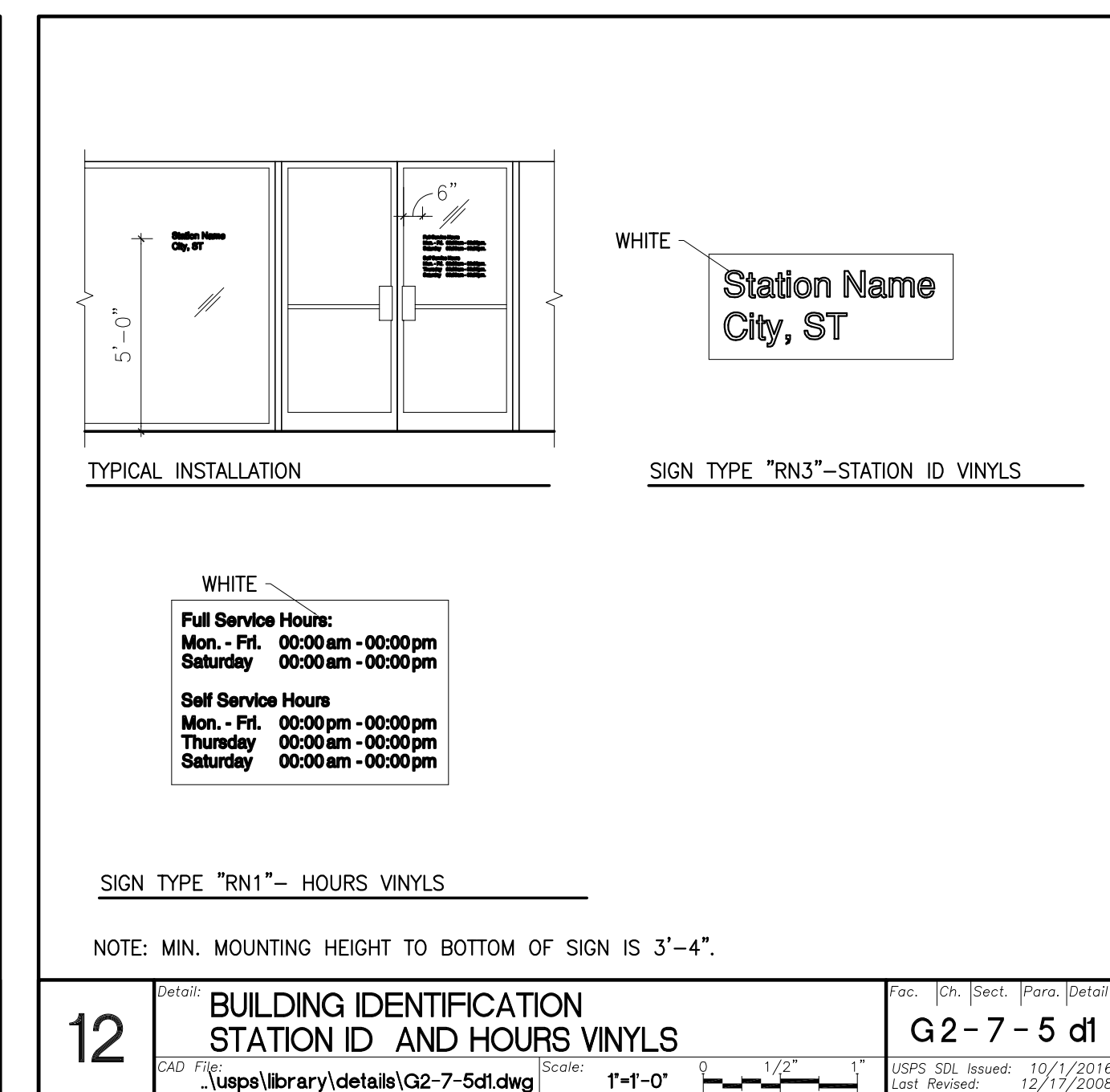
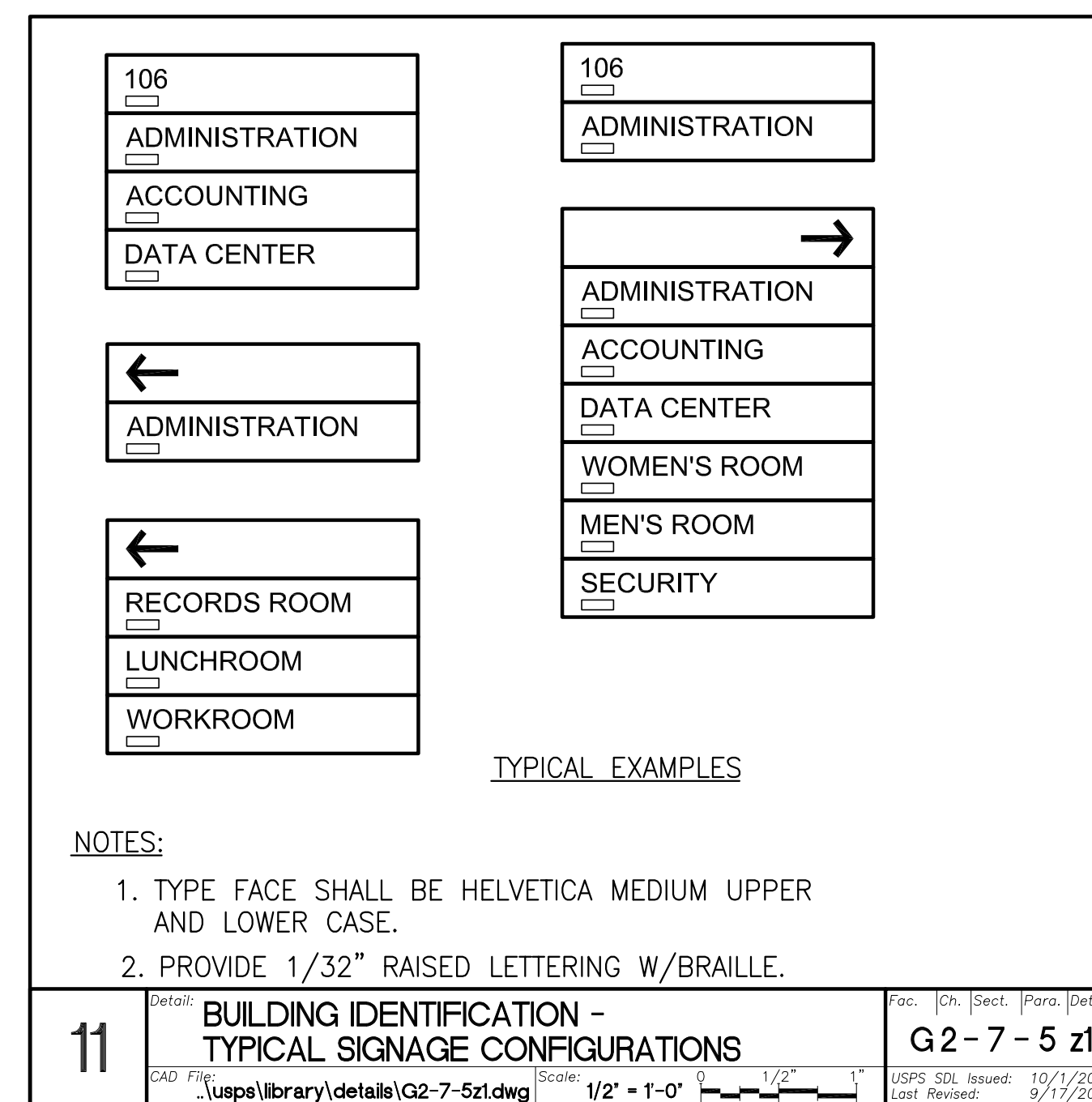
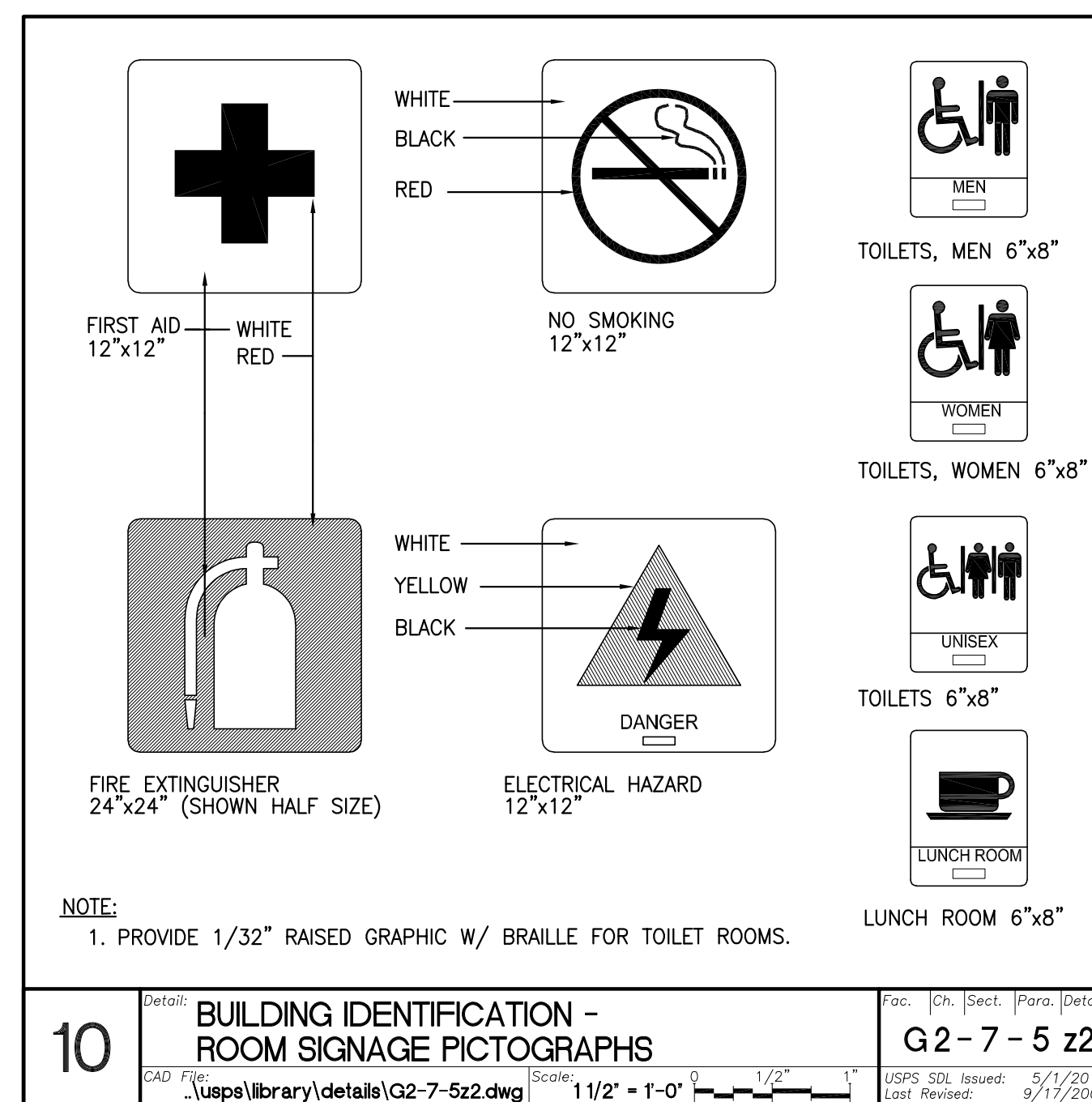
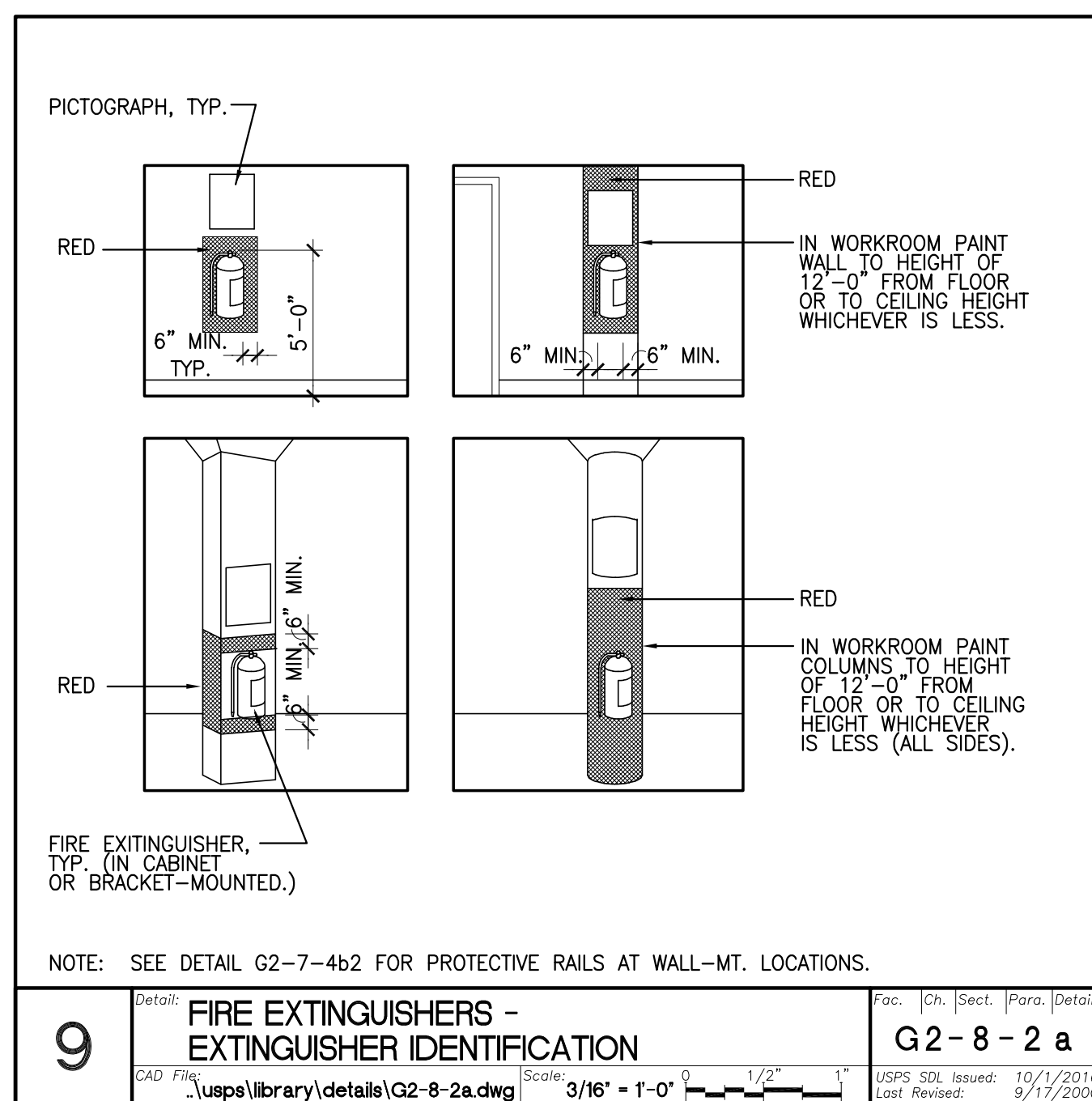
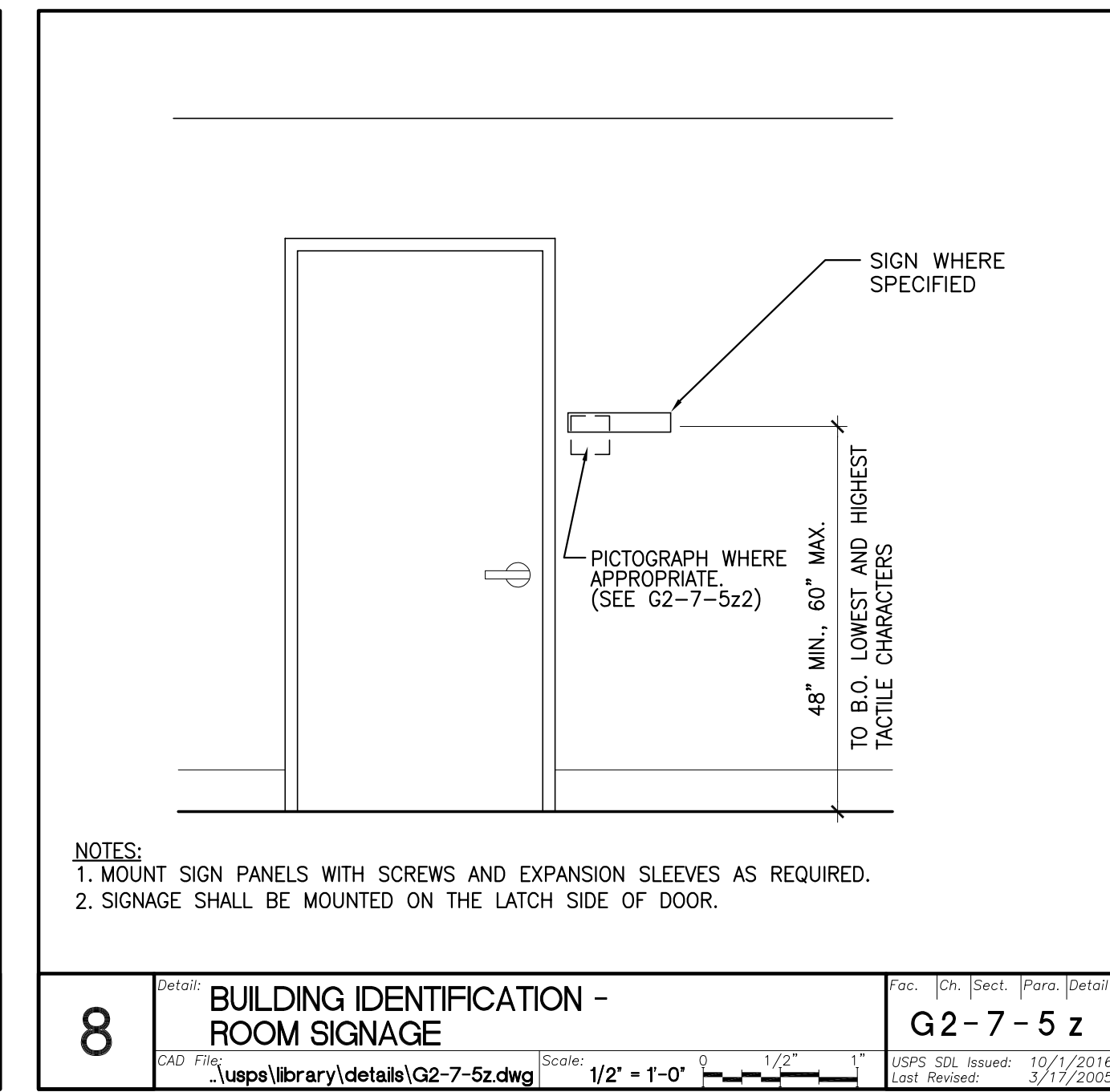
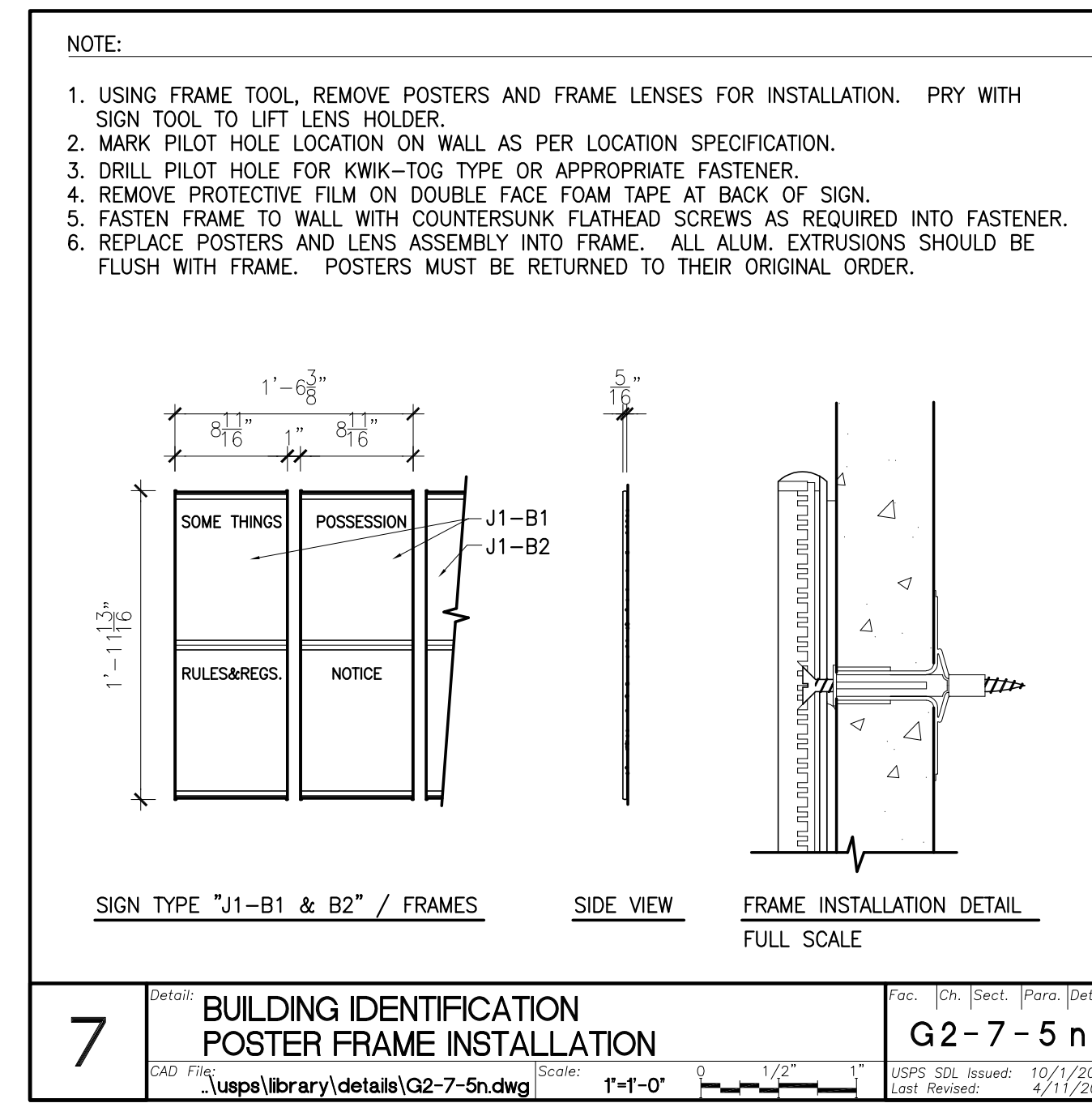
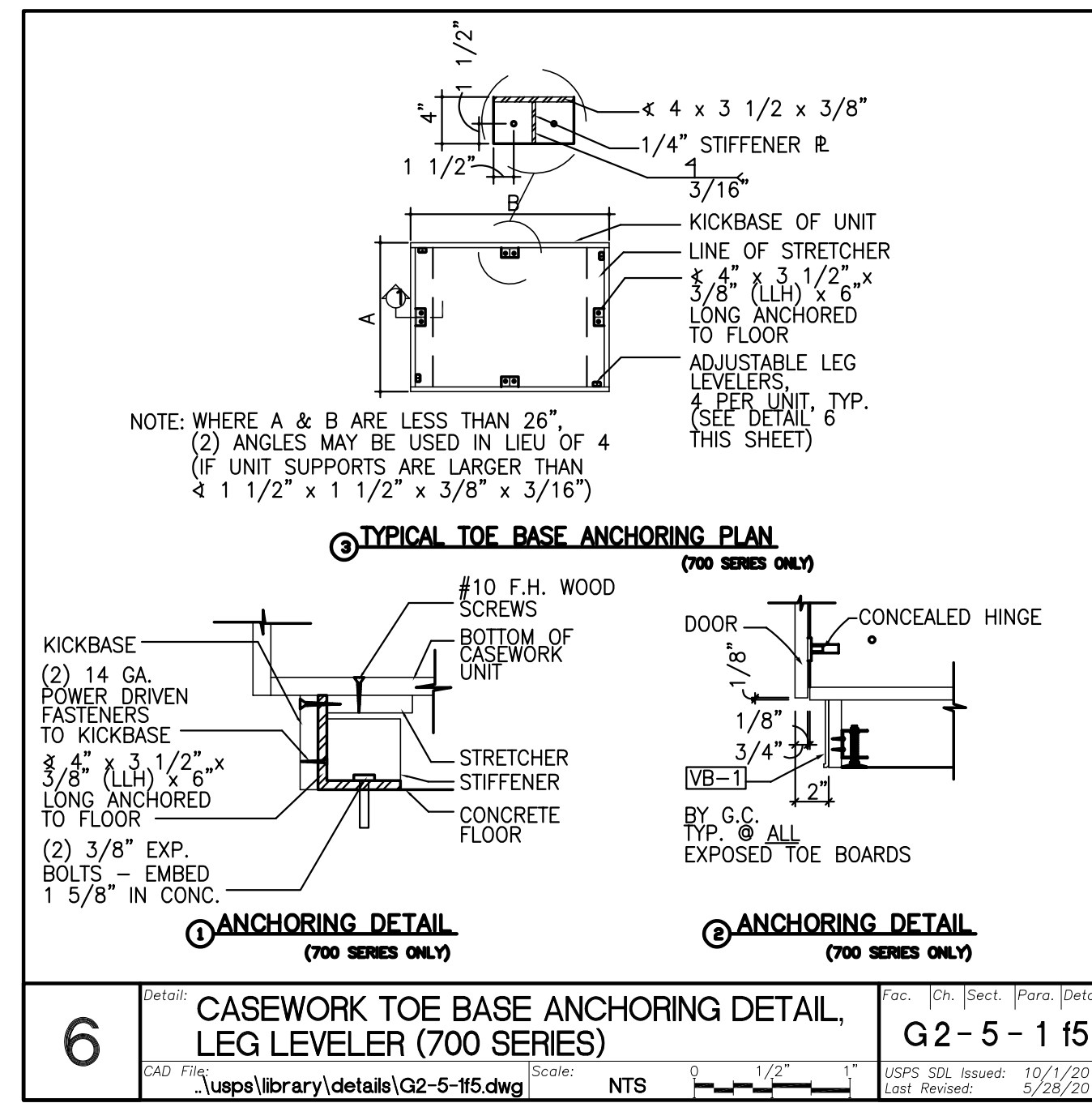
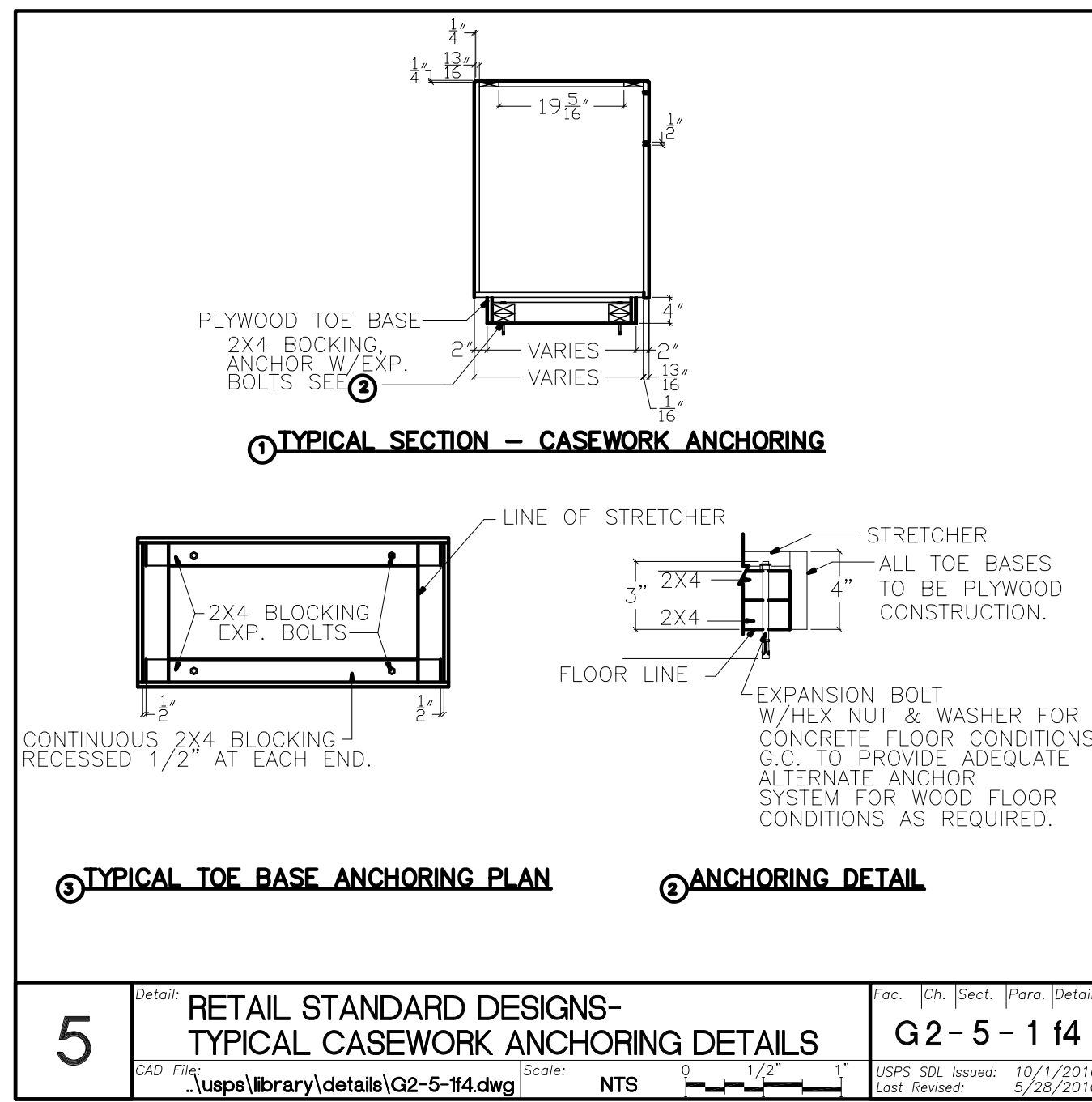
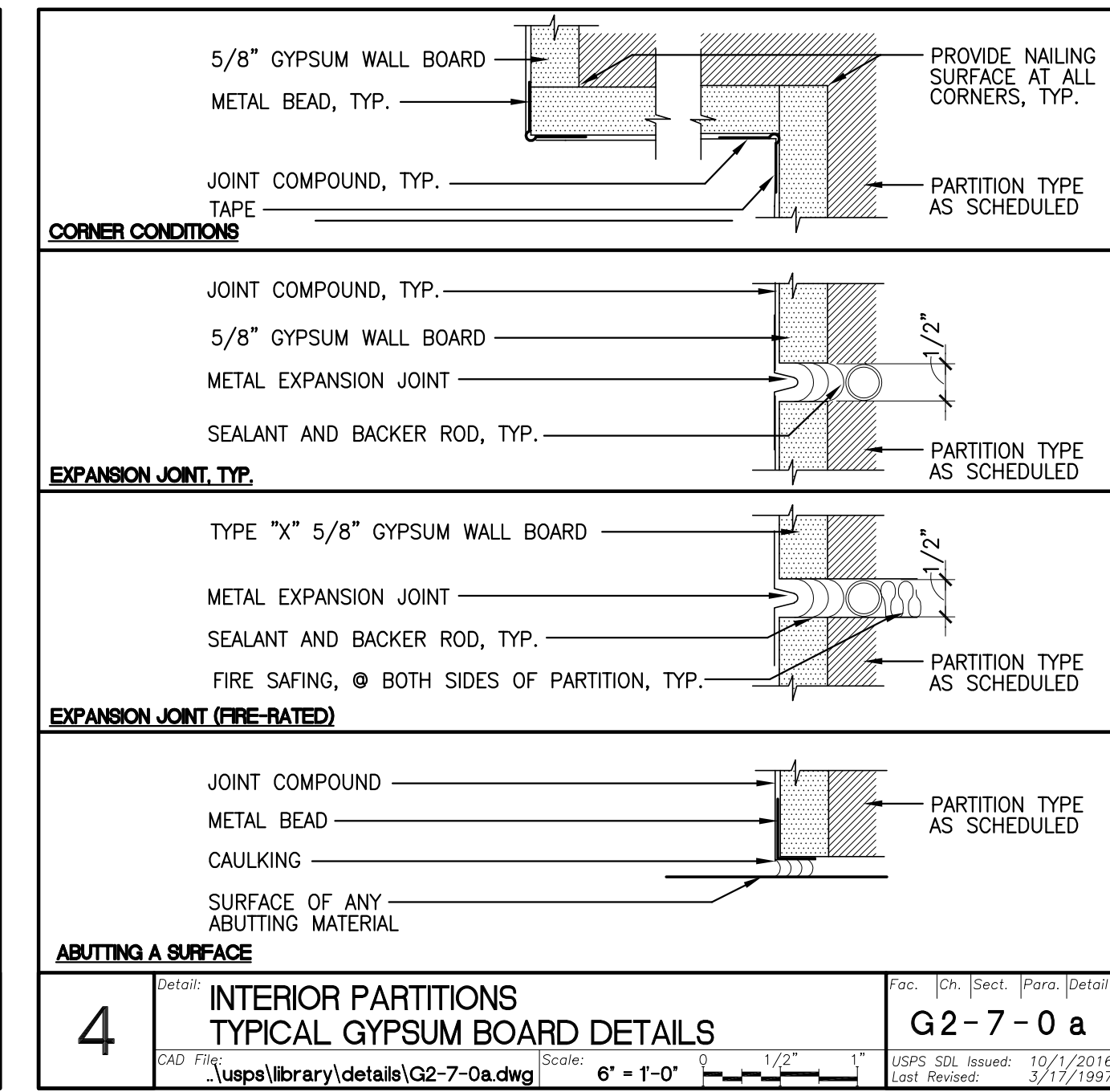
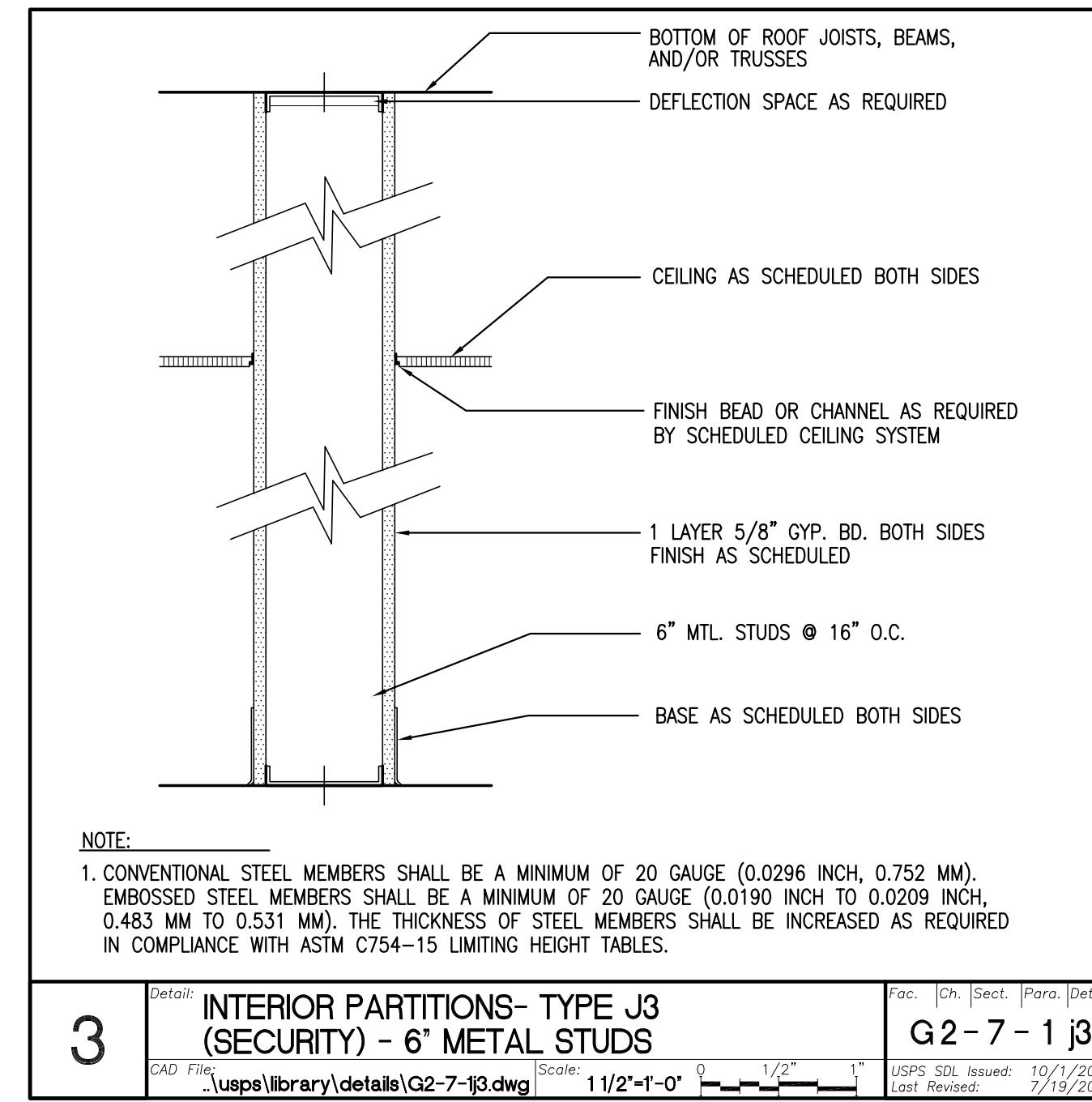
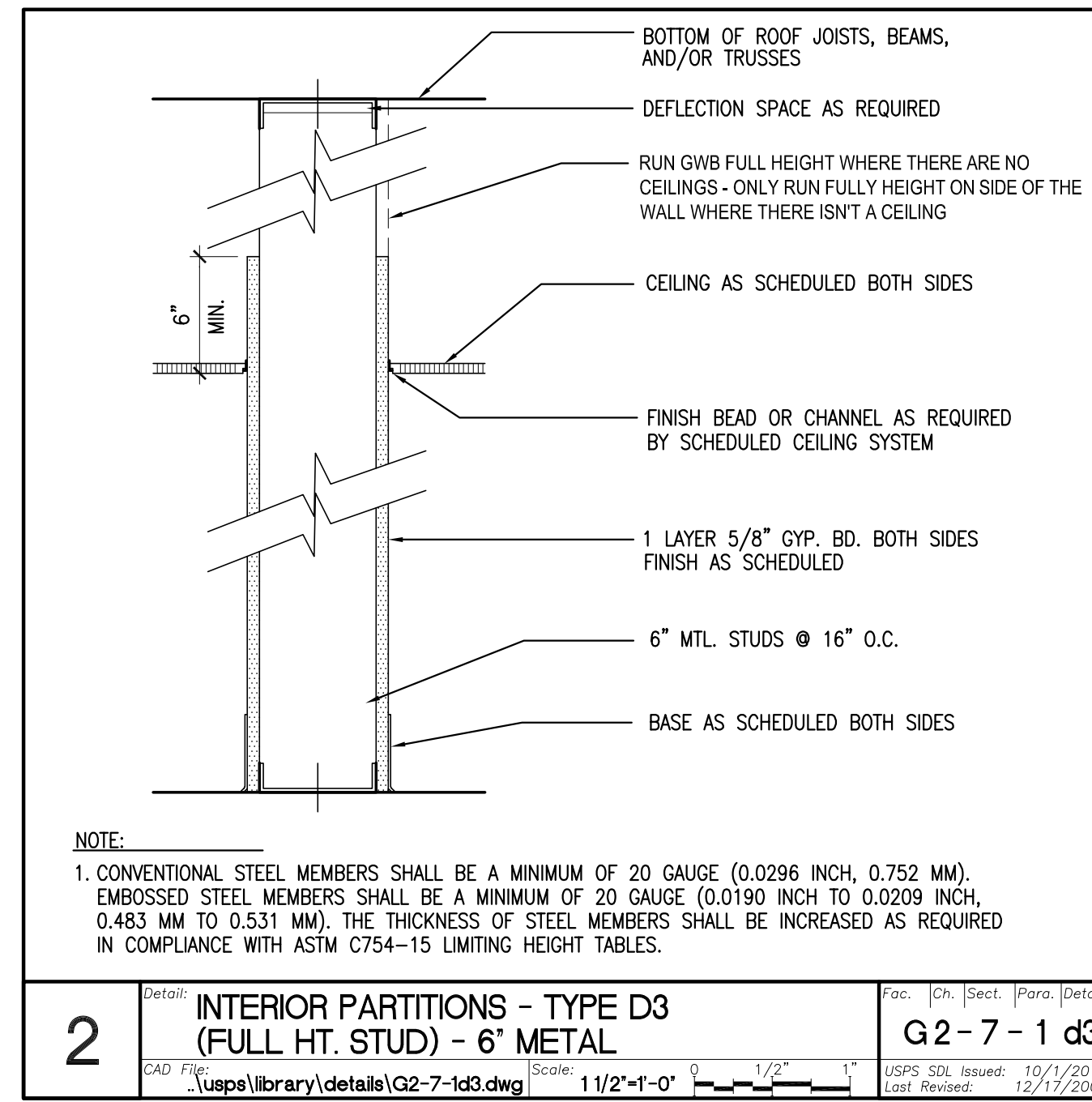
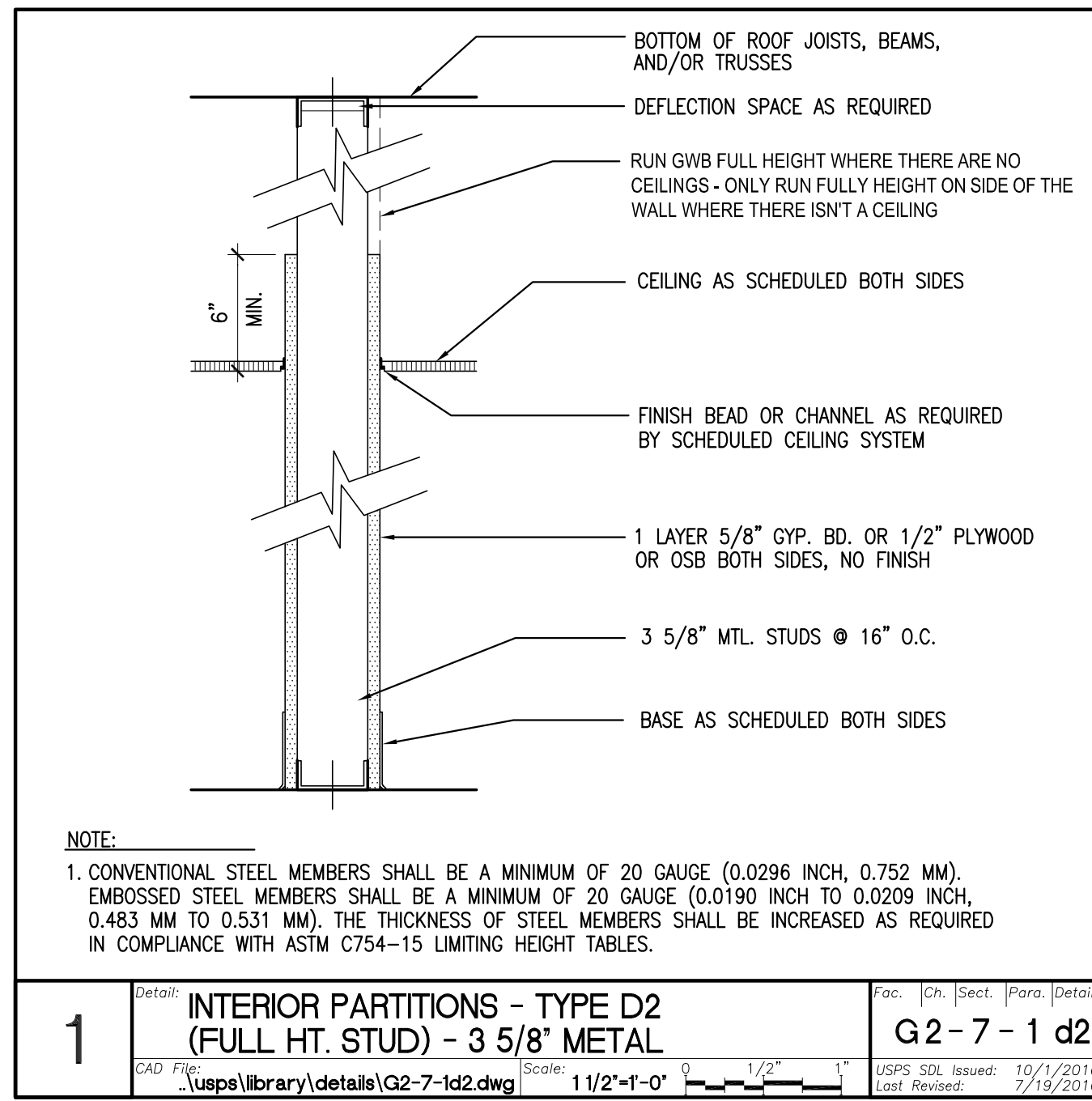




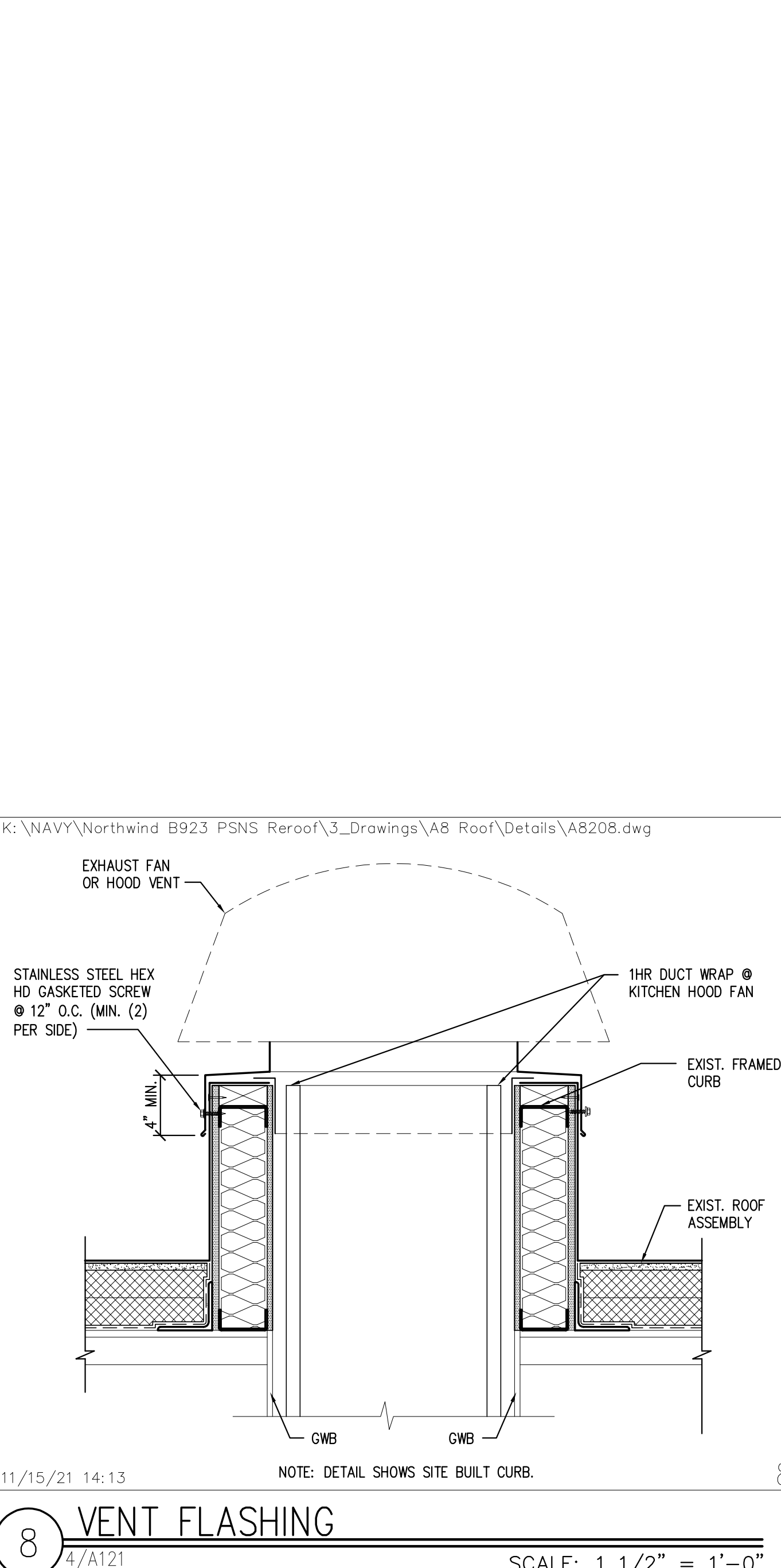
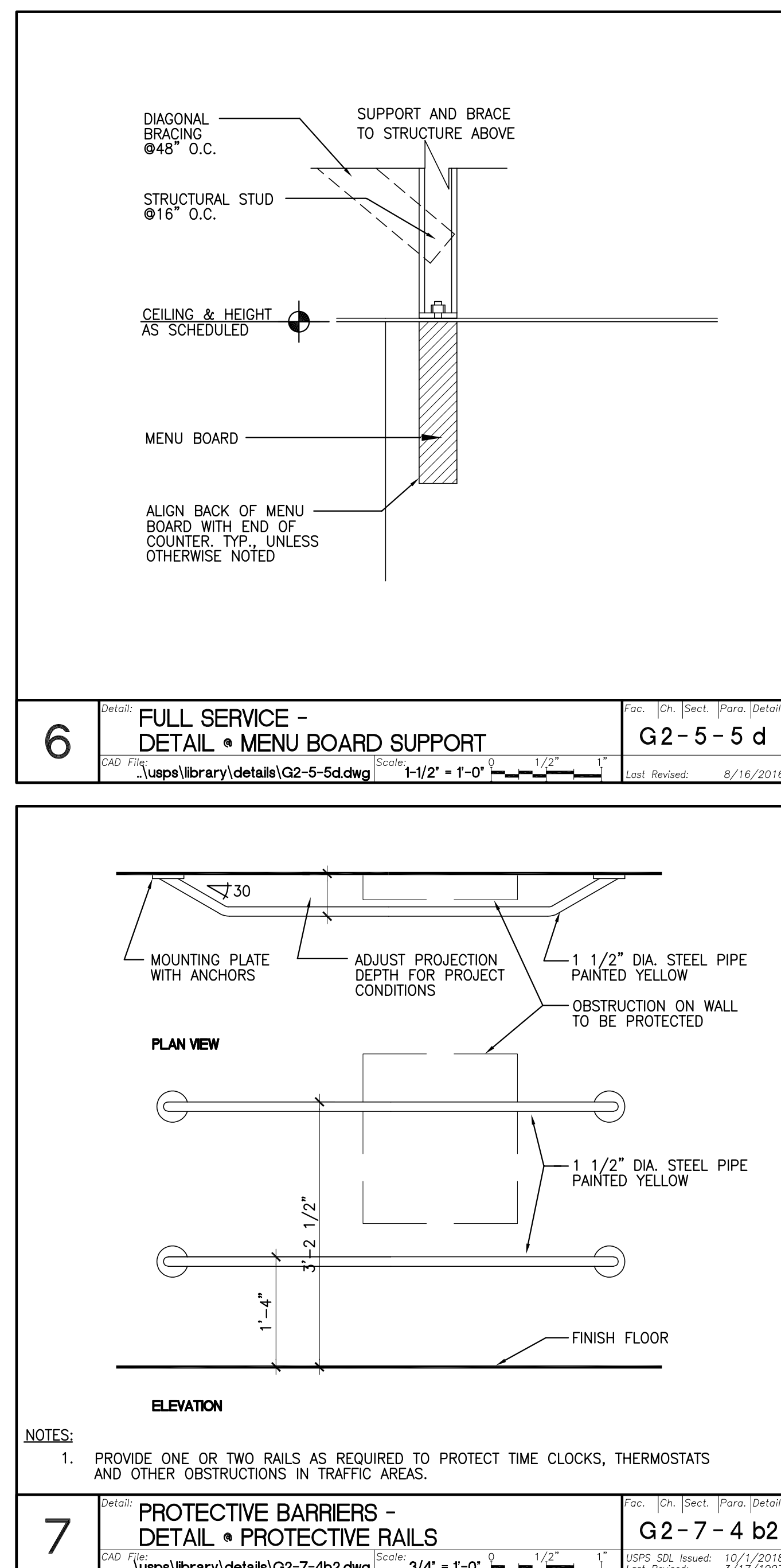
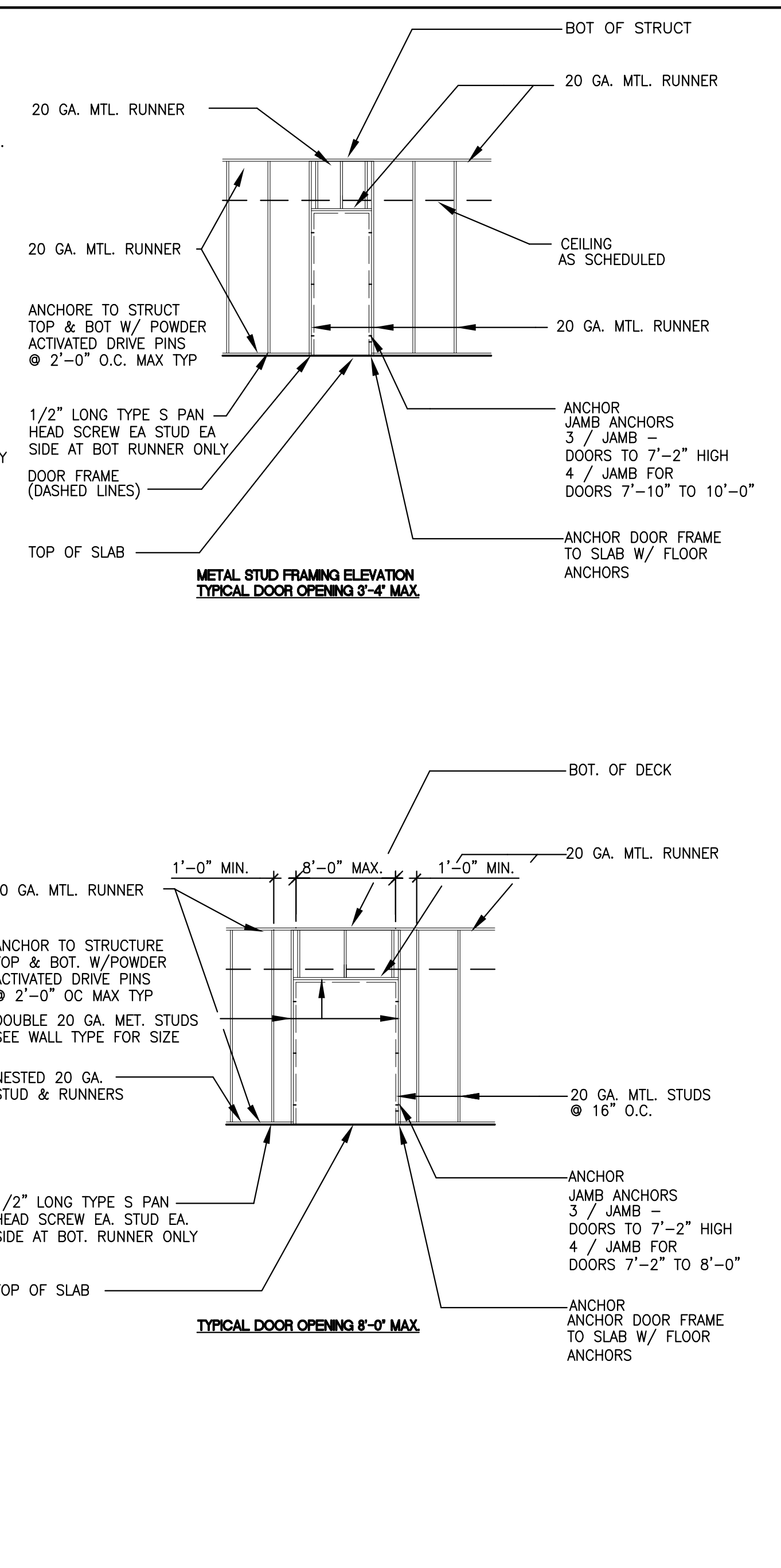
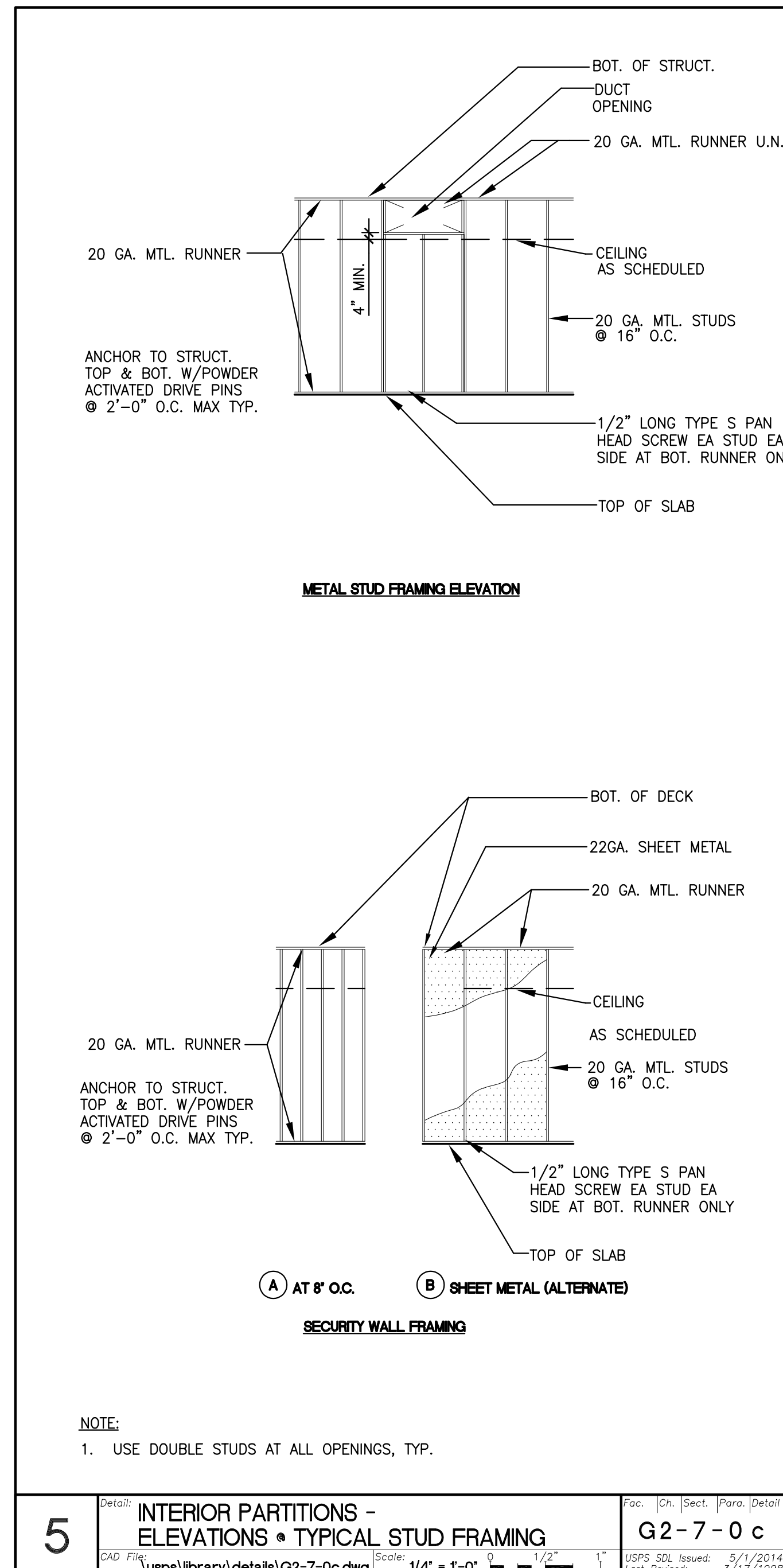
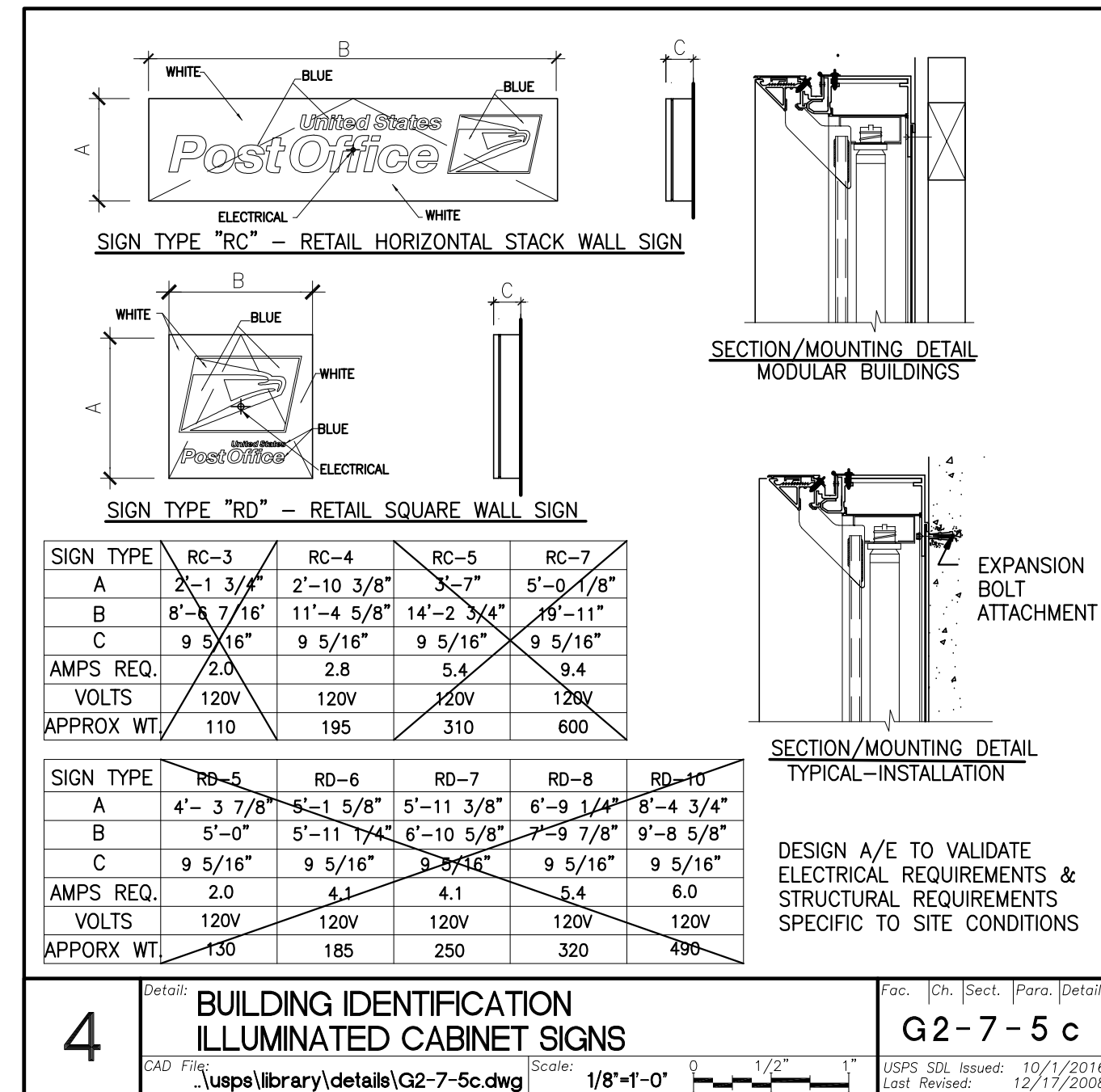
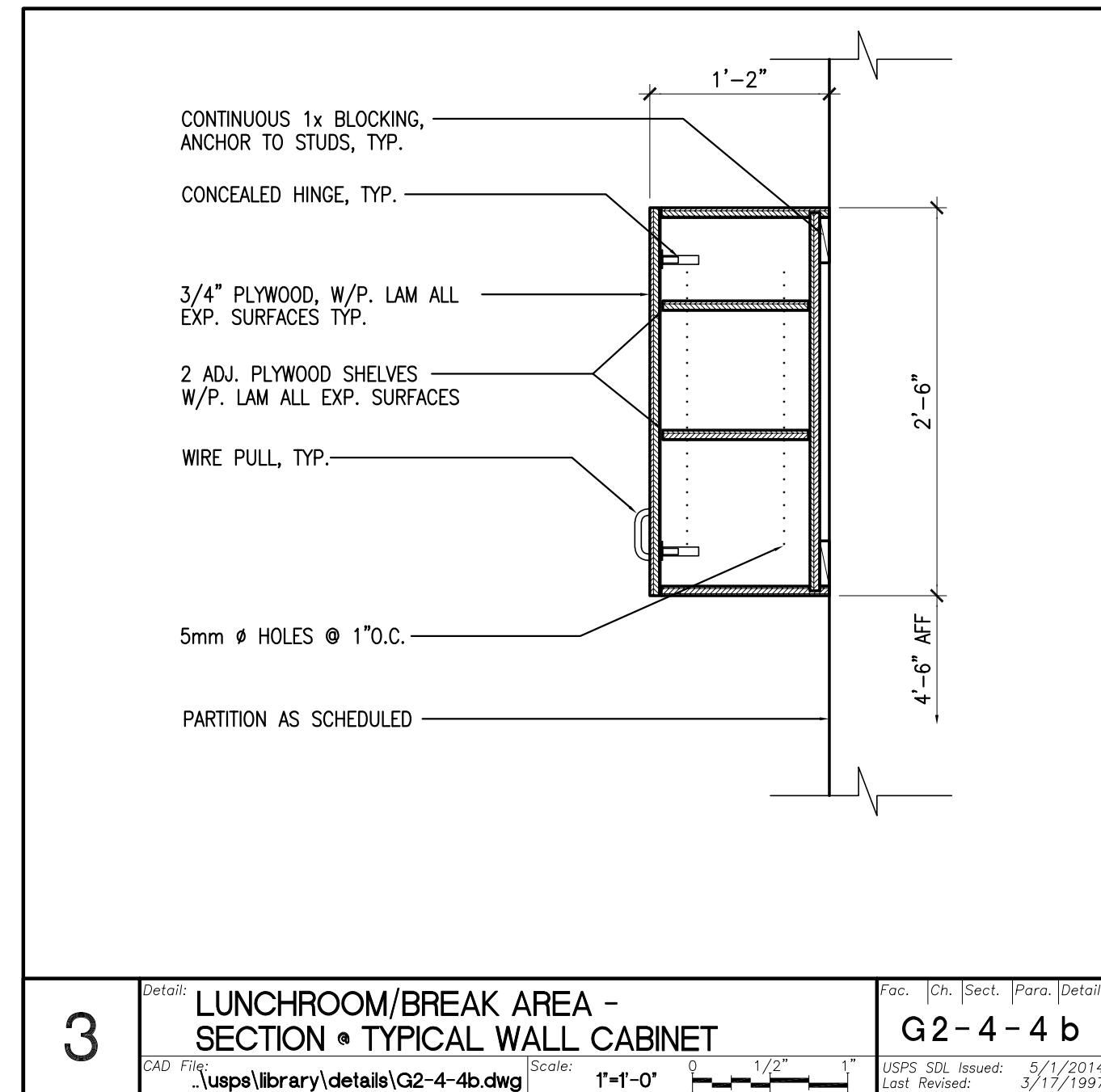
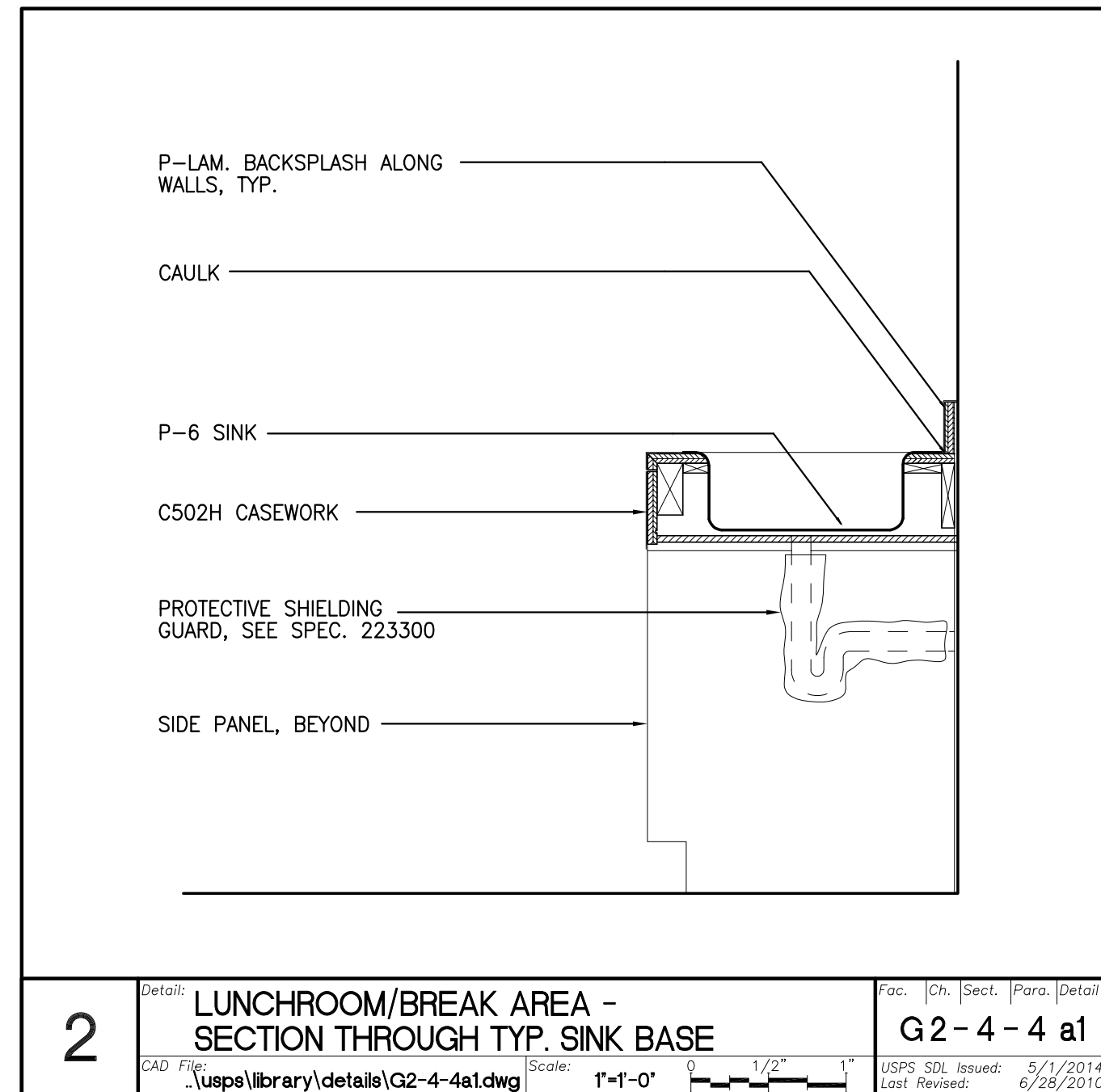
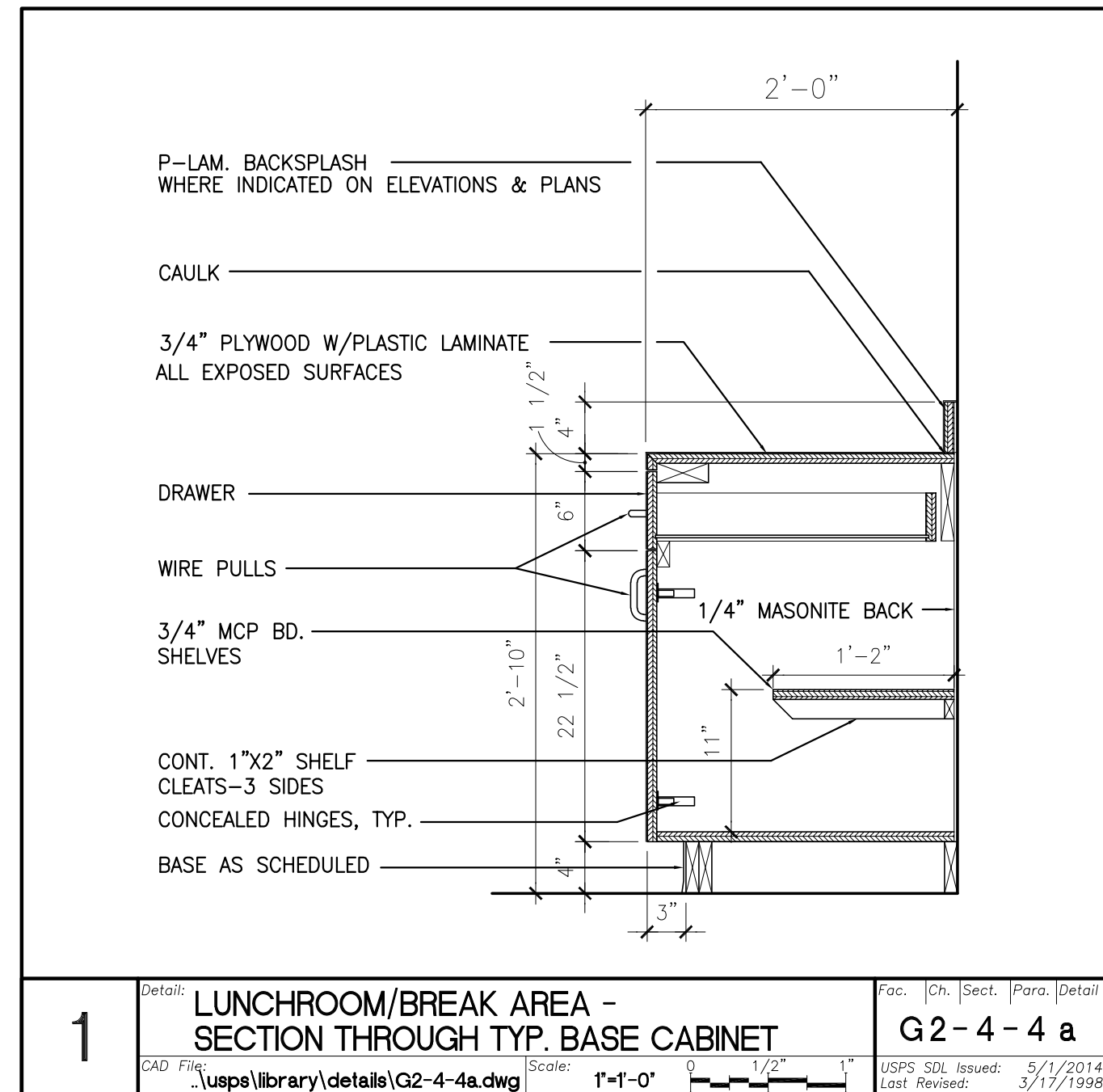
NO.	SIZE		DOOR			FRAME			DETAIL REFERENCE			HDW.	SIGNAGE	REMARKS	
	WIDTH	HEIGHT	THICK.	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	HEAD	JAMB				THRESH.
01	3'-0"	7'-0"	-	B	AL	FF	B	AL	FF	8/A6.1	8/A6.1	2A/A6.1	1	X	BOX LOBBY / EXTERIOR
02	8'-4"	8'-0"	-	J	METAL	FF	-	-	FF	5/A6.1	9/A6.3	N/A	15		BOX LOBBY / LOBBY FOLDING CLOSURE
02A	1'-2"	8'-0"	1 3/4"	A	WOOD	PT	-	-	P-6	-	9/A6.1	N/A	14		FOLDING CLOSURE POCKET
03	3'-0"	7'-0"	1 3/4"	A	WOOD	PT	A	HM	P-6	7/A6.1	7/A6.1	N/A	4	X	SERVICE LINE / WORKROOM
04	3'-0"	7'-0"	1 3/4"	F	WOOD	PT	A	HM	P-6	7/A6.1	7/A6.1	N/A	17	X	SERVICE LINE / WORKROOM
05	3'-0"	7'-0"	1 3/4"	EXIST	HM	P-6	EXIST	HM	P-6	N/A	N/A	N/A	?	X	WORKROOM / EXTERIOR
06A	4'-0"	7'-0"	1 3/4"	F	HM	P-6	A	HM	P-6	9/A6.3	2A/A6.1	7	X	MAIL VESTIBULE / EXTERIOR	
06B	4'-0"	7'-0"	1 3/4"	F	HM	P-6	A	HM	P-6	7/A6.1	7/A6.1	N/A	8	X	WORKROOM / MAIL VESTIBULE
07	3'-0"	7'-0"	1 3/4"	EXIST	SCW	P-6	EXIST	WD	P-6	N/A	N/A	N/A	?	X	TOILET INSTALL NEW LOCKSET IN EXISTING DOOR
08	3'-0"	7'-0"	1 3/4"	EXIST	SCW	P-6	EXIST	WD	P-6	N/A	N/A	N/A	?	X	TOILET INSTALL NEW LOCKSET IN EXISTING DOOR
09	3'-0"	7'-0"	1 3/4"	A	SCW	P-6	A	HM	P-6	7/A6.1	7/A6.1	N/A	12	X	JANITOR
10	3'-0"	7'-0"	1 3/4"	A	SCW	P-6	A	HM	P-6	7/A6.1	7/A6.1	N/A	12	X	I.T.
11	3'-0"	7'-0"	1 3/4"	A	SCW	P-6	A	HM	P-6	7/A6.1	7/A6.1	N/A	13	X	OFFICE

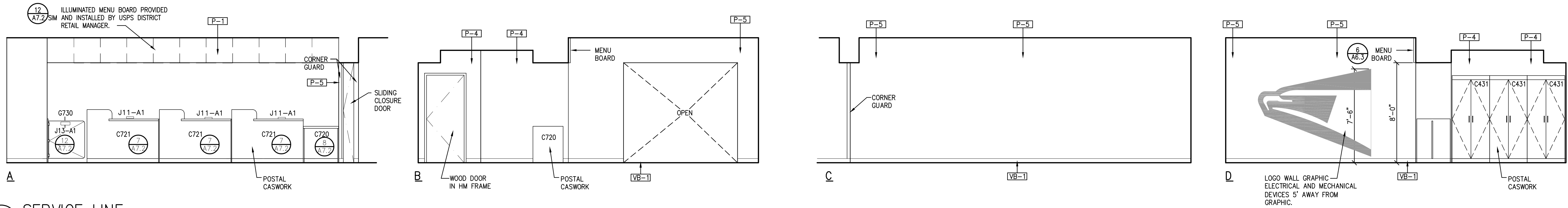
- NOTES:**  
 1. SEE SPECS. FOR DOOR AND FRAME PAINT FINISH.  
 2. SEE SPECS. FOR GLASS TYPE OF DOOR LIGHTS AND SIDELITES.  
 3. ROOM OR EXIT DOOR SIGNAGE REQUIRED. SEE DETAILS 8/A6.2  
 4. DOOR 5 INSTALL NEW CYLINDER FOR POST OFFICE KEYING.  
 5. PER 2015 IBC, SECTION 1010.1.9.1: HARDWARE, DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE BY CHAPTER 11 SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.  
 6. PER 2015 IBC, SECTION 1010.1.9.5: UNLATCHING, THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.  
 7. PROVIDE A MINIMUM OF 0.60 U-VALUE FOR NEW EXTERIOR DOORS.  
 8. FIELD VERIFY SLIDING CLOSURE AND POCKET DIMENSIONS.





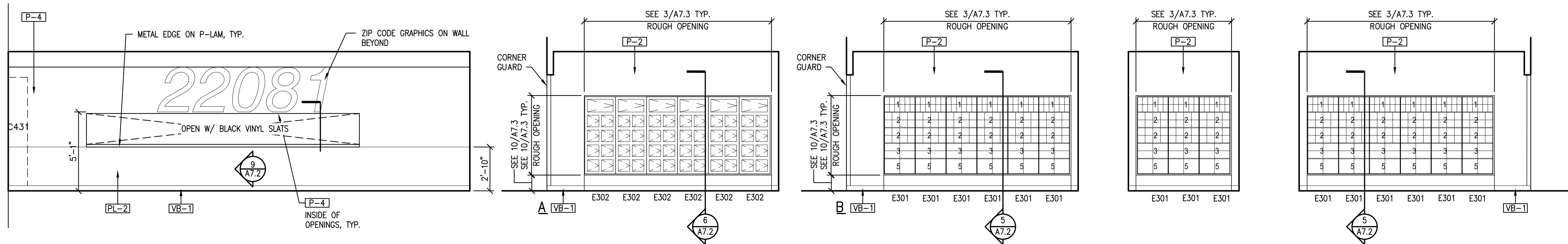






1 SERVICE LINE  
Intr-Elev

SCALE: 1/4" = 1'-0"



2 SERVICE LINE  
Intr-Elev

SCALE: 1/4" = 1'-0"

3 BOX LOBBY  
Intr-Elev

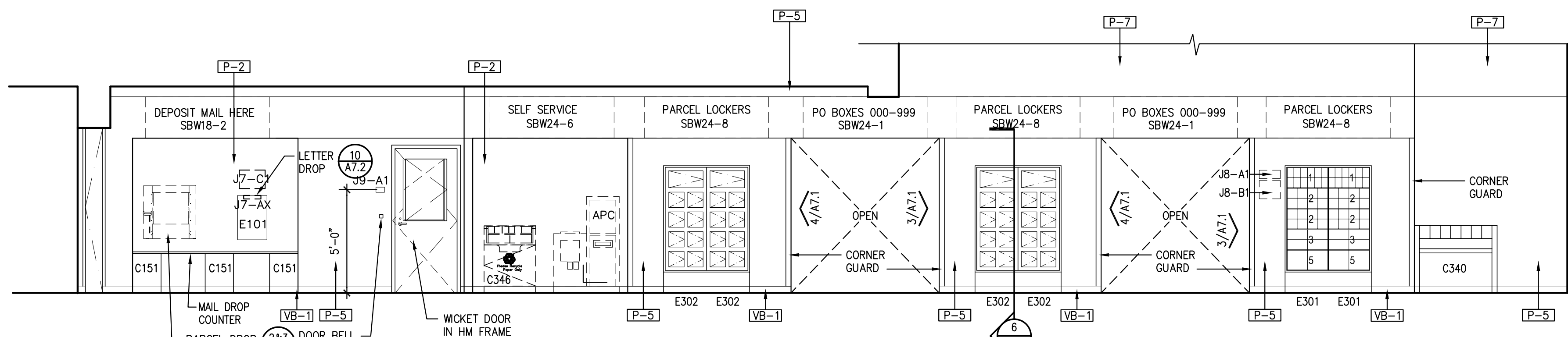
SCALE: 1/4" = 1'-0"

4 BOX LOBBY  
Intr-Elev

SCALE: 1/4" = 1'-0"

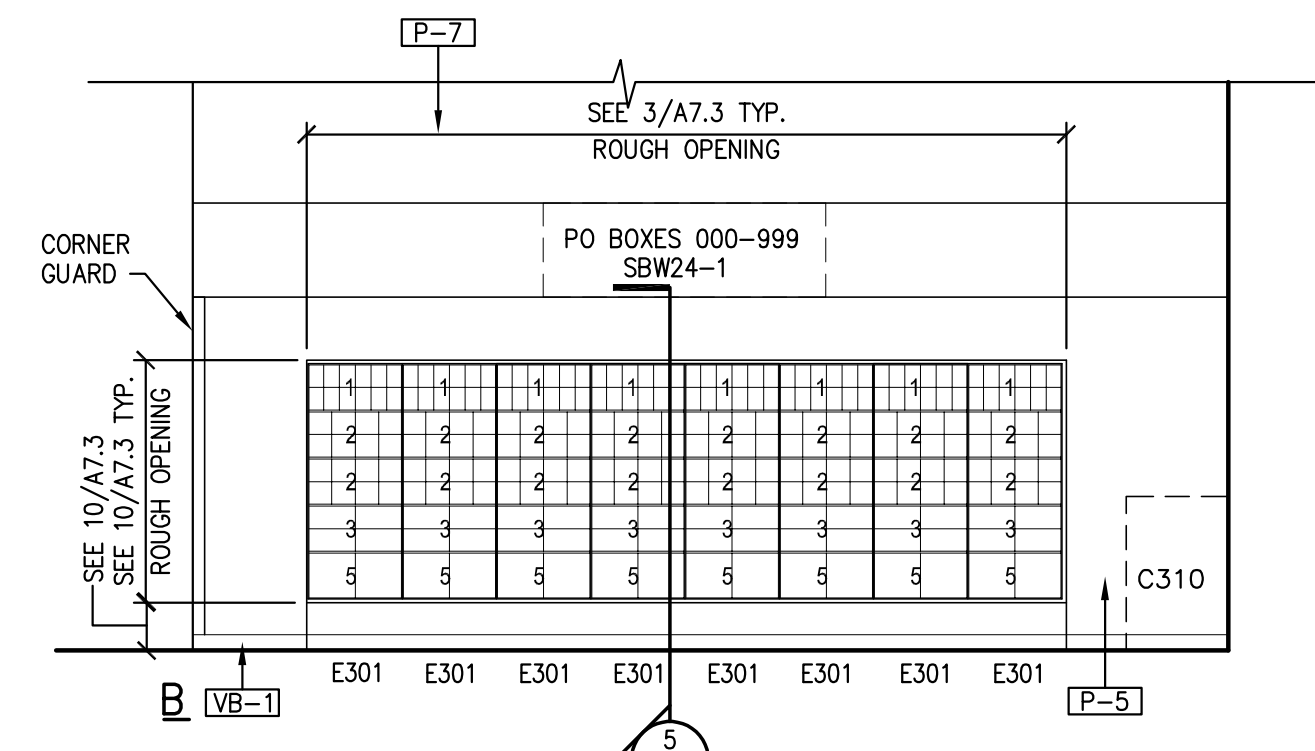
5 BOX LOBBY  
Intr-Elev

SCALE: 1/4" = 1'-0"



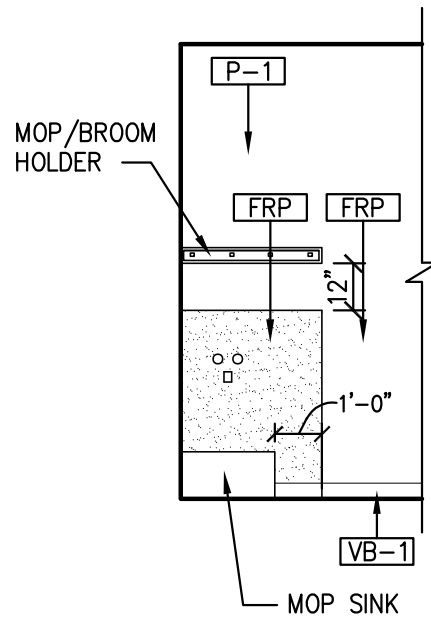
6 BOX LOBBY  
Intr-Elev

SCALE: 1/4" = 1'-0"



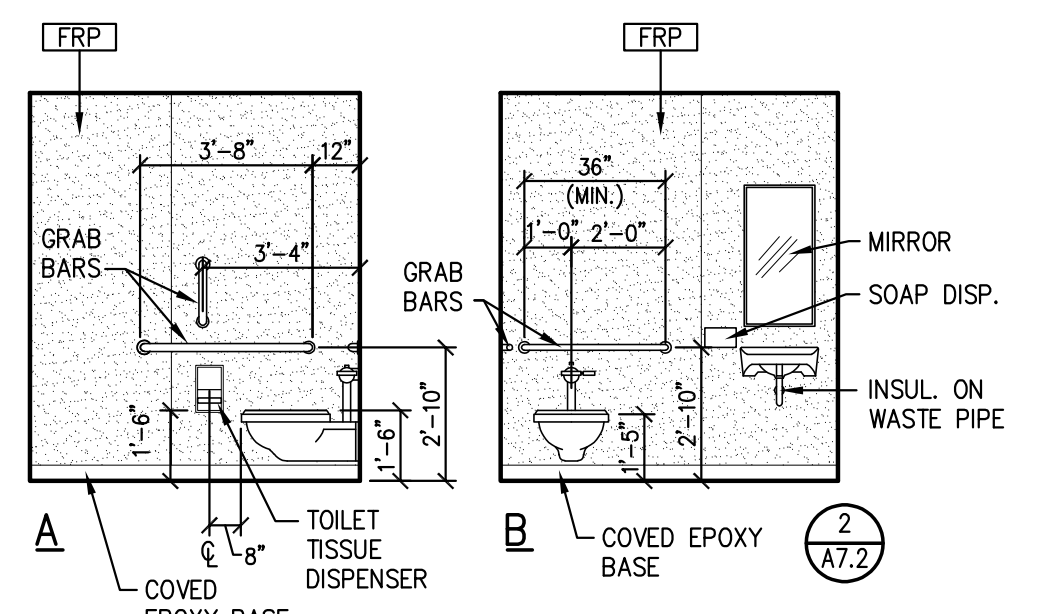
7 BOX LOBBY  
Intr-Elev

SCALE: 1/4" = 1'-0"



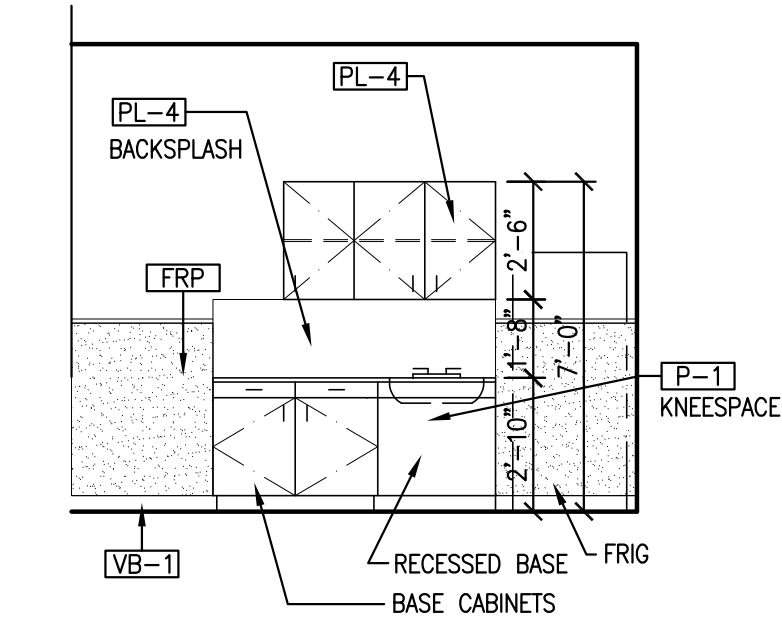
9 CUSTODIAN  
Intr-Elev

SCALE: 1/4" = 1'-0"



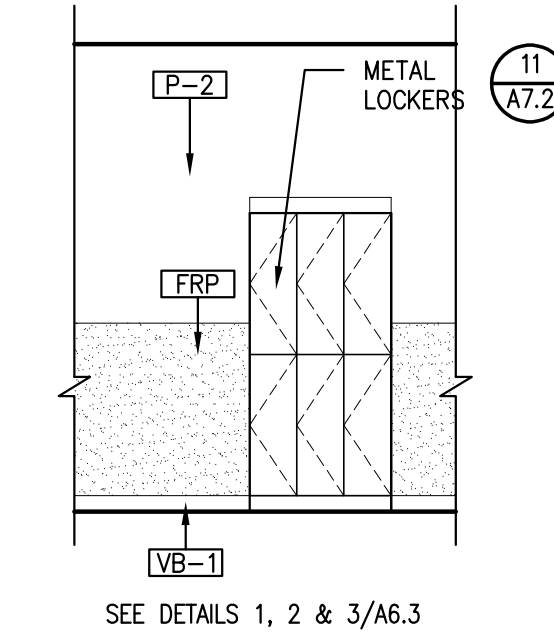
10 TOILET  
Intr-Elev

SCALE: 1/4" = 1'-0"



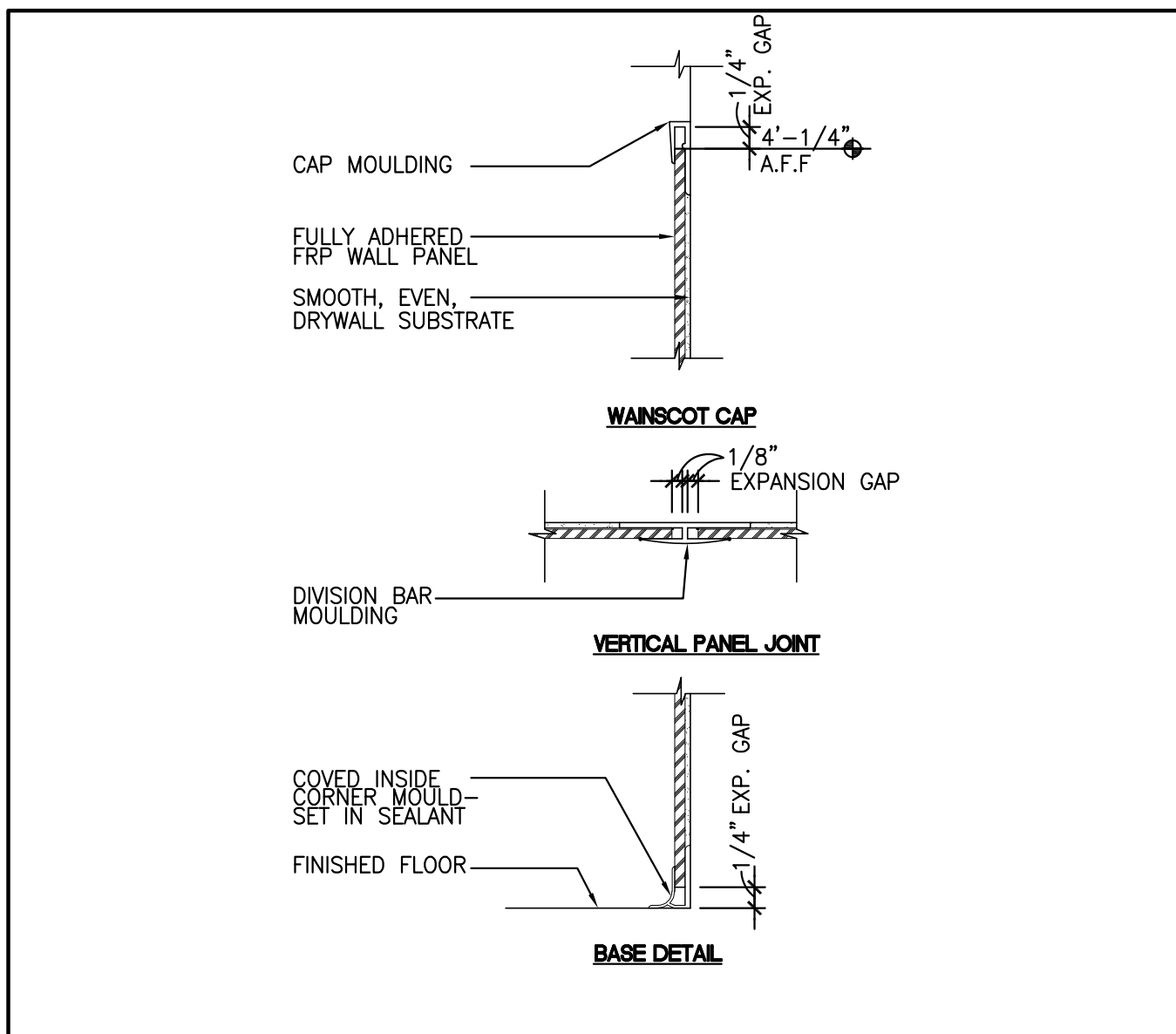
11 BREAK  
Intr-Elev

SCALE: 1/4" = 1'-0"

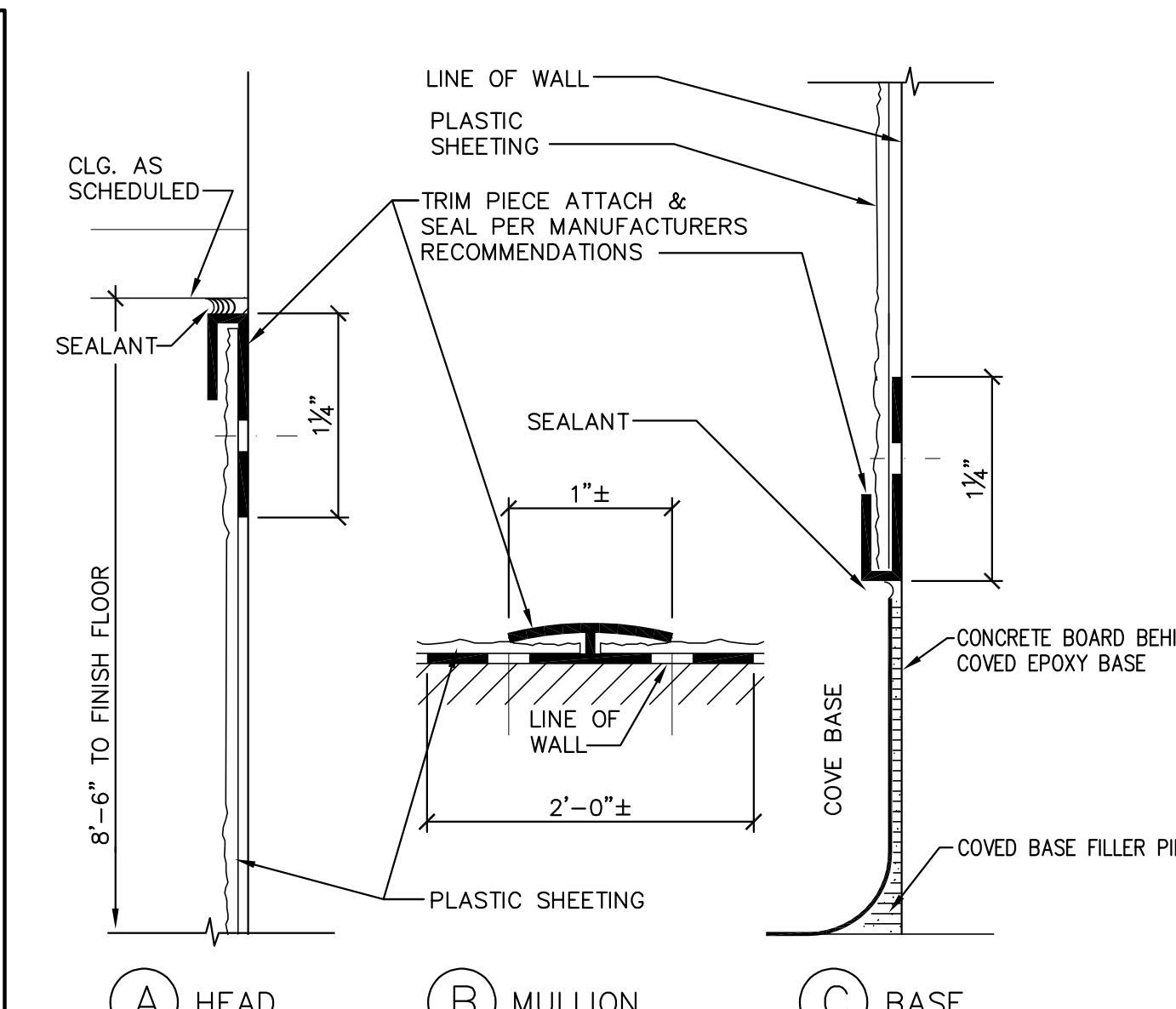


12 LOCKERS  
Intr-Elev

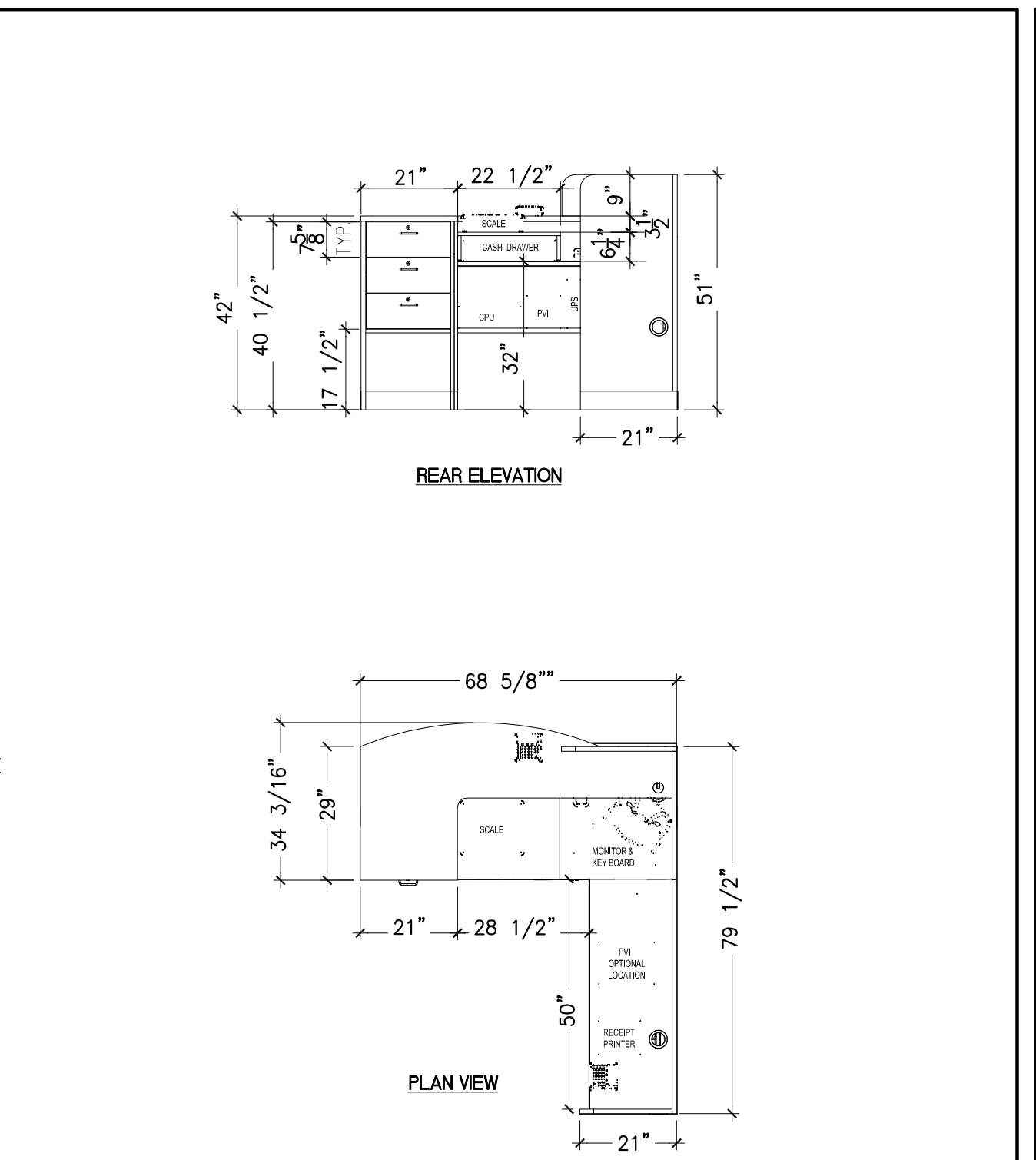
SCALE: 1/4" = 1'-0"



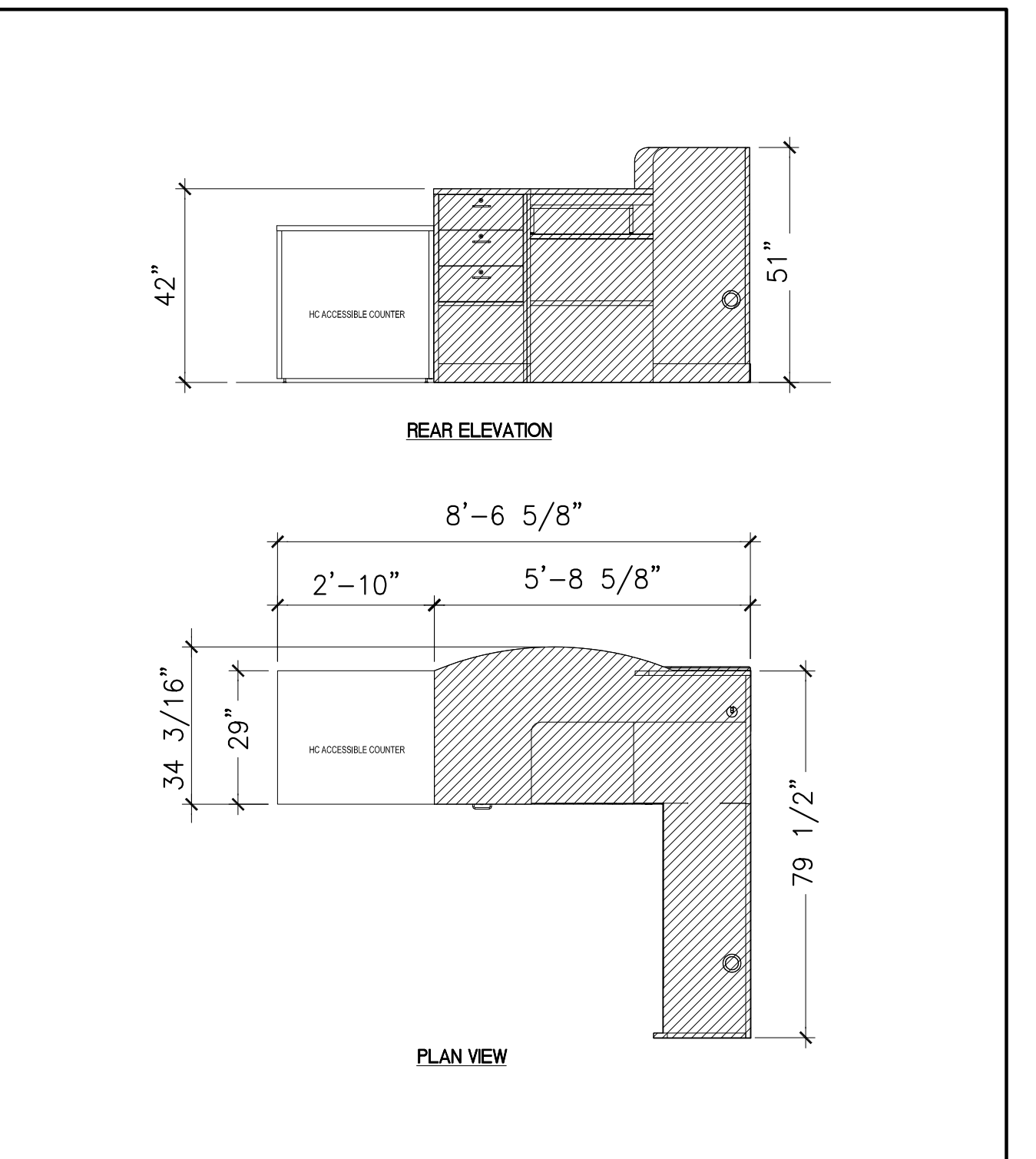
**1** Detail: PROTECTIVE BARRIERS - FIBERGLASS REINFORCED PLASTIC (FRP) PANEL DETAIL G2-7-4 e3  
 CAD File: \usps\library\details\G2-7-0a.dwg Scale: 6\"/>



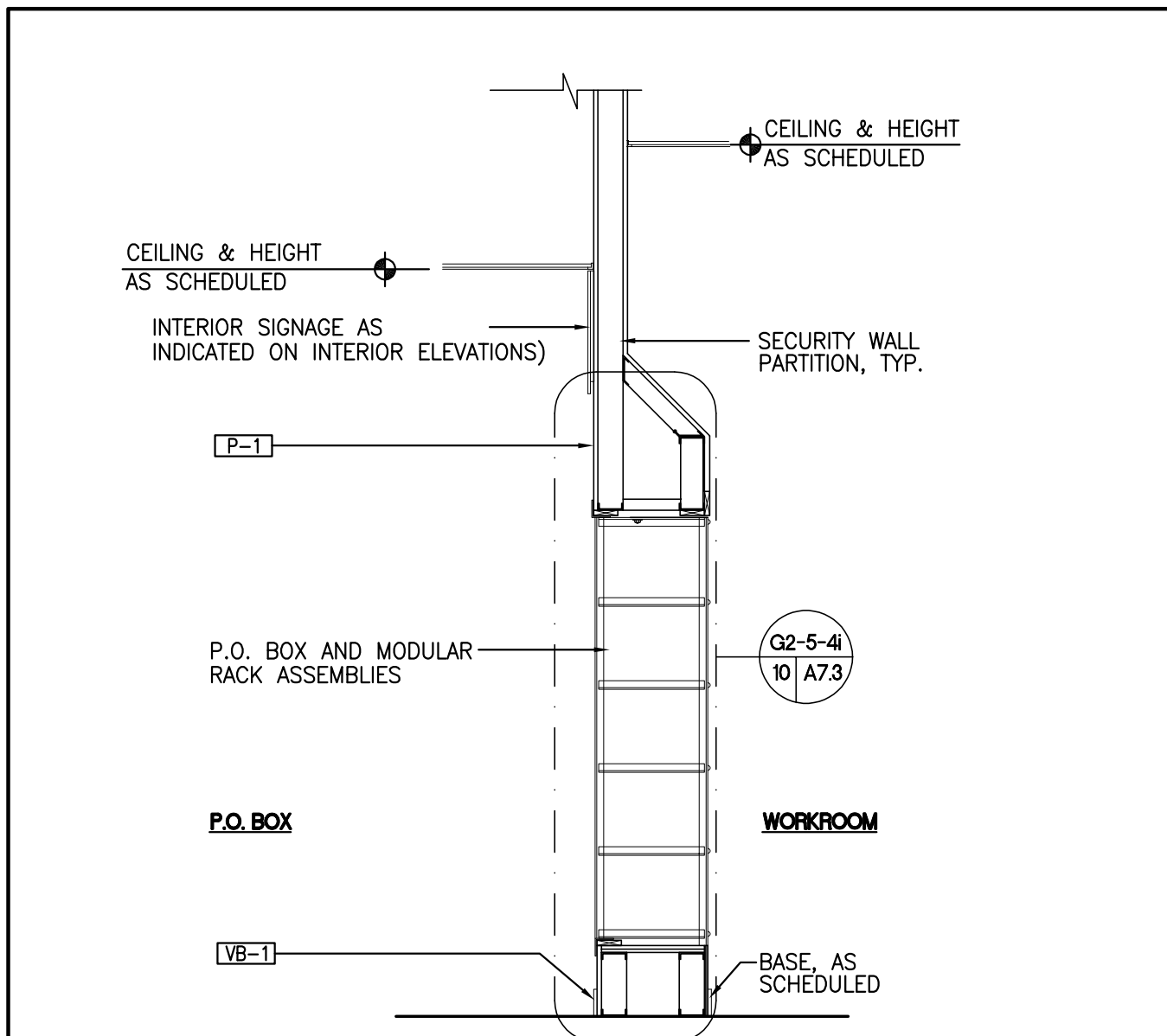
**2** (A) HEAD (B) MULLION (C) BASE  
 FRP TRIM DETAILS AT TOILET ROOMS  
 WAL0155A SCALE: N.T.S.



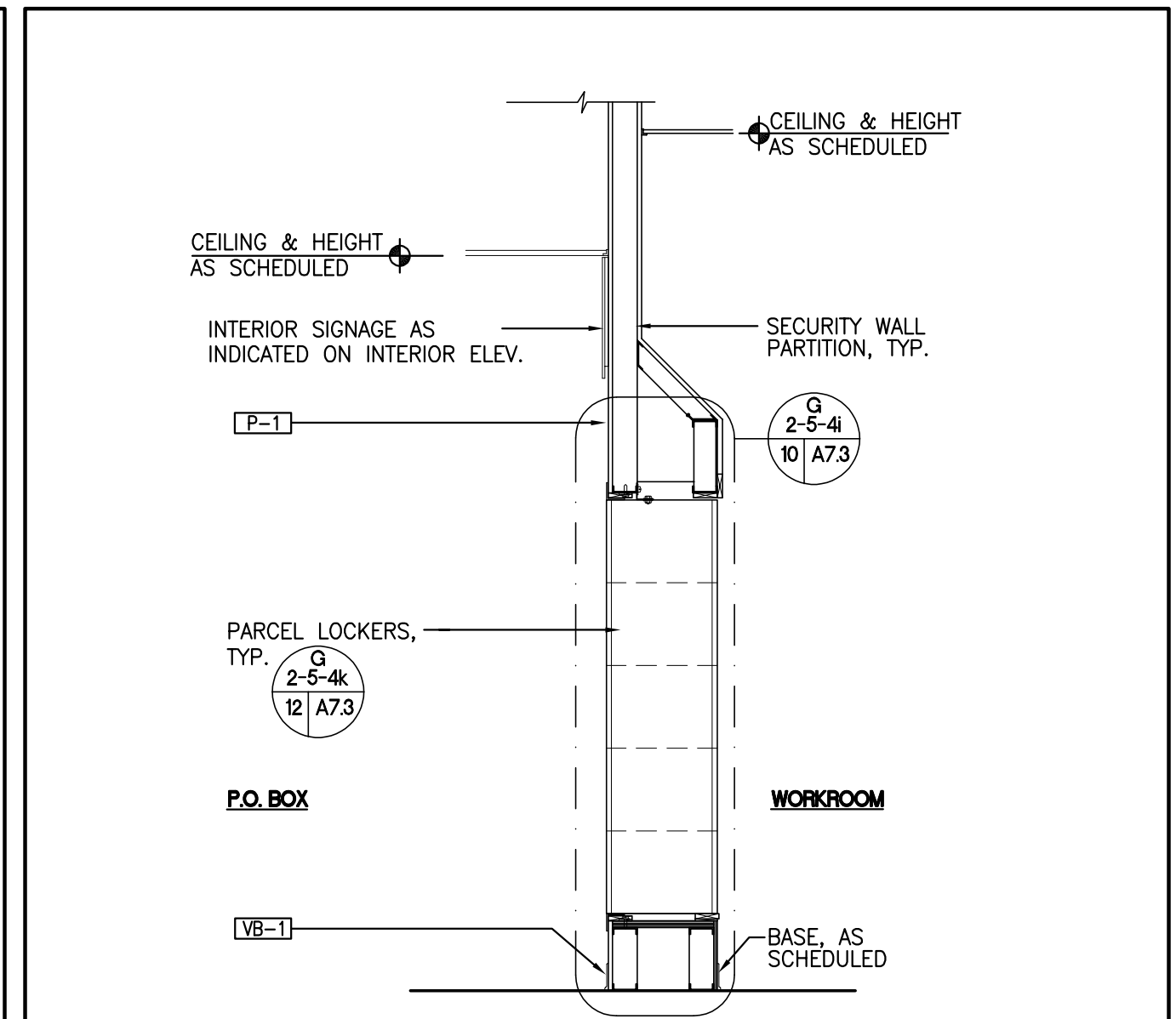
**7** Detail: FULL SERVICE STANDARD FULL SERVICE COUNTER (E401) G2-5-5 a  
 CAD File: \usps\library\details\G2-5-5a.dwg Scale: 3/8\"/>



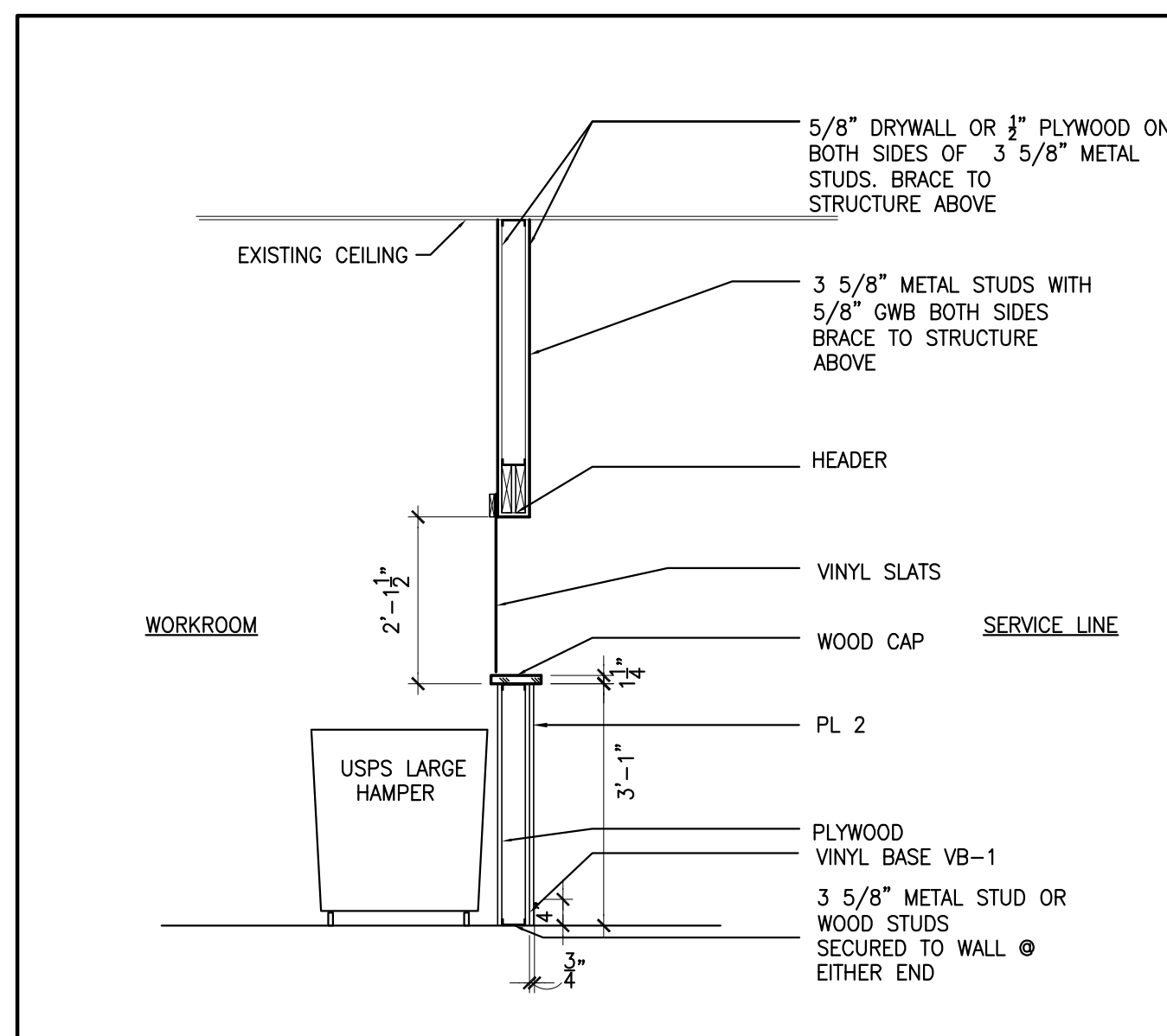
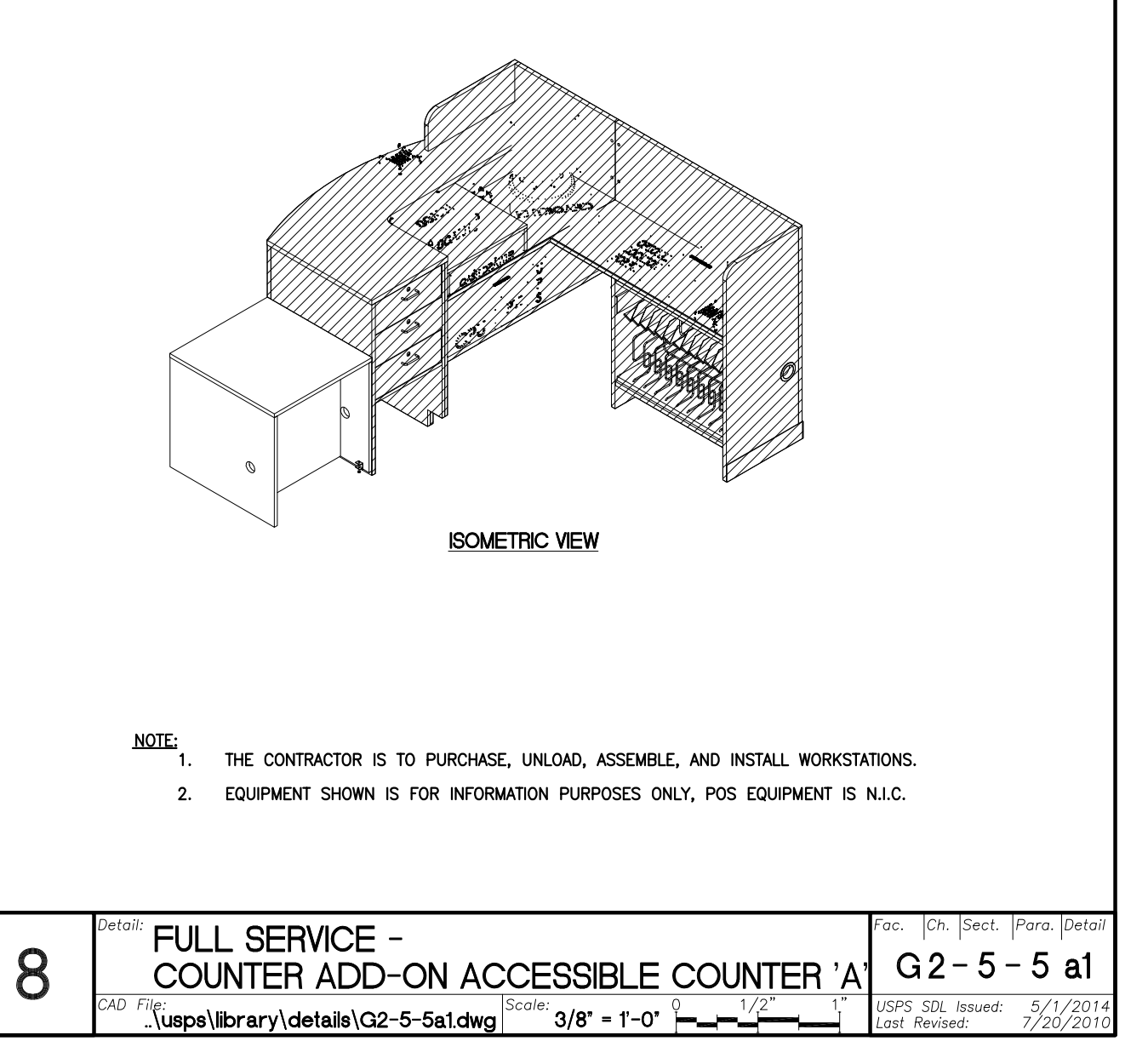
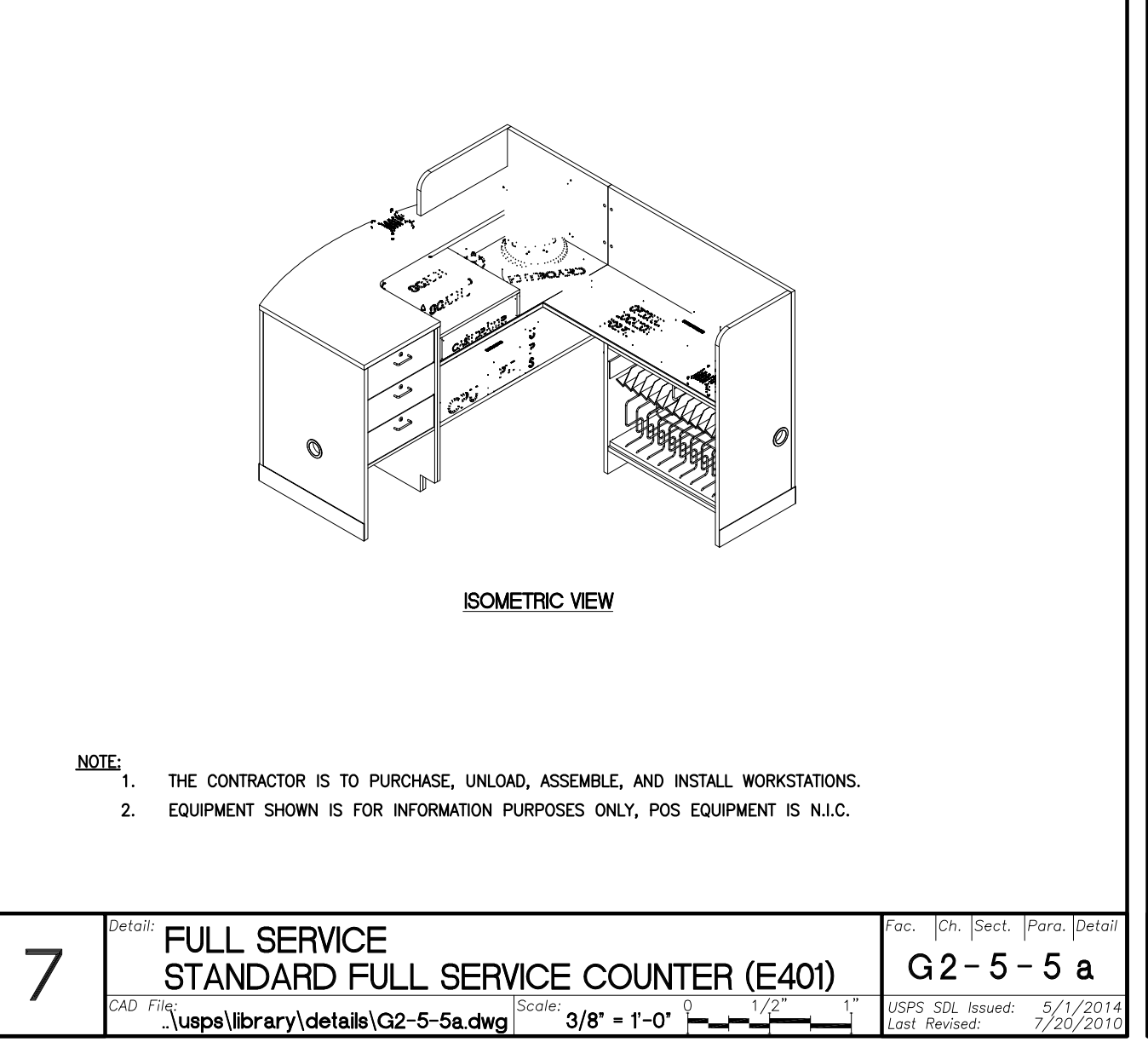
**8** Detail: FULL SERVICE COUNTER ADD-ON ACCESSIBLE COUNTER 'A' G2-5-5 a1  
 CAD File: \usps\library\details\G2-5-5a1.dwg Scale: 3/8\"/>



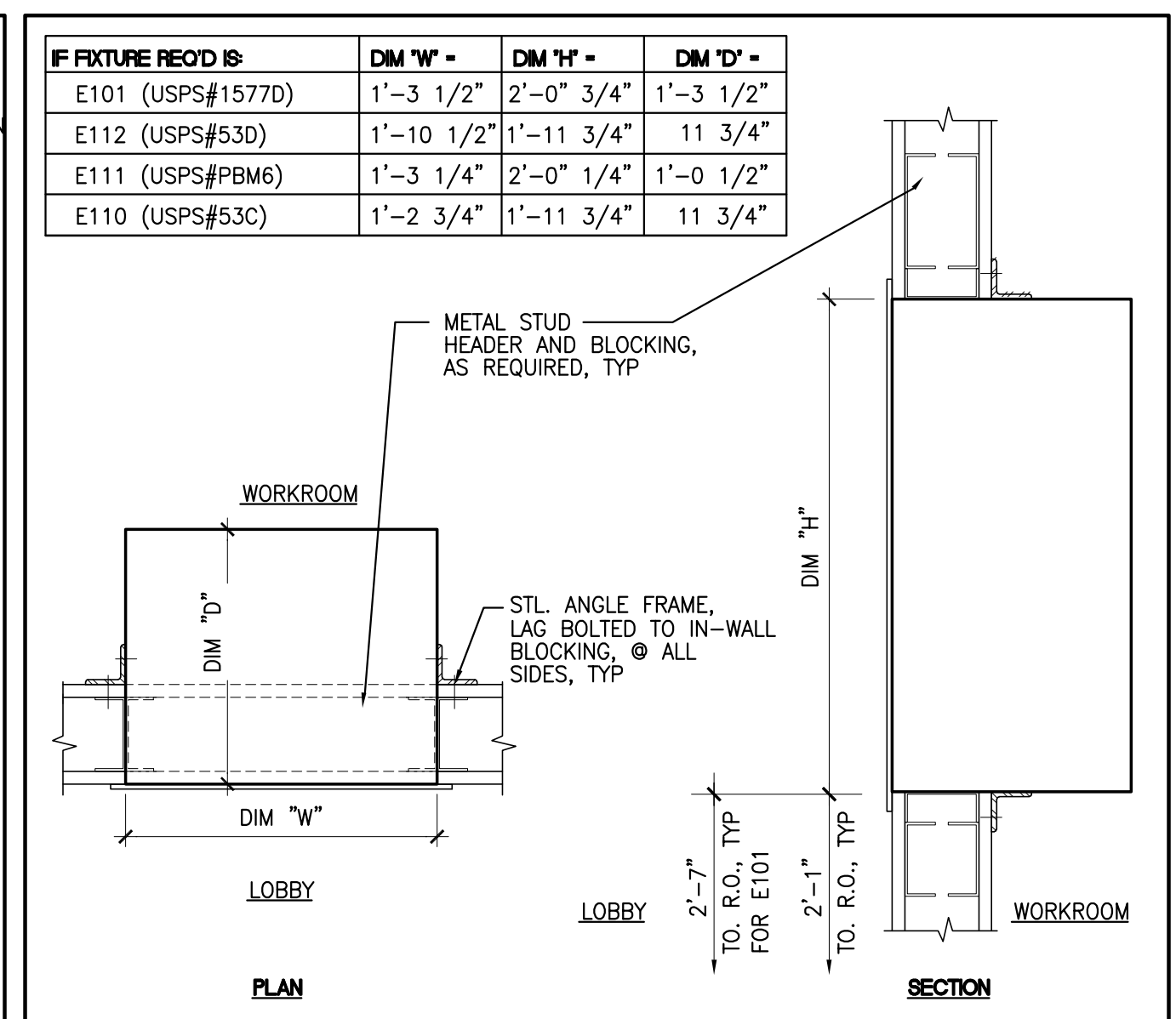
**5** Detail: P.O. BOX - SECTION P.O. BOXES G2-5-4 e2  
 CAD File: \usps\library\details\G2-5-4e2.dwg Scale: 1/2\"/>



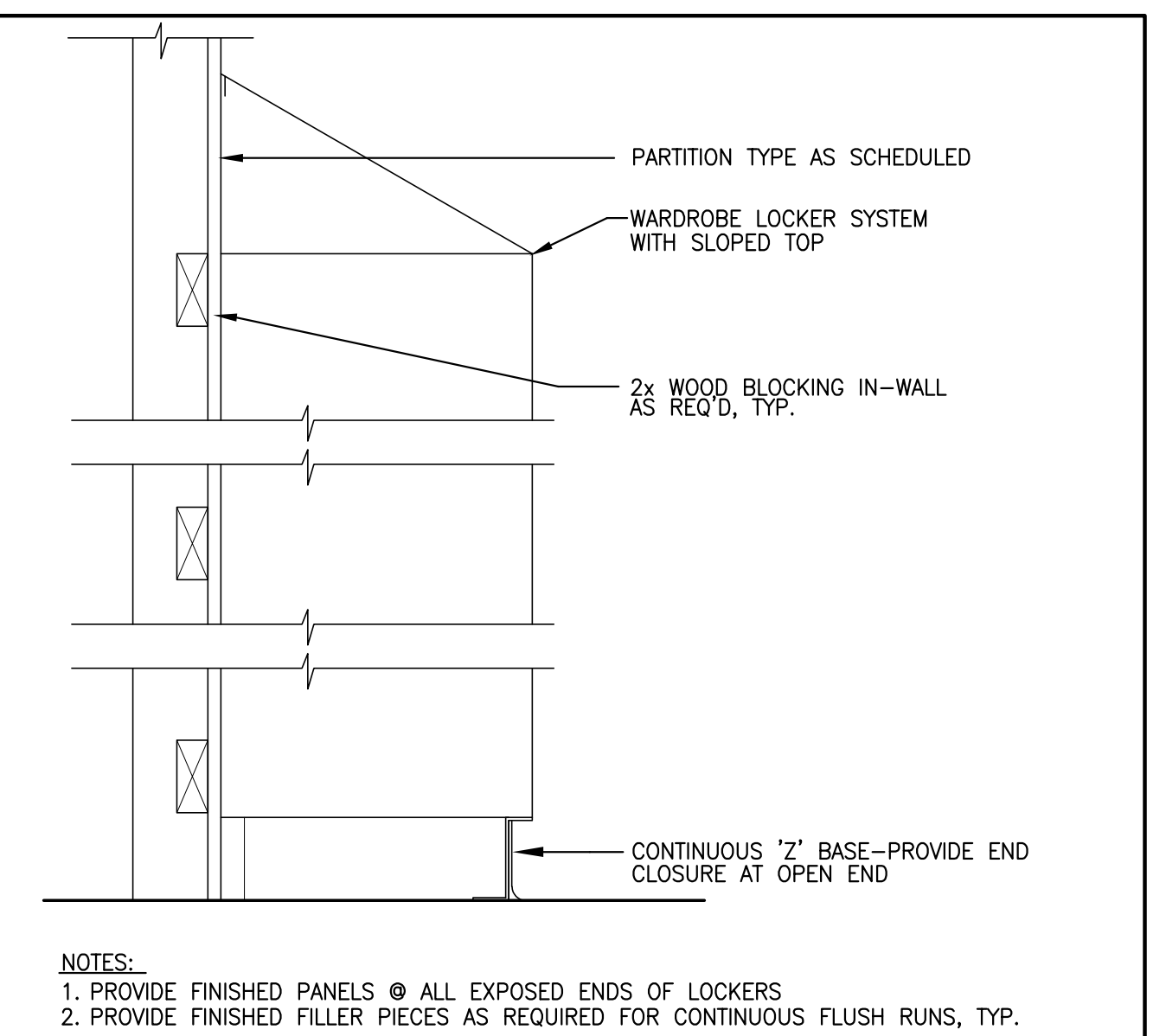
**6** Detail: P.O. BOX - SECTION PARCEL LOCKERS G2-5-4 h2  
 CAD File: \usps\library\details\G2-5-4h2.dwg Scale: 1/2\"/>



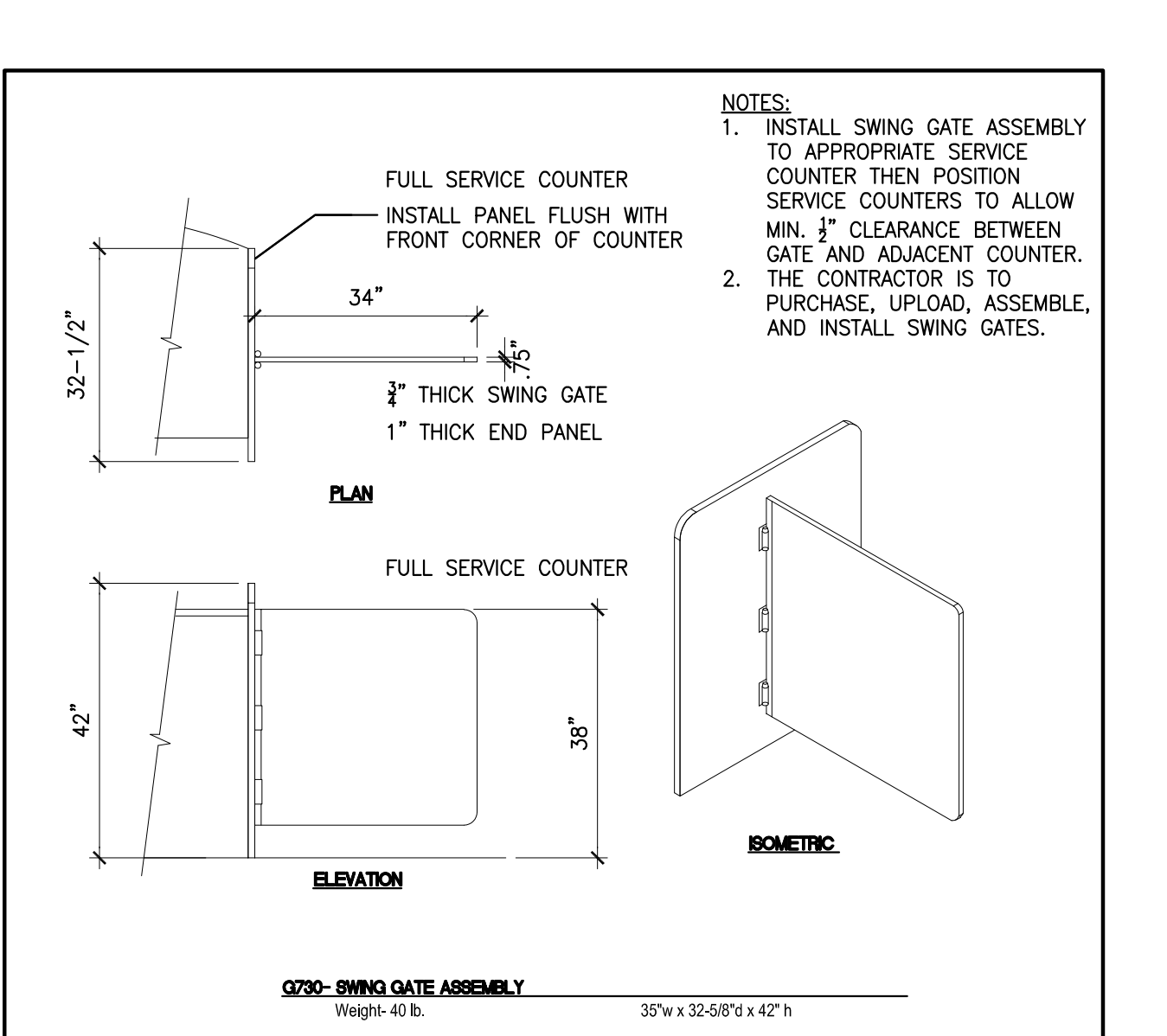
**9** Detail: SECTION - NEW SCREENLINE G2-5-5 e4  
 CAD File: \usps\library\details\G2-5-5e4.dwg Scale: 1/2\"/>



**10** Detail: SELF SERVICE - DETAIL - LETTER DROP - METAL FRAMING G2-5-2 d  
 CAD File: \usps\library\details\G2-5-2d.dwg Scale: 1/2\"/>

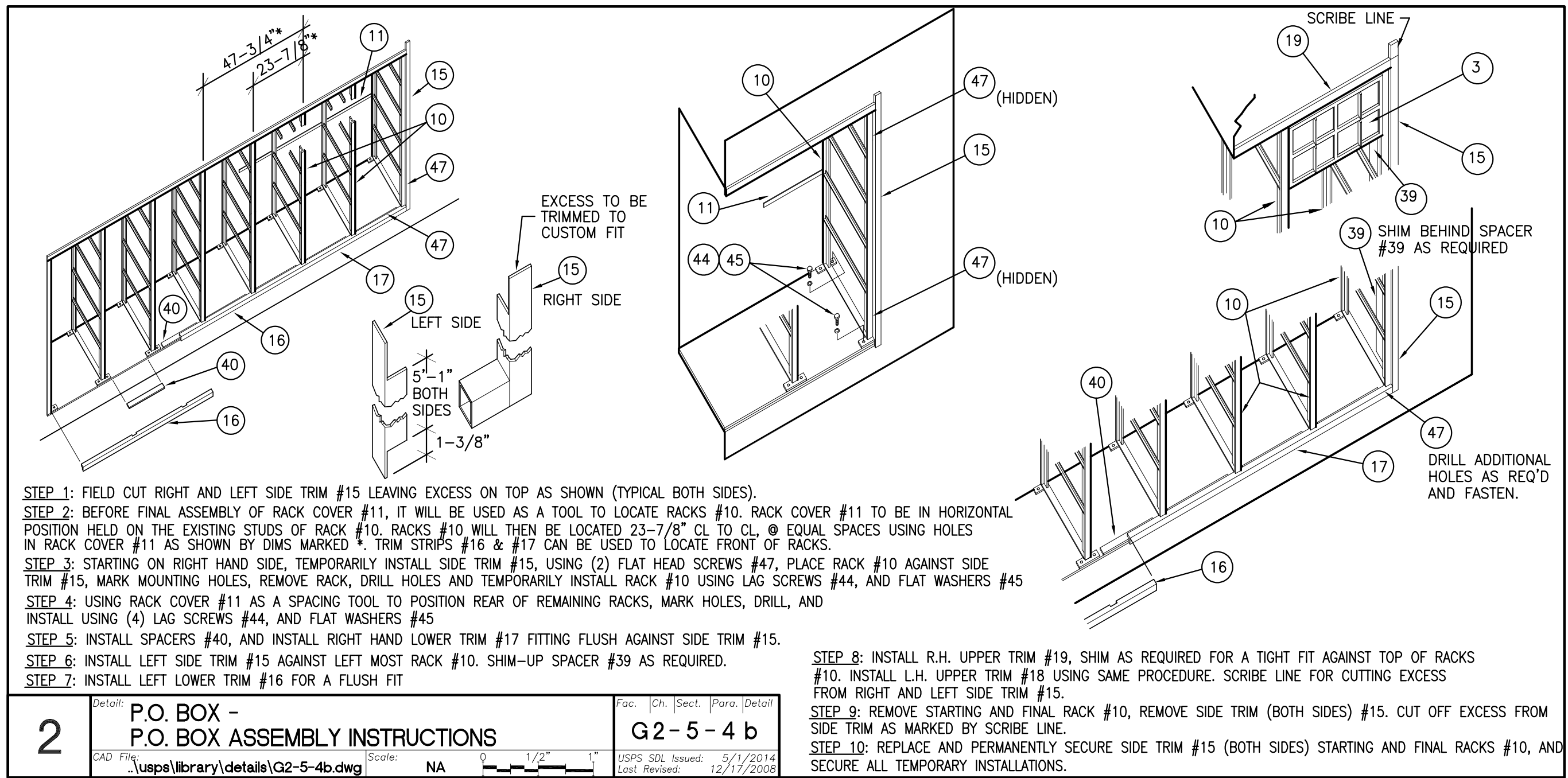
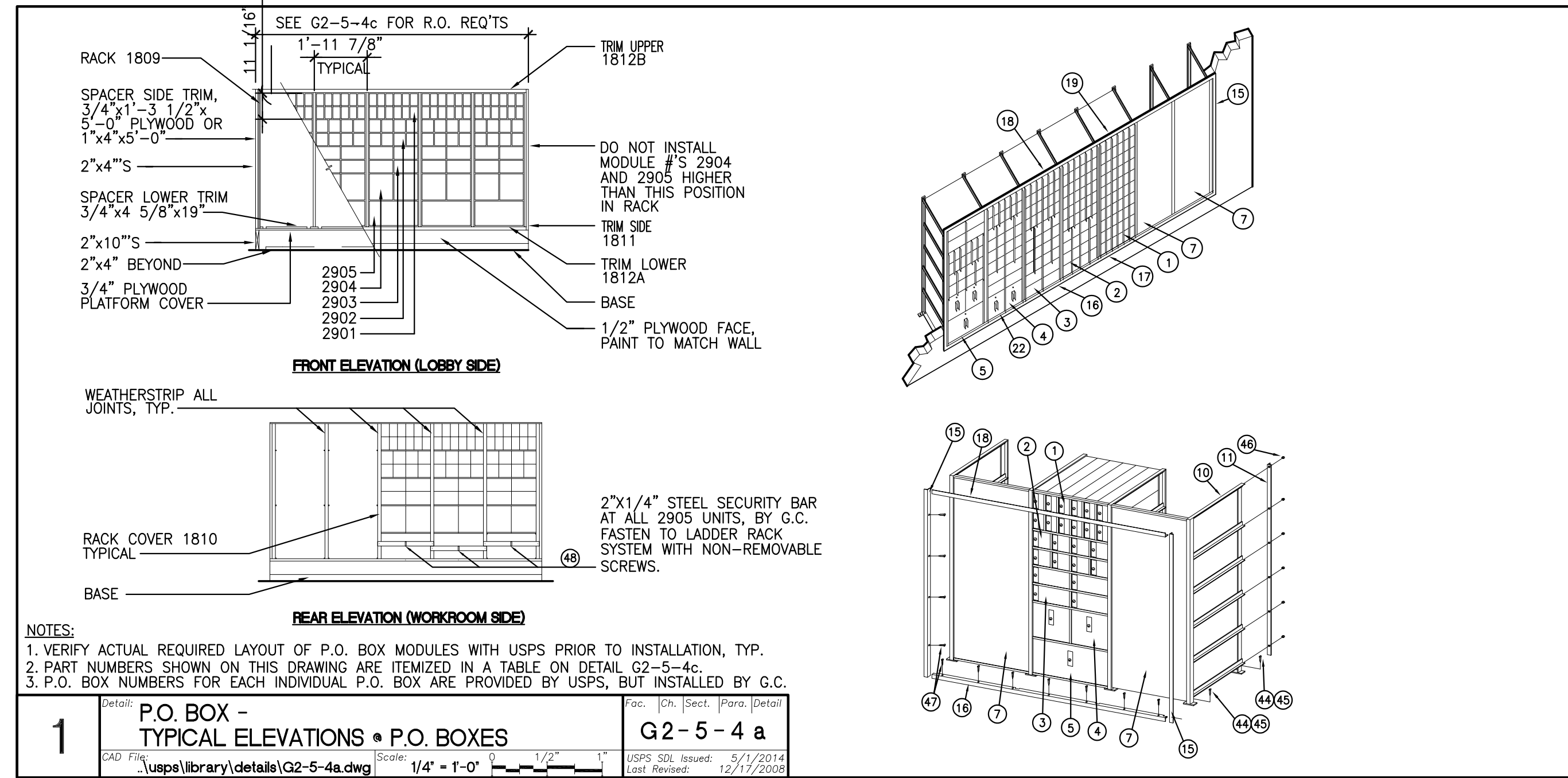


**11** Detail: SUPPORT AREAS - SECTION - WARDROBE LOCKERS G2-4-3 a  
 CAD File: \usps\library\details\G2-4-3a.dwg Scale: 1 1/2\"/>



**12** Detail: FULL SERVICE SWING GATE ASSEMBLY G2-5-5 a7  
 CAD File: \usps\library\details\G2-5-5a7.dwg Scale: 1/2\"/>

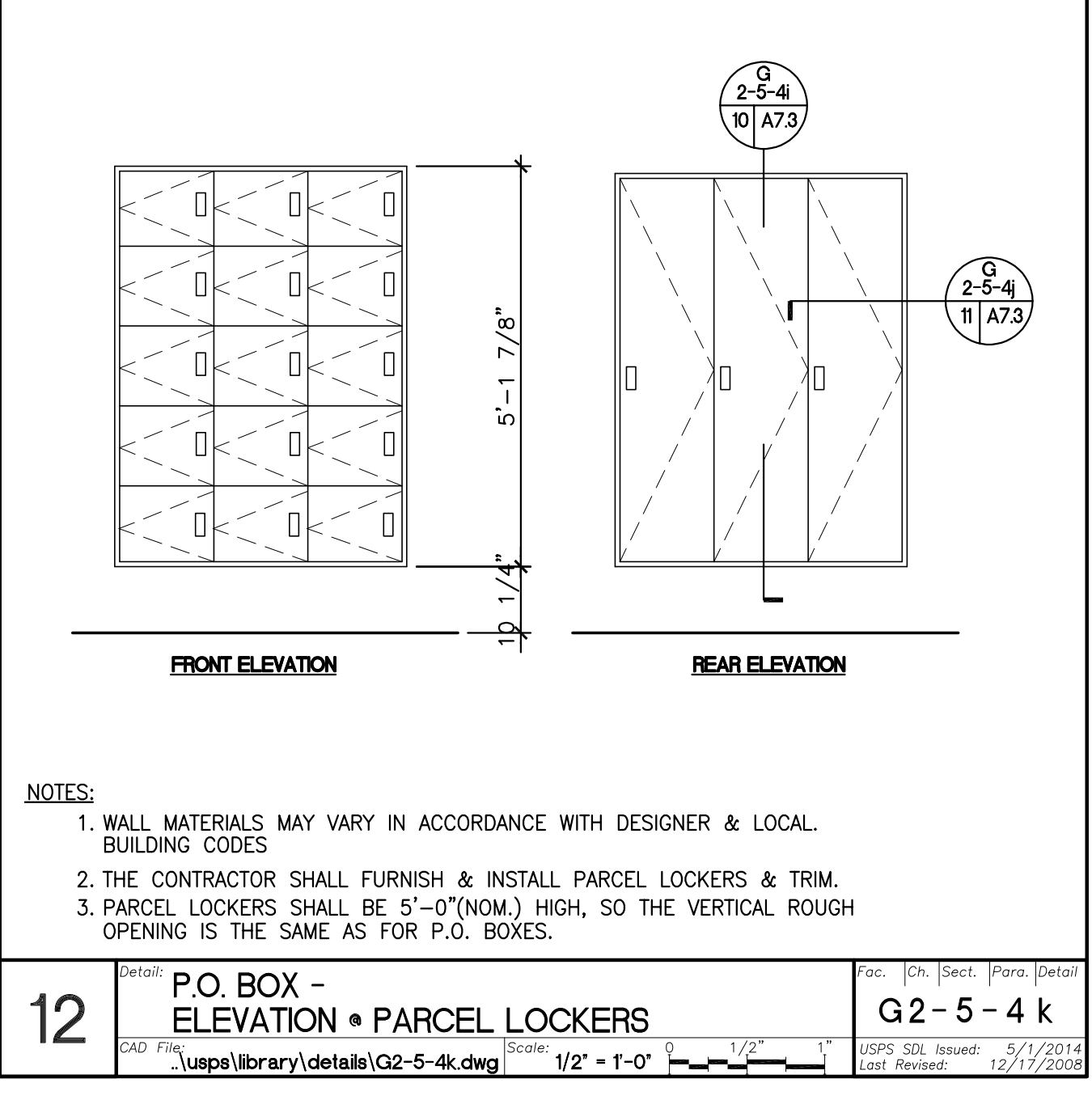
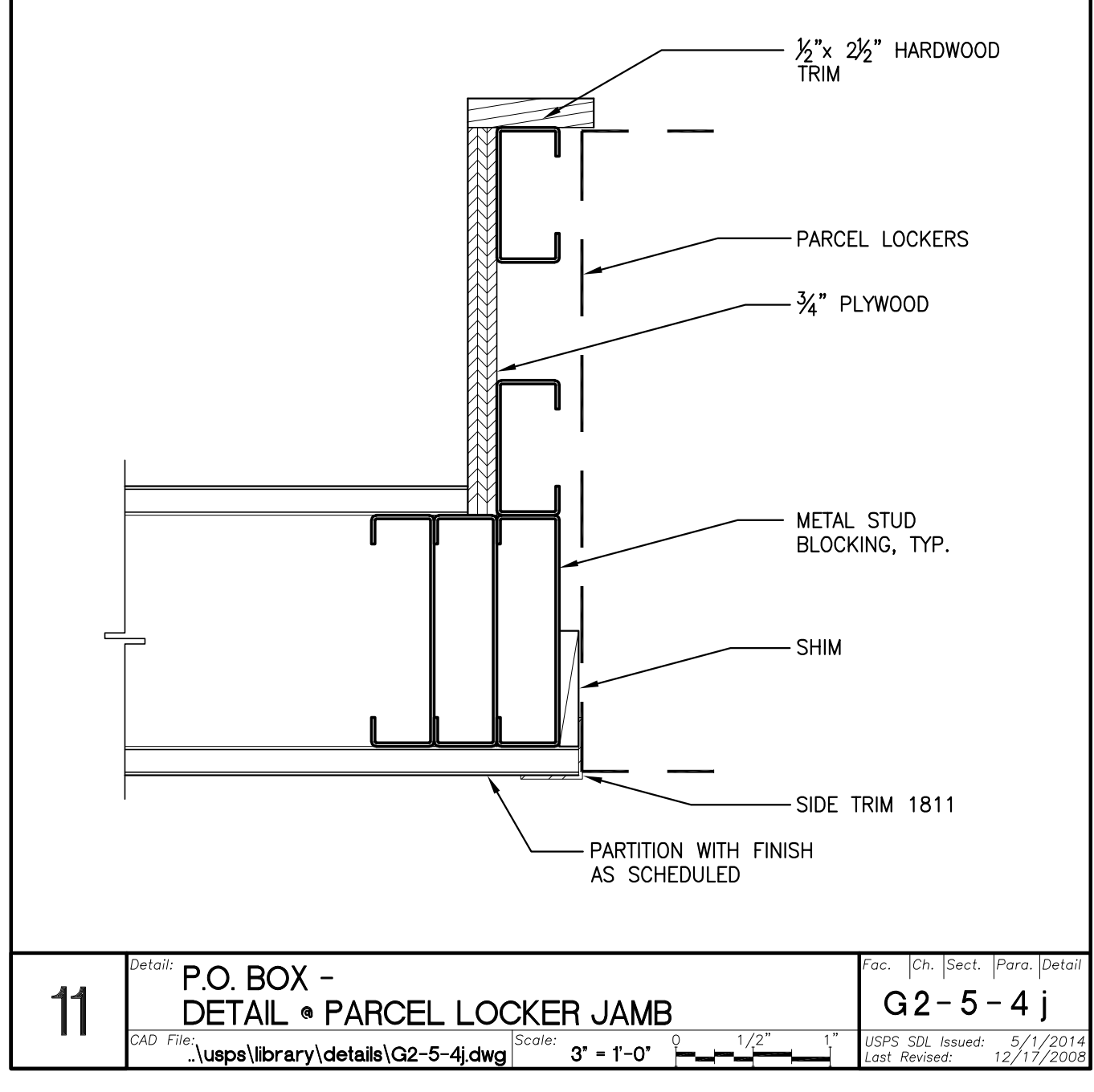
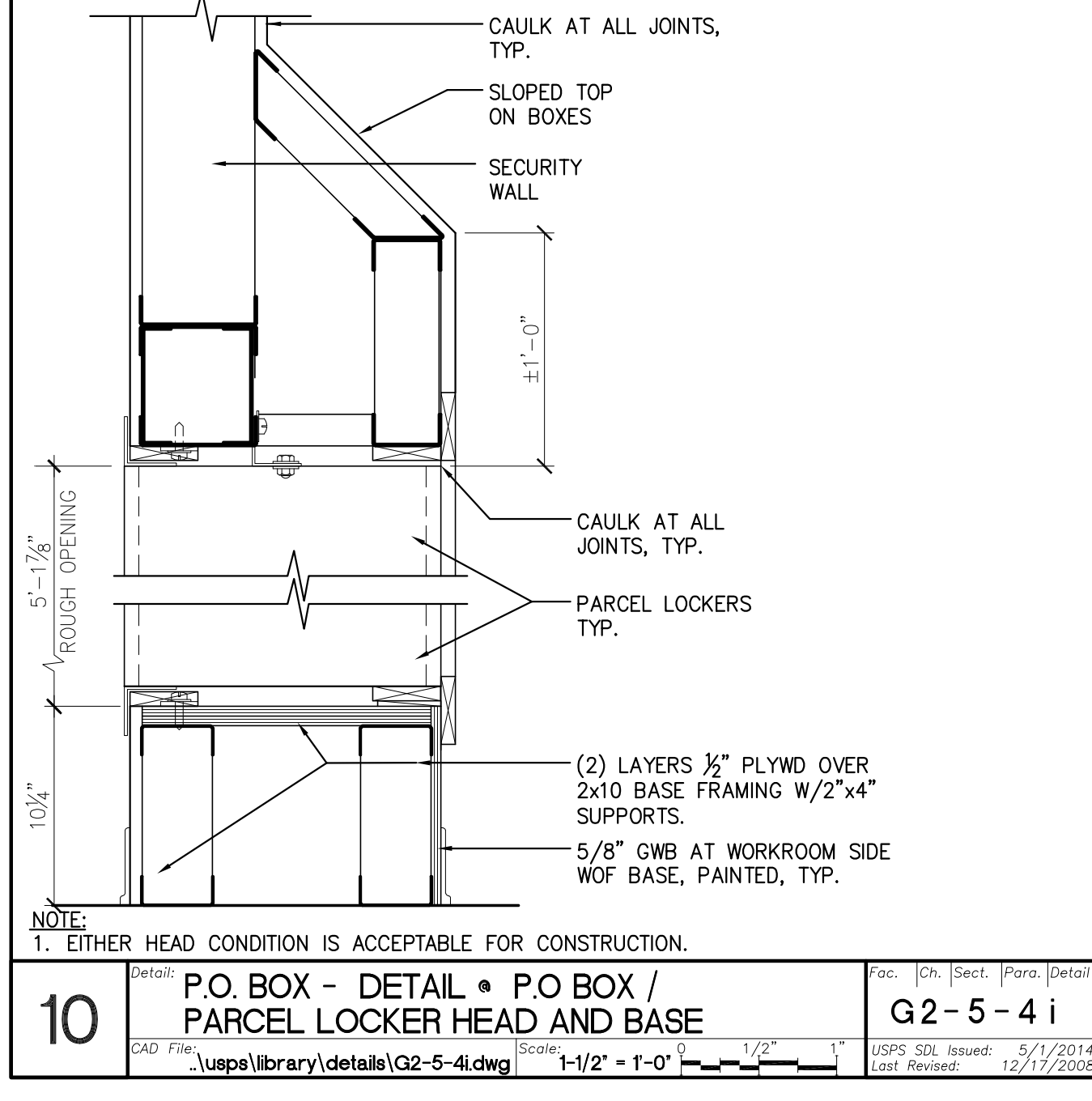
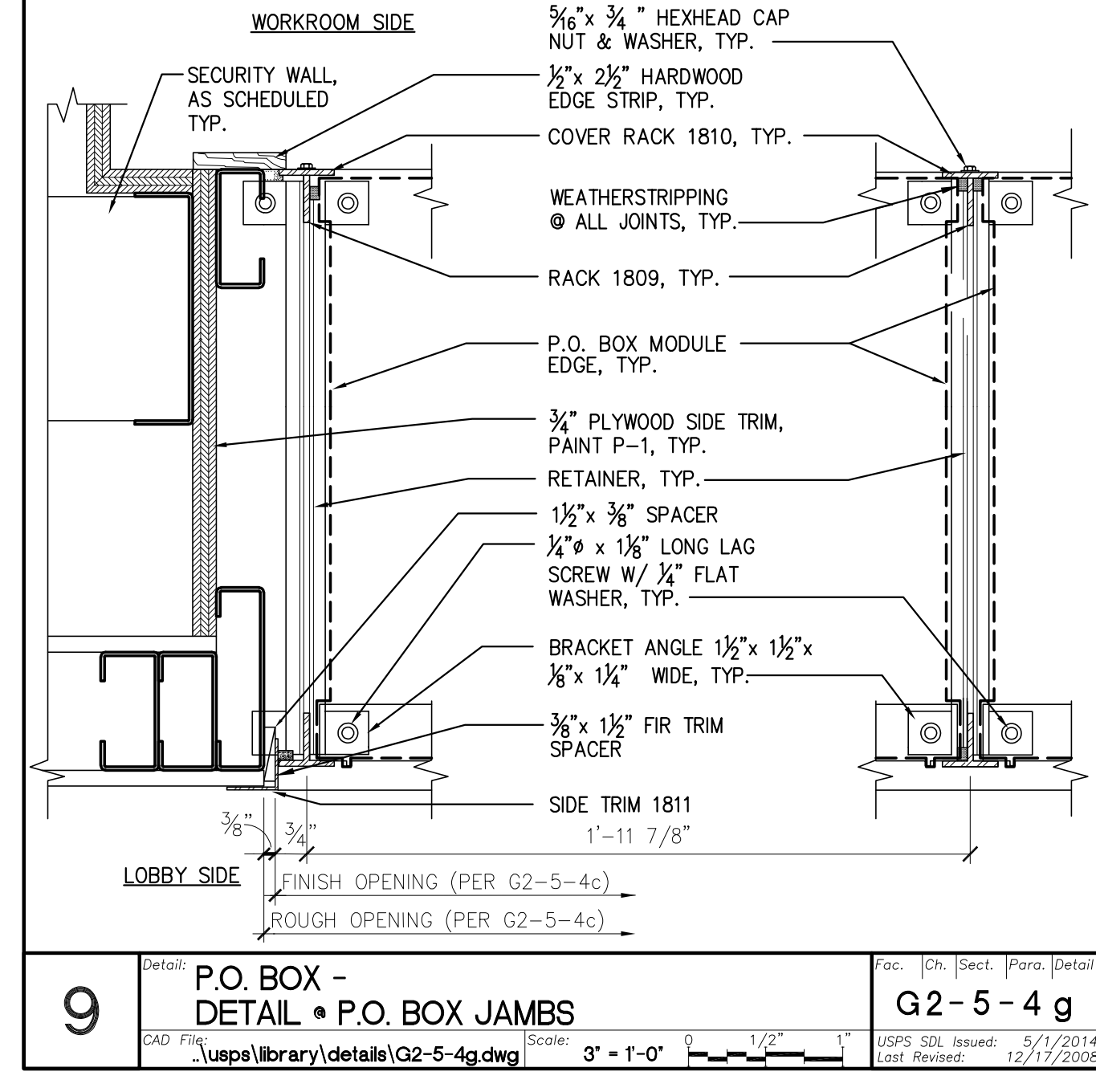
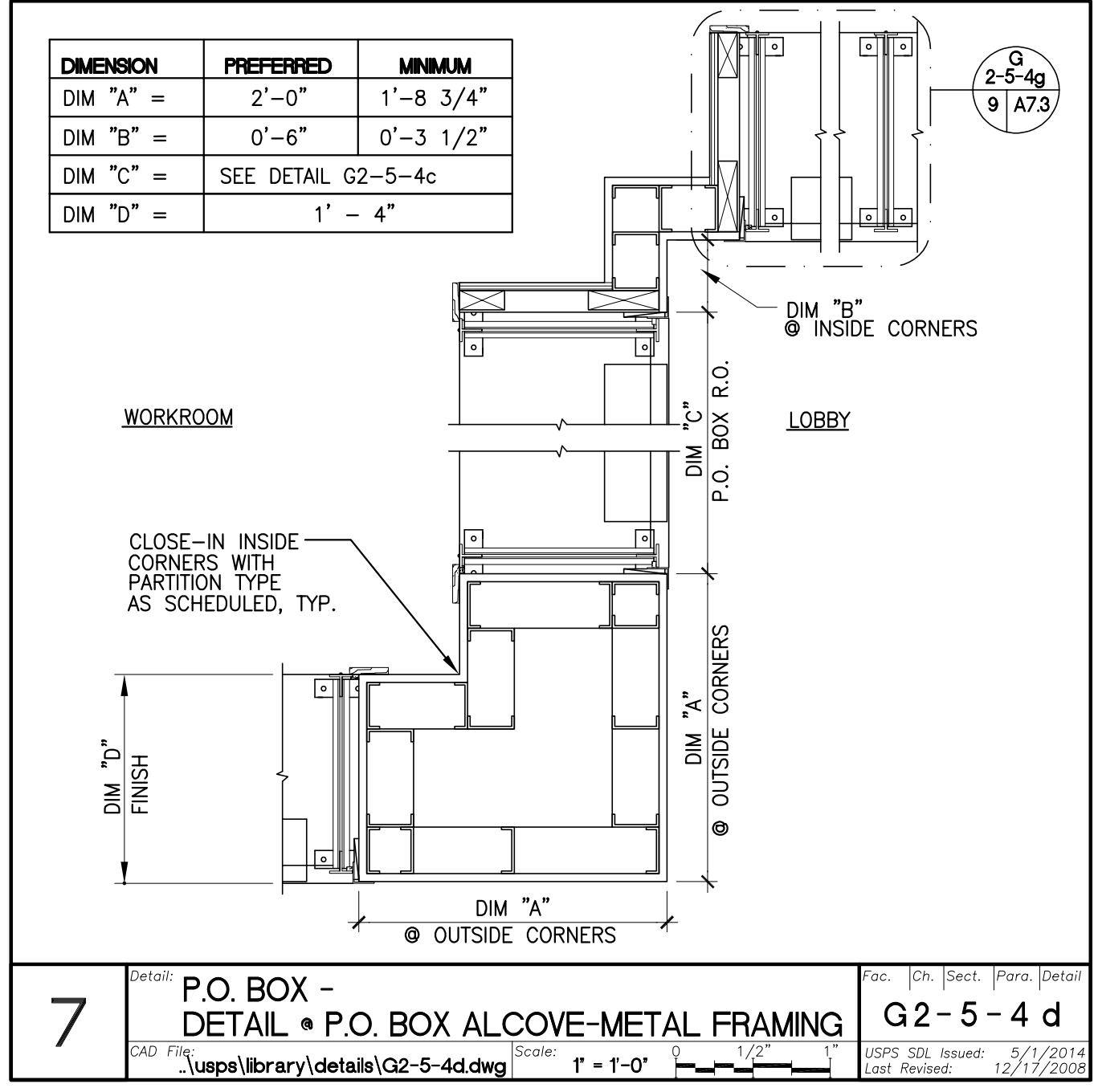
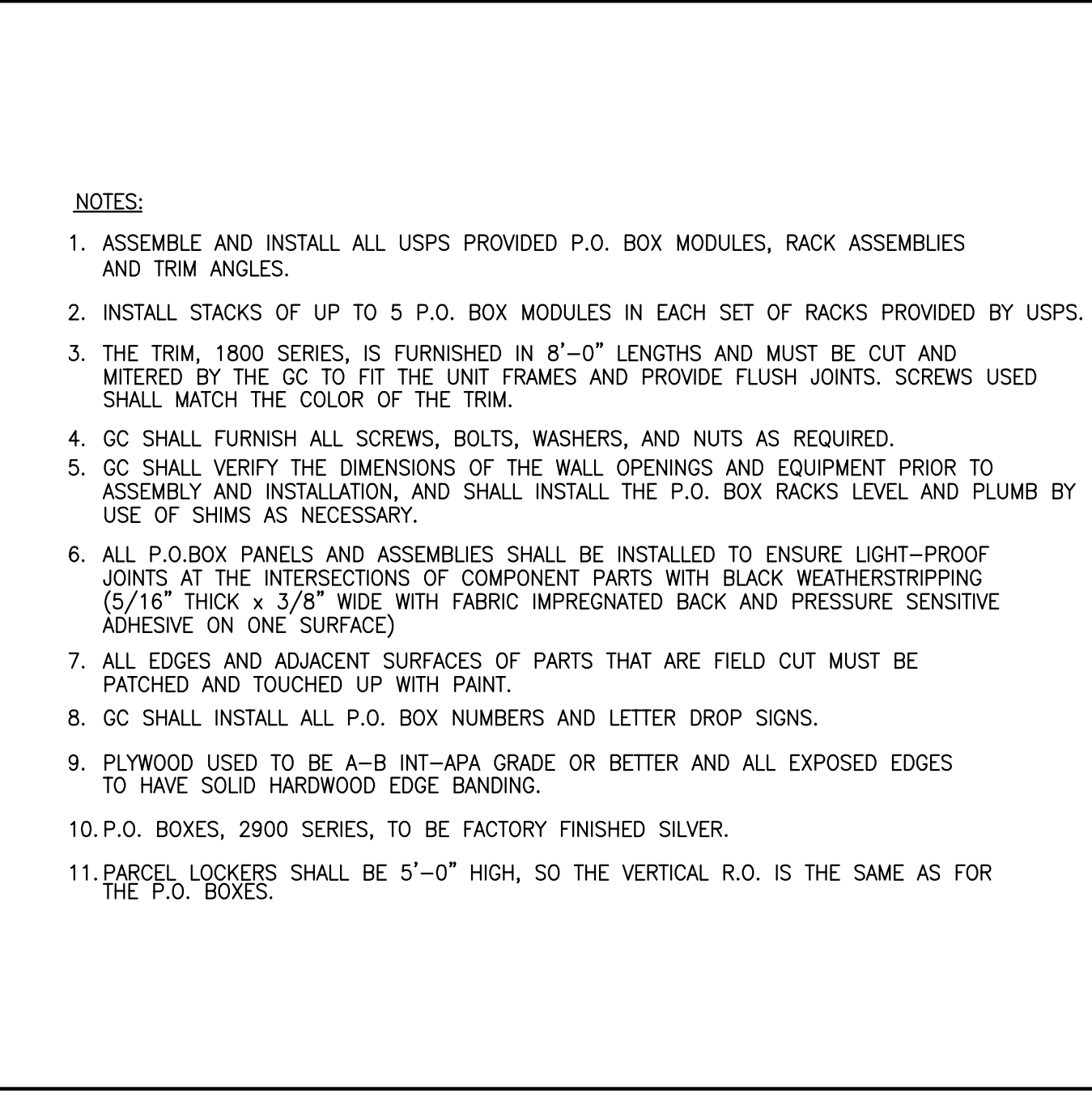




PARTS LIST		PANEL OPENINGS	
ITEM	NOMENCLATURE	IDEN. NO.	SCHEDULE OF PANEL OPENINGS
ITEMS PROVIDED BY USPS BUT INSTALLED BY GC			
1.	MODULE NO. 1 ASSEMBLY	2901	NO. OF PANELS FINISHED OPG. ROUGH OPG.
2.	MODULE NO. 2 ASSEMBLY	2902	1 2'-1 3/8" 2'-2 1/8"
3.	MODULE NO. 3 ASSEMBLY	2903	2 4'-1 1/4" 4'-2"
4.	MODULE NO. 4 ASSEMBLY	2904	3 6'-1 1/8" 6'-1 7/8"
5.	MODULE NO. 5 ASSEMBLY	2905	4 8'-1" 8'-1 3/4"
10.	MODULAR RACK ASSEMBLY	1809	5 10'-0 7/8" 10'-1 5/8"
11.	RACK COVER	1810	6 12'-0 3/4" 12'-1 1/2"
15.	TRIM SIDE	1811	7 14'-0 5/8" 14'-1 3/8"
16.	TRIM, L.H. LOWER (17.RH)	1812-A	8 ** 16'-0 1/2" 16'-1 1/4"
18.	TRIM, L.H. UPPER (19.RH)	1812-B	
22.	NUMBER	1813	
ITEMS FURNISHED & INSTALLED BY GC			
7.	BLANK PANEL (SEE G2-5-4g1 FOR MORE INFO.)		** RECOMMENDED MAXIMUM RUN OF UNINTERRUPTED PANELS (PANELS IN A ROW GREATER THAN 8 REQUIRE AN ADDITIONAL UNINTERRUPTED RUNS OF P.O. BOXES EXCEED 8 PANELS SHALL RECEIVE APPROPRIATE ADDITIONAL STRUCTURAL SUPPORT, AS REQUIRED.)
39.	SPACER, SIDE TRIM 3/8" x 1-1/2" FIR		
40.	SPACER, PLYWOOD 3/4" x 4" x 16"		
44.	LAG SCREW, 1/4 x 1-1/8 INCH LONG		
45.	WASHER, FLAT, 1/4" I.D.		
46.	HEXHEAD CAP NUT* 5/16" x 3/4" JC-24-T		
47.	SCREW, PAN HEAD, # 8 x 5/8" LG		
48.	STEEL SECURITY BAR @ EA. 2905 UNIT		
* NUTS TAPPED & THREADED TO RECEIVE STUD BOLTS W/ WASHERS AS REQUIRED.			

**3 P.O. BOX - P.O. BOX PARTS LIST, SCHEDULE AND NOTES G2-5-4 c**

Scale: NA



**9 P.O. BOX - DETAIL • P.O. BOX JAMBS G2-5-4 g**

Scale: 3" = 1'-0"

**10 P.O. BOX - DETAIL • P.O. BOX / PARCEL LOCKER HEAD AND BASE G2-5-4 i**

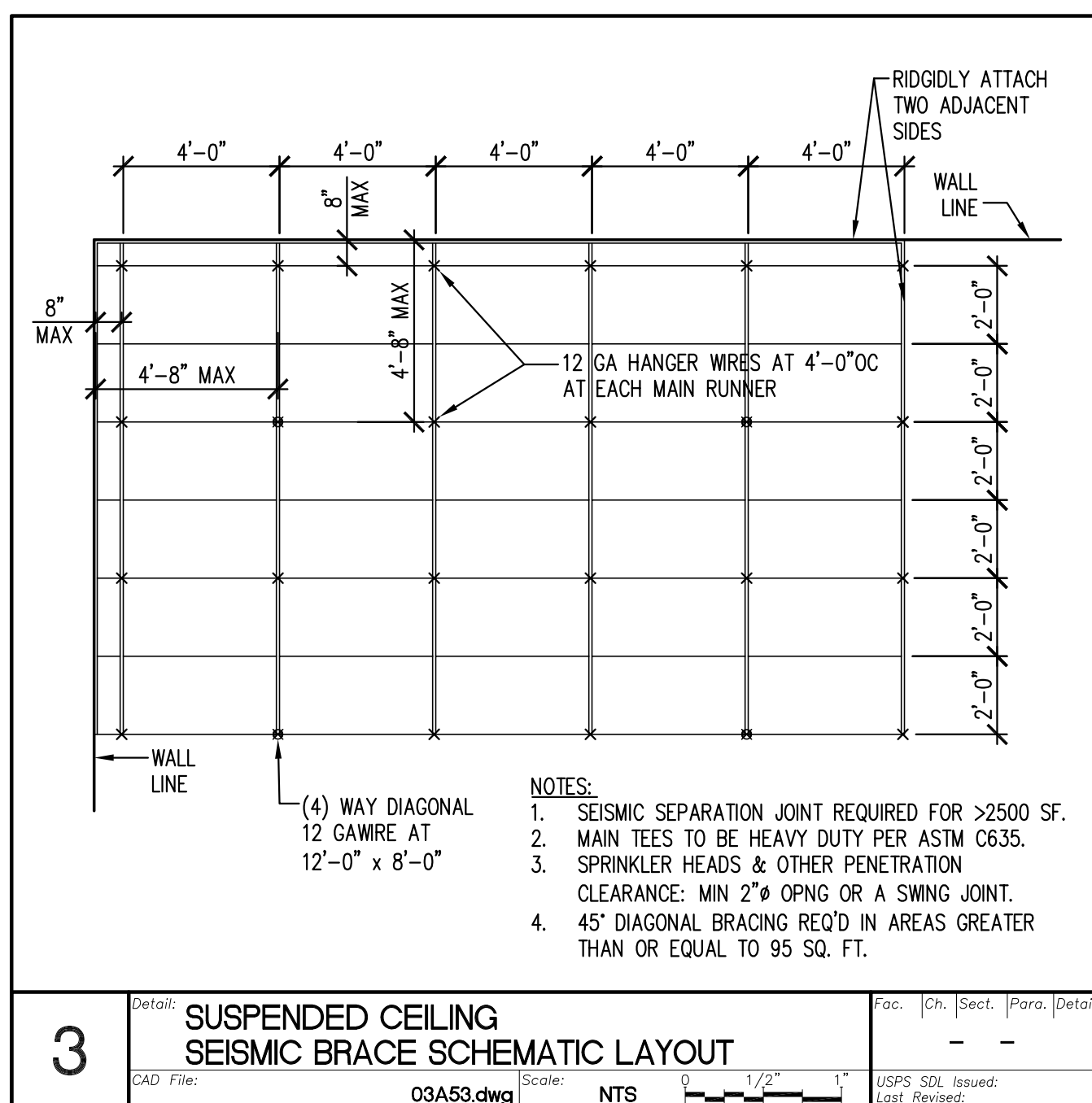
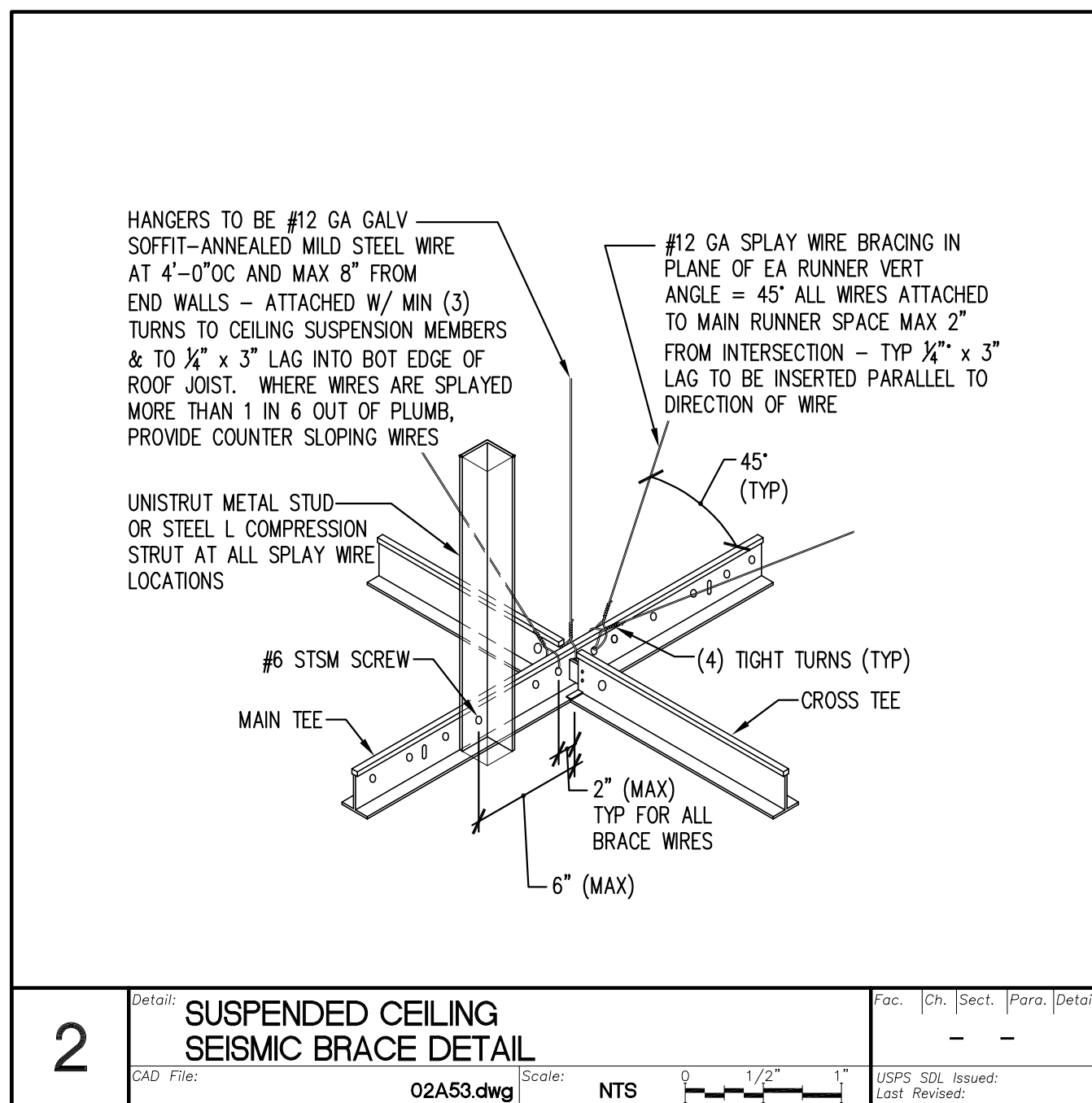
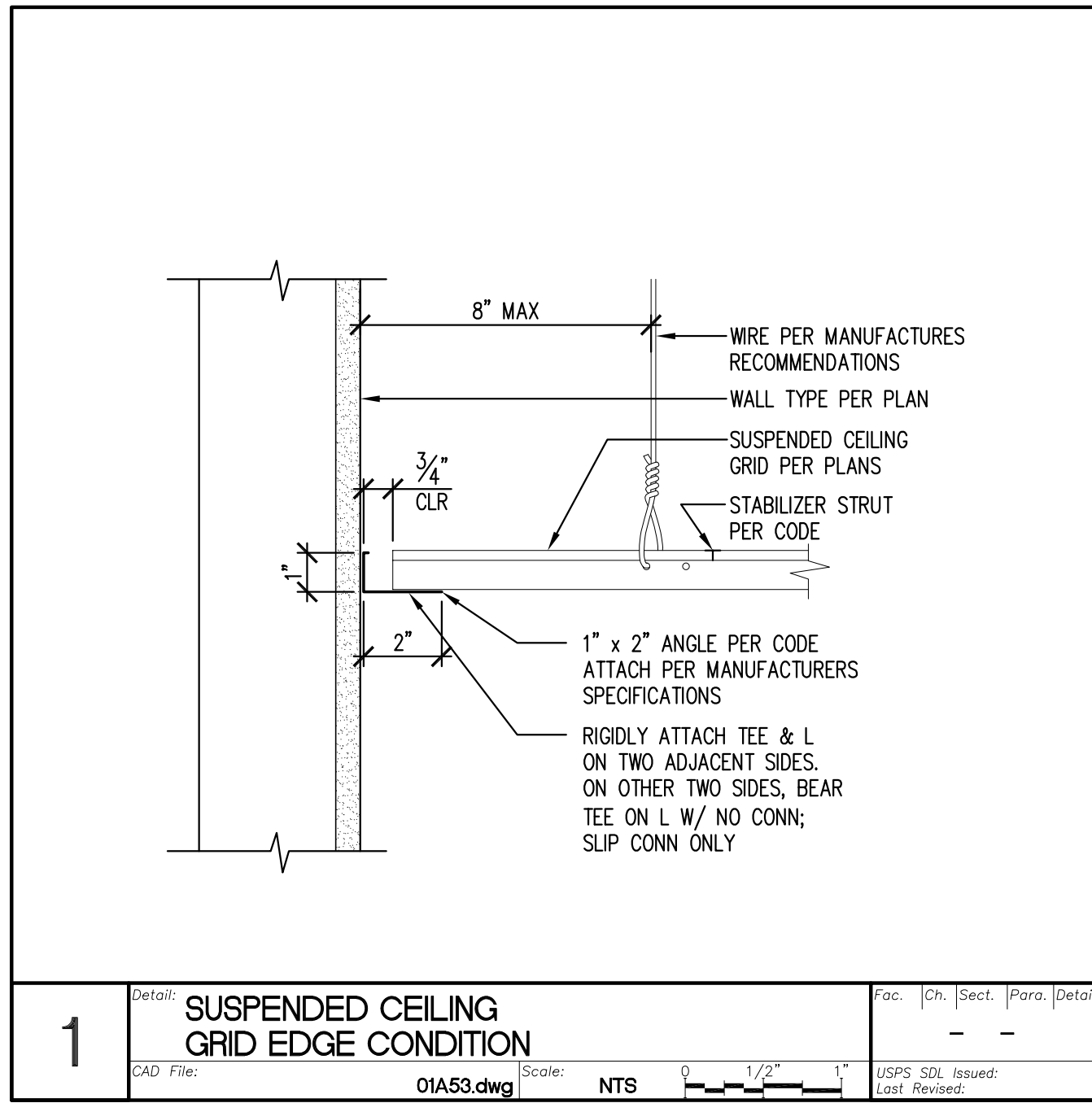
Scale: 1-1/2" = 1'-0"

**11 P.O. BOX - DETAIL • PARCEL LOCKER JAMB G2-5-4 j**

Scale: 3" = 1'-0"

**12 P.O. BOX - ELEVATION • PARCEL LOCKERS G2-5-4 k**

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



**4** Detail: **SUSPENDED CEILING GENERAL NOTES**  
 CAD File: CLG0815A.dwg Scale: NTS 0 1/2" 1" USPS SDI Issued: Last Revised:

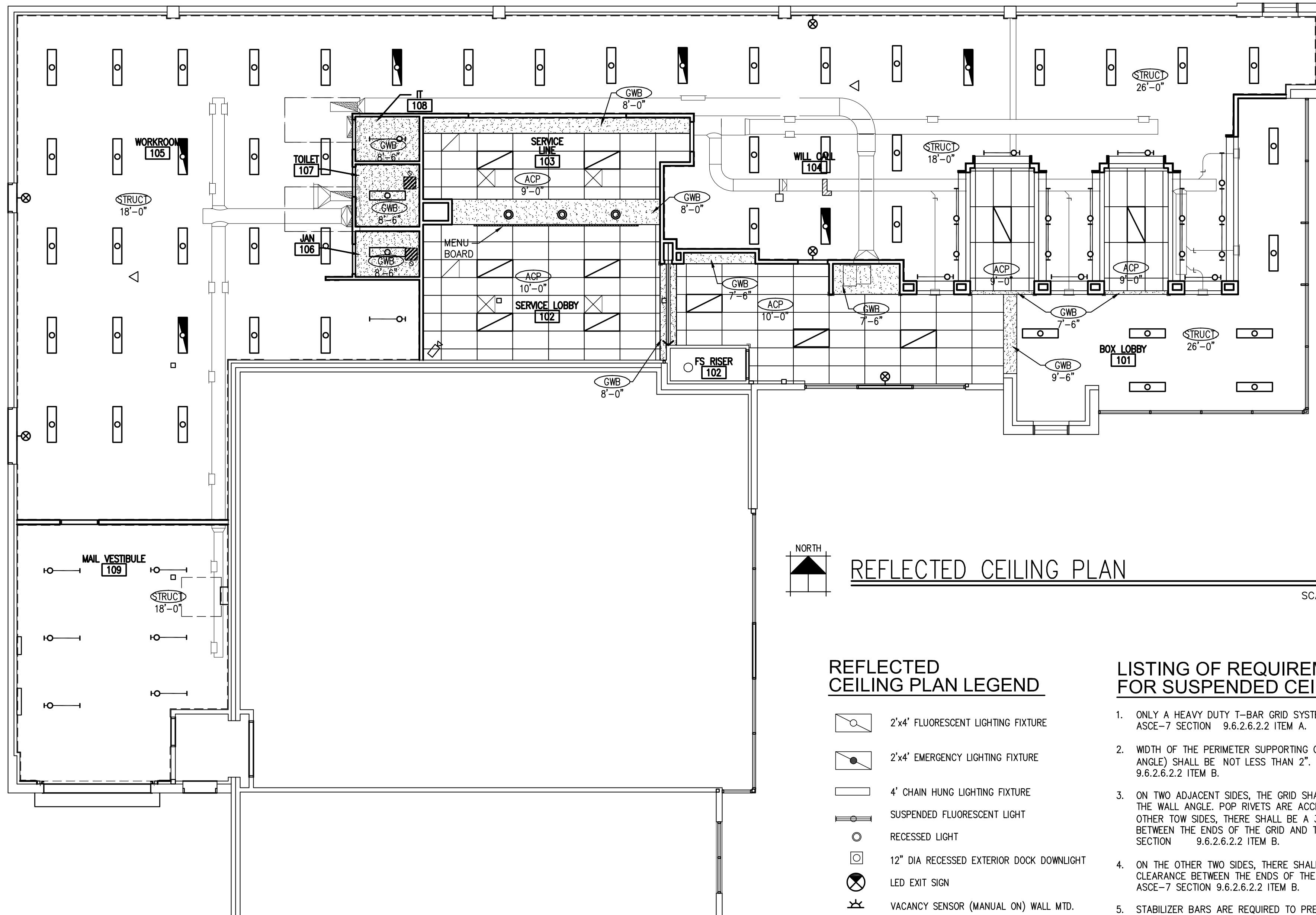
THE SUSPENDED CEILING SYSTEM SHALL COMPLY WITH AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) 7-10 SEISMIC DESIGN CATEGORY D ASCE 7-10 SECTION. 13.5.6.2.

**13.5.6.2 INDUSTRY STANDARD CONSTRUCTION FOR ACOUSTICAL TILE OR LAY-IN PANEL CEILINGS**  
 ACOUSTICAL TILE OR LAY-IN PANEL CEILINGS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THIS SECTION.

**13.5.6.2.2 SEISMIC DESIGN CATEGORY D**  
 ACOUSTICAL TILE OR LAY-IN PANEL CEILINGS IN SEISMIC DESIGN CATEGORY D SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ASTM C635, ASTM C636, AND ASTM E580, SECTION 5. ACOUSTICAL TILE OR LAY-IN PANEL CEILINGS SHALL COMPLY WITH THE FOLLOWING:

A. THE WIDTH OF THE PERIMETER SUPPORTING CLOSURE ANGLE OR CHANNEL SHALL BE NOT LESS THAN 2.5 IN. (50 MM). WHERE PERIMETER SUPPORTING CLIPS ARE USED, THEY SHALL BE QUALIFIED IN ACCORDANCE WITH APPROVED TEST CRITERIA. IN EACH ORTHOGONAL HORIZONTAL DIRECTION, ONE END OF THE CEILING GRID SHALL BE ATTACHED TO THE CLOSURE ANGLE OR CHANNEL. THE OTHER END IN EACH HORIZONTAL DIRECTION SHALL HAVE A 0.75 IN. (19 MM) CLEARANCE FROM THE WALL AND SHALL REST UPON AND BE FREE TO SLIDE ON A CLOSURE ANGLE OR CHANNEL.

B. FOR CEILING AREAS EXCEEDING 2,500 FT<sup>2</sup> (232 M<sup>2</sup>), A SEISMIC SEPARATION JOINT OR FULL HEIGHT PARTITION THAT BREAKS THE CEILING UP INTO AREAS NOT EXCEEDING 5200 FT<sup>2</sup> (232M<sup>2</sup>), EACH WITH A RATIO OF THE LONG TO SHORT DIMENSION LESS THAN OR EQUAL TO 4, SHALL BE PROVIDED UNLESS STRUCTURAL ANALYSES ARE PERFORMED OF THE CEILING BRACING SYSTEM FOR THE PRESCRIBED SEISMIC FORCES THAT DEMONSTRATE CEILING PENETRATIONS AND CLOSURE ANGLES OR CHANNELS PROVIDE SUFFICIENT CLEARANCE TO ACCOMMODATE THE ANTICIPATED LATERAL DISPLACEMENT. EACH AREA SHALL BE PROVIDED WITH CLOSURE ANGLES OR CHANNELS IN ACCORDANCE WITH SECTION 13.5.6.2.2.A AND HORIZONTAL RESTRAINTS OR BRACING.



**REFLECTED CEILING PLAN LEGEND**

- 2x4' FLUORESCENT LIGHTING FIXTURE
- 2x4' EMERGENCY LIGHTING FIXTURE
- 4' CHAIN HUNG LIGHTING FIXTURE
- SUSPENDED FLUORESCENT LIGHT
- RECESSED LIGHT
- 12" DIA RECESSED EXTERIOR DOCK DOWNLIGHT
- LED EXIT SIGN
- VACANCY SENSOR (MANUAL ON) WALL MTD.
- OCCUPANCY SENSOR - CEILING MTD.
- PHOTOCELL - CEILING MTD.
- SECURITY WALL OR SOFFIT
- SUPPLY DIFFUSER
- RETURN REGISTER
- EXHAUST FAN
- SUPPLY FAN
- DROP CORD
- DROP CORD LIFT CONTROL
- 2x4' SUSPENDED ACOUSTICAL CEILING
- GYPSUM BOARD CEILING
- 2'x2' SMOKED GLASS PANEL

**LISTING OF REQUIREMENTS FOR SUSPENDED CEILINGS:**

1. ONLY A HEAVY DUTY T-BAR GRID SYSTEM SHALL BE USED. ASCE-7 SECTION 9.6.2.6.2.2 ITEM A.
2. WIDTH OF THE PERIMETER SUPPORTING CLOSURE ANGLE (WALL ANGLE) SHALL BE NOT LESS THAN 2". ASCE-7 SECTION 9.6.2.6.2.2 ITEM B.
3. ON TWO ADJACENT SIDES, THE GRID SHALL BE ATTACHED TO THE WALL ANGLE. POP RIVETS ARE ACCEPTABLE. ON THE OTHER TWO SIDES, THERE SHALL BE A 3/4" CLEARANCE BETWEEN THE ENDS OF THE GRID AND THE WALL. ASCE-7 SECTION 9.6.2.6.2.2 ITEM B.
4. ON THE OTHER TWO SIDES, THERE SHALL BE A 3/4" CLEARANCE BETWEEN THE ENDS OF THE GRID AND THE WALL. ASCE-7 SECTION 9.6.2.6.2.2 ITEM B.
5. STABILIZER BARS ARE REQUIRED TO PREVENT THE SPREAD OF MAIN BEAMS AND/OR ACROSS TEES. CISCA GUIDELINES FOR SEISMIC RESTRAINT FOR DIRECT HUNG SUSPENDED CEILING ASSEMBLIES, SEISMIC ZONES 3 & 4, MAY, 2004, INSTALLATION SECTION, ITEM 4.
6. PERIMETER SUPPORT (TAIL) WIRES ARE REQUIRED WITHIN 8" OF THE WALL FOR ALL EDGES. CISCA GUIDELINES FOR SEISMIC RESTRAINT FOR DIRECT HUNG SUSPENDED CEILING ASSEMBLIES, SEISMIC ZONES 3 & 4, MAY, 2004, INSTALLATION SECTION, ITEM 2.
7. VERTICAL HANGERS SHALL BE NO. 12 GA WIRE SPACED AT 4' O.C. OR NOT 10 GA SPACES AT 5' O.C. ALONG EACH MAIN RUNNER. THREE WIRE TURNS REQUIRED. WITHIN 1:6 OUT-OF-PLUMB UNLESS COUNTER-SLOPING WIRES ARE PROVIDED.
8. LATERAL BRACING IS REQUIRED: SPLAY WIRE PODS AT 12' MAX. O.C. AND 6' AX FROM WALLS. INSTALL TRULY COMPRESSIBLE (E.G. SPRING LOADED) STRUTS OR NO STRUTS AT ALL. RIGID STRUTS ARE NOT ALLOWED. CISCA GUIDELINES FOR SEISMIC RESTRAINT FOR DIRECT HUNG SUSPENDED CEILING ASSEMBLIES, SEISMIC ZONES 3 & 4.
9. CEILINGS OVER 2500 SF MUST HAVE SEISMIC SEPARATION JOINTS OR FULL HEIGHT PARTITION THAT BREAKS THE CEILING UP INTO AREAS NOT EXCEEDING 2500 SF. ASCE-7 SECTION 9.6.2.6.2.2 ITEM D.
10. FOR CEILINGS WITHOUT RIGID BRACING, SPRINKLER HEAD AND OTHER PENETRATIONS SHALL HAVE A 2" OVERSIZE RING, SLEEVE, OR ADAPTER THROUGH THE CEILING TILE TO ALLOW FOR FREE MOVEMENT OF AT LEAST 1" IN ALL HORIZONTAL DIRECTIONS; OR, SPRINKLER HEAD EXTENSION TO HAVE A SWING JOINT THAT CAN ACCOMMODATE 1" OF CEILING MOVEMENT IN ALL HORIZONTAL DIRECTION. ASCE-7 SECTION 9.6.2.6.2.2 ITEM E.
11. CHANGES IN CEILING PLAN ELEVATION SHALL BE PROVIDED WITH POSITIVE BRACING. ASCE-7 SECTION 9.6.2.6.2.2 ITEM F.
12. CABLE TRAYS AND ELECTRICAL CONDUITS SHALL BE SUPPORTED INDEPENDENTLY OF THE CEILING. ASCE-7 SECTION 9.6.2.6.2.2 ITEM G.



## MECHANICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WASTE OR SOIL (W)	AFF	ABOVE FINISHED FLOOR
	VENT (V)	AHJ	AUTHORITY HAVING JURISDICTION
	COLD WATER (CW)	AMU	AIR MEASURING UNIT
	HOT WATER (HW)	APPROX	APPROXIMATELY
	HOT WATER CIRCULATING (HWC)	ARCH	ARCHITECTURAL
	CLEANOUT	AUTO	AUTOMATIC
	FLOOR DRAIN	BDD	BACKDRAFT DAMPER
	ISOLATION VALVE	BTU	BRITISH THERMAL UNIT
	CHECK VALVE	BTUH	BRITISH THERMAL UNIT/HOUR
	UNION	BLDG	BUILDING
	RELIEF VALVE	CAP	CAPACITY
	STRAINER WITH BLOW-OFF VALVE	CLG	CEILING
	CONCENTRIC REDUCER	CO	CLEANOUT
	PRESSURE REDUCING VALVE	COMP	COMPRESSOR
	THERMOMETER	CONN	CONNECTION
	PIPE UP	CONT	CONTINUE, CONTINUATION
	PIPE DOWN	CFM	CUBIC FEET PER MINUTE
	PIPE TEE IN LINE, BRANCH PIPE DOWN	CW	COLD WATER
	DUCT (FIRST FIGURE, SIDE SHOWN)	DEG F, F	DEGREE FAHRENHEIT
	RISE (R) OR DROP (D) ARROW IN DIRECTION OF FLOW	DIA, Ø	DIAMETER
	DUCT SECTION (SUPPLY)	DOAS	DEDICATED OUTSIDE AIR SYSTEM
	DUCT SECTION (EXHAUST OR RETURN)	DN	DOWN
	ROUND DUCT	DWG	DRAWING
	VOLUME DAMPER (MANUAL)	DB	DRY BULB
	MOTORIZED DAMPER	EA	EACH
	FLEXIBLE CONNECTION	EFF	EFFICIENCY
	FLEXIBLE DUCT	ECM	ELECTRONICALLY COMMUTATED MOTOR
	DUCT UP (RECTANGULAR)	ELEC	ELECTRICAL, ELECTRIC
	DUCT UP (RECTANGULAR)	EER	ENERGY EFFICIENCY RATIO
	DUCT DOWN (RECTANGULAR)	EAT	ENTERING AIR TEMPERATURE
	DUCT DOWN (RECTANGULAR)	EWB	ENTERING WET BULB
	DUCT UP (ROUND)	EDB	ENTERING DRY BULB
	DUCT DOWN (ROUND)	EXH	EXHAUST
	CEILING OUTLET	EXIST, (E)	EXISTING
	CEILING INLET	ESP	EXTERNAL STATIC PRESSURE
	WALL OUTLET (OR INLET)	FPM	FEET PER MINUTE
	THERMOSTAT G= WITH GUARD	FLEX	FLEXIBLE
	SWITCH	FCO	FLOOR CLEAN OUT
		FLA	FULL LOAD AMPS
		GAL	GALLON
		GALV.	GALVANIZED
		HP	HORSE POWER
		HW	HOT WATER
		HWC	HOT WATER CIRCULATION
		IN	INCH
		KW	KILOWATT
		LAT	LEAVING AIR TEMPERATURE
		LDB	LEAVING DRY BULB
		LWT	LEAVING WATER TEMPERATURE
		LWB	LEAVING WET BULB
		MAX	MAXIMUM
		MFR	MANUFACTURER
		MBH	THOUSAND BTUH
		MCA	MINIMUM CIRCUIT AMPS
		MECH	MECHANICAL
		MIN	MINIMUM
		MUA	MAKE UP AIR
		NO	NUMBER
		NTS	NOT TO SCALE
		OBD	OPPOSED BLADE DAMPER
		OA	OUTSIDE AIR
		PH	PHASE
		PSI	POUNDS PER SQUARE INCH
		PSIG	POUNDS PER SQUARE INCH GAUGE
		PD	PRESSURE DROP
		R	RETURN
		RLA	RATED LOAD AMPS
		REF	REFERENCE
		REQ'D	REQUIRED
		RA	RETURN AIR
		RPM	REVOLUTIONS PER MINUTE
		RM	ROOM
		S	SUPPLY
		SA	SUPPLY AIR
		SCO	SURFACE CLEANOUT
		SS	STAINLESS STEEL
		TEMP	TEMPERATURE
		TD	TRANSFER DUCT
		TG	TRANSFER GRILLE
		TYP	TYPICAL
		UNO	UNLESS NOTED OTHERWISE
		VTR	VENT THROUGH ROOF
		VERT	VERTICAL
		V	VOLTS, VOLTAGE, VENT
		WCO	WALL CLEAN OUT
		W	WASTE
		WA	WATT
		W	WITH
		WSEC	WASHINGTON STATE ENERGY CODE

## MECHANICAL GENERAL NOTES

- MECHANICAL WORK IS NOT LIMITED TO MECHANICAL DRAWINGS AND DIVISION 20, 21, 22, 23, AND 25 SPECIFICATIONS. THERE IS ADDITIONAL MECHANICAL WORK TO BE INCLUDED IN THE BID INDICATED ON OTHER DRAWINGS AND IN OTHER SPECIFICATION DIVISIONS. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL MECHANICAL WORK.
- MECHANICAL EQUIPMENT 1/2 HP AND LESS SHALL HAVE ANY REQUIRED STARTER/CONTROL RELAY PROVIDED BY DIVISION 25 (EXCEPT WHERE SPECIFICALLY SHOWN OR SPECIFIED OTHERWISE).
- SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING SEISMIC & EXPANSION JOINTS. PROVIDE FLEXIBLE CONNECTIONS IN ALL PIPING & DUCT SYSTEMS WHICH CROSS SUCH JOINTS, SIZED/CONFIGURED TO ACCOMMODATE SPECIFIED MOVEMENT (SEE SPECIFICATIONS) IN ANY DIRECTION W/O PERMANENT DAMAGE. SUBMIT DETAILS OF FLEXIBLE CONNECTIONS & LOCATIONS.
- FIXTURE LOCATIONS: VERIFY LOCATION OF PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS BEFORE BEGINNING WORK. ARCHITECTURAL DRAWINGS GOVERN. PLUMBING FIXTURE HEIGHTS SHALL BE AS SHOWN ON ARCHITECTURAL DRAWINGS.
- TRAP PRIMERS: ALL FLOOR DRAINS, FUNNEL DRAINS, AND FLOOR RECEPTORS SHALL HAVE TRAP PRIMERS. SOME DRAINS HAVE THE TRAP PRIMER LINE AND ASSOCIATED TRAP PRIMER VALVE SHOWN ON THE PLANS SOME LOCATIONS DO NOT. LOCATIONS WHERE THIS TRAP PRIMER PIPING AND VALVE ARE NOT SHOWN STILL REQUIRE A TRAP PRIMER, BUT THE LOCATION MAY BE SELECTED BY THE CONTRACTOR.
- CLEANOUTS: PROVIDE CLEANOUTS AS REQUIRED BY CODE; USE FLOOR CLEANOUTS WHERE POSSIBLE. SEE DETAILS.
- PIPE ROUTING: ALL PIPING SHOWN IS SCHEMATIC, CONTRACTOR SHALL PROVIDE ALL OFFSETS/ELBOWS AS REQ'D TO ALLOW ROUTING AROUND STRUCTURE, ELECTRICAL, & OTHER INTERFERENCES. ALL PIPING SHALL BE RUN CONCEALED, UNO.
- PIPE SIZES: UNSIZED PLUMBING PIPING SHALL MATCH THE SIZE OF THE LARGEST ADJACENT CONNECTING PIPE SIZE SHOWN, WHERE THE ADJACENT PIPE IS NOT SHOWN (OR NOT CLEAR), THE PIPE SIZE SHALL BE BASED ON THE GPM FLOWING IN THE PIPE (USE FIXTURE UNITS AND CORRESPONDING GPM PER THE UPC FOR DOMESTIC WATER SYSTEMS, USE WASTE FIXTURE UNITS & UPC TABLES FOR WASTE/VENT SYSTEM), AND A VELOCITY NO GREATER THAN 4 FEET PER SECOND. USE UPC CURVES FOR GPM/VELOCITY FOR APPROPRIATE PIPING MATERIAL INVOLVED.
- CLOSURE COLLARS: ALL DUCT PENETRATIONS THRU WALLS AND FLOORS SHALL BE PROVIDED WITH CLOSURE COLLARS (BOTH SIDES OF PENETRATION) AND BE TIGHTLY SEALED TO PREVENT THE TRANSMISSION OF NOISE.
- COORDINATION: CONTRACTOR SHALL CAREFULLY COORDINATE WORK W/ ALL OTHER TRADES, ESPECIALLY IN CEILING SPACES WHERE SPACE IS TIGHT. SHEET METAL CONTRACTOR SHALL HAVE PRIORITY OVER OTHER MECHANICAL TRADES IN CEILING SPACE WHERE CONFLICTS OCCUR.
- DUCT LAYOUT: ALL DUCTWORK SHOWN IS SCHEMATIC, CONTRACTOR SHALL PROVIDE ALL OFFSETS/ELBOWS AS REQ'D TO ALLOW ROUTING AROUND STRUCTURE, ELECTRICAL, & OTHER INTERFERENCES.
- FLEXIBLE DUCT: LENGTH SHALL NOT EXCEED 8 FEET, AND MAY ONLY BE USED WHERE SPECIFICALLY SHOWN ON THE PLANS.
- BALANCING DAMPERS: PROVIDE MANUAL VOLUME DAMPERS IN ALL BRANCH DUCTS AND SPLITS IN MAIN DUCTS AND WHERE REQUIRED BY BALANCERS; ONLY SOME OF THE REQUIRED DAMPERS ARE SHOWN ON THE PLANS.
- DUCT SIZES: UNSIZED DUCTS SHALL MATCH THE SIZE OF THE LARGEST ADJACENT DUCT THAT IS SIZED. WHERE THE ADJACENT DUCT SIZE IS NOT SHOWN, PROVIDE THE FOLLOWING SIZED DUCTS (OR EQUIVALENT RECTANGULAR).

CFM	DUCTS TO AIR INLETS/OUTLETS	OTHER DUCT
0 - 100	6" Ø	6" Ø
101 - 150	8" Ø	8" Ø
151 - 250	10" Ø	8" Ø
251 - 400	12" Ø	10" Ø
401 - 500	14" Ø	12" Ø
501 - 700	16" Ø	12" Ø
701 - 900	18" Ø	14" Ø
901 - 1200	20" Ø	16" Ø
1201 - 1500	---	18" Ø
1501 - 2000	---	20" Ø
2001 - 2400	---	22" Ø
>2401	SIZE BASED ON 500 FPM	SIZE BASED ON 0.08"/100' P.D.

- CEILING LOCATIONS: VERIFY LOCATIONS OF ITEMS INSTALLED IN CEILINGS WITH ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO BEGINNING WORK. NOTIFY ARCHITECT/ENGINEER OF DISCREPANCIES. SHIFT AIR INLETS/OUTLETS FROM LOCATIONS SHOWN AS REQ'D TO AVOID CONFLICTS W/STRUCTURE & OTHER ITEMS. SUCH SHIFTS SHALL MAINTAIN SYMMETRY OF AIR TERMINALS & SHALL HAVE PRIOR APPROVAL OF ARCHITECT/ENGINEER.
- BALANCING NOTES: PROVIDE AIR BALANCING OF HVAC SYSTEM, HYDRONIC SYSTEM, & BALANCING OF DOMESTIC HOT WATER SYSTEM. SEE SECTION 22 05 93 AND 23 05 93 FOR COMPLETE REQUIREMENTS.
- SIDE INLET CONNECTIONS: CEILING SPACE IS TIGHT IN A NUMBER OF AREAS. IN SUCH AREAS, CEILING AIR INLET/OUTLET CONNS REQUIRE SIDE INLET PLENUM, SEE DETAIL 1 SHEET M4.1. PROVIDE WHERE REQ'D DUE TO SPACE LIMITATIONS TO PREVENT KINKS IN FLEX DUCT AND ALLOW PROPER CONN.
- CONCEALED: ALL DUCTWORK SHALL BE RUN CONCEALED, UNO.
- ACCESS DOORS: PROVIDE DUCT ACCESS DOORS AT ALL DAMPERS & BDD'S.
- BALANCER CFM'S: WHERE RETURN GRILLE CFM'S ARE NOT INDICATED, BALANCER SHALL CALCULATE & SUBMIT FOR ENGINEER REVIEW. UNIT RA-SA-OA.
- GRILLE ALIGNMENT: RESTROOM EXHAUST & TRANSFER GRILLES SHALL BE INSTALLED TO BE INLINE W/ EACH OTHER (UNO).
- WHERE EXPOSED: VERIFY MOUNTING HEIGHTS OF ALL EXPOSED DUCTWORK & WALL GRILLES/WALL CAPS W/ ARCHITECT PRIOR TO BEGINNING WORK.
- EQUIPMENT TRANSITIONS: PROVIDE TRANSITIONS FROM DUCT SIZES INDICATED TO CONNECTION SIZES AT EQUIPMENT TO MATCH UNIT CONNECTIONS. WHERE THE CONNECTING DUCT IS LINED, THE TRANSITION SHALL BE LINED.
- DUCT PRESSURE CLASS: DUCTS SHALL BE CONSTRUCTED TO THE PRESSURE CLASS CORRESPONDING TO FAN INDICATED ESP (ROUND UP TO NEXT PRESSURE CLASS). SEAL DUCTS PER WSEC AND SPECIFICATIONS.

### FIRE SPRINKLER NOTES

- COMPLETE BUILDING SHALL BE FIRE SPRINKLERED PER NFPA 13 AND PER THE LOCAL AUTHORITY HAVING JURISDICTION.
- PROVIDE WET PIPE TYPE SYSTEM SERVING ALL AREAS NOT SUBJECT TO FREEZING. DRY TYPE HEADS MAY BE USED OFF WET SYSTEM FOR LIMITED COVERAGE AREAS AND WHERE FREEZING OF WET PIPE IS POSSIBLE.
- REVIEW ARCHITECTURAL, STRUCTURAL, AND ALL OTHER DRAWINGS FOR BUILDING DETAILS AND LAYOUT. PLANS SHOWN ON "M" SHEETS ARE APPROXIMATE.
- COORDINATE WITH ALL TRADES IN ROUTING OF SPRINKLER PIPING TO AVOID CONFLICTS. FIRE PROTECTION SYSTEM HAS THE LOWEST PRIORITY OF ITEMS RAN IN THE CEILING. PROVIDE OFFSETS AS REQUIRED.
- PIPING SHALL BE CAREFULLY FABRICATED & INSTALLED FOR BEST APPEARANCE. PIPING SHALL BE CLEANED AND PREPARED FOR PAINTING. PIPING MAY ONLY BE RAN EXPOSED WHERE NOTED AND WHERE APPROVED BY ARCHITECT. WHERE EXPOSED ALL PIPE SHALL BE STEEL (NO FLEX PIPING), ALL LABELS, MARKS, LETTERING, ETC. SHALL BE REMOVED.
- ALL PIPING SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE. EXPOSED PIPING SHALL BE ARRANGED TO BE SYMMETRIC AND COMPATIBLE WITH THE DIRECTION AND SPACING OF ADJACENT STRUCTURE MEMBERS AND ARCHITECTURAL FEATURES.
- ALL FIRE SPRINKLER HEADS SHALL BE LOCATED TO BE SYMMETRIC WITHIN SPACES SERVED AND BUILDING ARCHITECTURAL FEATURES.

### LIST OF DRAWINGS

M-001	MECHANICAL LEGEND AND NOTES
M-002	ENERGY CODE NOTES
M-003	MECHANICAL SCHEDULES
M-201	PLUMBING FOUNDATION PLAN
M-301	PLUMBING PLAN
M-302	PLUMBING DETAILS
M-401	MECHANICAL PLAN



## ENERGY CODE NOTES

### EQUIPMENT SIZING, PERFORMANCE, AND TYPE

1. LOAD CALCULATIONS, C403.1: LOAD CALCULATIONS HAVE BEEN PERFORMED IN ACCORDANCE WITH WSEC C403.1.2.
2. EQUIPMENT AND SYSTEM SIZING, C403.3: OUTPUT CAPACITIES OF HEATING AND COOLING EQUIPMENT AND SYSTEMS ARE NO GREATER THAN THE SMALLEST AVAILABLE EQUIPMENT SIZE THAT EXCEEDS THE CALCULATED LOADS.
3. HVAC EQUIPMENT PERFORMANCE, C403.3.2: EQUIPMENT SCHEDULES ARE INCLUDED WITH THESE PLANS.
4. ELECTRIC MOTOR EFFICIENCY, C405.8: ALL ELECTRIC MOTORS SHALL MEET THE MINIMUM EFFICIENCY OF WSEC TABLES.
5. FAN POWER LIMITATION: FOR ALL HVAC SYSTEMS WITH TOTAL FAN HP > 5HP, MOTOR HP OR BHP SHALL COMPLY WITH FAN POWER LIMITATIONS PER WSEC.
6. MOTOR NAMEPLATE HP: FOR EACH FAN, THE MOTOR SHALL BE NO LARGER THAN THE FIRST AVAILABLE MOTOR SIZE GREATER THAN THE BHP.
7. FAN EFFICIENCY: FANS AND FAN SYSTEMS GREATER THAN 5HP SHALL HAVE A FAN EFFICIENCY GRADE (FEG) OF 67 OR HIGHER PER AMCA 205.
8. FAN VARIABLE FLOW CAPACITY: FOR FAN MOTORS 7.5 HP AND GREATER VARIABLE FLOWS SHALL BE PROVIDED WITH A VFD.
9. OUTDOOR AIR, EXHAUST & RELIEF DAMPERS: PROVIDE ALL OUTSIDE AIR, EXHAUST AIR, AND RELIEF AIR OPENINGS WITH CLASS 1 (MAX LEAKAGE OF 4 CFM/SF AT 1.0" W.C.) MOTORIZED DAMPERS.
10. RETURN AIR DAMPERS: PROVIDE RETURN AIR OPENINGS WITH CLASS 1 MOTORIZED DAMPER WHERE USED FOR AIRSIDE ECONOMIZER. WHERE INSTALLED IN UNITARY PACKAGED EQUIPMENT DAMPER, PROVIDE DAMPERS WITH LOWEST LEAKAGE RATE AVAILABLE FROM THE EQUIPMENT MANUFACTURER.

### HVAC SYSTEM CONTROLS

11. THERMOSTATIC CONTROLS: WHERE ADJACENT ZONES CONNECTED BY PERMANENT OPENINGS WITH AREA GREATER THAN 10% OF EITHER ZONE SF. PROVIDE CONTROL TO PREVENT ADJACENT ZONES FROM OPERATING IN CONFLICTING MODES. WHERE A NON-PERIMETER ZONE IS ADJACENT TO A PERIMETER ZONE, PROVIDE CONTROLS TO ONLY ALLOW COOLING IN THE NON-PERIMETER ZONE WHEN IT IS 5 DEGREES HIGHER THAN THE PERIMETER ZONE.
12. DEADBAND: THERMOSTATIC CONTROLS SHALL BE CONFIGURED WITH 5°F MINIMUM DEADBAND FOR SYSTEMS THAT CONTROL BOTH HEATING AND COOLING.
13. AUTOMATIC SETBACK AND SHUTDOWN: HVAC SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC CONTROLS CAPABLE OF STARTING AND STOPPING THE SYSTEM FOR SEVEN DIFFERENT DAILY SCHEDULES, AND SHALL HAVE MANUAL OVERRIDE CONFIGURED TO OPERATE THE SYSTEM FOR 2 HOURS.
14. AUTOMATIC START: AUTOMATIC START CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM, AND BE CAPABLE OF AUTOMATICALLY ADJUSTING DAILY START TIME IN ORDER TO BRING EACH SPACE TO THE DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY.
15. OUTDOOR AIR DAMPERS: OUTSIDE AIR INTAKE DAMPERS SHALL AUTOMATICALLY CLOSE WHEN SYSTEM OR SPACES SERVED ARE NOT IN USE OR DURING WARM-UP AND SET BACK.
16. VENTILATION: MECHANICAL VENTILATION AIR SYSTEMS SHALL BE CONFIGURED TO PROVIDE NOT MORE THAN 150%, BUT AT LEAST THE MINIMUM REQUIRED VOLUME OF OUTDOOR AIR TO EACH ZONE PER IMC. SEE MECHANICAL EQUIPMENT SCHEDULES FOR MINIMUM OUTSIDE AIR VALUES.
17. DX AHU VARIABLE COOLING CONTROL: DX COOLING UNITS SHALL BE PROVIDED WITH INTEGRATED ECONOMIZER COOLING AND WITH MODULATING MECHANICAL COOLING CAPACITY USING EITHER MULTIPLE COMPRESSORS OR A VARIABLE SPEED COMPRESSOR.
18. FAN AIRFLOW CONTROL: DX COOLING UNITS; PROVIDE CONTROLS TO VARY THE INDOOR FAN AIRFLOW AS A FUNCTION OF LOAD.

### DUCTING SYSTEMS

19. DUCT CONSTRUCTION, C403.2.8.1: DUCTWORK SHALL BE CONSTRUCTED AND SEALED PER IMC.
20. HIGH PRESSURE DUCT TESTING: DUCTED SYSTEMS DESIGNED TO OPERATE ABOVE 3 INCHES WATER GAUGE(W.G.) SHALL BE LEAK TESTED TO DEMONSTRATE MAXIMUM LEAKAGE PER WSEC EQUATION 4-9.
21. DUCT INSULATION: MINIMUM DUCT INSULATION PER WSEC IS AS FOLLOWS:

SERVICE	INSULATION LEVEL
OUTSIDE AIR DUCTS AND PLENUMS	PROVIDE INSULATION EQUIVALENT TO ENVELOPE REQUIREMENT FOR METAL FRAMED WALLS (TABLE C402.1.3)
OUTSIDE AIR DUCT SERVING INDIVIDUAL SUPPLY UNIT WITH LESS THAN 2,800 CFM OF SUPPLY AIR	R-7
SUPPLY & RETURN DUCTS IN UNCONDITIONED SPACES	R-6
SUPPLY DUCTS WITHIN CONDITIONED SPACE WHERE SUPPLY AIR IS < 55 DEG F. OR > 105 DEG F.	R-3.3
EXPOSED DUCTWORK WITHIN A ZONE THAT SERVES THAT ZONE	NO INSULATION REQUIRED

### SYSTEMS REQUIRING ENERGY RECOVERY

22. ENERGY RECOVERY VENTILATION/EXHAUST: SYSTEMS WITH DESIGN OUTSIDE AIR GREATER THAN 5,000 CFM AND SYSTEMS WITH OUTSIDE AIR PERCENTAGE EXCEEDING THE VALUES OF WSEC TABLE C403.5.1(1) OR (2) SHALL BE PROVIDED WITH AN ENERGY RECOVERY SYSTEM. SEE EQUIPMENT SCHEDULES FOR TYPE AND EFFECTIVENESS.

### DEDICATED OUTDOOR AIR SYSTEMS (DOAS)

23. DEDICATED OUTDOOR AIR SYSTEMS PROVIDED FOR ALL AREAS (EXCEPT RANGES).
24. ENERGY RECOVERY VENTILATION WITH DOAS: ALL DOAS UNITS SHALL BE PROVIDED WITH EXHAUST HEAT RECOVERY WITH RATED EFFECTIVENESS TO INCREASE OSA ENTHALPHY BY 50% OR MORE BASED ON THE DELTA BETWEEN THE RETURN AIR AND THE OUTSIDE AIR ENTHALPIES AT DESIGN CONDITIONS.
25. HEATING/COOLING SYSTEM CONTROLS WITH DOAS: EQUIPMENT THAT PROVIDES ZONE LEVEL HEATING AND COOLING SHALL BE CONFIGURED WITH FANS AND/OR PUMPS THAT CYCLE OFF AND PRIMARY COOLING AIR SHALL SHUT OFF WHEN THERE IS NO CALL FOR HEATING OR COOLING IN THE ZONES THEY SERVE.

### COMMISSIONING

26. SCOPE OF MECHANICAL SYSTEMS COMMISSIONING: ALL MECHANICAL SYSTEMS, EQUIPMENT AND CONTROLS SHALL BE COMMISSIONED.
27. COMMISSIONING REQUIREMENTS IN CONSTRUCTION DOCUMENTS: COMMISSIONING PLAN SHALL BE DEVELOPED BY A COMMISSIONING PROFESSIONAL AND CONSIST OF A NARRATIVE DESCRIPTION OF ACTIVITIES, ROLES & RESPONSIBILITIES OF THE COMMISSIONING TEAM, SCHEDULE OF ACTIVITIES INCLUDING TAB, FUNCTIONAL PERFORMANCE TESTING AND VERIFICATION OF PROJECT CLOSE OUT DOCUMENTATION PER C103.6, AND SUBMIT COMPLIANCE CHECKLIST TO THE BUILDING OFFICIAL UPON SUBSTANTIAL COMPLETION. A PRELIMINARY COMMISSIONING REPORT AND/OR COMMISSIONING COMPLIANCE CHECKLIST SHALL BE AVAILABLE FOR AHJ REVIEW PRIOR TO THE FINAL MECHANICAL INSPECTION.
28. AIR SYSTEM BALANCING: HVAC AIR SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH THE SPECIFICATIONS AND THESE WSEC NOTES. SEE SPECIFICATIONS FOR FLOW RATE TOLERANCES.
29. AIR SYSTEM BALANCING DEVICES: PROVIDE ALL SUPPLY AIR OUTLETS AND TERMINAL DEVICES WITH MEANS OF BALANCING AIRFLOW. BALANCE TO FIRST MINIMIZE THROTTLING LOSSES, THEN ADJUST TO MEET DESIGN AIR FLOWS.
30. FUNCTIONAL PERFORMANCE TESTING CRITERIA: FUNCTIONAL PERFORMANCE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH WSEC.

### EQUIPMENT SIZING, PERFORMANCE, AND TYPE

1. SWH (SERVICE WATER HEATING) EQUIPMENT TYPE & EFFICIENCY, C404.2: EQUIPMENT SCHEDULES ARE INCLUDED WITH THESE PLANS.
2. HEAT TRAPS, C404.4: WATER HEATING EQUIPMENT NOT SUPPLIED WITH INTEGRAL HEAT TRAPS SERVING NON CIRCULATED SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON SUPPLY AND DISCHARGE PIPING.
3. INSULATION UNDER ELECTRIC WATER HEATER, C404.5: ELECTRIC WATER HEATERS IN UNCONDITIONED SPACES OR ON CONCRETE FLOORS SHALL BE PROVIDED WITH INCOMPRESSIBLE R-10 INSULATED PAD.

### PIPING SYSTEMS

4. INSULATION OF PIPING, C404.6: PROVIDE INSULATION FROM WATER HEATER TO FINAL FIXTURE, AND ON PIPING THAT IS HEAT TRACED. MINIMUM PIPE INSULATION PER WSEC IS AS FOLLOWS:

FLUID OPERATING TEMPERATURE	INSULATION THICKNESS (NOMINAL PIPE SIZE)			
	<1	1 TO <1-1/2	1-1/2 TO <4	4 TO <8
141-200	1.5	1.5	2.0	2.0
105-140	1.0	1.0	1.5	1.5
40-60	0.5	0.5	1.0	1.0
<40	0.5	1.0	1.0	1.5

5. EFFICIENT SWH SUPPLY PIPING, C404.3: ALL PIPING CONNECTING TO SERVICE HOT WATER SOURCE, SHALL COMPLY WITH MAXIMUM ALLOWABLE PIPE LENGTH METHOD. MAXIMUM ALLOWABLE LENGTHS ARE AS FOLLOWS:

NOMINAL PIPE SIZE (INCH)	MAXIMUM LENGTH (FEET)	
	AT PUBLIC LAVATORY	AT OTHER FIXTURES
1/2	2	43
3/4	1	21
1	0.5	13
1-1/4	0.5	8
1-1/2	0.5	6
2 OR LARGER	0.5	4

6. HEATED WATER CIRCULATING SYSTEM, C404.7.1/C404.8: CIRCULATING HOT WATER PUMPS SHALL TURN OFF AUTOMATICALLY WHEN THERE IS NO DEMAND OR DESIRED WATER TEMPERATURE IN RETURN LOOP HAS BEEN MET. CIRCULATING HOT WATER PUMPS SHALL BE EQUIPPED WITH CONTROLS TO TURN OFF DURING PERIODS OF NON-USE.
7. HEAT TRACE SYSTEM CONTROL, C404.7.1/C404.8: HEAT TRACE CONTROL SHALL DE-ENERGIZE SYSTEM WHEN THERE IS NO DEMAND AND WHEN DESIRED TEMPERATURE HAS BEEN MET.
8. CONTROLS FOR HOT WATER STORAGE, C404.7.3: FOR SYSTEMS WITH STORAGE TANKS, PROVIDE CONTROLS TO LIMIT OPERATION OF PUMPS FROM HEATING CYCLE START-UP TIME TO < 5 MINUTES AFTER THE END OF THE HEATING CYCLE.
9. VARIABLE FLOW PUMPS, C403.2.13/C403.4.2.7: FOR PUMP MOTORS 7.5 HP AND GREATER, VARIABLE FLOWS SHALL BE PROVIDED WITH A VFD AND SHALL BE CONTROLLED BY PRESSURE OR OTHER ZONE DEMAND INDICATOR.

### PROJECT CLOSE OUT DOCUMENTATION

10. DOCUMENTATION SUBMITTAL REQUIREMENTS: SUBMIT ALL CLOSEOUT DOCUMENTATION INCLUDING AS-BUILTS AND O&MS TO OWNER.
11. THESE "ENERGY CODE NOTES" ARE LISTED TO SATISFY THE BUILDING DEPARTMENT'S REQUIREMENT THAT CERTAIN INFORMATION BE PLACED ON THE PLANS, BUT DO NOT DIMINISH THE FULL PROJECT REQUIREMENTS. PROVIDE ITEMS IN EXCESS OF CODE WHERE NOTED ON DRAWINGS AND IN SPECIFICATIONS.

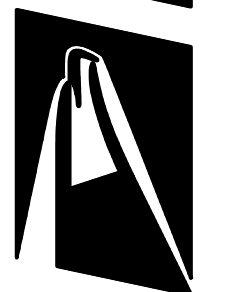
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**Cornerstone**  
ARCHITECTURAL GROUP

6161 NE 175th Street, Suite 101  
Kenmore, Washington 98026  
Phone: 206.682.5000  
cornerstonerearch.com

TUKWILA RETAIL AQ  
1233 ANDOVER PARK E  
TUKWILA, WA 98188



Revisions: -

M0.2 Mechanical ENERGY CODE NOTES  
Scale: 1/8" = 1'-0" Date: 9/22/23  
Project: TUKWILA RETAIL AQ  
USPS File Number: 600571

**HULTZ BHU**  
engineers inc

1111 Fawcett Ave Suite 100 Tacoma, WA 98402  
Phone: (253) 383-3257 Fax: (253) 383-3283  
general@hultzbhu.com Job Number: 23-112

**BID SET 9/21/23**

Facilities, 4301 Wilson Blvd., Suite 300, Arlington, VA 22203-1861

## EXISTING GAS HEAT / ELECTRIC COOLING UNIT SCHEDULE

SYMBOL	BASIS OF DESIGN MANUFACTURER AND SERIES NO.	AREA SERVED	COOLING CAP.			HEATING CAP.			SUPPLY FAN				COMPRESSOR		COND. FAN		FILTERS			MIN. OA	WEIGHT	UNIT ELECTRICAL			REMARKS	
			TOTAL MBH	SENSIBLE MBH	EFF.	INPUT MBH	OUTPUT MBH	STAGES	AFUE	CFM	ESP	BHP	FLA	QTY	RLA (EA)	QTY	FLA	TYPE	SIZE			QUANTITY	MCA	MOP		VOLTS / PH
(E)RTU-1	CARRIER 48TCDD08A2A5-6U0G0	EAST	90.1	68.9	11.0 EER 12.8 SEER	125	103	MOD	82%	3000	0.5"	1.65	8.6	2	75	2	0.48	2" PTA MERV 8	16X20	4	1800	1087	105	125	208/3	
(E)RTU-2	CARRIER 48TCDD08A2A5-6U0G0	WEST	90.1	68.9	11.0 EER 12.8 SEER	125	103	MOD	82%	3000	0.5"	1.65	8.6	2	75	2	0.48	2" PTA MERV 8	16X20	4	1800	1087	105	125	208/3	

NOTES: 1. ADJUST EACH UNIT'S ECONOMIZER TO ACCOMMODATE REQUIRED VENTILATION AIR RATES.

### AIR INLET & OUTLET SCHEDULE

SYMBOL	TYPE	MANUFACTURER AND SERIES NUMBER	REMARKS
CD	CEILING SUPPLY DIFFUSER	KRUEGER SERIES 1240	MODULAR CORE SQUARE NECK
CRG	CEILING RETURN GRILLE	KRUEGER SERIES EGC-5	1/2"x1/2"x1/2" CUBE CORE
WSG	WALL SUPPLY GRILLE	KRUEGER 5880 H	HORIZ. FACE BARS 3/4" O.C., VERTICAL REAR BARS, DOUBLE DEFLECTION
WRG	WALL RETURN GRILLE	KRUEGER 580 H	HORIZ. FACE BARS 3/4" O.C., 35° DEFLECTION

NOTES:  
 1. CEILING DIFFUSERS (CD) SHALL HAVE NO. & DIRECTION OF THROWS AS INDICATED ON PLANS. (E.G. CD-3 = 3 WAY THROW)  
 2. SEE LEGEND FOR TERMINOLOGY USED IN AIR TERMINAL CALL-OUTS ON DRAWINGS.  
 3. SEE ARCH. FINISH SCHEDULE FOR CEILING TYPES, PROVIDE AIR TERMINALS TO MATCH CEILING CONSTRUCTION INSTALLED IN.

### FAN SCHEDULE

SYMBOL	BASIS OF DESIGN MANUFACTURER AND SERIES NO.	TYPE	AREA SERVED	CFM	ESP	RPM	ELECTRICAL		DRIVE	CONTROL	MAX WEIGHT LBS	REMARKS
							HP	VOLTS / PH				
EF-1, -2	GREENHECK SP-A90-V6	CEILING EXHAUST	BATHROOM	110	0.5"	939	1/8	120/1	DIRECT	INTERVAL TIMER	30	①

ACCESSORIES: ① W. EC MOTOR, TO ALLOW BALANCING

### ELECTRIC HEATER SCHEDULE

SYMBOL	HEATER TYPE	BASIS OF DESIGN MANUFACTURER AND SERIES NO.	AREA SERVED	EQUIPMENT CAPACITY	ELECTRICAL		REMARKS
					POWER	VOLTS / PH	
DH-1	DUCT	INDEECO QUA	BOX LOBBY	8 KW	8,000 W	208/3	W/ SCR CONTROLLER

### WATER HEATER SCHEDULE

SYMBOL	BASIS OF DESIGN MANUFACTURER AND SERIES NO.	TYPE	AREA SERVED	HEATING CAPACITY INPUT	STORAGE (GAL)	DOMESTIC HW			ELECTRICAL		REMARKS
						GPH	EWT	LWT	FLA	VOLTS/PH	
WH-1	A.O. SMITH DRE-30	ELECTRIC TANK TYPE	USPS	3 KW	30	17.5	50	120	14.4	208/1	

### PUMP SCHEDULE

SYMBOL	BASIS OF DESIGN MANUFACTURER AND SERIES NO.	TYPE	SERVICE	GPM	FT. HEAD H2O	ELECTRICAL		REMARKS
						POWER	VOLTS/PH	
CP-1	BELL & GOSSETT NBF	DOMESTIC CIRCULATOR	RESTROOM HWC	2	15	270 WATTS	115/1	ALL BRONZE, W/ AQUASTAT

### OA VENTILATION CALCULATION

PER IMC 2018 (Ev Simplified Procedure Per State Amendment)

Project: **USPS Tukwila**  
 No: 23-112  
 Date: 9/11/23  
 Calc By: JJM

= Manually entered, from Code  
 = Calculated

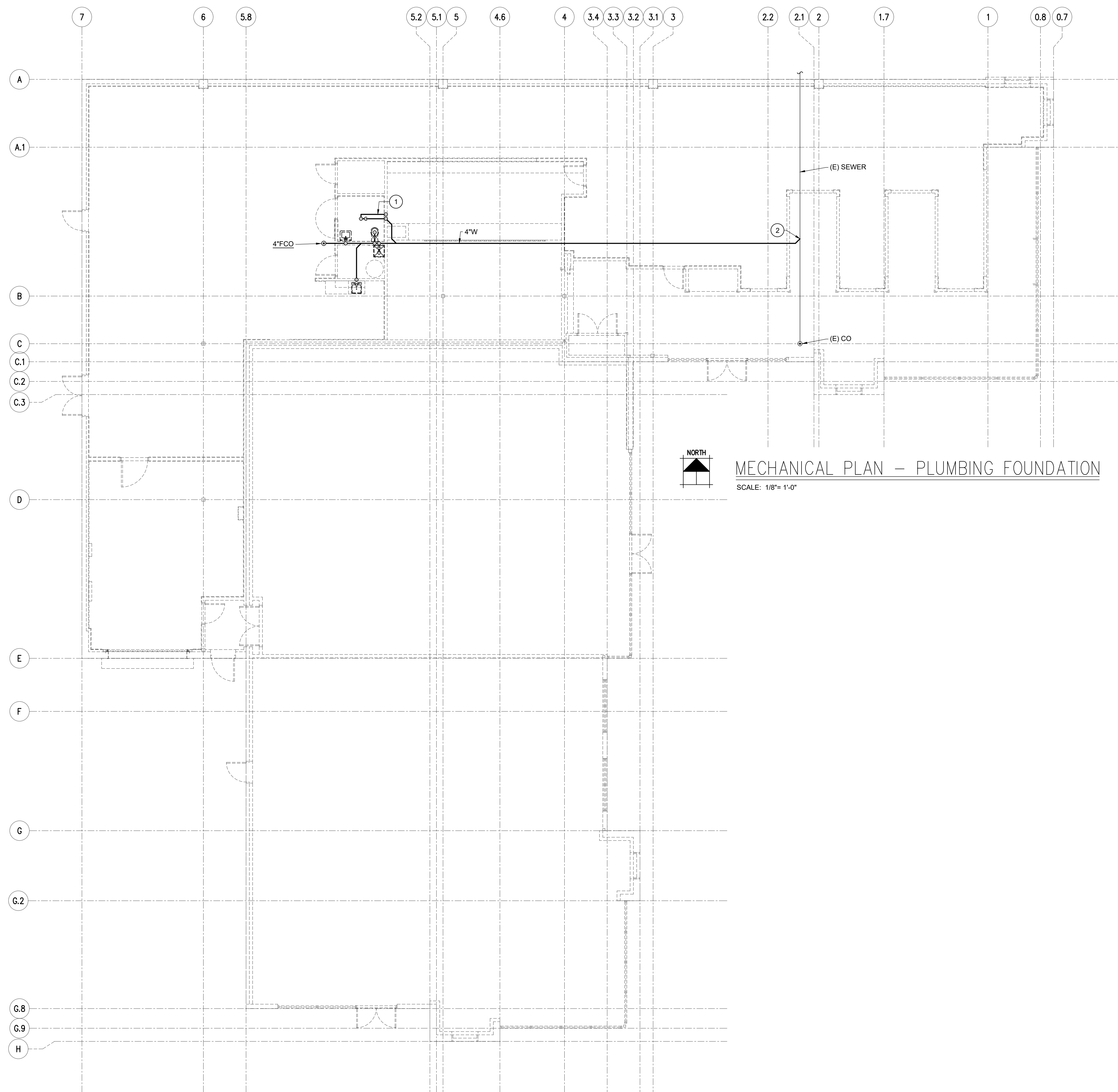
**OUTSIDE AIR:**  
 HVAC Unit, Zone #, Name, Occup Category, Az (sf), People OA (R<sub>p</sub>, P/1000 sf, P<sub>2</sub>), Area OA (Ra, Ra/Az), Vbz (OA), Ez, Voz (cfm), Vpz, Ev, D, D x (sum(Rp/Pz)), Vou, Vpz-min, Vot, Calc OA % of Vot

Unit	Zone #	Name	Occup Category	Az (sf)	Rp	P/1000 sf	P <sub>2</sub>	Ra	Ra/Az	Vbz (OA)	Ez	Voz (cfm)	Vpz	Ev	D	D x (sum(Rp/Pz))	Vou	Vpz-min	Vot	Calc OA % of Vot	
AHU-1	1	101 BOX LOBBY	MAIN ENTRY LOBBY	1264	3	10	13	39.0	0.06	75.8	114.3	1	114.3	1250	0.75	0.79	97.7	296.0	172.3	400	
	2	104 WILL CALL	WAREHOUSE	2042	4	10	21	84.0	0.06	122.5	206.5	1	206.5	1750				309.8	394.7	3%	
	System Actual Population Ps = 27				3306			34	123.0		198.4		321.4						482.0		
AHU-2	1	103 SERVICE LINE	OFFICE SPACE	307	3	20	7	21.0	0.06	18.4	39.4	1	39.4	300	0.38	0.18	25.1	222.4	59.1	600	
	2	102 SERVICE LOBBY	MAIN ENTRY LOBBY	424	5	10	5	25.0	0.06	25.4	59.4	1	59.4	500				75.7	588.5	2%	
	3	105 WORK ROOM	WAREHOUSE	1929	4	10	20	80.0	0.06	115.7	195.7	1	195.7	1700				253.6		% above CODE	
	4	109 MAIL VESTIBULE	WAREHOUSE	628	2	10	7	14.0	0.06	37.7	51.7	1	51.7	500				77.5			
System Actual Population Ps = 7				3288			39	140.0		197.3		337.3							505.9		

### PLUMBING FIXTURE SCHEDULE

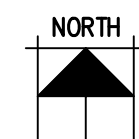
SYMBOL	DESCRIPTION	W	V	CW	HW	REMARKS
P-1A	WATER CLOSET	4"	2"	1/2"	-	FLOOR MOUNT, FLUSH TANK ADA ACCESSIBLE
P-3A	LAVATORY	2"	1-1/2"	1/2"	1/2"	WALL MOUNT, ADA ACCESSIBLE
P-5A	SINK	2"	2"	1/2"	1/2"	SINGLE COMPARTMENT
P-6A	SERVICE SINK	3"	2"	1/2"	1/2"	FLOOR MOUNT
P-11A	FLOOR DRAIN	SIZES AS NOTED ON PLANS *				W/ TRAP PRIMER

\* PROVIDE W/ 2"W & 2"V UNO.



**MECHANICAL PLAN – PLUMBING FOUNDATION**

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



**GENERAL NOTES:**

1. SEE MECHANICAL GENERAL NOTES SHEET M0.1.
2. SEE PLUMBING FIXTURE SCHEDULE ON SHEET M0.3 FOR PIPE SIZES TO INDIVIDUAL FIXTURES.
3. NO PLUMBING AS-BUILTS ARE AVAILABLE. FIELD VERIFY EXISTING WASTE PIPE SIZE & LOCATION USING ELECTRONIC DETECTION METHODS & CAMERAING OF (E) PIPING PRIOR TO BEGINNING WORK.
4. SAWCUT EXISTING CONCRETE FLOOR TO ALLOW FOR UNDERGROUND WORK INDICATED; ASSUME 75' OF SAWCUTTING REQUIRED FOR BIDDING PURPOSES.
5. ITEMS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. OFFSET ITEMS AS NEEDED TO CLEAR FOOTINGS & OTHER OBSTRUCTIONS.
6. FIXTURES SHOWN DASHED REPRESENT FIXTURES ON FLOOR ABOVE. SEE PLUMBING AND ARCHITECTURAL FLOOR PLANS FOR TYPE AND LOCATION.
7. ALL VENTS ARE 2" (UNO).
8. ALL WASTE PIPES ARE 4" AT 1% MINIMUM SLOPE.

**KEYED NOTES:**

- ① 1/2" CW TRAP PRIMER LINE TO FLOOR DRAIN.
- ② CONNECT TO (E) SANITARY SEWER. FIELD VERIFY LOCATION.

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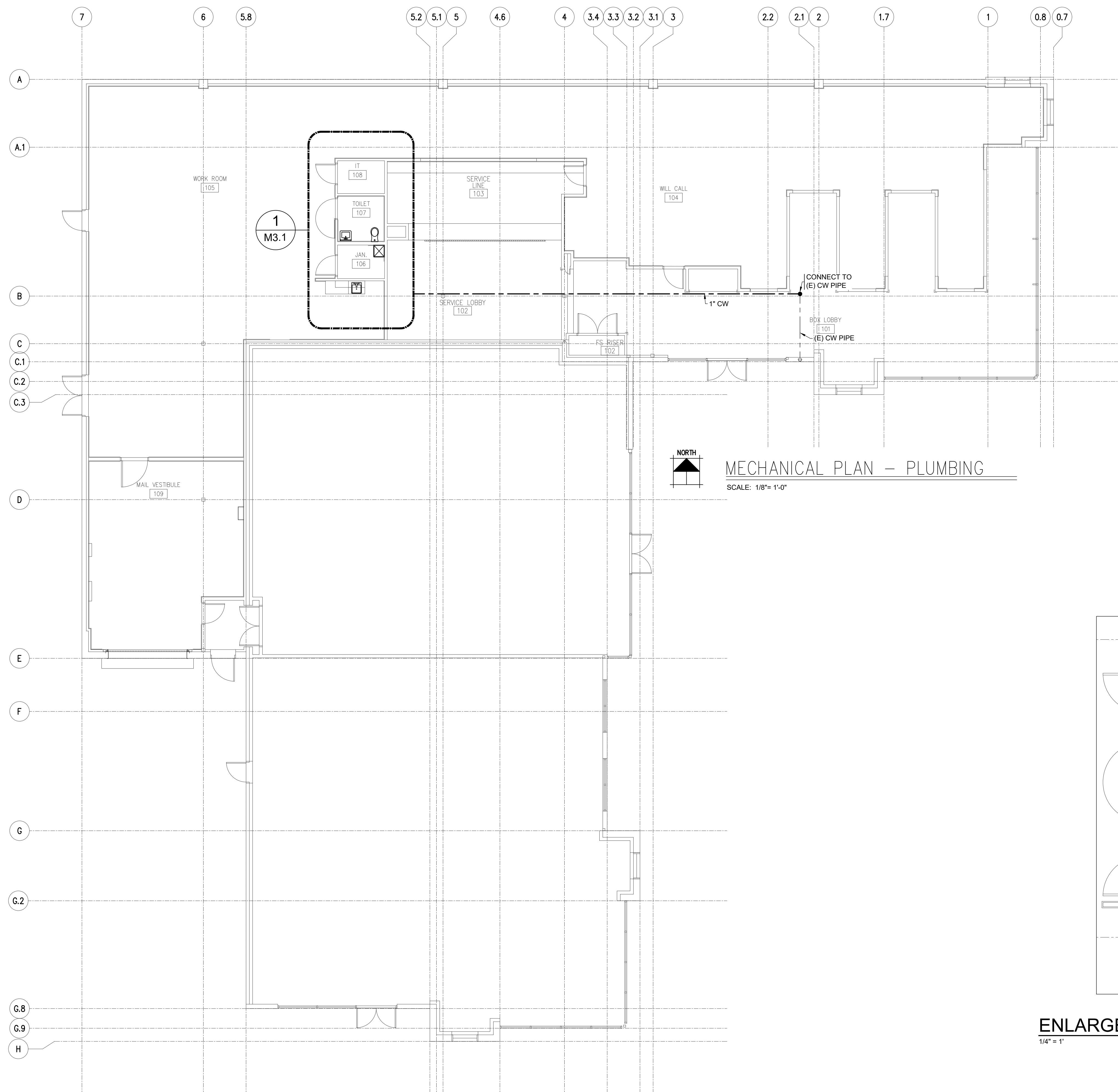
**M2.1** Plumbing FOUNDATION PLAN  
 Scale: 1/8" = 1'-0" Date: 9/22/23  
 Project: TUKWILA RETAIL AQ  
 USPS File Number: 600571



1111 Fawcett Ave Suite 100 Tacoma, WA 98402  
 Phone: (253) 383-3257 Fax: (253) 383-3283  
 general@hultzbhu.com Job Number: 23-112

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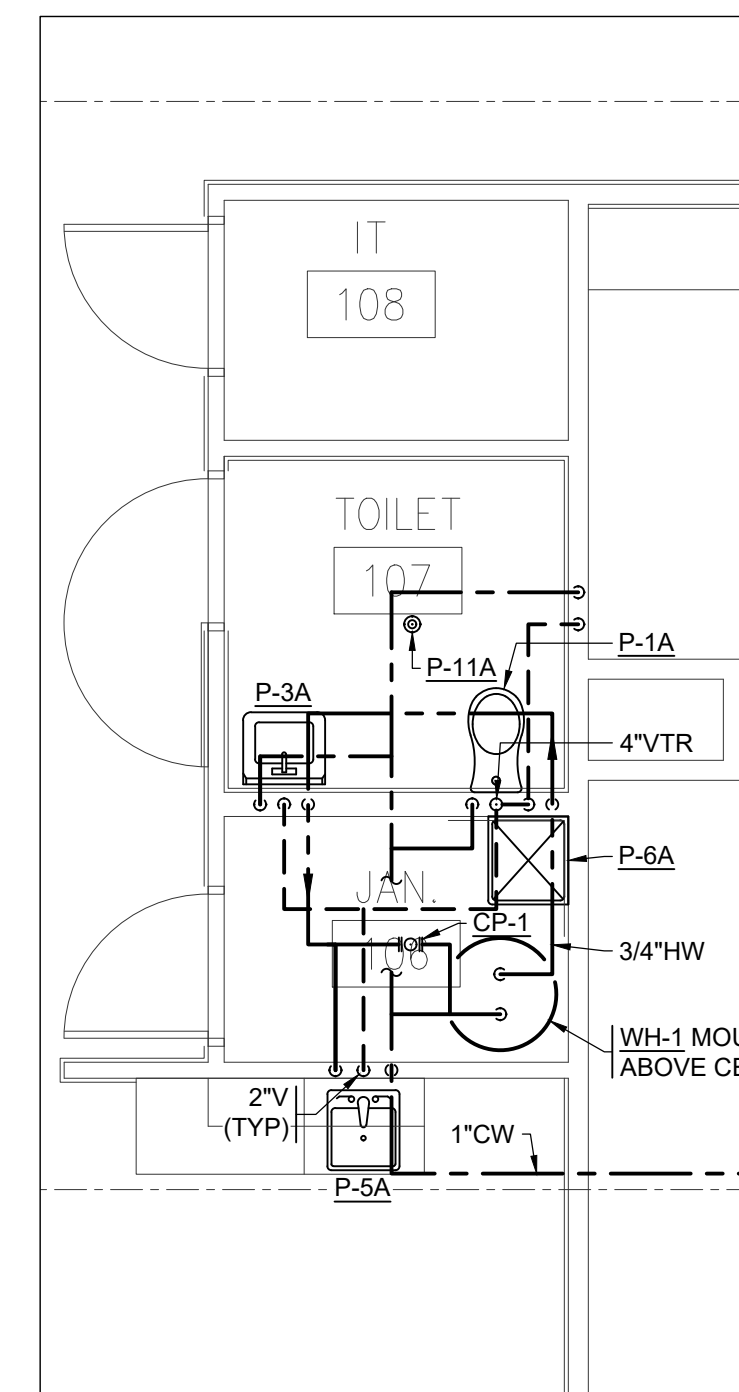


**GENERAL NOTES:**

1. SEE MECHANICAL GENERAL NOTES SHEET M0.1.
2. SEE PLUMBING FIXTURE SCHEDULE FOR PIPE SIZES TO INDIVIDUAL FIXTURES.
3. NO PLUMBING AS-BUILTS ARE AVAILABLE. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING WORK.
4. ITEMS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. OFFSET ITEMS AS NEEDED TO CLEAR FOOTINGS & OTHER OBSTRUCTIONS.
5. TERMINATE VTR MIN. 10' FROM AIR INLETS. PROVIDE PIPING OFFSETS AS REQUIRED.

**KEYED NOTES:**

1. CONNECT TO (E) CW SERVICE. VERIFY SIZE/LOCATION.



**ENLARGED PLUMBING PLAN**

1/4" = 1'

1

M3.1

**HULTZ BHU**  
engineers inc

1111 Fawcett Ave Suite 100 Tacoma, WA 98402  
Phone: (253) 383-3257 Fax: (253) 383-3283  
general@hultzbhu.com Job Number: 23-112

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**M3.1** Plumbing MECHANICAL PLAN

Scale: 1/8" = 1'-0" Date: 9/22/23

Project: TUKWILA RETAIL AQ

USPS File Number: 600571

Revisions: -



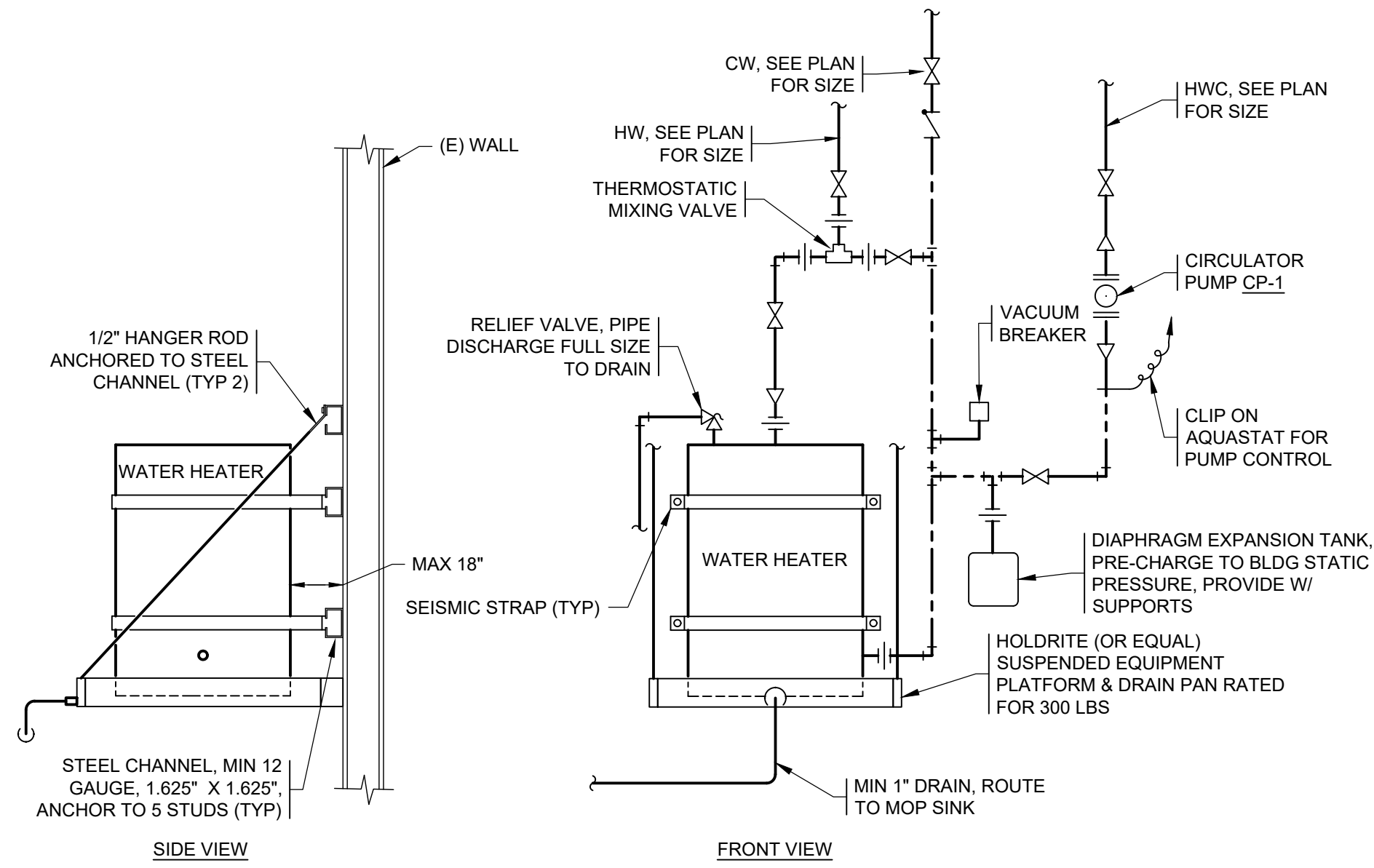
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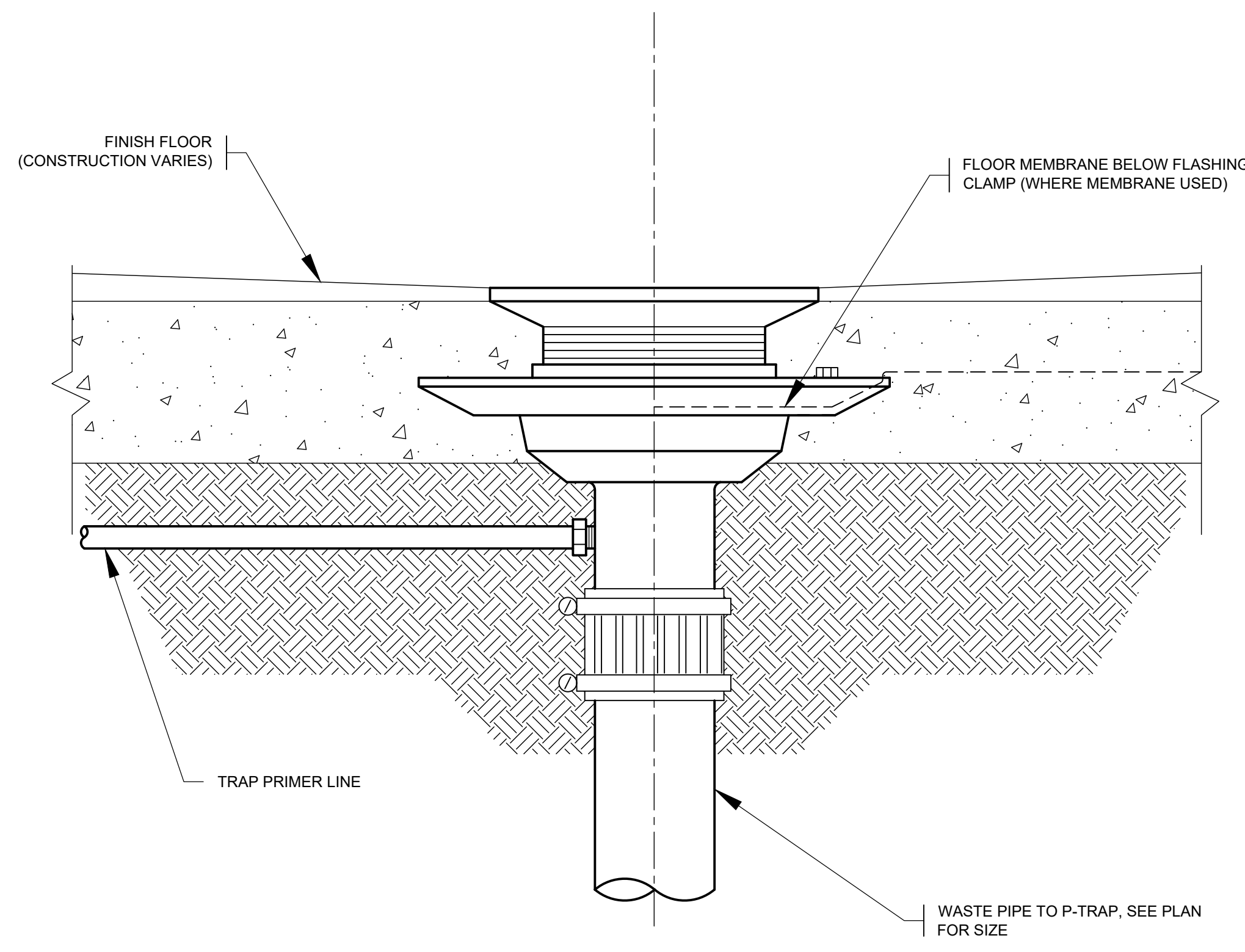


**Cornerstone**  
ARCHITECTURAL GROUP  
6161 NE 175th Street, Suite 101  
Kenmore, Washington 98026  
Phone: 206.682.5000  
cornerstonearch.com

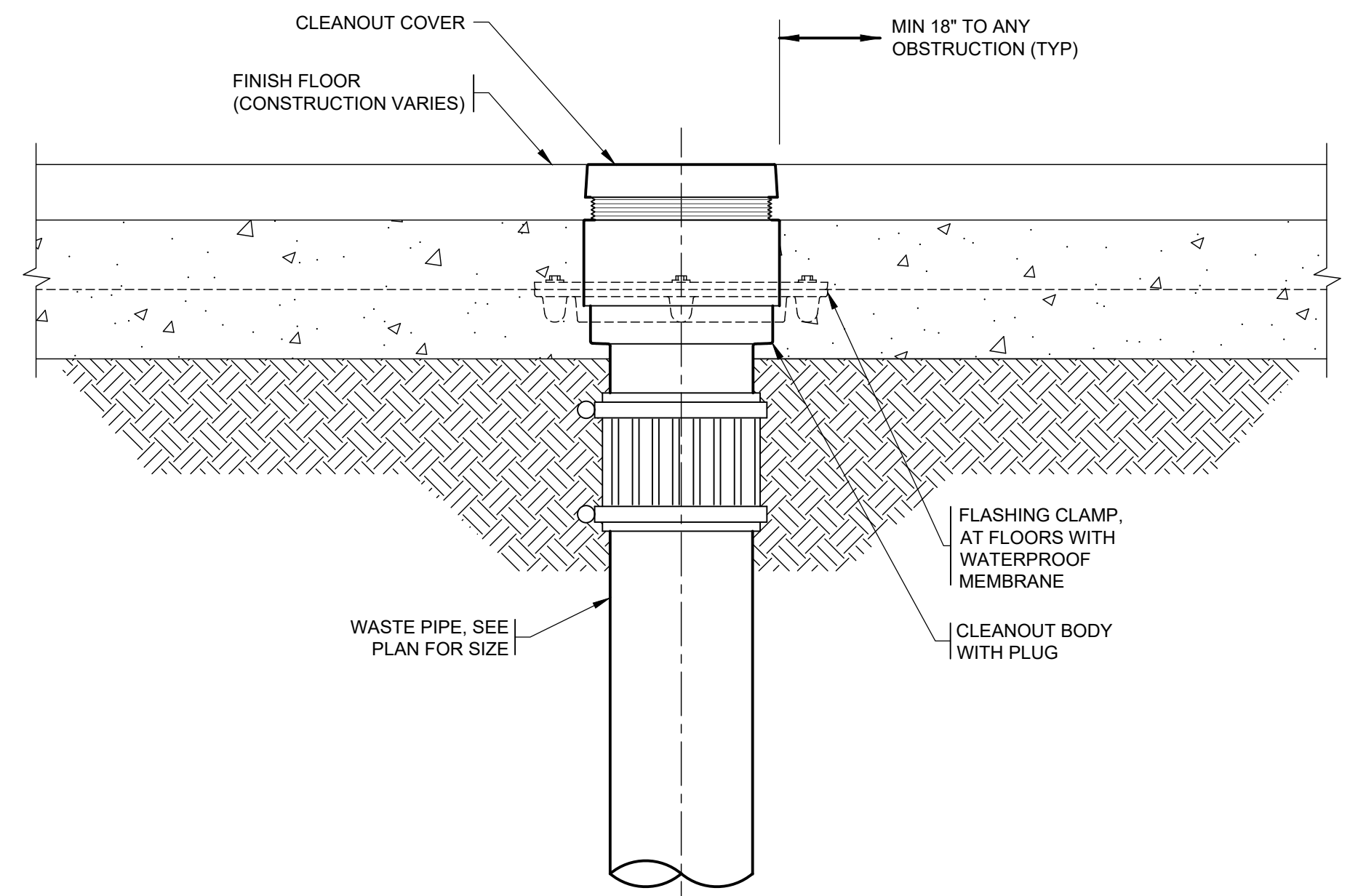
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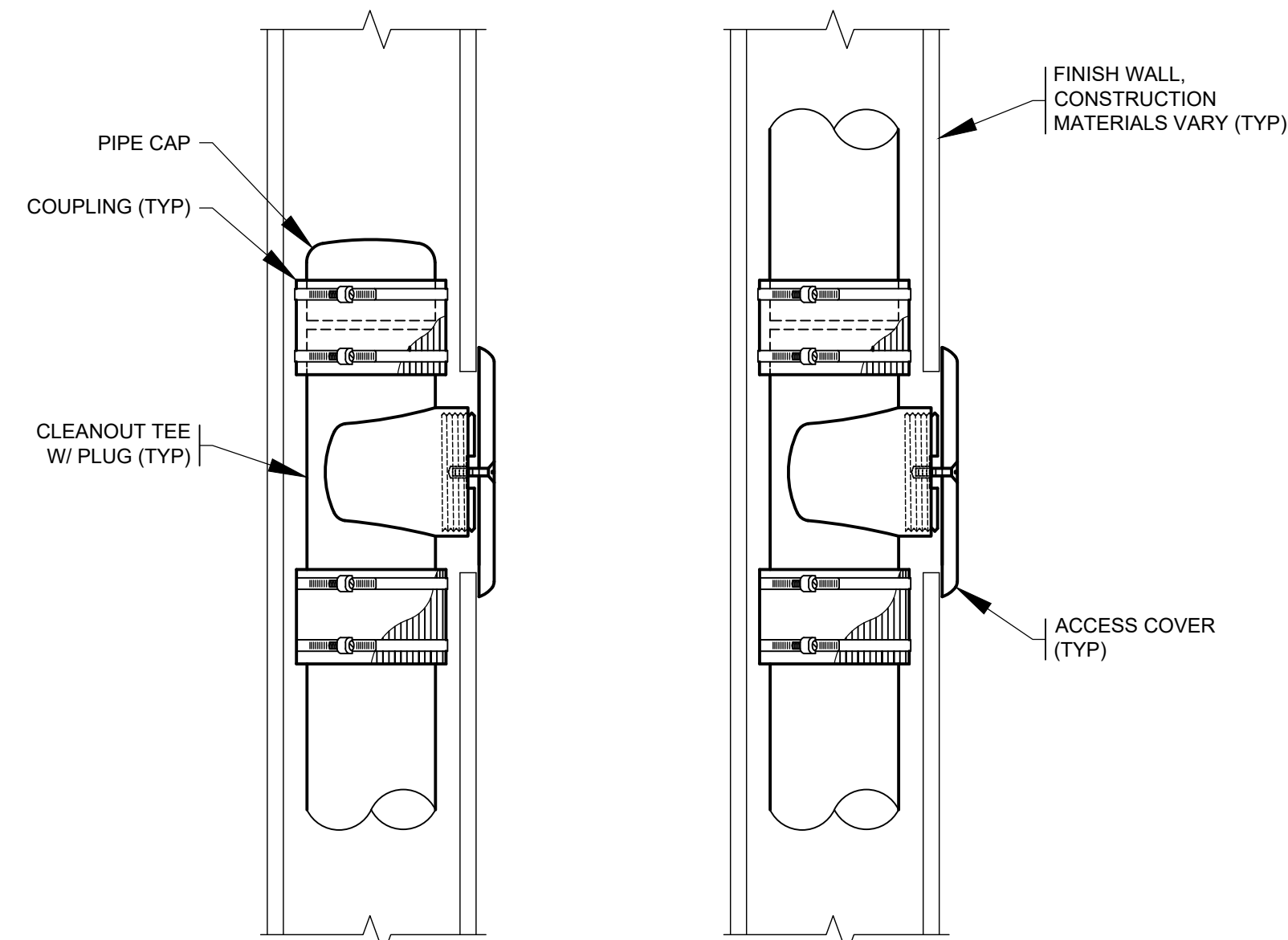
**WATER HEATER MOUNTING DETAIL** 6  
NTS M3.2



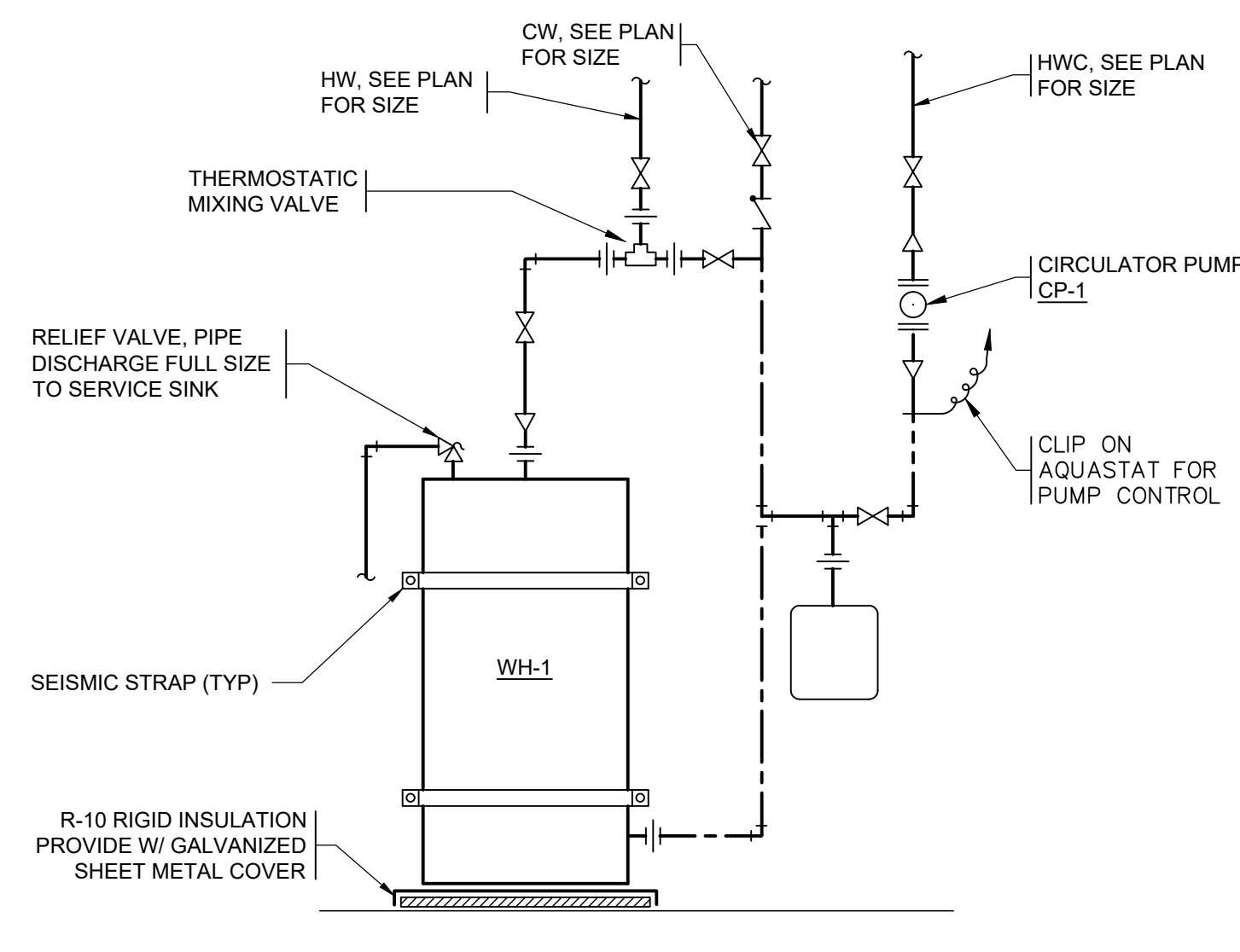
**FLOOR DRAIN DETAIL** 2  
NTS M3.2



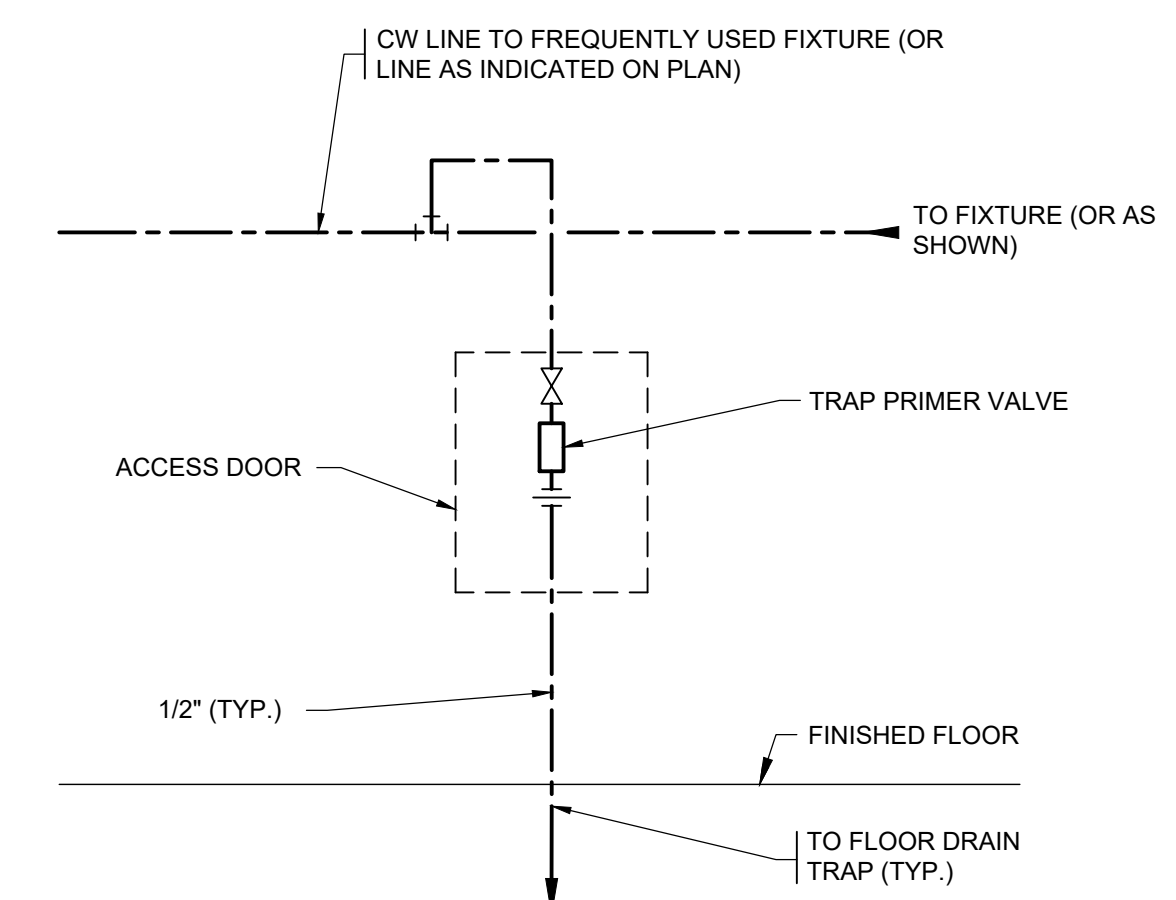
**FLOOR CLEANOUT DETAIL** 1  
NTS M3.2



**WALL CLEANOUT-IN WALL** 5  
NTS M3.2



**WATER HEATER DETAIL** 4  
NTS M3.2



**TRAP PRIMER DETAIL** 3  
NTS M3.2

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**Cornerstone ARCHITECTURAL GROUP**  
6161 NE 175th Street, Suite 101  
Kenmore, Washington 98026  
Phone: 206.682.5000  
cornerstonerch.com

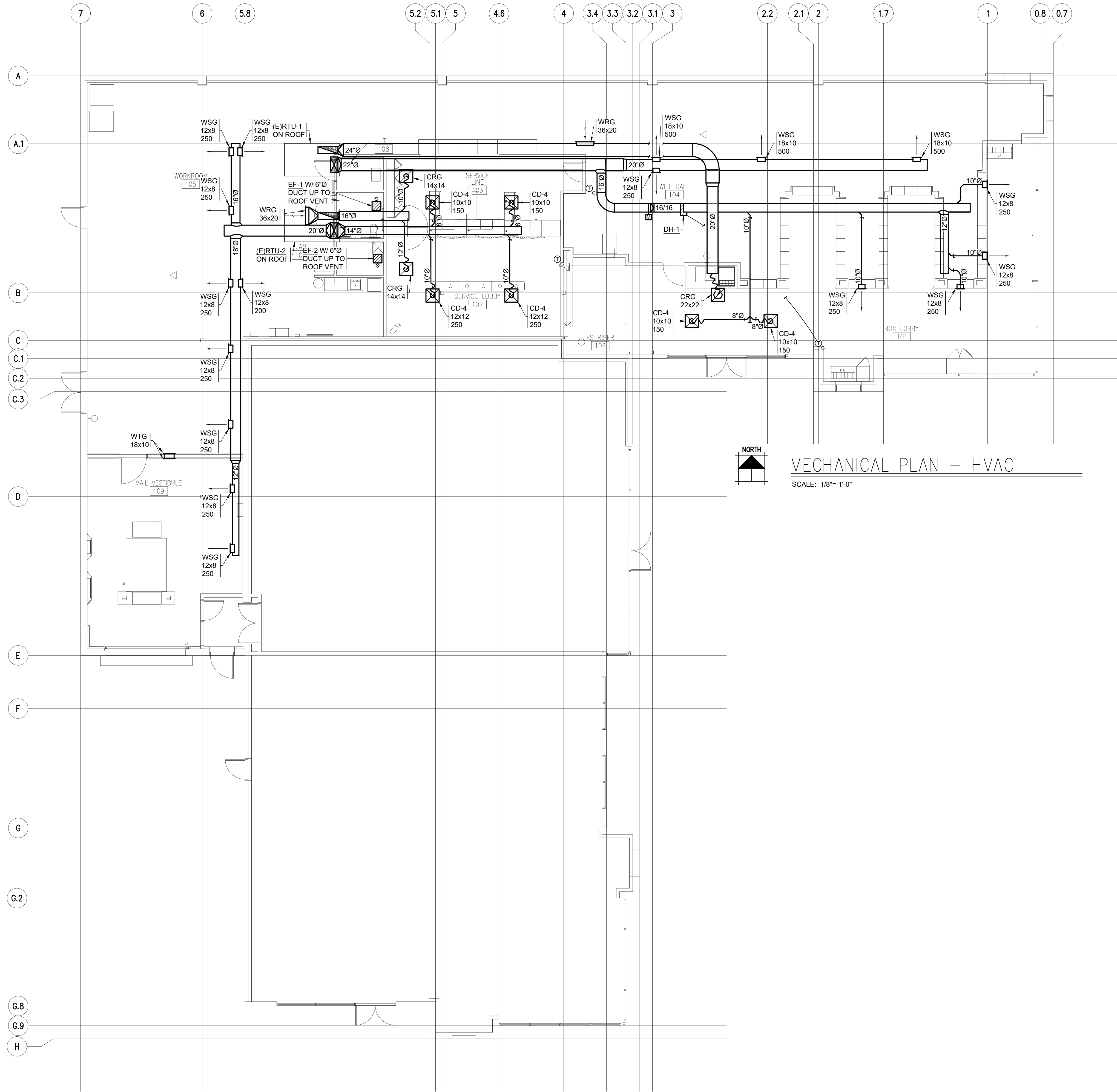
M3.2 Plumbing MECHANICAL DETAILS  
Scale: 1/8" = 1'-0"  
Date: 9/22/23  
Project: TUKWILA RETAIL AQ  
USPS File Number: 600571

Revisions: -

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engineers inc

1111 Fawcett Ave Suite 100 Tacoma, WA 98402  
Phone: (253) 383-3257 Fax: (253) 383-3283  
general@hultzbhu.com Job Number: 23-112

**BID SET 9/21/23**



MECHANICAL PLAN - HVAC  
SCALE: 1/8" = 1'-0"

**GENERAL NOTES:**

1. SEE MECHANICAL NOTES ON SHEET M0.1.
2. LOCATE ALL EQUIPMENT DAMPERS, AND ITEMS REQUIRING ADJUSTMENT OR MAINTENANCE TO BE ACCESSIBLE. PROVIDE BUILDING ACCESS DOORS AS REQUIRED. PROVIDE DUCT ACCESS DOORS AT ALL BDD'S AND MOTORIZED DAMPERS.
3. DUCTWORK SHALL BE CONSTRUCTED TO THE PRESSURE CLASS CORRESPONDING TO THE FAN STATIC PRESSURE THAT SERVES THE DUCT, BUT NO LESS THAN 1-INCH WG (PLUS/MINUS AS APPROPRIATE). SEAL DUCTWORK FOR SEAL CLASS C PER CODE REQUIREMENTS.
4. VERIFY SPACE FOR ALL GRILLES, & DUCTWORK PRIOR TO FABRICATING OR ORDERING MATERIALS.

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### ABBREVIATIONS

(SOME ABBREVIATIONS MAY NOT BE USED ON DRAWINGS)

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A or AMP	AMPERES	MCC	MOTOR CONTROL CENTER
AC	ALTERNATING CURRENT	MCM, KCM	THOUSAND CIRCULAR MILS
A/C	AIR CONDITIONING	MDF	MAIN DISTRIBUTION FRAME
AIC	AMPERE INTERRUPTING CAPACITY	MECH	MECHANICAL
AL	ALUMINUM	MIN	MINIMUM
ARCH	ARCHITECTURAL	MLO	MAIN LUGS ONLY
ATS	AUTOMATIC TRANSFER SWITCH	MOP, MOCP	MAXIMUM OVERCURRENT PROTECTION
AWG	AMERICAN WIRE GAUGE	NIC	NOT IN CONTRACT
BKR	BREAKER	NTS	NOT TO SCALE
BLDG	BUILDING	OC	ON CENTER
C	CONDUIT	PA	PUBLIC ADDRESS
C.O.	CONDUIT ONLY	PB	PULLBOX
CB	CIRCUIT BREAKER	Ø or PH	PHASE
CCTV	CLOSED CIRCUIT TELEVISION	PNL	PANEL
CFM	CUBIC FEET PER MINUTE	PR	PAIR
CKT	CIRCUIT	PRI	PRIMARY
CLG	CEILING	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	RECPT	RECEPTACLE
CT	CURRENT TRANSFORMER	REQ	REQUIRED
CU	COPPER	RM	ROOM
CW	COLD WATER	SHT	SHEET
DC	DIRECT CURRENT	SP	SINGLE POLE
DIA	DIAMETER	SPD	SURGE PROTECTIVE DEVICE
DIV	DIVISION	SPDT	SINGLE POLE, DOUBLE THROW
DPDT	DOUBLE POLE, DOUBLE THROW	SPST	SINGLE POLE, SINGLE THROW
DPST	DOUBLE POLE, SINGLE THROW	SW	SWITCH
DWG	DRAWING	SWBD	SWITCHBOARD
EGC	EQUIPMENT GROUND CONDUCTOR	TEL	TELEPHONE
ELEC	ELECTRIC	TV	TELEVISION
EMT	ELECTRICAL METALLIC TUBING	TTB	TELECOMMUNICATIONS TERMINAL BOARD
EXST, (E)	EXISTING	TYP	TYPICAL
ETR	EXISTING TO REMAIN	UL	UNDERWRITERS LABORATORY
EV	ELECTRIC VEHICLE	UF	UNDERFLOOR
FA	FIRE ALARM	UG	UNDERGROUND
FC	FOOTCANDLE	V	VOLTS
FLA	FULL LOAD AMPS	VA	VOLT AMPERES
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	VAC	VOLTS ALTERNATING CURRENT
GND	GROUND	VAR	REACTIVE VOLT AMPERES
HP	HORSEPOWER	W	WATTS
IDF	INTERMEDIATE DISTRIBUTION FRAME	WP	WEATHERPROOF
J-BOX	JUNCTION BOX	W	WITH
KV	KILOVOLTS	W/O	WITHOUT
KVA	KILOVOLT AMPERES	XFER	TRANSFER
KW	KILOWATTS	XFMR	TRANSFORMER
LT	LIGHT		
LTG	LIGHTING		
MAX	MAXIMUM		
MCA	MINIMUM CIRCUIT AMPS		
MCB	MAIN CIRCUIT BREAKER		

### OUTLET MOUNTING HEIGHTS

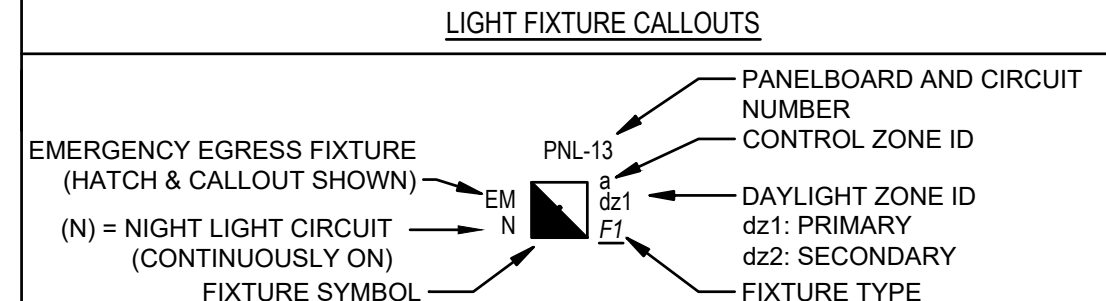
(MEASURE TO CENTER OF BOX, UNLESS OTHERWISE INDICATED)

COUNTER HEIGHT (*)	+3 INCHES ABOVE SPLASH	FIRE ALARM	
CASEWORK OUTLETS	AS DIRECTED	MANUAL STATIONS	48 INCHES TO TOP
SWITCHES AND DIMMERS	48 INCHES	SIGNALING DEVICES	80 INCHES TO BOTTOM
RECEPTACLES	18 INCHES	REMOTE ALARM LIGHTS	80 INCHES TO BOTTOM
THERMOSTATS	48 INCHES	REMOTE ANNUNCIATOR	60 INCHES TO BOTTOM
OCCUPANCY SENSORS	12 FEET MAXIMUM	GRAPHIC PLAQUES	60 INCHES TO BOTTOM
DATA (COMPUTER)	18 INCHES	SECURITY	
WALL PHONE	48 INCHES	KEY PAD	48 INCHES TO TOP
TV (TELEVISION)	18 INCHES	CARD READER	48 INCHES
TV WALL MOUNTED	CENTER OF TV BRACKET	CCTV	WITHIN 6 INCHES OF CAMERA MOUNT
SPEAKERS	90 INCHES	CCTV POLE MOUNTED	16 FEET
CLOCKS	90 INCHES		
CLOCK/SPEAKER	90 INCHES, GYM OR COMMONS - 120"		
PROJECTOR	ABOVE WHITEBOARD, TO BE COORDINATED		

### ELECTRICAL LEGEND

(SOME SYMBOLS MAY NOT BE USED ON DRAWINGS)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	<b>DISTRIBUTION</b> PANELBOARD - SURFACE PANELBOARD - EXISTING (SURFACE PANEL SHOWN) SWITCHBOARD OR MCC (DRAWN TO SCALE) DISCONNECT SWITCH FUSED DISCONNECT SWITCH MAGNETIC MOTOR STARTER OR OTHER MOTOR CONTROL DEVICE AS SCHEDULED DRY TYPE TRANSFORMER WIRING CONCEALED IN CEILING OR WALL WIRING CONCEALED UNDERGROUND OR BELOW FLOOR WIRING EXPOSED WIRING HOMERUN CONDUIT UP, DOWN FLEXIBLE WIRING CONNECTION		<b>POWER</b> <b>ALL RECEPTACLES ARE TAMPER RESISTANT</b> RECEPTACLES (NEMA 5-20R) SUBSCRIPT: IG ISOLATED GROUND * ABOVE COUNTER REF REFRIGERATOR COP COPIER P PEDESTAL WP WEATHERPROOF C CEILING DW DISHWASHER P WALL MOUNT PROJECTOR TV VIDEO DISPLAY OUTLET. REFER TO ARCHITECTURAL DETAILS FOR MOUNTING HEIGHT U NEMA 5-20R WITH (2) USB PORTS FOURPLEX RECEPTACLE (NEMA 5-20R) DUPLIX RECEPTACLE, 1/2 CONTROLLED BY OCCUPANCY SENSOR OR TIME SWITCH SPLIT WIRED FOURPLEX (1) DUPLIX RECEPTACLE UNSWITCHED, (1) DUPLIX RECEPTACLE CONTROLLED BY OCCUPANCY SENSOR OR TIME SWITCH GFCI DUPLIX RECEPTACLE (NEMA 5-20R) ASTERISK INDICATES COUNTER HEIGHT OUTLET (DUPLIX RECEPTACLE SHOWN) RANGE RECEPTACLE (NEMA 14-50R) DRYER RECEPTACLE (NEMA 14-30R) SPECIAL PURPOSE OUTLET (AS NOTED) RECESSED FLOOR BOX FOR POWER & SIGNAL (DUPLIX AND DATA DROP SHOWN) DISCONNECT SWITCH FUSED DISCONNECT SWITCH JUNCTION BOX MOTOR CONNECTION EQUIPMENT CONNECTION SUBSCRIPT: WH WATER HEATER HD HAND DRYER WC WATER COOLER SINGLE RECEPTACLE (NEMA 5-20R) <b>COMMUNICATIONS</b> CAT 6 OUTLET WITH 1.25" C TO ACCESSIBLE SPACE AND (2) CAT 6A CABLES TO DISTRIBUTION FRAME QTY OF CAT 6 OUTLETS INDICATED W/ CAT 6A CABLE FOR EACH IF MORE THAN 2 OUTLET TO DISTRIBUTION FRAME, MIN 1.25" C TO ACCESSIBLE SPACE WIRELESS ACCESS POINT STATION WITH (1) CAT 6A CABLE TERMINATED IN A BISCUIT STYLE ENCLOSURE WITH (1) CAT 6A OUTLET, INSTALL WAP FURNISHED BY OWNER TELEVISION OUTLET - F-CONNECTOR & COAX TO TERMINAL
	<b>GENERAL</b> BUBBLE NOTE TAG SYMBOL: # - IDENTIFYING NUMBER SCHEDULED EQUIPMENT CONNECTION (INCLUDE ALL WIRING, DISCONNECTING MEANS, CONTROL AND OTHER REQUIREMENTS SCHEDULED) DETAIL SYMBOL: # - IDENTIFYING NUMBER A - SHEET WHERE DETAIL SHOWN REVISION CALLOUT FLAG NOTE SCHEDULED CONDUIT CALLOUT <b>LIGHTING</b> LUMINAIRE (TO SCALE ON DRAWINGS) EMERGENCY FIXTURE - TWIN HEAD COMBINATION EXIT SIGN AND TWIN HEAD EMERGENCY LIGHTING UNIT EXIT FIXTURE - CEILING EXIT FIXTURE - WALL EXIT FIXTURE WITH DIRECTION ARROWS LIGHT FIXTURE ON NIGHT LIGHT CIRCUIT PROVIDE UNSWITCHED HOT CONDUCTOR INDICATES CONTROL ZONE POLE MOUNTED LIGHT INDICATES LUMINAIRE TYPE		<b>INTRUSION / ACCESS CONTROL</b> CARD READER KEY SWITCH KEY PAD DOOR CONTACT ULTRASONIC DETECTOR CLOSED CIRCUIT TELEVISION CAMERA INTRUSION DETECTION DOOR SWITCH <b>FIRE ALARM</b> FIRE ALARM CONTROL PANEL FIRE ALARM ANNUNCIATOR MANUAL STATION HORN [SPEAKER] "C" INDICATES CEILING MOUNT HORN [SPEAKER] WITH VISUAL SIGNAL (STROBE) "C" INDICATES CEILING MOUNT HEAT DETECTOR SMOKE DETECTOR RELAY <b>LINE TYPES</b> EXISTING WORK NEW WORK

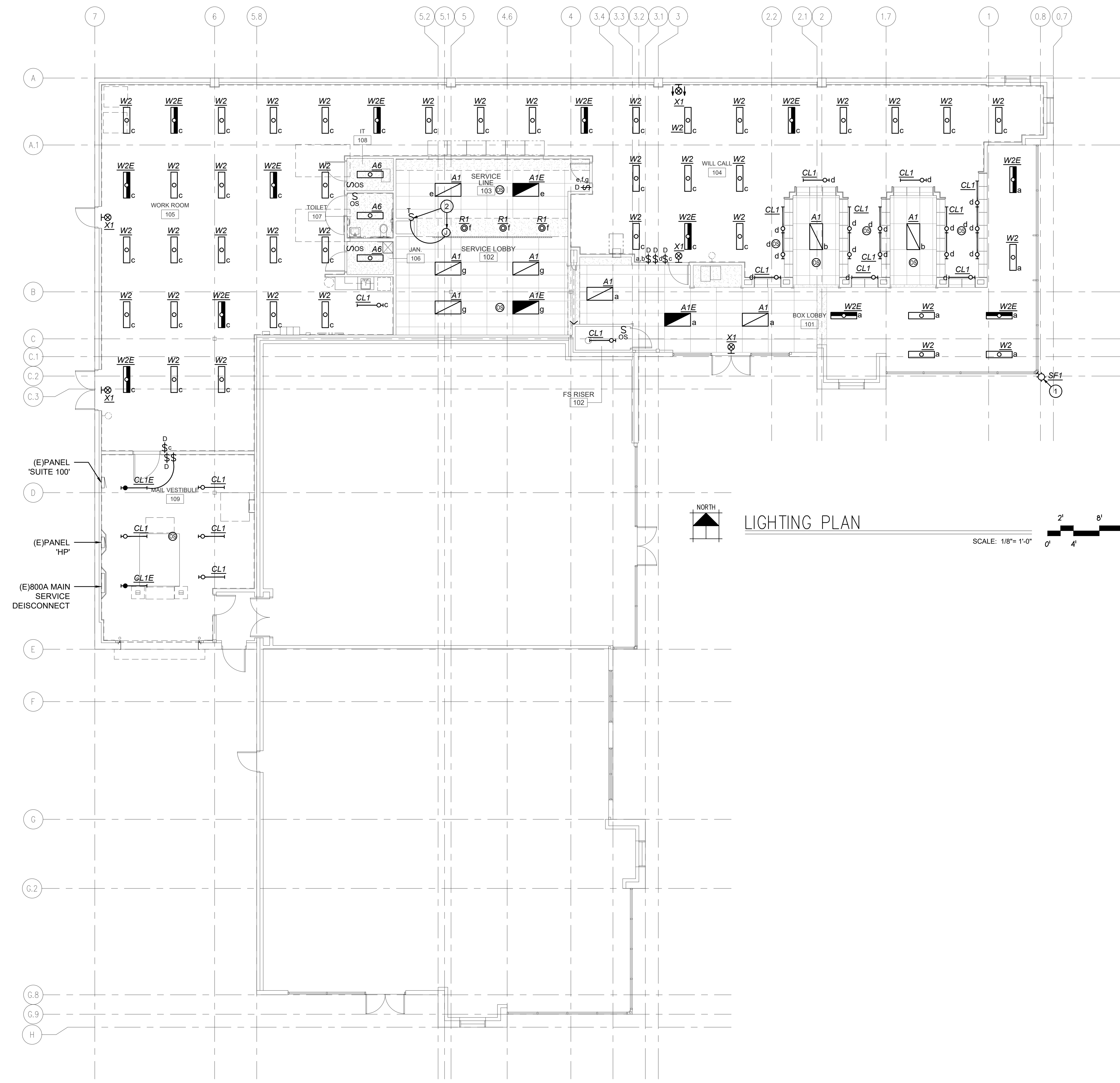


### GENERAL ELECTRICAL NOTES:

- SEE ARCHITECTURAL PLANS FOR LOCATION OF FIRE RATED CONSTRUCTION.
- BRANCH CIRCUIT NOTES:
  - VERIFY BRANCH CIRCUIT WIRE COUNT BEFORE PULLING CONDUCTORS. PROVIDE REQUIRED CONDUCTORS TO EACH OUTLET AND DEVICE FOR PHASE, NEUTRAL AND EQUIPMENT GROUND BASED ON CIRCUIT DESIGNATIONS SHOWN AND AS OTHERWISE INDICATED ON PLANS OR NOTE BELOW.
  - FOR SWITCHED OUTLETS, PROVIDE ADDITIONAL CONDUCTOR COUNT REQUIRED FOR SWITCH LEGS TO ACCOMMODATE SWITCH CONTROL INDICATED. MAINTAIN UNSWITCHED LEG IN LIGHTING BRANCH CIRCUITS TO EXIT, EMERGENCY, AND NIGHT LIGHTING SHOWN.
  - MINIMUM BRANCH CIRCUIT CONDUCTOR SIZE FOR OUTDOOR AND EXTERIOR BUILDING LIGHTING SHALL BE #10 AWG.
  - PROVIDE SEPARATE NEUTRAL CONDUCTOR FOR BRANCH CIRCUITS SERVING RECEPTACLE OUTLETS UNLESS OTHERWISE INDICATED.
- MINIMUM CONDUIT SIZE FOR HOMERUNS AND FOR CONDUIT INSTALLED BELOW GRADE OUTDOORS SHALL BE 3/4 INCH.
- REFER TO ARCHITECTURAL PLANS FOR LIGHT FIXTURE LOCATIONS AND FOR MOUNTING HEIGHT OF SUSPENDED AND WALL MOUNTED LIGHT FIXTURES. REFER TO REFLECTED CEILING PLANS, INTERIOR ELEVATIONS, EXTERIOR ELEVATIONS, ROOM SECTIONS, AND DETAILS SHOWN ON ARCHITECTURAL CONTRACT DOCUMENTS PRIOR TO ROUGH-IN. REPORT CONFLICTS TO ARCHITECT/ENGINEER FOR RESOLUTION.
- REFER TO ARCHITECTURAL ELEVATIONS FOR LOCATION AND MOUNTING HEIGHT OF WIRING DEVICES. REPORT CONFLICTS TO ARCHITECT/ENGINEER FOR RESOLUTION.
- VERIFY EXACT LOCATION OF FLOOR BOXES AND OUTLETS LOCATED IN KNEE SPACES AND CASEWORK. OBTAIN ARCHITECT APPROVAL PRIOR TO ROUGH-IN.
- VERIFY BACK BOX REQUIREMENTS OF EQUIPMENT FURNISHED UNDER OTHER THAN DIVISION 26, 27 OR 28 SECTIONS AND EQUIPMENT FURNISHED BY OWNER.
- SEE MECHANICAL PLANS FOR QUANTITY AND LOCATION OF FIRE / SMOKE DAMPERS. PROVIDE 120 VOLT CONNECTION TO EACH DAMPER.

### ENERGY CODE COMPLIANCE NOTES

- MANUAL LIGHTING CONTROL: PROVIDE EACH ROOM WITH MANUAL LIGHTING CONTROL AS INDICATED. REMOTE LIGHTING CONTROLS SHALL IDENTIFY WHERE LIGHTS ARE CONTROLLED AND ON/OFF STATUS. MANUAL CONTROLS FOR SPACES NOT COVERED IN C405.2.1 LISTED EXCEPTIONS SHALL INCLUDE PROVISION FOR 50% LIGHT REDUCTION.
- AUTOMATIC TIME SWITCH CONTROL: PROVIDE PROGRAMMABLE TIME SWITCH WITH MANUAL OVERRIDE FOR AUTOMATIC CONTROL OF LIGHTING IN ALL AREAS OF THE BUILDING NOT CONTROLLED BY OCCUPANCY SENSORS. TIME SWITCH AND OVERRIDE CONTROL SHALL COMPLY WITH MINIMUM REQUIREMENTS OF C405.2.2.1.
- OCCUPANCY SENSORS: PROVIDE OCCUPANCY SENSORS IN ALL CLASSROOMS, CONFERENCE/MEETING ROOMS, LUNCH AND BREAK ROOMS, PRIVATE OFFICES, RESTROOMS, WAREHOUSE AND STORAGE SPACES, JANITORIAL CLOSETS, AND OTHER SPACES 300 SQUARE FEET OR LESS OR BY C405.2.1.
- DAYLIGHT ZONES: PROVIDE AUTOMATIC CONTROL OF PRIMARY (DZ1) AND SECONDARY (DZ2) DAYLIGHT ZONES INDICATED ON PLANS INDEPENDENT OF MANUAL LIGHTING CONTROL ZONES INDICATED.
- DAYLIGHT ZONE CONTROL: PROVIDE AUTOMATIC CONTINUOUS DIMMING CONTROL OF LIGHTS LOCATED WITHIN PRIMARY AND SECONDARY DAYLIGHT ZONES.
  - MEANS OF EGRESS: PROVIDE AUTOMATIC CONTROL OF EGRESS LIGHTING BY MEANS OF OCCUPANCY SENSORS OR TIME CLOCK AS INDICATED. EMERGENCY LIGHTS TO HAVE UL924 RELAYS TO OVERRIDE CONTROL STATE UPON LOSS OF POWER.
  - DISPLAY AND ACCENT LIGHTS: PROVIDE MANUAL CONTROL AS INDICATED.
  - FIXED MOUNTED TASK LIGHTING: PROVIDE LIGHTS WITH INTEGRAL ON/OFF CONTROL AND CONTROL BY OCCUPANCY SENSOR IN SPACE.
- EXTERIOR LIGHTING CONTROL: PROVIDE AUTOMATIC CONTROL OF EXTERIOR LIGHTING USING COMBINATION OF PHOTOCELL AND ENERGY MANAGEMENT SYSTEM, SEE SERVICE PLAN FOR ADDITIONAL INFORMATION.
- ELECTRIC ENERGY METERING: PROVIDE END-USE METERING FOR HVAC AND WATER HEATING PER SECTION C409.
- TRANSFORMERS: DRY TYPE DISTRIBUTION TRANSFORMERS RATED 600 VOLTS OR LESS SHALL COMPLY WITH MINIMUM EFFICIENCY REQUIREMENTS OF NEMA TP-1, TABLE 4-2.
- MOTORS SHALL COMPLY WITH EFFICIENCY REQUIREMENTS OF C405.8, SEE MECHANICAL DOCUMENTS FOR MOTOR EFFICIENCY DATA.
- COMMISSIONING: PROVIDE PROGRAMMING, CALIBRATION, AND FUNCTIONAL PERFORMANCE TESTING OF AUTOMATIC LIGHTING CONTROL SYSTEMS TO INCLUDE OCCUPANCY SENSORS, DAYLIGHT CONTROLS, AND TIME SWITCHES PER APPROVED COMMISSIONING PLAN. SUBMIT COMPLETED COMMISSIONING COMPLIANCE CHECKLIST (C408.1.4) FOR SIGNATURE PRIOR TO FINAL INSPECTIONS BY MECHANICAL AND ELECTRICAL INSPECTION AUTHORITIES.



**GENERAL NOTES:**

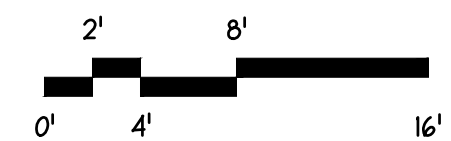
1. REFER TO GENERAL ELECTRICAL NOTES ON SHEET E0.1 FOR ADDITIONAL INFORMATION.
2. BRANCH CIRCUIT HOME RUNS ARE NOT INDICATED WITH LOCATION OR NUMBER OF CONDUCTORS AT ALL LOCATIONS. PROVIDE ALL BRANCH CIRCUIT CONDUCTORS/PATHWAYS AS REQUIRED FOR COMPLETE OPERATION OF ALL DEVICES/EQUIPMENT INDICATED. PROVIDE INDIVIDUAL NEUTRALS FOR EACH CIRCUIT. HOME RUN FROM CLOSEST DEVICE ON CIRCUIT TO SOURCE PANEL.
3. ALL EMERGENCY FIXTURES SHALL BE RATED FOR 90 MINUTES OF RUNTIME.
4. PROVIDE UNSWITCHED HOT CONDUCTOR FOR ALL BATTERY BACKED LIGHT FIXTURES.
5. PROVIDE 1-HOUR FIRE RATED ENCLOSURE FOR RECESSED LIGHT FIXTURES IN FIRE RATED CEILING. (SEE ARCHITECTURAL PLAN FOR FIRE RATED CEILING). FIRE RATED ENCLOSURES FOR RECESSED FIXTURES SHALL HAVE ALL AROUND MINIMUM CLEARANCES OF 3".
6. DO NOT TAKE MEASUREMENTS FROM PLANS FOR DEVICE LOCATIONS. FIELD VERIFY EXACT DEVICE EQUIPMENT, EQUIPMENT LOCATIONS & MOUNTING HEIGHTS WITH OWNER'S REPRESENTATIVE FOR PROPER INSTALLATION.
7. PROVIDE ALL MATERIAL AND LABOR RELATED TO THE INSTALLATION OF ELECTRICAL DEVICES PENETRATING INTO OR THROUGH FIRE RATED WALLS, FLOORS, OR CEILINGS SUCH THAT THE FIRE RATING OF THE WALL IS MAINTAINED.

**PLAN NOTES:**

- ① PROVIDE PHOTOCELL FOR DUSK/DAWN CONTROL OF SOFFIT MOUNTED FLAG POLE LIGHT FIXTURE.
- ② ILLUMINATED MENU BOARD LOCATION. PROVIDE TIME SWITCH CONTROLLER IN ACCORDANCE WITH WSEC C405.2.2.1.

LIGHTING PLAN

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



PLOTTED: Friday, December 01, 2023 10:20:06 AM  
 PLOTTED BY: BRADY  
 USER: P:\1111\2023\_20231201\TUKWILA RETAIL AQ - Lighting.dwg

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engineers inc

1111 Fawcett Ave Suite 100 Tacoma, WA 98402  
 Phone: (253) 383-3257 Fax: (253) 383-3283  
 general@hultzbhu.com Job Number: 23-112

**E2.1** Electrical LIGHTING PLAN

Scale: AS NOTED Date: 9/22/23  
 Project: TUKWILA RETAIL AQ  
 USPS File Number: G00571

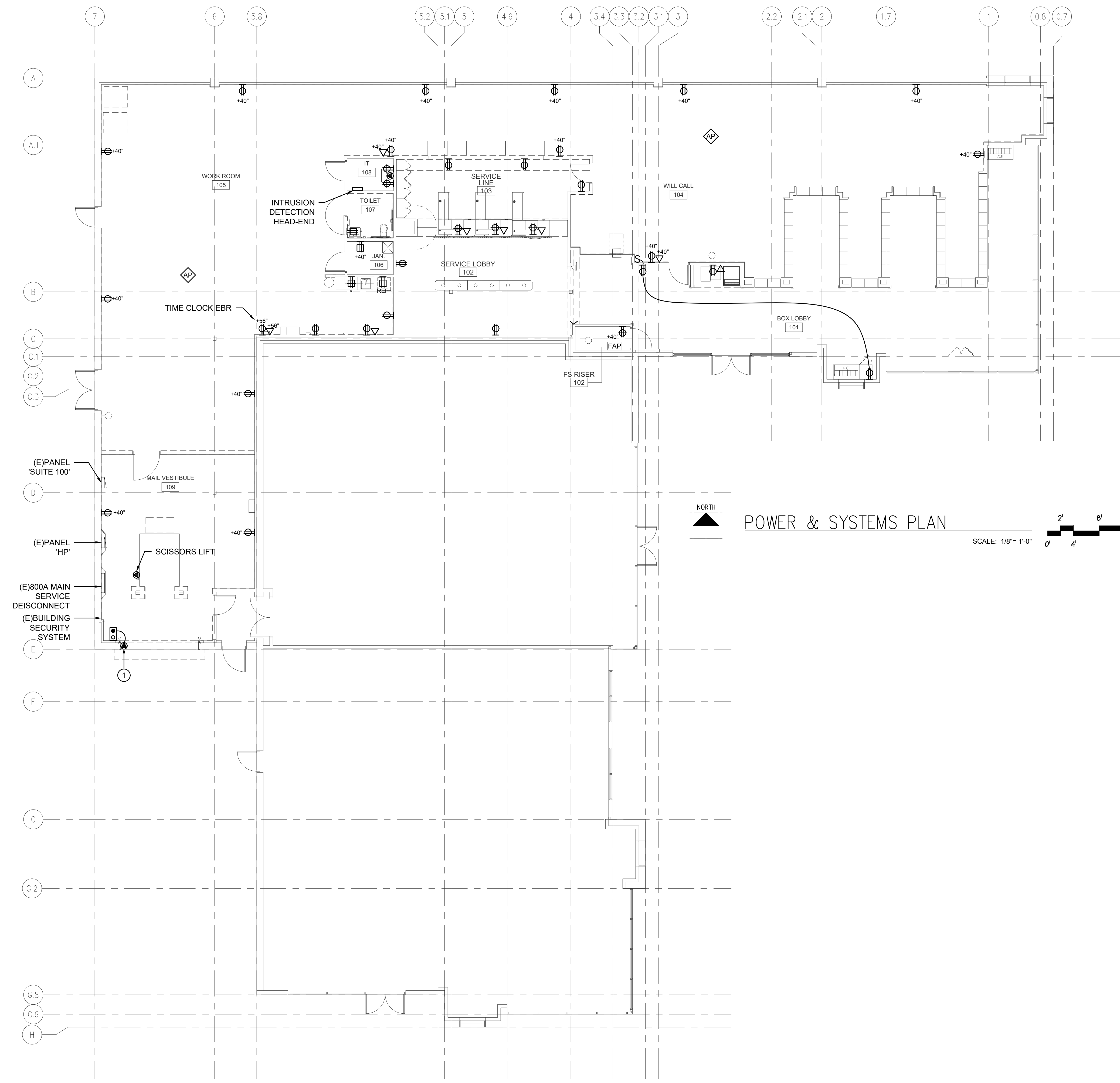
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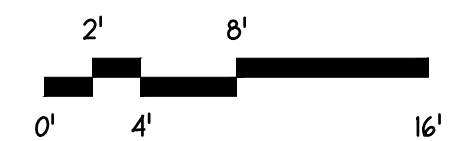
1. REFER TO GENERAL ELECTRICAL NOTES ON SHEET E001 FOR ADDITIONAL INFORMATION.
2. BRANCH CIRCUIT HOME RUNS ARE NOT INDICATED WITH LOCATION OR NUMBER OF CONDUCTORS AT ALL LOCATIONS. PROVIDE ALL BRANCH CIRCUIT CONDUCTORS/PATHWAYS AS REQUIRED FOR COMPLETE OPERATION OF ALL DEVICES/EQUIPMENT INDICATED. PROVIDE INDIVIDUAL NEUTRALS FOR EACH CIRCUIT. HOME RUN FROM CLOSEST DEVICE ON CIRCUIT TO SOURCE PANEL.
3. DO NOT TAKE MEASUREMENTS FROM PLANS FOR DEVICE LOCATIONS. FIELD VERIFY EXACT DEVICE EQUIPMENT, EQUIPMENT LOCATIONS & MOUNTING HEIGHTS WITH OWNER'S REPRESENTATIVE FOR PROPER INSTALLATION.
4. PROVIDE ALL MATERIAL AND LABOR RELATED TO THE INSTALLATION OF ELECTRICAL DEVICES PENETRATING INTO OR THROUGH FIRE RATED WALLS, FLOORS, OR CEILINGS SUCH THAT THE FIRE RATING OF THE WALL IS MAINTAINED.
5. REFER TO EQUIPMENT SCHEDULES FOR WIRING REQUIREMENTS NOT INDICATED ON POWER PLANS.
6. INCLUDE COST OF PROVIDING ALL ELECTRICAL CONNECTIONS AS REQUIRED FOR FULL OPERATION OF ALL OWNER FURNISHED, CONTRACTOR INSTALLED EQUIPMENT. SEE ARCHITECTURAL DRAWINGS TO VERIFY LOCATIONS.
7. DO NOT INSTALL FLUSH WALL OUTLETS BACK TO BACK. A MINIMUM OF 24" SEPARATION IS REQUIRED BETWEEN ANY OUTLET INSTALLED ON FIRE RATED WALL.

**PLAN NOTES:**

- ① NEW POWERED ROLL-UP DOOR. PROVIDE CONNECTION BETWEEN DOOR CONTROLLER AND MOTOR.

**POWER & SYSTEMS PLAN**

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



PLOTTED: Friday, December 01, 2023 10:20:02 AM. PLOTTED BY: BROCK  
 USER: PATTI.022 20231201 10:20:02 AM. PLOT: 23-112-100

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**HULTZ + BHU**  
engineers inc

1111 Fawcett Ave Suite 100 Tacoma, WA 98402  
 Phone: (253) 383-3257 Fax: (253) 383-3283  
 general@hultzbhu.com Job Number: 23-112

**E3.1 Electrical POWER & SYSTEMS PLAN**

Scale: AS NOTED Date: 9/22/23  
 Project: TUKWILA RETAIL AQ  
 USPS File Number: G00571

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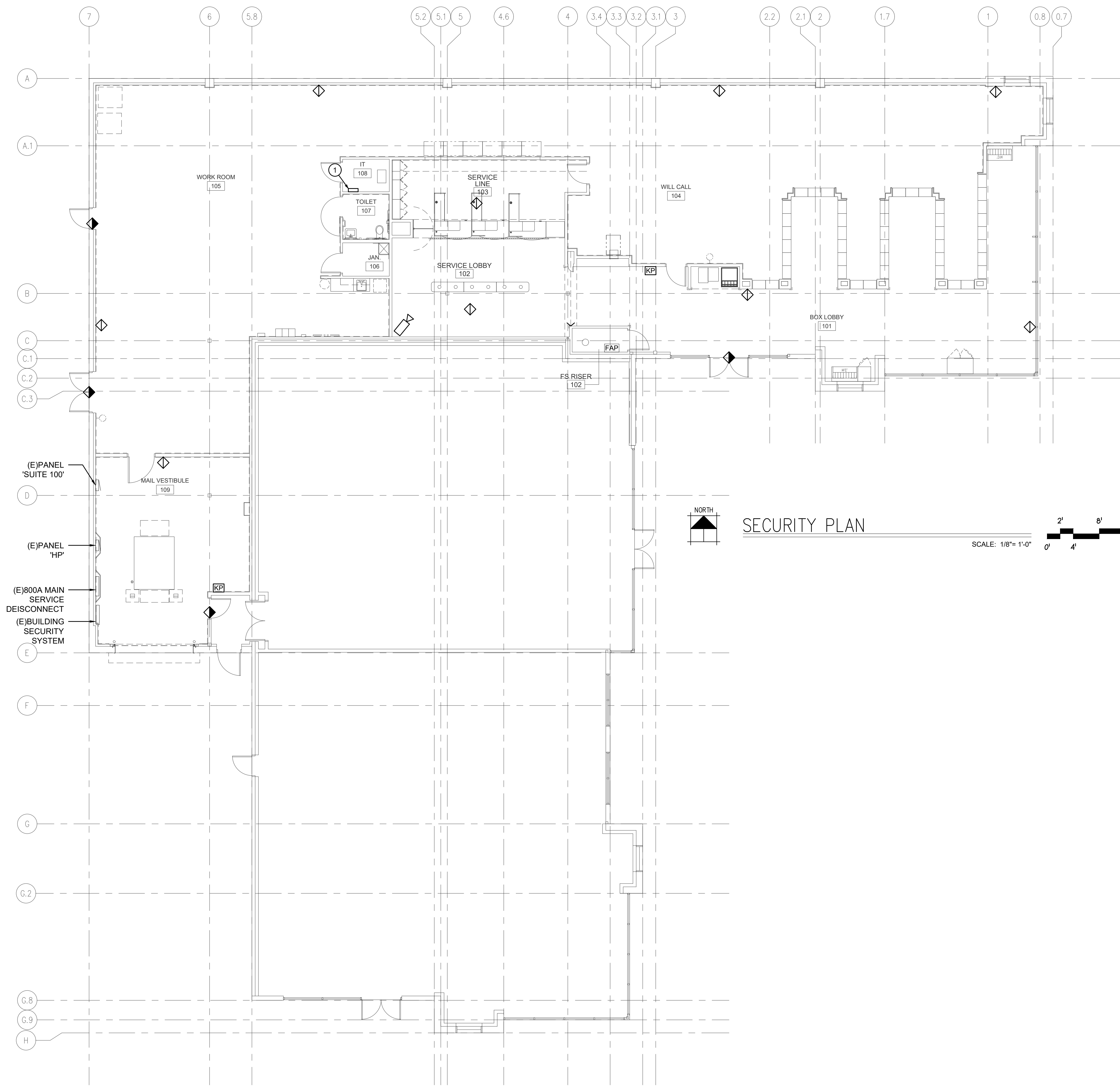
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**GENERAL NOTES:**

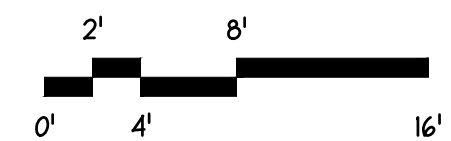
1. REFER TO GENERAL ELECTRICAL NOTES ON SHEET E001 FOR ADDITIONAL INFORMATION.
2. BRANCH CIRCUIT HOME RUNS ARE NOT INDICATED WITH LOCATION OR NUMBER OF CONDUCTORS AT ALL LOCATIONS. PROVIDE ALL BRANCH CIRCUIT CONDUCTORS/PATHWAYS AS REQUIRED FOR COMPLETE OPERATION OF ALL DEVICES/EQUIPMENT INDICATED. PROVIDE INDIVIDUAL NEUTRALS FOR EACH CIRCUIT. HOME RUN FROM CLOSEST DEVICE ON CIRCUIT TO SOURCE PANEL.
3. DO NOT TAKE MEASUREMENTS FROM PLANS FOR DEVICE LOCATIONS. FIELD VERIFY EXACT DEVICE EQUIPMENT, EQUIPMENT LOCATIONS & MOUNTING HEIGHTS WITH OWNER'S REPRESENTATIVE FOR PROPER INSTALLATION.
4. PROVIDE ALL MATERIAL AND LABOR RELATED TO THE INSTALLATION OF ELECTRICAL DEVICES PENETRATING INTO OR THROUGH FIRE RATED WALLS, FLOORS, OR CEILINGS SUCH THAT THE FIRE RATING OF THE WALL IS MAINTAINED.
5. REFER TO EQUIPMENT SCHEDULES FOR WIRING REQUIREMENTS NOT INDICATED ON POWER PLANS.
6. INCLUDE COST OF PROVIDING ALL ELECTRICAL CONNECTIONS AS REQUIRED FOR FULL OPERATION OF ALL OWNER FURNISHED, CONTRACTOR INSTALLED EQUIPMENT. SEE ARCHITECTURAL DRAWINGS TO VERIFY LOCATIONS.
7. DO NOT INSTALL FLUSH WALL OUTLETS BACK TO BACK. A MINIMUM OF 24" SEPARATION IS REQUIRED BETWEEN ANY OUTLET INSTALLED ON FIRE RATED WALL.

**PLAN NOTES:**

- ① INTRUSION DETECTION SYSTEM HEAD-END EQUIPMENT. PROVIDE 120V POWER.

**SECURITY PLAN**

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



PLOTTED: Friday, December 01, 2023 10:29:46 AM  
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**E4.1** Electrical SECURITY PLAN  
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 USPS File Number: G00571

**HULTZ & BHU**  
 engineers inc  
 1111 Fawcett Ave Suite 100 Tacoma, WA 98402  
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MECHANICAL EQUIPMENT CONNECTION SCHEDULE												
NAME	DESCRIPTION	LOCATION	MAXIMUM RATINGS					(CU) FEEDER		CIRCUIT#	DISCONNECT	REMARKS
			HP	KVA	FLA	MCA	MOCP	VOLT/PH	#12 EACH PHASE + NEUTRAL + GND, UNO.			
RTU-1	ROOF TOP UNIT	ROOF										EXISTING EQUIPMENT
RTU-2	ROOF TOP UNIT	ROOF										EXISTING EQUIPMENT
EF-1	EXHAUST FAN	BATHROOM	1/8	0.46	3.8	4.8	20	120	1			
EF-2	EXHAUST FAN	BATHROOM	1/8	0.46	3.8	4.8	20	120	1			
CP-1	CIRCULATION PUMP	JANITOR 106		0.27	2.3	2.8	20	120	1			
DH-1	DUCT HEATER	LOBBY		8.00	22.2	27.8	30	208	3		1" C, 3#10 + #10G	
WH-1	WATER HEATER	JANITOR 106		9.00	25.0	31.3	40	208	3		1" C, 3#8 + #10G	

18.18

**EQUIPMENT CONNECTION SCHEDULE NOTES:**

- VERIFY VOLTAGE, PHASE, FLA/MCA OF EACH CONNECTION WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. NOTIFY ARCHITECT/ENGINEER WHEN SCHEDULED SUPPLY WILL NOT MEET NEC REQUIREMENTS.
- OUTLETS, DISCONNECTS, CONTROLLERS, AND EQUIPMENT CONNECTIONS FOR ROOF TOP AND OTHER OUTDOOR EQUIPMENT SHALL BE WEATHER PROOF.
- LOCATION OF OUTLETS, DISCONNECTS, CONTROL DEVICES, AND EQUIPMENT CONNECTIONS ARE DIAGRAMMATIC AND TO BE LOCATED IN FIELD BY THE CONTRACTOR AS APPROVED BY THE ENGINEER. UNLESS OTHERWISE INDICATED ON PLANS, INSTALL SCHEDULED DISCONNECTS AND CONTROL DEVICES IN SIGHT OF EQUIPMENT. ARRANGE WIRING AND EQUIPMENT TO AVOID INTERFERENCE WITH OTHER WORK AND TO MAXIMIZE ACCESSIBILITY FOR MAINTENANCE AND REPAIRS.
- COORDINATE WITH THE OTHER INSTALLING CONTRACTORS TO ENSURE NEC REQUIRED ACCESS TO DISCONNECTS IS PROVIDED FOR EACH PIECE OF EQUIPMENT.
- PROVIDE SMOKE DUCT DETECTORS IN HEATING AND COOLING SYSTEMS PER INTERNATIONAL MECHANICAL CODE. SEE DIVISION 25 EQUIPMENT SCHEDULES FOR ADDITIONAL UNITS RATED OVER 2000 CFM AND PROVIDE DUCT DETECTOR AS REQUIRED.
- WIRING BETWEEN EQUIPMENT DISCONNECT AND POINT OF CONNECTION SHALL COMPLY WITH NEC BASED ON EQUIPMENT NAMEPLATE RATING EXCEPT MINIMUM BRANCH CIRCUIT RATING SHALL BE 20 AMPERES.
- SIZE OF DISCONNECT SWITCH AND MOTOR STARTER SHALL BE SIZED TO COMPLY WITH NEC REQUIREMENTS. WHERE INDICATED MOTOR CONTROL IS NOT LOCATED IN SIGHT OF MOTOR AS DEFINED BY NEC, PROVIDE ADDITIONAL DISCONNECTING MEANS TO COMPLY WITH NEC 430.102.
- WIRING SIZES ARE BASED ON 60 DEGREE C. FOR AMPACITIES 100 AMPERES AND LESS. FOR FEEDERS LESS THAN 100 FEET IN LENGTH, CONDUCTOR SIZES MAY BE SELECTED BASED ON 75 DEGREE C. WHERE EQUIPMENT INSTALLED IS LABELED FOR 75 DEGREE C. WIRING.
- SCHEDULE LEGEND:
  - = FURNISH AND INSTALL NEW UNDER DIVISION 26
  - = INSTALL UNDER DIVISION 26; FURNISHED WITH EQUIPMENT OR BY OTHERS.
  - X = FURNISH AND INSTALL BY OTHERS (NOT DIVISION 26)
  - \* = EXISTING, RELOCATED EQUIPMENT

LUMINAIRE SCHEDULE							
TYPE	DESCRIPTION	MANUFACTURER	LAMP	VOLTAGE	INPUT WATTS	BALLAST/ DRIVER	REMARKS
A1	2X4 LAY-IN LED.	LITHONIA LIGHTING 2BLT4 SERIES	LED 4000K 4000 LM	120-277	32	0-10V	SEE SPECIFICATIONS
A1E	SAME AS TYPE 'A1' BUT WITH 1400 LUMEN INTEGRAL BATTERY PACK	-	-	-	-	-	-
A6	4FT SURFACE MOUNT LED.	LITHONIA LIGHTING WL4 SERIES	LED 4000K 3000 LM	120-277	28	0-10V	SEE SPECIFICATIONS
W2	4FT LINEAR LED PENDANT WITH ONBOARD OCCUPANCY SENSOR	LITHONIA LIGHTING ZL1D SERIES	LED 4000K 5000 LM	120-277	41	0-10V	SEE SPECIFICATIONS
W2E	SAME AS TYPE 'W2' BUT WITH 10W INTEGRAL BATTERY PACK	-	-	-	-	-	-
CL1	4FT SURFACE MOUNT LED.	LITHONIA LIGHTING	LED 4000K 4600 LM	120-277	34	0-10V	SEE SPECIFICATIONS
CL1E	SAME AS TYPE 'CL1' BUT WITH 10W INTEGRAL BATTERY PACK	-	-	-	-	-	-
R1	4.5" RECESSED LED DOWNLIGHT	GOTHAM LIGHTING EVO 4 SERIES	LED 4000K 1000 LM	120-277	9	0-10V	SEE SPECIFICATIONS
SF1	BUILDING MOUNTED SPOTLIGHT TO ILLUMINATE FLAG POLE	LITHONIA LIGHTING OR APPROVED EQUAL	LED 4000K	120-277	-	0-10V	CONTRACTOR TO SELECT SUITABLE BUILDING MOUNTED FLAGPOLE IN ACCORDANCE WITH USFS STANDARDS
X1	UNIVERSAL MOUNT EXIT SIGN WITH SELF DIAGNOSTICS	LITHONIA LIGHTING LQM SERIES	LED	120-277	1	-	SEE SPECIFICATIONS

**GENERAL LUMINAIRE SCHEDULE NOTES:**

- LED LUMENS ARE BASED ON TOTAL ILLUMINATION OUTPUT OF THE LUMINAIRE UNLESS OTHERWISE INDICATED.
- VERIFY STEM, CHAIN, OR CABLE LENGTH WITH FIXTURE VENDOR AS REQUIRED TO ACCOMMODATE THE INDICATED MOUNTING HEIGHT MEASURED TO BOTTOM OF FIXTURE.
- LED DRIVERS FOR LOW VOLTAGE DIMMING SHALL BE 0-10 VOLTS [ DIGITAL SIGNAL DIMMING INTERFACE TYPE ] UNLESS OTHERWISE INDICATED.
- LED DRIVERS FOR LINE VOLTAGE DIMMING SHALL BE REVERSE PHASE ELECTRONIC LOW VOLTAGE (ELV) UNLESS OTHERWISE APPROVED BY THE ARCHITECT/ENGINEER.

