

# ONETA COMPANY PEPSI BUILDING

## ONETA COMPANY

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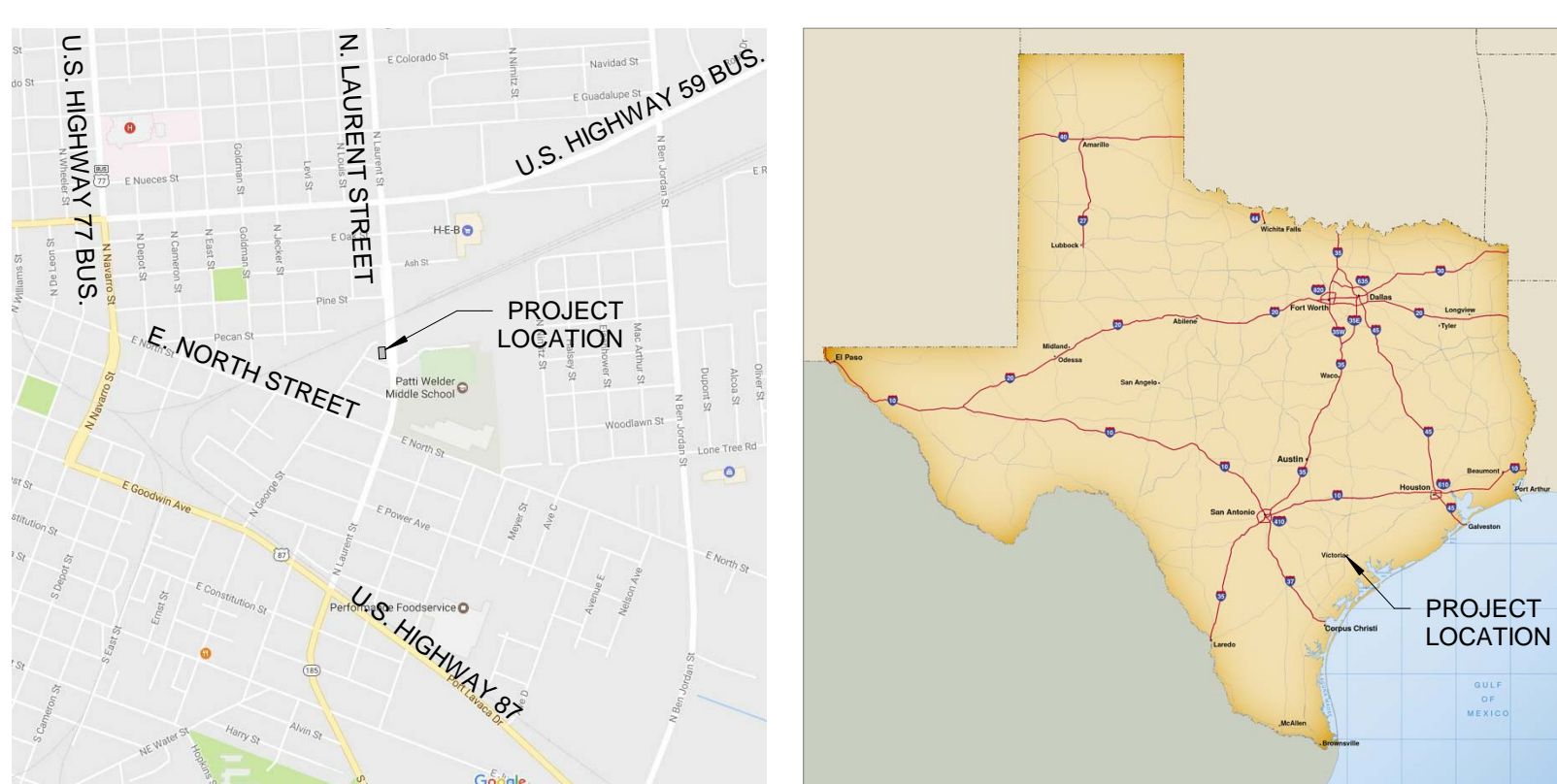
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PROJECT LOCATION: 1402 Elizabeth St. Victoria, TX 77901



#### WALL TO DECK RATING LEGEND

**1-HR**  
 UL No U465 AT STUD CONSTR  
 NCMA-TEK 7-1A -FIRE RESISTANCE (2001) AT CMU CONSTR  
 WALL TO LD

**2-HR**  
 UL No U411 AT STUD CONSTR  
 NCMA-TEK 7-1A -FIRE RESISTANCE (2001) AT CMU CONSTR  
 WALL TO LD

NON-RATED WALL TO DECK (NON-RATED OPENINGS)

NON-RATED WALL TO LID (NON-RATED OPENINGS)

**NOTES:**

- ALL WALLS ARE NON-RATED WALL TO BOTTOM OF DECK (UON).
- ALL NON-LOADBEARING CMU WALLS SPAN VERTICALLY (UON).
- ALL COLUMN ENCLOSURES SHALL BE THE SAME HEIGHT AS THE ADJACENT WALL (UON).
- BRACE ALL WALLS TO STRUCT ABOVE AS NOTED IN WALL BRACING NOTES AND WALL TERMINATION DETAILS ON SHEET A003.
- REFER TO WALL TYPES, SHEET A1.1 & WALL CONSTRUCTION AND RATED ASSEMBLY UL NOS., SHEET A1.1, TYP.
- FIRE RATING OF ANY "EXTERIOR" LOAD BEARING WALLS SHALL CONTINUE FOR A MIN OF 30" BELOW ROOF LINES AT STEPPED BUILDING LOCATIONS, SUCH SAME WALL BELOW SUCH POINT IS AN "INTERIOR" LOAD BEARING WALL AND FIRE RATED ACCORDING TO "INTERIOR" LOAD BEARING WALLS.
- MARKING OF FIRE RATED & SMOKE STOP PARTITIONS: PERMANENTLY MARK ALL SMOKE BARRIERS, FIRE PARTITIONS, SHAFT ENCLOSURES, FIRE BARRIERS ABOVE CEILING AS FOLLOWS: "FIRE AND SMOKE BARRIER-PROTECT ALL OPENINGS". LETTERS SHALL BE MINIMUM 2" 1/2" IN HEIGHT AND PAINTED RED. PROVIDE ONE TIME PER STRUCTURAL BAY.

#### EGRESS REQUIREMENTS: IBC 2009

**OCCUPANCY LOADS: (TABLE 1004.1.2)**

FUNCTION OF SPACE:	SQ. FT. PER OCCUPANT:
ACCESSORY STORAGE AREAS, MECH. EQUIPMENT ROOMS	300 GROSS
ASSEMBLY W/OUT FIXED SEATS:	
CONCENTRATED (CHAIRS ONLY)	7 NET
STANDING SPACE	5 NET
UNCONCENTRATED (TABLES AND CHAIRS)	15 NET
BUSINESS AREAS	100 GROSS
CLASSROOMS	20 NET
SHOPS AND VOCATIONAL ROOMS	50 NET
EXERCISE ROOMS	50 NET
KITCHENS (COMMERCIAL)	200 GROSS
LOCKER ROOMS	50 NET
STAGES AND PLATFORMS	15 NET

**REQUIRED EGRESS WIDTH:**

MINIMUM CORRIDOR WIDTH (TABLE 1018.2)	44" MIN OR .2" PER OCCUPANT WHICHEVER IS GREATER
MINIMUM STAIR WIDTH (TABLE 1005.3.1, EXC)	72" MIN (EDUCATIONAL WITH OCCUPANCY 100 OR MORE)
NUMBER OF EXITS REQUIRED (SEC 1015)	
1-49 OCCUPANTS	1
50-500 OCCUPANTS	2
501-1000 OCCUPANTS	3
1001 OR MORE OCCUPANTS	4
MAXIMUM TRAVEL DISTANCE TO AN EXIT (TAB 1017.2)	
OCCUPANCY A, B, E, F-1, M, R, S-1	200' - W/O AUTO FIRE SUPPRESSION
OCCUPANCY A, E, F-1, M, R, S-1	250' - W/ AUTO FIRE SUPPRESSION
OCCUPANCY B	300' - W/ AUTO FIRE SUPPRESSION
OCCUPANCY S-2	300' - W/O AUTO FIRE SUPPRESSION
OCCUPANCY S-2	400' - W/ AUTO FIRE SUPPRESSION
MAXIMUM LENGTH OF DEAD END CORRIDORS (1018.4, EXC 2 & 3)	20' OR 2.5 TIMES THE MIN. WIDTH OF THE DEAD END CORR. 50' IN GROUP 'B' & 'E' OCC. W/ AUTO FIRE SUPPRESSION PERMITTED AT ACCESSORY, NON-HI-HAZARD ROOMS W/ A DECERNABLE PATH OF TRAVEL PROVIDED; NOT PERMITTED THROUGH KITCHENS, STORAGE, OR SIMILAR
EXITS THROUGH ADJOINING ROOMS (1014.2)	
COMMON PATH OF TRAVEL (TAB 1014.3)	
OCCUPANCY A, E, M, U	75' (W/O SPRINKLER SYSTEM)
OCCUPANCY B, F, S	100' (W/ SPRINKLER SYSTEM)

#### PROJECT GENERAL INFORMATION:

PROJECT	ONETA-PEPSI OFFICE
LOCATION	VICTORIA, TEXAS
BUILDING HEIGHT	ONE STORY
FLOOR AREA SUMMARY	2,285 SF

#### CODE REVIEW: IBC 2015

PRIMARY OCCUPANCY (SEC. 305.1)	BUSINESS "B"
SECONDARY OCCUPANCY (SEC. 508.2)	STORAGE "S-2"
AUTOMATIC SPRINKLER SYSTEM	NO
TYPE OF CONSTRUCTION (TAB 503/601)	TYPE V-B
BUILDING AREA AND HEIGHT LIMITATIONS (TABLE 503)	23,000 AREA / 55 FT HGT / 3 STORY HEIGHT
GROUP B OCCUPANCY	
BUILDING HEIGHT LIMITATION (TABLE 504.3)	40 FT HGT
BUILDING STORY LIMITATION (TABLE 504.4)	2 STORY HEIGHT
BUILDING AREA LIMITATION (TABLE 506.2)	9,000 SF PER FLOOR

#### FIRE-RESISTANCE REQUIREMENTS

FOR GENERAL BUILDING ELEMENTS: (TABLE 601 AND SECTION 602)	DOOR RATING (TABLE 716.5)
STRUCTURAL FRAME	0 HR
BEARING WALLS:	
EXTERIOR	0 HR
INTERIOR	0 HR
NONBEARING WALLS:	
EXTERIOR LESS THAN 5'	1 HR 45 MIN
BETWEEN 5' & 10'	1 HR 45 MIN
BETWEEN 10' & 30'	0 HR 45 MIN
GREATER THAN 30'	0 HR
INTERIOR	0 HR
FLOOR CONSTRUCTION (INCL. SUPPORT BEAMS/JOISTS)	0 HR
ROOF CONSTRUCTION (INCL. SUPPORT BEAMS/JOISTS)	0 HR

#### OCCUPANCY SEPARATIONS:

MIXED OCCUPANCIES (TAB 508.4)	
B. BUSINESS / S-1, STORAGE	2 HR
ACCESSORY USE OCCUPANCIES (SEC 508.2.1)	
- NO SEPARATION REQUIRED IF AGGREGATE ACCESSORY USE AREA <= 10% OF THE AREA OF THE STORY IN WHICH THEY ARE LOCATED	
NONSEPARATED USE AREA (SEC 508.2.2)	
- FIRE SEPARATIONS BETWEEN USES ARE NOT REQUIRED WHEN THE MOST RESTRICTIVE USE IS APPLIED TO ENTIRE BUILDING AS DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES	
INCIDENTAL USE SEPARATIONS (TABLE 508.1.1):	
BOILER AND FURNACE ROOMS	1 HOUR FIRE BARRIER OR AUTO FIRE SUPPRESSION
LABORATORIES OR VOCATIONAL SHOPS	1 HOUR FIRE BARRIER
STORAGE / LAUNDRY ROOMS OVER 100 SF	1 HOUR FIRE BARRIER OR AUTO FIRE SUPPRESSION

#### MISCELLANEOUS DETAILED REQUIREMENTS

CEILING HEIGHT FOR MEANS OF EGRESS (SEC 1206.2)	7'-6" MIN
STAIRS (SEC 1009.2)	6'-8" MIN
CEILING HEIGHT FOR OCCUPIABLE SPACES AND CORRIDORS (SEC 1208.2)	7'-6" MIN
KITCHEN HOOD - TYPE I (SEC 507.10/506.3.10 OF IMC)	SHAFT ENCL. PER IBC (2 HR.)
SAFETY GLAZING MISCELLANEOUS REQUIREMENT	SEC 2406
ELEVATOR MISCELLANEOUS REQUIREMENTS	CHAPTER 30

#### EGRESS LEGEND

TYPE	DESCRIPTION	COUNT
1	3'-0" DOORS (33.2" CLR.) AT .2" PERSON = 166 PERSONS	2

#### PLUMBING COUNT

TYPE OF OCCUPANCY: BUSINESS (B)	RECD	PROVIDED
TOTAL NO OCCUPANTS: 17		
TLTS		
1:25 - FIRST 80 OCC	1	1
1:50 - REMAINING OCC		
LAVS		
1:40 - FIRST 80 OCC	1	1
1:50 - REMAINING OCC		
TOTAL FIXTURES	2	2
UNISEX REQUIREMENTS (1109.2.1):	N/A REQUIRED; N/A PROVIDED	
(1 FOR # OF FIXTURES <6)		
1:100 EWC'S	REQUIRED 1; PROVIDED 1	

#### OCCUPANCY TOTAL

BUILDING CALCULATION	NEW CONSTRUCTION CALCULATION
25 OCCUPANTS EXISTING	17 OCCUPANTS
17 OCCUPANTS NEW	2 EXITS PROVIDED
2 EXITS REQUIRED: 8.2' REQUIRED	66.4' PROVIDED

#### SYMBOLS

	BUILDING SECTION REFERENCE		WINDOW TYPE REFER TO SHEET A4.1 FOR ADDITIONAL INFORMATION
	INTERIOR ELEVATION REFERENCE		DOOR NUMBER REFER TO SHEET A4.1 FOR ADDITIONAL INFORMATION
	RESTROOM ACCESSORY REFER TO SHEET A1.1 FOR SCHEDULE		ENLARGED PLAN/DETAIL REFERENCE
	MATERIAL REFERENCE REFER TO SHEET A1.1 FOR SCHEDULE		WALL TYPE REFER TO SHEET A1.1 FOR ADDITIONAL INFORMATION

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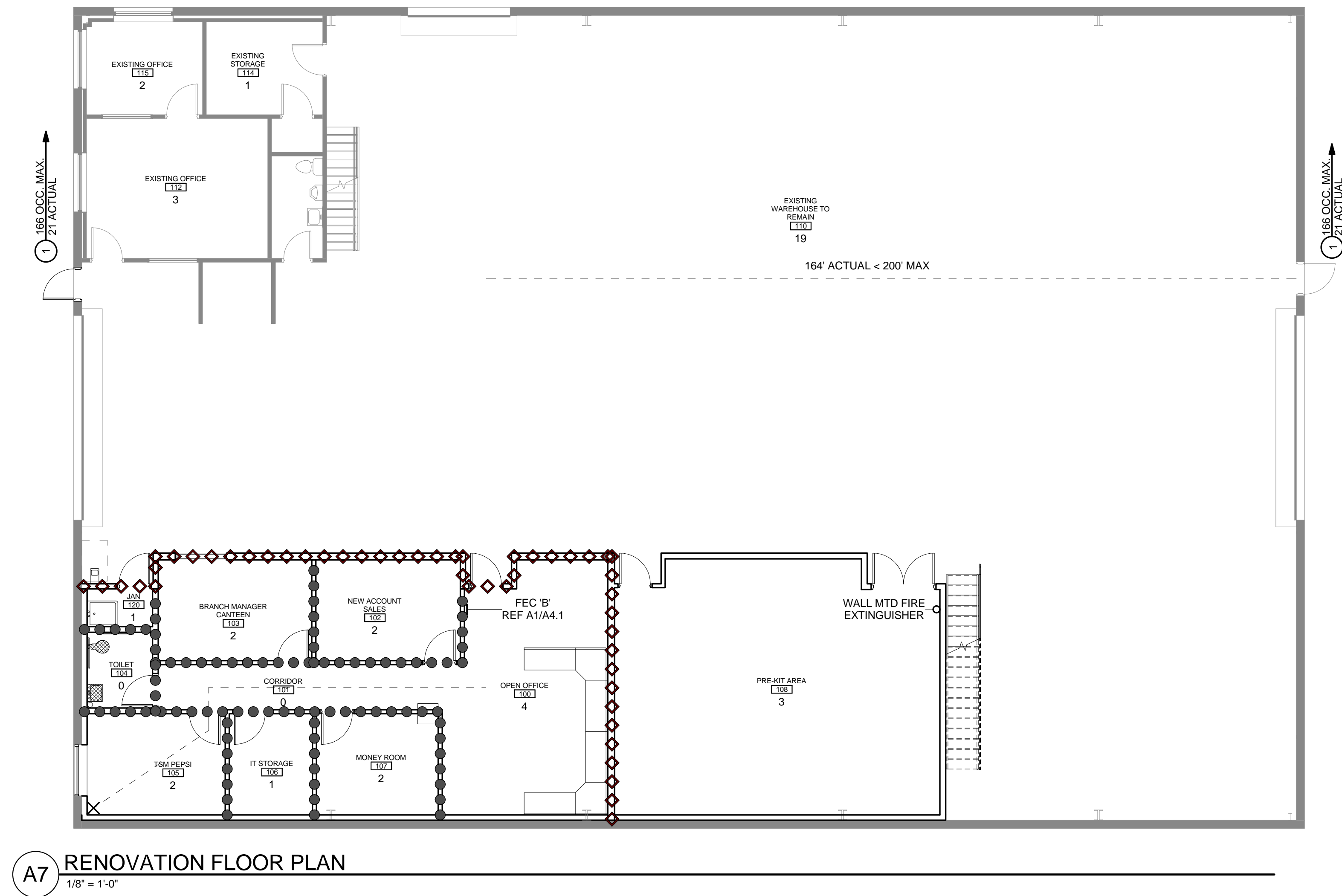
NO.	TITLE
<b>GENERAL</b>	
G1.1	COVER SHEET & CODE REVIEW
G1.2	ADA DETAILS AND MOUNTING HEIGHTS
G3.1	SPECIFICATIONS
G3.2	SPECIFICATIONS
<b>CIVIL</b>	
C1	COVER SHEET
C2	GENERAL NOTES
C3	DEMOLITION PLAN
C4	CIVIL SITE PLAN
C5	UTILITY PLAN
C6	PAVING PLAN
C7	GRADING PLAN
C8.1	STANDARD DETAILS
C8.2	STANDARD DETAILS
C8.3	STANDARD DETAILS
<b>STRUCTURAL</b>	
S1.1	FRAMING PLAN AND DETAILS
<b>ARCHITECTURAL</b>	
A1.1	FLOOR PLANS, ENLARGED PLANS & FINISH PLAN
A2.1	RCP, PLAN DETAILS, SECTIONS & WALL SECTIONS
A4.1	DOOR SCHEDULE, DETAILS & WINDOW ELEVATIONS
<b>MECHANICAL</b>	
MEP1.0	MEP SPECIFICATIONS
<b>MECHANICAL</b>	
M1.1	MECHANICAL FLOOR PLAN
M2.1	MECHANICAL SCHEDULES
M2.2	MECHANICAL SCHEDULES & DETAILS
<b>PLUMBING</b>	
P1.1	PLUMBING FLOOR PLAN
P2.1	PLUMBING SCHEDULES & DETAILS
<b>ELECTRICAL</b>	
E1.1	ELECTRICAL PLANS
E2.1	ELECTRICAL SCHEDULES & DETAILS

#### ABBREVIATIONS

ABV	ABOVE	HOR	HORIZONTAL
ADD	ADDENDUM	ID	INSIDE DIAMETER
ADDL	ADDITIONAL	INFO	INFORMATION
ADJ	ADJACENT	INT	INTERIOR
AFF	ABOVE FINISH FLOOR	INV	INVERT
ALUM	ALUMINUM	JT	JOINT
APPROX	APPROXIMATELY	LAV	LAVATORY
ARCH	ARCHITECTURAL	LH	LEFT HAND
ACT	ACOUSTICAL CEILING TILE	MFR	MANUFACTURER
AUTO	AUTOMATIC	MAX	MAXIMUM
BD	BOARD	MECH	MECHANICAL
BK	BRICK	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BLKG	BLOCKING	MTL	METAL
BM	BEAM	NIC	NOT IN CONTRACT
BOTT	BOTTOM	NO	NUMBER
BOD	BOTTOM OF DECK	NOM	NOMINAL
CIP	CAST IN PLACE	NTS	NOT TO SCALE
CLR	CLEAR	OC	ON CENTER
CMU	CONCRETE MASONRY UNIT	OCFI	OWNER FURNISHED CONTRACTOR INSTALLED
COL	CLEANOUT	OFOI	OWNER FURNISHED OWNER INSTALLED
COL	COLUMN	OH	OVERHEAD
CONC	CONCRETE	OPH	OPPOSITE HAND
CONST	CONSTRUCTION	OSB	ORIENTED STRAND BOARD
CONT	CONTINUOUS	PL	PLATE
CJ	CONTROL JOINT	PLAM	PLASTIC LAMINATE
DEMO	DEMOLITION	PLYWD	PLYWOOD
DIA	DIAMETER	PSF	POUNDS PER SQUARE FOOT
DIM	DIMENSION	PSI	POUNDS PER SQUARE INCH
DOCS	DOCUMENTS	PVC	POLYVINYL CHLORIDE
DS	DOWNSPOUT	RD	ROOF DRAIN
DTL	DETAIL	REF	REFERENCE
DWG	DRAWING	RH	RIGHT HAND
EA	EACH	RO	ROUGH OPENING
EJ	EXPANSION JOINT	S CONC	SEALED CONCRETE
EJC	EXPANSION JOINT COVER	SIM	SIMILAR
ELEC	ELECTRICAL	SPEC	SPECIFICATION
ELEV	ELEVATOR	SS	STAINLESS STEEL
EWC	ELECTRIC WATER COOLER	STD	STANDARD
EXIST	EXISTING	STL	STEEL
EXT	EXTERIOR	STOR	STORAGE
FD	FLOOR DRAIN	TOS	TOP OF STEEL
FEB	FIRE EXTINGUISHER & BRACKET	TV	TELEVISION
FEC	FIRE EXTINGUISHER CABINET	TYP	TYPICAL
FHC	FIRE HOSE & CABINET	UNO	UNLESS NOTED OTHERWISE
FT	FOOT	VCT	VINYL COMPOSITION TILE
GA	GAUGE	VERT	VERTICAL
GALV	GALVANIZED	VWC	VINYL WALL COVERING
GC	GENERAL CONTRACTOR	W/	WITH
GYP	GYP SUM	W/O	WITHOUT
GYP BD	GYP SUM WALLBOARD	WD	WOOD

#### MATERIAL LEGEND

	BRICK
	CONCRETE
	EARTH
	GLASS
	GYP SUM WALLBOARD
	LOOSE / BATT INSULATION
	METAL
	PLYWOOD
	RIGID INSULATION
	WOOD BLOCKING
	FINISH WOOD



**ONETA COMPANY PEPSI BUILDING**  
**ONETA COMPANY**  
 VICTORIA, TX  
DESIGN BY RAWLEY McCOY & ASSOCIATES

DATE ISSUED:  
**04.05.2017**

PROJECT NUMBER:  
 773-0515

PLAN NORTH TRUE NORTH

SHEET NAME  
**COVER SHEET & CODE REVIEW**

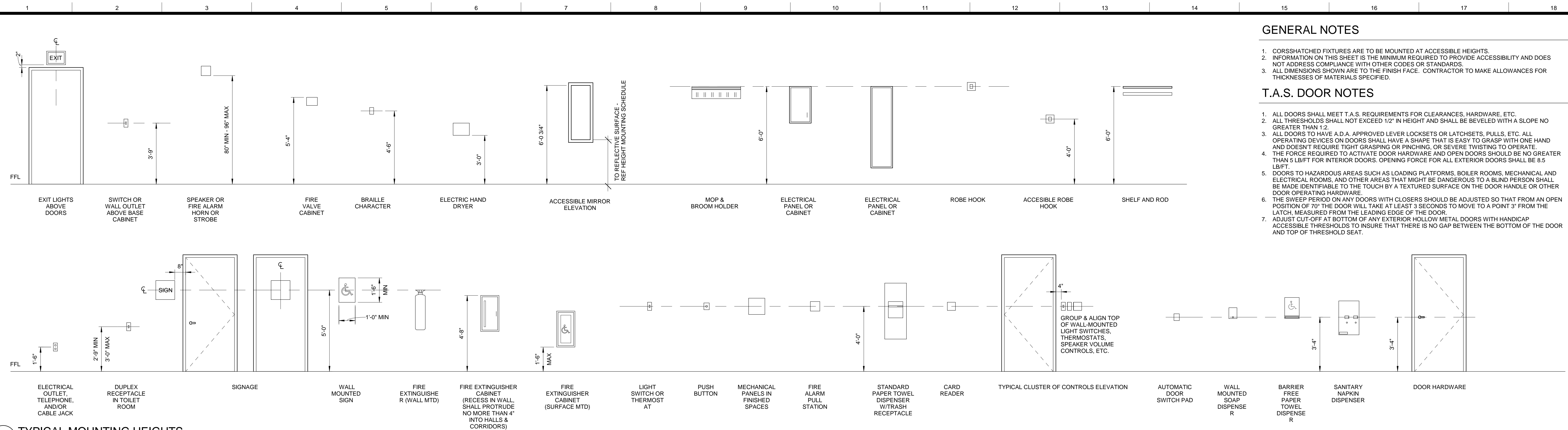
SHEET NUMBER  
**G1.1**

**GENERAL NOTES**

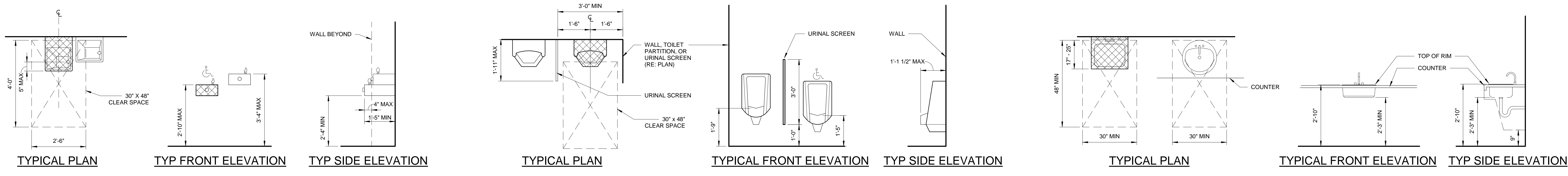
1. CORRS/HATCHED FIXTURES ARE TO BE MOUNTED AT ACCESSIBLE HEIGHTS.
2. INFORMATION ON THIS SHEET IS THE MINIMUM REQUIRED TO PROVIDE ACCESSIBILITY AND DOES NOT ADDRESS COMPLIANCE WITH OTHER CODES OR STANDARDS.
3. ALL DIMENSIONS SHOWN ARE TO THE FINISH FACE. CONTRACTOR TO MAKE ALLOWANCES FOR THICKNESSES OF MATERIALS SPECIFIED.

**T.A.S. DOOR NOTES**

1. ALL DOORS SHALL MEET T.A.S. REQUIREMENTS FOR CLEARANCES, HARDWARE, ETC.
2. ALL THRESHOLDS SHALL NOT EXCEED 1/2" IN HEIGHT AND SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
3. ALL DOORS TO HAVE A.D.A. APPROVED LEVER LOCKSETS OR LATCHSETS, PULLS, ETC. ALL OPERATING DEVICES ON DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOESN'T REQUIRE TIGHT GRASPING OR PINCHING OR SEVERE TWISTING TO OPERATE.
4. THE FORCE REQUIRED TO ACTIVATE DOOR HARDWARE AND OPEN DOORS SHOULD BE NO GREATER THAN 5 LB/FT FOR INTERIOR DOORS. OPENING FORCE FOR ALL EXTERIOR DOORS SHALL BE 8.5 LB/FT.
5. DOORS TO HAZARDOUS AREAS SUCH AS LOADING PLATFORMS, BOILER ROOMS, MECHANICAL AND ELECTRICAL ROOMS, AND OTHER AREAS THAT MIGHT BE DANGEROUS TO A BLIND PERSON SHALL BE MADE IDENTIFIABLE TO THE TOUCH BY A TEXTURED SURFACE ON THE DOOR HANDLE OR OTHER DOOR OPERATING HARDWARE.
6. THE SWEEP PERIOD ON ANY DOORS WITH CLOSERS SHOULD BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70° THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED FROM THE LEADING EDGE OF THE DOOR.
7. ADJUST CUT-OFF AT BOTTOM OF ANY EXTERIOR HOLLOW METAL DOORS WITH HANDICAP ACCESSIBLE THRESHOLDS TO INSURE THAT THERE IS NO GAP BETWEEN THE BOTTOM OF THE DOOR AND TOP OF THRESHOLD SEAT.



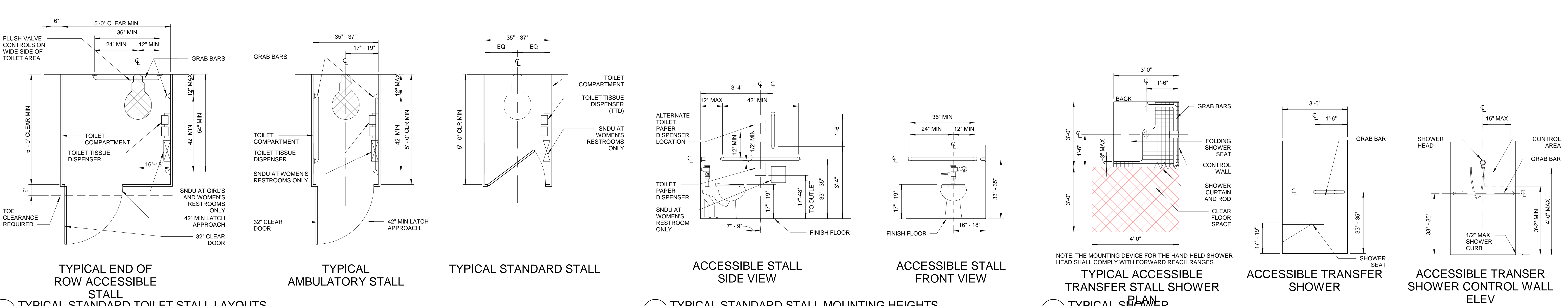
**K1 TYPICAL MOUNTING HEIGHTS** NOTE: ALL HEIGHTS ARE AS INDICATE UNLESS OTHERWISE NOTED  
3/8" = 1'-0"



**G1 TYPICAL DRINKING FOUNTAIN**  
1/2" = 1'-0"

**G6 TYPICAL URINAL LAYOUT**  
1/2" = 1'-0"

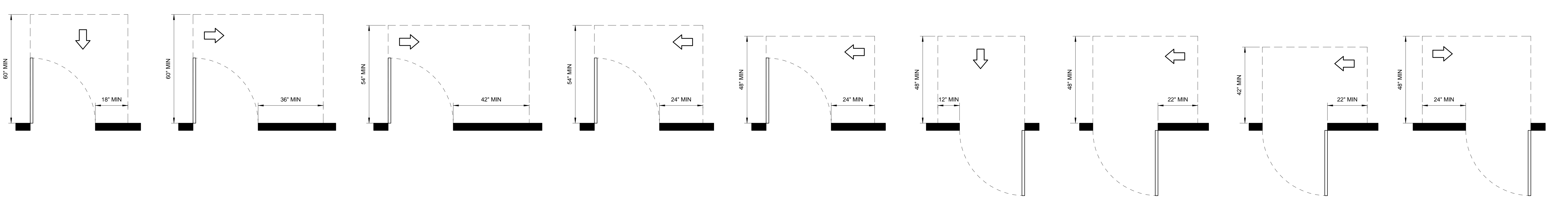
**G12 TYPICAL LAVATORY**  
1/2" = 1'-0"



**D1 TYPICAL STANDARD TOILET STALL LAYOUTS**  
1/2" = 1'-0"

**D8 TYPICAL STANDARD STALL MOUNTING HEIGHTS**  
1/2" = 1'-0"

**D12 TYPICAL SHOWER**  
1/2" = 1'-0"



**A1 TYPICAL DOOR CLEARANCES**  
1/2" = 1'-0"

**RMA**  
Rawley McCoy & Associates  
ARCHITECTS AND INTERIOR DESIGNERS

PATRICK OHRT  
REGISTERED ARCHITECT  
REGISTRATION NO. 21195  
STATE OF TEXAS

Final Plans for Bidding and Construction

REGISTERED ARCHITECT  
STATE OF TEXAS  
21195  
0705-17

**ONETA COMPANY PEPSI BUILDING**  
ONETA COMPANY  
VICTORIA, TX

DATE ISSUED:  
**04.05.2017**

PROJECT NUMBER:  
773-0515

PLAN NORTH TRUE NORTH

SHEET NAME  
**ADA DETAILS AND MOUNTING HEIGHTS**

SHEET NUMBER  
**G1.2**

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**INSTRUCTIONS:**

**NOTICE TO BIDDERS**

THE CONDITIONS OF THE CONTRACT AND APPLICABLE REQUIREMENTS OF DIVISION 01 GOVERN THIS SECTION.

ROBERT HARLEY, 1401 S. PADRE ISLAND DR., CORPUS CHRISTI, TEXAS 78416, HEREINAFTER CALLED OWNER, WILL RECEIVE BIDS FROM INVITED BIDDERS FOR THE ONETA COMPANY PEPSI BUILDING PROJECT, LOCATED AT 1402 ELIZABETH ST. VICTORIA, TX 77901, UNTIL 3:00 P.M., WEDNESDAY, APRIL 26, 2017.

BIDS MUST BE DELIVERED BEFORE THE TIME AND DATE INDICATED ABOVE TO THE OFFICE OF THE ARCHITECT, RAWLEY MCCOY & ASSOCIATES, 1908 N. LAURENT, SUITE 540, VICTORIA, TEXAS 77901. BIDS WILL BE PRIVATELY OPENED. BIDS RECEIVED AFTER THE STATED TIME AND DATE WILL BE RETURNED TO THE BIDDER UNOPENED.

BIDDING DOCUMENTS MAY BE OBTAINED BY CONTACTING THE ARCHITECT, RAWLEY MCCOY & ASSOCIATES AT 1908 N. LAURENT, SUITE 540, VICTORIA, TX 77901 OR BY CALLING (361) 873-1642. A REFUNDABLE DEPOSIT OF \$100.00 IS REQUIRED FOR EACH PHYSICAL SET OF DOCUMENTS. ELECTRONIC COPIES CAN BE OBTAINED FOR A NON-REFUNDABLE DEPOSIT OF \$20.00. CHECKS FOR DEPOSITS SHALL BE MADE PAYABLE TO THE ARCHITECT. IF REQUESTING BOTH PHYSICAL AND ELECTRONIC COPIES, PROVIDE SEPARATE CHECKS FOR EACH DEPOSIT. FULL DEPOSIT WILL BE RETURNED PROVIDED DOCUMENTS, INCLUDING ADDENDA, ARE RETURNED FULLY ASSEMBLED AND IN GOOD CONDITION WITHIN 10 DAYS OF THE BID OPENING.

ALL BIDS MUST BE ACCOMPANIED BY BID SECURITY IN THE FORM OF A CASHIER'S CHECK, CERTIFIED CHECK OR BID BOND MADE PAYABLE WITHOUT RECOURSE TO ROBERT HARLEY, IN AN AMOUNT EQUAL TO OR NOT LESS THAN 5% OF THE BID AMOUNT INCLUDING ANY ADDITIVE ALTERNATES. PERFORMANCE AND LABOR AND MATERIAL PAYMENT BONDS WILL BE REQUIRED EQUAL TO 100% OF THE CONTRACT AMOUNT. NO BIDS MAY BE WITHDRAWN FOR A PERIOD OF 30 DAYS SUBSEQUENT TO THE OPENING OF THE BIDS WITHOUT CONSENT OF THE OWNER. ALL BID SECURITIES WILL BE RETAINED UNTIL CONTRACTS HAVE BEEN AWARDED AND EXECUTED, BUT NO LONGER THAN 30 DAYS.

THE OWNER RESERVES THE RIGHT TO REJECT ANY AND/OR ALL BIDS AND TO ACCEPT ANY BID DEEMED BY THE OWNER AS BEING MOST BENEFICIAL TO THE OWNER, AND TO WAIVE ALL FORMALITIES IN BIDDING.

**INSTRUCTIONS TO BIDDERS**

THE CONDITIONS OF THE CONTRACT AND APPLICABLE REQUIREMENTS OF DIVISION 01 GOVERN THIS SECTION.

BIDDERS ARE EXPECTED TO INFORM THEMSELVES REGARDING ALL LOCAL CONDITIONS AND ARE EXPECTED TO INSPECT THE SITE OF WORK AT THE ONETA COMPANY PEPSI BUILDING PROJECT, LOCATED AT 1402 ELIZABETH ST. VICTORIA, TX 77901.

BID DOCUMENTS MAY BE OBTAINED AT THE FOLLOWING LOCATIONS:

RAWLEY MCCOY & ASSOCIATES ARCHITECTS AND INTERIOR DESIGNERS 1908 N. LAURENT, SUITE 540 VICTORIA, TEXAS 77901

THE BIDDER SHALL CHECK ALL BID DOCUMENTS FURNISHED IMMEDIATELY UPON RECEIPT OF THE DOCUMENTS, AND SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS THEREIN DURING THE TIME GIVEN FOR PREPARING BIDS. THE ARCHITECT WILL GIVE NO VERBAL INSTRUCTIONS TO THE BIDDERS. WRITTEN ADDENDA WILL BE ISSUED BY THE ARCHITECT TO CORRECT DISCREPANCIES AND CONFLICTS IN THE DOCUMENTS OR CLARIFY ANY ITEMS THAT ARE NOT CLEARLY UNDERSTOOD.

IF THE GENERAL CONTRACTOR ELECTS TO ENTER INTO A SUBCONTRACT FOR ANY PORTION OF THE WORK, HE SHALL ASSUME ALL RESPONSIBILITY FOR ASCERTAINING THAT THE SUBCONTRACTOR HAS INCLUDED ALL MATERIALS, LABOR, EQUIPMENT AND APPURTENANCES IN CONNECTION THEREWITH. IT SHALL ALSO BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO NOTIFY HIS SUB-BIDDERS, AT THE TIME OF REQUEST FOR BIDS, ALL CONTRACTS, CONDITIONS AND OTHER DOCUMENTS BY WHICH THEY WILL BE BOUND TO THE GENERAL CONTRACTOR AS SUBCONTRACTORS.

ALL SUBCONTRACTORS WILL BE REQUIRED TO SUBMIT INDIVIDUAL CERTIFICATES OF INSURANCE TO THE OWNER THROUGH THE OFFICE OF THE GENERAL CONTRACTOR SHOWING STATUTORY WORKER'S COMPENSATION INSURANCE COVERAGE AS REQUIRED BY THE GENERAL AND SUPPLEMENTARY GENERAL CONDITIONS OF THE CONTRACT.

BIDS ARE TO BE BASED EXACTLY ON THE BID DOCUMENTS. INCLUDE THE MATERIALS, MANUFACTURERS AND PROCESSES SPECIFIED. NO SUBSTITUTIONS MAY BE USED UNLESS THEY ARE INCORPORATED INTO THE BID DOCUMENTS BY ADDENDA. MAKE REQUESTS FOR SUBSTITUTIONS AT LEAST FIVE (5) DAYS PRIOR TO THE BID RECEIPT DATE. PROVIDE SUFFICIENT TECHNICAL INFORMATION ON SUBSTITUTION ITEMS TO ALLOW THE ARCHITECT TO MAKE EQUITABLE COMPARISON WITH SPECIFIED ITEMS.

ADDENDA ISSUED DURING THE COURSE OF THE BID PREPARATION TIME SHALL BE DELIVERED TO EACH PERSON WHO PREVIOUSLY RECEIVED A COMPLETE SET OF BIDDING DOCUMENTS. ADDENDA WILL BE MAILED, FAXED OR OTHERWISE DELIVERED NO LATER THAN ONE (1) DAY PRIOR TO THE BID RECEIPT DATE. BIDDERS MUST ACKNOWLEDGE RECEIPT OF ALL ADDENDA RECEIVED DURING THE BID PREPARATION TIME AS PROVIDED FOR ON THE PROPOSAL FORM. SUCH ACKNOWLEDGMENT WILL CONSTITUTE EVIDENCE THAT THE BIDDER HAS CONSIDERED ALL CHANGES AND CLARIFICATIONS TO THE BID DOCUMENTS INCLUDED IN THE ADDENDA IN PREPARING HIS BID AND WILL ACCEPT INCLUSION OF THE ADDENDA IN THE EVALUATION AND/OR NEGOTIATION PROCESS AND ULTIMATELY IN AN EXECUTED CONTRACT FOR CONSTRUCTION.

ALL BIDS MUST BE SUBMITTED ON THE PROPOSAL FORM PROVIDED BY THE ARCHITECT. ANY PROPOSAL FORMS WITH QUALIFICATIONS ADDED MAY BE REJECTED. IN THE EVENT OF A DIFFERENCE IN WRITTEN WORDS AND FIGURES ON THE PROPOSAL FORM, THE AMOUNT STATED IN WRITTEN WORDS SHALL GOVERN. A BIDDER MAY MODIFY HIS BID PRIOR TO CLOSING TIME PROVIDED SUCH MODIFICATION IS OVER THE SIGNATURE OF THE BIDDER.

IT SHOULD BE CLEARLY UNDERSTOOD BY THOSE SUBMITTING BIDS THAT THE BIDDER WILL CONSIDER CALENDAR DAYS STATED BY THE BIDDER ON THE BID FORM AS WELL AS THE DOLLAR AMOUNT BID FOR THE PROJECT IN AWARDED THE CONTRACT. THE OWNER WILL ALSO CONSIDER THE FOLLOWING FACTORS IN DETERMINING WHOM TO AWARD A CONTRACT:

- 1. THE EXPERIENCE AND REPUTATION OF THE BIDDER.
- 2. THE QUALITY OF THE BIDDERS GOODS OR SERVICES.
- 3. ANY OTHER RELEVANT FACTOR THAT A PRIVATE BUSINESS ENTITY WOULD CONSIDER IN AWARDED A CONTRACT.

ENCLOSE COPIES OF BID FORM, BID SECURITY AND OTHER DOCUMENTS REQUIRED TO BE SUBMITTED IN A SEALED ENVELOPE ADDRESSED TO ROBERT HARLEY, ONETA COMPANY PEPSI BUILDING PROJECT, C/O RAWLEY MCCOY & ASSOCIATES, ARCHITECTS AND INTERIOR DESIGNERS, AND CLEARLY LABELED AS FOLLOWS:

ROBERT HARLEY ONETA COMPANY PEPSI BUILDING PROJECT VICTORIA, TEXAS BIDDERS' NAME BIDDERS' ADDRESS

MAILED PROPOSALS SHALL BE PREPARED AS DESCRIBED ABOVE AND ENCLOSED IN AN OUTER ENVELOPE NOTED 'BID ENCLOSED' AND ADDRESSED TO:

FOR FIRST CLASS EXPRESS MAIL, OVERNIGHT EXPRESS OR COURIER DELIVERY: ROBERT HARLEY, ONETA COMPANY PEPSI BUILDING PROJECT C/O RAWLEY MCCOY & ASSOCIATES 1908 N. LAURENT, SUITE 540 VICTORIA, TX 77901

FAXED BIDS WILL NOT BE ACCEPTED.

**ATTACHMENTS**

IN ADDITION TO THE BID FORM, THE FOLLOWING DOCUMENTS MUST BE INCLUDED IN THE PROPOSAL PACKAGE FOR BID TO BE CONSIDERED:

- 1. PROPOSAL SECURITY
- 2. BIDDER'S RESUME

**WARRANTIES:**

FURNISH A WRITTEN GUARANTEE FOR ALL WORK PERFORMED AND INSTALLED ITEMS WHICH SHALL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT FOR NOT LESS THAN 12 MONTHS.

FURNISH MANUFACTURERS WARRANTIES FOR INSTALLED ITEMS, WHEN APPLICABLE.

**SPECIFICATIONS:**

**A. GENERAL**

1. THE CONTRACTOR SHALL REVIEW ALL SPECIFICATIONS AND DRAWINGS.

**2. CONTRACT FORMS**

2.1 THE FOLLOWING STANDARD FORMS ISSUED BY THE AMERICAN INSTITUTE OF ARCHITECTS WILL BE USED ON THIS PROJECT:

- a. STIPULATED FORM OF AGREEMENT BETWEEN OWNER AND CONSTRUCTION MANAGER AS CONSTRUCTOR A 133 2009
- b. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION A 201 2007
- c. APPLICATION AND CERTIFICATE FOR PAYMENT G 702 1992
- d. CONTINUATION SHEET G 703 1992
- e. CHANGE ORDER G 701 2001
- f. CERTIFICATE OF SUBSTANTIAL COMPLETION G 704 2000
- g. CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS G 706 1994
- h. CONSENT OF SURETY COMPANY TO FINAL PAYMENT G 707 1994
- i. CONSENT OF SURETY COMPANY TO REDUCTION IN OR PARTIAL RELEASE OF RETAINAGE G 707A 1994

2.2 THE ABOVE FORMS REMAIN SUBJECT TO FINAL NEGOTIATION AND REVISION PRIOR TO EXECUTION.

**3. SCHEDULING THE WORK**

3.1 THE WORK SHALL BE CAREFULLY SCHEDULED AND EXECUTED IN A MANNER THAT WILL CAUSE THE LEAST POSSIBLE INTERFERENCE WITH THE OWNER'S OPERATIONS AND PROPERTY.

**4. RIGHT OF ENTRY**

4.1 THE OWNER RESERVES THE RIGHT OF ENTRY TO THE PROPERTY AT ALL TIMES FOR INSPECTION OF THE WORK.

**5. PROGRESS MEETINGS**

5.1 THE CONTRACTOR SHALL MEET WITH THE ARCHITECT AND OWNER'S REPRESENTATIVE AS OFTEN AS NECESSARY TO MAINTAIN COMMUNICATIONS BETWEEN ALL PARTIES AS MAY BE NECESSARY TO MAINTAIN SCHEDULING AND EXECUTION OF THE WORK IN A MANNER THAT IS LEAST DISRUPTIVE TO THE OWNER.

**6. SUBMITTALS**

6.1 THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING SIX (6) SETS OF SUBMITTALS OR SHOP DRAWINGS FOR ORDERING/INSTALLATION.

6.2 FURNISH THE OWNER FOUR (4) COPIES OF MAINTENANCE RECOMMENDATIONS FOR ALL WORK INSTALLED. MAINTENANCE RECOMMENDATIONS SHALL BE FURNISHED IN A FORM APPROVED BY THE ARCHITECT AND SHALL BE NEATLY TYPEWRITTEN AND BOUND.

**7. STORAGE**

7.1 EACH CONTRACTOR SHALL PROVIDE SUITABLE MEANS TO PROTECT ALL STORED MATERIAL SUBJECT TO DAMAGE FROM THE WEATHER.

7.2 CONTRACTORS MAY USE PORTIONS OF EXISTING PARKING LOTS FOR STORAGE IF APPROVED IN ADVANCE BY OWNER. CONTRACTORS MUST PROTECT THESE AREAS AND RETURN THEM TO THEIR ORIGINAL CONDITION UPON COMPLETION OF THE WORK.

**8. DEMOLITION**

8.1 ALL MATERIAL REMOVED BY CONTRACTOR, AND NOT NOTED TO BE RE-INSTALLED OR DELIVERED TO OWNER, SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF, AND ALL COSTS ASSOCIATED WITH SUCH DISPOSAL SHALL BE BORNE BY THE CONTRACTOR.

**9. ASBESTOS CONTAINING MATERIAL**

9.1 TO THE BEST OF THE OWNER'S KNOWLEDGE, NONE OF THE MATERIALS INDICATED ON THE PLANS OR IN THE SPECIFICATIONS TO BE REMOVED UNDER VARIOUS CONTRACTS OR OTHERWISE DISTURBED CONTAIN ASBESTOS.

9.2 UNDER NO CIRCUMSTANCES SHALL ANY CONTRACTOR WORKING ON THE PROJECT DISTURB ASBESTOS CONTAINING MATERIALS OR SUSPECTED ASBESTOS CONTAINING MATERIALS. COPIES OF THE ASBESTOS SURVEY REPORTS ARE AVAILABLE DURING NORMAL OFFICE HOURS AT BOTH THE OWNER'S AND THE ARCHITECT'S OFFICE.

9.3 IF ASBESTOS CONTAINING MATERIALS ARE DISCOVERED OR IF ANY CONTRACTOR SUSPECTS THAT MATERIALS PRIOR TO BE REMOVED ON THE PROJECT MIGHT CONTAIN ASBESTOS, THEY SHOULD CONTACT THE ARCHITECT OR OWNER IMMEDIATELY.

**10. MATERIALS SCHEDULE**

10.1 THE ARCHITECT WILL PROVIDE AN UPDATED MATERIALS LIST TO CONFIRM THE ACTUAL MATERIALS, COLOR, ETC., AT A LATER DATE.

10.2 MATERIAL SCHEDULE PROVIDED ON DRAWINGS ARE FOR BIDDING PURPOSES, MANUFACTURER AND MANUFACTURERS MODEL NUMBER ARE PROVIDED. SPECIFIC COLOR CHOICES HAVE NOT BEEN PROVIDED AT THIS TIME.

**11. SUBSTITUTIONS**

11.1 SUBSTITUTIONS MUST BE APPROVED BY THE ARCHITECT PRIOR TO THE BID DATE.

11.2 SUBMIT ONE (1) COPY OF PROPOSED PRODUCT BROCHURES, PRODUCT DATA, PRODUCT MSDS OR SDS, ALONG WITH CREDIT / ADDITION INFORMATION.

**12. FENCES**

12.1 CONTRACTORS SHALL PROVIDE TEMPORARY FENCING AND OTHER BARRICADES TO PROTECT STORED MATERIALS FROM THE SITE AND PROVIDE A SECURE AND SAFE WORK AREA AROUND THE PROJECT.

12.2 COORDINATE SIZE AND LOCATION OF ALL FENCED STORAGE AND WORK AREAS WITH THE OWNER PRIOR TO ERECTION.

12.3 FENCING SHOULD BE CHAIN LINK, MINIMUM 6'-0" TALL, WITH LOCKABLE METAL GATES.

**13. PROTECTION OF PROPERTY & PERSONS**

13.1 PROTECT EXISTING UTILITIES FROM THE WORK SITE. ALL DAMAGE CAUSED BY THE CONTRACTOR OR ANY SUBCONTRACTORS SHALL BE MADE GOOD AT THE EXPENSE OF THE CONTRACTOR.

13.2 PROVIDE NECESSARY BARRICADES TO PROTECT PERSONS ENTERING, LEAVING OR WALKING AROUND THE CONSTRUCTION AREAS DURING THE COURSE OF THE WORK OR DURING PERIODS WHEN NO WORK IS IN PROGRESS BUT WHEN CONDITIONS AROUND THE CONSTRUCTION AREAS COULD POSE A DANGER.

**B. VINYL COMPOSITE TILE (VCT)**

TEXTURED, HARD-PARTICLE VINYL COMPOSITION TILE, 12"x12"x1/8", CORTINA COLORS, CORTINA COMPLEMENTS, OR PREMIERE AS MANUFACTURED BY AZROCK COMMERCIAL FLOORING COMPANY, OR EQUAL, COLORS TO BE SELECTED BY THE ARCHITECT. PROVIDE FULL COLOR SAMPLE RANGE TO ARCHITECT. LAY IN STANDARD QUARTER TURN PATTERN. FURNISH ADHESIVE AS RECOMMENDED BY MANUFACTURER FOR THE PARTICULAR SUBSTRATE ON WHICH THE TILE WILL BE INSTALLED. APPLY LEVELING COMPOUND AS REQUIRED TO ACHIEVE A LEVEL AND SMOOTH SURFACE FOR NEW FLOORING APPLICATION.

**TESTING**

1. FLOORING INSTALLER SHALL CONDUCT CALCIUM CHLORIDE (MOISTURE) AND PH TESTS PRIOR TO INSTALLING FLOORS AND CONFIRM THAT RESULTS MEET FLOORING AND ADHESIVE MANUFACTURER'S SPECIFICATIONS.

2. SUBMIT RESULTS OF TESTING TO ARCHITECT AND GENERAL CONTRACTOR ALONG WITH CONFIRMATION THAT BOTH MOISTURE LEVELS AND PH LEVELS ARE ACCEPTABLE PRIOR TO BEGINNING ANY PORTION OF TILE INSTALLATION, INCLUDING LEVELING OF FLOORS.

**C. RESILIENT BASE**

RESILIENT BASE SHALL BE 4" HIGH, 1/8" CONTINUOUS ROLL RUBBER, STANDARD TOE BASE, COLOR AS SELECTED BY ARCHITECT (ROPPE, OR APPROVED EQUAL), PROVIDE FULL COLOR SAMPLE RANGE TO ARCHITECT.

ADHESIVE SHALL BE THAT WHICH IS APPROVED BY THE MANUFACTURER FOR THE GIVEN APPLICATION. PROVIDE BASE IN LONGEST PRACTICABLE LENGTH FROM CONTINUOUS ROLLS, WITH THE MINIMUM LENGTH TO BE FROM CORNER TO CORNER OR CORNER TO DOORWAY.

**D. GYPSUM WALL BOARD**

INTERIOR WALL BOARD SHALL BE 5/8" THICK 4'-0" X 8'-0" (CEILING HEIGHT + 6") WITH TAPERED EDGES, GOLD BOND® H-ABUSE® XP® GYPSUM BOARD BY NATIONAL GYPSUM.

**1. ACCESSORIES**

1.1 CORNER BEADS SHALL BE "DUR-A-BEAD" NO. 103 WITH 1-1/4" X 1-1/4" FLANGES AS MANUFACTURED BY UNITED STATES GYPSUM COMPANY, OR EQUAL.

1.2 CASING BEADS SHALL BE "SHEETROCK" SERIES NO. 200A-"J" SHAPED, CHANNELS AS MANUFACTURED BY UNITED STATES GYPSUM COMPANY, OR EQUAL.

**2. SEALANTS**

2.1 CONCEALED ACOUSTICAL SEALANTS SHALL BE RUBBER BASED, PERMANENTLY FLEXIBLE, NON-SKINNING AND NON-HARDENING AS MANUFACTURED BY TREMCO, PECORA, PRESSITTE DIVISION OF INTERCHEMICAL CORP., OR EQUAL.

2.2 EXPOSED ACOUSTICAL SEALANTS SHALL BE A SYNTHETIC RESIN, PAINTABLE COMPOUND AS MANUFACTURED BY TREMCO, PECORA, PRESSITTE DIVISION OF INTERCHEMICAL CORP., OR EQUAL.

**3. DRYING TYPE COMPOUND**

3.1 READY MIX VINYL BASE COMPOUND

3.1.1 "PROFORM BRAND ALL PURPOSE READY MIX JOINT COMPOUND"

3.1.2 "PROFORM LITE-BLUE READY MIX JOINT COMPOUND"

3.1.3 "PROFORM BRAND LITE READY MIX JOINT COMPOUND"

3.1.4 "PROFORM BRAND MULTI-USE READY MIX JOINT COMPOUND"

3.2 READY MIX VINYL BASE COMPOUND FORMULATED FOR ENHANCED MOLD AND MILDEW RESISTANCE

3.2.1 "PROFORM BRAND XP READY MIX JOINT COMPOUND"

3.3 READY MIX VINYL BASE COMPOUND FORMULATED TO REDUCE AIRBORNE DUST DURING SANDING

3.3.1 "PROFORM BRAND LITE READY MIX JOINT COMPOUND WITH DUST-TECH"

3.4 READY MIX VINYL BASE TOPPING COMPOUND FOR FINISH COATING

3.4.1 "PROFORM BRAND TOPPING COMPOUND"

3.5 READY MIX VINYL BASE COMPOUND FOR EMBEDDING JOINT TAPE, CORNERBEADS OR OTHER ACCESSORIES

3.5.1 "PROFORM BRAND TAPING JOINT COMPOUND"

3.6 FIELD MIX VINYL BASE COMPOUND

3.6.1 "PROFORM BRAND TRIPLE-T COMPOUND"

**E. LAY IN ACOUSTIC CEILING**

**1. SUSPENSION SYSTEM**

1.1 SUSPENSION SYSTEM SHALL BE NON-FIRE RATED, PRELUDE LX 1516" EXPOSED TEE SYSTEM, 24" X 24", WHITE FINISH AS MANUFACTURED BY ARMSTRONG OR APPROVED EQUAL.

1.2 THE SUSPENSION SYSTEMS SHALL SUPPORT THE CEILING ASSEMBLIES SHOWN ON THE DRAWINGS, INCLUDING LIGHTING FIXTURES, DIFFUSERS, GRILLES AND SIMILAR ITEMS IN THE ASSEMBLIES, WITH A MAXIMUM ALLOWABLE DEFLECTION OF 1/860 OF SPAN.

1.3 PROVIDE SECONDARY SUPPORTS (SUCH AS UNISTRUT) TO SPAN BENEATH LARGE DUCTS AND SUSPENDED EQUIPMENT TO ALLOW THE MAINTAINING OF MAXIMUM HANGER WIRE SPACING AS RECOMMENDED BY THE MANUFACTURER. SECONDARY SUPPORTS MUST BE HUNG FROM THE STRUCTURE ABOVE AND NOT FROM DUCTWORK OR EQUIPMENT. SUBMIT DESIGN OF SECONDARY SUPPORTS TO MAINTAIN MAXIMUM ALLOWABLE DEFLECTION OF SYSTEM (1/860 OF SPAN) FOR ARCHITECTS APPROVAL.

**2. ACOUSTICAL CEILING PANELS**

2.1 CEILING PANELS SHALL BE 24" X 24" X 5/8" .764C SAG RESISTANT HUMGUARD PLUS PERFORMANCE BY ARMSTRONG OR APPROVED EQUAL. PROVIDE SAMPLES FOR APPROVAL BY ARCHITECT.

2.2 PROVIDE HOLD-DOWN CLIPS AT ALL CEILING PANELS WITHIN 36" OF A DOOR.

**SPECIFICATIONS (CONT.):**

**F. PAINTING AND FINISHING**

APPLY ALL PAINT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, BEFORE PAINTING. HARDWARE, ACCESSORIES, ELECTRICAL DEVICE PLATES, LIGHTING FIXTURES AND SIMILAR ITEMS SHALL BE REMOVED BY THE INSTALLING TRADE AND BE REPLACED AFTER PAINTING WORK IS COMPLETED. IF ITEMS ARE NOT REMOVED PRIOR TO PAINTING AND ARE DAMAGED THEY MUST BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.

THE ARCHITECT RESERVES THE RIGHT TO SELECT A DIFFERENT COLOR FOR EACH ROOM OR SPACE AND TO HAVE COLORS ADJUSTED AT ANY TIME BEFORE THE FINAL COAT IS APPLIED. SUBMIT CURRENT COLOR SELECTION 'FANS' OR BROCHURES FROM MANUFACTURER PROVIDING MATERIALS FOR THIS PROJECT.

**1. APPLIED METHODS**

1.1 CAREFULLY TOUCH-UP AND REPAIR MARRED OR DAMAGED SPOTS, WORK OVER ALL SURFACES THAT HAVE BEEN REPAIRED BY OTHER TRADES AND LEAVE ENTIRE WORK IN FIRST GLASS CONDITION. ALL FINISHES OF EACH TYPE OF PAINT SHALL BE UNIFORM AS TO SHEEN, COLOR AND TEXTURE.

1.2 SANDPAPER WITH NUMBER 60 SANDPAPER BETWEEN ALL INTERIOR COATS ON WOOD OR METAL SURFACES. STEEL WOOL MAY NOT BE USED. ALL COATS SHALL BE THOROUGHLY DRY BEFORE THE SUCCEEDING COAT IS APPLIED. ALLOW AT LEAST 24 HOURS BETWEEN COATS.

1.3 ALL APPLICATIONS, OTHER THAN ON DOORS AND FRAMES, SHALL BE BY BRUSH, SPRAY OR ROLLER AS RECOMMENDED BY COATING MANUFACTURER TO PRODUCE THE BEST FINISH.

1.4 SEMI-TRANSPARENT STAIN SHALL BE BRUSHED ONLY. APPLY MATERIALS IN A MANNER TO INSURE SMOOTH, EVEN, UNIFORM COATS, FREE FROM DIRT, RUNS, BRUSH MARKS, SAGS AND LAPS.

BEST GRADE PRODUCTS OF THE FOLLOWING MANUFACTURERS WILL BE ACCEPTABLE FOR USE ON THE PROJECT.

**a. SHERWIN-WILLIAMS**

b. BENJAMIN MOORE'S c. PITTSBURGH d. DEVCO e. PRATT & LAMBERT f. OLYMPIC STAIN PRODUCTS g. U.S. GYPSUM COMPANY

**2. PREPARATION**

2.1 DELIVER ALL MATERIALS IN UNBROKEN ORIGINAL PACKAGES OR CONTAINERS BEARING MANUFACTURER'S LABELS.

2.2 ALL MATERIAL SHALL BE STORED AND MIXED ONLY IN SUCH ROOMS AS MAY BE ASSIGNED FOR THIS PURPOSE AND ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT A FIRE.

2.3 PROTECT ALL FINISHED SURFACES AND ALL SURFACES RECEIVING OTHER MATERIALS, WHICH DEPEND ON SURFACE BONDING, FROM BECOMING CONTAMINATED BY ANY PAINTING OR COATING. COORDINATE AND SCHEDULE PAINTING WORK SO AS NOT TO CONFLICT WITH THE WORK OF OTHER TRADES. PROTECT ALL RE-USE ITEMS FROM DAMAGE.

**3. GENERAL**

BEFORE PAINTING / STAINING, HARDWARE ACCESSORIES, SHALL BE REMOVED AND THEN RE-INSTALLED AFTER PAINTING WORK IS COMPLETED.

**4. STEEL DOOR FRAMES**

4.1 REMOVE ANY GREASE, RUST, SCALE AND DUST FILE ALL CHIPS AND DEPRESSIONS IN EXPOSED SURFACES WITH BOND.

4.2 TOUCH-UP WITH APPROVED PRIMER. PREPARE FOR PAINTING PER MANUFACTURER'S RECOMMENDATIONS.

4.3 GIVE TOP AND BOTTOM EDGES OF ALL DOORS TWO COATS OF THE SAME FINISH APPLIED TO FACES. EDGE FINISHES ON DOOR TOPS AND BOTTOMS SHALL BE APPLIED AFTER ALL CUTTING AND FITTING OF DOOR IS COMPLETED AND BEFORE ANY WEATHER STRIPPING IS APPLIED. DOORS AND TRIM AND STEEL DOOR FRAMES SHALL BE BRUSHED OR SPRAYED. INTERIOR SURFACES OF STOPS, EXPOSED TO VIEW, RETAINING GLASS SHALL BE PAINTED PRIOR TO INSTALLATION OF GLASS.

**5. WOOD DOORS**

5.1 1ST COAT - PASTE FILLER AND SATIN SHEEN OIL STAIN.

5.2 2ND, 3RD & 4TH COATS - CLEAR SATIN SHEEN VARNISH.

**6. STEEL DOOR FRAMES**

6.1 1ST COAT (FACTORY PRIME SURFACES) - TOUCH-UP PRIMER.

6.2 2ND & 3RD COATS - SATIN SHEEN INDUSTRIAL ENAMEL.

**F. ROUGH CARPENTRY**

**1. LUMBER GRADING**

1.1 STAMP EACH PIECE WITH THE GRADE AND EVEN.

1.2 GRADE TO THE STANDARDS OF ONE OF THE FOLLOWING ASSOCIATIONS

1.2.1 SOUTHERN PINE ASSOCIATION

1.2.2 WESTERN WOOD PRODUCTS ASSOCIATION.

**2. LUMBER**

2.1 SURFACED ON ALL SIDES (S4S)

2.2 LUMBER SHALL FALL WITHIN THE MOISTURE CONTENT RANGES:

2.2.1 SOUTHERN PINE, 12% AVERAGE, 15% MAXIMUM

2.2.2 WEST COAST SOFT WOODS, 15% AVERAGE, 19% MAXIMUM

2.2.3 UNLESS STATED OTHERWISE, IN THE SPECIFICATIONS ON THE DRAWINGS, LUMBER SHALL HAVE THE FOLLOWING MINIMUM GRADING FOR USE ON THE PROJECT:

2.3.1 SOUTHERN PINE, #2 COMMON

2.3.2 WEST COAST SOFT WOODS, STANDARD FOR STRUCTURAL USE AND UTILITY FOR NON-STRUCTURAL USE

2.3.3 PRESSURE TREATED WOOD, "SMART SENSE" BY OSMOSE

**3. MATERIAL**

3.1 INTERIOR WALL AND CEILING FRAMING, ROUGH BUCKS, BLOCKING IN DRYWALL FOR CABINET AND SHELVING SUPPORTS, GRAB BARS, WOOD TRIM, AND OTHER SPECIALTIES, ETC., SHALL BE #2 OR BETTER YELLOW PINE.

3.2 INTERIOR FURRING 2x4s OVER EXTERIOR WALLS, REFER TO WALL TYPES

3.3 EXTERIOR DOOR & WINDOW BLOCKING, ROOF BLOCKING, WALL BLOCKING, GILLS, MISCELLANEOUS BLOCKING, ETC., SHALL BE "MICROPRO" / SMART SENSE" PRESURE TREATED WOOD BY KOPPERS INC.

**4. INSTALLATION**

4.1 TREATED FASCIA, CURBS, CANT STRIPS, BLOCKING, NAILERS, ETC., SHALL BE NAILED OR BOLTED AS SHOWN ON THE DRAWINGS AND SET STRAIGHT AND EVEN.

4.2 BOLTS OR OTHER FASTENERS SHALL BE USED AT A MAXIMUM OF 12" FROM THE END ALL PIECES.

4.3 WALL AND CEILING FRAMING SHALL BE AS DETAILED ON DRAWINGS WITH STUDS OR JOISTS AT 16" O.C., UNLESS SPECIFICALLY NOTE OTHERWISE. NOTE SPECIAL STAGGERED STUD FRAMING AS DETAILED FOR SOUND RETARDANT WALLS.

**5. ROUGH HARDWARE**

5.1 USE COMMON NAILS, TYPICALLY, BUT COUNTERSUNK WOOD SCREWS FOR ALL TENSION JOINTS

5.2 ALL FASTENERS AND OTHER HARDWARE EXPOSED TO WEATHER SHALL HAVE GALVANIZED FINISH. FINISH 5.3 CONFIRM THAT ALL FASTENERS USED TO ATTACHED PRESSURE TREATED PRODUCTS ARE COMPATIBLE WITH THE CHEMICAL USED IN THE PRESSURE TREATING PROCESS.

5.4 BOLTS AND OTHER ANCHORS SHALL HAVE A MINIMUM 3/8" DIAMETER UNLESS SHOWN OTHERWISE. PROVIDE WASHERS WHEN SECURING WOOD. LAG BOLTS AND ANCHORS SHALL HAVE GALVANIZED FINISH WHEN USED IN EXTERIOR EXPOSURE. EXTERIOR WALL CONSTRUCTION OR PLACED IN SLABS ON GRADE. PROVIDE THE PROPER TYPE OF BOLT OR ANCHOR, I.E. BOLT AND NUT, TOGGLE BOLT, EXPANSION BOLT, BOLT AND LEAD SHIELD, LAG SCREWS, ETC., AS REQUIRED BY CONDITION OF USE.</















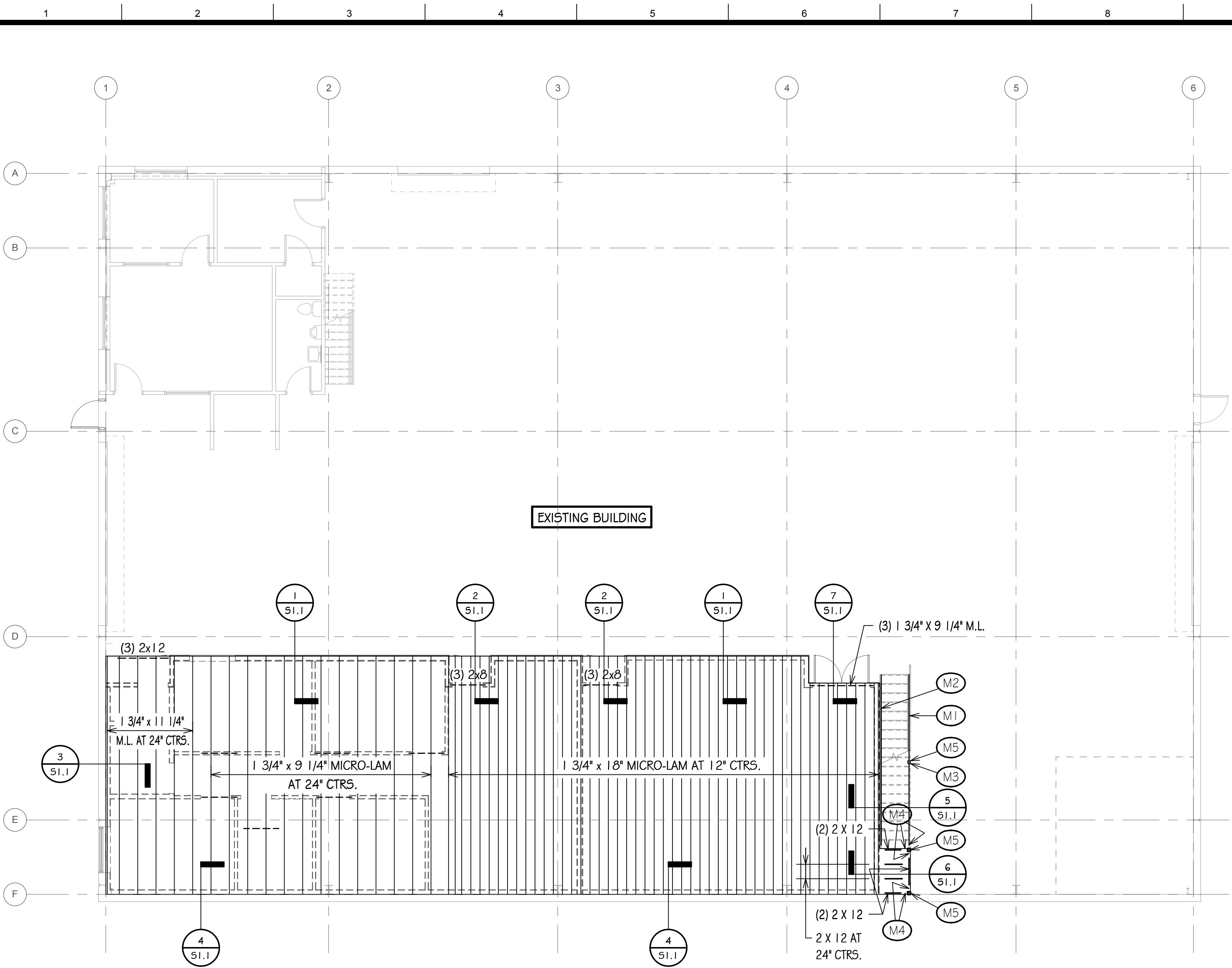






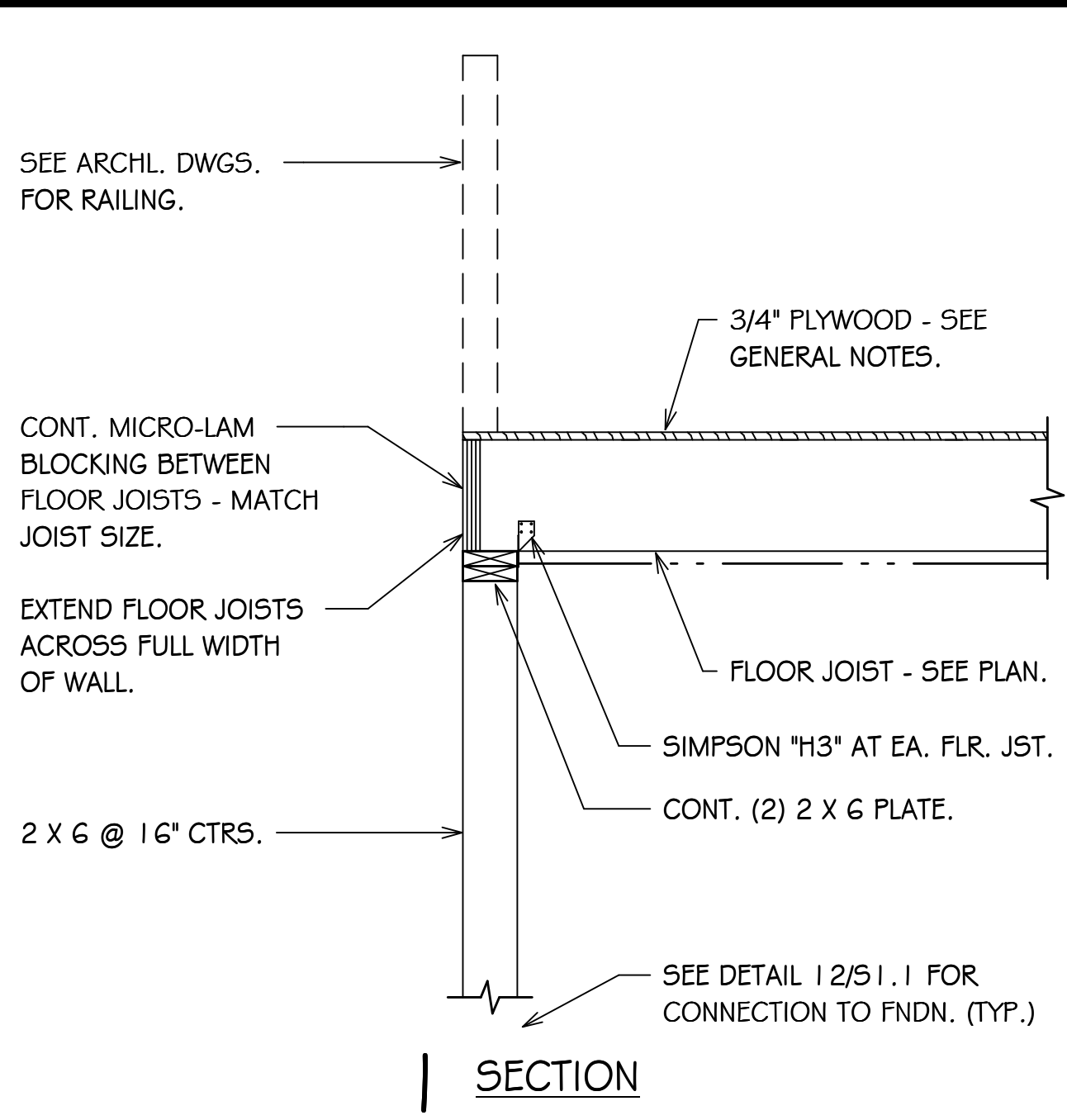




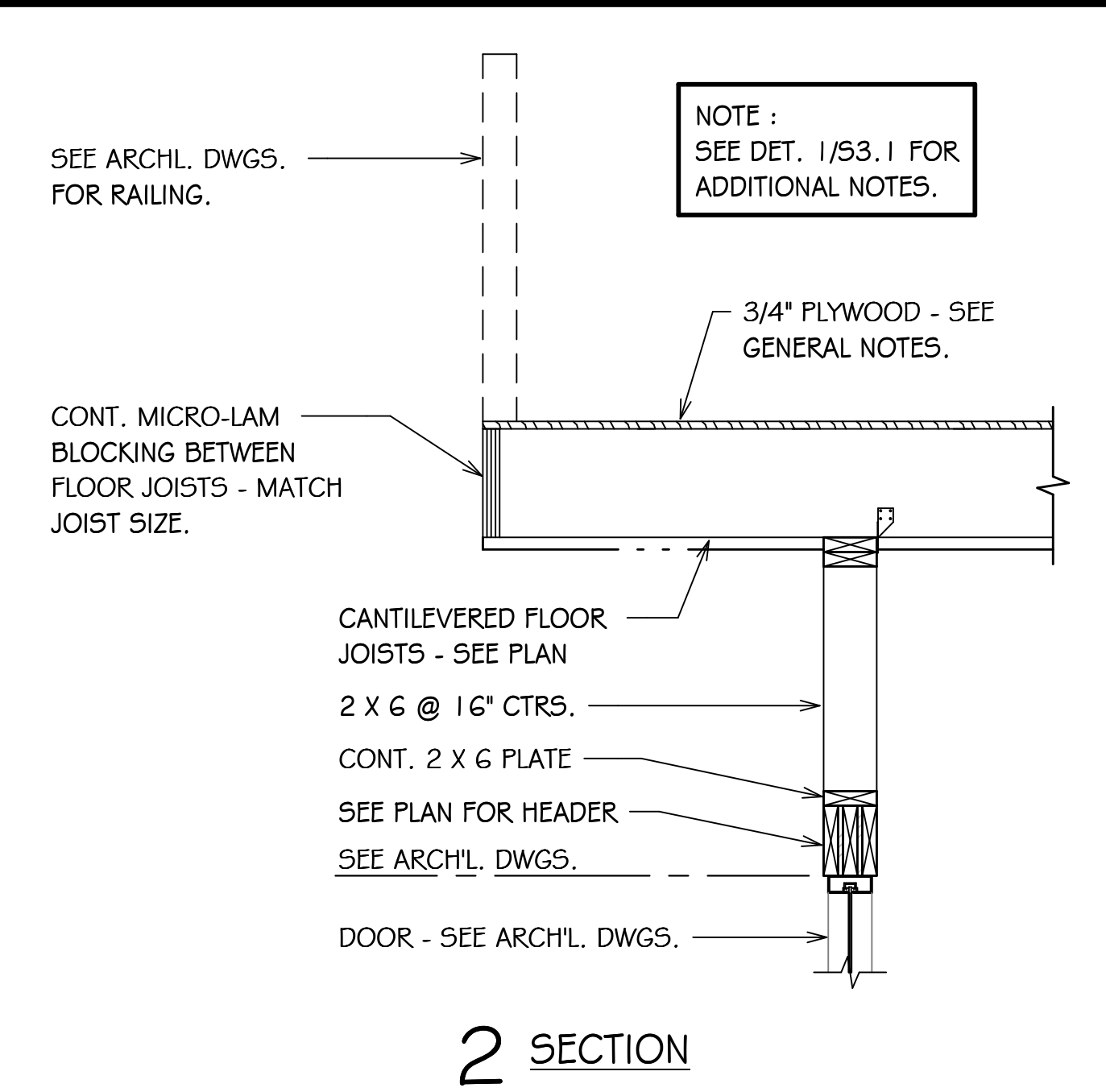


**MEZZANINE FRAMING PLAN**  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH

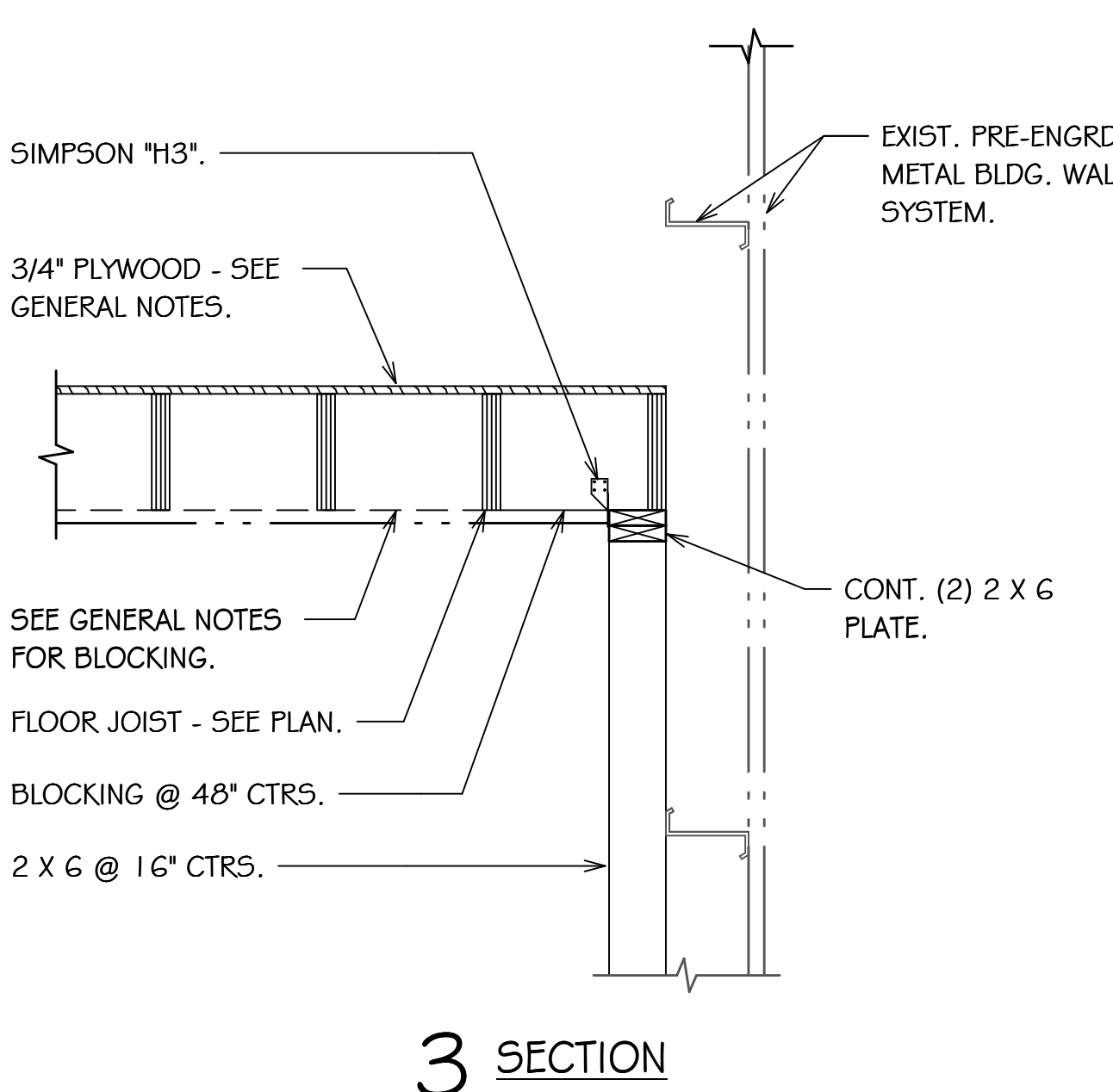
- MEZZANINE FRAMING PLAN NOTES:**
- ALL HEADERS ABOVE DOOR AND WINDOWS IN 2 X 4 WALLS SHALL BE (2) 2 X 6 WITH (1) 1/2" PLYWOOD SHIM (U.N.O.).
  - ALL HEADERS ABOVE DOOR AND WINDOWS IN 2 X 6 WALLS SHALL BE (3) 2 X 8 WITH (2) 1/2" PLYWOOD SHIM (U.N.O.).
  - SEE ARCHITECTURAL DRAWINGS FOR ALL ELEVATIONS AND WALL DIMENSIONS.
- MEZZANINE FRAMING PLAN KEYED NOTES:**
- (M1) (2) 2 X 12 WOOD STRINGER.
  - (M2) (2) 2 X 12 WOOD STRINGER, NAIL TO EACH ALL STUD WITH (2) 1 6d NAILS. (TYP.)
  - (M3) PROVIDE 4 X 4 WOOD POST AT MID-SPAN OF STRINGER.
  - (M4) CONNECT BEAMS TO POSTS WITH SIMPSON STRONG-TIE TYPE "HUCQ210-2-SDS".
  - (M5) CONNECT 4 X 4 WOOD POST TO FOUNDATION WITH SIMPSON STRONG-TIE TYPE "ABA44Z".



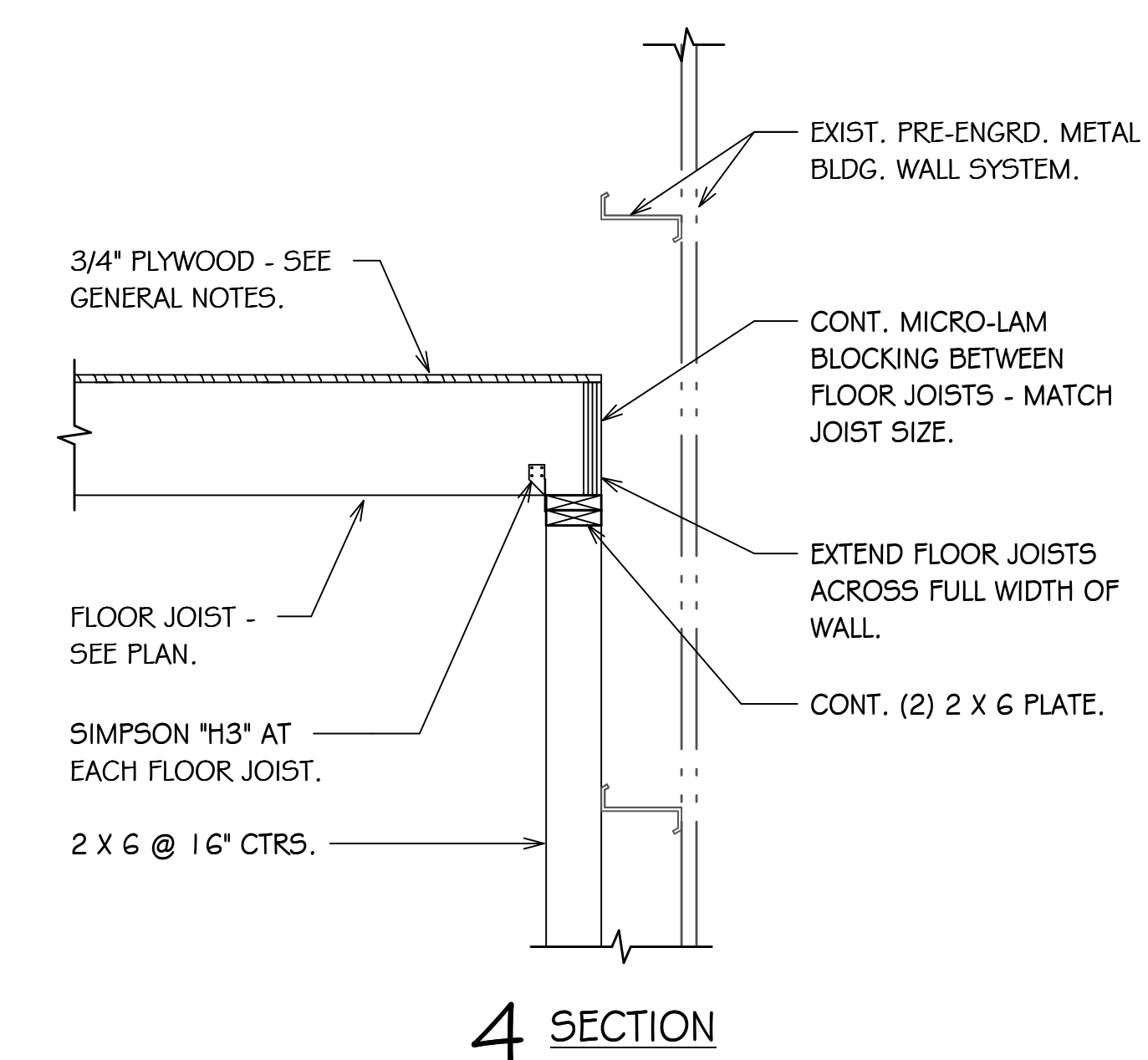
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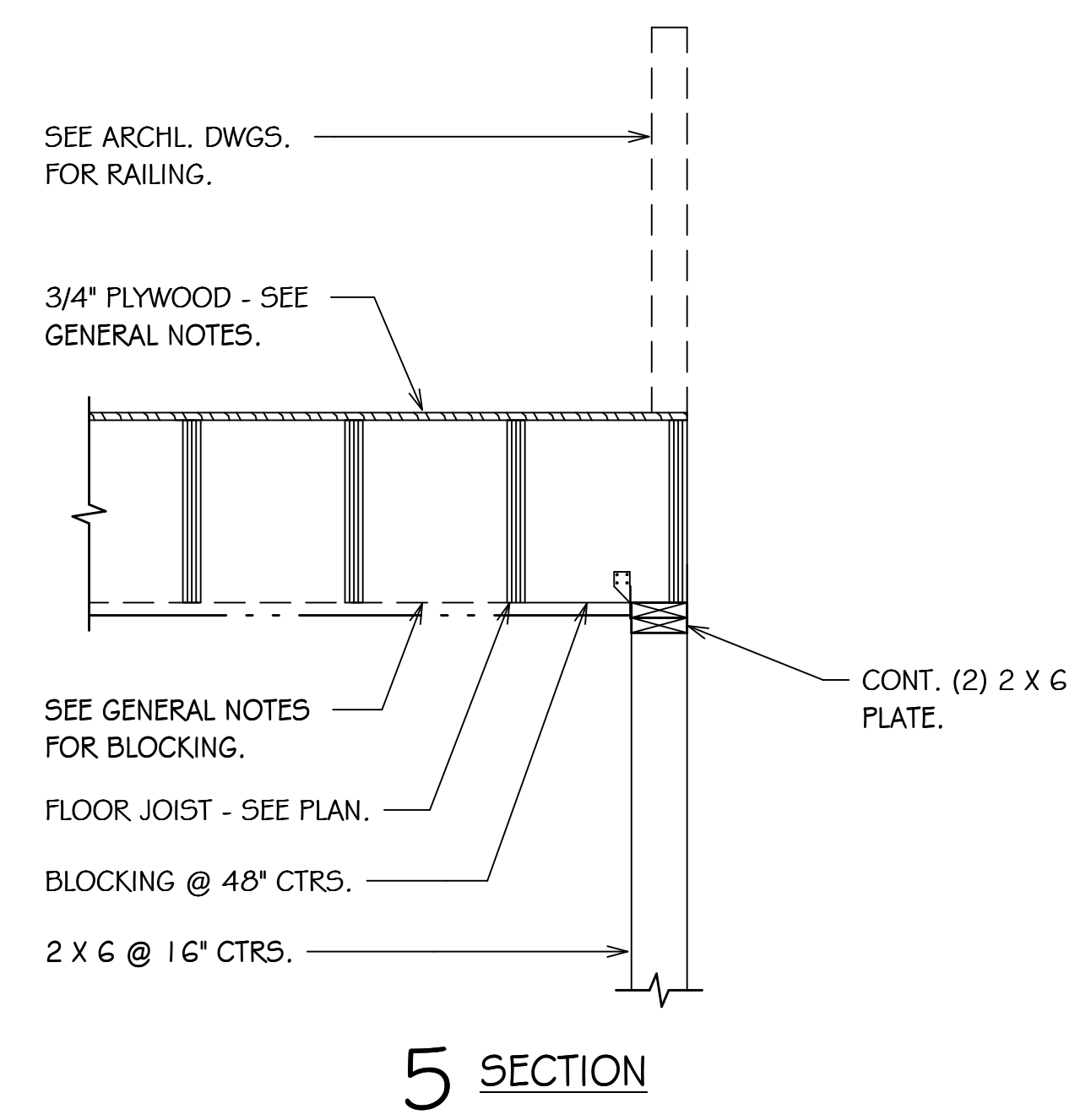
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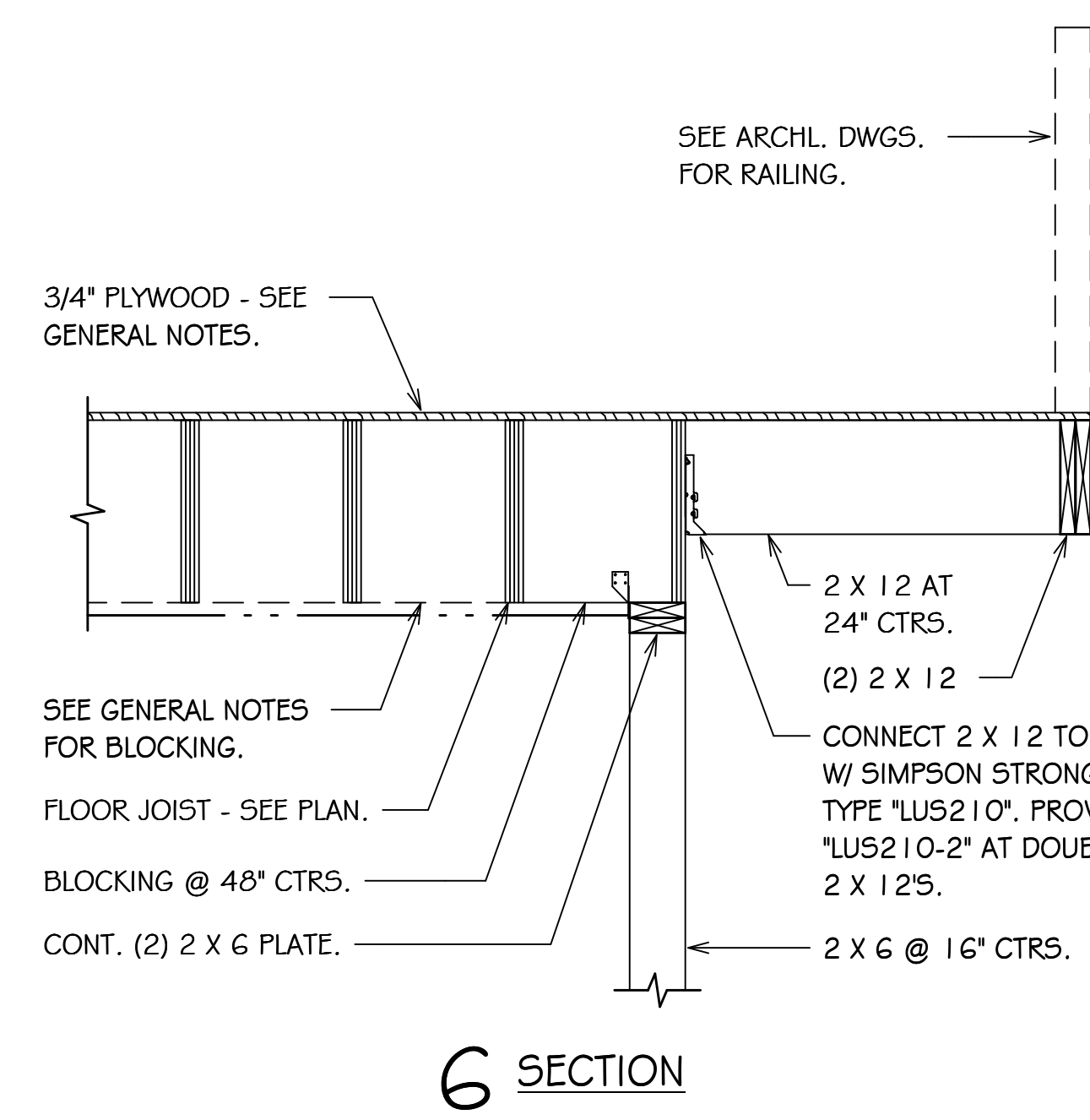
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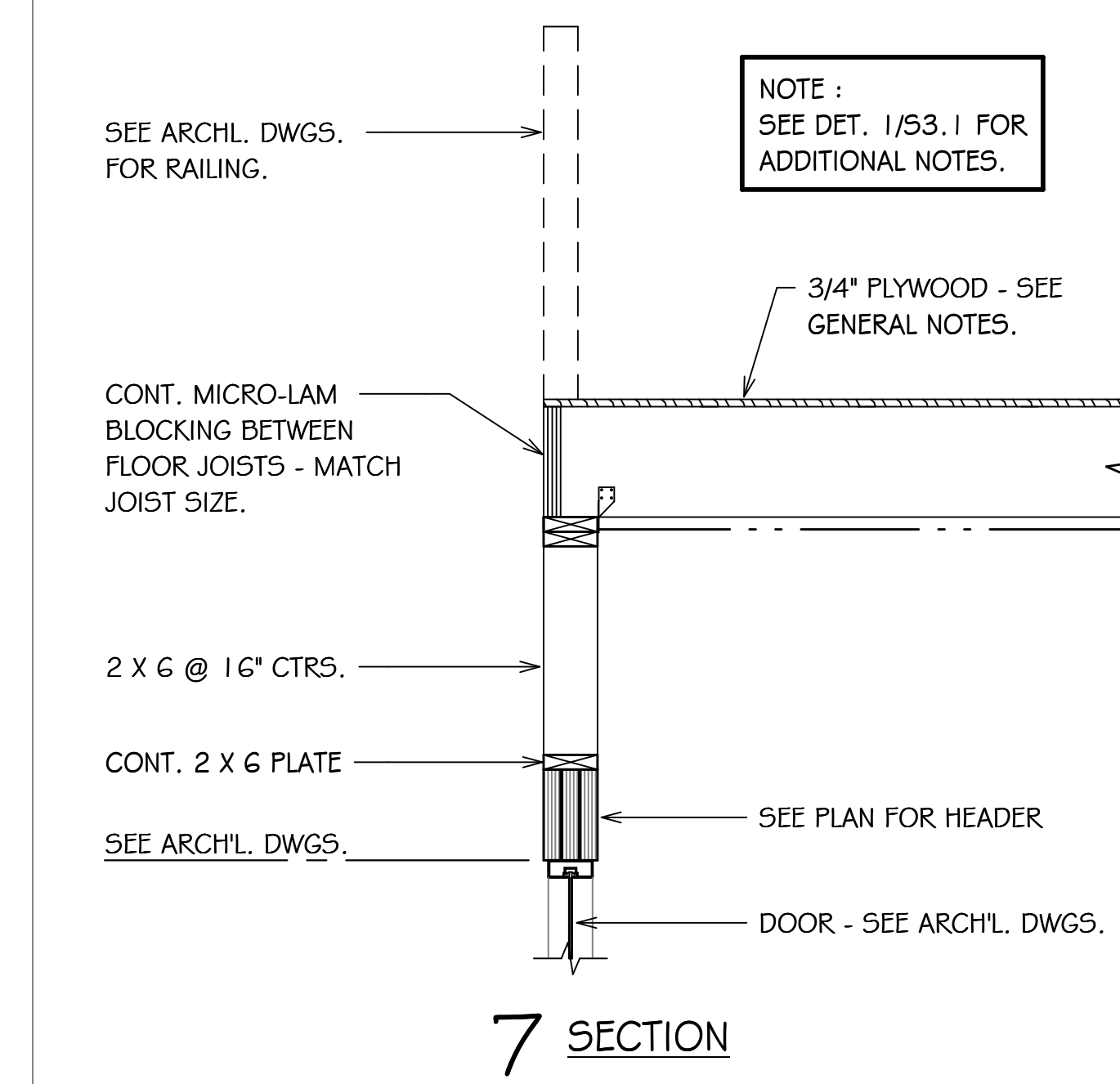
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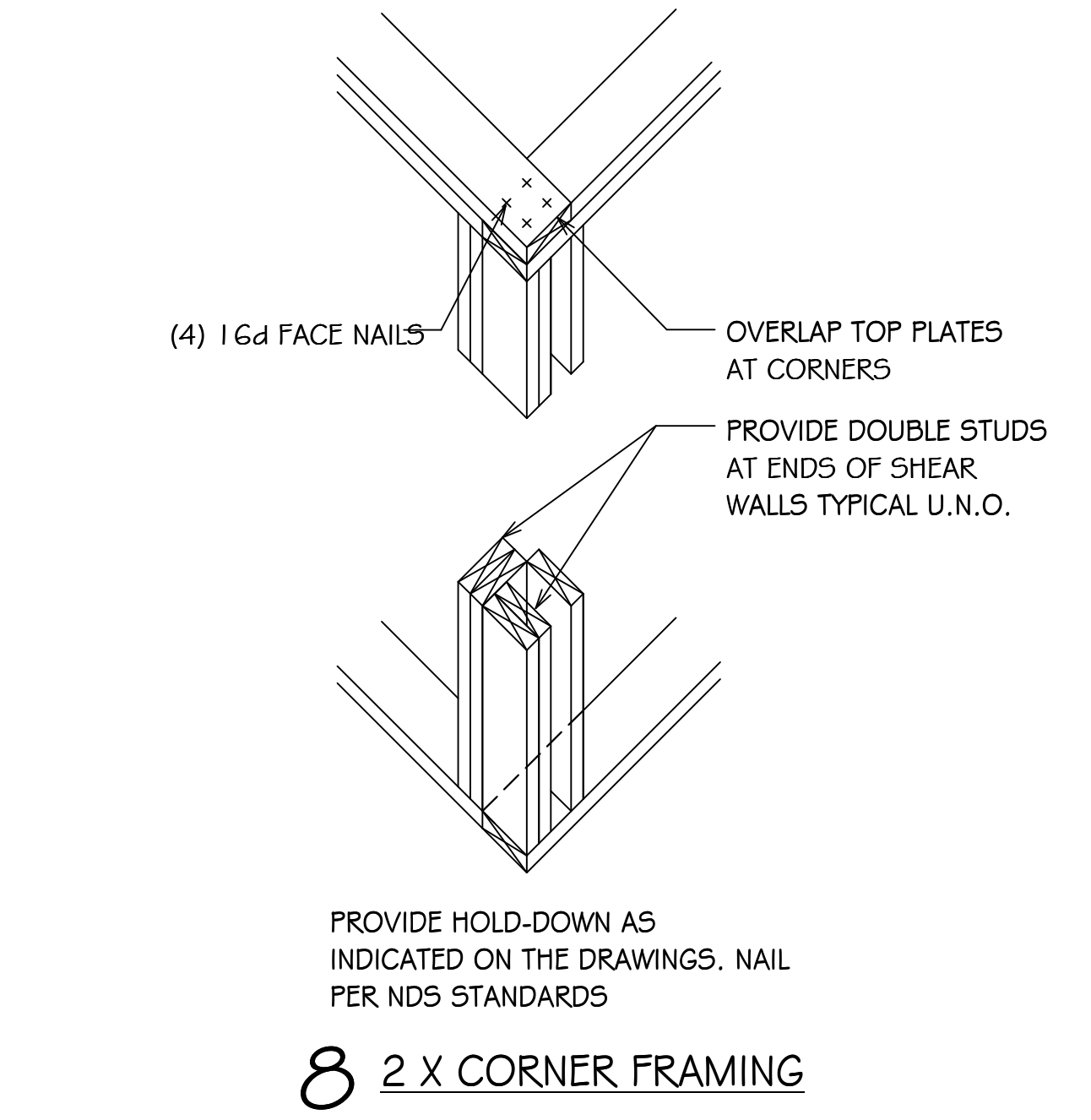
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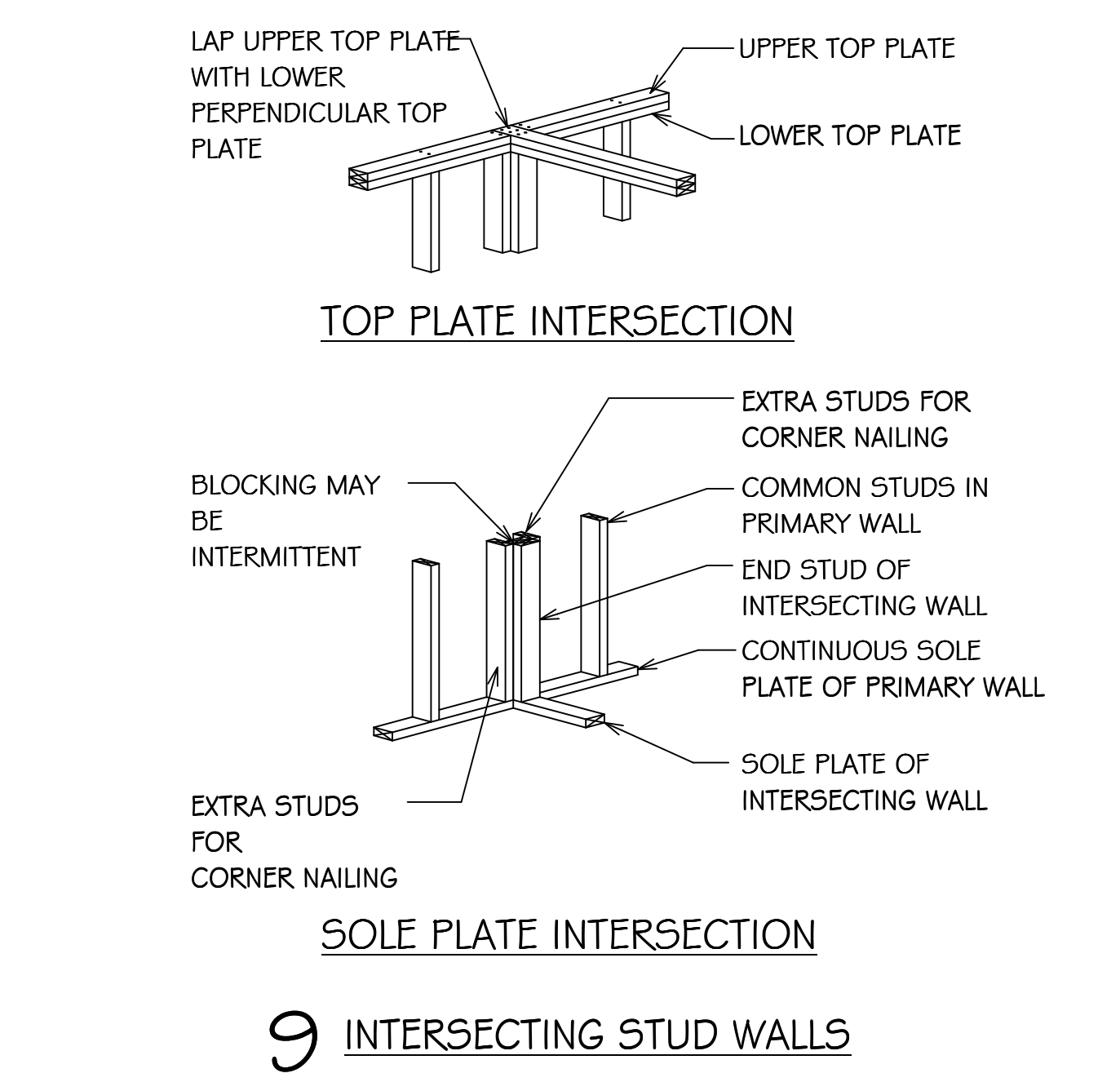
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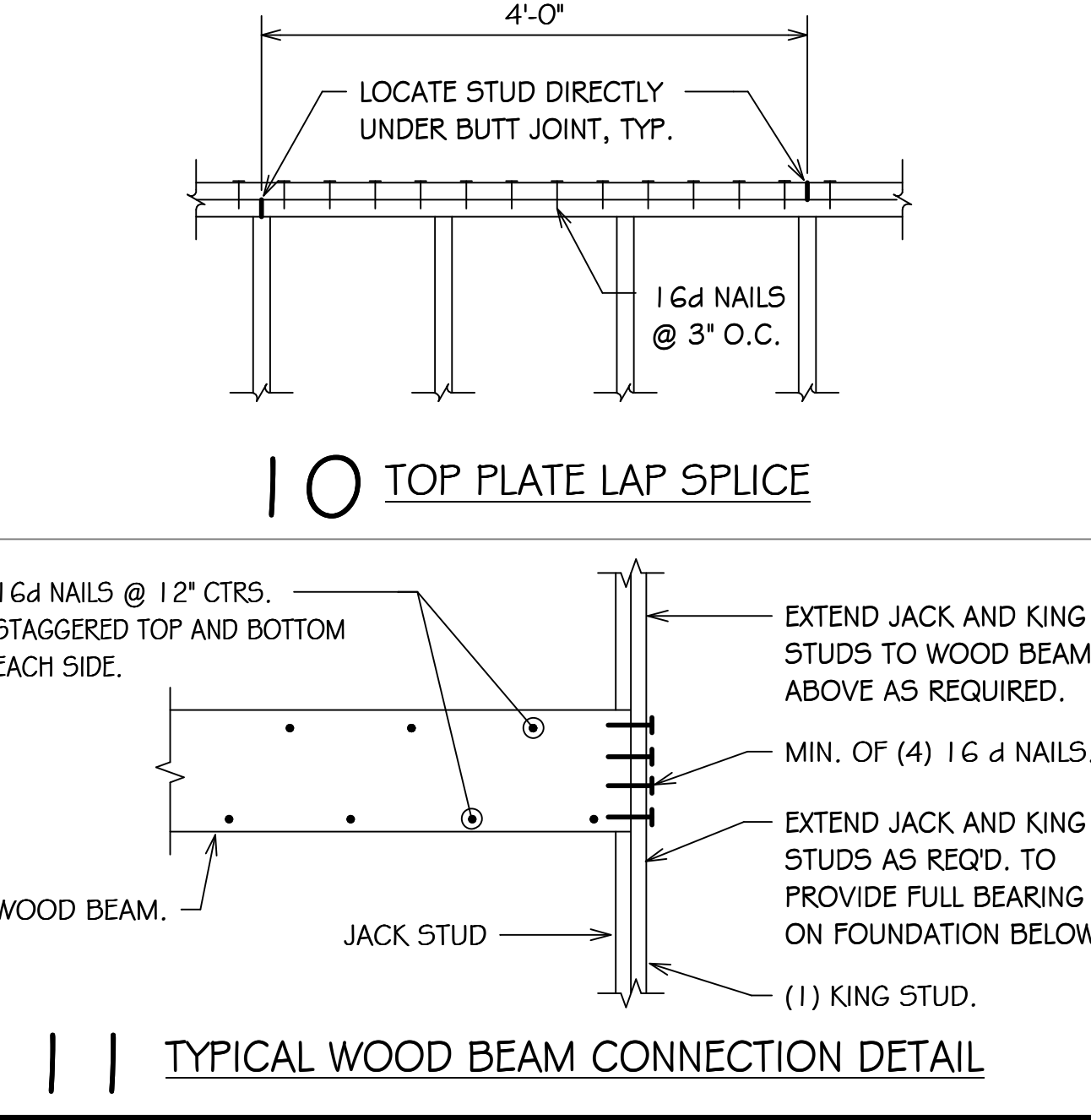
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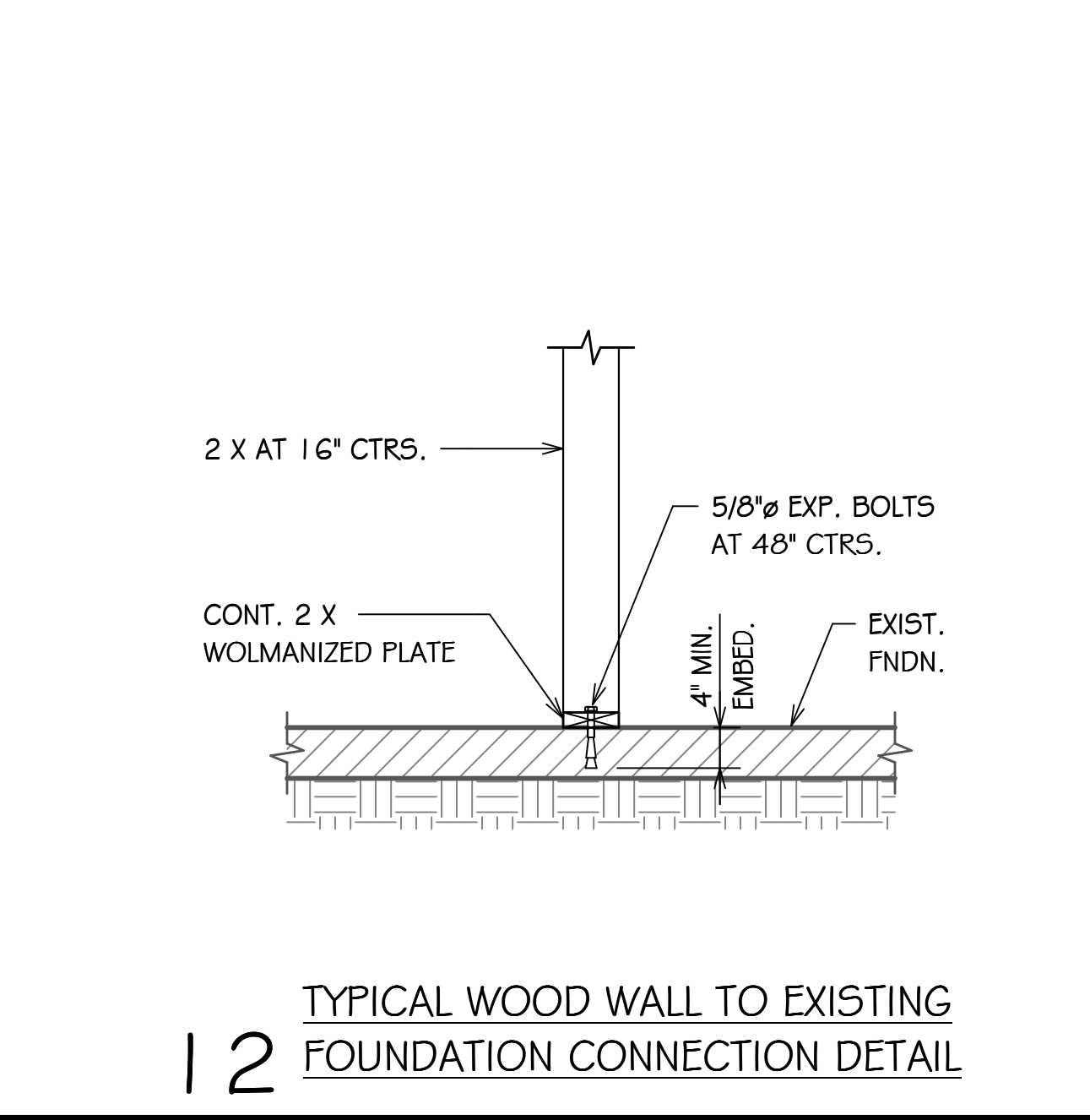
**8 2 X CORNER FRAMING**



**9 INTERSECTING STUD WALLS**



**10 TOP PLATE LAP SPLICE**



**11 TYPICAL WOOD WALL TO EXISTING FOUNDATION CONNECTION DETAIL**

**GENERAL**

GC-1 The contract structural documents represent the finished structure, and except where specifically shown, do not indicate the method or means of construction. The Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, and sequence.

GC-2 The structure has been designed to resist design loads only as a completed structure. Applications of construction loads to the partially completed structure shall be considered by the Contractor and so included in the design of shoring, bracing, formwork, and any other supporting elements provided for construction of the structure. During erection and until all permanent connections are made, the Contractor must provide temporary bracing to brace the structure in all directions.

GC-3 The Engineer shall not have control or charge of, and shall not be responsible for, construction means, methods, techniques, sequences, or procedures for safety precautions and programs in connection with the work, for the acts or omission of the Contractor, Subcontractor, or any other persons performing any of the work, or for the failure of any of them to carry out the work in accordance with the contract documents.

GC-4 General Contractor shall check and verify all dimensions and elevations, (both new and existing) reporting any discrepancies to the Engineer before proceeding with any phase of the work as he will be responsible for all work fitting as intended by the construction documents.

**STRUCTURAL DESIGN CRITERIA**

SD-1 A. Live loads:  
 1. Mezzanine Floor Storage - 125 PSF (Non-Reduceable)

**EPOXY**

EX-1 Acceptable Products are HILTI HIT RE500SD, HILTI HIT-HY 150 SD-MAX, Simpson Strong-Tie Set-XP or approved equal. Substitutions may be considered provided complete technical information is furnished to the Engineer and approved prior to commencement of work. In using the above products, follow strictly the manufacturer's specifications and directions for mixing and application. Also heed all label warnings by manufacturer. Make application in accordance with applicable safety laws.

**WOOD FRAMING**

WF-1 All lumber and its fastenings shall conform to the National Design Specification for Wood Construction, latest edition, by the National Forest Products Association.

WF-2 All wood framing shall be Southern Yellow Pine, Grade 2, or approved equivalent unless noted otherwise.

WF-3 Micro-Lam beams shall be solid rectangular sections constructed of high strength laminated veneer as manufactured by Truss-Joist Corporation. Design properties: Fb=2,600 PSI multiplied by (12/16) for member depths greater than 12"; Fv=1,555 PSI; Fc perpendicular = 750 PSI; Fc parallel = 2,510 PSI; Fw=285 PSI; E=1,017,000 PSI.

WF-4 If the Contractor or Owner choose to use a wood species or framing member other than what is shown in the drawings and general notes, modifications to the design will need to be performed by the Engineer. The Contractor/Owner who is requesting the alternate material shall reimburse the Engineer for all time spent on the re-design.

WF-5 Provide solid wood blocking at supports, ends of cantilevers, halfway between supports and ends of cantilevers, and 8'-0" on center maximum.

WF-6 See detail 7/53.1 for sill plate bolts. Locate first anchor bolt within 12 inches from all corners.

WF-7 All wood members in contact with concrete shall be treated lumber.

**GENERAL NOTES**

WF-8 Installation and framing construction requirements for all MEP mechanical equipment, unless otherwise addressed in the Engineer's drawings, shall be the sole responsibility of the Contractor. Specific models, and dimensional characteristics of such equipment shall be determined by the Owner and Contractor in accordance with the Architect's plans and schedules. The Contractor shall bear full responsibility for insuring that framing and attached components provide the necessary dead and live load support in the manner required by the equipment manufacturer.

**FLOOR SHEATHING**

FS-1 Floor sheathing shall be 23/32" or 3/4" thick APA RATED PLYWOOD or OSB SHEATHING EXP 1, EXP 2 or EXT with a Panel Span Rating of 48/24.

FS-2 Install panels with the long dimension of the panel across supports, except where noted, and with panel continuous over two or more spans. Allow 1/8" spacing at panel ends and 1/4" at panel edges. Nail 6" on center along panel edges and 12" on center at intermediate supports. Use 8d common nails. No staples are allowed.

**MISCELLANEOUS**

M-1 See architectural drawings for dimensions, elevations, stair dimensions and handrail details.

M-2 The Contractor shall compare structural sections with architectural sections and report any discrepancy to the Architect and Engineer prior to fabrication or installing structural members.

M-3 Changes shall not be made to the drawings without written approval of the Engineer.

M-4 Shop drawings shall be submitted for all structural items including micro-lam members and Simpson Strong-Tie anchors.

M-5 Verify all dimensions and conditions of existing building at the job site prior to beginning work.

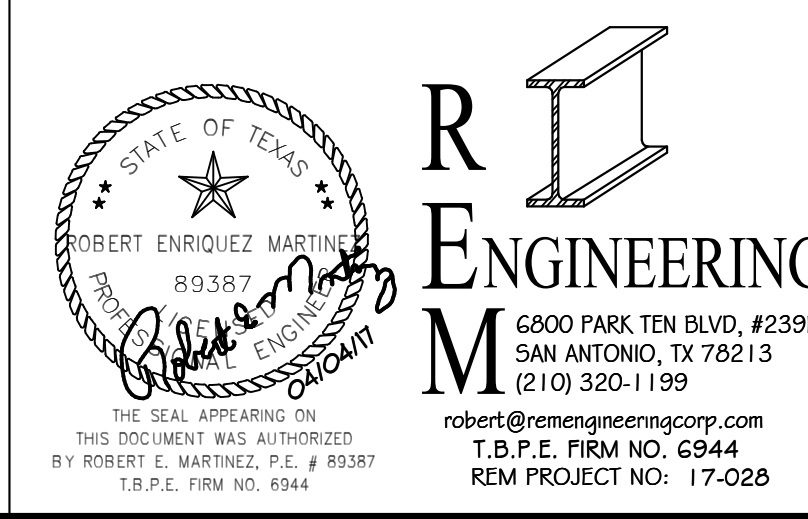
**SITE OBSERVATION BY THE STRUCTURAL ENGINEER**

SV-1 Periodic site observations by field representatives of the Structural Engineer are solely for the purpose of determining if the work of the Contractor is proceeding in general accordance with the structural contract documents. These limited site observations should not be construed as exhaustive or continuous to check the quality or quantity of the work, but rather periodic in an effort to guard the Owner against defects or deficiencies in the work of the Contractor.

SV-2 Do not cover up structural framing until it has been reviewed by the Engineer.

**REPRODUCTION NOTE**

R-1 The use of reproductions of these contract drawings by any contractor, subcontractor, erector, fabricator, or material supplier in lieu of preparation of shop drawings signifies his acceptance of all information shown hereon as correct, and obligates himself to any job expense, real or implied, arising due to any errors that may occur hereon.



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### FINISH TAG KEY

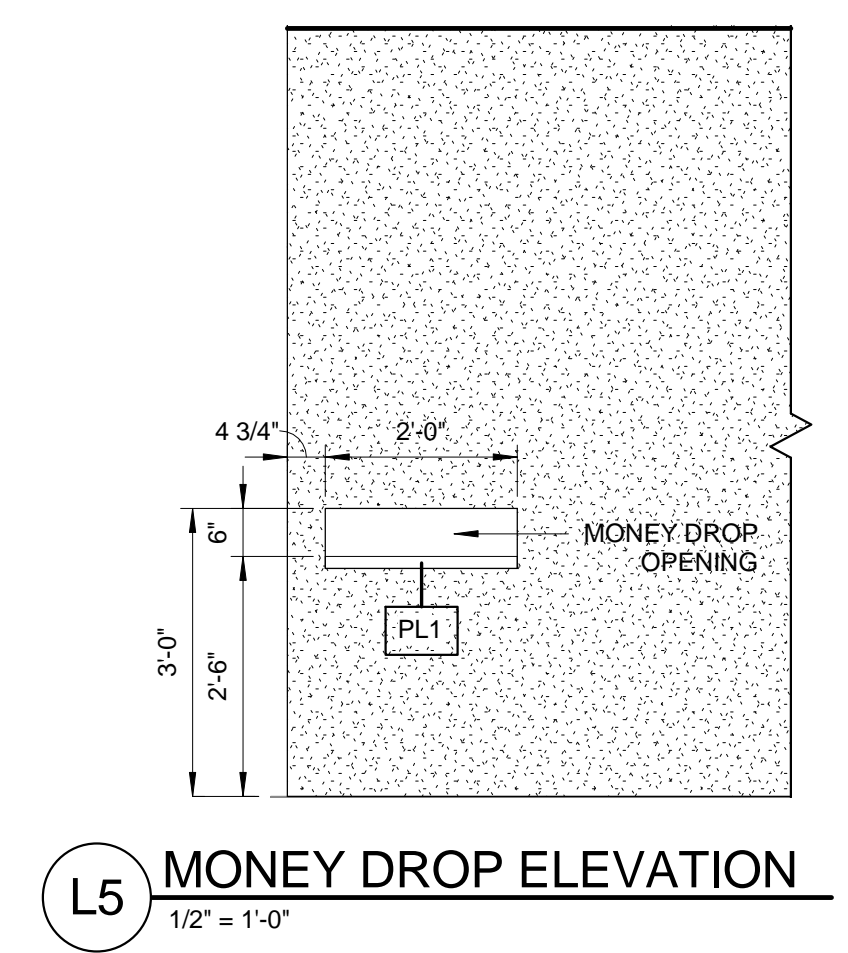
APC2	CEILING TYPE
P1	WALL FINISH, UNO
RB1	BASE TYPE
VCT1	FLOOR FINISH
P1	MATERIAL TAG

### FLOOR PATTERN LEGEND

VCT1	VCT1
CRP1	CRP1
	AREA OF NO ARCHITECTURAL WORK

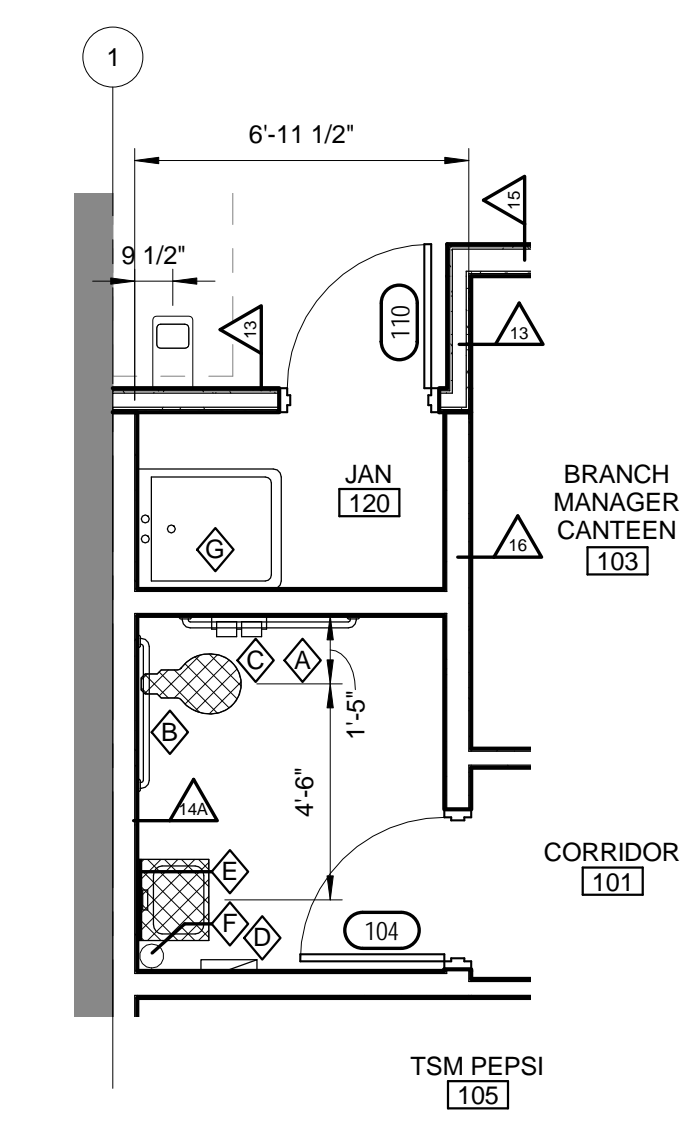
### WALL COVERING

(1) LAYER OF 1/4" PLYWOOD, PAINT GRADE, OVER GYPSUM BOARD WITH 1/4"x3/4" WD. MOLDING STRIPS AT THE SEAMS



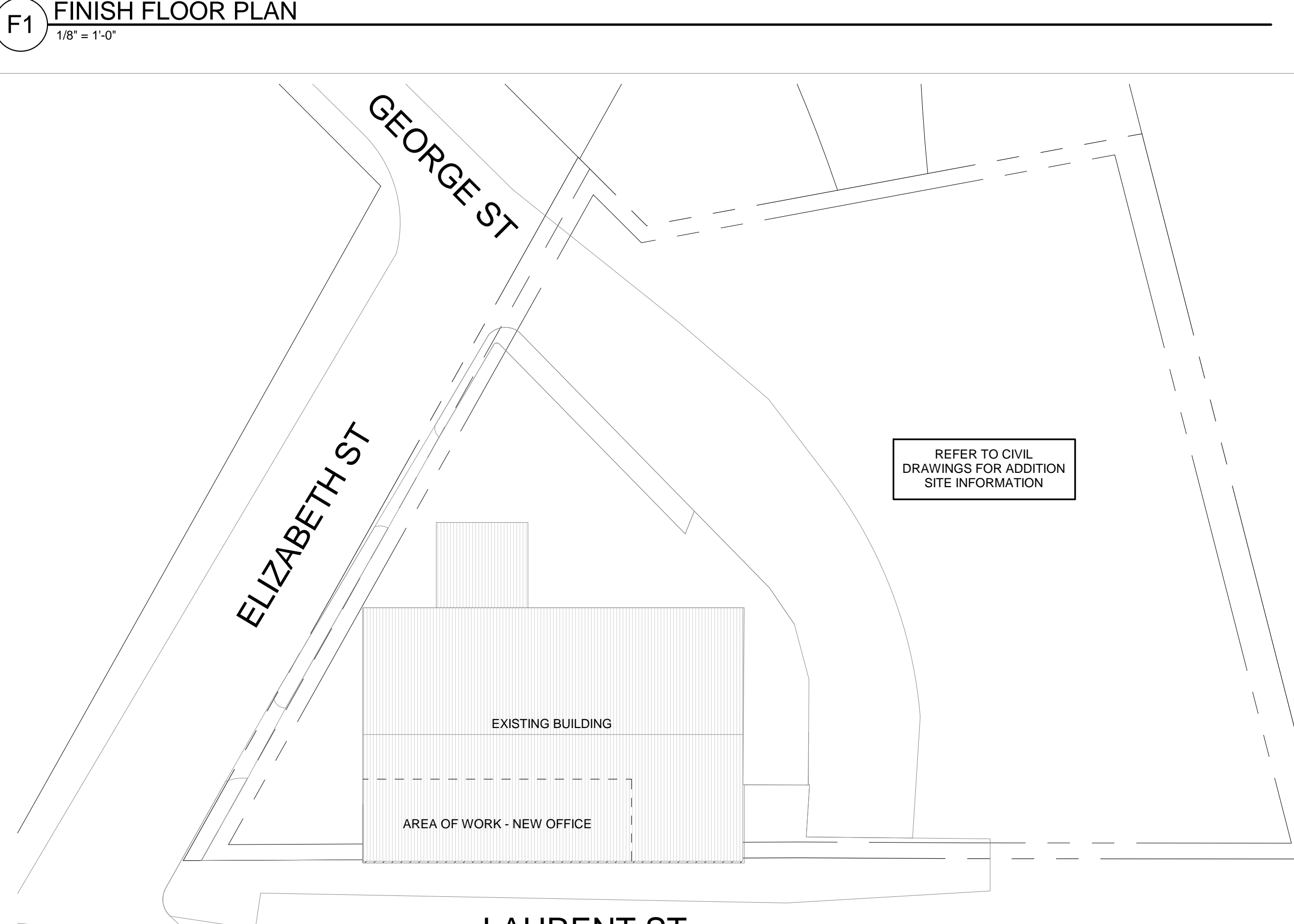
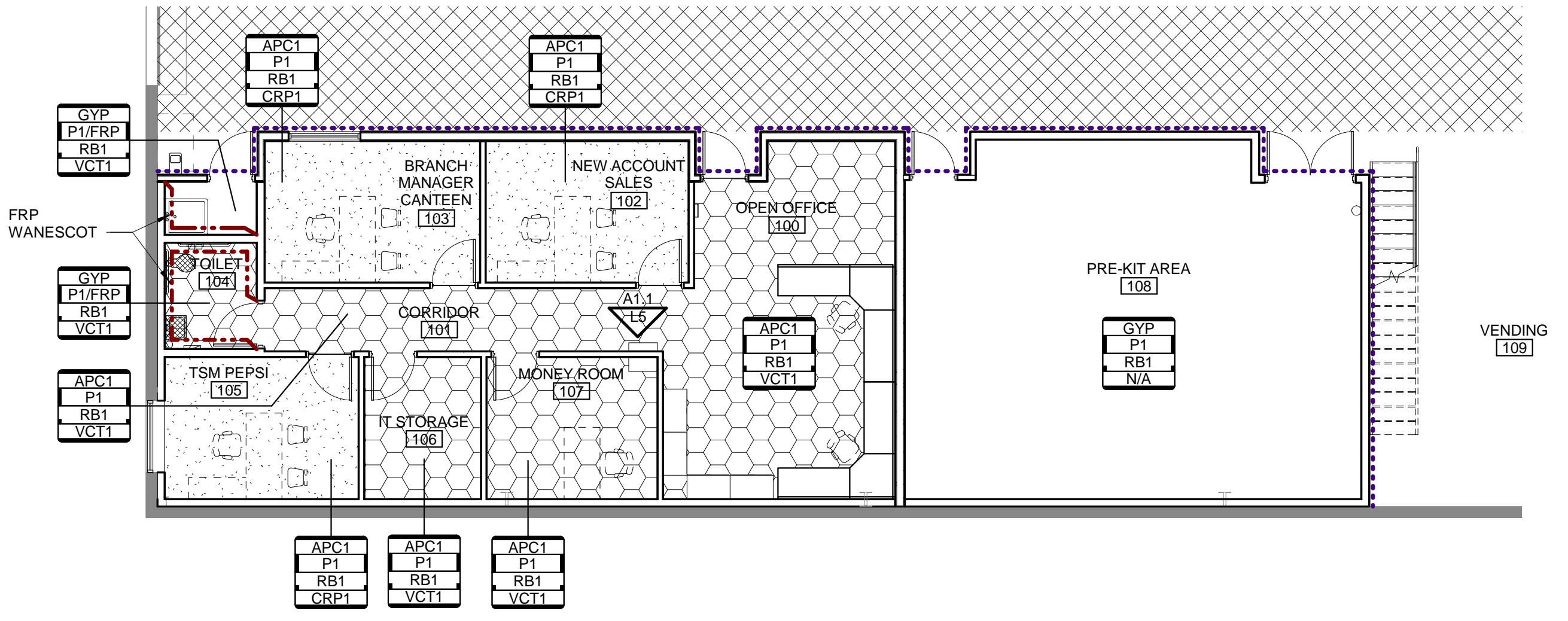
### RESTROOM ACCESSORY...

MARK	NAME	DESCRIPTION & MOUNTING	COUNT
A	GRAB BAR	'BOBRICK' B-6806 X 42" 1 1/2" DIAMETER, STAINLESS STEEL - SATIN FINISH - GYP. BD. MOUNTING, REFER TO ELEVATIONS FOR MOUNTING HEIGHT	1
B	GRAB BAR	'BOBRICK' B-6806 X 36" 1 1/2" DIAMETER, STAINLESS STEEL - SATIN FINISH - GYP. BD. MOUNTING, REFER TO ELEVATIONS FOR MOUNTING HEIGHT	1
C	TOILET TISSUE DISPENSER	'BOBRICK' B-2740 SURFACE-MOUNTED TOILET TISSUE DISPENSER, MOUNT AS SHOWN ON ELEVATIONS	1
D	PAPER TOWEL DISPENSER	'BOBRICK' B-3861 - MASONRY MOUNTING, REFER TO ELEVATIONS FOR MOUNTING HEIGHT	1
E	MIRROR	'BOBRICK' B290 - 1836 STAINLESS STEEL ANGLE FRAME, MOUNT AS SHOWN ON ELEVATIONS	1
F	SOAP DISPENSER	FURNISHED BY OWNER, INSTALLED BY CONTRACTOR	1
G	MOPIBROOM HOLDER	'BOBRICK' B223 X 24" L STAINLESS STEEL W/3 HOLDERS, MOUNT AS SHOWN ON ELEVATIONS	1



### MATERIAL SCHEDULE

MATERIAL	MARK	MANUFACTURER	STYLE	MFR. NO.	COLOR	LOCATION
ACOUSTIC PANEL CEILING	APC1	ARMISTRONG, 24x24	SCHOOL ZONE FINE FISSURED	465	WHITE	OFFICE CEILINGS
CARPET	CRP1	MOHAWK	BIGELOW - ICONIC EARTH 24x24	-	-	SELECT OFFICES, REF. FINISH PLAN
GLASS	GL-1	PPG	SINGLE PANE SAFETY GLASS	-	CLEAR	INTERIOR GLAZING
GLASS	GL-2	PPG	SOLABAN 60	-	SOLAR GRAY	EXTERIOR GLAZING
PAINT	P1	SHERWIN WILLIAMS	EGGSHELL	-	-	STANDARD WALL COLOR
PAINT	P2	SHERWIN WILLIAMS	EGGSHELL	-	-	ACCENT WALL COLOR
PAINT	P3	SHERWIN WILLIAMS	EGGSHELL	-	-	HM DOOR FRAMES, STEEL DOORS, HANDRAILS
PAINT	P4	SHERWIN WILLIAMS	SEMI-GLOSS	-	-	EXTERIOR MTL WALL PANEL
PLASTIC LAMINATE	PL1	FORMICA	-	-	-	MONEY DROP COUNTERTOP
RUBBER BASE	RB1	ROPPE	4" COVE	-	-	INTERIOR OFFICE AREAS AS INDICATED ON PLAN
VINYL COMPOSITION TILE	VCT1	MANNINGTON	PROGRESSIONS	-	-	ALL OFFICE AREAS NOT RECEIVING CARPET, REF. FINISH PLAN

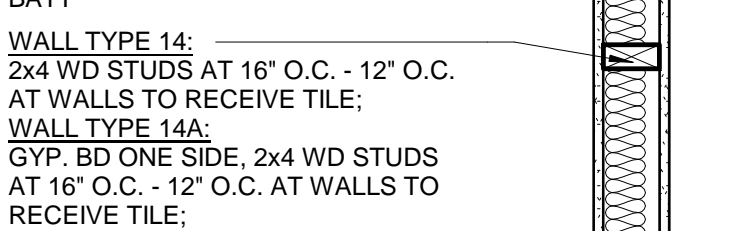
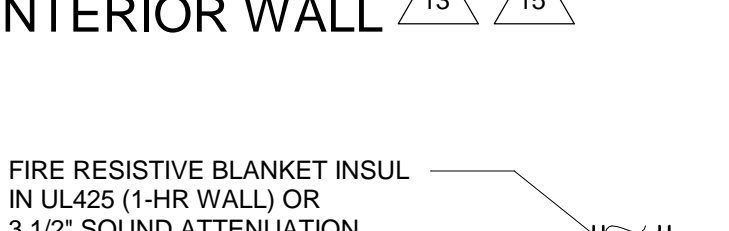
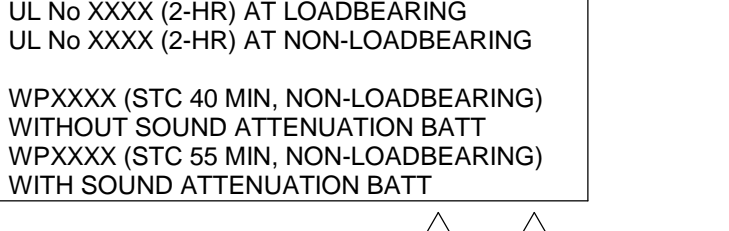
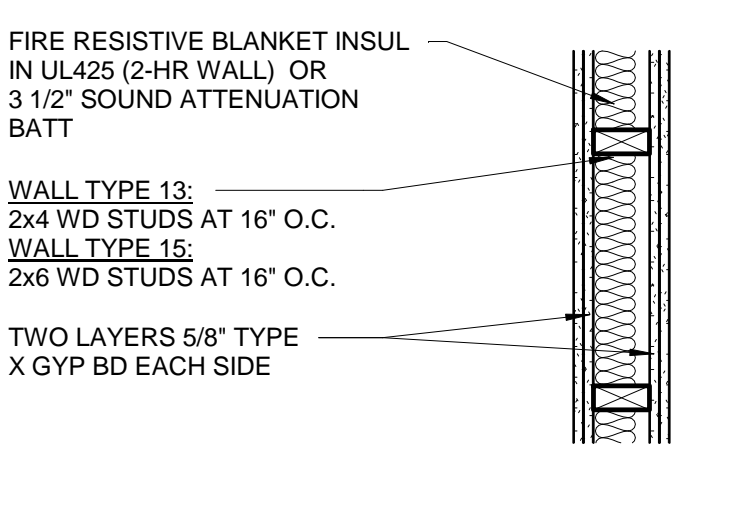


### GENERAL NOTES

- ON THIS PLAN, WALL TYPE 14 IS TYP AT INTERIOR WALLS, UNO.
- DIMENSIONS ARE TO FACE OF STUD, UNO.

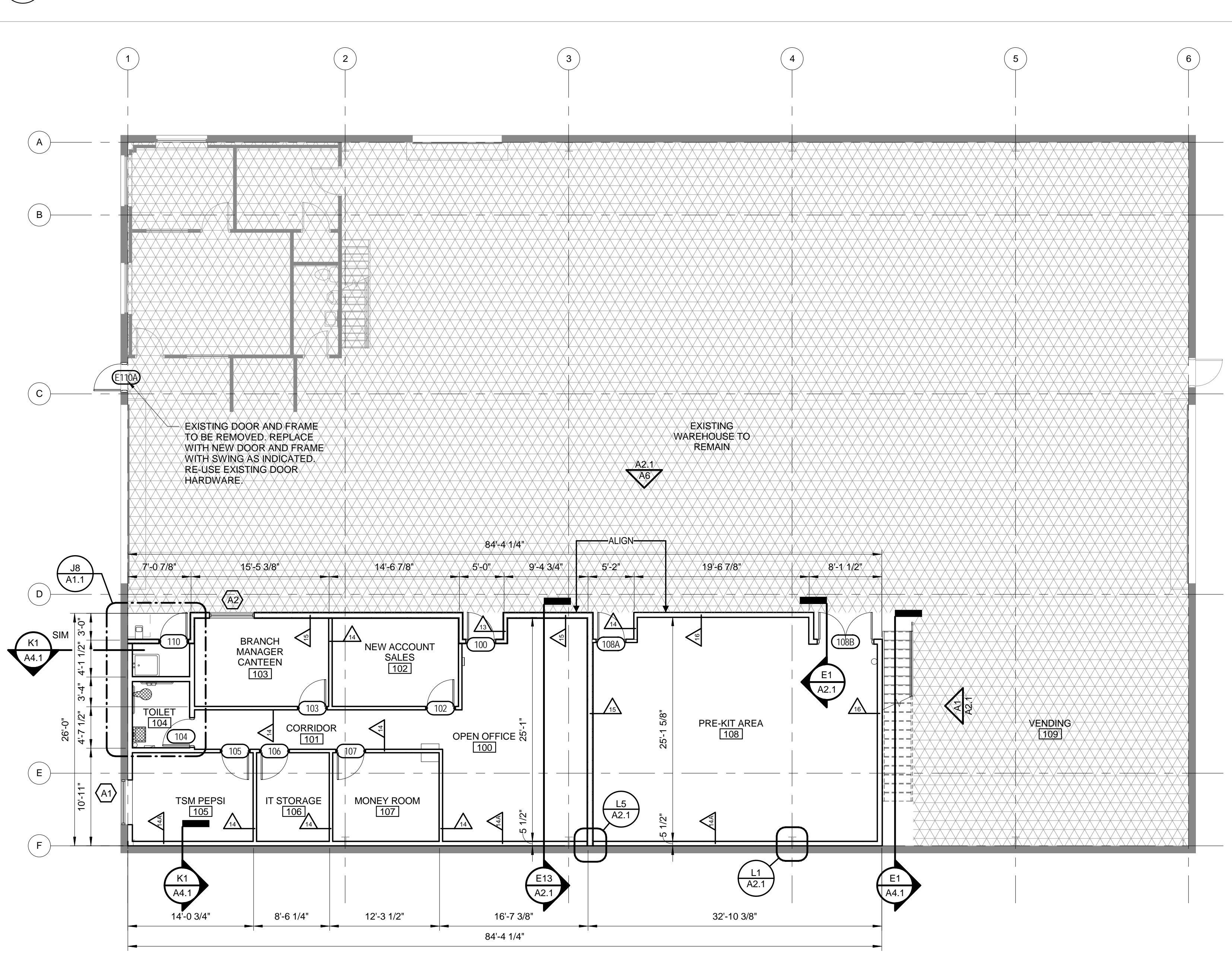
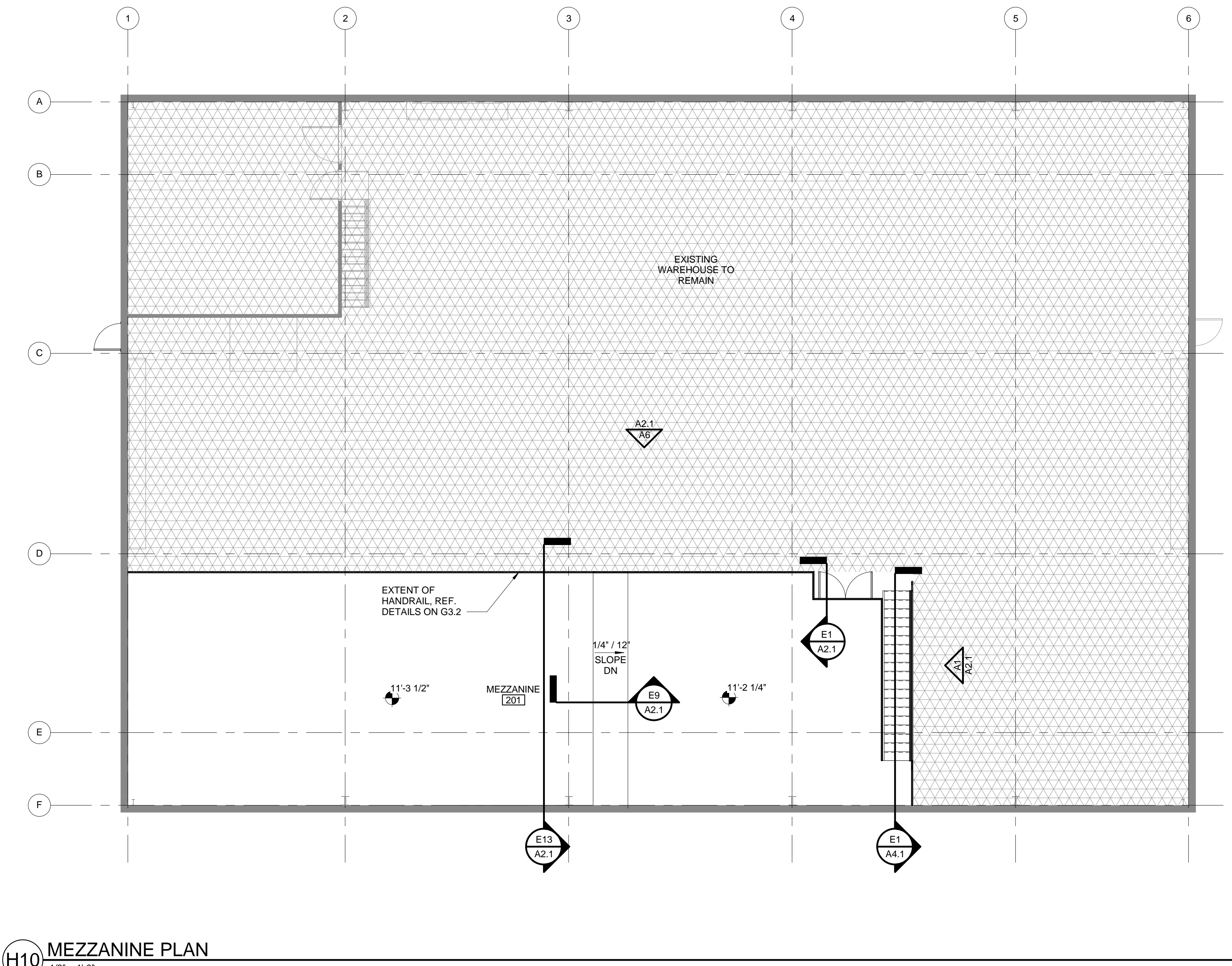
### CONSTRUCTION LEGEND

	STL STUD WALLS (REFER TO WALL TYPES)
	EXISTING WALLS TO REMAIN
	EXISTING DOORS TO REMAIN
	AREA OF NO ARCHITECTURAL WORK



### WALL TYPES

13	15
14	14a
16	



**RMA**  
**Rawley McCoy & Associates**  
 ARCHITECTS AND INTERIOR DESIGNERS

PATRICK OHRT  
 REGISTERED ARCHITECT  
 REGISTRATION NO. 21195  
 STATE OF TEXAS

Final Plans for Bidding and Construction

REGISTERED ARCHITECT  
 STATE OF TEXAS  
 21195  
 07-05-17

**ONETA COMPANY PEPSI BUILDING**  
**ONETA COMPANY**  
 VICTORIA, TX

DATE ISSUED:  
**04.05.2017**

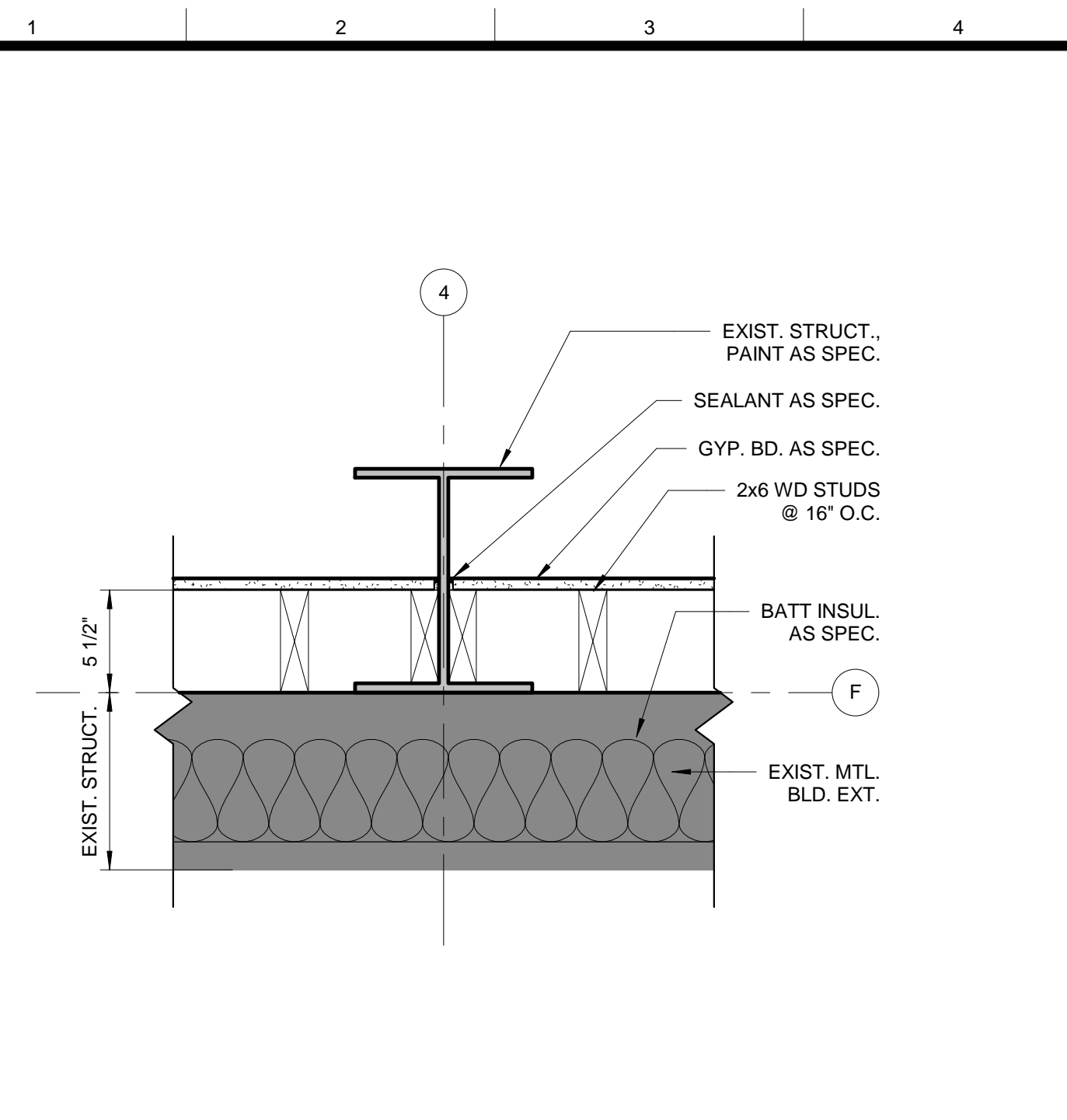
PROJECT NUMBER:  
 773-0515

PLAN NORTH  
 TRUE NORTH

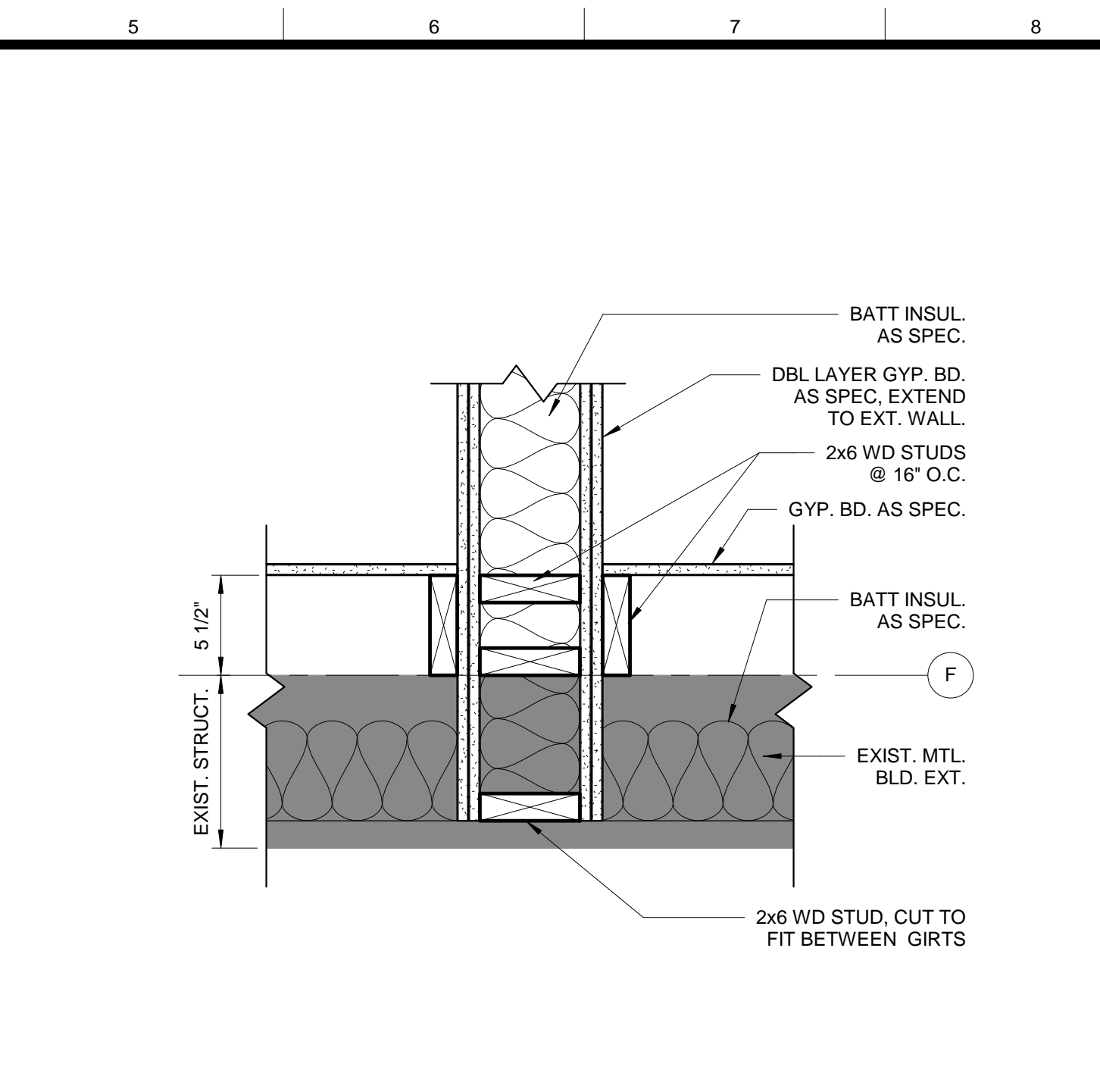
SHEET NAME  
**FLOOR PLANS, ENLARGED PLANS & FINISH PLAN**

SHEET NUMBER  
**A1.1**

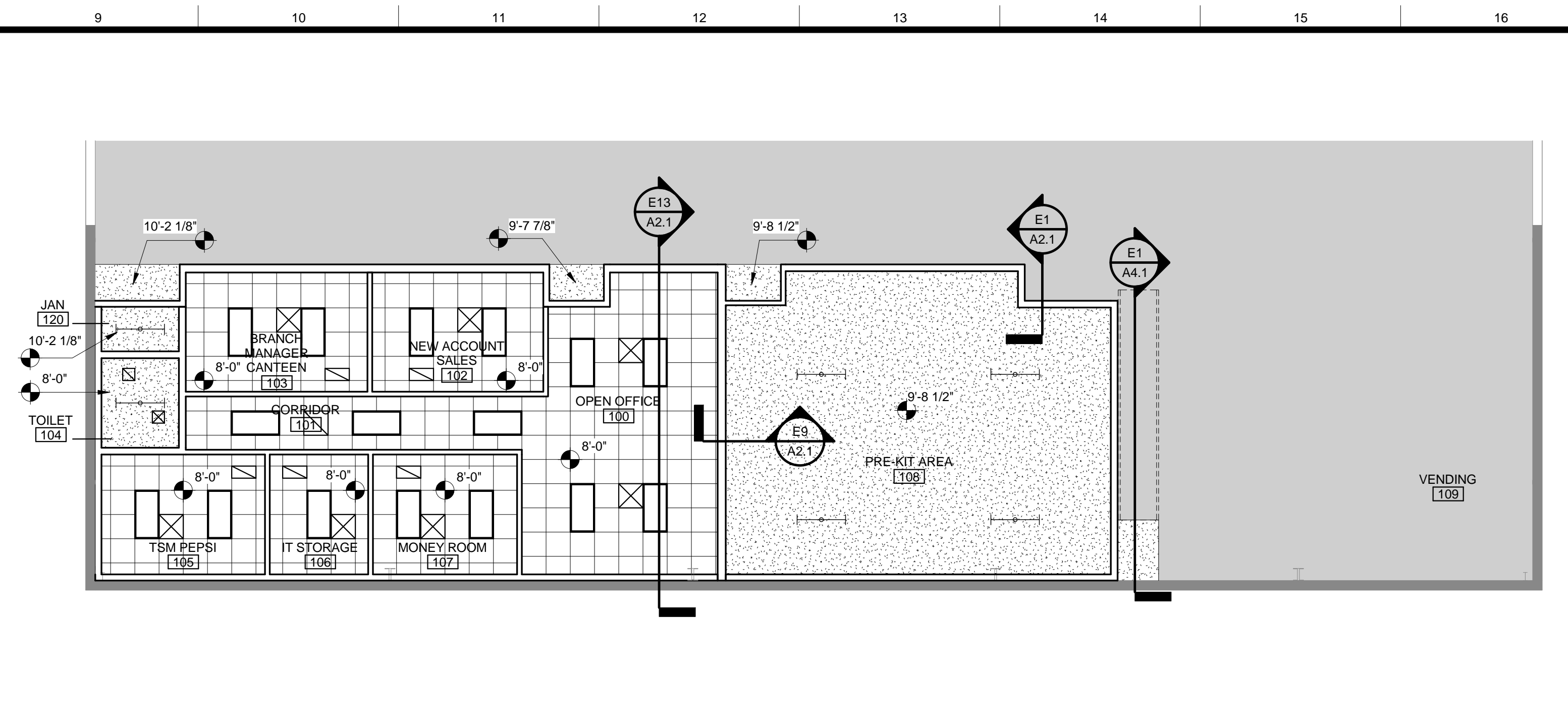




**L1** TYP. WALL @ COLUMN  
1 1/2" = 1'-0"



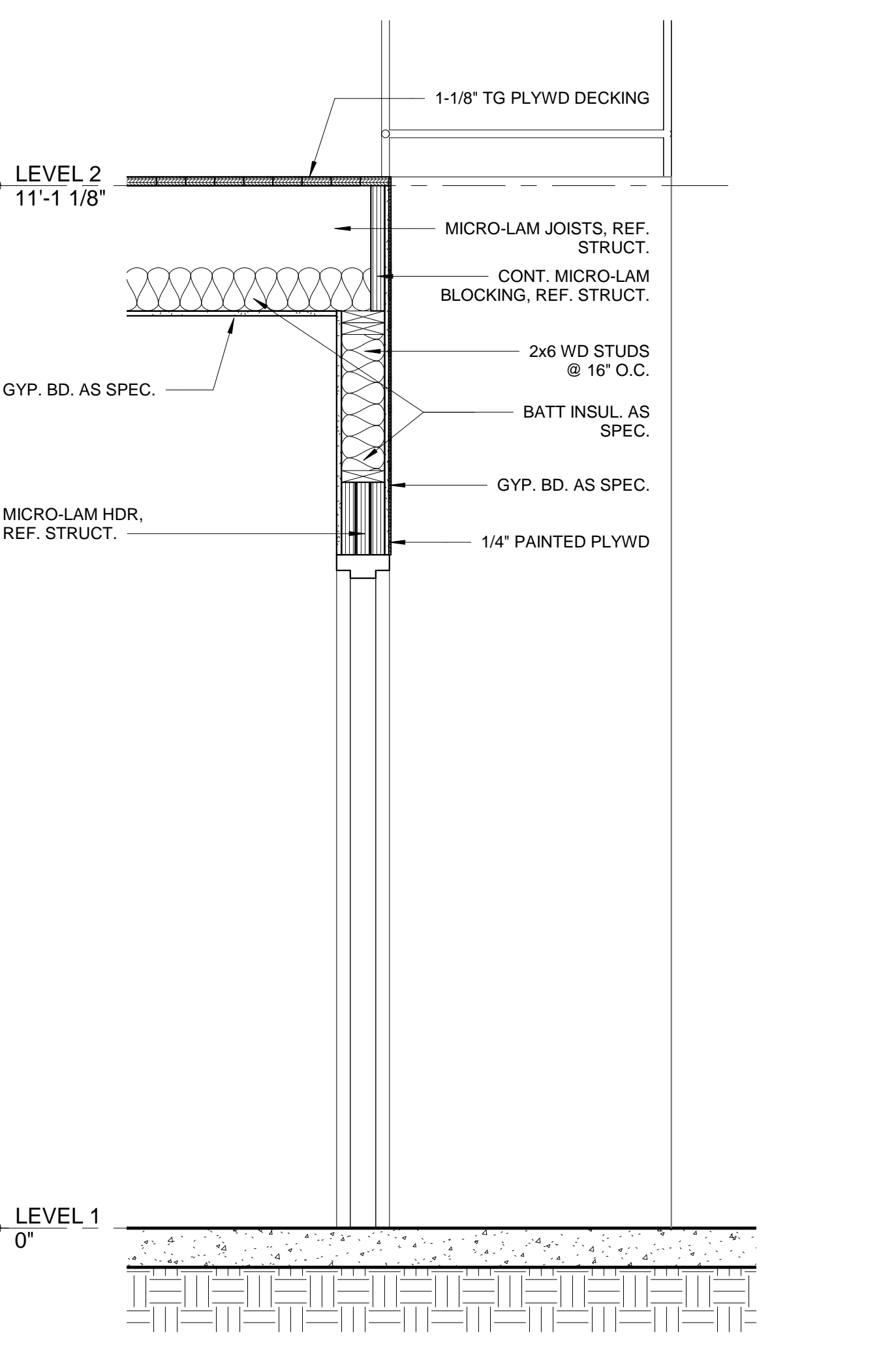
**L5** LEVEL 1 - FP - Callout 1  
1 1/2" = 1'-0"



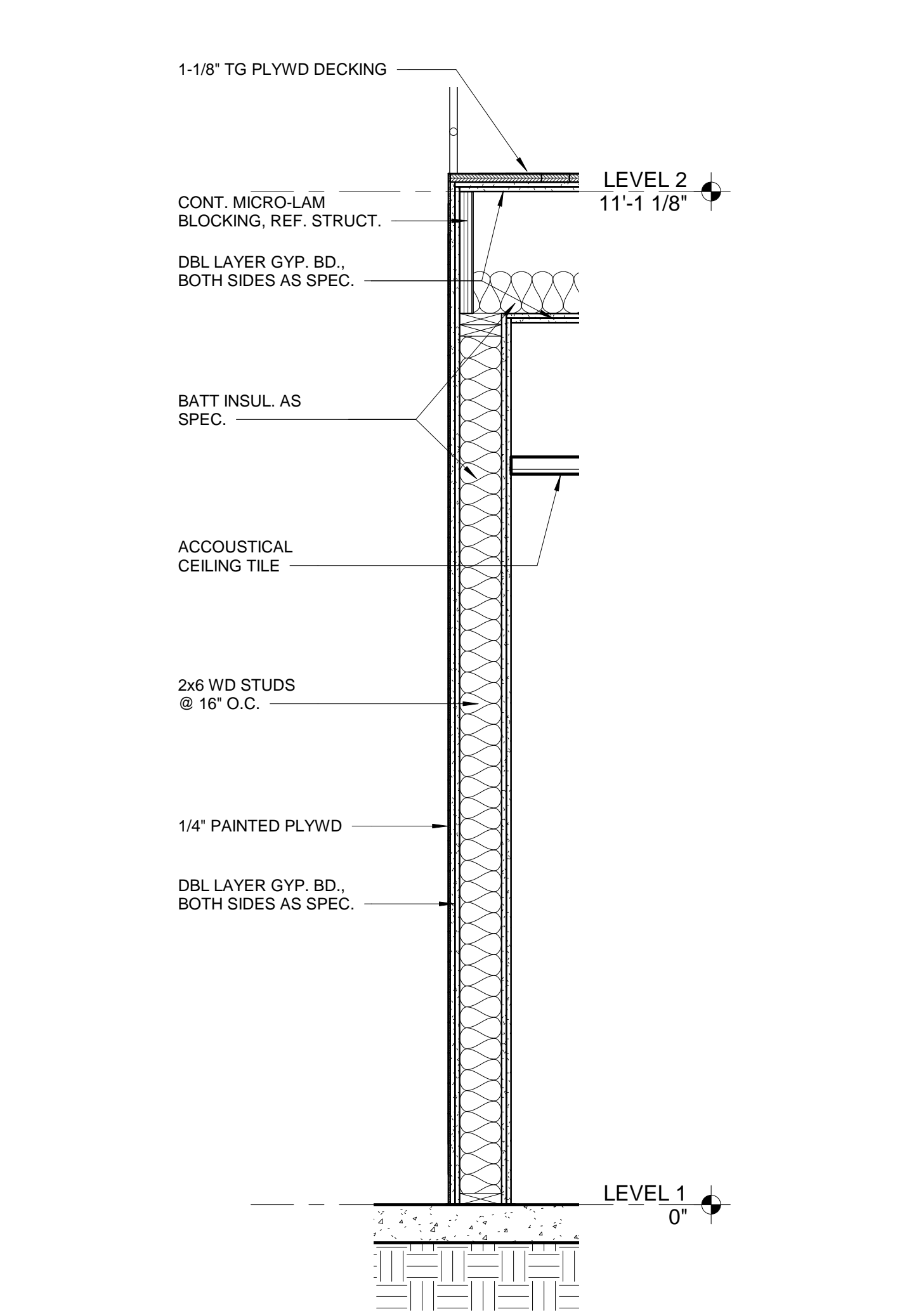
**L9** LEVEL 1 REFLECTED CEILING PLAN  
1/8" = 1'-0"

**CEILING LEGEND**

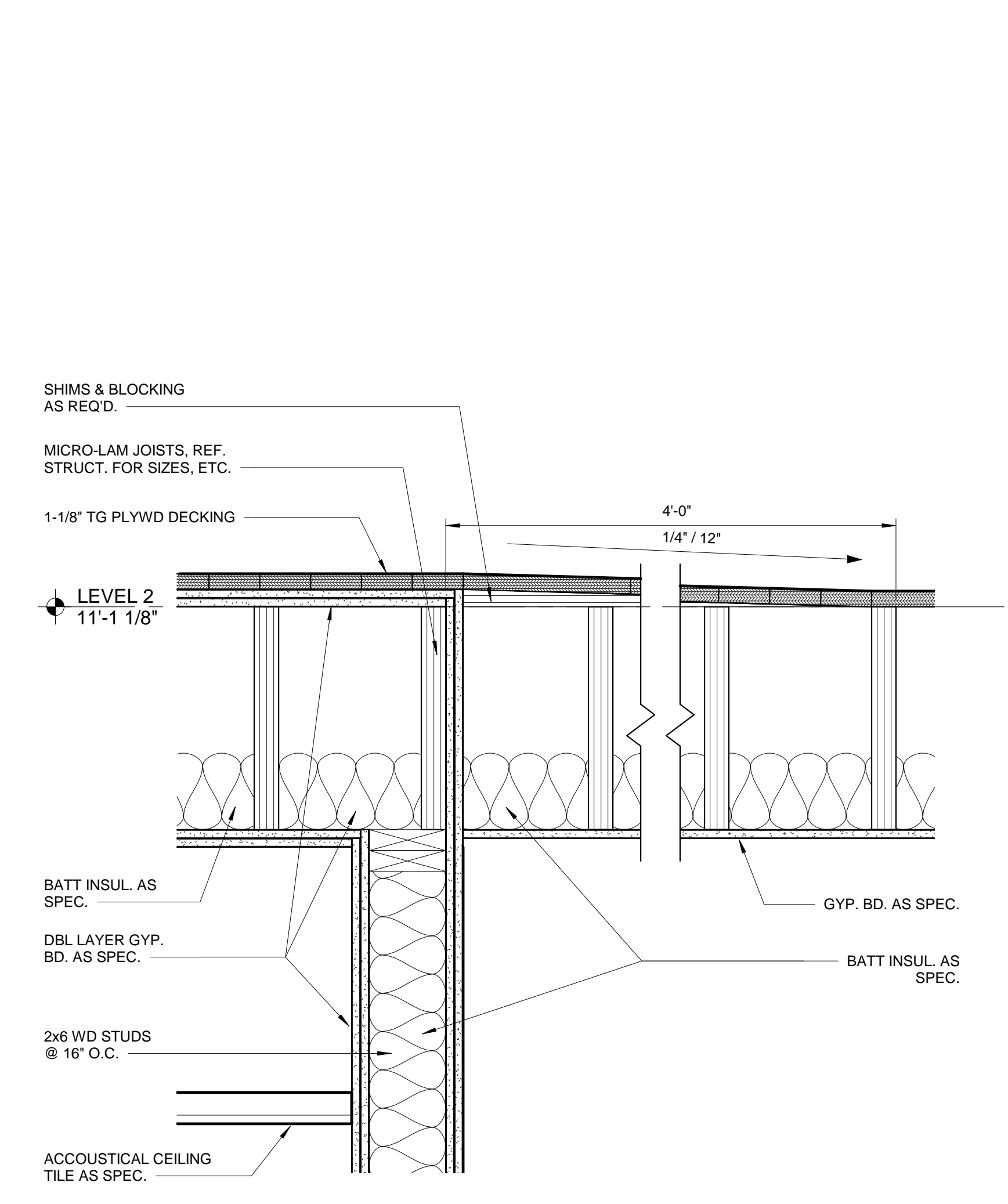
- ACOUSTICAL PANEL CEILING SYSTEM. REF MATERIAL SCHEDULE FOR TYPES.
- SUSPENDED GYP BD CEILING SYSTEM OR GYP BD BULKHEAD REF DWGS. PAINT MARK "P1" U.O.N..
- EXPOSED STRUCTURE
- 10'-0" ELEVATION HEIGHT SYMBOL INDICATES HEIGHT ABOVE FINISH FLOOR
- SUPPLY AND RETURN AIR GRILLS. REF MEP DOCS
- RECESSED 2 X 4 LIGHT FIXTURE REF MEP DOC
- RECESSED LIGHTING FIXTURE REF MEP DOC
- PENDANT MTD FIXTURE REF MEP DOC
- PENDANT MTD FIXTURE REF MEP DOC
- WALL MOUNTED LIGHT REFER TO MEP DWGS



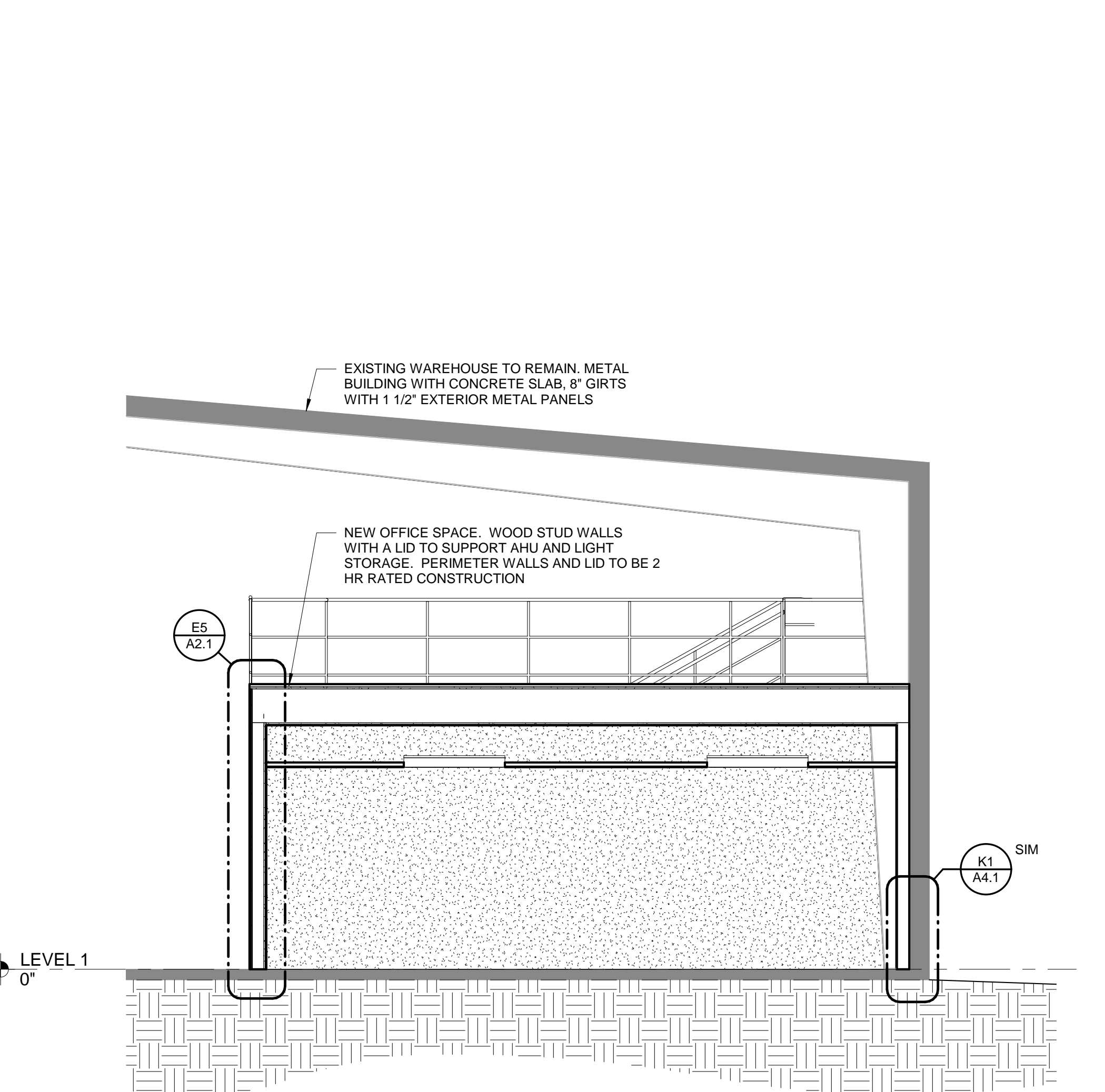
**E1** WALL SECTION  
3/4" = 1'-0"



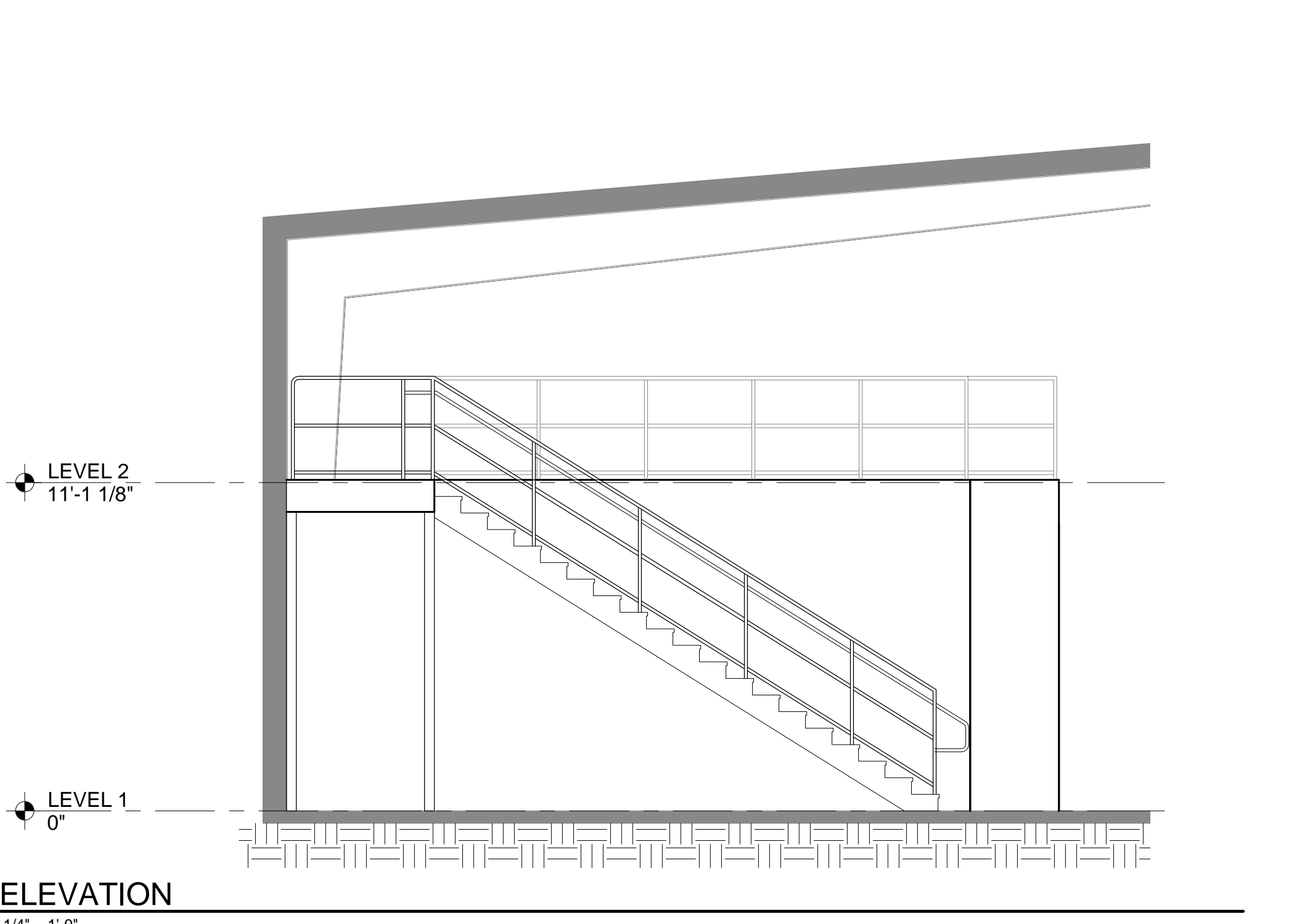
**E5** WALL SECTION  
3/4" = 1'-0"



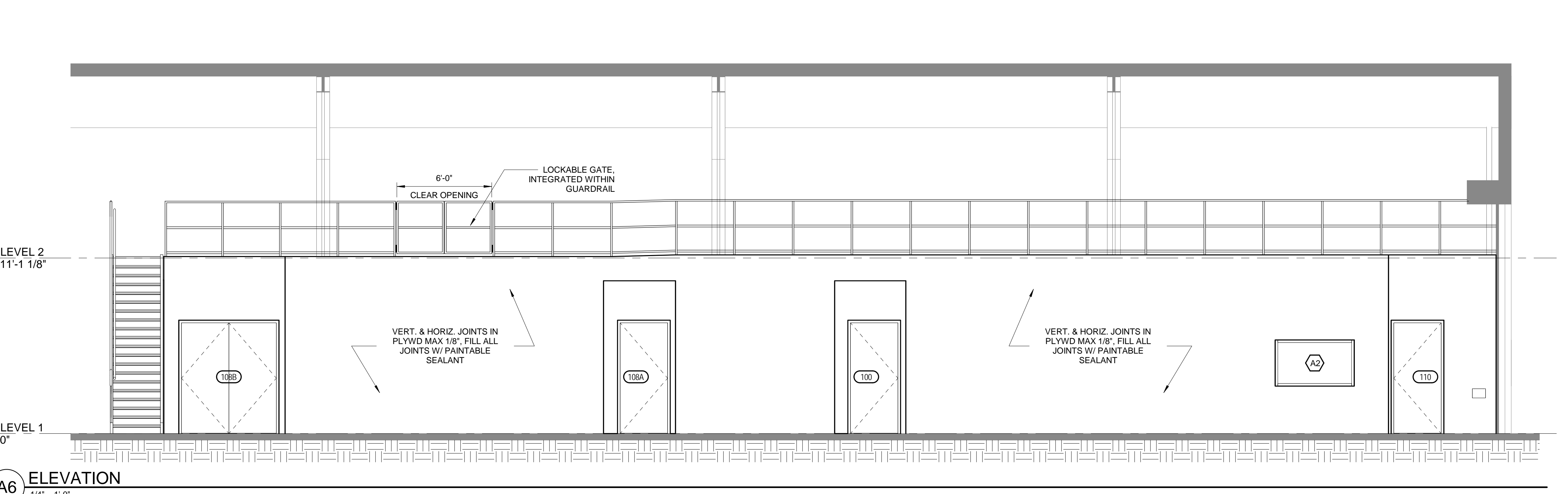
**E9** RATED CEILING & SLOPED FLOOR  
1 1/2" = 1'-0"



**E13** BUILDING SECTION  
1/4" = 1'-0"



**A1** ELEVATION  
1/4" = 1'-0"



**A6** ELEVATION  
1/4" = 1'-0"

**RMA**  
Rawley McCoy & Associates  
ARCHITECTS AND INTERIOR DESIGNERS

PATRICK OHRT  
REGISTERED ARCHITECT  
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Final Plans for Bidding and Construction

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21195  
0705-17

**ONETA COMPANY PEPSI BUILDING**  
ONETA COMPANY  
VICTORIA, TX  
DESIGNED BY RAWLEY MCCOY & ASSOCIATES

DATE ISSUED:  
**04.05.2017**

PROJECT NUMBER:  
773-0515

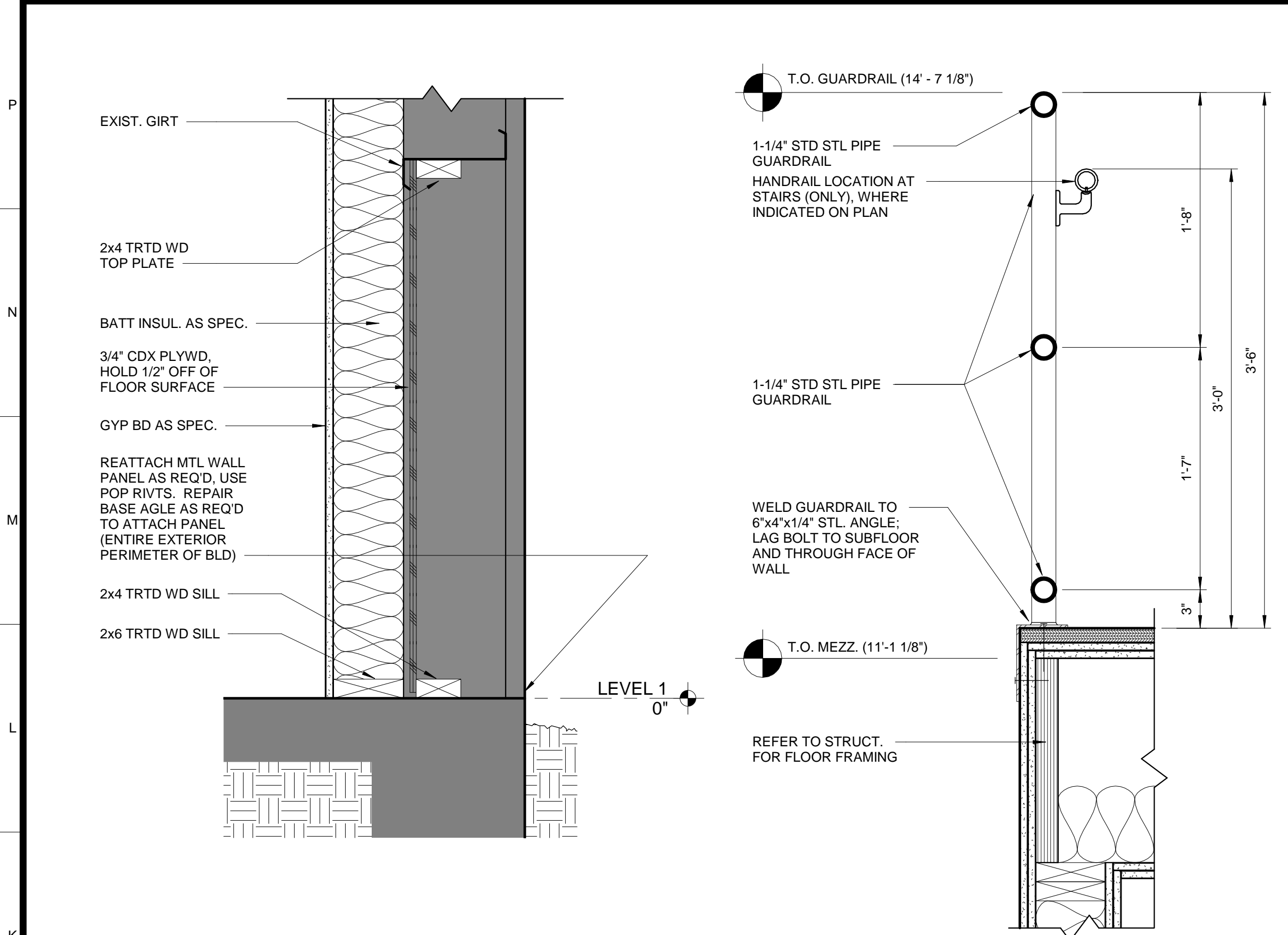
PLAN NORTH TRUE NORTH

SHEET NAME  
**RCP, PLAN DETAILS, SECTIONS & WALL SECTIONS**

SHEET NUMBER

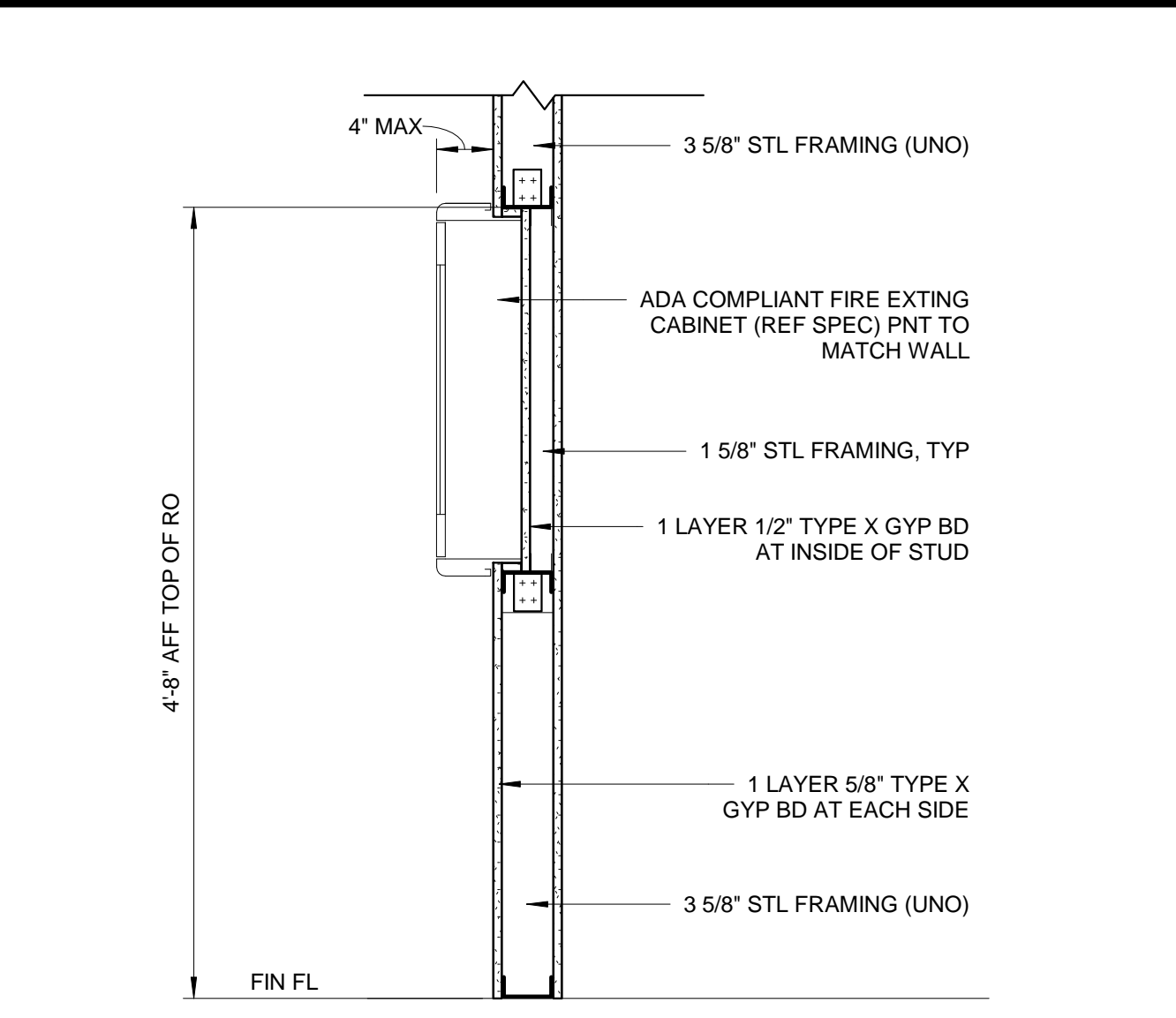
**A2.1**

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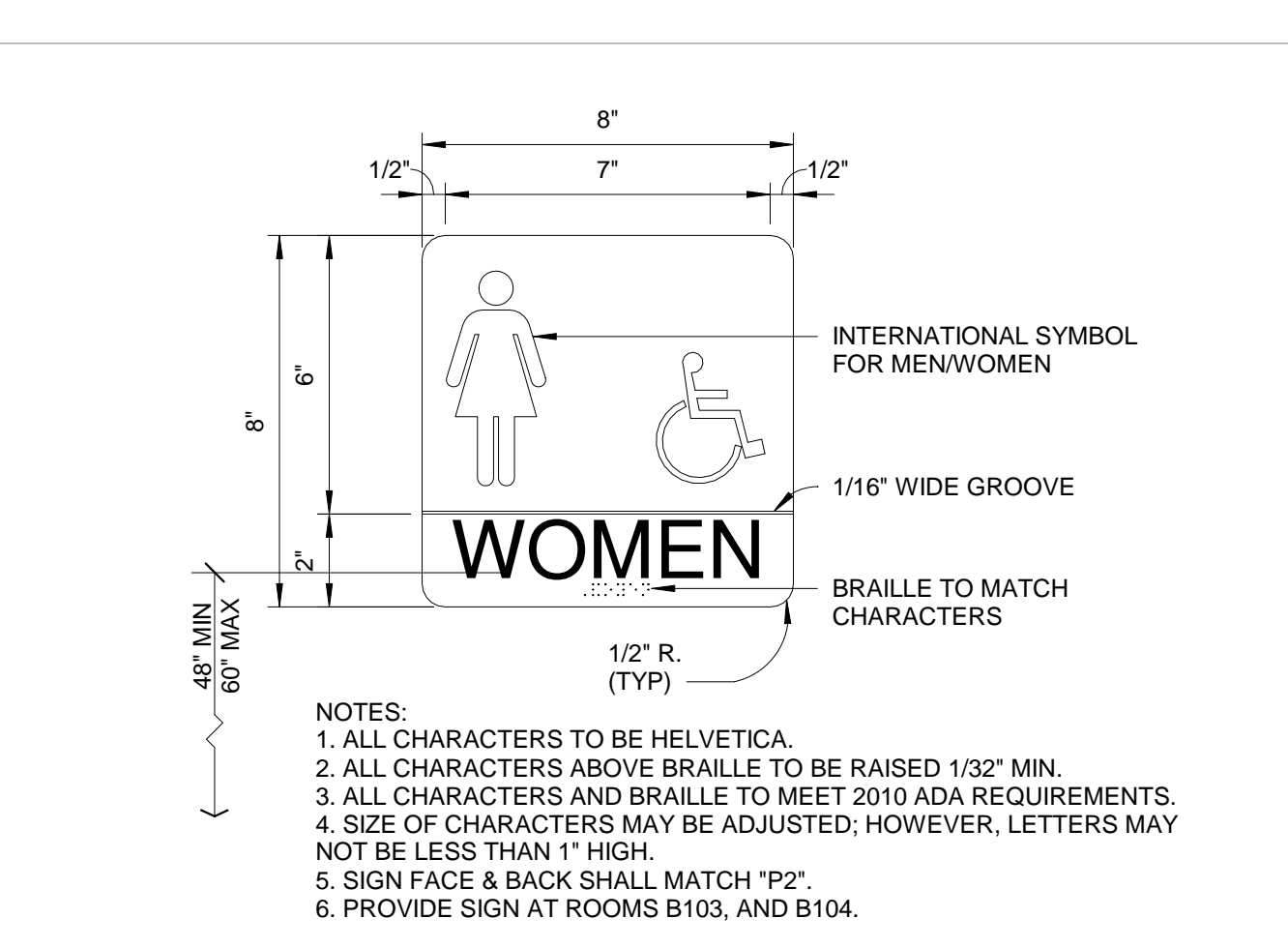


**K1** TYP. LOWER WALL DETAIL ALONG EXT. WALL  
1 1/2" = 1'-0"

**K4** GUARDRAIL DETAIL @ MEZZ.  
1 1/2" = 1'-0"



**L7** FIRE EXTINGUISHER CABINET DETAILS  
1" = 1'-0"

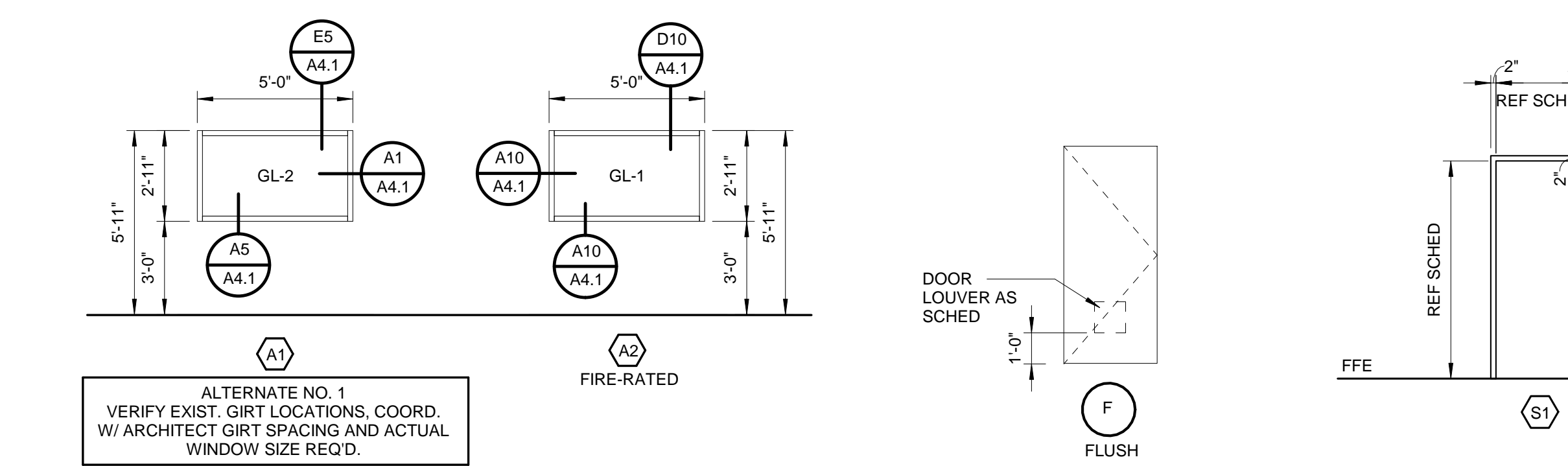


**J7** TYP. HANDICAP SIGN  
3" = 1'-0"

DOOR NUMBER	DOOR TYPE	FIRE RATING	DOOR			FRAME		DETAILS			REMARKS		
			WIDTH	HEIGHT	THICKNESS	MATERIAL	GLAZING	TYPE	MATERIAL	HEAD		JAMB	BILL
100	F	45 MIN.	3'-0"	7'-0"	1 3/4"	STL	NA	S1	STL	D13/A4.1	A13/A4.1	G16/A4.1	-
102	F	-	3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	D16/A4.1	A16/A4.1	-	-
103	F	-	3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	D16/A4.1	A16/A4.1	-	-
104	F	-	3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	D16/A4.1	A16/A4.1	-	-
105	F	-	3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	D16/A4.1	A16/A4.1	-	-
106	F	-	3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	D16/A4.1	A16/A4.1	-	-
107	F	-	3'-0"	7'-0"	1 3/4"	WD	NA	S1	STL	D16/A4.1	A16/A4.1	-	-
108A	F	-	3'-0"	7'-0"	1 3/4"	STL	NA	S1	STL	D16/A4.1	A16/A4.1	G16/A4.1	-
108B	F	-	6'-0"	7'-0"	1 3/4"	STL	NA	S2	STL	D16/A4.1	A16/A4.1	G16/A4.1	-
110	F	45 MIN.	3'-0"	7'-0"	1 3/4"	STL	NA	S1	STL	D13/A4.1	A13/A4.1	G16/A4.1	-
E110A	F	-	3'-0"	7'-0"	1 3/4"	STL	NA	S1	STL	-	-	G16/A4.1	-
Grand total: 11													

**DOOR NOTES:**

- INTERIOR THRESHOLDS SHOULD NOT EXCEED 1/2" IN HEIGHT AND SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
- DOOR HANDLES, PULLS, LATCHES, AND OTHER OPERATING DEVICES ON DOORS SHALL BE MOUNTED AT 3'-6" A.F.F. AND SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING OR PINCHING, OR SEVERE TWISTING TO OPERATE.
- THE FORCE REQUIRED TO ACTIVATE DOOR HARDWARE AND OPEN DOORS SHOULD BE NO GREATER THAN 5 LBF FOR INTERIOR DOORS.
- DOORS TO HAZARDOUS AREAS SUCH AS LOADING PLATFORMS, BOILER ROOMS, MECHANICAL AND ELECTRICAL ROOMS AND OTHER AREAS THAT MIGHT BE DANGEROUS TO A BLIND PERSON SHALL BE MADE IDENTIFIABLE TO THE TOUCH BY A TEXTURED SURFACE ON THE DOOR HANDLE OR OTHER DOOR OPERATING HARDWARE.
- THE SWEEP PERIOD ON ANY DOORS WITH CLOSERS SHOULD BE ADJUSTED SO THAT FROM ANY OPEN POSITION OF 70 DEGREES THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED FROM THE LEADING EDGE OF THE DOOR.
- ADJUST CUT-OFF AT BOTTOM OF ANY EXTERIOR HOLLOW METEL DOORS WITH HANDICAP ACCESSIBLE THRESHOLDS TO INSURE THAT THERE IS NO GAP BETWEEN THE BOTTOM OF THE DOOR AND THE TOP OF THRESHOLD SEAT.
- ALL DOORS SHALL MEET T.A.S. REQUIREMENTS FOR CLEARANCES, HARDWARE, ETC.



**J12** WINDOW ELEVATIONS  
1/4" = 1'-0"

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

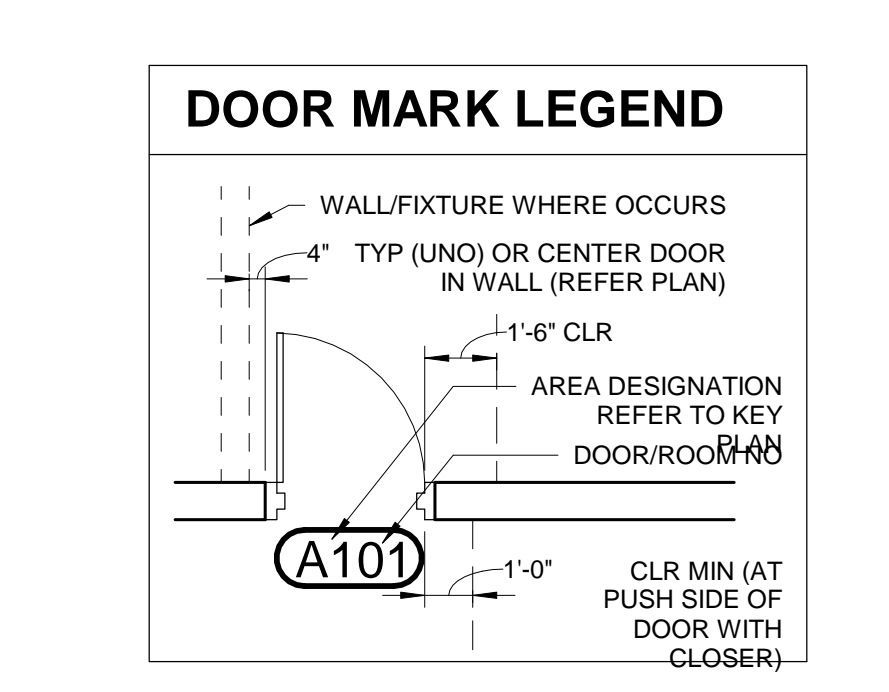
**J15** FRAME TYPES  
1/4" = 1'-0"

**FRAME TYPE LEGEND**

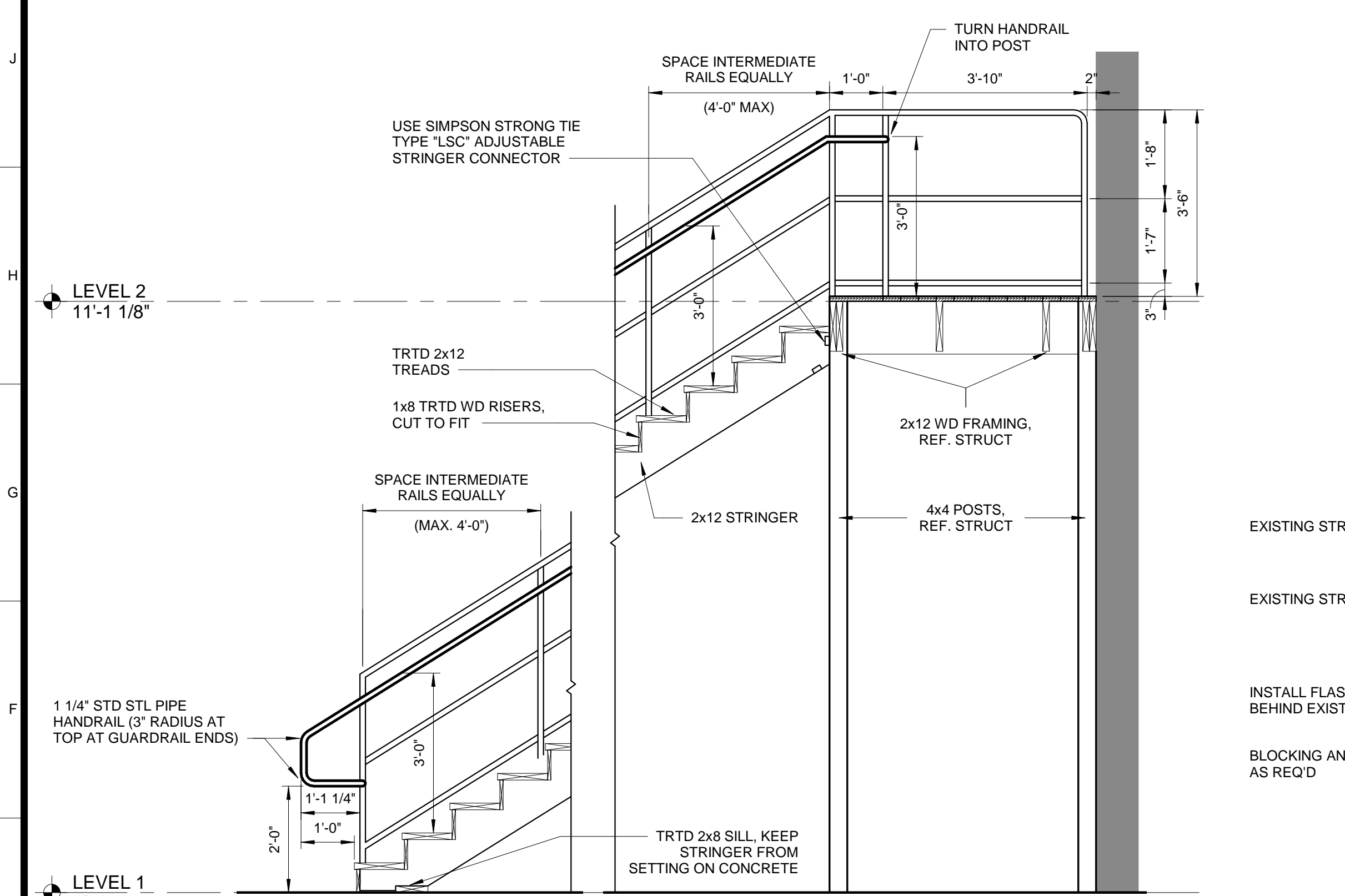
- SH STEEL (HM) FRAME TYPE
- AF ALUMINUM (STOREFRONT) FRAME TYPE
- CF ALUMINUM (CURTAINWALL) FRAME TYPE
- TF ALUMINUM (TRANSLUCENT PANEL) FRAME TYPE
- LF LOUVER TYPE, REF MECHANICAL DRAWINGS

**GLAZING LEGEND**

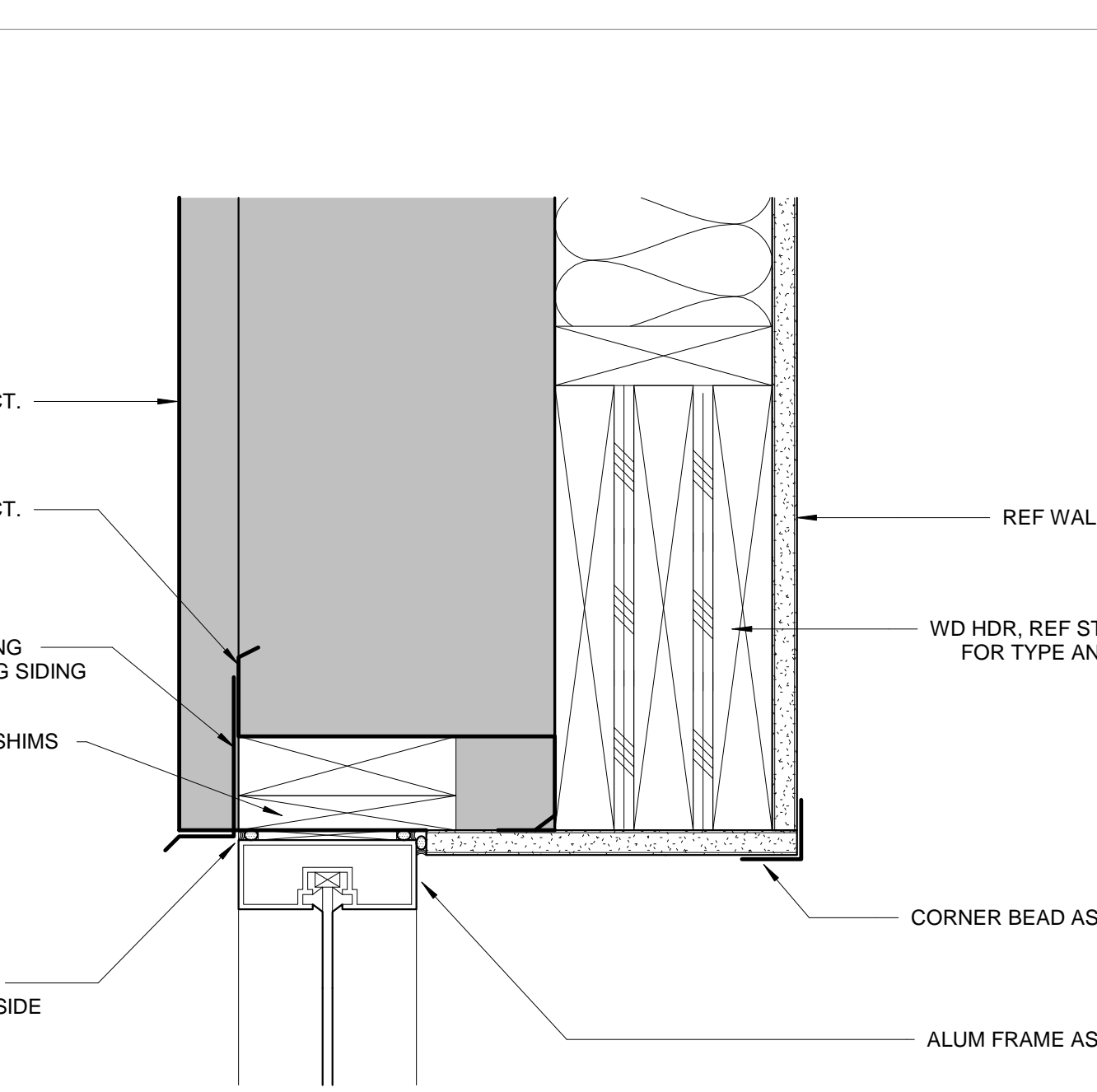
- GL-1 CLEAR INSUL SAFETY GLASS
- GL-2 TINTED INSUL SAFETY GLASS - SOLAR GRAY



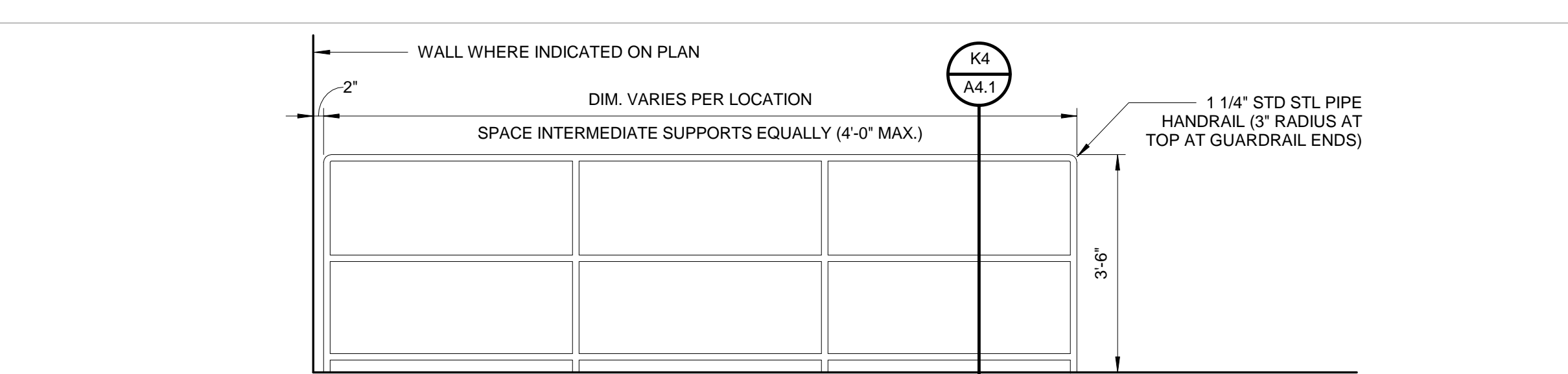
**A101** DOOR MARK LEGEND



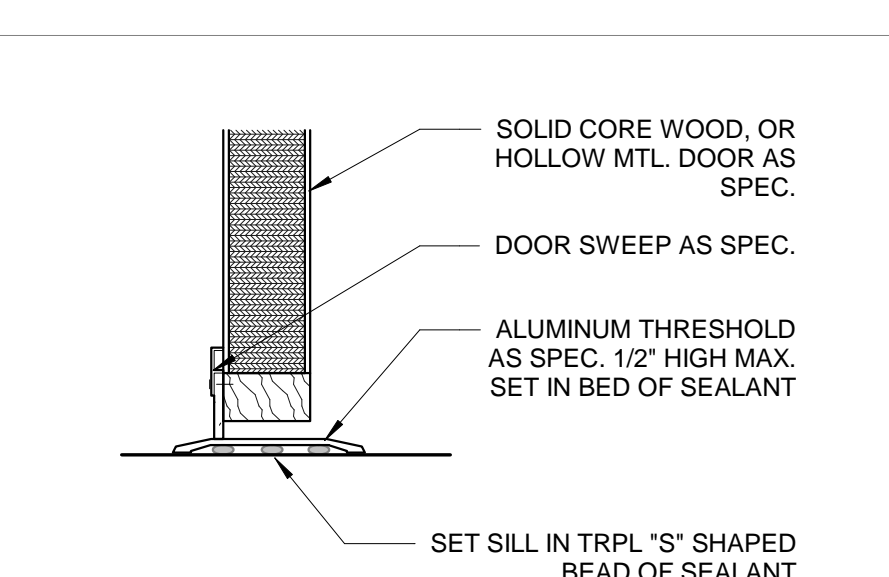
**E1** STAIR GUARDRAIL AND HANDRAIL  
1/2" = 1'-0"



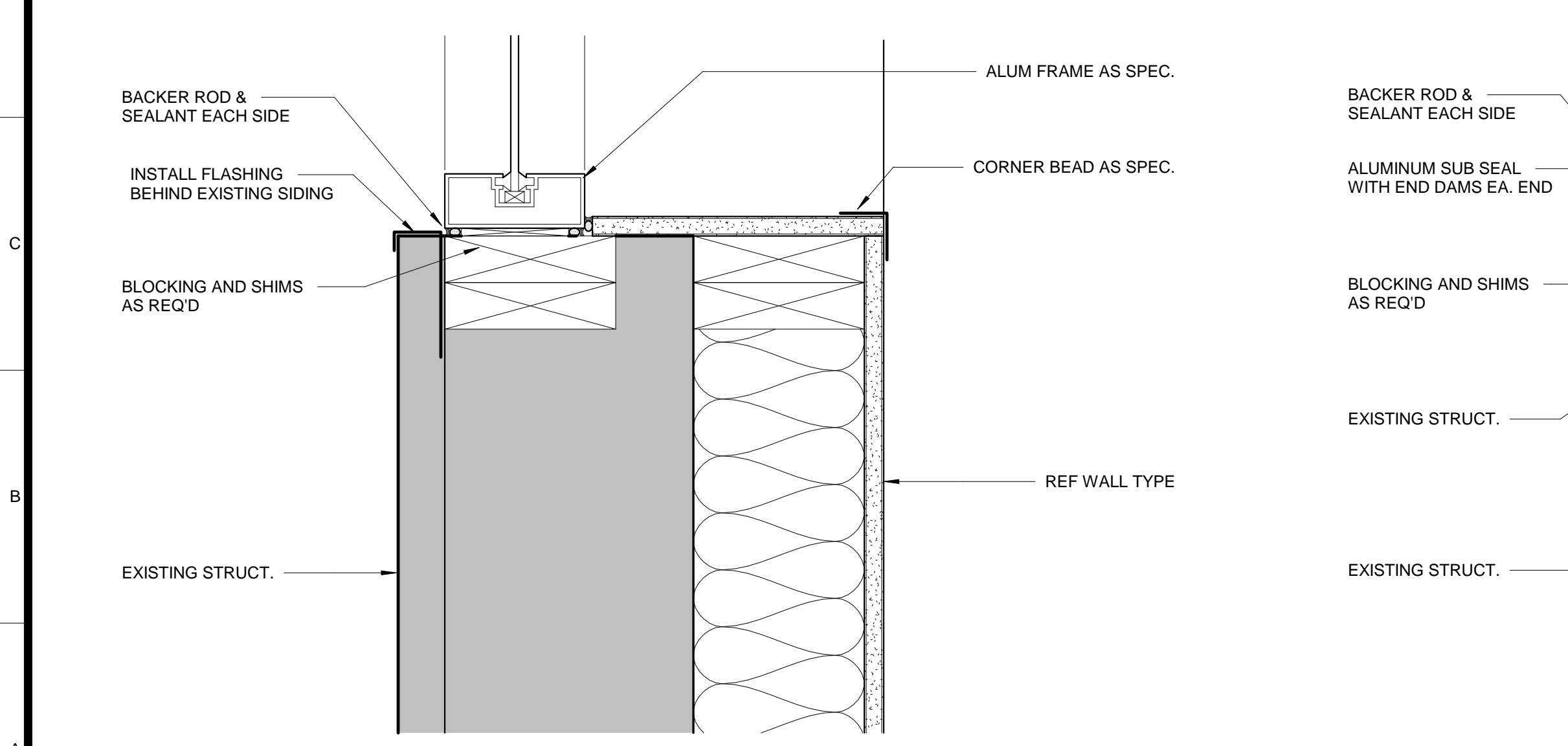
**E5** ALUM STOREFRONT HEAD DETAIL  
3" = 1'-0"



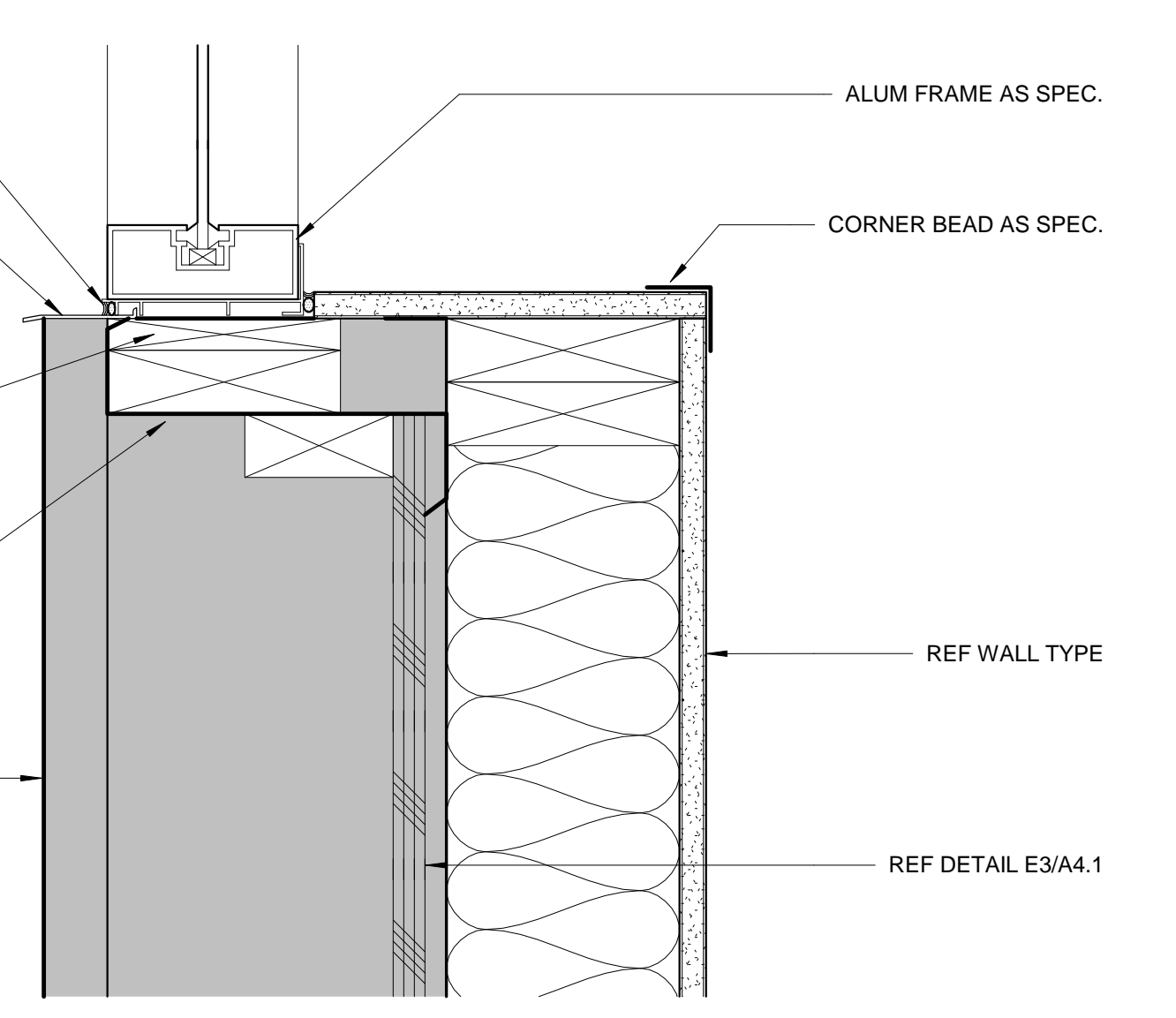
**G12** TYP. GUARDRAIL DETAIL  
1/2" = 1'-0"



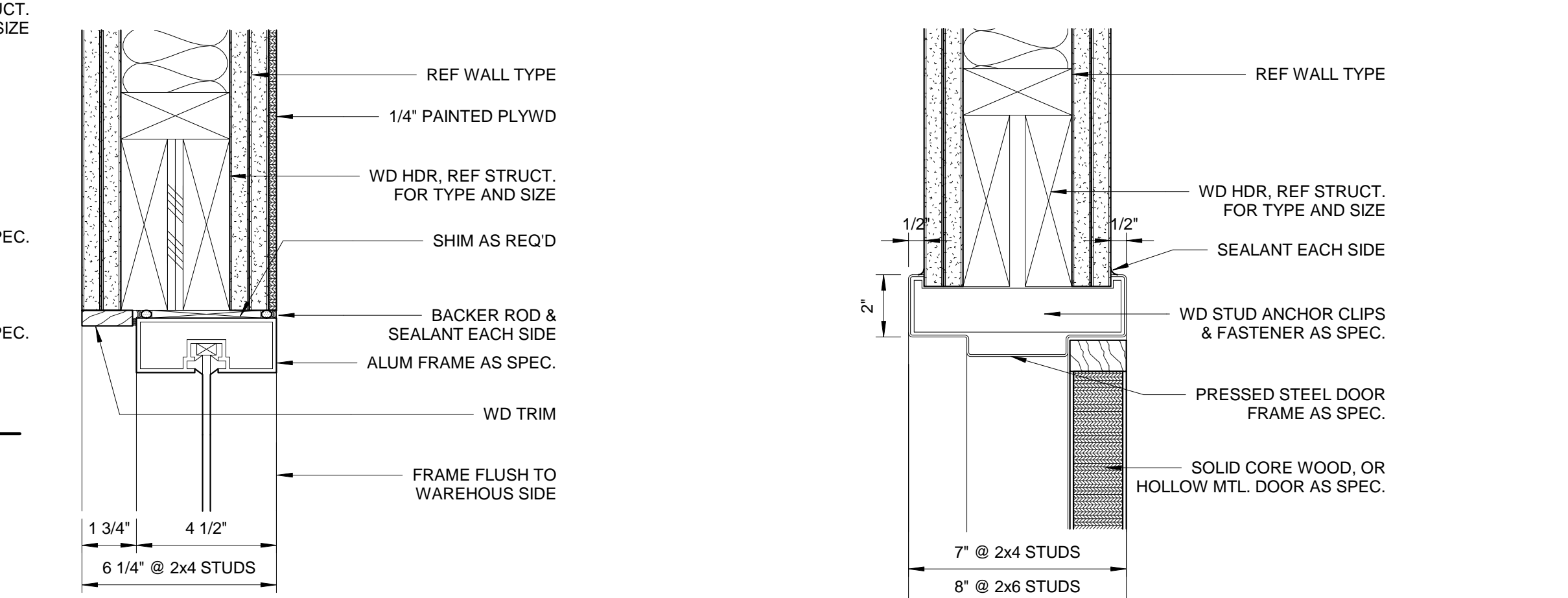
**G16** ALUM DOOR THRESHOLD DETAIL  
3" = 1'-0"



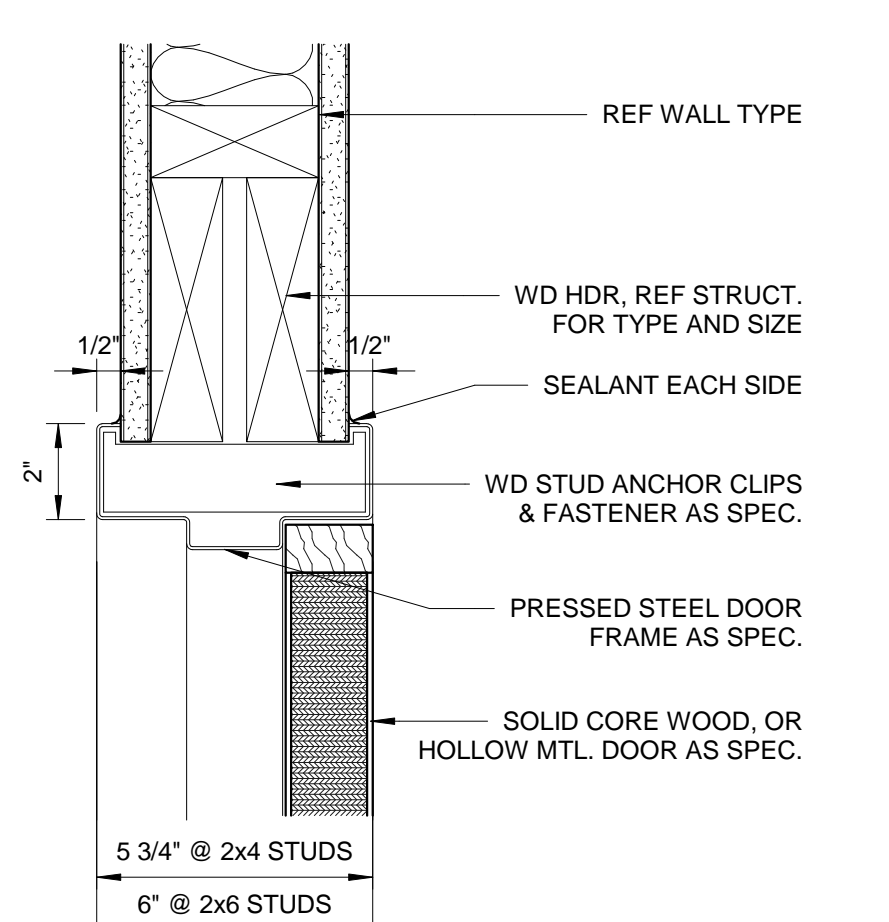
**A1** ALUM STOREFRONT JAMB DETAIL  
3" = 1'-0"



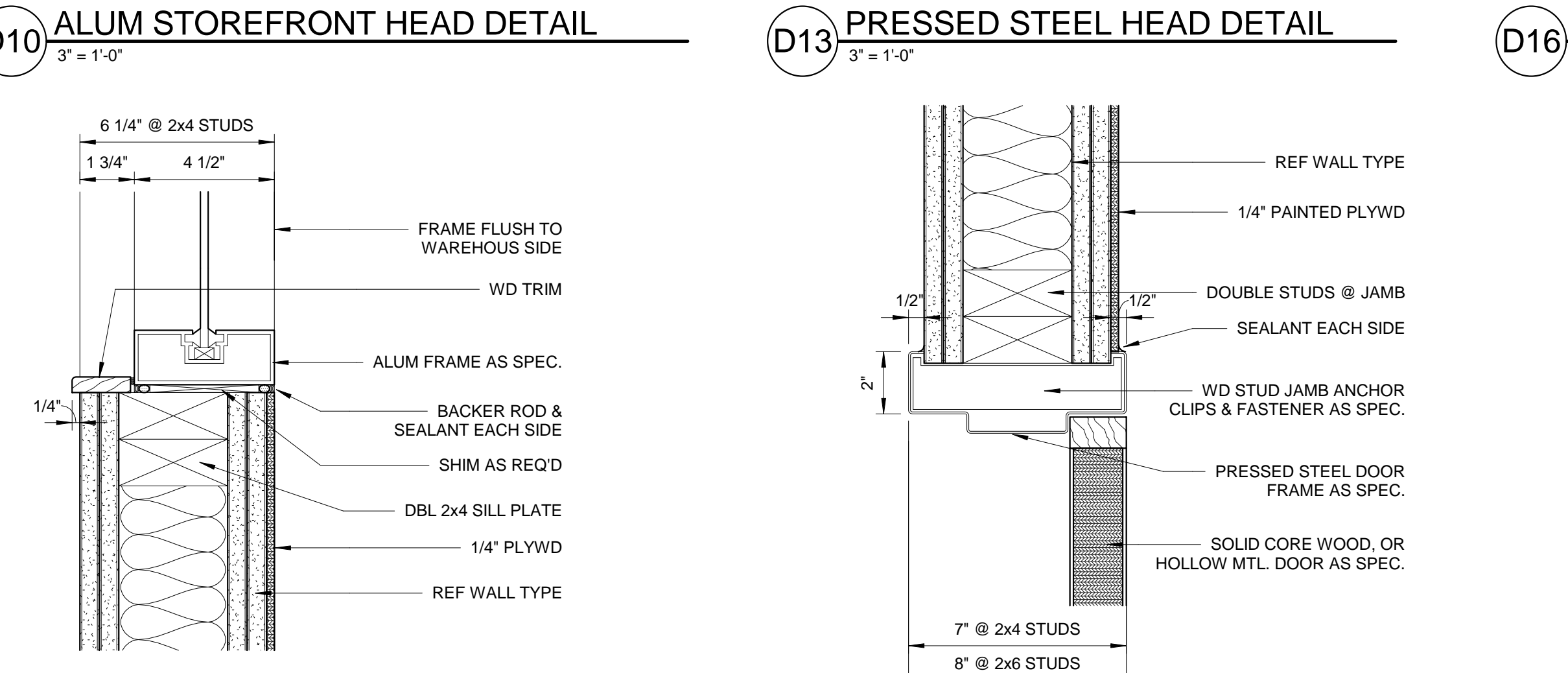
**A5** ALUM STOREFRONT SILL DETAIL  
3" = 1'-0"



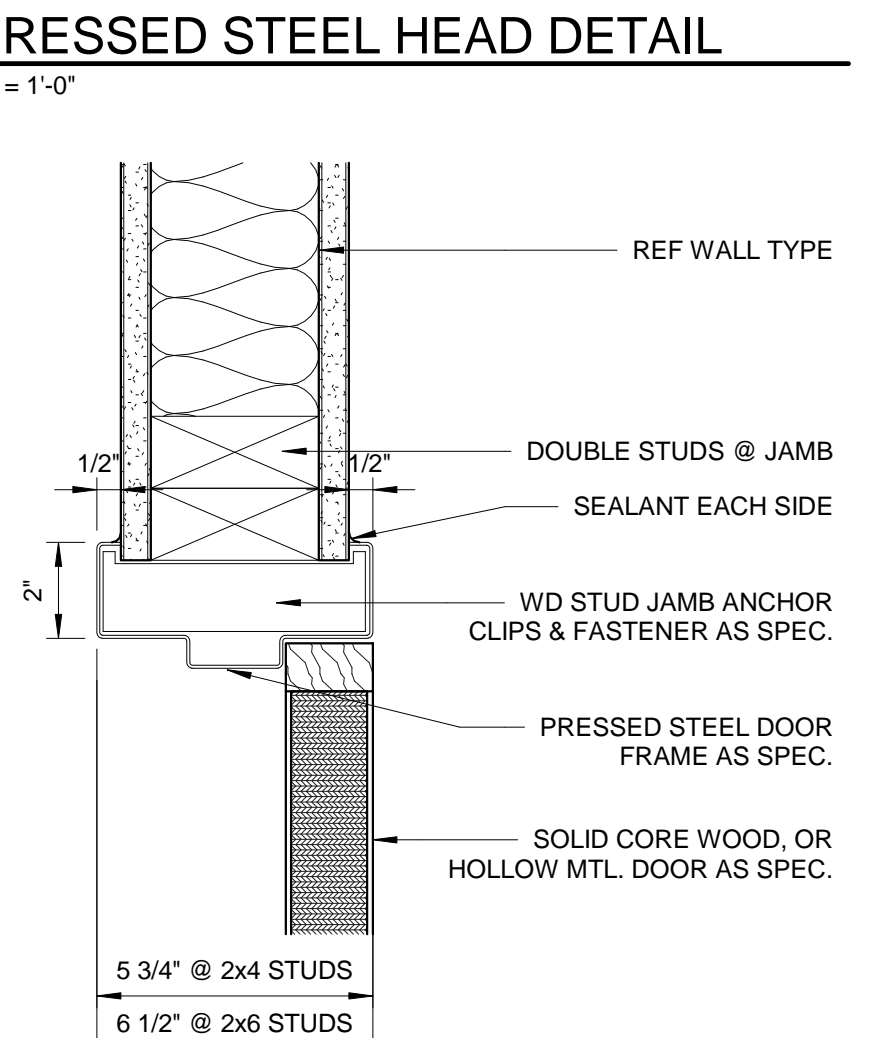
**D10** ALUM STOREFRONT HEAD DETAIL  
3" = 1'-0"



**D13** PRESSED STEEL HEAD DETAIL  
3" = 1'-0"



**D16** PRESSED STEEL HEAD DETAIL  
3" = 1'-0"



**A13** PRESSED STEEL JAMB DETAIL  
3" = 1'-0"

**ELECTRICAL SYSTEM SECTION 16000**

THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND DISMANTLING OF TEMPORARY POWER USED FOR CONSTRUCTION AND ALL COSTS INCURRED AS A RESULT OF THIS WORK. COORDINATE ALL TEMPORARY ELECTRICAL SERVICE WORK WITH LOCAL UTILITY COMPANY PRIOR TO COMMENCING WORK.

WORK UNDER THIS CONTRACT INCLUDES MODIFICATIONS TO ANY EXISTING ELECTRICAL SYSTEM AND ALSO PROVIDING NEW MATERIALS, DEVICES, AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING ELECTRICAL SYSTEM. THE WORK ALSO INCLUDES FINAL CONNECTIONS TO FOOD SERVICE EQUIPMENT ITEMS PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES, ALL LOCAL APPLICABLE ORDINANCES AND LAWS, AS WELL AS, SUBJECT TO INSPECTION.

THE INTENT OF THESE DRAWINGS ARE TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR ELECTRICAL WORK ARE DIAGRAMMATIC, SHOWING THE LOCATION, TYPE, DEVICES, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. PROVIDE ALL DEVICE ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PROPER OPERATION OF ALL SYSTEMS AND THEIR ASSOCIATED EQUIPMENT AS INDICATED BY THE DESIGN ON THESE PLANS.

COORDINATE WITH THE WORK OF ALL OTHER SECTIONS. VERIFY ALL EXISTING CONDITIONS PRIOR TO BID. REFER TO ARCHITECTURAL PLANS, AS WELL AS, KITCHEN EQUIPMENT PLANS FOR ADDITIONAL INFORMATION REGARDING RELATED EQUIPMENT, CASEWORK, AND ELECTRICAL CONNECTIONS REQUIRED THEREIN.

COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, NFPA, OSHA, LIFE SAFETY CODES, AND ALL APPLICABLE LAWS IN EFFECT AT THE TIME OF THIS PROPOSAL. IN THE CASE OF CONFLICT TO THE STRICTER INTERPRETATION SHALL TAKE PRECEDENCE. ALL MATERIALS USED SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS ESTABLISHED BY THE UNDERWRITER'S LABORATORIES INC.

VERIFY VOLTAGE DROPS, A.I.C. RATINGS FOR ALL EQUIPMENT CONNECTED, AND VERIFY SIZE OF ALL CIRCUIT BREAKERS, CONDUIT, ETC. PRIOR TO INSTALLATION.

ROOF PENETRATIONS SHALL COMPLY WITH SMACNA, NRCA STANDARDS, AS WELL AS, ALL REQUIREMENTS OF THE OWNER AND ROOF METHODS AND MATERIALS WARRANTY. SUB-CONTRACT ROOFING PENETRATION WORK TO AN ENTITY APPROVED FOR USE BY THE OWNER AND ROOF MANUFACTURER.

**PANELBOARDS:** SHALL BE AS MANUFACTURED BY SQUARE D, EATON, OR SIEMENS, ALL EQUIPMENT SHALL BE U.L. LISTED AND MEET OR EXCEED ALL OF THE LATEST APPLICABLE U.L. AND NEMA STANDARDS. BUSSING SHALL BE COPPER WITH SILVER PLATING. PROVIDE SOLID NEUTRAL BAR.

**DISCONNECT SWITCHES:** SHALL BE HEAVY-DUTY TYPE AS MANUFACTURED BY SQUARE D, EATON, OR SIEMENS, ALL EQUIPMENT SHALL BE U.L. LISTED AND MEET OR EXCEED ALL OF THE LATEST APPLICABLE U.L. AND NEMA STANDARDS. DO NOT MOUNT DISCONNECT SWITCHES TO ANY HVAC UNIT. LOCATION TO BE COORDINATED WITH MECHANICAL CONTRACTOR.

**TRANSFORMERS:** SHALL BE AS MANUFACTURED BY SQUARE D, EATON, OR SIEMENS, ALL EQUIPMENT SHALL BE U.L. LISTED AND MEET OR EXCEED ALL OF THE LATEST APPLICABLE U.L. AND NEMA STANDARDS.

**CIRCUIT BREAKERS:** THERMAL MAGNETIC TYPE, QUICK-MAKE, QUICK-BREAK, BOLT-ON TYPE OF SINGLE UNIT CONSTRUCTION. TWO AND THREE POLE BREAKERS SHALL BE SINGLE UNIT COMMON TRIP TYPE. BREAKERS USED AS A SWITCH FOR 120 VOLT LIGHTING CIRCUITS SHALL BE APPROVED FOR THAT USE AND MARKED "SWD". BREAKERS USED FOR PROTECTING HVAC EQUIPMENT SHALL BE RATED "HACR".

**CABINETS:** SHALL BE ONE PIECE CODE GAGE GALVANIZED STEEL WITH MOUNTING STUDS, WIRING CUTTERS OF AMPLE SIZE AND KNOCKOUTS FOR CONDUIT CONNECTIONS AS REQUIRED. BUS BARS SHALL BE 98% CONDUCTIVE COPPER, ALUMINUM, OR COPPER-CLAD ALUMINUM. FRONTS SHALL BE ONE PIECE CODE GAGE FURNITURE STEEL WITH ADJUSTABLE FASTENERS. PROVIDE FLUSH MOUNT UNITS UNLESS OTHERWISE INDICATED. PROVIDE A PLASTIC COVERED TYPED SCHEDULE IDENTIFYING ALL BRANCH CIRCUITS INSIDE EACH CABINET.

**GROUNDING SYSTEM:** PERMANENTLY AND EFFECTIVELY GROUND ALL METALLIC CONDUIT, SUPPORTS, CABINETS, PANELBOARDS AND SYSTEM NEUTRAL CONDUCTORS. MAINTAIN CONTINUITY OF EQUIPMENT GROUND THROUGHOUT THE SYSTEM. GROUND CLAMPS SHALL BE APPROVED TYPE, SPECIFICALLY DESIGNED FOR GROUNDING. WHERE GROUNDING CONDUCTORS ARE ENCLOSED IN CONDUIT, GROUND CLAMPS SHALL BE OF A TYPE WHICH GROUND BOTH CONDUCTOR AND CONDUIT. ALL CIRCUITS IN FLEXIBLE METAL OR PLASTIC CONDUIT SHALL INCLUDE A GROUND WIRE SIZE IN ACCORDANCE WITH NEC TABLE 250.

**SURGE PROTECTION DEVICE (SPD):** SPDs SHALL BE UL1449 3RD EDITION LISTED AND MANUFACTURED BY SQUARE D, EATON OR SIEMENS. SPDs SHALL HAVE STANDARD 7-MODE PROTECTION AND SERVICE ENTRANCE & INTERMEDIATE DISTRIBUTION UNITS SHALL BE UL LABELED WITH 200KA 1-NOMINAL AND 200KA SHORT CIRCUIT CURRENT RATING. SURGE CURRENT CAPABILITY FOR SERVICE ENTRANCE DEVICES SHALL BE 300KA PER PHASE, 200KA PER PHASE FOR INTERMEDIATE DISTRIBUTION OR ROOF MOUNTED BRANCH PANELS, AND 100KA FOR BRANCH PANELS. SPDs SHALL BE INTEGRAL TO EQUIPMENT UNLESS NOTED OTHERWISE ON DRAWING.

**CONDUIT:** SHALL BE SIZED TO COMPLY WITH NEC FOR NUMBER AND SIZE OF CONDUCTORS INSTALLED, MINIMUM OF 24" BELOW GRADE. PROVIDE SCHEDULE 40 PVC PLASTIC OR RIGID STEEL CONDUIT BELOW GRADE, MINIMUM SIZE 3/4". PROVIDE RIGID STEEL ELBOWS WHEN UNDERGROUND CONDUIT PENETRATES THE FLOOR SLAB. PROVIDE ELECTRICAL METALLIC TUBING (EMT) MEETING FSW-C563, ARMOR CABLE, OR FLEXIBLE CONDUIT (IN LENGTHS 6' OR LESS) FOR INTERIOR LOCATIONS. EMT CONNECTORS AND COUPLINGS 2" AND SMALLER SHALL BE COMPRESSION-SCREW TYPE. CLAMP CONDUIT TO BOXES WITH BUSSING INSIDE AND LOCKNUT OUTSIDE.

- RIGID STEEL CONDUIT: ANSI C80.1
- INTERMEDIATE STEEL CONDUIT: UL 1242
  - ELECTRICAL METALLIC TUBING AND FITTINGS: ANSI C80.3
  - FLEXIBLE METAL CONDUIT: ZINC COATED STEEL
  - LIQUID-TIGHT FLEXIBLE METAL CONDUIT AND FITTINGS: UL 360, FITTINGS TO BE SPECIFICALLY APPROVED FOR USE WITH THIS RACEWAY.
  - MC CABLE IS APPROVED FOR INSTALLATION ONLY AT THE END OF A RIGID CONDUIT RUN AND IS ONLY TO ORIGINATE FROM AN APPROVED JUNCTION BOX AND FEED DIRECTLY DOWN TO DEVICE.

**CONDUCTORS:** INSULATED SOFT ANNEALED 98% PURE COPPER WITH COLOR CODING, # AND S GAGE, #10 AND SMALLER TO BE SOLID, #8 AND LARGER TO BE STRANDED, MINIMUM #12, UNLESS OTHERWISE INDICATED. AT THE CONTRACTORS OPTION, ALUMINUM CONDUCTORS WILL BE ALLOWED FOR COPPER SIZED #5/0 AND LARGER BUT, SIZE MUST BE INCREASED TO EQUAL OR EXCEED THE COPPER AMPACITY IN ACCORDANCE WITH ARTICLE 310 OR NEC. ALL ALUMINUM CONDUCTORS MUST BE MADE OF AA-8000 SERIES ALUMINUM ALLOY MATERIAL. ALL EQUIPMENT TO BE PROVIDED WITH CU/AL 75% DEGREE C TERMINAL LUGS. "THHN" MAY NOT BE USED UNDERGROUND AT SERVICE ENTRANCES, OUTSIDE, OR IN WET LOCATIONS. ALL INSULATION TO BE RATED FOR 600 VOLT AND TYPES AS FOLLOWS:

#10 AND SMALLER	THW, THWN OR THHN
#8 TO #4/0	THW OR THHN
SERVICE ENTRANCE	THW
OVER #4/0 ORDINARY SERVICE	THW
OVER #4/0 WET OR HOT SERVICE	THW
WIRE THROUGH FLUORESCENT FIXTURES OR WITHIN 3' OF HEATING EQUIPMENT	THHN

**DEVICES & COVERPLATES:**

**PUBLICAREAS:** ALL DEVICES AND COVERPLATES SHALL BE STAINLESS STEEL. STANDARD DUPLEX RECEPTACLES SHALL BE GROUNDING TYPE, 20 AMP, NEMA 5-20R, SIDE OR BACK WIRED.

**SINGLE RECEPTACLE:** 15 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-15R. HUBBELL #5251-#. (DEVICE COLOR IS DEPENDENT ON AREA OF BUILDING).

**DUPLEX RECEPTACLE:** 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R. HUBBELL #5342-#. (DEVICE COLOR IS DEPENDENT ON AREA OF BUILDING).

**GROUND-FAULT INTERRUPTER RECEPTACLE:** 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, FEED-THRU TYPE CAPABLE OF PROTECTING CONNECTED DOWNSTREAM RECEPTACLES. UL RATED CLASS A, GROUP 1, SOLID STATE GROUND-FAULT SENSING LEVEL WITH 5 mg GROUND-FAULT TRIP LEVEL. HUBBELL #16362#. (DEVICE COLOR IS DEPENDENT ON AREA OF BUILDING).

**WEATHERPROOF RECEPTACLE:** SHALL BE A GROUND-FAULT INTERRUPTER WITH STAINLESS STEEL GASKETED LIDS AND PLATE. PLATE TO CONSIST OF TWO SPRING LOADED LIDS HINGED AT TOP.

**PLUG FILLERS:** PROVIDE FLUSH RECEPTACLE COVERS AT ALL DUPLEX RECEPTACLES IN PUBLIC AREAS, COLOR OF FILLERS TO MATCH COLOR OF RECEPTACLE AND COVERPLATE.

**LIGHTING FIXTURES:** ALL LIGHTING FIXTURES AND ASSOCIATED LAMPS AND BALLASTS SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

LAYOUT BRANCH CIRCUIT WIRING AND ARRANGE HOMERUNS FOR MAXIMUM ECONOMY AND EFFICIENCY. INCREASE WIRE AND CONDUIT SIZE ACCORDINGLY IF VOLTAGE DROP EXCEEDS 3% OR LENGTH OF RUN EXCEEDS 100 FEET.

CONCEAL WIRING SYSTEM ABOVE SUSPENDED CEILINGS OR IN WALL OR FLOOR CONSTRUCTION WHERE POSSIBLE. INSTALL CONDUIT PARALLEL OR PERPENDICULAR TO ALL BUILDING LINES, SUCH THAT ALL OPENINGS, DEPRESSIONS, PIPES, DUCTS, STRUCTURE, ETC. ARE AVOIDED.

INSTALL CONDUIT CONTINUOUS BETWEEN BOXES AND CABINETS WITH NO MORE THAN FOUR (4) 90° DEGREE BENDS. SECURELY FASTEN IN PLACE WITH STRAPS, HANGERS AND STEEL SUPPORTS AS REQUIRED. DO NOT SUPPORT CONDUIT FROM SUSPENDED CEILING GRID OR SUSPENSION WIRES. REAM CONDUIT ENDS AND THOROUGHLY CLEAN BEFORE INSTALLATION. OPENINGS SHALL BE PLUGGED OR COVERED TO KEEP CONDUIT FREE OF DEBRIS. SWITCHES AND OUTLETS SHALL NOT BE USED TO "FEED THRU" TO THE NEXT SWITCH OR OUTLET. THE DISCONNECTION OR REMOVAL OF A RECEPTACLE FIXTURE OR OTHER DEVICE FED FROM A BOX SHALL NOT INTERFERE WITH OR INTERRUPT THE CONDUCTOR CONTINUITY.

ADJUSTING AND TESTING: ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED AND TESTED FOR PROPER OPERATION. COMPLETED WIRING SYSTEM SHALL BE FREE OF SHORT CIRCUITS. TOUCH-UP OR REFINISH DAMAGED SURFACES OF FIXTURES AND EQUIPMENT, EXPOSED TO VIEW, TO PRESENT A "NEW" APPEARANCE.

ALL CONDUIT AND JUNCTION BOXES LOCATED WITHIN AN EXPOSED STRUCTURAL SYSTEM SHALL BE PAINTED TO MATCH THE COLOR OF THE STRUCTURE (COLOR TO BE VERIFIED WITH ARCHITECT).

ALL LAMPS, FIXTURES AND ASSOCIATED HOUSINGS, LENSES, AND LOUVERS SHALL BE CLEANED PRIOR TO OWNER ACCEPTANCE.

**TOGGLE TYPE SWITCH:** 20 AMP, 120/277 VOLT AC SINGLE-POLE, QUIET TYPE, WITH MOUNTING YOKES INSULATED FROM MECHANISM, EQUIPPED WITH PLASTER EARS, SIDE-WIRED SCREW TERMINALS. HUBBELL #HBL 1221I.

2-POLE, 3-WAY & 4-WAY SWITCHES SHALL BE OF THE SAME MAKE AS FOR SINGLE-POLE.

**PILOT TYPE TOGGLE SWITCH:** INSTALL SWITCH DEVICE WITH 1/25 WATT NEON PILOT INTEGRAL WITH TOGGLE HANDLE, RATED 120/277 VOLT AC. PILOT LIGHT GLOWS IN THE "ON" POSITION. HUBBELL #HBL 1221PL.

**ELECTRICAL EQUIPMENT IDENTIFICATION:**

ENGRAVED PLASTIC-LAMINATE NAMEPLATES: SHALL BE ENGRAVING STOCK MELAMINE PLASTIC LAMINATE 1/16" THICK, 1-1/2" HIGH (2" HIGH FOR 2 LINES OF TEXT) WITH C. 1/2" HIGH ENGRAVER'S STYLE LETTERS. COLOR SHALL BE BLACK WITH WHITE LETTERING. NAMEPLATE SHALL BE PUNCHED FOR MECHANICAL FASTENING WITH SELF-DRILLING STAINLESS STEEL SCREWS, UNLESS ADHESIVE MOUNTING IS NECESSARY DUE TO SUBSTRATE MATERIAL.

UNDERGROUND-TYPE PLASTIC LINE MARKER: SHALL BE PERMANENT, BRIGHT COLORED, CONTINUOUS-PRINTED PLASTIC TAPE, INTENDED FOR DIRECT BURIAL SERVICE, NOT LESS THAN 6" WIDE X 4 MILS THICK. PROVIDE TAPE WITH WORDS PRINT WHICH MOST ACCURATELY DESCRIBES THE TYPE OF SERVICE FOR BURIED CABLE.

CABLE/CONDUCTOR IDENTIFICATION BANDS: SHALL BE VINYL-CLOTH, SELF-ADHESIVE, WRAP-AROUND TYPE MARKER, EITHER PRE-NUMBERED PLASTIC COATED TYPE OR WRAP-ON TYPE WITH CLEAR PLASTIC SELF-ADHESIVE COVER FLAP. NUMBERED TO SHOW CIRCUIT IDENTIFICATION.

**HVAC SECTION 15500**

THE WORK INCLUDES PROVIDING NEW DUCTWORK, DIFFUSERS, GRILLES, INSULATION, CONTROLS AND EQUIPMENT NECESSARY FOR A COMPLETE AND FUNCTIONING SYSTEM. THE WORK INCLUDES BUT IS NOT NECESSARY LIMITED TO THE FOLLOWING:

- INSTALL ROOFTOP UNITS AND ROOF CAPS.
- SUPPLY & RETURN DUCTWORK SYSTEM WITH GRILLES, DIFFUSERS, FILTERS, AND DAMPERS.
- TEMPERATURE CONTROL SYSTEM INCLUDING LOW-VOLTAGE WIRING AND CONDUIT.
- DUCT, PIPING, AND EQUIPMENT INSULATION, WHERE INDICATED HEREIN.
- ROOF CURBS, ROOFING AND FLASHINGS OF ROOF PENETRATIONS FOR EQUIPMENT NOTED.
- FANS AND MAKE-UP AIR UNITS.

SHOP DRAWINGS: SUBMIT 6 SETS OF EQUIPMENT/DUCT SUBMITTALS TO ARCHITECT/ENGINEER FOR APPROVAL.

EQUIPMENT INDICATED ON THE DRAWINGS OR AS REQUIRED FOR A COMPLETE INSTALLATION, SUCH AS DUCTWORK, EXHAUST FANS, SUPPLY AND RETURN DIFFUSERS, ETC. SHALL BE PROVIDED WITHIN THE SCOPE OF WORK OF THIS SECTION.

WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. EQUIPMENT PROVIDED BY MECHANICAL CONTRACTOR.

RECORD DOCUMENTS: PREPARE AT THE TIME OF REQUEST FOR FINAL PAYMENT THE FOLLOWING DOCUMENTS:

- LETTER OF GUARANTEE FROM THE CONTRACTOR.
- MANUFACTURER'S PARTS DATA AND SERVICE INSTRUCTIONS ON ALL ITEMS OF EQUIPMENT.
- MANUFACTURER'S GUARANTEES AND WARRANTIES.

INSTRUCTIONS TO THE OWNER: THE CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE PROPER OPERATION OF ALL EQUIPMENT. THE CONTRACTOR SHALL FURNISH TO THE OWNER ALL PAMPHLETS AND OTHER LITERATURE FURNISHED BY THE MANUFACTURER AND EXPLAIN THE PROPER OPERATING AND MAINTENANCE PROCEDURES.

DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS AS REQUIRED. FURNISH AND INSTALL ALL DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED. THE WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES OR ORDINANCES AND SUBJECT TO INSPECTION.

COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.

EXTRA STOCK: PROVIDE TWO SETS OF REPLACEMENT FILTERS PER EACH INSTALLED FOR ALL THE ROOFTOP UNITS, AND OTHER EQUIPMENT AND DEVICES, AND PROVIDE A ITEMIZED LIST OF THE NUMBER, TYPE REQUIRED AND WHERE USED. OBTAIN RECEIPT FROM OWNER THAT THESE ITEMS HAVE BEEN DELIVERED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE.

EXHAUST FANS: FURNISH AND INSTALL EXHAUST FANS IN THE LOCATION AND OF THE SIZE AND CAPACITY SHOWN ON THE DRAWINGS. EXHAUST FANS SHALL BE OF TYPE SHOWN ON DRAWINGS. SUPPORT FAN WITH VIBRATION ISOLATORS FROM ROOF STRUCTURE NOT FROM THE CEILING. PROVIDE TERMINATOR CAP AS INDICATED ON THE DOCUMENTS. FANS SHALL BE OF DRIVE TYPE INDICATED ON DRAWINGS. DIRECT DRIVE FANS SHALL HAVE SPEED CONTROL RELAY TO BALANCE THE FAN AT THE CFM'S SCHEDULED. FAN TO BE EQUIPPED WITH INTERNAL BACKDRAFT DAMPER AND SWITCHED LOCALLY AS INDICATED ON THE DOCUMENTS. APPROVED MANUFACTURERS ARE GREENHECK, COOK, AND PENN.

DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON DRAWINGS ARE NET INSIDE CLEAR DIMENSIONS.

FIBERGLASS DUCTWORK: DUCTWORK SHALL BE RIGID FIBERGLASS DUCTBOARD AND INSTALLED TO ASHRAE AND NAMA STANDARDS. FIBERGLASS SHALL BE 3/4" 1/2" THICK WITH AN INSTALLED R-VALUE OF 5 OR GREATER AND MEET ASHRAE 90A AND 90B. SEAL ALL JOINTS AND SEAMS WITH MANUFACTURERS TAPE. ALL HANGING STRAPS FOR SUPPORT SHALL BE GALVANIZED CONNECTIONS TO WALLS OR FLOORS SHALL BE AIRTIGHT WITH APPROVED WEATHERPROOF CAULKING SEAL AT DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIR-TIGHT. PROVIDE TURNING VANES AT ALL ELBOWS OR OFFSETS EXCEEDING 33 DEGREES. TRAPEZE DUCT HANGERS: MINIMUM 1" X 2" X 1" X 18 GAGE CHANNELS WITH 1" X 18 GAGE STRAPS TO STRUCTURAL SUPPORT ABOVE.

**FLEXIBLE DUCT:** PROVIDE FACTORY ASSEMBLED CLASS 1 AIR DUCT (UL 181) WITH 1-1/2" THICK 1 Pcf FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER / VAPOR BARRIER. FLEX DUCT SHALL MEET NFPA 90A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR 2" W.G. PRESSURE AND 0 TO 250 DEGREE TEMPERATURE. PROVIDE METAL ADJUSTABLE CLAMPING DEVICES, SREW OPERATED, USE TWISTLOCK CONICAL TAP COLLARS AT CONNECTIONS INTO SHEET METAL DUCTWORK. DO NOT EXCEED 6 FEET IN LENGTH. FLEXMASTER 8M OR APPROVED EQUAL.

CEILING DIFFUSERS / RETURNS: INSTALL SUPPLY & RETURN DIFFUSERS/REGISTERS WITH DAMPER 1 SIZES, CAPOTTIES, MATERIALS, AND PATTERN INDICATED ON THE DRAWINGS. INSULATE REFRIGERANT SUCTION LINES WITH 1-1/2" CLOSED CELL FOAM INSULATION EQUIVALENT TO ARMACELL'S AP ARMAFLEX WITH SELF ADHESIVE SEAMS.

ACCESS PANELS: PROVIDE HINGED ACCESS PANELS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS IN INSULATED DUCTWORK.

AUTOMATIC TEMPERATURE CONTROL: PROVIDE FOR EACH HVAC UNIT, LOW VOLTAGE SEVEN DAY PROGRAMABLE THERMOSTAT, TRANE, CARRIER, OR HONEYWELL T7300. UNIT SHALL INCORPORATE TWO STAGE HEAT/COOL AS APPLICABLE WITH AN AUTO CHANGEOVER FEATURE. HEATING AND COOLING SET POINTS SHALL BE OPERATOR ADJUSTABLE (THERMOSTATS BY UNIT SUPPLIER). THERMOSTAT SHALL HAVE NON-VOLATILE MEMORY WITH MINIMUM 24 HOUR MEMORY RETENTION, 1 DEGREE F DEADBAND, AND LCD DISPLAY. WIRING SHALL COMPLY WITH SECTION 16000 REQUIREMENTS. PROVIDE RELAYS AS REQUIRED FOR UNIT INTERFACE. PROVIDE ALL TEMPERATURE CONTROL WIRING FOR ALL HVAC SYSTEMS, INCLUDING THERMOSTATS, SMOKE DETECTOR INTERLOCK ETC. INSTALL THERMOSTAT SAME HEIGHT AS LIGHT SWITCHES. COORDINATE FINAL LOCATION WITH ARCHITECT.

CONTRACTOR TO PROVIDE TEST AND BALANCE NEBB CERTIFIED AIR BALANCE, THE MECHANICAL CONTRACTOR SHALL HAVE ALL EQUIPMENT STARTED, ADJUSTED AND TESTED PRIOR TO BALANCING. MECHANICAL CONTRACTOR SHALL ALSO HAVE THEIR TECHNICIAN ON SITE DURING BALANCE TO ADJUST OR CORRECT EQUIPMENT OPERATION DURING BALANCE.

**PLUMBING SYSTEM SECTION 15400**

THE WORK INCLUDES PROVIDING NEW MATERIALS, FITTINGS, AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING PLUMBING SYSTEM. THE WORK ALSO INCLUDES ROUGH-IN AND FINAL CONNECTIONS TO FOOD SERVICE EQUIPMENT PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES AND IS SUBJECT TO INSPECTION.

CONNECTION CHARGES, PERMITS AND ALL OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING PLUMBING SYSTEM ARE INCLUDED AS A PART OF THIS SECTION.

THE INTENT OF THE DRAWINGS IS TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, FIXTURES AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURE INSTALLATION REQUIREMENTS. COMPLY WITH ALL APPLICABLE ADA INSTALLATION REQUIREMENTS.

COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS ON THE PROJECT SITE.

PIPING SYSTEMS - GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK SUCH AS DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION. ALL HANGERS SHALL BE COMPATIBLE WITH PIPING MATERIAL TO PREVENT CORROSION.

PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED.

SEWER/WASTE PIPING: SANITARY DRAINAGE PIPING ABOVE FLOOR SHALL BE HUBLESS PVC PIPE WHERE ACCEPTED BY CODE, FITTINGS AND CONNECTIONS. SANITARY DRAINAGE PIPING BELOW GRADE SHALL BE SCHEDULE 40 PVC WITH SOVENT WELD JOINTS AND FITTINGS. ALL DRAINAGE PIPING SHALL BE UNIFORMLY PITCHED, 1/4" PER FOOT FOR SIZES 3" AND SMALLER AND 1/8" PER FOOT FOR PIPE SIZES 4" AND LARGER.

VENTS: PROVIDE A COMPLETE SYSTEM OF SCHEDULE 40 PVC. DO NOT USE DWV PLASTIC IN RETURN AIR FLENUM SPACES. LINE VENT SYSTEM SHALL BE CARRIED THROUGH THE ROOF WITH APPROPRIATE FLASHING.

CONDENSATE AND INDIRECT DRAIN PIPING: TYPE M COPPER TUBING UP TO 1" ID, TYPE DWV TUBING AND FITTINGS FOR 1-1/4" AND LARGER SIZES.

CLEANOUTS: PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE SAME SIZE AS THE PIPES THEY SERVE, CONFORMING TO CODE REQUIREMENTS. PROVIDE SUITABLE WALL OR FLOOR CLEANOUTS WITH ACCESSORIES TO OBSCURE FROM VIEW. WATER DISTRIBUTION PIPING: LAYOUT WATER PIPING SO THAT THE ENTIRE SYSTEM CAN BE DRAINED. HOT AND COLD WATER PIPING SHALL BE 1/2" MIN. TYPE L COPPER TUBING WITH WROUGHT COPPER FITTINGS AND SWEAT CONNECTIONS. PROVIDE WATER HAMMER ARRESTORS AT EACH FIXTURE STOP. INSTALL CHROME PLATED BRASS ESCUTCHEON PLATES AT ALL PENETRATIONS THROUGH FINISHED SURFACES (INCLUDING CABINET INTERIORS). USE TIN-ANTIMONY SOLDER, 95/5 FOR ALL SWEAT FITTINGS OF COPPER PIPING.

PIPE INSULATION: INSULATE ALL HOT AND COLD WATER PIPING. PROVIDE 1" PRE-FORMED FIBERGLASS, ASJ-VB, FLAME SPREAD 25, SMOKE DEVELOPED 50, ASTM C-547. OR PROVIDE WHERE PERMITTED BY LOCAL CODES, 1" SELF-ADHESIVE CLOSED CELL FOAM PIPE INSULATION WITH PRE-FORMED PVC FITTING COVERS - EQUAL TO SELF-ADHESIVE ARMACELL'S AP ARMAFLEX WITH K FACTOR OF 0.27 AT 75 DEGREES MEAN TEMPERATURE. INSULATE ANY EXPOSED CONDENSATE PIPING WITH WASTE TEMPERATURES BELOW 60 DEGREES F.

PROVIDE HEAT TRAPS AT HOT AND COLD WATER CONNECTIONS TO WATER HEATER. SHUTOFF VALVES, WITH UNIONS SHALL BE PROVIDED FOR SERVICE TO EACH PLUMBING FIXTURE, FOOD SERVICE EQUIPMENT ITEM OR OTHER EQUIPMENT ITEM, TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. VALVES SHALL BE EQUAL TO JENKINS #902-T BALL VALVE, CHROME-FINISHED BRONZE, TEFLON SEATS AND PACKING, 400 LB. W.O.G., SOLDER END.

ACCESS PANELS SHALL BE PROVIDED WHERE CONCEALED CONTROL DEVICES, VALVES, ETC. ARE CONCEALED WITHIN WALLS. WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAY-IN SUSPENDED CEILINGS, ACCESS PANELS ARE NOT REQUIRED.

SUPPLIES AND TRAPS: PROVIDE WATER SEALED TRAPS AND/OR SUPPLIES INSTALLED AS CLOSE AS POSSIBLE TO ALL PLUMBING FIXTURES, DRAINS, AND FOOD SERVICE EQUIPMENT OR BEVERAGE DISPENSING EQUIPMENT ITEMS FURNISHED BY OTHERS, HAVING A WASTE CONNECTION, OR REQUIRING WATER SERVICE. EXPOSED TRAPS AND SUPPLIES IN EXPOSED AREAS (INCLUDING CABINET INTERIORS) SHALL BE CHROMIUM PLATED BRASS, WITH CHROME PLATED ESCUTCHEON PLATES. PROVIDE HUBLESS CAST IRON WASTE PIPING AND FITTINGS FOR THE TWO, THREE AND, FOUR COMPARTMENT SINKS. REMOVE MARKINGS FROM ALL PIPING WHEN INSTALLATION IS COMPLETE.

INSTALLATION: THOROUGHLY CLEAN ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET ALIGNMENT WITH FIXTURES. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL, FOR SANITARY JOINT, AND OMIT ESCUTCHEONS.

REPAIR EXISTING PLUMBING SYSTEM COMPONENTS DAMAGED BY CONSTRUCTION OPERATIONS AND RESTORE TO ORIGINAL CONDITIONS.

TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE, FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.

SHOP DRAWINGS: CONTRACTORS TO PROVIDE SIX SETS OF SHOP DRAWING SUBMITTALS FOR REVIEW AND APPROVAL TO ARCHITECT, OWNER, ARCHITECT, AND ENGINEER (WHEN APPLICABLE) TO RETAIN ONE SET FOR THEIR OWN RECORDS.

**GENERAL ROOF PLAN NOTES:**

1. CONTRACTOR SHALL CAREFULLY REVIEW CONTRACT DOCUMENTS INCLUDING DRAWINGS AND PROJECT MANUAL. INFORMATION REGARDING WORK OF THE VARIOUS TRADES AND SUBCONTRACTORS ARE DISPERSED THROUGHOUT THE DOCUMENTS AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE FULL SET OF DOCUMENTS.

2. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES ABOVE THE CEILING TO PROVIDE GREATEST POSSIBLE CLEARANCE FOR INSTALLATION OF AND FUTURE CHANGES IN MECHANICAL EQUIPMENT. CONDUIT AND PIPE TO BE RUN THROUGH TRUSSES. COORDINATE SERVICE AND ACCESS POINTS ABOVE CEILING TO MINIMIZE REQUIRED ACCESS.

3. VERIFY EXACT LOCATION OF ALL HVAC EQUIPMENT WITH HVAC CONTRACTOR PRIOR TO COMMENCING ANY WORK.

4. ALL EQUIPMENT (RECEPTACLES, DISC. SWITCHES, ETC.) SHALL BE WEATHERPROOF.

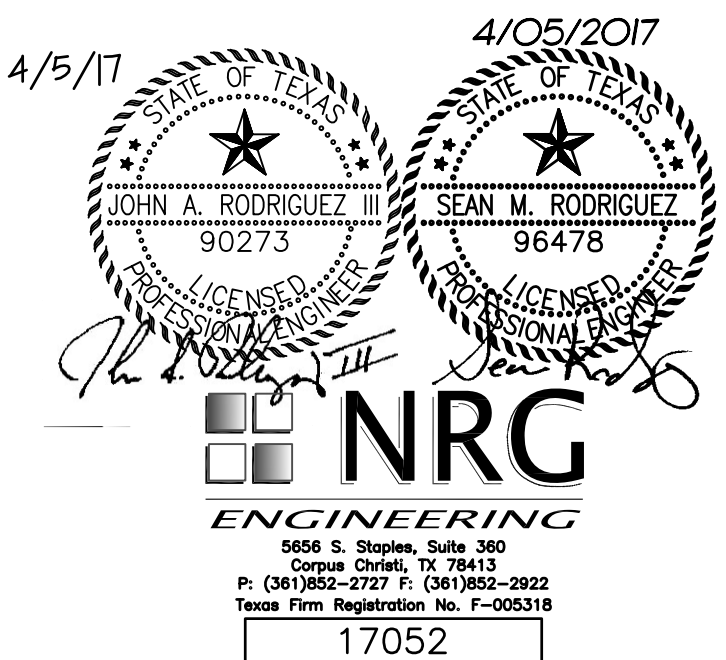
5. ALL FUSES FOR HVAC UNITS SHALL BE SIZED AS REQUIRED BY MANUFACTURER'S NAMEPLATE ON EQUIPMENT. FUSES SHALL BE CURRENT LIMITING, TIME DELAY BUSSMAN FRN-R OR EQUAL BY GOULD SHAWMUT.

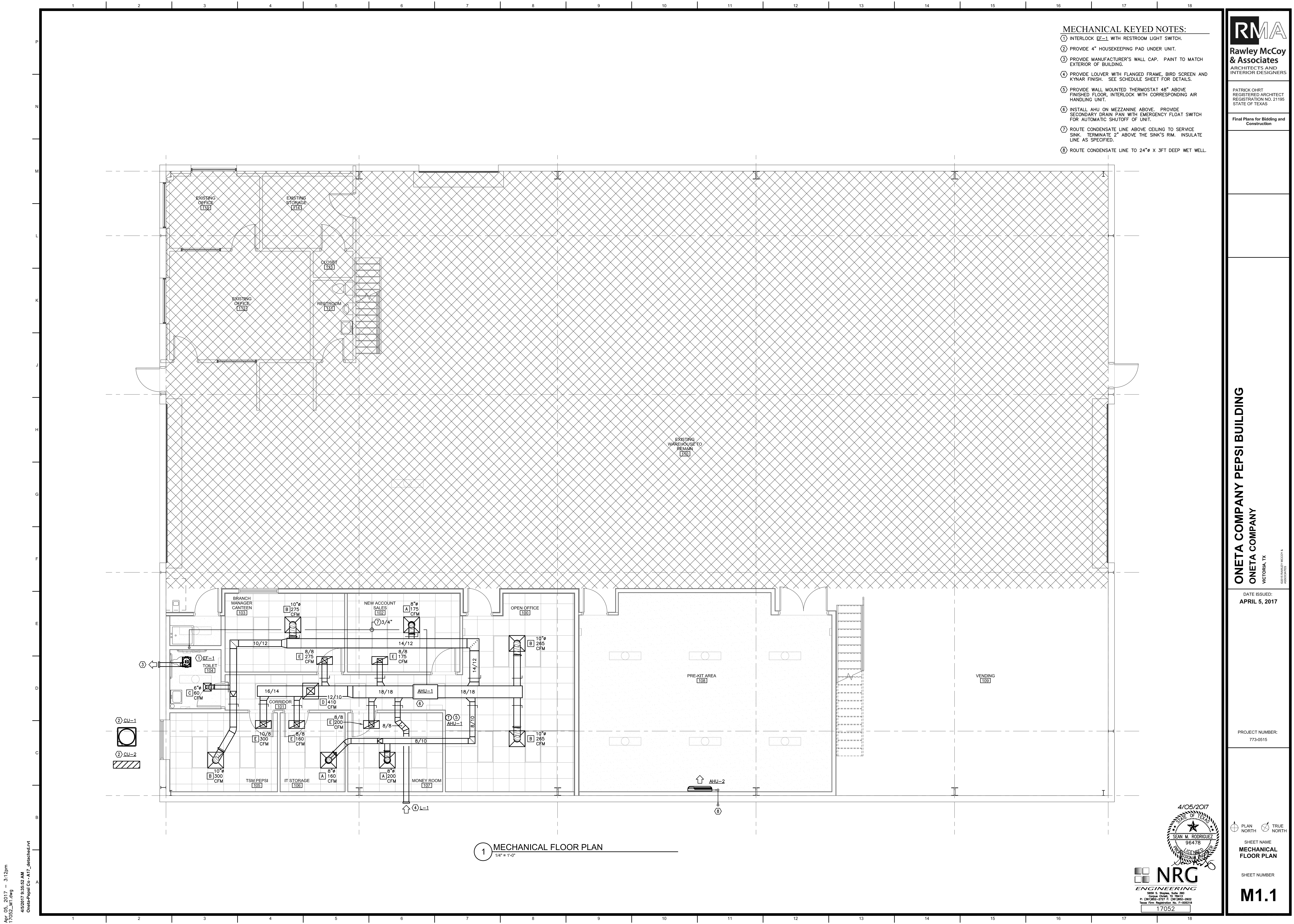
6. ALL CONDUIT SHALL BE RUN CONCEALED BELOW ROOF. PROVIDE WATERTIGHT PITCH POCKETS AS REQUIRED.

7. REFER TO HVAC DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. PROVIDE ALL CONTROL CONDUIT AND WIRING AS REQUIRED FOR INTERLOCKING FANS, MOTORS, ETC. AS INDICATED ON THE HVAC DRAWINGS.

8. ALL DEVICES INSTALLED ON ROOF TOP EQUIPMENT SHALL BE MOUNTED ON A NON-REMOVABLE PANEL OF THE EQUIPMENT. THIS LOCATION SHALL BE COORDINATED WITH THE MECHANICAL OR PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.

9. ROOF DECK PENETRATIONS: CONTRACTOR SHALL SECURE LANDLORD APPROVAL FOR ALL BUILDING ROOF DECK PENETRATIONS. REQUESTS SHALL BE ON A SCALED ROOF PLAN SHOWING EXACT LOCATION & SIZE OF PENETRATION & INCLUDE DETAILS OF MOUNTING, FLASHING & SEALING. CONTRACT WITH THE LANDLORD'S ROOFING CONTRACTOR TO PERFORM ALL WORK AT THIS CONTRACTOR'S SOLE EXPENSE. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL ROOFTOP EQUIPMENT, NEW ROOF PENETRATIONS, REMOVAL OF EXISTING ROOFTOP EQUIPMENT & INSTALLATION OF ALL ROOFTOP EQUIPMENT WITH THE LANDLORD.





- MECHANICAL KEYED NOTES:**
- ① INTERLOCK EF-1 WITH RESTROOM LIGHT SWITCH.
  - ② PROVIDE 4" HOUSEKEEPING PAD UNDER UNIT.
  - ③ PROVIDE MANUFACTURER'S WALL CAP. PAINT TO MATCH EXTERIOR OF BUILDING.
  - ④ PROVIDE LOUVER WITH FLANGED FRAME, BIRD SCREEN AND KYNAR FINISH. SEE SCHEDULE SHEET FOR DETAILS.
  - ⑤ PROVIDE WALL MOUNTED THERMOSTAT 48" ABOVE FINISHED FLOOR, INTERLOCK WITH CORRESPONDING AIR HANDLING UNIT.
  - ⑥ INSTALL AHU ON MEZZANINE ABOVE. PROVIDE SECONDARY DRAIN PAN WITH EMERGENCY FLOAT SWITCH FOR AUTOMATIC SHUTOFF OF UNIT.
  - ⑦ ROUTE CONDENSATE LINE ABOVE CEILING TO SERVICE SINK. TERMINATE 2" ABOVE THE SINK'S RIM. INSULATE LINE AS SPECIFIED.
  - ⑧ ROUTE CONDENSATE LINE TO 24"Ø X 3FT DEEP WET WELL.

**RMA**  
**Rawley McCoy & Associates**  
 ARCHITECTS AND INTERIOR DESIGNERS  
 PATRICK OHRT  
 REGISTERED ARCHITECT  
 REGISTRATION NO. 21195  
 STATE OF TEXAS

Final Plans for Bidding and Construction

**ONETA COMPANY PEPSI BUILDING**  
**ONETA COMPANY**  
 VICTORIA, TX  
DESIGNED BY RAWLEY MCCOY & ASSOCIATES

DATE ISSUED:  
**APRIL 5, 2017**

PROJECT NUMBER:  
 773-0515

4/05/2017  
 PLAN NORTH TRUE NORTH  
 SHEET NAME  
**MECHANICAL FLOOR PLAN**  
 SHEET NUMBER  
**M1.1**



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 17052

**1 MECHANICAL FLOOR PLAN**  
 1/4" = 1'-0"

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**Rawley McCoy & Associates**  
ARCHITECTS AND INTERIOR DESIGNERS

PATRICK OHRT  
REGISTERED ARCHITECT  
REGISTRATION NO. 21195  
STATE OF TEXAS

Final Plans for Bidding and Construction

### AIR BALANCE SCHEDULE

MARK	SERVES	BASED ON ASHRAE 62.1-2010				RESULTING BALANCE	PERCENT OUTSIDE AIR
		SUPPLY AIR CFM	RETURN AIR CFM	OUTSIDE AIR CFM	EXHAUST AIR CFM		
AHU-1	OFFICE	1700	1520	180	180	10.6%	
AHU-2	PRE-KIT	500	500	0	0	0.0%	
EF-1	OFFICE RESTROOM				50	-50	
DA	OUTSIDE AIR TOTAL					180	
EA	EXHAUST AIR TOTAL					-50	
	DIFFERENCE (DA-EA)					130	
CONDITIONED AREA (SQ. FEET)				1200			
DESIRED CFM FOR PRESSURIZATION (CFM/SF)				0.01	12	CFM	
BUILDING LEAKAGE BASED ON BLDG AT 0.04 CFM/SF X TOTAL SURFACE AREA					111.24	CFM	
BUILDING EXHAUST					50	CFM	
MINIMUM REQUIRED FOR PRESSURIZATION (A+B+C)					173	CFM	
AMOUNT OF FRESH AIR PROVIDED (DELIVERED)					180		
AMOUNT TO BE RELIEVED (DELIVERED - MINIMUM)					7	CFM	
BUILDING PRESSURIZED AT:		0.04 in. W.G.	AT	174	CFM		

### HEAT PUMP UNIT SCHEDULE

MARK	HP-1	HP-2
SERVES	AHU-1	AHU-2
NOMINAL TONS	4	1.5
TOT MBTUH	46	18
AMBIENT TEMP.	105	105
SEER (EER)	16	16
HSPF	8.5	9
VOLTS/PH	240/1/60	240/1/60
MCA	26	16
MDCP	40	25
MFG	TRANE	TRANE
MODEL No.	4TRV604B	4TK1618A
NOTES:	1,2,3,4	1,3,4

NOTES:  
1. PROVIDE COMPRESSOR WITH 5 YEAR WARRANTY.  
2. PROVIDE RAWAL 'APR' HOT GAS BYPASS CONTROL DEVICE TO PROVIDE MODULATING CAPACITY CONTROL.  
3. SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE HIGH AND LOW PRESSURE SWITCHES, LIQUID LINE FILTER DRIER, CRANKCASE HEATERS AND NON-BLEED PORT, ADJUSTABLE TXV VALVE. PROVIDE LIQUID LINE SIGHT GLASS AND PRESSURE TAPS ON INLET AND OUTLET OF INDOOR COILS.  
4. EQUIVALENT MANUFACTURERS ARE MITSUBISHI, CARRIER, AND TRANE.

### DX SPLIT AIR HANDLING UNIT SCHEDULE

MARK	AHU-1	AHU-2
SERVES	OFFICE	PRE-KIT
TYPE	FAN COIL	DUCTLESS SPLIT
SUPPLY (CFM)	1700	470
OUTSIDE AIR (CFM)	180	0
EXT. SP. (IN. WG)	0.6	0.3
FAN MOTOR HORSEPOWER		
FAN RPM	552	ECM
FAN STYLE/CONFIGURATION	HORZ.	WALL MOUNT
COOLING COIL		
MAX. COIL FACE VEL. (CFM)	500	500
ROWS/FINS	3/14	75/62.6
EAT DB/WB (F)	77/64.9	55/54
LAT DB/WB (F)	57/56	17.9
TOTAL GRAND (MBTUH)	46.1	12.9
TOTAL SENSIBLE (MBTUH)	34.3	
REHEAT COIL		
EMERGENCY HEATING KW	7.7	N/A
HEATING BTUH	39106.8	12690.0
HEATING EAT DB (F)	65.7	70
HEATING LAT DB (F)	87	95
ELECTRICAL DATA		
VOLTS/PH/Hz	240/1/60	240/1/60
MCA	48	POWERED FROM
MDCP	50	OUTDOOR UNIT
MANUFACTURE	TRANE	
MODEL No.	GAMS90C4B	4MXV161B
NOTES:	1,2,3,5,6,7,8,9	4,7,8,9

NOTES:  
1. PROVIDE 2" PLEATED 30% EFFICIENT MERV 8 FILTERS FOR THE AHU. PROVIDE SLIDE OUT FILTER FRAME ON RETURN INLET OF THE AIR HANDLER.  
2. UNIT SHALL BE COMPATIBLE WITH THE SAME MANUFACTURER'S HEAT PUMP OUTDOOR UNIT.  
3. PROVIDE WITH SINGLE POINT OF ELECTRICAL CONNECTION FOR EACH UNIT. THE UNITS SHALL BE CONSTANT VOLUME.  
4. PROVIDE WALL MOUNTED HARD WIRED THERMOSTAT FOR DUCTLESS SPLIT UNIT. UNIT SHALL BE POWERED FROM THE CONDENSING UNIT.  
5. PROVIDE RUBBER IN SHEAR ISOLATORS FOR SUSPENDED AIR HANDLER.  
6. PROVIDE SECONDARY DRAIN PAN WITH EMERGENCY FLODAT SWITCH. INTERLOCK FLODAT SWITCH WITH UNIT SAFETIES.  
7. PROVIDE ALL SENSORS, ACCESSORIES, CONTROL POINTS, AND INTERLOCKS FOR THE AHUS AND THEIR RESPECTIVE ACCUS TO BE PROPERLY OPERATED AND STAGED BY THE BMS SYSTEM. COORDINATE ALL THE REQUIRED CONTROLS WITH THE EQUIPMENT TYPE, CONFIGURATION, NUMBER OF DX STAGES, REFRIGERATION CIRCUITS, CONTROL SEQUENCES AND SPECIFICATIONS.  
8. INSTALL ALL UNITS AS PER THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. PROVIDE THE MANUFACTURER'S MINIMUM CLEARANCES FOR OPERATION AND SERVICE OF THE UNIT. COORDINATE THE INSTALLATION OF THE UNIT WITH ALL OTHER DISCIPLINES, DUCTWORK, STRUCTURE, ELECTRICAL, AND ALL OTHER OBSTRUCTION PRIOR TO INSTALLATION OF THE UNIT, ITS EQUIPMENT PAD, AND ALL ACCESSORIES.  
9. MECHANICAL SPACES HAVE BEEN DESIGNED AROUND THE SPECIFIED MANUFACTURER. ALTERNATE MANUFACTURER EQUIPMENT SHALL NOT EXCEED THE SPECIFIED MANUFACTURER'S PHYSICAL DIMENSIONS AND WEIGHTS.

### HVAC DESIGN CRITERIA

JOB LOCATION	DESIGN CONDITIONS	WORST CASE HUMIDITY CONDITIONS
VICTORIA, TX 95 FT ALTITUDE	SUMMER DB / MWB (DEG. F) 94/76	SUMMER DB / MWB (DEG. F) 82/78.2
CHANGE LOCATION AND CONDITIONS	WINTER DB (DEG. F) 33.2	DEW POINT (DEG. F) 75.5
INTERIOR DESIGN AREA	SUMMER DB (°) RH	WINTER DB (°) RH
OFFICE	75 50	70 50
STORAGE	78 50	68 50

### EXHAUST FAN SCHEDULE

Manufacture	Mark	Quantity	Model	Volume (CFM)	Ext. SP (in. wg)	Fan Speed (RPM)	Operating Power (Bhp)	Sones	Motor Size (hp)	Voltage	Phase	Hertz	Weight (lb)	Control	Notes
Cook	EF-1	1	GC-124	50	0.5	789	47.2	2.7	0.5	115	1	60	19	A	1,2,3

CONTROL:  
A. FAN SHALL BE CONTROLLED BY LOCAL LIGHT SWITCH.

NOTES:  
1. FAN SHALL BE DIRECT DRIVE WITH MOTOR MOUNTED SPEED CONTROL RELAY, PREWIRED DISCONNECT SWITCH, AND BACKDRAFT DAMPER.  
2. PROVIDE MANUFACTURER'S WALL CAP.  
3. EQUIVALENT MANUFACTURERS ARE COOK AND GREENHECK.

### LOUVER SCHEDULE

TAG	SERVICE	RUSKIN MODEL NUMBERS	SIZE (INCHES) (WXH)	AIR FLOW (CFM)	FREE AREA (FT^2)	PRESSURE DROP (IN WG)	INTAKE OR EXHAUST	NOTES
L-1	AHU-1	EME520DD	12x12	180	0.25	0.08	INTAKE	1,2,3,4

NOTES:  
1. PROVIDE WITH GRAVITY BACKDRAFT DAMPER (EXHAUST LOUVERS ONLY).  
2. PROVIDE WITH FLANGED FRAME.  
3. PROVIDE WITH INSECT SCREEN AND ANODIZED COLOR - REF. ARCHITECTURAL SPECS.  
4. RUSKIN, GREENHECK, AND UNITED ENERTECH ARE APPROVED EQUALS.

ONETA COMPANY PEPSI BUILDING  
ONETA COMPANY  
VICTORIA, TX

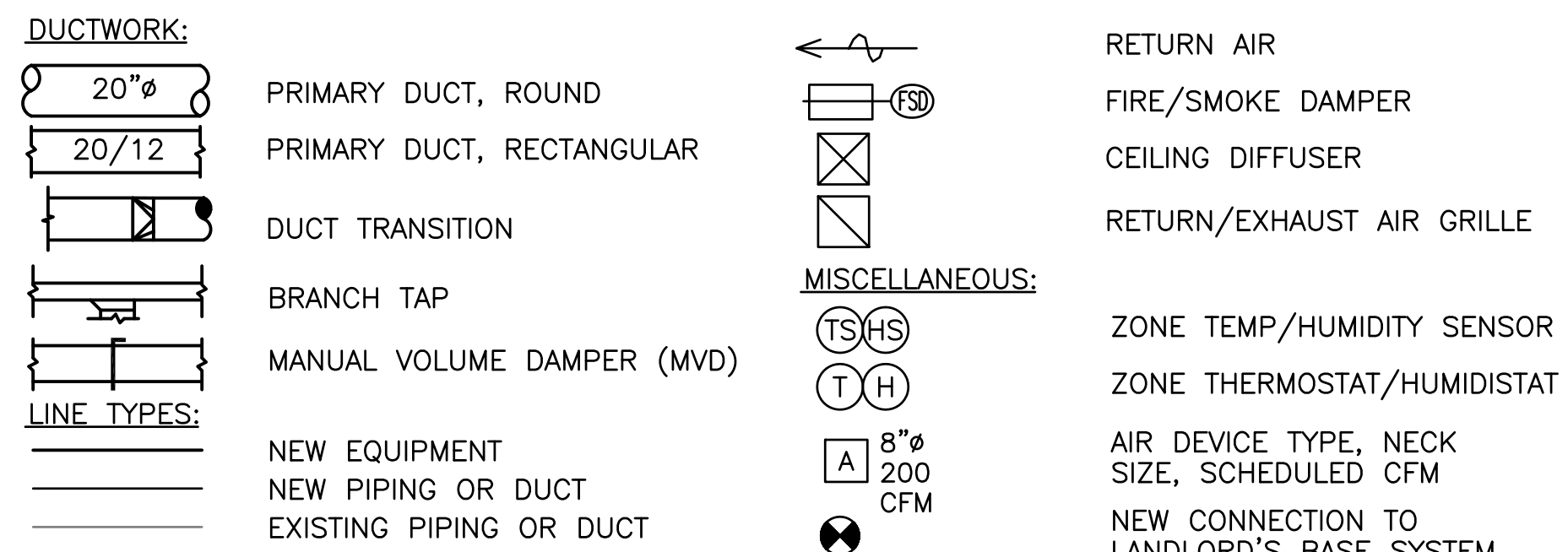
DATE ISSUED:  
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PROJECT NUMBER:  
773-0515



PLAN NORTH TRUE NORTH  
SHEET NAME  
MECHANICAL SCHEDULES  
SHEET NUMBER  
M2.1

### HVAC SYMBOLS AND ABBREVIATIONS



NOTE: ALL SYMBOLS & ABBREVIATIONS MAY NOT APPLY TO THIS PROJECT

### LEGEND

φ SQUARE	HVAC HEATING VENTILATING & AIR CONDITIONING
○ ROUND	IN W.G. INCH WATER GAUGE
ACC.DR. ACCESS DOOR	KW KILOWATT
AFF ABOVE FINISHED FLOOR	LAT LEAVING AIR TEMPERATURE
CFM CUBIC FEET PER MINUTE	MBH THOUSAND BTU PER HOUR
DB DRY BULB	MOCP MAXIMUM OVER CURRENT PROTECTION
E/A EXHAUST AIR	O/A OUTSIDE AIR
EAT ENTERING AIR TEMPERATURE	PD PRESSURE DROP
ESP EXTERNAL STATIC PRESSURE	R/A RETURN AIR
FC FLEXIBLE CONNECTION	RLA RUNNING LOAD AMPS
FLA FULL LOAD AMPS	RPM REVOLUTION PER MINUTE
FPI FINS PER INCH	S/A SUPPLY AIR
FT W.G. FOOT WATER GAUGE	SP STATIC PRESSURE
GA GAUGE	SQ FT SQUARE FEET
GALV GALVANIZED	U.C.D. UNDERCUT DOOR BY 1"
GPM GALLONS PER MINUTE	WB WET BULB

### AIR DEVICE SCHEDULE

PLAN MARK	MANUF. & MODEL NUMBER	SERVICE	MODULE SIZE	NECK SIZE	FACE SIZE	BORDER TYPE	FINISH	BLOW PATTERN	MAT'L.	OPTIONS/NOTES
A	TITUS OMNI	SUPPLY	24 X 24	6"	18 X 18	3	26	4	ALU	
B	TITUS OMNI	SUPPLY	24 X 24	10"	18 X 18	3	26	4	ALU	
C	TITUS OMNI	SUPPLY	12 X 12	6"	10 X 10	3	26	4	ALU	
D	TITUS 50 F	RETURN	24 X 24	20 X 20	20 X 20	3	26	-	ALU	1/2" X 1/2" X 1" CORE AG-15-AA
E	TITUS 50 F	RETURN	24 X 12	20 X 8	20 X 8	3	26	-	ALU	1/2" X 1/2" X 1" CORE AG-15-AA

BORDER TYPE	BLOW PATTERN	FINISH	OPTIONS/NOTES
01 SURFACE MOUNT	1. 1-WAY	01 ALUMINUM	TRM RAPID MOUNT FRAME
2. SNAP-IN	2. 2-WAY	04 MILL (STD)	SS PLASTER FRAME
3. LAY-IN	3. 2-WAY, OPPOSITE	26 WHITE	PPA ALUM PLASTER FRAME
4. SPLINE	3. 3-WAY		AG-15 STEEL DAMPER
5. DROPPED	4. 4-WAY+		AG-15-AA ALUMINUM DAMPER
6. BEVELED			AG-15-SS STAINLESS STEEL DAMPER
			EOT EARTHQUAKE TABS
			L FRONT BLADE LONG ORIENTATION
			S FRONT BLADE SHORT ORIENTATION
			AG-85 BUTTERFLY DAMPER
			EG EQUALIZING GRID
			TRV THROW REDUCING VANES

### HVAC GENERAL NOTES:

- THESE GENERAL NOTES APPLY TO ALL HVAC DRAWINGS.
- DUCT SIZES ARE INSIDE CLEAR DIMENSIONS.
- DUCTWORK SHALL BE FACTORY FABRICATED FIBERGLASS DUCTBOARD TO NAIMA STANDARDS. DUCTWORK SHALL BE 1-1/2" THICK WITH FIRE RESISTANT FOIL-SCRM-KRAFT (FSK) VAPOR RETARDER. DUCTBOARD SHALL BE DESIGNED FOR DUAL SERVICE TEMPERATURE. INSULATION SHALL HAVE A THERMAL CONDUCTIVITY OF .23 AT 75 DEG. F AND AN R-VALUE OF 6.5. THE DUCTBOARD SHALL BE LISTED AS UL 181 CLASS 1 DUCT AND MEET NFPA 90A AND 90B WITH 25/50 FLAME/SMOKE DEVELOPED RATING.
- PROVIDE FLEXIBLE CONNECTION AT DUCT ATTACHMENTS TO MECHANICAL EQUIPMENT.
- HVAC EQUIPMENT SUBMITTED OTHER THAN SCHEDULED MANUFACTURER'S SHALL NOT EXCEED PHYSICAL DIMENSIONS DUE TO SPACE LIMITATIONS.
- ALL PIPING AND DUCTWORK PENETRATIONS OF FIRE-RATED BARRIERS SHALL BE PROTECTED WITH FIRE BLOCKING MATERIAL AND/OR DAMPERS PER SPECIFICATIONS.
- MANUAL VOLUME DAMPERS INSTALLED IN RECTANGULAR DUCTWORK SHALL BE OPPOSED BLADE TYPE. MANUAL VOLUME DAMPERS INSTALLED IN ROUND DUCTWORK SHALL BE BUTTERFLY TYPE.
- BALANCING DAMPERS IN EXTERNALLY INSULATED DUCTWORK SHALL BE PROVIDED WITH A BUILD-OUT ON DAMPER OPERATOR TO EXTEND OPERATOR HANDLE TO OUTSIDE OF INSULATION.
- CONCEALED DUCTWORK TO HAVE OPERABLE QUADRANTS ON BALANCING DAMPERS. PROVIDE CONCEALED REGULATORS FOR DAMPER OPERATORS SIMILAR TO YOUNG'S REGULATOR.
- PROVIDE ACCESS TO ALL CONTROL, MOTORIZED, BALANCING AND FIRE DAMPERS. PROVIDE ACCESS DOORS IN DUCTS AND CEILING WHEN NECESSARY.
- SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL SEAMS AIR TIGHT WITH UL 181 A-P/B-FX AND UL 723 LISTED 3" WIDE ALUMINUM FOIL TAPE, SHURTAPE No AF-100.
- FLEXIBLE DUCTWORK SHALL BE EQUAL TO FLEXMASTER 8M WITH AN INSULATING R-VALUE OF 5 OR BETTER. FLEX DUCT SHALL NOT EXCEED 6 FT IN LENGTH. DUCT RUNOUTS TO DIFFUSERS SHALL BE SAME SIZE AS DIFFUSER NECK.
- PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT WITH 24 HOUR MEMORY BACKUP. SEE DIVISION 15 SPECIFICATIONS.

### GENERAL ENERGY NOTES:

- THERMOSTATIC CONTROLS MUST HAVE A 5deg DEADBAND OR HAVE MANUAL CHANGEOVER BETWEEN HEATING AND COOLING.
- PROVIDE AUTOMATIC CONTROLS: SETBACK TO 55degF (HEAT) AND 85degF (COOL); 7-DAY CLOCK, 2-HOUR OCCUPANT OVERRIDE, 10-HOUR BACKUP IN THE EVENT OF A POWER LOSS.
- OUTDOOR AIR SUPPLY AND EXHAUST DUCTS SHALL BE PROVIDED WITH AUTOMATIC MEANS TO REDUCE AND SHUT OFF AIRFLOW WITH THE EXCEPTION FOR SYSTEM DESIGNED FOR CONTINUOUS OPERATION OR SYSTEM WITH AN FLOW RATE LESS THAN 3,000 CFM; SYSTEMS WITH READILY ACCESSIBLE MANUAL DAMPERS; OR RESTRICTED BY HEALTH AND LIFE SAFETY CODES.
- ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BELISTED AND LABELED IN ACCORDANCE WITH UL181A OR UL181B. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEMS SHALL BE SEALED AND MECHANICALLY FASTENED. DUCT TAPE IS NOT PERMITTED AS A SEALANT OF ANY METAL DUCTS.
- INSULATION SHALL BE PROVIDED FOR PIPING AS NOTED IN THE TABLE BELOW. PIPING INSULATION SHALL BE PROVIDED FOR RETURN CIRCULATION HOT WATER SYSTEM WITH 1" OR R-4 INSULATION. THE FIRST 8' OF PIPING IN NONCIRCULATING SYSTEMS SERVED BY EQUIPMENT W/O INTEGRAL HEAT TRAPS SHALL BE INSULATED WITH 5" OR R-4 INSULATION.

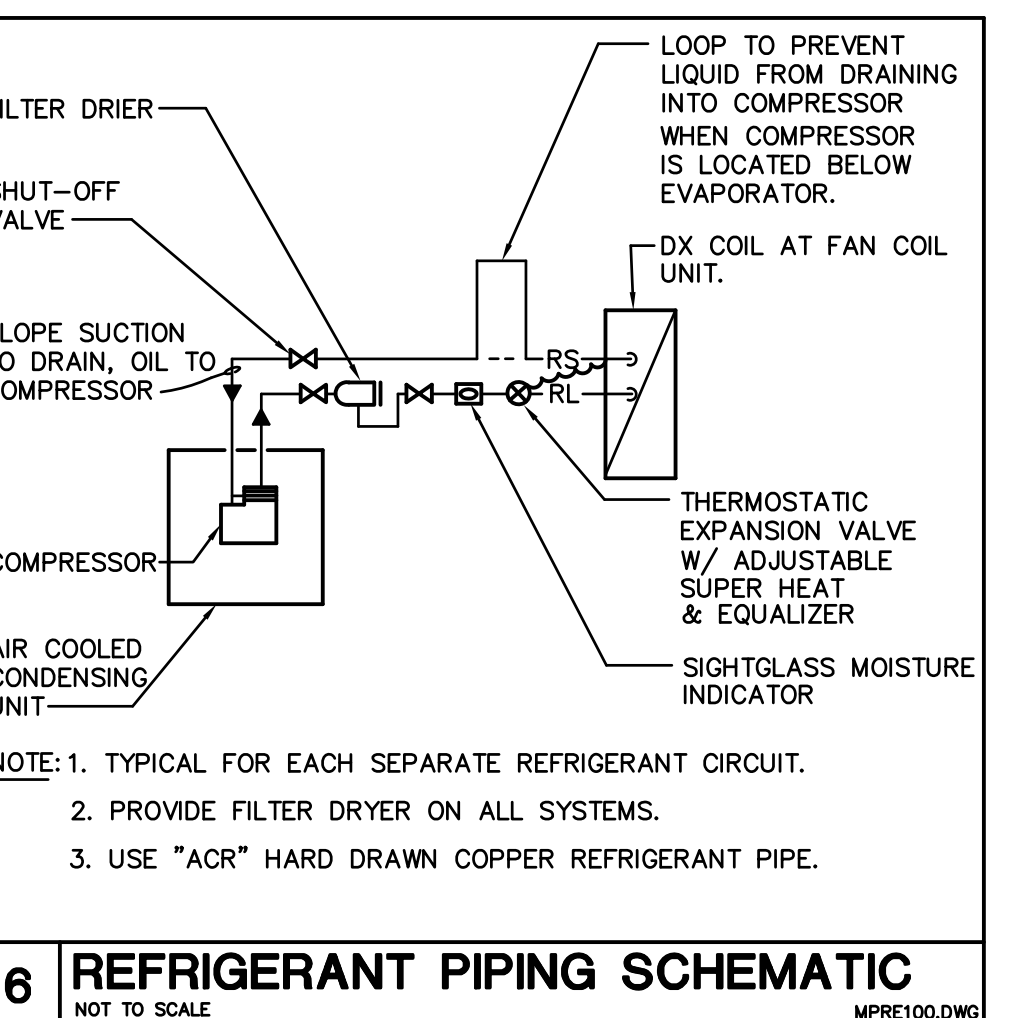
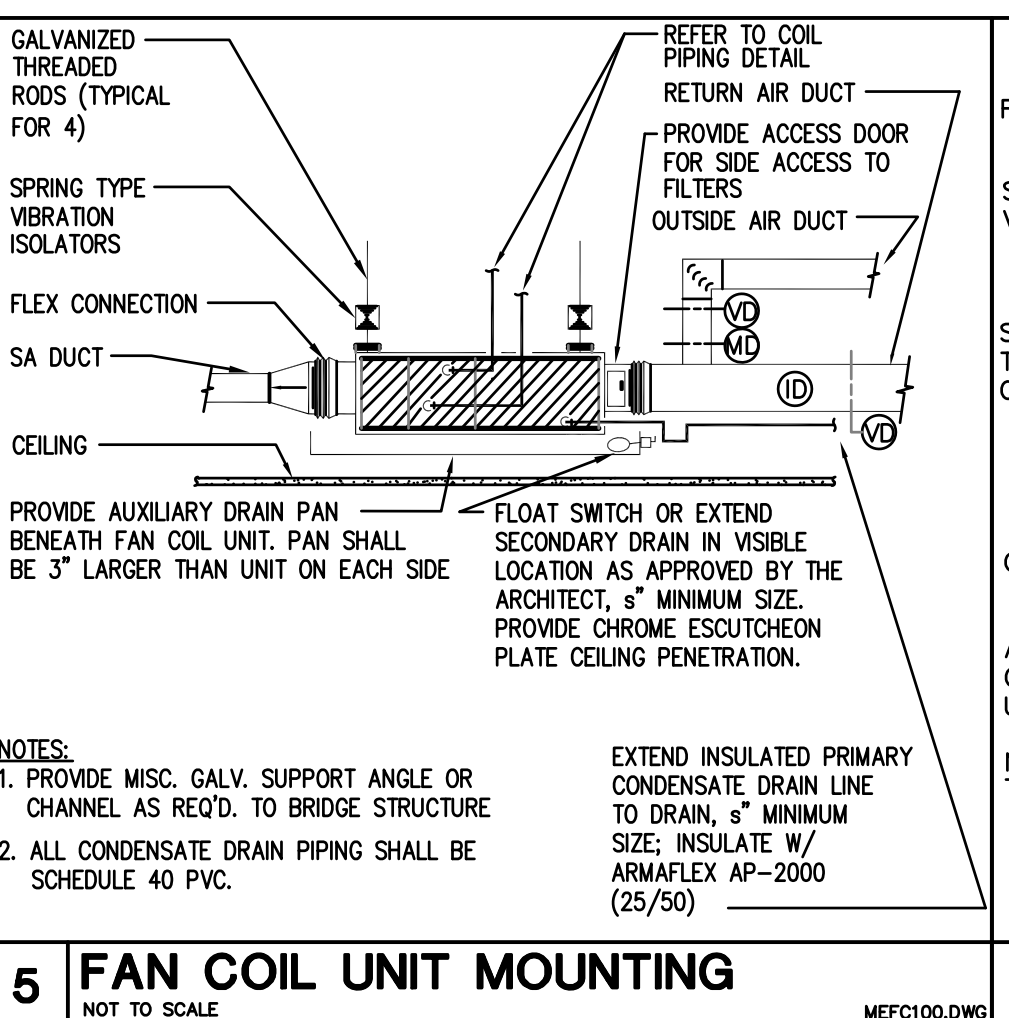
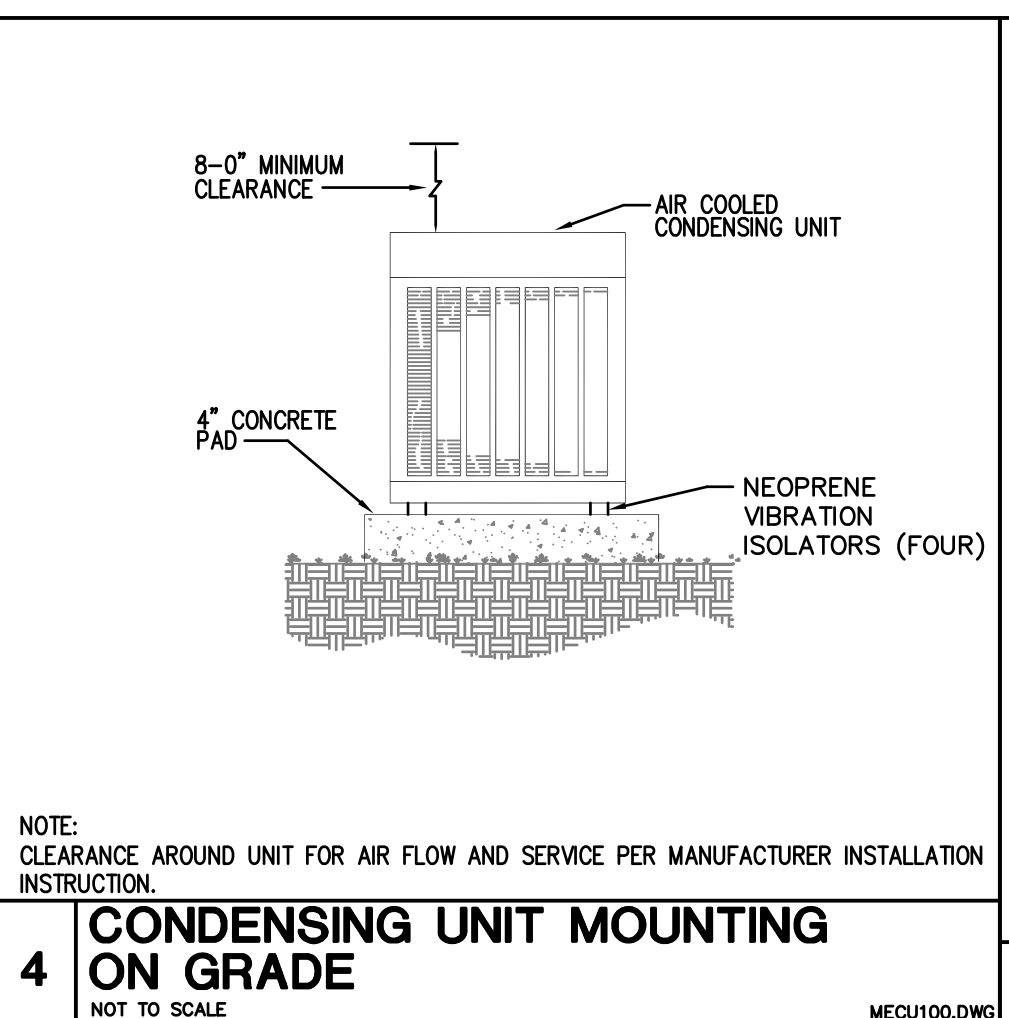
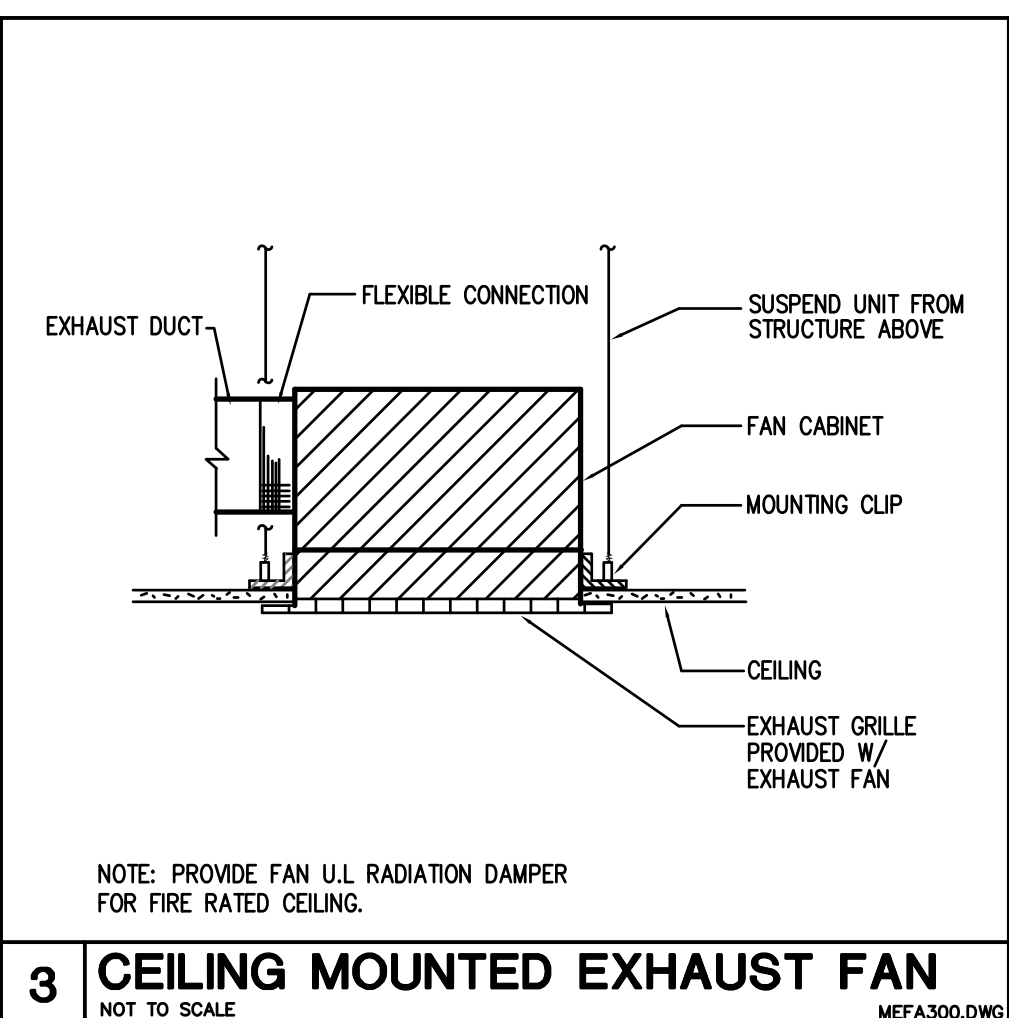
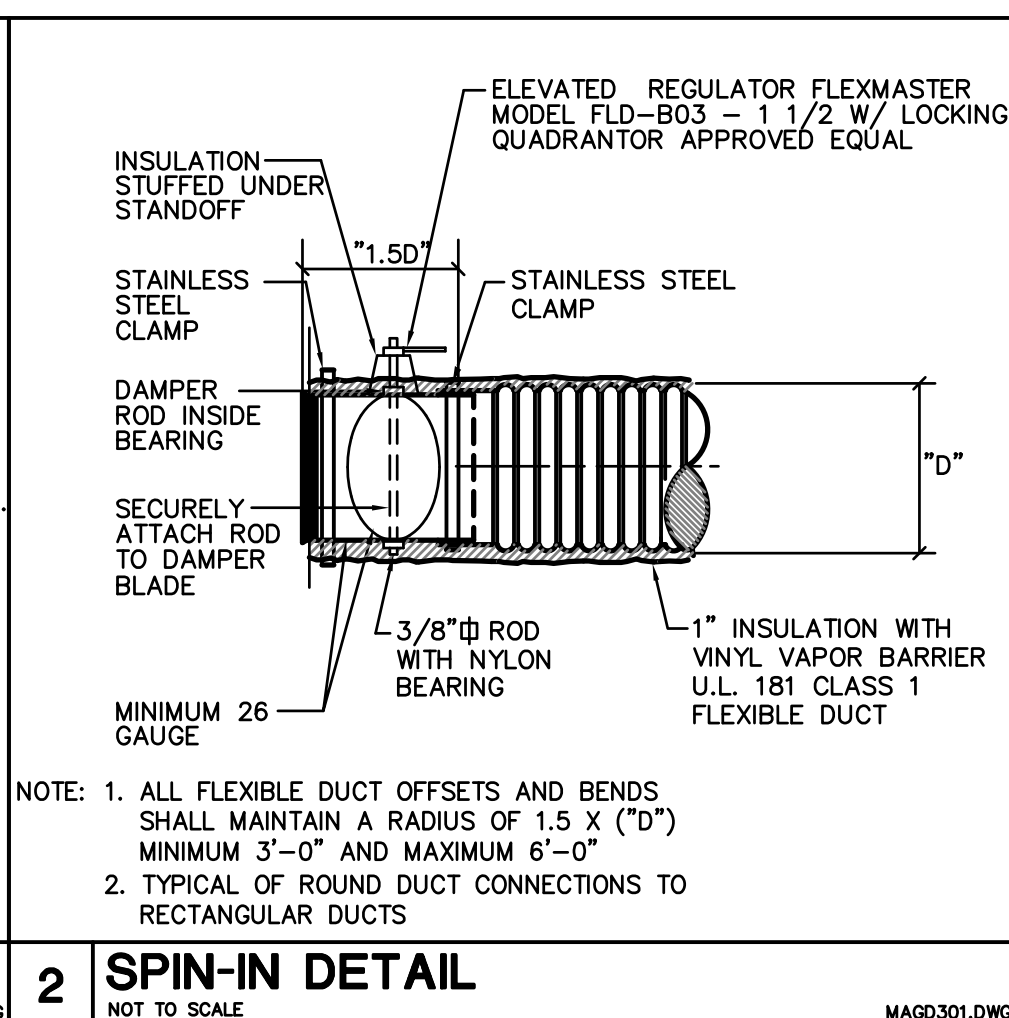
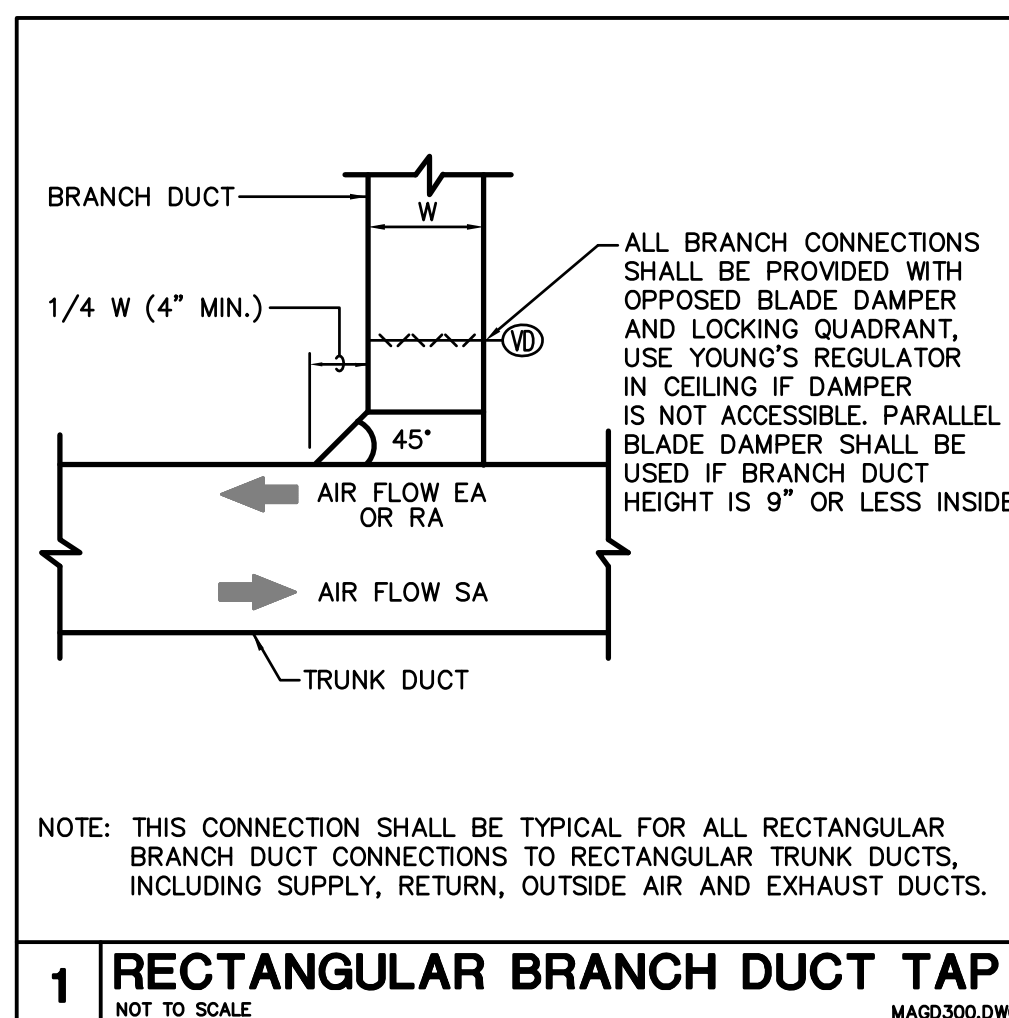
FLUID	MINIMUM PIPE INSULATION (inch)		MINIMUM DUCT INSULATION (R)
	NORMAL PIPE DIA.		
STEAM	1-1/2	3-1/2	UNCONDITIONED SPACE ≥ 6 OUTSIDE BLDG. ENVELOPE ≥ 8
HOT WATER	1	1-1/2	EXCEPTIONS: 1. WHEN LOCATED WITHIN EQUIPMENT. 2. WHEN DESIGN TEMP. DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT OR PLENUM DOES NOT EXCEED 15°F.
CHILL WATER or REFRIGERANT	1	1	

### MECHANICAL NARRATIVE:

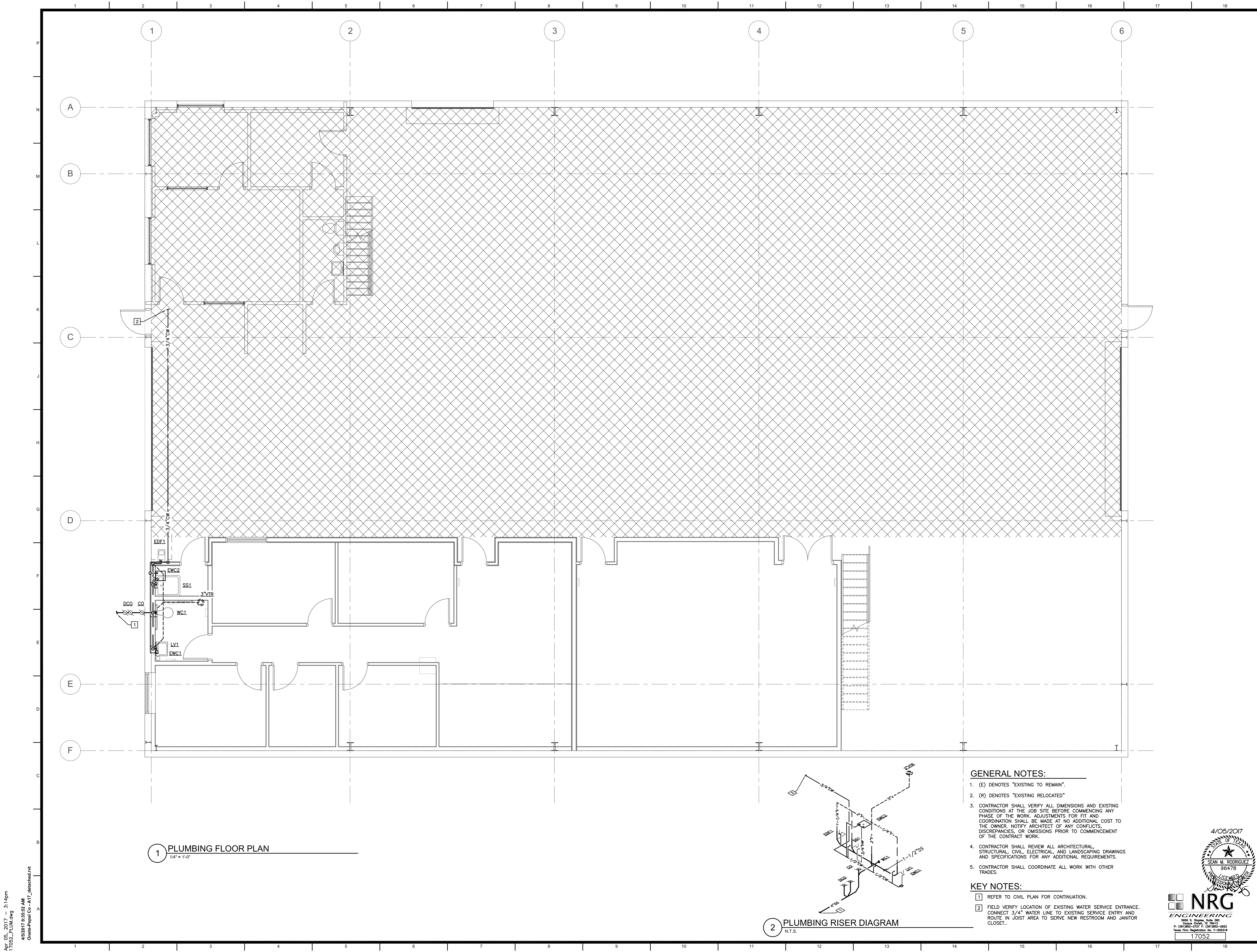
THE HVAC SYSTEM SHALL BE HIGH EFFICIENCY DX SPLIT SYSTEM UNITS WITH ELECTRIC HEAT.

EXHAUST FANS SHALL BE INTERLOCKED WITH CORRESPONDING LIGHT.

REFER TO THE MECHANICAL ENERGY NOTES FOR COMPLIANCE REQUIREMENTS WITH IECC 2015. SEE THE HVAC DESIGN CRITERIA ON THIS SHEET AS REQUIRED BY THE 2015 IECC.



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**1 PLUMBING FLOOR PLAN**  
1/4" = 1'-0"

**2 PLUMBING RISER DIAGRAM**  
N.T.S.

- GENERAL NOTES:**
- (E) DENOTES "EXISTING TO REMAIN".
  - (R) DENOTES "EXISTING RELOCATED"
  - CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE JOB SITE BEFORE COMMENCING ANY PHASE OF THE WORK. ADJUSTMENTS FOR FIT AND COORDINATION SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER. NOTIFY ARCHITECT OF ANY CONFLICTS, DISCREPANCIES, OR OMISSIONS PRIOR TO COMMENCEMENT OF THE CONTRACT WORK.
  - CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL, AND LANDSCAPING DRAWINGS AND SPECIFICATIONS FOR ANY ADDITIONAL REQUIREMENTS.
  - CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES.

- KEY NOTES:**
- REFER TO CIVIL PLAN FOR CONTINUATION.
  - FIELD VERIFY LOCATION OF EXISTING WATER SERVICE ENTRANCE. CONNECT 3/4" WATER LINE TO EXISTING SERVICE ENTRY AND ROUTE IN JOIST AREA TO SERVE NEW RESTROOM AND JANITOR CLOSET.



### PLUMBING LEGEND

DISREGARD LEGEND ITEMS NOT INDICATED ON DRAWINGS

SYMBOL	DESCRIPTION	ABBR.
---	SOIL OR WASTE PIPING B.G.	WST
---	SOIL OR WASTE PIPING A.G.	WST
---	VENT PIPING	V
---	DOMESTIC COLD WATER	CW
---	DOMESTIC HOT WATER	HW
---	DOMESTIC HOT WATER RETURN	HWR
---	TEMPERED DOMESTIC HOT WATER	TW
---	GATE VALVE	GV
---	BALL VALVE	BV
---	CHECK VALVE	CKV
---	PRESSURE RELIEF VALVE	T&P
---	UNION	UN
---	CONDENSATE OR INDIRECT DRAIN	D
---	BRANCH CONNECTION, TOP	---
---	BRANCH CONNECTION, BOTTOM	---
---	ELBOW UP	---
---	ELBOW DOWN	---
---	FLOOR CLEANOUT (INTERIOR)	FCO
---	CLEANOUT AT GRADE (EXTERIOR)	COG
---	WALL CLEANOUT	WCO
---	FLOOR DRAIN	FD
---	FLOOR SINK	FS
---	HOSE BIBB	HB
---	WALL HYDRANT	WH
---	NEW TO EXISTING PIPE CONNECTION	---
---	ABBREVIATIONS	ABBR.
---	ABOVE FINISHED FLOOR	AFF
---	ACCESS PANEL	AP
---	BELOW FINISHED FLOOR	BFF
---	BOTTOM OF PIPE	BOP
---	INDIRECT DRAIN	D
---	FINISHED	FIN
---	FLOOR	FLR
---	INVERT ELEVATION	INV. EL
---	TRAP PRIMER	TP
---	TYPICAL	TYP
---	VENT THRU ROOF	VTR

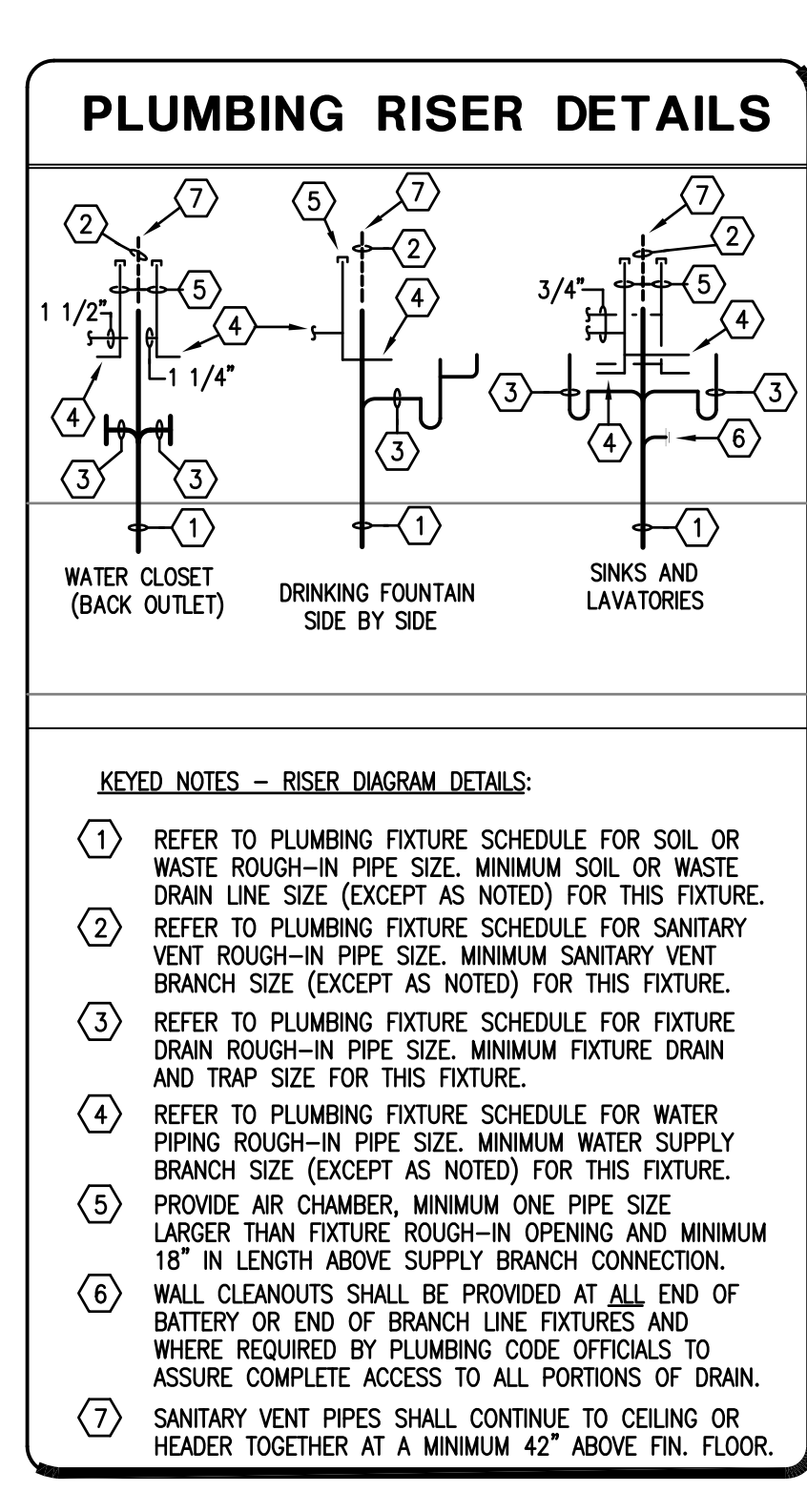
\*\*NOT ALL SYMBOLS MAY BE USED\*\*

- ### GENERAL NOTES:
- CONTRACTOR TO FIELD VERIFY ELEVATIONS AND DIMENSIONS OF FINISHED FLOORS AND WALLS. TRUE ALL DRAINS, ROUGH-INS AND CARRIERS IN ACCORDANCE WITH THE PROPOSED ELEVATIONS AND FINISHED SURFACES.
  - MOUNTING HEIGHT ELEVATION OF ALL WALL HUNG OR COUNTER MOUNTED FIXTURES SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION OF ROUGH-IN WORK.
  - FOR ALL FIXTURES AND EQUIPMENT WITH ASSOCIATED TRIM OR COMPONENT ACCESSORIES, PROVIDE UNDER SEPARATE DIVISIONS AND REQUIRE PLUMBING CONNECTIONS. THIS CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS OF, MAKE PROVISIONS FOR, AND SHOP ALL MATERIALS AND LABOR FOR MAKING FINAL CONNECTIONS.
  - CONTRACTOR SHALL REFER TO SUPPLY DRAWINGS OF EQUIPMENT TO BE SUPPLIED FOR FINAL COORDINATION OF ALL ROUGH-IN OPENINGS BEFORE BEGINNING WORK.
  - ALL FIXTURE AND EQUIPMENT SUB-OUTS SHALL BE PROVIDED WITH A STOP VALVE. ALL FIXTURE STOPS SHALL BE SOLID BRASS, LOOSE KEY OPERATED, CHROME PLATED (WHERE EXPOSED), AND FITTED TIGHT TO CHROME PLATED BRASS WALL ESCUTCHEON PLATES. SUPPLY RISERS SHALL BE TYPE 1 1/2" TUBING, CHROME PLATED. PROVIDE 1/2" PIP X 3/8" OD COMPRESSION FITTINGS FOR ALL SINKS, LAVATORIES, AND SIMILAR FIXTURES.
  - ALL P-TRAPS WITHIN THE BUILDING, ABOVE GRADE AND EXPOSED TO INSPECTION SHALL BE CHROME PLATED ADJUSTABLE, CAST BRASS WITH CLEANOUT PLUG. PROVIDE CAST SLIP NUTS AND WASHERS, 17 GAUGE SEAMLESS TUBULAR BRASS DRAIN TO WALL AND WALL FLANGE. PROVIDE 1-1/2" P-TRAP FOR ALL LAVATORIES AND SIMILAR FIXTURES. PROVIDE 1-1/2" P-TRAP FOR ALL SINKS AND SIMILAR FIXTURES, OCCURE OR EQUAL.
  - ALL ROUGH-IN OPENINGS SHALL BE FITTED WITH CHROME PLATED, WROUGHT BRASS DEEP BELL OR BOX ESCUTCHEON PLATES FITTED TIGHT TO PIPE AND FLUSH TO WALL. STEEL ESCUTCHEON PLATES ARE NOT ACCEPTED.
  - ALL EXPOSED BRASS SHALL BE CHROME PLATED.
  - ALL HANDICAPPED ACCESSIBLE FIXTURES SHALL BE OF APPROVED TYPES AND WITH REQUIRED CONTROLS INSTALLED TO HEIGHTS AND CLEARANCES, AS PRESCRIBED BY THE AMERICAN DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY STANDARDS (TAS). FIXTURES SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ACCESSIBILITY CODE REQUIREMENTS. PROVIDE FIXTURES WITH DEPTHS AT MAXIMUM PERMITTED AND AVAILABLE FOR INTENDED FIXTURE USE.
  - INSULATE ALL EXPOSED WATER AND DRAIN LINES ON ADA/TAS ACCESSIBLE LAVATORIES AND SINKS WITH OCCURE PRO WRAP OR EQUAL. PROVIDE OFFSET DRAIN FITTINGS WHERE REQUIRED TO PROVIDE MINIMUM CLEARANCES.
  - ALL ADA/TAS SINKS SHALL BE STAMPED WITH DRAIN OUTLET AT THE REAR OF THE BOWL.
  - PLUMBING FIXTURES SHALL BE OF WATER CONSERVATION TYPE IN ACCORDANCE WITH SENATE BILL 587 FOR WATER SAVING PERFORMANCE. LAVATORY AND SINK FAUCETS SHALL INCLUDE 2.2 GPM FLOW CONTROL.
  - ORIENT ADA/TAS WATER CLOSET FLUSH VALVE WITH OPERATOR ON LARGE SIDE OF ENCLOSURE AND BELOW GRAB BARS.
  - SEAL ALL SPACES BETWEEN PLUMBING FIXTURES AND MOUNTING SURFACES WITH WHITE LATEX CAULK WIPED SMOOTH AND FLOOR DRAINS SHALL BE INSTALLED AT LOW POINTS OF UNIFORMLY SLOPED FLOOR. CONTRACTOR SHALL FIELD COORDINATE WITH STRUCTURAL TO INSURE FLOORS ARE UNIFORMLY SLOPED ACROSS ENTIRE TOILET ROOMS OR OVER AS WIDE AN AREA AS PRACTICAL FOR OPEN AREA FLOOR DRAINS. CONVEX FLOOR SLOPE IN THE IMMEDIATE VICINITY OF THE FLOOR DRAIN IS NOT ACCEPTABLE.
  - EQUIVALENT MANUFACTURES OF CHINA FIXTURES ARE KOHLER, ELIAR, AND CRANE. EQUIVALENT MANUFACTURES OF STAINLESS FIXTURES ARE JUST AND ELKAY.
  - WATER HEATER SHALL BE PROVIDED WITH CODE APPROVED VACUUM BREAKER AND BRASS ASME TEMPERATURE AND PRESSURE RELIEF VALVE. RELIEF VALVE SHALL BE FULL SIZED TO EXTERIOR OF BUILDING AND TERMINATE 6" ABOVE FINISHED GRADE, OR AS INDICATED ON PLANS.
  - ROOF PENETRATIONS SHALL BE DONE IN STRICT COMPLIANCE WITH THE ARCHITECTS SPECIFICATIONS AND SHALL BE LEAK PROOF.
  - FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATION OF STUB OUTS. NOTIFY ARCHITECT OF ANY DISCREPANCIES IMMEDIATELY WHICH MAY AFFECT THE INTENDED DESIGN.
  - ALL PLUMBING WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL STATE AND LOCAL CODES.
  - THE PLUMBING CONTRACTOR SHALL GUARANTEE THE COMPLETE PLUMBING SYSTEM TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF 12 MONTHS FROM DATE OF FINAL ACCEPTANCE.
  - ALL WATER HEATER SUPPLY CONNECTIONS SHALL HAVE HEAT TRAP NIPPLE CONNECTIONS. HEAT TRAP NIPPLES NOT REQUIRED IF HOT WATER RECIRCULATION SYSTEM IS PROVIDED.

### PLUMBING PIPE MATERIALS SCHEDULE

PIPING SYSTEM	PIPING MATERIAL
SANITARY SEWER BELOW GRADE	SCHEDULE 40 DWV PVC
SANITARY DRAIN AND VENTS ABOVE GRADE	SCHEDULE 40 DWV PVC*
DOMESTIC HOT & COLD WATER BELOW GRADE	COPPER, TYPE "K" SOFT
DOMESTIC HOT & COLD WATER ABOVE GRADE	COPPER, TYPE "L" HARD DRAWN
HOT WATER PIPE INSULATION	1" RIGID FIBER GLASS

\*SCHEDULE 40 DWV PVC SHALL NOT BE USED IN RETURN AIR PLUMBING, WHERE CEILING PLUMBING ARE USED FOR RETURN AIR, CONTRACTOR SHALL ONLY USE BELL AND SPIGOT SERVICE WEIGHT CAST IRON PIPE.

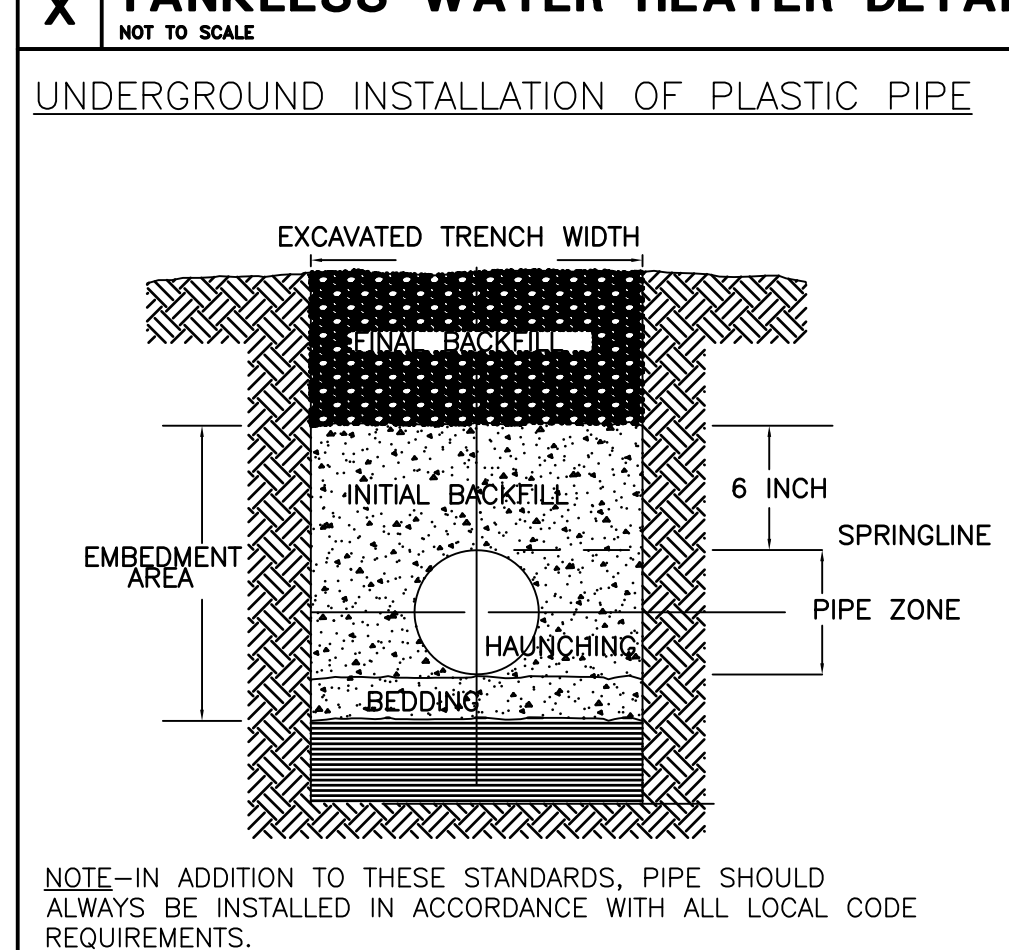
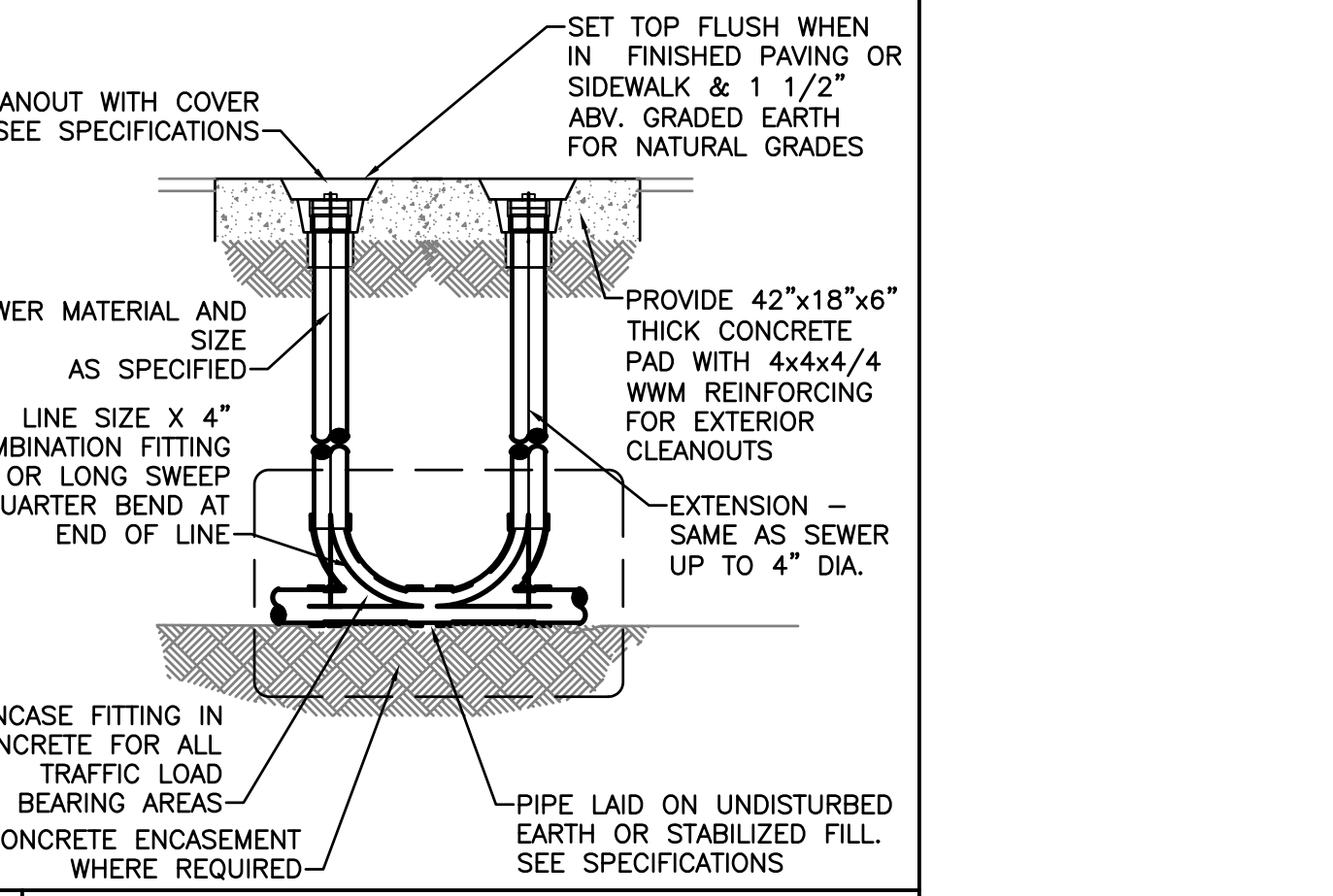
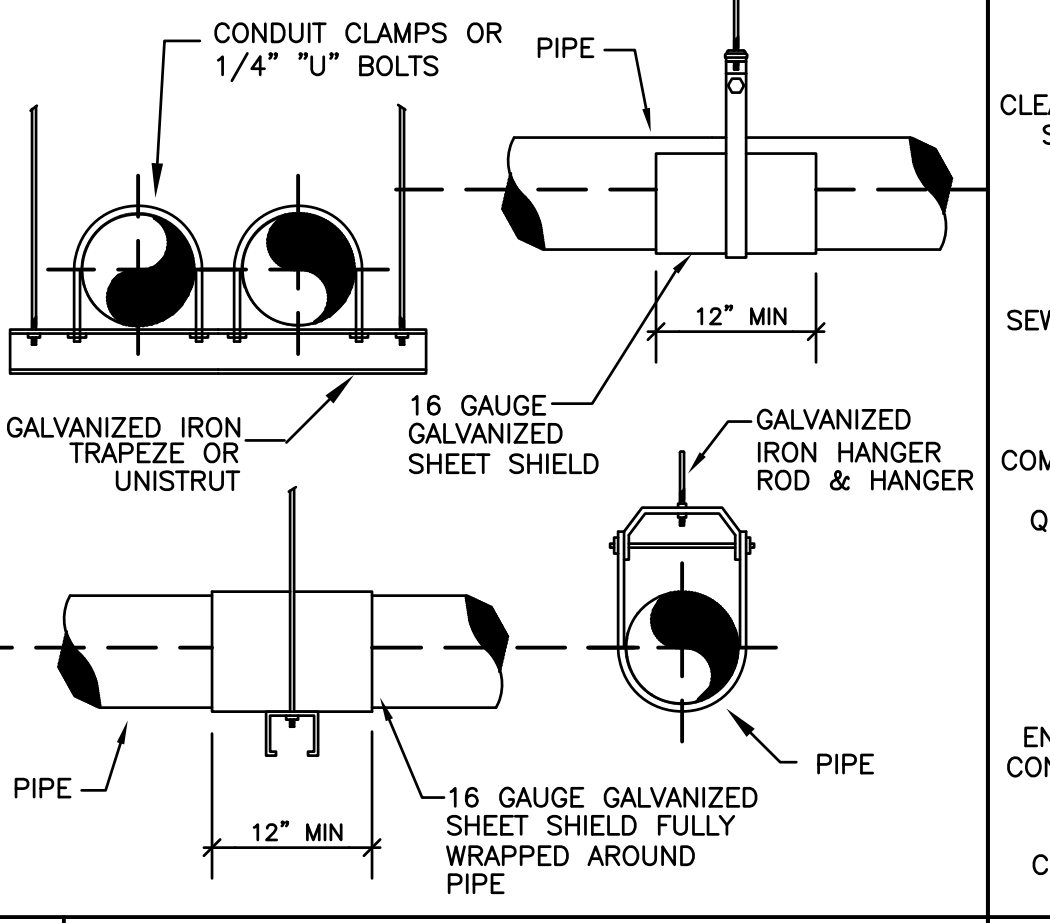
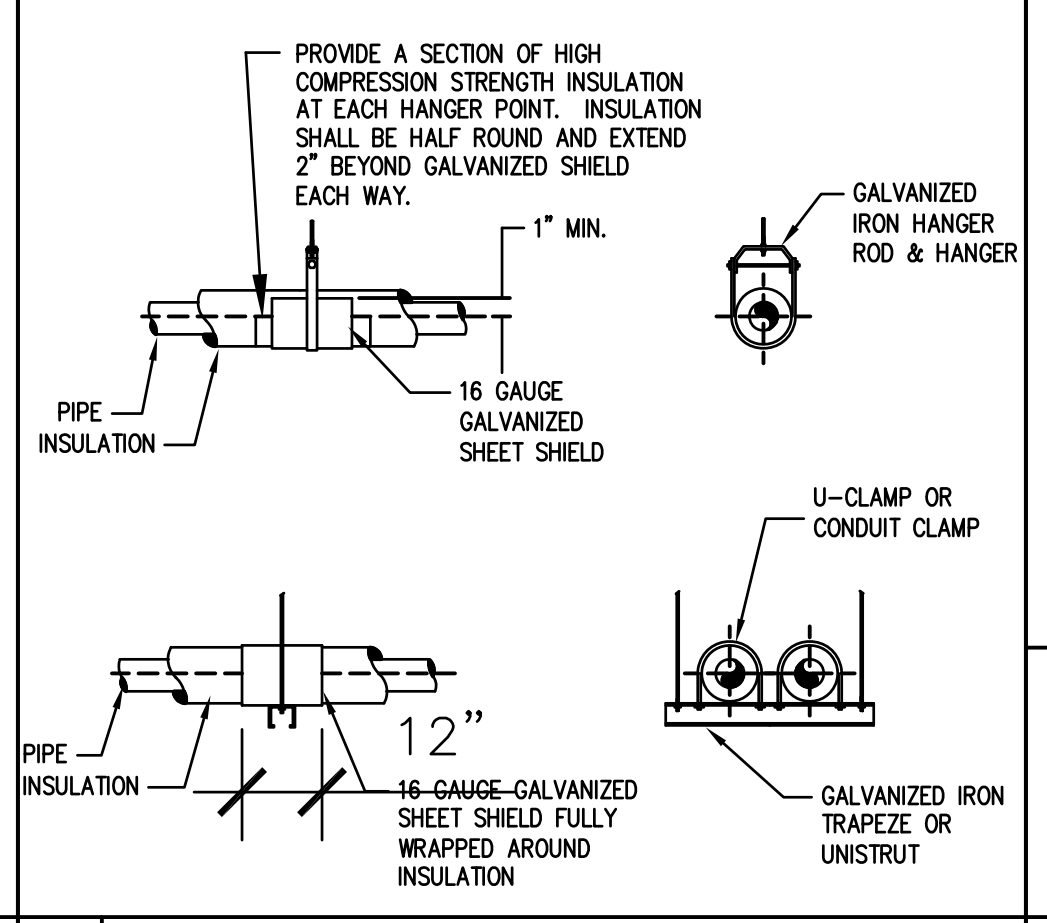
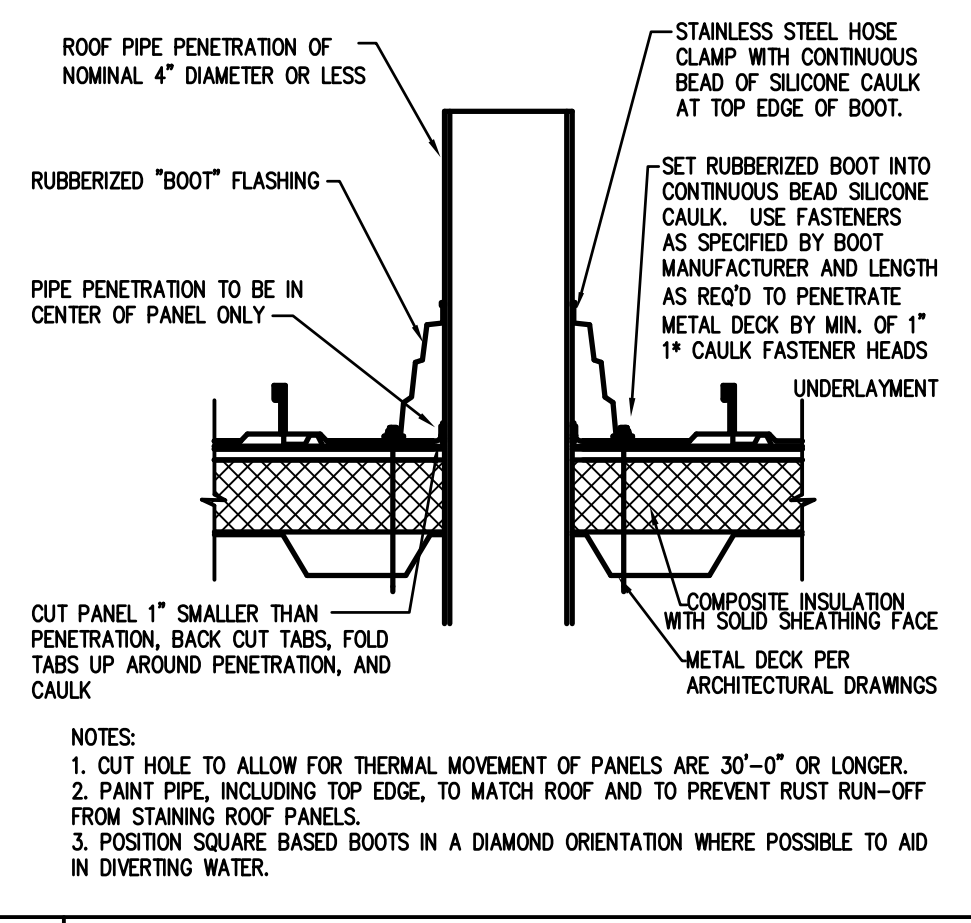
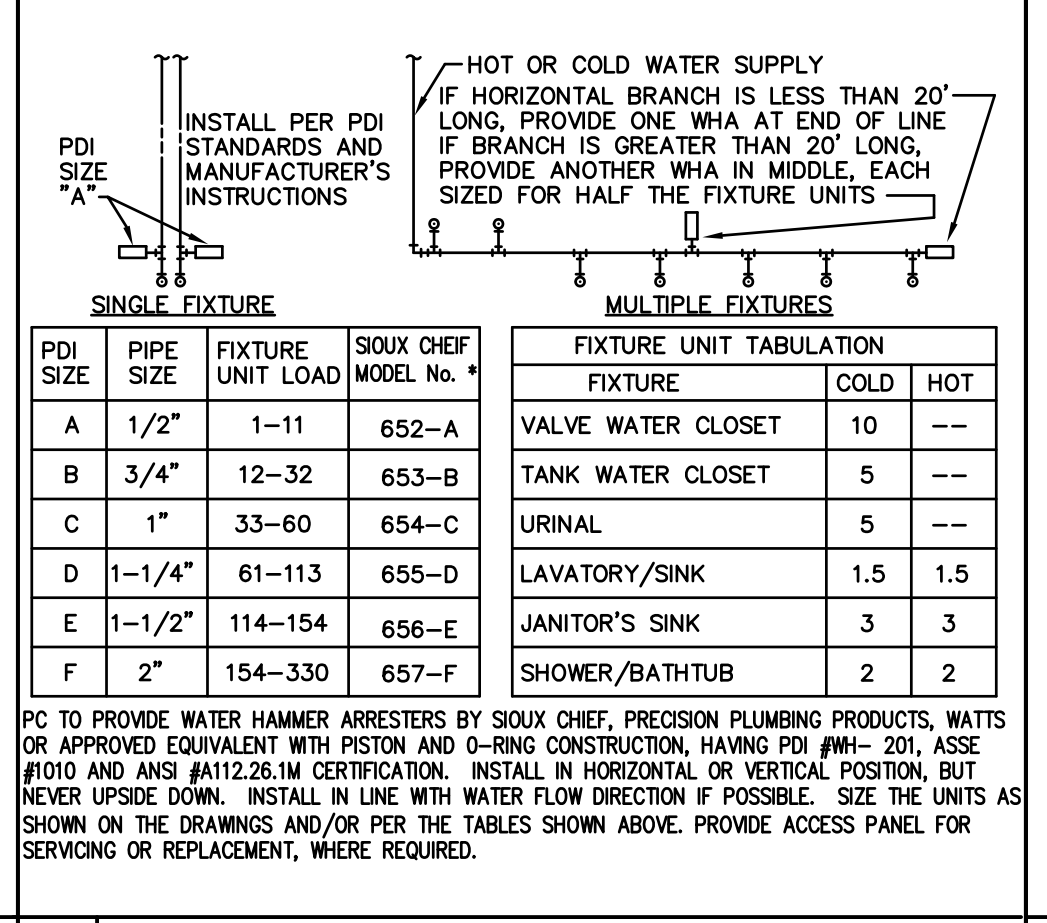
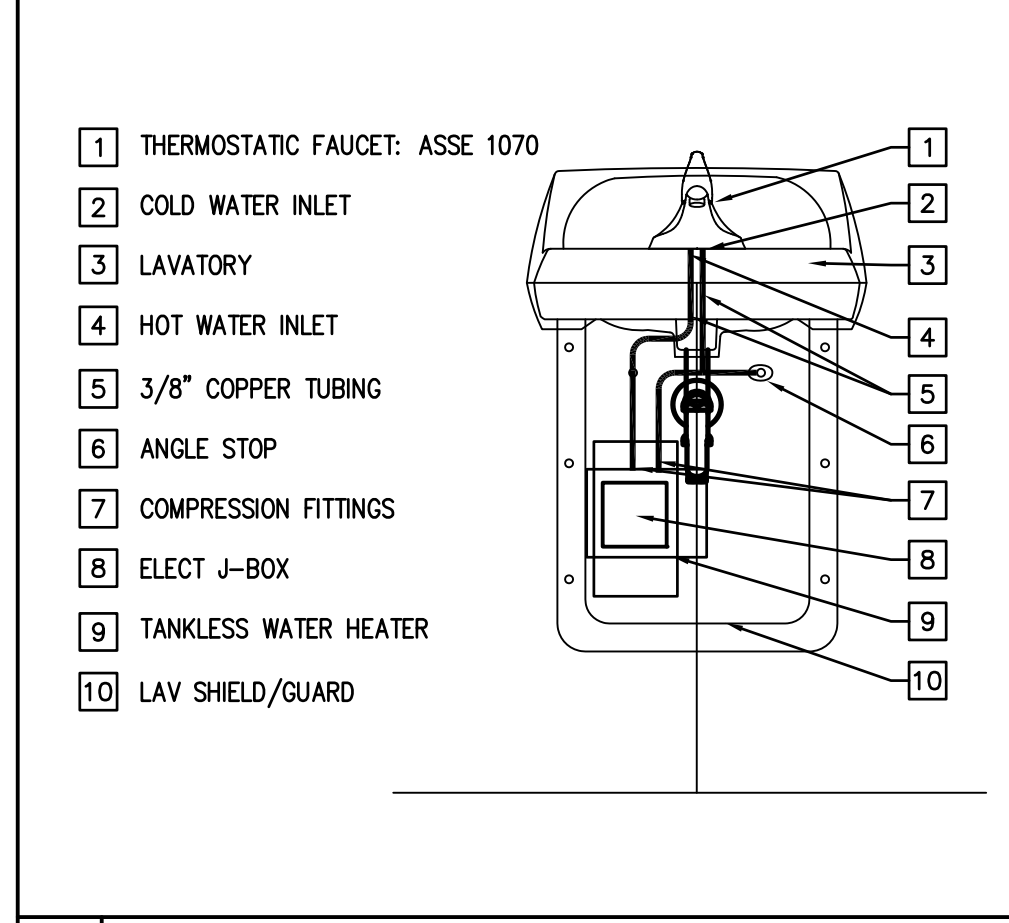


### PLUMBING FIXTURE UNITS

FIXTURE	QTY.	DRAINAGE				WATER SUPPLY			
		TRAP SIZE	DFU EA	SDFU	WSFU EA	TOT. WSFU	CW WSFU	HW WSFU	PEAK GPM
WATER CLOSET -- TANK	1	---	4	4	5	5	5	---	1.60
LAVATORY	1	1 1/4"	1	1	2	2	1.50	1.50	0.40
SERVICE SINK	1	2"	2	2	3	3	2.25	2.25	3.00
DRINKING FOUNTAIN	2	1 1/4"	0.50	1.00	0.25	0.50	0.50	---	0.75
(E)LAVATORY	1	1 1/4"	1	1	2	2	2	2	0.40
(E)WATER CLOSET	1	---	4	4	5	5	3	3	1.60
TOTAL FU				13.00		17.50	14.25	8.75	
TOTAL GPM				8.00		19.00	17.00	13.00	
PIPE SIZE				4"		3/4"	3/4"	3/4"	

### PLUMBING FIXTURE SCHEDULE

SYMB.	PLAN MARK	MINIMUM ROUGH-IN SIZES				DESCRIPTION
		WST & VENT	DRAIN	CW	HW	
	ELEC. DRINKING FOUNTAIN (SINGLE COOLER)	2"	1-1/2"	1-1/2"	1/2"	ELKAY No. EZ58 BARRIER-FREE, LEAD FREE WALL MOUNT COOLER, 8.0 GPH CAPACITY, COOLED TO 50°F WITH 80°F AMBIENT WATER TEMP., UNIT SHALL USE 3/7 FL AMPS. WIRED FOR 120V/1/60HZ. POWER. PROVIDE MIFAB FLOOR MOUNTED WATER COOLER SUPPORT SYSTEM. PROVIDE CAST BRASS P-TRAP WITH C.O., STOPS AND SUPPLIES. COLOR TO BE SELECTED BY ARCHITECT. MOUNT AT ADA HEIGHT.
	LAVATORY (WALL HUNG)	2"	1-1/2"	1-1/4"	1/2"	AMERICAN STANDARD NO.0355.012 "LUCERNE" WALL MOUNTED LAVATORY; TAS COMPLIANT, WHITE, FRONT OVERFLOW, CONCEALED WALL CARRIER, 4" O.C. TAPPING; MIFAB MC-41 SERIES FLOOR MOUNTED CONCEALED ARM CARRIER WITH TWO UPRIGHTS; WATTS P1070 FAUCET; C.P. 0.5 AERATOR; DECK PLATE, ASSE 1070, SET AT 105°F. WASTE: 1-1/4" 17 GA C.P. BRASS OFFSET TAILPIECE WITH GRID STRAINER, 1-1/4" 17 GA BRASS C.P. ADJ. "P"-TRAP W/C.O. ESCUTCHEON; SUPPLY: C.P. ANGLE SUPPLIES W/STOPS, 3/8" FLEX TUBE RISERS, ESCUTCHEONS; PROVIDE TRUBRO FACTORY CUT LAY SHIELD NO. 2018-AS-1 FOR EXPOSED PIPING. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
	SERVICE SINK (FREE STANDING)	2"	1-1/2"	1-1/2"	1/2"	FIAT No. PA11 LAUNDRY TUB: 20"x24" POLYETHYLENE BOWL W/ LEGS; HANDLE, A10P C.P. FAUCET; BLADE HANDLES, 6" SWING SPOUT, AERATOR; WASTE: 1-1/4" 17 GA C.P. BRASS OFFSET TAILPIECE, 1-1/4" 17 GA BRASS C.P. ADJ. "P"-TRAP W/C.O. ESCUTCHEON; SUPPLY: C.P. ANGLE SUPPLIES W/STOPS, 3/8" FLEX TUBE RISERS, ESCUTCHEONS.
	WATER CLOSET (TANK TYPE)	4"	2"	4"	1/2"	AMERICAN STANDARD 2878.016 "YORKVILLE" FLUSH TANK WATER CLOSET ADA/TAS COMPLIANT, 17"-19" MAX. TOP OF SEAT, ELONGATED, V.C., WHITE, FLOOR MOUNTED, BACK-OUTLET, 1.6 GPF SIPHON FLUSH, BOLT CAPS, CLOSET SEAL, MOUNT WITH HANDLE AT WIDE SIDE OF STALL; CHURCH 255550 SEAT; ELONGATED, PLASTIC, WHITE, OPEN FRONT; SS POSTS, SELF SUSTAINING CHECK HINGE; SUPPLY: C.P. ANGLE SUPPLY WITH STOP, 3/8" FLEX TUBE RISER, ESCUTCHEON.
	TANKLESS WATER HEATER (SINGLE LAVATORY)	---	---	---	3/8"	EMAX No. SP2412 TANKLESS WATER HEATER; REPLACEABLE NICKEL CHROME CARTRIDGE ELEMENT, 150 PSI RATED, 3/4" NPT CONNECTIONS, FACTORY SET AT 110°F, 0.3 GPM TURN ON, 2.4 KW, 120/1/60, 33°F TEMP RISE AT 0.5 GPM. MOUNT UNDER LAVATORY.
	POINT OF USE WATER HEATER (SINGLE SINK)	---	---	---	3/4"	EMAX No. EM76 MINI TANK WATER HEATER; 6 GALLON CAPACITY; REPLACEABLE ELEMENT, 150 PSI RATED, 3/4" NPT CONNECTIONS, ADJ. TEMP. 50°F - 140°F, ASME T&P VALVE, 1440 WATTS @ 120/1/60, 12 GPH @ 60 F TEMP RISE, HARDWIRED, 5 YR WARRANTY, MOUNT ABOVE SERVICE SINK.
	WATER HAMMER ARRESTOR (WHA)	SEE PLAN	SEE PLAN	SEE PLAN	---	SILOUX CHIEF MODEL 652A, TYPE 1 COPPER TUBE, POLY PISTON WITH TWO EPDM O-RINGS. INSTALL TO MANUFACTURER'S SPECIFICATIONS.
	DOUBLE CLEANOUT (DCO)	SEE PLAN	SEE PLAN	SEE PLAN	---	WADE 6000-75 EXTERIOR CLEANOUT; C.I. CLEANOUT AND HOUSING, BRONZE TAPER PLUG, ROUND SCORATED C.I. TOP, ANCHOR IN CONCRETE PAD 12"x12"x8" DEEP, FLUSH WITH GRADE OR SET FLUSH WITH SIDEWALK.
	EXTERIOR CLEANOUT (ECO)	SEE PLAN	SEE PLAN	SEE PLAN	---	WADE 6000-75 EXTERIOR CLEANOUT; C.I. CLEANOUT AND HOUSING, BRONZE TAPER PLUG, ROUND SCORATED C.I. TOP, ANCHOR IN CONCRETE PAD 12"x12"x8" DEEP, FLUSH WITH GRADE OR SET FLUSH WITH SIDEWALK.
	FLOOR CLEANOUT (FCO)	SEE PLAN	SEE PLAN	SEE PLAN	---	SILOUX CHIEF 852-XPV "PVC" FLOOR CLEANOUT; SIZE PVC HUB, C.I. MED. DUTY LOOSE SET COVER, VANDAL-PROOF SCREWS, THREADED PVC PLUG; MOUNT COVER FLUSH WITH FLOOR.
	FLOOR DRAIN (FD) (REST ROOMS)	2"	1-1/2"	2"	---	WADE 1100-A-1 FLOOR DRAIN; CAST IRON DRAIN BODY WITH 1/2" IPS TRAP PRIMER TAP, BOTTOM OUTLET, CLAMPING COLLAR, WEEP HOLES, V.P. SCREWS, ADJUSTABLE TOP; STRAINER: 6" DIAMETER, LIGHT DUTY, NICKEL BRONZE, HEEL PROOF PERFORATED; DEEP SEAL TRAP. PROVIDE PROSET SYSTEMS TRAP GUARD INSERT.
	HUB DRAIN (HD)	2"	1-1/2"	2"	---	PROSET No.TG23HD PVC HUB DRAIN WITH 3" HUB AND 2" TRAP GUARD AND DEEP SEAL TRAP.
	WALL CLEANOUT (WCO)	SEE PLAN	SEE PLAN	SEE PLAN	---	ZURN NO. ZS1469-7-V-P ROUND STAINLESS STEEL ACCESS COVER COMPLETE WITH SECURING SCREW. PROVIDE CLEANOUT PLUG TO MATCH PIPE MATERIAL.

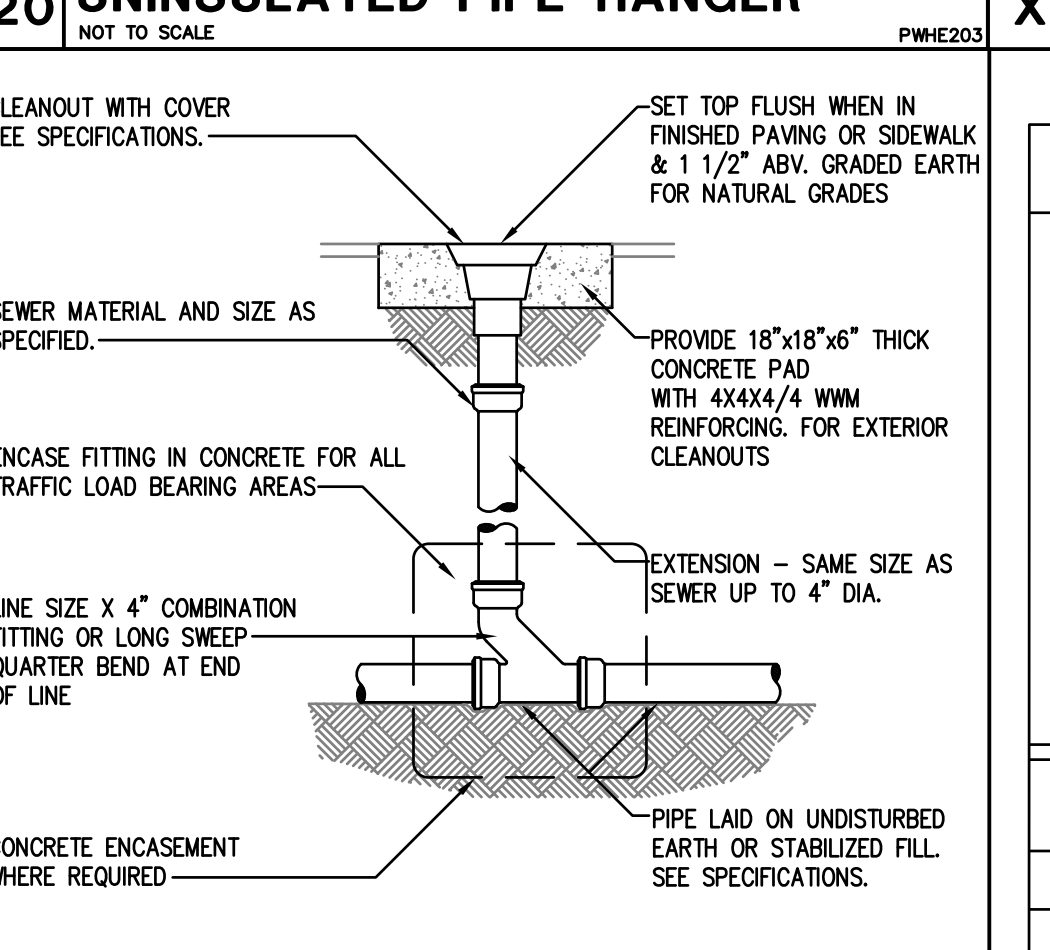
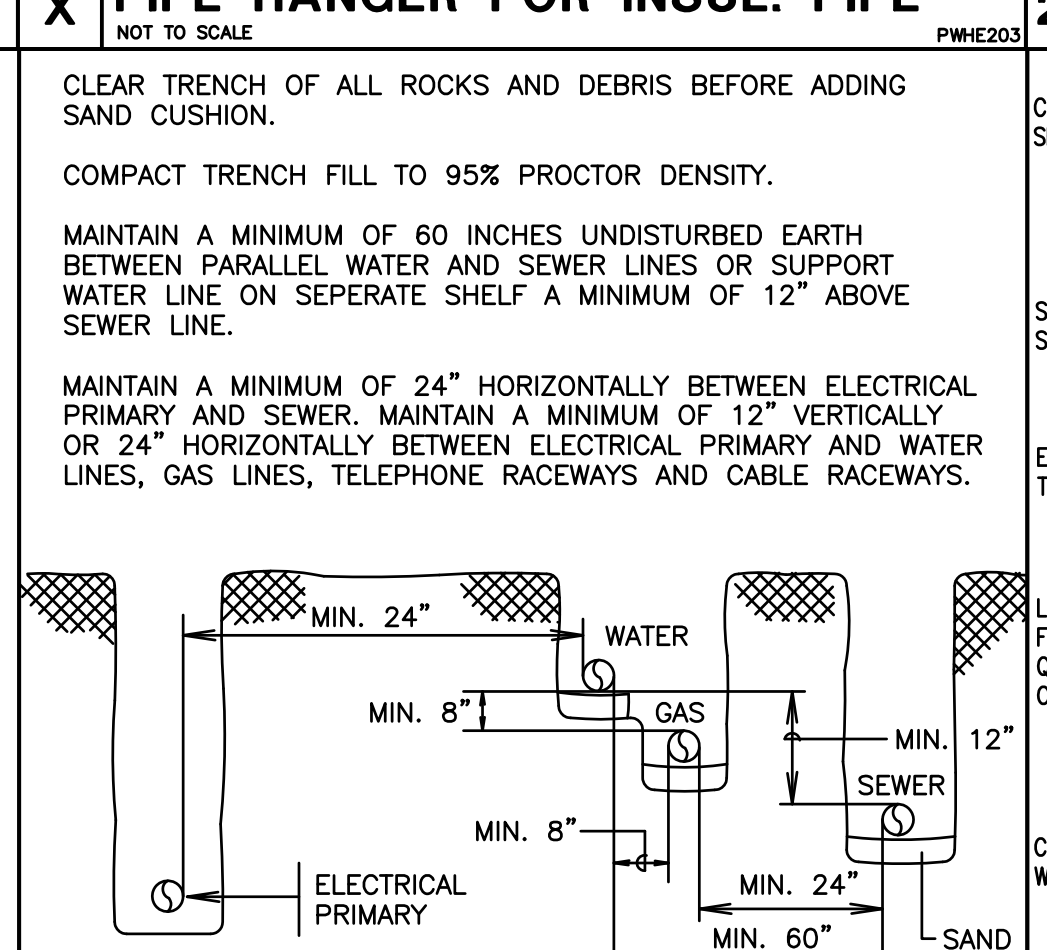


PLASTIC PIPE SHOULD ALWAYS BE BURIED IN STRICT ACCORDANCE WITH THE ASTM STANDARD RELEVANT TO THE TYPE OF PLASTIC PIPING SYSTEM BEING INSTALLED. THOSE STANDARDS ARE:

ASTM D2321 STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS.

ASTM D2774 STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING.

- THE MINIMUM WIDTH OF THE TRENCH SHOULD BE THE PIPE OD (OUTSIDE DIAMETER) PLUS 16 INCHES OR THE PIPE OUTSIDE DIAMETER TIMES 1.25 PLUS 12 INCHES. THIS WILL ALLOW ADEQUATE ROOM FOR JOINING THE PIPE, SNAKING THE PIPE IN THE TRENCH TO ALLOW FOR EXPANSION AND CONTRACTION WHERE APPROPRIATE AND SPACE FOR BACKFILLING AND COMPACTION OF BACKFILL. THE SPACE BETWEEN THE PIPE AND TRENCH WALL MUST BE WIDER THAN THE COMPACTION EQUIPMENT USED TO COMPACT THE BACKFILL.
- PROVIDE A MINIMUM OF 4 INCHES OF FIRM, STABLE AND UNIFORM BEDDING MATERIAL IN THE TRENCH BOTTOM. IF ROCK OR UNYIELDING MATERIAL IS ENCOUNTERED, A MINIMUM OF 6 INCHES OF BEDDING SHALL BE USED. BLOCKING SHALL NOT BE USED TO CHANGE PIPE GRADE OR TO INTERMITTENTLY SUPPORT PIPE OVER LOW SECTIONS IN THE TRENCH.
- PIPE SHOULD BE SURROUNDED WITH AGGREGATE MATERIAL WHICH CAN BE EASILY WORKED AROUND THE SIDES OF THE PIPE. BACKFILLING TO BE PERFORMED IN LAYERS OF 6 INCHES WITH EACH LAYER BEING SUFFICIENTLY COMPACTED TO 85% TO 95% COMPACTION.
- A MECHANICAL TAMPER IS RECOMMENDED FOR COMPACTING SAND AND GRAVEL. THESE MATERIALS CONTAIN FINE-GRAINS, SUCH AS SILT AND CLAY. IF A TAMPER IS NOT AVAILABLE, COMPACTING SHOULD BE DONE BY HAND.
- THE TRENCH SHOULD BE COMPLETELY FILLED. THE BACKFILL SHOULD BE PLACED AND SPREAD IN UNIFORM LAYERS TO PREVENT ANY UNFILLED SPACES OR VOIDS. LARGE ROCKS, STONES, FROZEN CLODS, OR OTHER LARGE DEBRIS SHOULD BE REMOVED. STONE BACKFILL SHALL PASS THROUGH AN 1-1/2" SIEVE. ROCK SIZE SHOULD BE ABOUT ONE-TENTH OF THE PIPE OUTSIDE DIAMETER. HEAVY TAMPERS OR ROLLING EQUIPMENT SHOULD ONLY BE USED TO CONSOLIDATE THE FINAL BACKFILL.
- TO PREVENT DAMAGE TO THE PIPE AND DISTURBANCE TO PIPE EMBEDMENT, A MINIMUM DEPTH OF BACKFILL ABOVE THE PIPE SHOULD BE MAINTAINED. PIPE SHOULD ALWAYS BE INSTALLED BELOW THE FROST LEVEL. TYPICALLY, IT IS NOT ADVISABLE TO ALLOW VEHICULAR TRAFFIC OR HEAVY CONSTRUCTION EQUIPMENT TO TRAVERSE THE PIPE TRENCH.



### PLUMBING ENERGY NOTES:

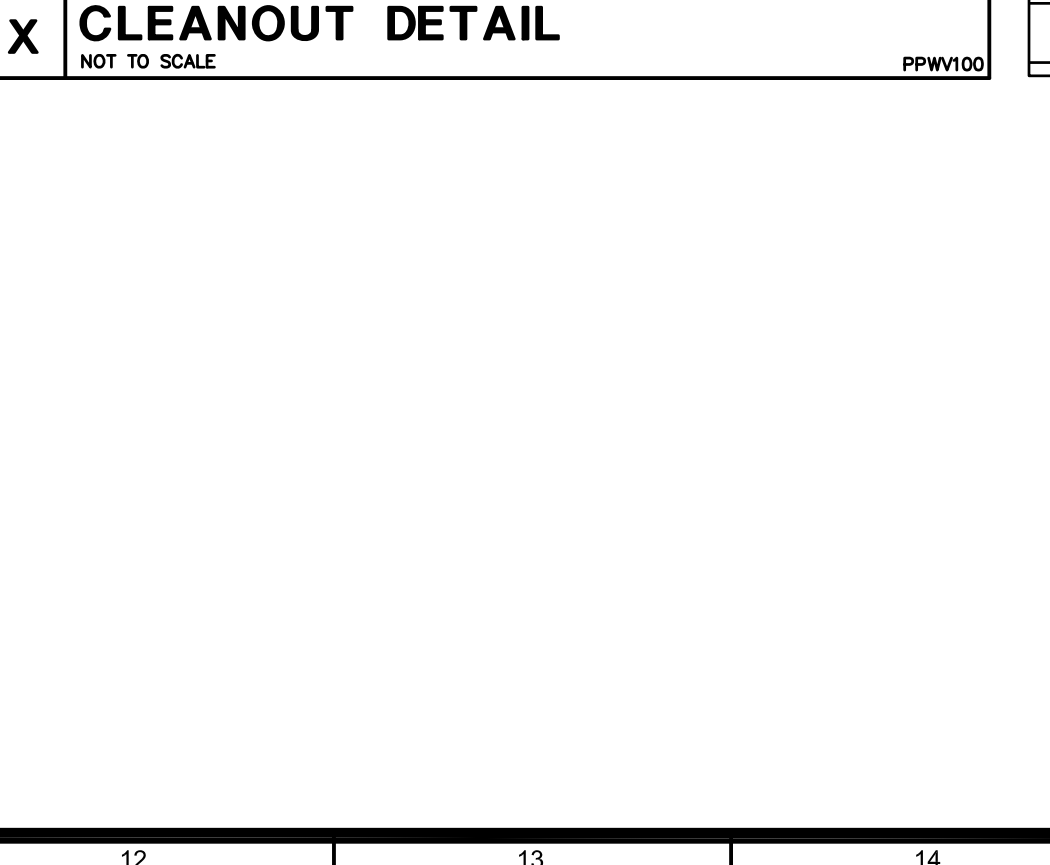
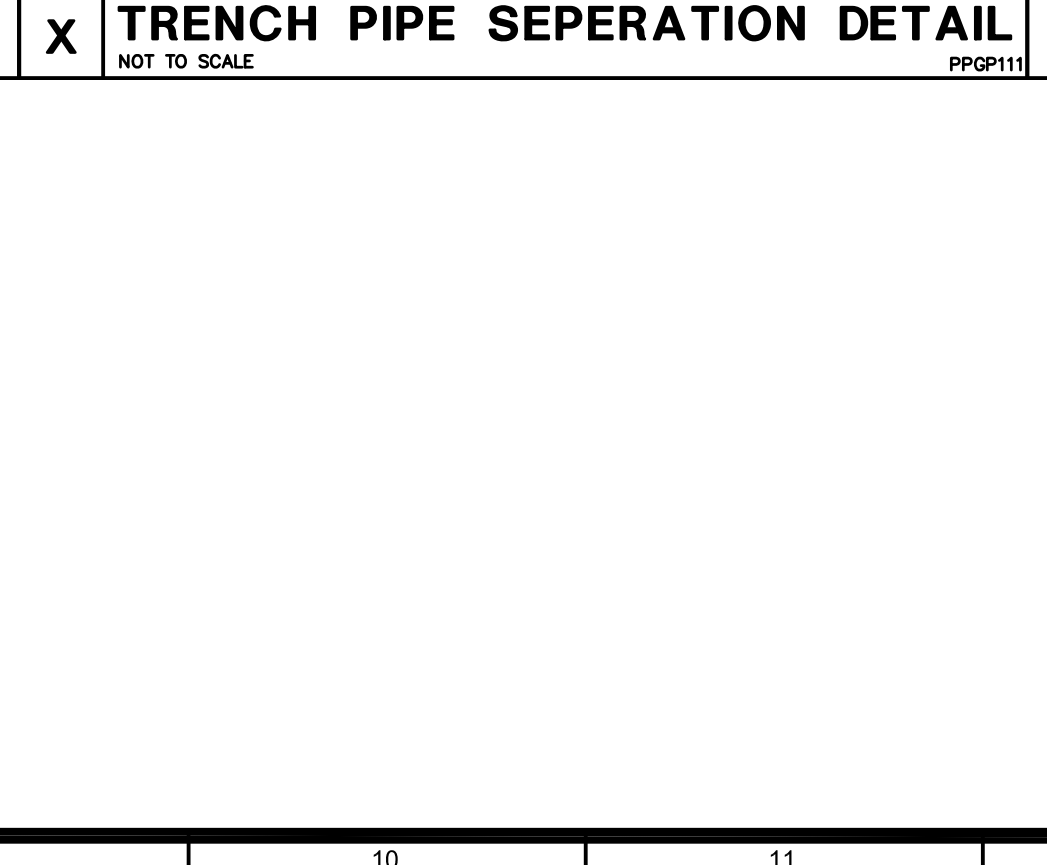
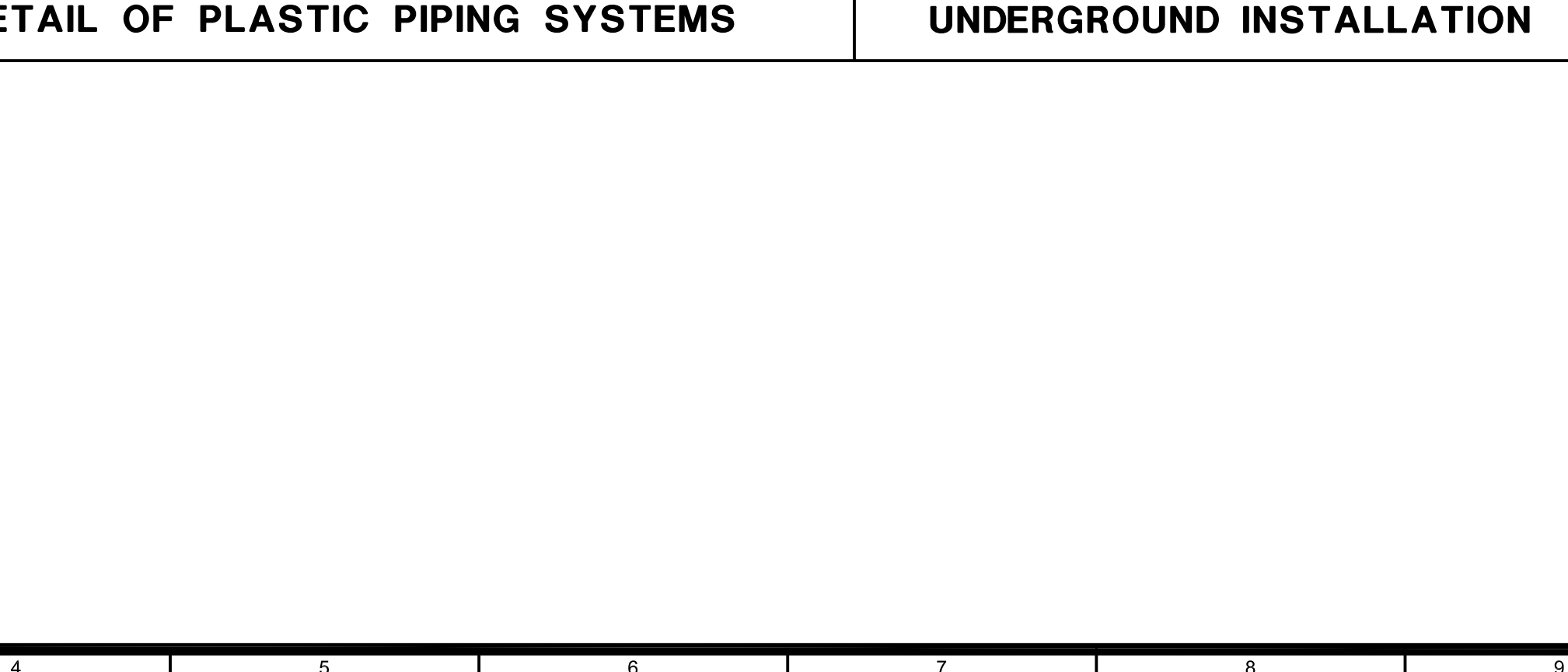
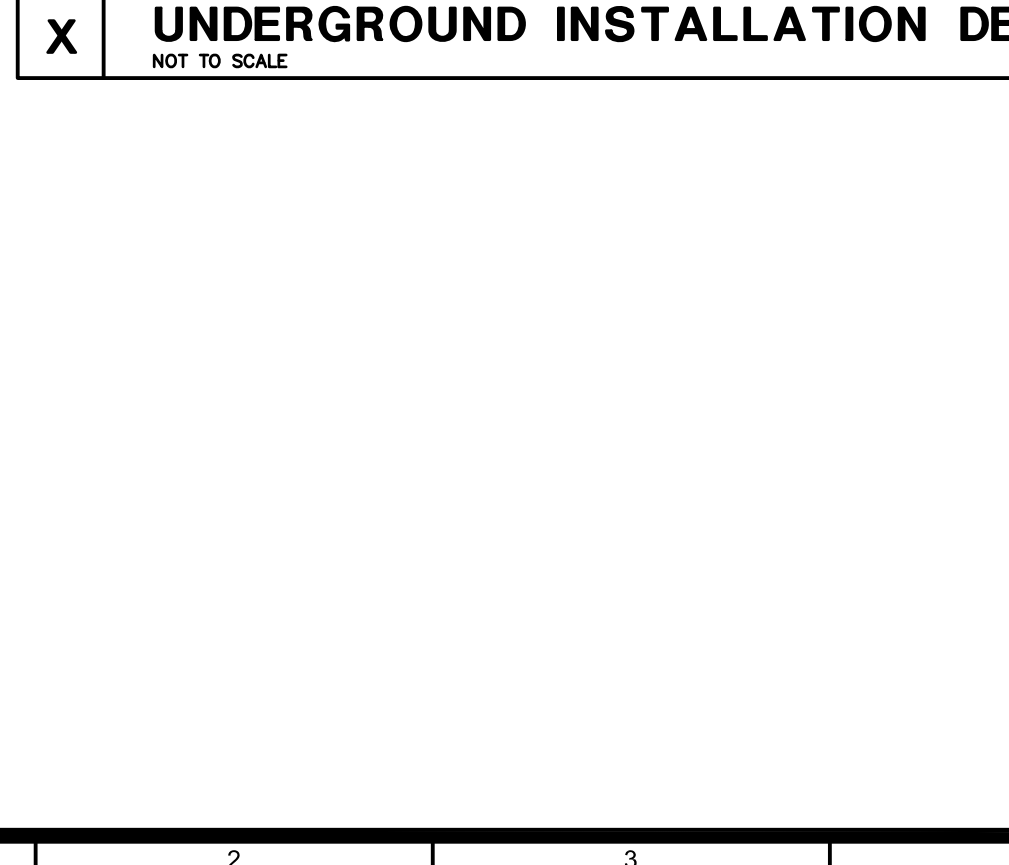
THE HOT WATER HEATING SYSTEM SHALL BE BY AN ELECTRIC WATER HEATER WITH A MAXIMUM OF 3'-0" OF 3/8" TUBING TO LAVATORIES AND 21'-0" OF 3/4" TUBING TO ALL OTHER FIXTURES.

ELECTRIC WATER HEATERS LESS THAN 12KW SHALL HAVE A PERFORMANCE RATING OF 0.97. REFER TO THE 2015 IECC SERVICE WATER HEATING FOR OTHER REQUIREMENTS.

THE PLUMBING CONTRACTOR SHALL REVIEW THE SYSTEM COMMISSIONING SPECIFICATION ON THIS SHEET FOR REQUIREMENTS AND PARTICIPATION IN THE COMMISSIONING PROCESS. FAILURE TO COMPLY OR PARTICIPATE MAY INCUR ADDITIONAL COST TO THE CONTRACTOR.

INSULATION SHALL BE PROVIDED FOR PIPING AS NOTED IN THE TABLE BELOW. THE FIRST 8' OF PIPING IN NONCIRCULATING SYSTEMS SERVED BY EQUIPMENT W/O INTEGRAL HEAT TRAPS SHALL BE INSULATED WITH 5" OR R-4 INSULATION.

MINIMUM PIPE INSULATION (inch)	
	NORMAL PIPE DIA.
	< 1.5"
	≥ 1.5"
HOT WATER	1
	1-1/2





TYPE	CATALOG #	LAMPS	VOLTAGE	DESCRIPTION
A	ACUTY #2GT8-2-32-A12-MVOLT-GEB10IS	2-32WT8	120V	2X4 LENSED TROFFER
AX	ACUTY #2GT8-2-32-A12-MVOLT-GEB10IS-EL	2-32WT8	120V	2X4 LENSED TROFFER
B	ACUTY #2GT8-3-32-A12-MVOLT-GEB10IS	3-32WT8	120V	2X4 LENSED TROFFER
BK	ACUTY #2GT8-3-32-A12-MVOLT-GEB10IS-EL	3-32WT8	120V	2X4 LENSED TROFFER
C	ACUTY #2GT8-4-32-A12-MVOLT-GEB10IS	4-32WT8	120V	2X4 LENSED TROFFER
CX	ACUTY #2GT8-4-32-A12-MVOLT-GEB10IS-EL	4-32WT8	120V	2X4 LENSED TROFFER
D	ACUTY #LB-4-32-MVOLT-GEB10IS	4-32WT8	120V	FLUORESCENT WRAP AROUND
DX	ACUTY #LB-4-32-MVOLT-GEB10IS-EL	4-32WT8	120V	FLUORESCENT WRAP AROUND W/ BATT PACK
EX	ACUTY #LHM-5-W-R	INCL	120V	EXIT LIGHT W/ EMERG HEADS & BATTERY
EM	ACUTY #ELM2	INCL	120V	EMERGENCY LIGHT W/ BATTERY PACK
G	ACUTY #C-2-32-MVOLT-GEB10IS-WG	2-32WT8	120V	FLUORESCENT STRIP W/ WIREGUARD
GX	ACUTY #C-2-32-MVOLT-GEB10IS-WG-EL	2-32WT8	120V	FLUORESCENT STRIP W/ WIREGUARD & BATTERY
H	ACUTY #LB-2-32-MVOLT-GEB10IS	2-32WT8	120V	FLUORESCENT WRAP AROUND
HX	ACUTY #LB-2-32-MVOLT-GEB10IS-EL	2-32WT8	120V	FLUORESCENT WRAP AROUND W/ BATTERY PACK

**LIGHTING KEY NOTES:**

- CIRCUIT TO UNSWITCHED SIDE OF CIRCUIT C-4.
- RELOCATED LIGHT FIXTURE. MODIFY CIRCUITRY SO THAT TWO NEW 3-WAY SWITCHES CONTROL FIXTURE.
- LIGHTS IN THIS AREA ONLY TURNED ON MANUALLY BY OCCUPANT VIA OCCUPANCY SENSOR OR #POD SWITCH INDICATED.
- SIDE LIGHT DAYLIGHT ZONE INCLUDES LIGHTING WITH LESS THAN 150W CONNECTED LOAD. AUTO DAYLIGHTING CONTROLS NOT REQUIRED PER 2015 IECC #C405.2.3.1.

**LIGHTING CONTROL NARRATIVE:**

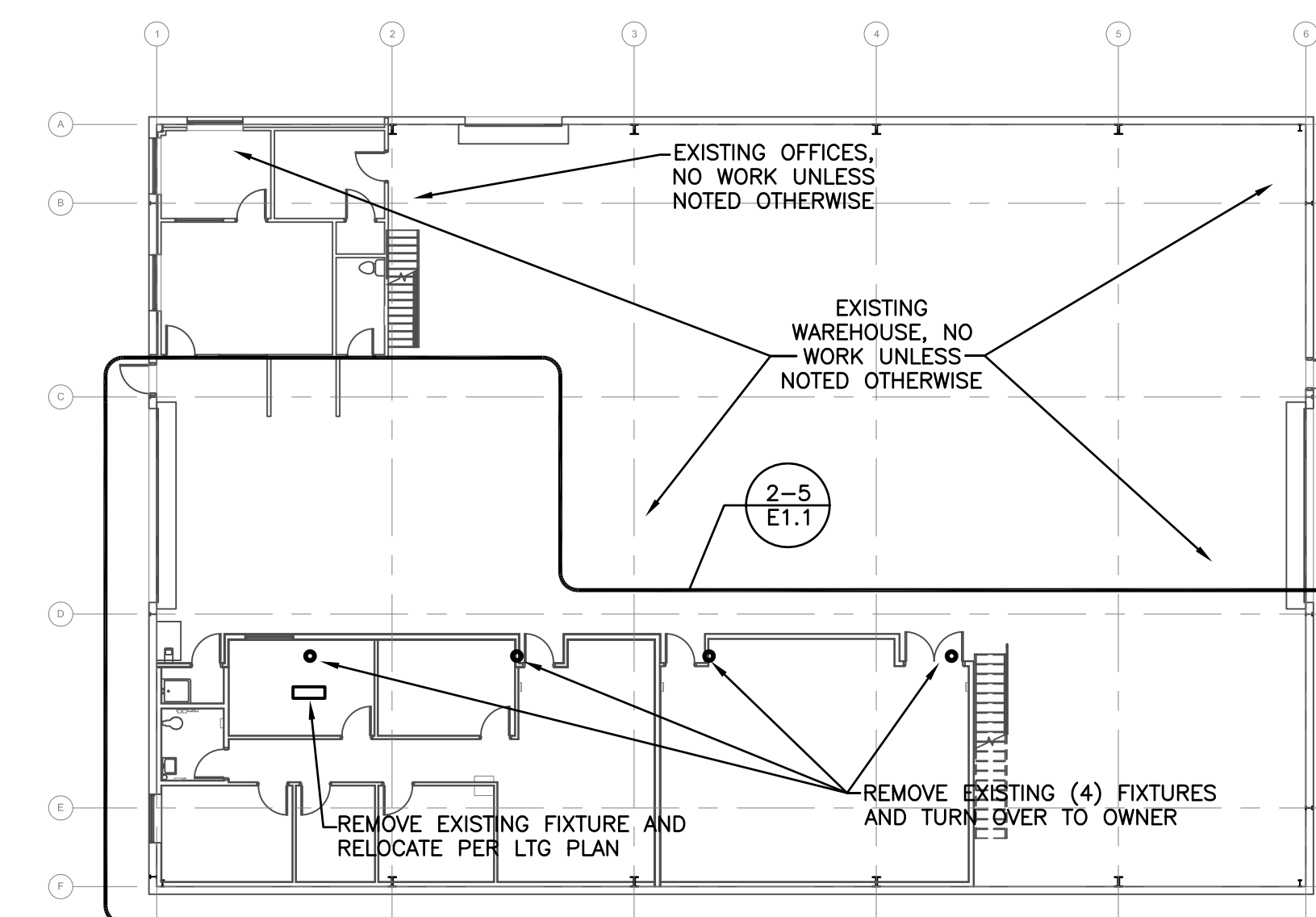
- OCCUPANT SENSOR CONTROLS SHALL BE UTILIZED THROUGHOUT FOR INTERIOR LIGHTING CONTROL PER E1.1. EXCEPT IN AREAS FOR WHICH EXCEPTIONS APPLY. OCCUPANCY SENSORS AND DIGITAL BUTTON CONTROLS WILL REQUIRE MANUAL ON FOR LIGHTS IN REQUIRED AREAS.
- NO DAYLIGHT RESPONSIVE CONTROLS ARE REQUIRED DUE TO REDUCED CONNECTED LOAD WITHIN SIDEWALL DAYLIGHT ZONES. REFER TO E1.1 FOR NOTE REGARDING DAYLIGHTING CONTROLS.
- EXTERIOR LIGHTING IS EXISTING AND NOT WITHIN SCOPE OF WORK.
- REDUCED LIGHTING POWER DENSITY (IECC C406.3) METHOD WILL BE UTILIZED TO SATISFY THE ADDITIONAL EFFICIENCY PACKAGE OPTION IN IECC C406.

**GENERAL NOTES:**

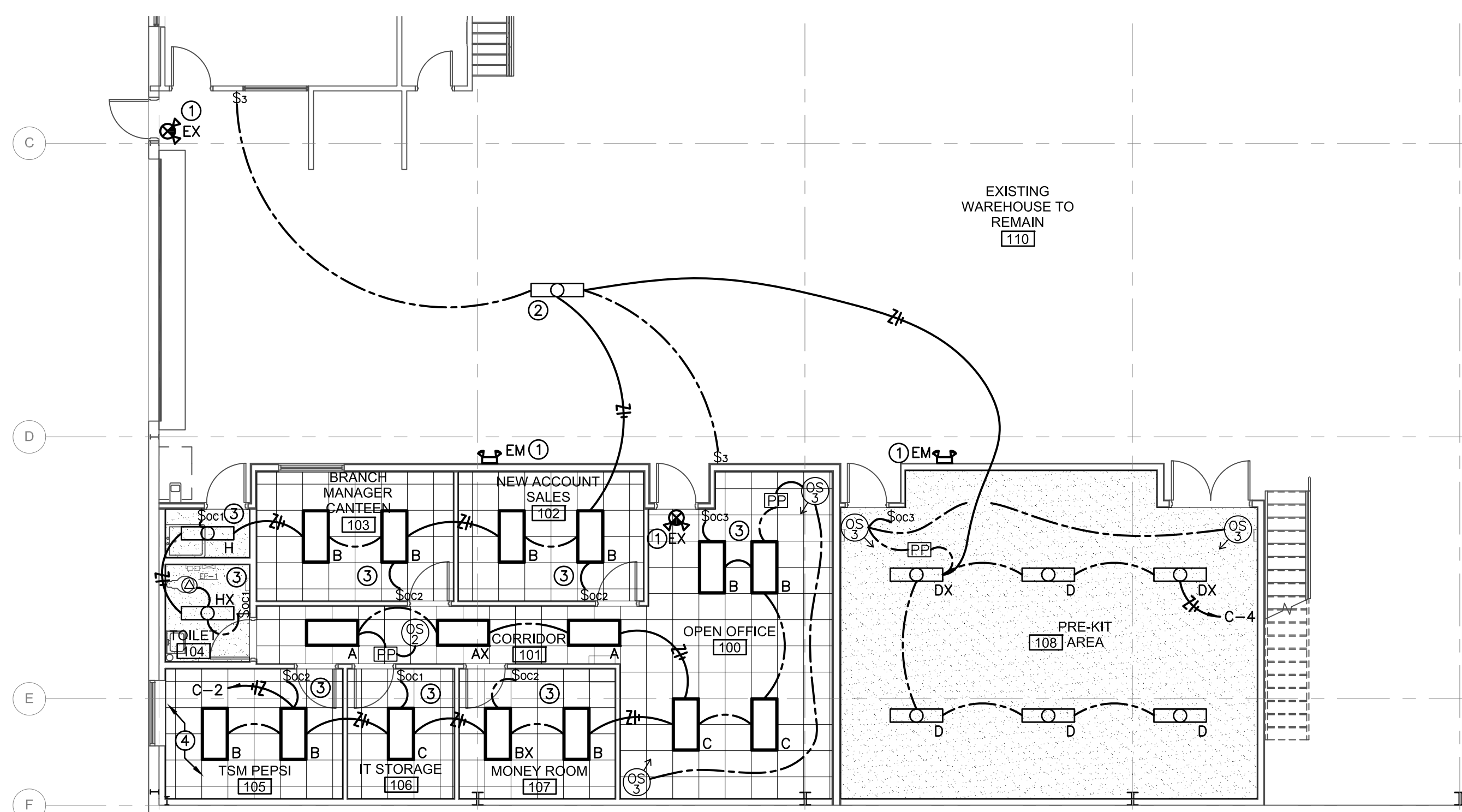
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE JOB SITE BEFORE COMMENCING ANY PHASE OF THE WORK. ADJUSTMENTS FOR FIT AND COORDINATION SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER. NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES OR OMISSIONS PRIOR TO COMMENCEMENT OF THE CONTRACT WORK.
- CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL, CIVIL, MECHANICAL & STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ANY ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.
- ALL CONDUIT SHALL BE AS STRAIGHT AS POSSIBLE AND PARALLEL OR PERPENDICULAR TO BUILDING LINES.
- ALL WORK SHALL COMPLY WITH CURRENTLY ADOPTED VERSION OF NATIONAL ELECTRICAL CODE.
- SEAL ALL WALL, ROOF, AND FLOOR PENETRATIONS WITH UL LISTED FIRE SEALANT.
- ALL CONDUIT SHALL BE ROUTED CONCEALED WITHIN WALLS AND/OR ABOVE CEILINGS, WHERE APPLICABLE.
- REFER TO DETAIL #1/SHEET E2.1 FOR EXACT MOUNTING HEIGHTS OF ALL DEVICES.

**POWER KEY NOTES:**

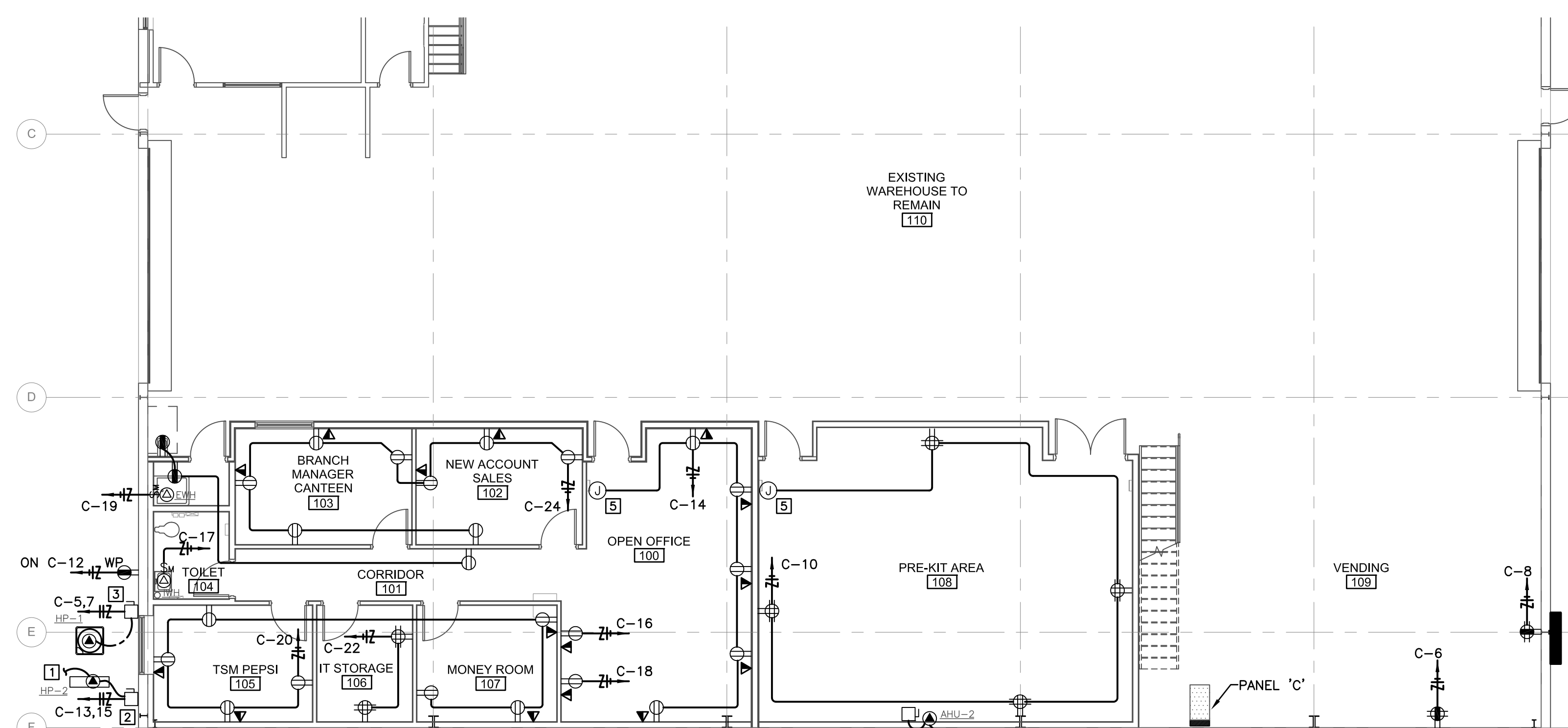
- PROVIDE CONDUCTORS BETWEEN INDOOR AND OUTDOOR UNITS PER MANUFACTURER'S RECOMMENDATIONS.
- 30A/2P/FUSIBLE/N3R DISCONNECT SWITCH.
- 60A/2P/FUSIBLE/N3R DISCONNECT SWITCH.
- EXISTING ELECTRICAL SERVICE TO BE MODIFIED PER NEW ONE-LINE RISER DIAGRAM (REF. SHEET E2.1).
- COORDINATE POWER LOCATION WITH TIME CARD MACHINE.
- 60A/2P/NF/N1 DISCONNECT SWITCH.



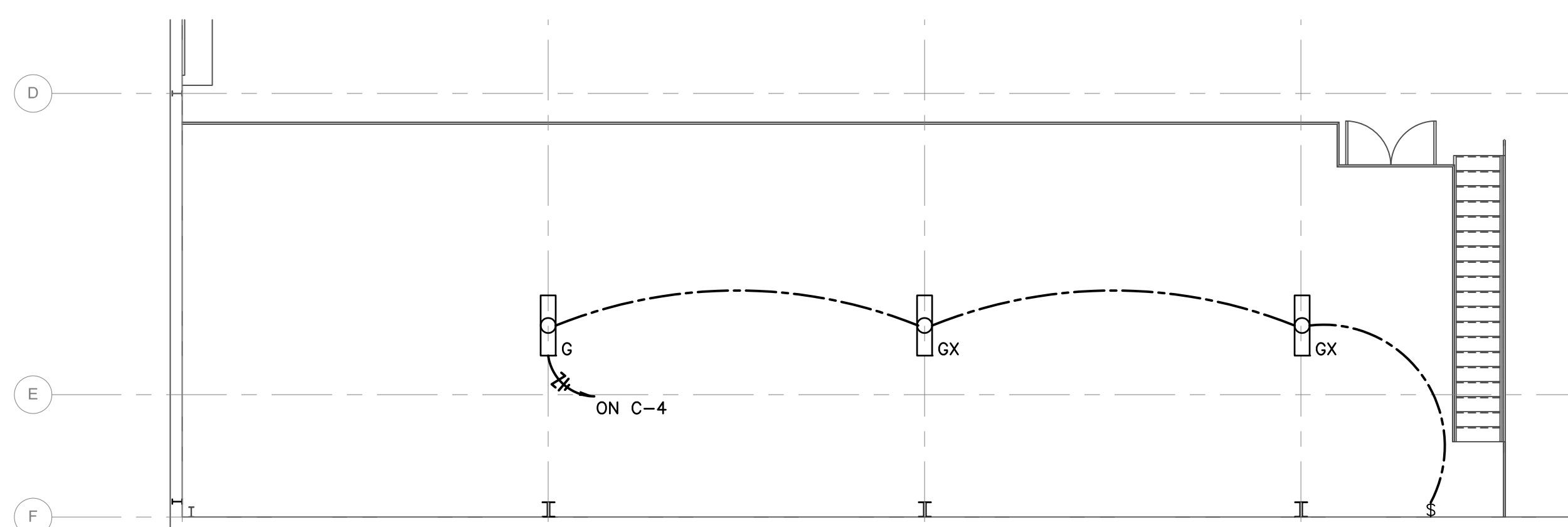
1 OVERALL BUILDING ELECTRICAL PLAN  
1/16" = 1'-0"



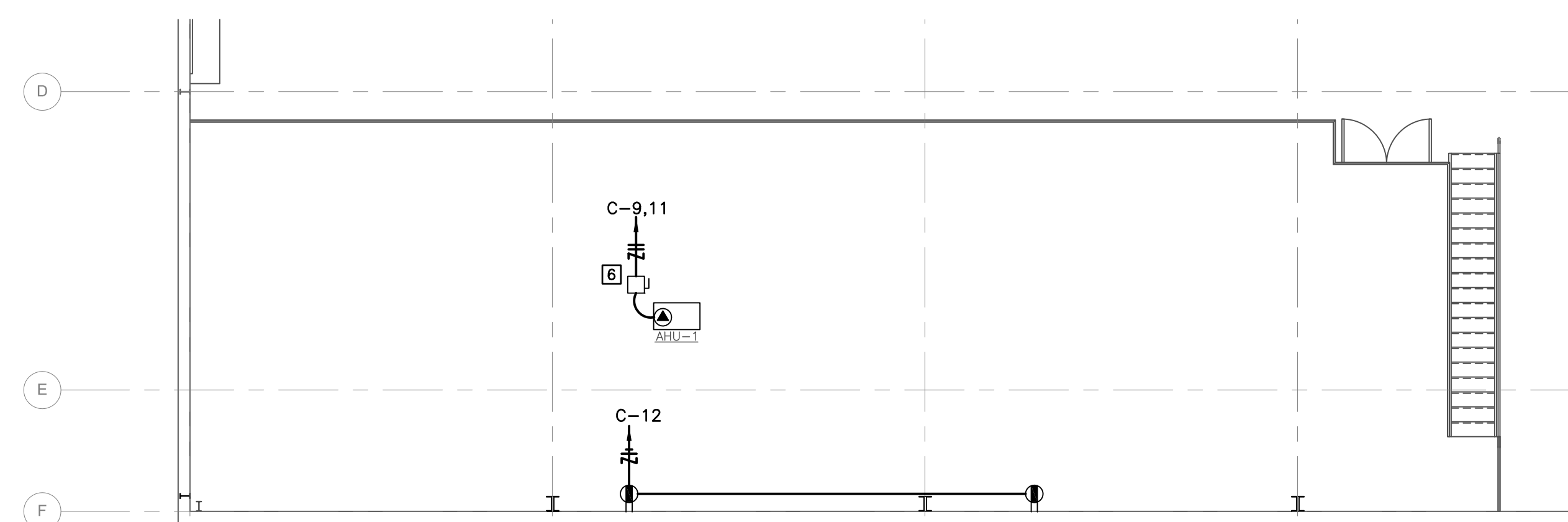
2 1ST FLOOR LIGHTING PLAN  
1/8" = 1'-0"



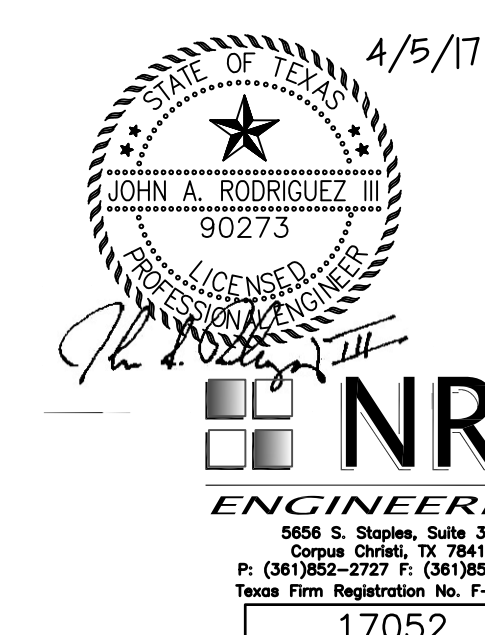
3 1ST FLOOR POWER PLAN  
1/8" = 1'-0"



4 MEZZANINE LIGHTING PLAN  
1/8" = 1'-0"



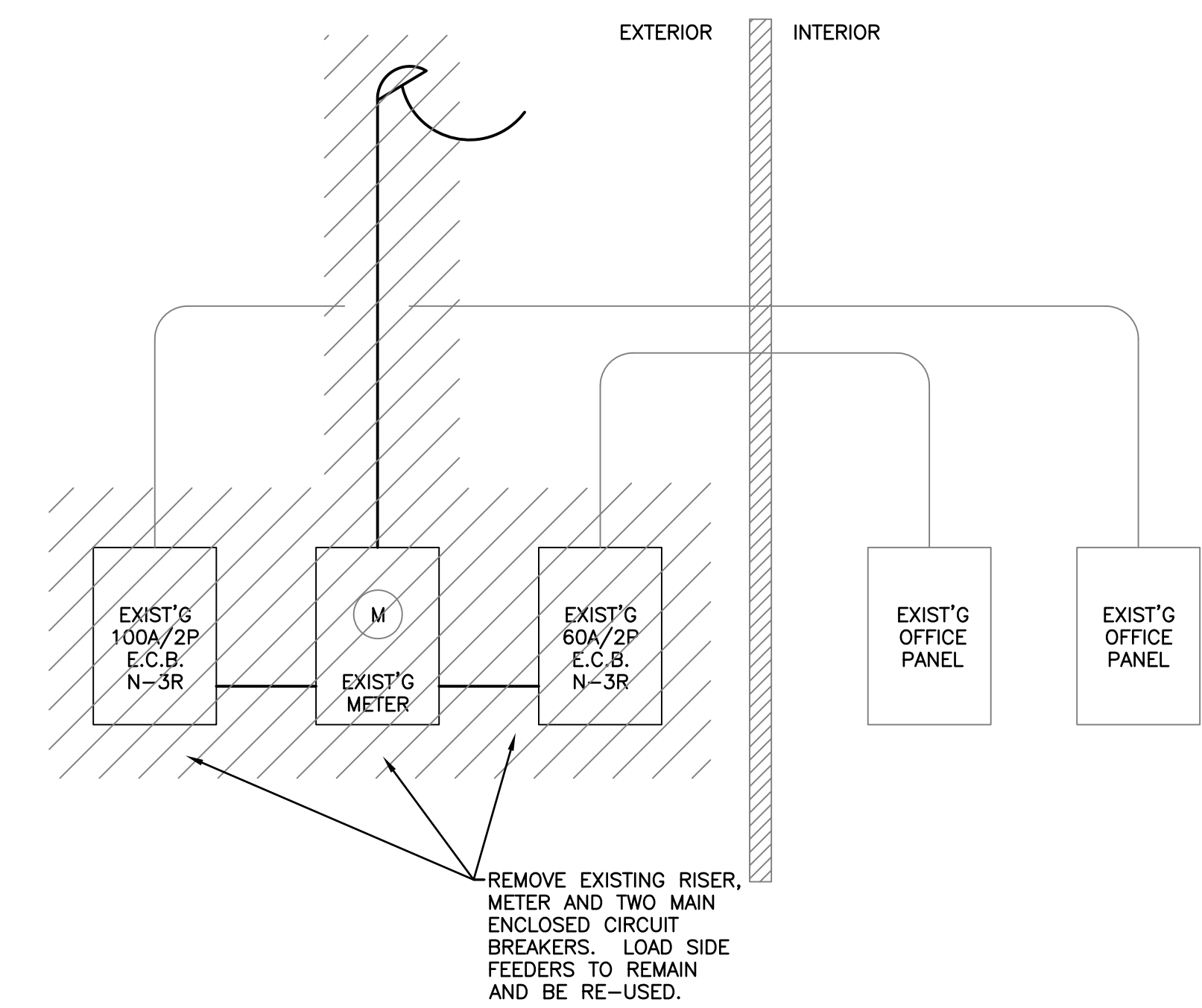
5 MEZZANINE POWER PLAN  
1/8" = 1'-0"



PANEL 'C'											
200 AMP, M.L.O., 120/240V, 1Ø, 3W, S/N, SURFACE, NEMA-1, 10 KAIC											
CKT #	LOAD SERVED	LOAD	CONDUIT & WIRE SIZE	BKR SIZE	A	B	BKR SIZE	CONDUIT & WIRE SIZE	LOAD	LOAD SERVED	CKT #
1					A	B	20/1	#12 AWG	1222	INTERIOR LTG	2
3					A	B	20/1	#12 AWG	1222	PRE-KIT/SHOP LTG	4
5	HP-1	3120	#6 AWG	40/2	A	B	20/1	#12 AWG	1440	VENDING	6
7		3120	#6 AWG		A	B	20/1	#12 AWG	1440	VENDING	8
9	AHU-1	5760	#8 AWG	50/2	A	B	20/1	#12 AWG	1440	PRE-KIT RECEPT	10
11		5760	#8 AWG		A	B	20/1	#12 AWG	540	MEZZ/EXTER RECEPT	12
13	HP-2	1920	#8 AWG	25/2	A	B	20/1	#12 AWG	1440	OPEN OFF RECEPT	14
15		1920	#8 AWG		A	B	20/1	#12 AWG	700	PRINTER	16
17	IWH	2400	#10 AWG	30/1	A	B	20/1	#12 AWG	700	PRINTER	18
19	EWH	1400	#10 AWG	20/1	A	B	20/1	#12 AWG	1440	MONEY/TSM RECEPT	20
21					A	B	20/1	#10 AWG	1080	IT RECEPT	22
23					A	B	20/1	#12 AWG	1440	OFFICE RECEPT	24
25					A	B	20/1	#12 AWG	540	HALL/JAN RECEPT	26
27					A	B	20/1			SPARE	28
29					A	B	20/1			SPARE	30
31					A	B	20/1			SPARE	32
33					A	B	20/1			SPARE	34
35					A	B	20/1			SPARE	36
37					A	B					38
39					A	B					40
41					A	B					42

CONNECTED LOAD = 40044 VA      PHASE A = 21062 VA      PHASE B = 18982 VA

LOAD ANALYSIS:	
EXISTING:	18.4KW PEAK DEMAND SINCE 2015 PER A.E.P.
PROPOSED NEW:	2444VA x1.25 = 3055VA
LIGHTING	7920VA 220-13= 7920VA
POWER/RECEPT	21600VA x1 = 15360VA
HVAC	8080VA x1 = 8080VA
MISC SINGLE PHASE (H2O HEAT, APPLIANCES, ETC)	34415VA
	<b>34.4KVA</b>
	<b>63.4KVA</b>
	<b>264 AMPS</b>

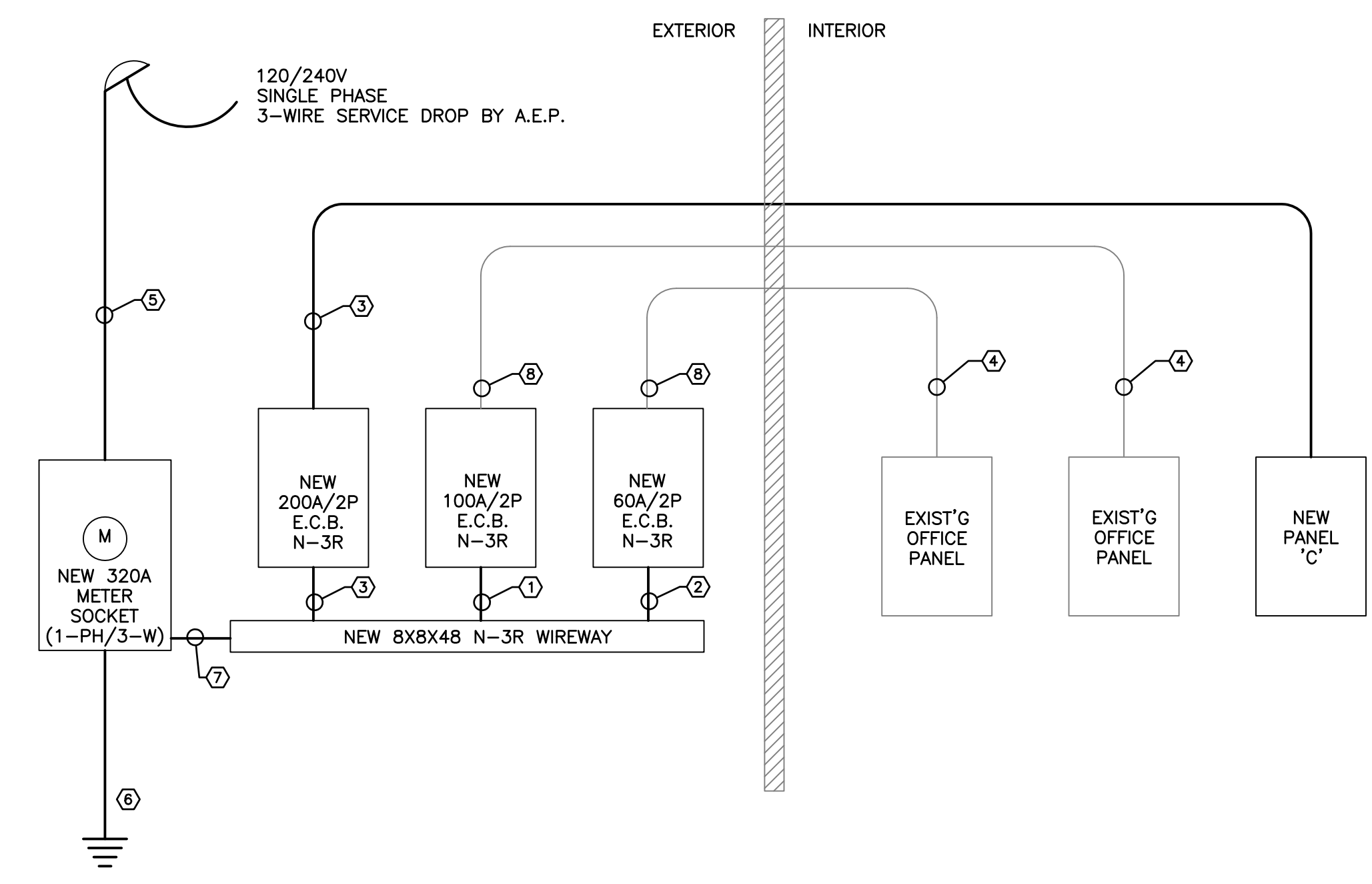


5 EXISTING ONE-LINE RISER DIAGRAM  
NO SCALE

ELECTRICAL LEGEND				
NOTE: NOT ALL SYMBOLS MAY APPLY TO THIS JOB!				
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
B-2	HOMERUN TO CIRCUIT AND PANEL INDICATED	⊕	120V, 1P EQUIPMENT CONNECTION	
—	NEUTRAL CONDUCTOR	⊕	240V, 1P EQUIPMENT CONNECTION	
—	HOT CONDUCTOR	⊕	240V, 3P EQUIPMENT CONNECTION	
—	GROUNDING CONDUCTOR	⊕	208V, 1P EQUIPMENT CONNECTION	
—	TRAVELER	⊕	208V, 3P EQUIPMENT CONNECTION	
—	SWITCH LEG	⊕	277V, 1P EQUIPMENT CONNECTION	
(2)	NUMBER IN PARENTHESIS INDICATES CIRCUIT TO WHICH DEVICE IS CONNECTED	⊕	480V, 3P EQUIPMENT CONNECTION	
S	TOGGLE SWITCH - 120/277V, 20A	⊕	480V, 1P EQUIPMENT CONNECTION	
S3	THREWAY SWITCH - 120/277V, 20A	⊕	DISCONNECT SWITCH - SIZE AND POLE AS NOTED	
S4	FOURWAY SWITCH - 120/277V, 20A	⊕	COMBINATION STARTER/DISCONNECT SWITCH	
S5	DIMMER SWITCH	⊕	STARTER	
S6	KEY SWITCH - 120/277V, 20A	⊕	JUNCTION BOX, SIZED PER N.E.C.	
S7	MANUAL MOTOR STARTER	⊕	SPEAKER	
⊕	DUPLEX RECEPTACLE - 125V,20A,1P	⊕	HUMIDIFIER OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING	
⊕	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE 125V,20A,1P	⊕	DISCONNECT SWITCH - SIZE AND POLE AS NOTED	
⊕	ISOLATED GROUND RECEPTACLE - 125V,20A,1P	⊕	STARTER	
⊕	SINGLE RECEPTACLE - 250V, AMPS PER PANEL SCHEDULE	⊕	⊕	TELEPHONE OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
⊕	QUADRAPLEX RECEPTACLE - 125V,20A,1P	⊕	⊕	DATA/TELEPHONE OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
⊕	ISOLATED GROUND QUADRAPLEX RECEPTACLE - 125V,20A,1P	⊕	⊕	DATA OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
⊕	SINGLE RECEPTACLE - 125V,20A,1P	⊕	⊕	TELEPHONE OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
⊕	ISOLATED GROUND SINGLE RECEPTACLE - 125V,20A,1P	⊕	⊕	PUSHBUTTON
⊕	DUPLEX RECEPTACLE - 125V,20A,1P (FLOOR MOUNTED)	⊕	⊕	H.H.H.L. HAND-HELD INTERCOM (ADMIN STATION)
		⊕	⊕	DOOR BELL/BUZZER
		⊕	⊕	DOOR BELL/BUZZER TRANSFORMER
		⊕	⊕	CAMERA
		⊕	⊕	TELEPHONE OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
		⊕	⊕	DATA/TELEPHONE OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
		⊕	⊕	DATA OUTLET BOX WITH CONDUIT TO ACCESSIBLE LOCATION ABOVE CEILING
		⊕	⊕	FIRE ALARM PULL STATION
		⊕	⊕	FIRE ALARM AUDIO/VISUAL SIGNAL
		⊕	⊕	FIRE ALARM ADA VISUAL SIGNAL
		⊕	⊕	FIRE ALARM SHUT DOWN RELAY
		⊕	⊕	SMOKE DETECTOR
		⊕	⊕	DUCT MTD. SMOKE DETECTOR
		⊕	⊕	HEAT DETECTOR
		⊕	⊕	PUSH-TO-EXIT BUTTON
		⊕	⊕	ANSUL SUPPRESSION SYSTEM
		⊕	⊕	FIRE ALARM DOOR RELEASE
		⊕	⊕	DOOR CONTACTOR ROUGH-IN WITH CONDUIT TO ACCESSIBLE LOCATIONS ABOVE CEILING
		⊕	⊕	GENERAL PAGING SYSTEM
		⊕	⊕	KEYPAD (ROUGH-IN W/CONDUIT TO ACCESSIBLE LOCATIONS ABOVE CEILING)
		⊕	⊕	CARD READER (ROUGH-IN W/CONDUIT TO ACCESSIBLE LOCATIONS ABOVE CEILING)
		⊕	⊕	TAMPER SWITCH
		⊕	⊕	FLOW SWITCH
		⊕	⊕	ELECTRONIC STRIKE (ACCESS CONTROL)
		⊕	⊕	MAGNETIC LOCK (ACCESS CONTROL)
		⊕	⊕	SECURITY PANEL
		⊕	⊕	FIRE ALARM ANNUNCIATOR
		⊕	⊕	FIRE ALARM CONTROL PANEL
		⊕	⊕	SAFE DOOR CONTACT/ HEAT THERMAL
		⊕	⊕	GLASS BREAK
		⊕	⊕	PANELBOARD AS SPECIFIED
		⊕	⊕	EXHAUST FAN
		⊕	⊕	OCCUPANCY SENSOR, SENSORSWITCH #WS0-SA-IVORY.
		⊕	⊕	OCCUPANCY SENSOR, SENSORSWITCH #WS0-PDT-SA-IVORY.
		⊕	⊕	OCCUPANCY SENSOR, SENSORSWITCH #CM-9.
		⊕	⊕	OCCUPANCY SENSOR, SENSORSWITCH #CM-10.
		⊕	⊕	OCCUPANCY SENSOR, SENSORSWITCH #WV-PDT-16.
		⊕	⊕	POWER PACK, SENSORSWITCH #PP20.

ONE-LINE KEY NOTES:

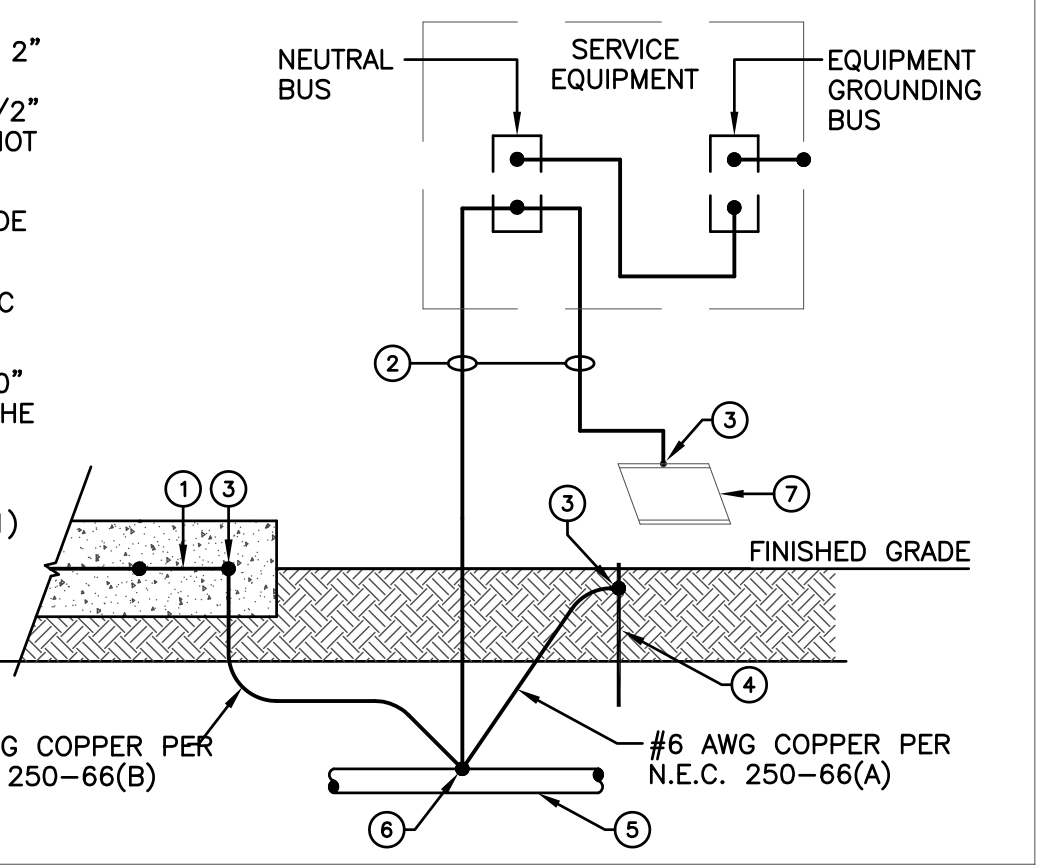
- NEW 1-1/2" C, 3-#3, 1-#8G.
- NEW 1" C, 3-#4, 1-#8G.
- NEW 2" C, 3-#3/0, 1-#6G.
- EXISTING FEEDER TO REMAIN.
- NEW 2 SETS 2" C W/ 3-#3/0 EACH.
- PROVIDE NEW GROUNDING ELECTRODE SYSTEM PER DETAIL #2/E2.1, INCLUDING BUT NOT LIMITED TO STRUCTURAL STEEL, WATER PIPING, GROUND ROD, ETC.
- NEW 3" C W/ 6-#3/0 (2 CONDUCTORS PER PHASE AND N).
- TERMINATE EXISTING FEEDER ON LOAD SIDE OF INDICATED SWITCH. EXTEND FEEDER BY INSTALLING NEMA-1 JUNCTION BOX INSIDE BUILDING AND SPLICING NEW SECTION OF CONDUCTORS TO EXISTING CONDUCTORS IF REQUIRED.



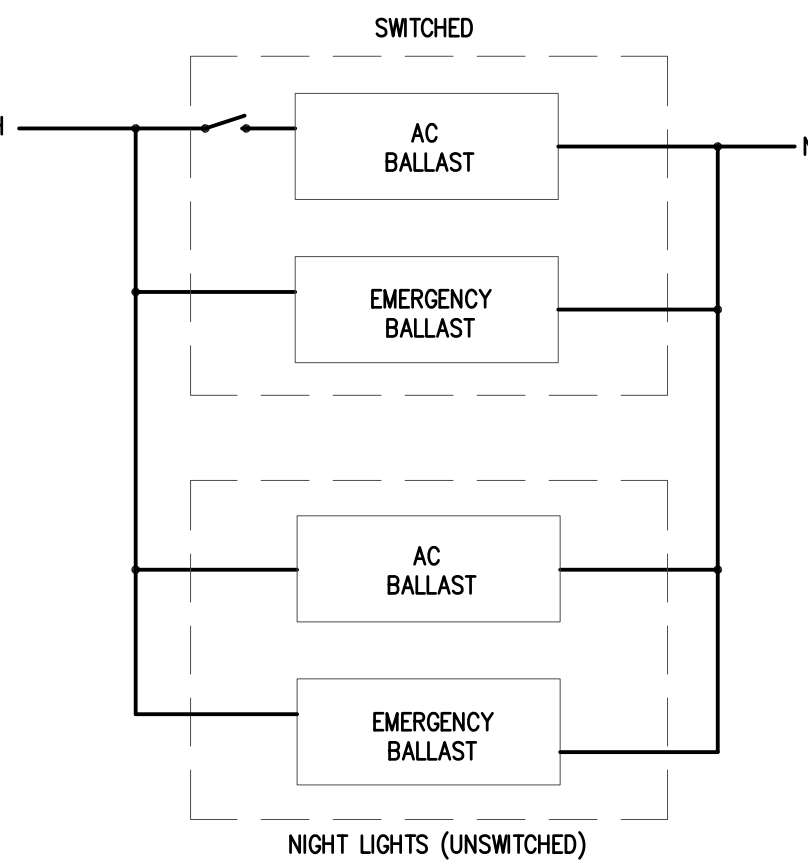
6 NEW/MODIFIED ONE-LINE RISER DIAGRAM  
NO SCALE

GROUNDING ELECTRODE KEYED NOTES

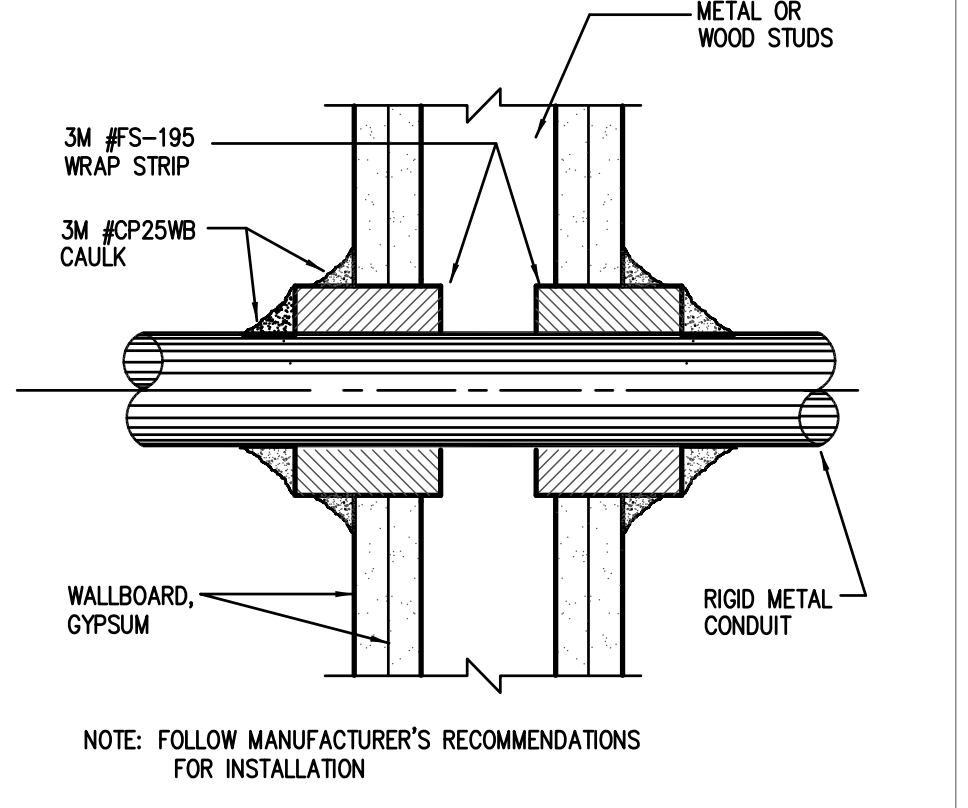
- CONCRETE ENCASED ELECTRODE ENCASED BY A MINIMUM OF 2" CONCRETE OF FOUNDATION CONSISTING OF AT LEAST 20' OF ONE OR MORE STEEL REINFORCING BARS NOT LESS THAN 1/2" DIAMETER OR AT LEAST 20' OF BARE COPPER CONDUCTOR NOT LESS THAN #4 AWG. PER N.E.C. 250.52 (A) (3).
- RGS CONDUIT WITH FULL SIZE COPPER GROUNDING ELECTRODE CONDUCTOR PER N.E.C. TABLE 250-66
- CONNECTION SHALL BE CADWELDED COPPER-BASED EXOTHERMIC WELD.
- COPPER BONDED STEEL ELECTRODE 5/8" IN DIAMETER 10'-0" LONG WITH A MINIMUM OF 8'-0" IN DIRECT CONTACT WITH THE EARTH PER N.E.C. 250-52 (A) (5).
- METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10'-0" OR MORE PER N.E.C. 250.52 (A) (1)
- BOLTED TYPE CONNECTION SUITABLE FOR DIRECT BURIAL OR EXOTHERMIC WELD (TYP)
- METAL FRAME OF BUILDING PER N.E.C. 250.52 (A) (2)



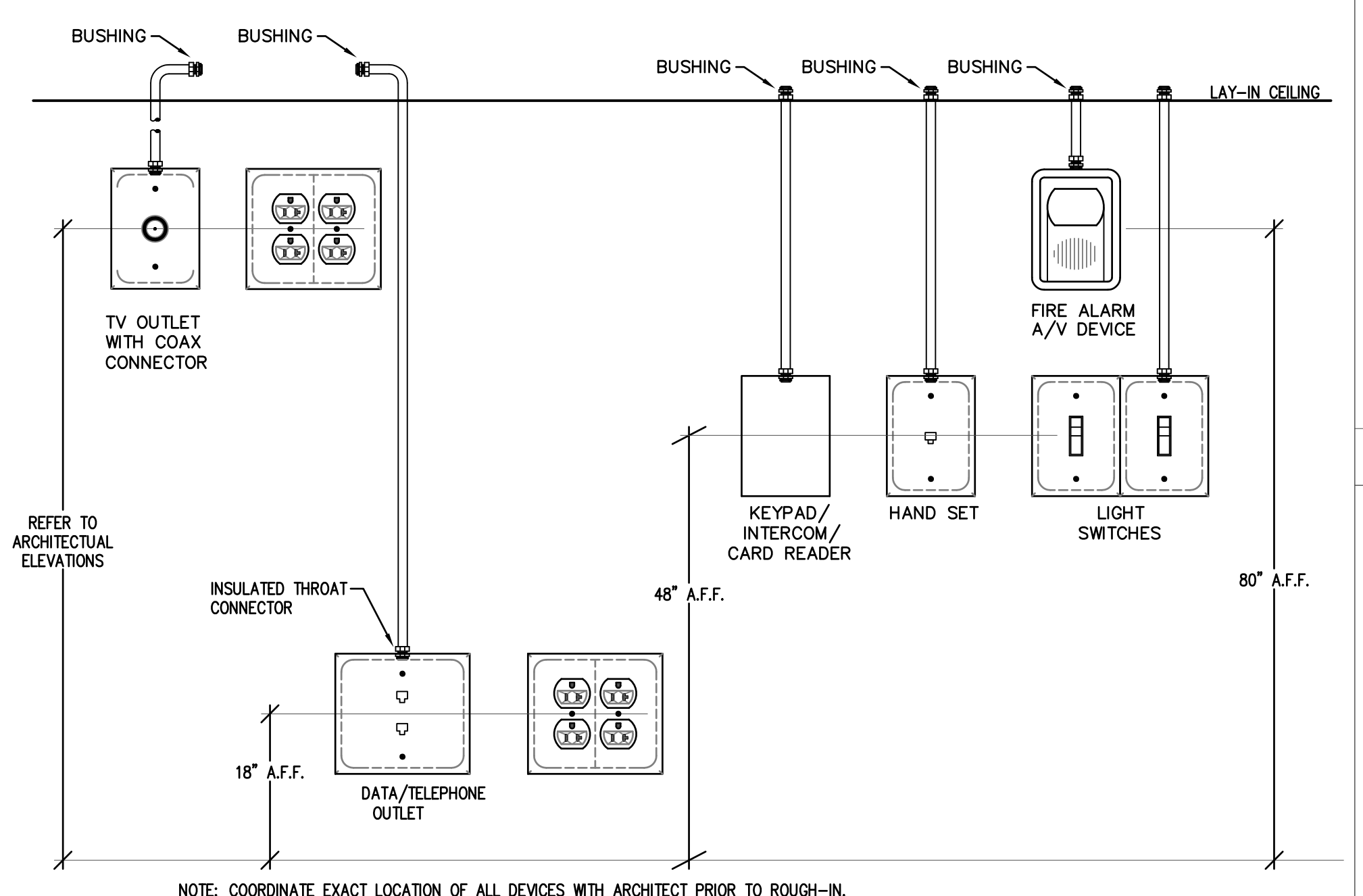
2 GROUNDING ELECTRODE SYSTEM DETAIL  
NOT TO SCALE



3 EMERGENCY BALLAST WIRING  
NOT TO SCALE



1 AND 2 HR. GYPSUM/WALLBOARD PIPE PENETRATION  
NOT TO SCALE



1 TYPICAL DEVICE ELEVATIONS (UNLESS NOTED OTHERWISE)  
NOT TO SCALE

CONTRACTOR REQUIREMENTS FOR SYSTEMS COMMISSIONING

PROJECT REQUIRES SYSTEM COMMISSIONING OF VARIOUS MECHANICAL, ELECTRICAL & PLUMBING (MEP) SYSTEMS PER INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2015. SYSTEMS TO BE COMMISSIONED INCLUDE BUT ARE NOT LIMITED TO HVAC, HOT WATER GENERATION AND LIGHTING CONTROL. COMMISSIONING WILL BE PERFORMED BY THE COMMISSIONING AGENT, WHICH SHALL BE THE ENGINEER OF RECORD OR OTHER QUALIFIED THIRD PARTY AS SELECTED BY OWNER OR OWNER'S AGENT (HEREAFTER REFERRED TO AS 'OWNER'), AT THE OWNER'S EXPENSE.

GENERAL CONTRACTOR AND ALL ASSOCIATED SUBCONTRACTORS, HEREAFTER REFERRED TO AS 'CONTRACTOR', SHALL PARTICIPATE, ASSIST AND SUPPORT THE COMMISSIONING PROCESS TO THE EXTENT REQUIRED TO ACHIEVE COMPLETE AND SUCCESSFUL COMMISSIONING OF ALL REQUIRED MEP SYSTEMS. CONTRACTOR SHALL INCLUDE IN HIS/HER BID AND CONTRACT ALL LABOR AND ASSOCIATED COSTS TO ASSIST AND SUPPORT THE COMMISSIONING AGENT. FAILURE FOR THE CONTRACTOR TO PROVIDE ASSISTANCE AND SUPPORT WILL RESULT IN DELAYS IN THE COMMISSIONING PROCESS AND LIKELY THE PROJECT SCHEDULE.

DURING THE COMMISSIONING PROCESS, CONTRACTOR SHALL PROVIDE ACCESS FOR TO ALL EQUIPMENT AND ASSOCIATED ITEMS FOR THE COMMISSIONING AGENT AND DEMONSTRATE PROPER FUNCTION OF ALL EQUIPMENT. THIS INCLUDES BUT IS NOT LIMITED TO OPENING OF ALL EQUIPMENT, PROVIDING LADDER OR OTHER REQUIRED ACCESS, ETC.

CONTRACTOR SHALL BE PRESENT AND HAVE RESPECTIVE SUBCONTRACTOR(S) PRESENT AT ALL TIMES WHILE COMMISSIONING AGENT IS ON SITE PERFORMING COMMISSIONING. THIS INCLUDES BUT IS NOT LIMITED TO PRELIMINARY COMMISSIONING, FINAL COMMISSIONING, AND POST-CONSTRUCTION COMMISSIONING. CONTRACTOR REPRESENTATIVES SHALL BE FAMILIAR WITH PROJECT AND HAVE PLAYED A VITAL ROLE DURING CONSTRUCTION, SUCH AS PROJECT FOREMAN, PROJECT SUPERINTENDENT OR PROJECT MANAGER.

IF AND WHEN COMMISSIONING AGENT IS NOT ABLE TO COMPLETE SCHEDULED COMMISSIONING TASKS DUE TO EQUIPMENT FAILURES, PROJECT DEFICIENCIES, INADEQUATE CONTRACTOR PERSONNEL ATTENDANCE, ETC., COMMISSIONING AGENT WILL SCHEDULE ADDITIONAL SITE VISIT(S) AS REQUIRED AT THE CONTRACTOR'S EXPENSE.

CONTRACTOR SHALL ENGAGE THE COMMISSIONING AGENT AT LEAST 30 DAYS PRIOR TO THE NEED FOR PRELIMINARY COMMISSIONING. CONTRACTOR SHALL PROVIDE COMMISSIONING AGENT A PROJECT SCHEDULE TO INCLUDE ANTICIPATED DATES OF ALL RELATED TASKS/MILESTONES. COMMISSIONING AGENT WILL PREPARE COMMISSIONING PLAN FOR REVIEW BY ALL INTERESTED PARTIES AND AS REQUIRED BY IECC 2015. COMMISSIONING AGENT THEN SHALL BE KEPT AWARE OF ALL PROJECT MEETINGS RELATED TO COMMISSIONING AND PROJECT COMPLETION, INCLUDING BUT NOT LIMITED TO ANY CHANGES IN PROJECT SCHEDULE. COMMISSIONING AGENT SHALL BE INFORMED OF RELEVANT PROJECT MEETINGS 5 BUSINESS DAYS IN ADVANCE, AND SITE VISITS FOR COMMISSIONING TASKS 3 BUSINESS DAYS IN ADVANCE. REQUESTS MADE AFTER 3:00PM DURING A BUSINESS DAY WILL BE CONSIDERED AS BEING REQUESTED THE FOLLOWING BUSINESS DAY.

UNLESS AGREED UPON IN ADVANCE, AND WHERE THE SIZE OF THE PROJECT OR OTHER EXTENUATING CIRCUMSTANCE WARRANTS IT, ALL MEP EQUIPMENT SHALL BE COMMISSIONED ON THE SAME SCHEDULE, AND NOT COMMISSIONED IN SEPARATE PHASES OR SEPARATE TRIPS.

