SPRING HOPE RAILROAD DEPOT

Building Rehabilitation & Platform Addition

101 South Ash Street
Spring Hope, North Carolina 27882

Owner:
Town of Spring Hope
118 W E Railroad Street
Spring Hope, North Carolina 27882
Ph. (252) 478-5625

Architectural:
Alliance Architecture of the Triad, PC
2601 Pilgrim Court, Suite 130
Winston-Salem, North Carolina 27106
Ph. (336) 722-4447

Historic Preservation Consultant:
David E. Gall, Historic Preservation Consultant
938 W 5th Street
Winston-Salem, North Carolina 27101
Ph. (336) 773-1213

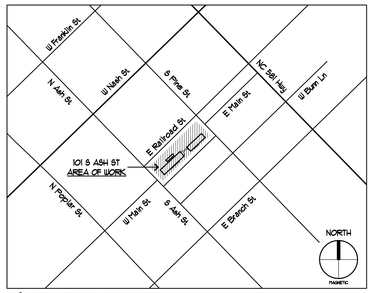
Civil Engineering:
Allied Design, Inc.
4720 Kester Mill Road
Winston-Salem, North Carolina 27103
Ph. (336) 765-2377

Structural Engineering:
MEPC Structural Engineers
7990 North Point Boulevard, Suite 209
Winston-Salem, North Carolina 27106
Ph. (336) 593-9623

Plumbing, Mechanical, & Fire Protection Engineering:
Beekman Point Engineering
295 Seven Farms Drive, Suite C-321
Daniel Island, South Carolina 29492
Ph. (843) 471-5488

Electrical Engineering:
B.E.C.I.
2001 Old Westfield Road
Pilot Mountain, North Carolina 27041
Ph. (336) 462-1710

DRAWING INDEX



CS1101 VICINITY MAP
NOT TO SCALE VIC123081

PROJECT NOTES

FN0123058

A. THE PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS AND PROVISIONS OF THE "2018 NORTH CAROLINA EXISTING BUILDING CODE." ALL WORK SHALL COMPLY WITH SAME AS WELL AS ALL APPLICABLE CODES, ORDINANCES, LAWS, SAFETY ORDERS, AND DIRECTIVES OF THE STATE, COUNTY, AND CITY.

B. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, CERTIFICATES OF INSPECTIONS AND APPROVAL.

C. IN THE CASE OF DISCREPANCIES OR INCONSISTENCIES APPEARING IN THE CONSTRUCTION DOCUMENTS, THE ARCHITECT SHALL BE NOTIFIED IN WRITING FOR PROPER ADJUSTMENT. IN NO CASE SHALL WORK PROCEED IN UNCERTAINTY OR WITH INSUFFICIENT DATA.

D. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN, FOR THE DURATION OF CONSTRUCTION, ALL REQUIRED SCAFFOLDS, TARPAULINS, WIRING SIGNS, FENCES, AND OTHER TEMPORARY CONSTRUCTION ITEMS FOR THE PROPER AND SAFE COMPLETION OF THE WORK AND FOR COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND CODES.

E. THE CONTRACT DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCES, AND ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENTS DURING CONSTRUCTION.

F. PREFINISHED ITEMS WHICH ARE DAMAGED BY CONTRACTOR EITHER BEFORE, DURING, OR AFTER INSTALLATION SHALL BE REPLACED BY CONTRACTOR WITH NEW AND UNDAMAGED MATERIAL. MATERIALS FINISHED AFTER INSTALLATION WHICH ARE DAMAGED BY CONTRACTOR SHALL BE REPLACED OR REFINISHED.

G. THE GENERAL CONTRACTOR, PRIOR TO OCCUPANCY, SHALL PROVIDE FINAL NORMAL CLEANING INCLUDING, BUT NOT LIMITED TO: REMOVAL OF ALL ACCUMULATED TRASH AND DEBRIS, CLEAN ALL WINDOWS, DOORS, HARDWARE, AND FIXTURES. VACUUM, CLEAN OR SCRUB AND POLISH ALL FLOORS, AS APPROPRIATE, REMOVING ALL STAINS OR DIRT.

H. ALL WORK SHALL BE CHECKED AND ACCEPTED BY THE OWNER'S FIELD REPRESENTATIVE DURING THE FINAL PUNCH LIST WALK-THROUGH, BEFORE SAME CAN BE CONSIDERED COMPLETE.

I. THE GENERAL CONTRACTOR IS RESPONSIBLE TO CONTACT THE FIRE MARSHAL FOR SITE VISIT TO CONFIRM LOCATIONS FOR PORTABLE FIRE EXTINGUISHERS.

J. SEE SPECIFICATIONS FOR DESCRIPTION OF ADD ALTERNATES.

CONSTRUCTION DOCUMENT ABBREVIATIONS

ABBREV

@	AT	BC	BOTTOM OF CURB	DP	DAMPPROOFING	EST	ESTIMATE	FLRG	FLOORING	GVL	GRAVEL	KPL	KICKPLATE	MTL	METAL	PER	PERIMETER	RH	RIGHT HAND	SUSP	SUSPENDED	VIB	VIBRATION	ARCH	ARCHITECTURAL
ABV	ABOVE	BLDG	BUILDING	DEMO	DEMOLITION	EXH	EXHAUST	FD	FLOOR DRAIN	GWB	GYPSUM WALLBOARD	KITCH	KITCHEN	MTL FURRG	METAL FURRING	PLAS	PLASTIC	ROH	RIGHT OF WAY	SYM	SYMMETRICAL	VB	VINYL BASE	CIVIL	CIVIL ENGINEERING
AFF	ABOVE FINISHED FLOOR	BUR	BUILT UP ROOFING	DMT	DEMOUNTABLE	EXISTG	EXISTING	FLUOR	FLUORESCENT	GYP	GYPSUM WALLBOARD	KO	KNOCKOUT	MEZZ	MEZZANINE	P LAM	PLASTIC LAMINATE	R	RADIUS	SYS	SYSTEM	VCT	VINYL COMPOSITION TILE	STRUCT	STRUCTURAL ENGINEERING
AP	ACCESS PANEL	CAB	CABINET	DEPT	DEPARTMENT	EIP	EXISTING IRON PIPE	FT	FOOT / FEET	HBD	HARDBOARD	LBL	LABEL	min	MINIMUM	PL	PLATE	RD	ROOF DRAIN	TKBD	TACKBOARD	VF	VINYL FABRIC	PLUMB	PLUMBING ENGINEERING
ACOUS	ACOUSTICAL	CPT	CARPET/CARPETING	DTL	DETAIL	EIR	EXISTING IRON ROD	FTG	FOOTING	HDW	HARDWARE	MR	MIRROR	PLWD	PLYWOOD	RFG	ROOFING	TELE	TELEPHONE	VT	VINYL TILE	MECH	MECHANICAL ENGINEERING
ACT	ACOUSTICAL TILE CEILING	CSMT	CASEMENT	DIAG	DIAGONAL	EB	EXPANSION BOLT	FDND	FOUNDATION	HWD	HARDWOOD	MISC	MISCELLANEOUS	PT	POINT	RM	ROOM	TV	TELEVISION	VOL	VOLUME	ELEC	ELECTRICAL ENGINEERING
ADD	ADDENDUM	CI	CAST IRON	dia	DIAMETER	EXP	EXPOSED	FRM	FRAME	HDR	HEADER	MOD	MODULAR	PVC	POLYVINYL CHLORIDE	RO	ROUGH OPENING	TEMP	TEMPORARY	WSCT	WAINSCOT	FIRE PROT.	FIRE PROTECTION SPRINKLER ENGINEER		
ADDL	ADDITIONAL	CB	CATCH BASIN	DIM	DIMENSION	EXPAN	EXPANSION	FRMG	FRAMING	HTG	HEATING	MLDG	MOLDING	PCT	POST-TENSIONED CONCRETE	SLP	SLOPE	TMPD	TEMPERED	WH	WALL HUNG				
ADH	ADHESIVE	CLG	CEILING	DIV	DIVISION	EJ	EXPANSION JOINT	FS	FULL SIZE	HVAC	HEATG VENTLTG AIR COND	MTD	MOUNTED	PCF	POUNDS per CUBIC FOOT	SND	SANITARY NAPKIN DISPOSAL	TC	TERRA COTTA	WC	WATER CLOSET				
ADJ	ADJACENT	CT	CERAMIC TILE	DR	DOOR	EXT	EXTERIOR	FURN	FURNISH / FURNISHED	HD	HEAVY DUTY	MP	MEN IRON PIPE	PFL	POUNDS per LINEAR FOOT	SS	SANITARY SEWER	TZ	TERRAZZO	WH	WATER METER				
AGG	AGGREGATE	CMT	CERAMIC MOSAIC TILE	DBL	DOUBLE	FOC	FACE OF CONCRETE	FBO	FURNISHED BY OTHERS	HGT	HEIGHT	NRC	NOISE REDUCTION COEFF.	PSF	POUNDS per SQUARE FOOT	SCHD	SCHEDULE	THK	THICK / THICKNESS	WV	WATER VALVE				
A/C	AIR CONDITIONING	CHAM	CHAMFER	DN	DOWN	FOM	FACE OF MASONRY	FURR	FURRED	HEX	HEXAGONAL	NOM	NOMINAL	PSI	POUNDS per SQUARE INCH	SECT	SECTION	THRESH	THRESHOLD	WP	WATER PROOFING				
ALT	ALTERNATE	CIR	CIRCLE	DS	DOWNSPOUT	FOS	FACE OF STUDS	FURRG	FURRING	HC	HANDICAP / HOLLOW CORE	N	NORTH	PCG	PRECAST CONCRETE	SSK	SERVICE SINK	TPTN	TOILET PARTITION	WR	WATER RESISTANT				
ALUM	ALUMINUM	CLO	CLOSET	DRN	DRAIN	FAS	FASTEN / FASTENER	FUT	FUTURE	HM	HOLLOW METAL	NC	NOT IN CONTRACT	PREFAB	PREFABRICATED	SHEATHG	SHEATHING	TOL	TOLERANCE	WWF	WELDED WIRE FABRIC				
AB	ANCHOR BOLT	clr	CLEAR/CLEARANCE	DT	DRAIN TILE	FBD	FIBERBOARD	FV	FIELD VERIFY	HORZ	HORIZONTAL	NTS	NOT TO SCALE	PREFIN	PREFINISHED	SHT	SHEET	T & G	TONGUE and GROOVE	W	WEST / WOMEN				
ANOD	ANODIZED	COL	COLUMN	DWR	DRAWER	FGL	FIBERGLASS	GA	GAGE / GAUGE	HB	HOSE BIB	MAINT	MAINTAIN / MAINTENANCE	oc	ON CENTER	PREFMD	PREFORMED	sim	SIMILAR	W	WIDE / WIDTH				
APPROX	APPROXIMATE	CO	CLEAN OUT	DWG	DRAWING	FIN	FINISH / FINISHED	GALV	GALVANIZED	hr	HOUR	MH	MANHOLE	OPG	OPENING	PRESTRESSED CONCRETE		SC	SOLID CORE	WCH	WINDOW				
ARCH	ARCHITECT/ARCHITECTURAL	COMB	COMBINATION	ea	EACH	FFE	FINISH FLOOR ELEVATION	GI	GALVANIZED IRON	HHW	HOT WATER HEATER	MANUF	MANUFACTURER	OPH	OPPOSITE HAND	PR. TRTD	PRESSURE TREATED	SP	SOUNDPROOF	TOS	TOP OF STEEL	W/	WITH		
ASB	ASBESTOS	CONC	CONCRETE	E	EAST	FFL	FINISH FLOOR LINE	GM	GAS METER	HWY	HIGHWAY	MAS	MASONRY	OD	OUTSIDE DIAMETER	P/L	PROPERTY LINE	S	SOUTH	TRD	TREAD	W/o	WITHOUT		
ASPH	ASPHALT	CMU	CONCRETE MASONRY UNIT	EIFS	EXTERIOR INSUL FIN SYSTEM	FA	FIRE ALARM	GV	GAS VALVE	in	INCHES	MO	MASONRY OPENING	OA	OVERALL	QT	QUARRY TILE	SPK	SPEAKER	TRTD	TREATED	WD	WOOD		
AVG	AVERAGE	CONF	CONFERENCE	ELEC	ELECTRIC / ELECTRICAL	FE	FIRE EXTINGUISHER	GC	GENERAL CONTRACTOR	INCL	INCLUDE / INCLUDING	MATL	MATERIAL	OHD	OVERHEAD	REF	REFERENCE	SPEC	SPECIFICATIONS	typ	TYPICAL	WB	WOOD BASE		
BATT	BATTEN	CONST	CONSTRUCTION	EP	ELECTRICAL PANELBOARD	FEC	FIRE EXTINGUISHER CABINET	GEN	GENERAL	ID	INSIDE DIAMETER	max	MAXIMUM	PTD	PAINTED	RUBB	RUBBER	SQ	SQUARE	UNFIN	UNFINISHED	WPT	WORKING POINT		
BD	BOARD	CONT	CONTINUOUS	EWC	ELECTRICAL WATER COOLER	FH	FIRE HYDRANT	GL	GLASS / GLAZING	INSUL	INSULATION / INSULATE	MECH	MECHANICAL	PNL	PANEL	RFL	REFLECTED / REFLECTIVE	SF	SQUARE FOOT	UNO	UNLESS OTHERWISE NOTED	WI	WROUGHT IRON		
BSMT	BASEMENT	CJ	CONTROL JOINT	EL	ELEVATION	FRP	FIRE RESISTANT PANEL	GLB	GLASS BLOCK	INT	INTERIOR	MED CAB	MEDICINE CABINET	PARK'G	PARKING	REFRIG	REFRIGERATOR	SST	STAINLESS STEEL	UTIL	UTILITY	YI	YARD INLET		
BRG	BEARING	CORR	CORRIDOR	ELEV	ELEVATOR	FPL	FIRE PLACE	GCMU	GLAZED CONCRETE MAS UNIT	INV	INVERT	MECH CNTR	MECHANICAL CONTRACTOR	PTBD	PARTICLE BOARD	REINF	REINFORCE / REINFORCING	STD	STANDARD	UP	UTILITY POLE				
BFF	BELOW FINISHED FLOOR	CMP	CORRUGATED METAL PIPE	EMERG	EMERGENCY	FLASHG	FLASHG	GST	GLAZED STRUCTURAL TILE	JAN	JANITOR	MED	MEDIUM	PTN	PARTITION	RCP	REINFORCED CONCRETE PIPE	STL	STEEL	VB	VAPOR BARRIER				
BITUM	BITUMINOUS	CPT	CUBIC FOOT	EQ	EQUAL	FMMS	FLATHEAD MACHINE SCREW	GLU LAM	GLUE LAMINATED	JT	JOINT	MBR	MASTER BEDROOM	PV	PAVE / PAVING	RESIL	RESILIENT	STOR	STORAGE	VNR	VENEER				
BLKG	BLOCKING	CYD	CUBIC YARD	EQUIP	EQUIPMENT	FWMS	FLATHEAD WOOD SCREW	GB	GRAB BAR	JF	JOINT FILLER	MEMB	MEMBRANE	PVMT	PAVEMENT	RET	RETURN	ST DRN	STORM DRAINAGE	VERT	VERTICAL				
BOT	BOTTOM	C&G	CURB AND GUTTER	ESC	ESCALATOR	FLR	FLOOR	GI	GRATE INLET	JST	JOIST	M	MEN	PERF	PERFORATED / PERFORATE	REV	REVISION / REVISED	STRUCT	STRUCTURAL	VEST	VESTIBULE				

DETAIL NUMBERING SYSTEM

C811-23081

30	29	28	27	26	25
24	23	22	21	20	19
18	17	16	15	14	13
12	11	10	09	08	07
06	05	04	03	02	01

FOR ALL **ARCHITECTURAL** SHEETS THE DETAIL NUMBERING SYSTEM IS AS FOLLOWS:

- THE FIRST TWO NUMBERS INDICATE THE SHEET NUMBER - AN EXAMPLE OF A DETAIL ON SHEET A4.1 IS 4101
- THE SECOND TWO NUMBERS INDICATE THE LOCATION OF THE DETAIL ON THAT SHEET AS IT RELATES TO THE NUMBERED GRIDS SHOWN ABOVE - FOR EXAMPLE THE DETAIL IN THE UPPER LEFT CORNER OF SHEET A4.1 IS 4130
- IF A DETAIL OVERLAPS THE GRIDS, THE DETAIL NUMBER IS DETERMINED BY WHERE THE LOWER RIGHT CORNER OF THE DETAIL FALLS WITHIN THE NUMBERED GRIDS

ALLIANCE ARCHITECTURE OF THE TRIAD
2601 Pilgrim Court, Suite 130 | Winston-Salem, NC 27106 | Ph. 336-722-4447

REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

JOB 25081
DATE February 28, 2025
DRAWN T. Doorn
SHEET CS1.1

c811-25081

APPENDIX B - BUILDING CODE SUMMARY

FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

NAME OF PROJECT: Spring Hope Railroad Depot Building Rehabilitation & Platform Addition

ADDRESS: 101 South Ash Street, Spring Hope, North Carolina 27882
PROPOSED USE: Banquet Hall (A-2)
OWNER/AUTHORIZED AGENT: Andrew Delorno, Town Manager PHONE #: (252) 478-5625 E-MAIL: adelorno@springhope.net

OWNED BY: ■CITY / COUNTY ☐PRIVATE ☐STATE
CODE ENFORCEMENT JURISDICTION: ☐CITY - ■COUNTY Nash ☐STATE

LEAD DESIGN PROFESSIONAL: ANDREW J. LOPINA, AIA

DESIGNER	FIRM	NAME	LICENSE #	PHONE #	E-MAIL
ARCHITECTURAL	Alliance Arch. of the Triad, PC	Andrew J. Lopina	7188	(336) 722-4447	alopina@alliancetriad.com
CIVIL	Allied Design, Inc.	WM. Kevin Davie	023450	(336) 765-2377	kevin@allied-engsurv.com
ELECTRICAL	B.E.C.I.	Jason White	051045	(336) 351-3781	jason@briteengineering.com
FIRE ALARM	B.E.C.I.	Jason White	051045	(336) 351-3781	jason@briteengineering.com
PLUMBING	Beekman Point Engineering	Anthony Shane Duttera	046074	(843) 471-5488	dale@bpe-eng.com
MECHANICAL	Beekman Point Engineering	Anthony Shane Duttera	046074	(843) 471-5488	dale@bpe-eng.com
SPRINKLER/STANDPIPE	Beekman Point Engineering	Anthony Shane Duttera	046074	(843) 471-5488	dale@bpe-eng.com
STRUCTURAL	MEPC Structural Engineers	Jerry W. Moorefield, P.E.	20707	(336) 593-9623	jerry@mepc-consultants.com
RETAINING WALLS > 5' HIGH	-	-	-	(-) -	-
OTHER	-	-	-	(-) -	-

2018 EDITION OF NC CODE FOR: ☐NEW BUILDING ■ADDITION ☐RENOVATION ☐1ST TIME INTERIOR COMPLETION ☐SHELL / CORE ☐PHASED CONSTRUCTION

2018 NC EXISTING BUILDING CODE: EXISTING: ☐PRESCRIPTIVE ☐REPAIR ☐CHAPTER 14
ALTERATION: ☐LEVEL I ☐LEVEL II ■LEVEL III
■HISTORIC PROPERTY ■CHANGE OF USE

CONSTRUCTED (DATE) 1887 CURRENT OCCUPANCY (CHAPTER 3) Library (A-3)
RENOVATED (DATE) 2008 PROPOSED OCCUPANCY (CHAPTER 3) Banquet Hall (A-2)

RISK CATEGORY: (TABLE 1604.5): CURRENT: ☐ I ■ II ☐ III ☐ IV
PROPOSED: ☐ I ■ II ☐ III ☐ IV

BASIC BUILDING DATA

CONSTRUCTION TYPE(S): ☐I-A ☐I-B ☐II-A ☐II-B ☐III-A ☐III-B ☐IV ☐V-A ■V-B

SPRINKLERS: ☐NO ☐PARTIAL ■YES ■NFPA 13 ☐NFPA 13R ☐NFPA 13D
STANDPIPES: ■NO ☐YES CLASS: ☐I ☐II ☐III ☐WET ☐DRY
FIRE DISTRICT: ■NO ☐YES FLOOD HAZARD AREA: ■NO ☐YES
SPECIAL INSPECTIONS REQUIRED: ■NO ☐YES

GROSS BUILDING AREA TABLE:

FLOOR	EXISTING (SQ. FT.)	NEW (SQ. FT.)	SUB-TOTAL (SQ. FT.)
6th FLOOR	-	-	-
5th FLOOR	-	-	-
4th FLOOR	-	-	-
3rd FLOOR	-	-	-
2nd FLOOR	-	-	-
MEZZANINE	-	-	-
1st FLOOR	3,492	3,524	7,016
BASEMENT	-	-	-

TOTAL GROSS AREA: 7,016 SQ. FT.
AREA THIS PROJECT: 7,016 SQ. FT.

SPRING HOPE RAILROAD DEPOT (EXISTING BUILDING) - SEE CS1.3 FOR OVERALL LIFE SAFETY PLAN

ALLOWABLE AREA

PRIMARY OCCUPANCY CLASSIFICATION(S):
ASSEMBLY ☐A-1 ■A-2 ☐A-3 ☐A-4 ☐A-5
BUSINESS ☐
EDUCATIONAL ☐
FACTORY ☐F-1 MODERATE ☐F-2 LOW
HAZARDOUS ☐H-1 DETONATE ☐H-2 DEFLAGRATE ☐H-3 COMBUST ☐H-4 HEALTH ☐H-5 HPM
INSTITUTIONAL ☐I-1 CONDITION ☐1 ☐2
☐I-2 CONDITION ☐1 ☐2
☐I-3 CONDITION ☐1 ☐2 ☐3 ☐4 ☐5
☐I-4 CONDITION
MERCANTILE ☐
RESIDENTIAL ☐R-1 ☐R-2 ☐R-3 ☐R-4
STORAGE ☐S-1 MODERATE ☐S-2 LOW ☐HIGH PILED
☐PARKING GARAGE ☐OPEN ☐ENCLOSED ☐REPAIR GARAGE
UTILITY & MISCELLANEOUS ☐

ACCESSORY OCCUPANCY CLASSIFICATIONS: -
INCIDENTAL USES (Table 509): -
SPECIAL USES (Chap 4 - List Code Sections): -
SPECIAL PROVISIONS (Chap 5 - List Code Sections): -
MIXED OCCUPANCY: ☐NO ■YES SEPARATION: - HR EXCEPTION: -

■NON-SEPERATED USE (508.3)
THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.

☐SEPARATED USE (508.4) - SEE BELOW FOR AREA CALCULATIONS FOR EACH STORY, THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

$$\frac{-}{-} + \frac{-}{-} + \dots = - \leq 1.00$$

STORY #	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 [4] AREA	(C) AREA FOR FRONTAGE INCREASE [1, 5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED [2, 3]
FIRST	BANQUET HALL (A-2)	3,492 SF	24,000 SF	NOT USED	24,000 SF
FIRST	STORAGE @ NEW CABOOSE (S-1)	450 SF	36,000 SF		

1 FRONTAGE AREA INCREASES FROM SECTION 506.3 ARE COMPUTED THUS:
a. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = - (F)
b. TOTAL BUILDING PERIMETER = - (P)
c. RATIO (F/P) = - (F/P)
d. W = MINIMUM WIDTH OF PUBLIC WAY = - (W)
e. PERCENT OF FRONTAGE INCREASE I_f = 100 (F/P - 0.25) x W/30 = - (%)
2 UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507.
3 MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x D (MAXIMUM 3 STORIES) (506.2)
4 THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.5.4.
5 FRONTAGE INCREASE IS BASED ON THE UNSPRINKLERED AREA VALUE IN TABLE 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
BUILDING HEIGHT IN FEET (Table 504.3)	60'-0"	22'	-
BUILDING HEIGHT IN STORIES (Table 503.4)	2	1	-

(Provide Code Reference if "Shown on Plans" is not based on Table 503.3 or 503.4)

FIRE PROTECTION REQUIREMENTS
LIFE SAFETY PLAN SHEET #, IF PROVIDED CS1.3 & CS1.4

BUILDING ELEMENT (DIRECTIONS LISTED BELOW REFER TO ORIENTATION ON PLAN, NOT CARDINAL DIRECTIONS)		FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (w/ - * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES		–	N/A	N/A	-	-	-	-
BEARING WALLS (EXTERIOR)	NORTH	> 30'	0	0	-	-	-	-
	EAST	15'-2"	0	0	-	-	-	-
	WEST	> 30'	0	0	-	-	-	-
	SOUTH	> 30'	0	0	-	-	-	-
BEARING WALLS (INTERIOR)		–	N/A	N/A	-	-	-	-
NONBEARING WALLS & PARTITIONS (EXTERIOR)	NORTH	–	N/A	N/A	-	-	-	-
	EAST	–	N/A	N/A	-	-	-	-
	WEST	–	N/A	N/A	-	-	-	-
	SOUTH	–	N/A	N/A	-	-	-	-
INTERIOR WALLS AND PARTITIONS		–	0	0	-	-	-	-
FLOOR CONSTRUCTION - INCLUDING SUPPORTING BEAMS & JOISTS			0	0	-	-	-	-
FLOOR CEILING ASSEMBLY			N/A	N/A	-	-	-	-
COLUMNS SUPPORTING FLOORS			N/A	N/A	-	-	-	-
ROOF CONSTRUCTION - INCLUDING SUPPORTING BEAMS & JOISTS			0	0	-	-	-	-
ROOF CEILING ASSEMBLY			0	0	-	-	-	-
COLUMNS SUPPORTING ROOF			N/A	N/A	-	-	-	-
SHAFT ENCLOSURES - EXIT			N/A	N/A	-	-	-	-
SHAFT ENCLOSURES - OTHER			N/A	N/A	-	-	-	-
CORRIDOR SEPARATION			0	0	-	-	-	-
OCCUPANCY / FIRE BARRIER SEPARATION			N/A	N/A	-	-	-	-
PARTY / FIRE WALL SEPARATION			N/A	N/A	-	-	-	-
SMOKE BARRIER SEPARATION			N/A	N/A	-	-	-	-
SMOKE PARTITION			N/A	N/A	-	-	-	-
TENANT / DWELLING UNIT / SLEEPING UNIT SEPARATION			N/A	N/A	-	-	-	-
INCIDENTAL USE SEPARATION			N/A	N/A	-	-	-	-

* INDICATE SECTION NUMBER PERMITTING REDUCTION

PERCENTAGE OF WALL OPENING CALCULATIONS UNLIMITED PER NCBC 705.8.1, EXC. 2

LIFE SAFETY SYSTEM REQUIREMENTS

EMERGENCY LIGHTING: ☐NO ■YES
EXIT SIGNS: ☐NO ■YES
FIRE ALARM: ☐NO ■YES ☐SPRINKLER MONITORING ONLY
SMOKE DETECTION SYSTEMS: ☐NO ■YES ☐PARTIAL -
CARBON MONOXIDE DETECTION: ■NO ☐YES

LIFE SAFETY PLAN REQUIREMENTS

LIFE SAFETY PLAN SHEET #: CS1.3 & CS1.4
☐FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7)
☐ASSUMED AND REAL PROPERTY LINE LOCATIONS (if not on site plans)
☐EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8)
■OCCUPANCY USE FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2)
■OCCUPANT LOADS FOR EACH AREA
■EXIT SIGN LOCATIONS (1013)
■EXIT ACCESS TRAVEL DISTANCES (1017)
■COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1))
☐DEAD END LENGTHS (1020.4)
■CLEAR EXIT WIDTHS FOR EACH EXIT DOOR
■MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3.1)
■ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR
☐A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR / CEILING AND / OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION
■LOCATION OF DOORS WITH PANIC HARDWARE (1010.1.10)
☐LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1010.1.9.7)
☐LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1010.1.9.9)
☐LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES
☐LOCATION OF EMERGENCY ESCAPE WINDOWS (1030)
■THE SQUARE FOOTAGE OF EACH FIRE AREA (202)
☐THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT FOR OCCUPANCY CLASSIFICATION I-2 (407.5)
☐NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

ACCESSIBLE DWELLING UNITS NOT APPLICABLE
(SECTION 1107)

ACCESSIBLE PARKING (SECTION 1106)
SITE TO UTILIZE EXST'G STREET-SIDE ACCESSIBLE PARKING PER SPRING HOPE TOWN ORDINANCE REGARDING CENTRAL BUSINESS DISTRICT TO MEET PARKING REQUIREMENTS - SEE CIVIL FOR NEW ACCESSIBLE ROUTE w/ STREET CROSSING TO EXISTING ACCESSIBLE PARKING SPACES

PLUMBING FIXTURE REQUIREMENTS @ DEPOT
(TABLE 2902.1)

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS / TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
SPACE	EXISTING	0	0	0	0	0	0	0	0	0	0
	NEW	1	4	0	1	2	2	0	0	1	1
	REQUIRED	2	2	0	0	2	2	0	0	1	1

PLUMBING FIXTURE COUNT BASED ON 257 OCCUPANTS:

129 MEN: WATER CLOSETS 1 PER 75 PPL = 2 WATER CLOSETS
LAVATORIES 1 PER 200 PPL = 2 LAVS
129 WOMEN: WATER CLOSETS 1 PER 75 PPL = 2 WATER CLOSETS
LAVATORIES 1 PER 200 PPL = 2 LAVS

1 SERVICE SINK REQUIRED
1 HI/LO EWC REQUIRED

SPECIAL APPROVALS

(LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC, etc., DESCRIBE BELOW)
NASH COUNTY, NC / NC STATE HISTORIC PRESERVATION OFFICES / NC DOT RAIL DIVISION
-
-
-

ENERGY SUMMARY SEE BELOW FOR EXEMPTIONS @ DEPOT

ENERGY REQUIREMENTS:

THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE PROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL COST FOR THE STANDARD REFERENCE DESIGN vs. ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.

EXISTING BUILDING ENVELOPE COMPLIES WITH CODE: ■NO ☐YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE)

EXEMPT BUILDING: ☐NO ■YES (PROVIDE CODE OR STATUTORY REFERENCE) EXEMPT PER NC ENERGY CODE C501.6 @ DEPOT

CLIMATE ZONE: ☐3A ☐4A ☐5A

METHOD OF COMPLIANCE: ENERGY CODE: ☐ PERFORMANCE ☐ PRESCRIPTIVE
ASHRAE 90.1: ☐ PERFORMANCE ☐ PRESCRIPTIVE
OTHER: ☐ (IF OTHER, PROVIDE SOURCE HERE) -

STRUCTURAL DESIGN SEE STRUCTURAL DRAWINGS

MECHANICAL DESIGN SEE MECHANICAL DRAWINGS

ELECTRICAL SUMMARY & DESIGN SEE ELECTRICAL DRAWINGS

SPRING HOPE COTTON PLATFORM (NEW CONSTRUCTION) - SEE CS1.3 FOR OVERALL LIFE SAFETY PLAN

ALLOWABLE AREA

PRIMARY OCCUPANCY CLASSIFICATION(S):
ASSEMBLY ☐A-1 ■A-2 ☐A-3 ☐A-4 ☐A-5
BUSINESS ☐
EDUCATIONAL ☐
FACTORY ☐F-1 MODERATE ☐F-2 LOW
HAZARDOUS ☐H-1 DETONATE ☐H-2 DEFLAGRATE ☐H-3 COMBUST ☐H-4 HEALTH ☐H-5 HPM
INSTITUTIONAL ☐I-1 CONDITION ☐1 ☐2
☐I-2 CONDITION ☐1 ☐2
☐I-3 CONDITION ☐1 ☐2 ☐3 ☐4 ☐5
☐I-4 CONDITION
MERCANTILE ☐
RESIDENTIAL ☐R-1 ☐R-2 ☐R-3 ☐R-4
STORAGE ☐S-1 MODERATE ☐S-2 LOW ☐HIGH PILED
☐PARKING GARAGE ☐OPEN ☐ENCLOSED ☐REPAIR GARAGE
UTILITY & MISCELLANEOUS ☐

ACCESSORY OCCUPANCY CLASSIFICATIONS: -
INCIDENTAL USES (Table 509): -
SPECIAL USES (Chap 4 - List Code Sections): -
SPECIAL PROVISIONS (Chap 5 - List Code Sections): -
MIXED OCCUPANCY: ■NO ☐YES SEPARATION: - HR EXCEPTION: -

☐NON-SEPERATED USE (508.3)
THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.

☐SEPARATED USE (508.4) - SEE BELOW FOR AREA CALCULATIONS FOR EACH STORY, THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

$$\frac{-}{-} + \frac{-}{-} + \dots = - \leq 1.00$$

STORY #	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 [4] AREA	(C) AREA FOR FRONTAGE INCREASE [1, 5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED [2, 3]
FIRST	BANQUET HALL (A-2)	2,654 SF	24,000 SF	NOT USED	24,000 SF

1 FRONTAGE AREA INCREASES FROM SECTION 506.3 ARE COMPUTED THUS:
a. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = - (F)
b. TOTAL BUILDING PERIMETER = - (P)
c. RATIO (F/P) = - (F/P)
d. W = MINIMUM WIDTH OF PUBLIC WAY = - (W)
e. PERCENT OF FRONTAGE INCREASE I_f = 100 (F/P - 0.25) x W/30 = - (%)
2 UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507.
3 MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x D (MAXIMUM 3 STORIES) (506.2)
4 THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.5.4.
5 FRONTAGE INCREASE IS BASED ON THE UNSPRINKLERED AREA VALUE IN TABLE 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
BUILDING HEIGHT IN FEET (Table 504.3)	60'-0"	22'	-
BUILDING HEIGHT IN STORIES (Table 503.4)	2	1	-

(Provide Code Reference if "Shown on Plans" is not based on Table 503.3 or 503.4)

FIRE PROTECTION REQUIREMENTS
LIFE SAFETY PLAN SHEET #, IF PROVIDED CS1.3 & CS1.4

BUILDING ELEMENT		FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (w/ - * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES		–	0	0	-	-	-	-
BEARING WALLS (EXTERIOR)	NORTH	> 30'	0	0	-	-	-	-
	EAST	> 30'	0	0	-	-	-	-
	WEST	15'-2"	0	0	-	-	-	-
	SOUTH	> 30'	0	0	-	-	-	-
BEARING WALLS (INTERIOR)		–	0	0	-	-	-	-
NONBEARING WALLS & PARTITIONS (EXTERIOR)	NORTH	–	N/A	N/A	-	-	-	-
	EAST	–	N/A	N/A	-	-	-	-
	WEST	–	N/A	N/A	-	-	-	-
	SOUTH	–	N/A	N/A	-	-	-	-
INTERIOR WALLS AND PARTITIONS		–	0	0	-	-	-	-
FLOOR CONSTRUCTION - INCLUDING SUPPORTING BEAMS & JOISTS			0	0	-	-	-	-
FLOOR CEILING ASSEMBLY			N/A	N/A	-	-	-	-
COLUMNS SUPPORTING FLOORS			0	0	-	-	-	-
ROOF CONSTRUCTION - INCLUDING SUPPORTING BEAMS & JOISTS			0	0	-	-	-	-
ROOF CEILING ASSEMBLY			0	0	-	-	-	-
COLUMNS SUPPORTING ROOF			0	0	-	-	-	-
SHAFT ENCLOSURES - EXIT			N/A	N/A	-	-	-	-
SHAFT ENCLOSURES - OTHER			N/A	N/A	-	-	-	-
CORRIDOR SEPARATION			0	0	-	-	-	-
OCCUPANCY / FIRE BARRIER SEPARATION			N/A	N/A	-	-	-	-
PARTY / FIRE WALL SEPARATION			N/A	N/A	-	-	-	-
SMOKE BARRIER SEPARATION			N/A	N/A	-	-	-	-
SMOKE PARTITION			N/A	N/A	-	-	-	-
TENANT / DWELLING UNIT / SLEEPING UNIT SEPARATION			N/A	N/A	-	-	-	-
INCIDENTAL USE SEPARATION			N/A	N/A	-	-	-	-

* INDICATE SECTION NUMBER PERMITTING REDUCTION

PERCENTAGE OF WALL OPENING CALCULATIONS UNLIMITED PER NCBC 705.8.1, EXC. 2

LIFE SAFETY SYSTEM REQUIREMENTS

EMERGENCY LIGHTING: ☐NO ■YES
EXIT SIGNS: ☐NO ■YES
FIRE ALARM: ☐NO ■YES ☐SPRINKLER MONITORING ONLY
SMOKE DETECTION SYSTEMS: ☐NO ■YES ☐PARTIAL -
CARBON MONOXIDE DETECTION: ■NO ☐YES

LIFE SAFETY PLAN REQUIREMENTS

LIFE SAFETY PLAN SHEET #: CS1.3 & CS1.4
☐FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7)
☐ASSUMED AND REAL PROPERTY LINE LOCATIONS (if not on site plans)
☐EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8)
■OCCUPANCY USE FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2)
■OCCUPANT LOADS FOR EACH AREA
■EXIT SIGN LOCATIONS (1013)
■EXIT ACCESS TRAVEL DISTANCES (1017)
■COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1))
☐DEAD END LENGTHS (1020.4)
■CLEAR EXIT WIDTHS FOR EACH EXIT DOOR
■MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3.1)
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☐A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR / CEILING AND / OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION
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PLUMBING FIXTURE REQUIREMENTS @ PLATFORM
(TABLE 2902.1)

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS / TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
SPACE	EXISTING	0	0	0	0	0	0	0	0	0	0
	NEW	1	2	0	1	1	1	0	0	1	1
	REQUIRED	2	2	0	0	1	1	0	0	1	1

PLUMBING FIXTURE COUNT BASED ON 212 OCCUPANTS:

106 MEN: WATER CLOSETS 1 PER 75 PPL = 2 WATER CLOSETS
LAVATORIES 1 PER 200 PPL = 1 LAV
106 WOMEN: WATER CLOSETS 1 PER 75 PPL = 2 WATER CLOSETS
LAVATORIES 1 PER 200 PPL = 1 LAV

1 SERVICE SINK REQUIRED
1 HI/LO EWC REQUIRED

SPECIAL APPROVALS

(LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC, etc., DESCRIBE BELOW)
NASH COUNTY, NC / NC STATE HISTORIC PRESERVATION OFFICES / NC DOT RAIL DIVISION
-
-
-

ENERGY SUMMARY SEE BELOW FOR EXEMPTION @ PLATFORM

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EXISTING BUILDING ENVELOPE COMPLIES WITH CODE: ☐NO ☐YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE)

EXEMPT BUILDING: ☐NO ■YES (PROVIDE CODE OR STATUTORY REFERENCE) EXEMPT PER NC ENERGY CODE C402.1.1 ¶1 @ PLATFORM

CLIMATE ZONE: ☐3A ☐4A ☐5A

METHOD OF COMPLIANCE: ENERGY CODE: ☐ PERFORMANCE ☐ PRESCRIPTIVE
ASHRAE 90.1: ☐ PERFORMANCE ☐ PRESCRIPTIVE
OTHER: ☐ (IF OTHER, PROVIDE SOURCE HERE) -

STRUCTURAL DESIGN SEE STRUCTURAL DRAWINGS

MECHANICAL DESIGN SEE MECHANICAL DRAWINGS

ELECTRICAL SUMMARY & DESIGN SEE ELECTRICAL DRAWINGS

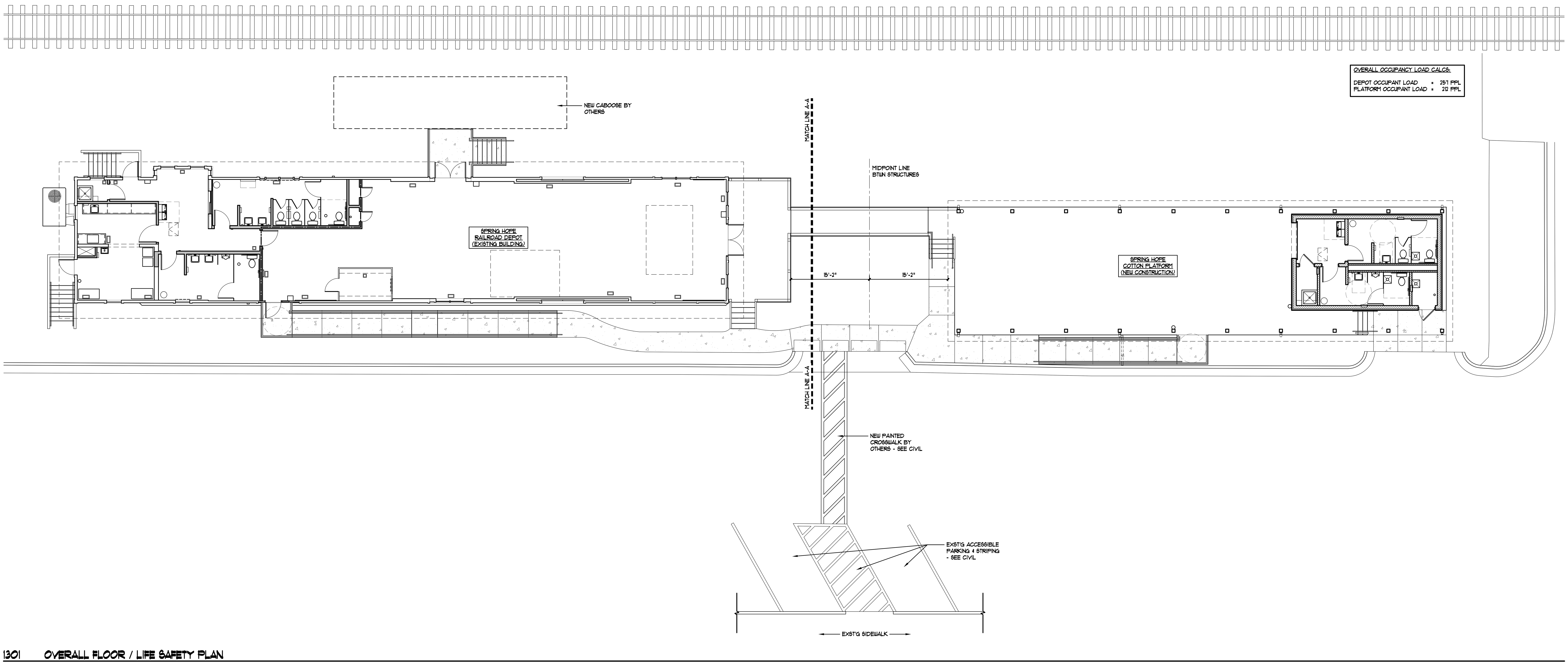
NORTH CAROLINA
ANDREW J. LOPINA
ALLIANCE ARCHITECTURE OF THE TRIAD
LICENSE NO. 50943
WINSTON-SALEM, NC

ALLIANCE ARCHITECTURE OF THE TRIAD
2601 Pilgrim Court, Suite 130 | Winston-Salem, NC 27106 | Ph. 336-722-4447

REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

JOB 23081
DATE February 28, 2025
DRAWN T. Doorn
SHEET CS1.2



1301 OVERALL FLOOR / LIFE SAFETY PLAN

1/8" = 1'-0"

BP0123081

SPRING HOPE RAILROAD DEPOT

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REVISIONS

JOB 25081

DATE February 28, 2025

DRAWN T. Doom

SHEET CS1.3

OCCUPANCY LOAD CALCS @ PLATFORM:

MIXED ASSEMBLY USE - ASSUMING HIGHEST OCCUPANCY (1/5 SF)
EVENT SPACE (1,054 SF) = 211 PPL
STORAGE / MECH (1/300 SF)
MISC. STORAGE (61 SF) = 1 PERSON

PLATFORM OCCUPANT LOAD = 212 PPL

EXITS REQUIRED = 2
max TRAVEL DIST = 56'-7"
max ALLOWABLE TRAVEL DIST = 250'

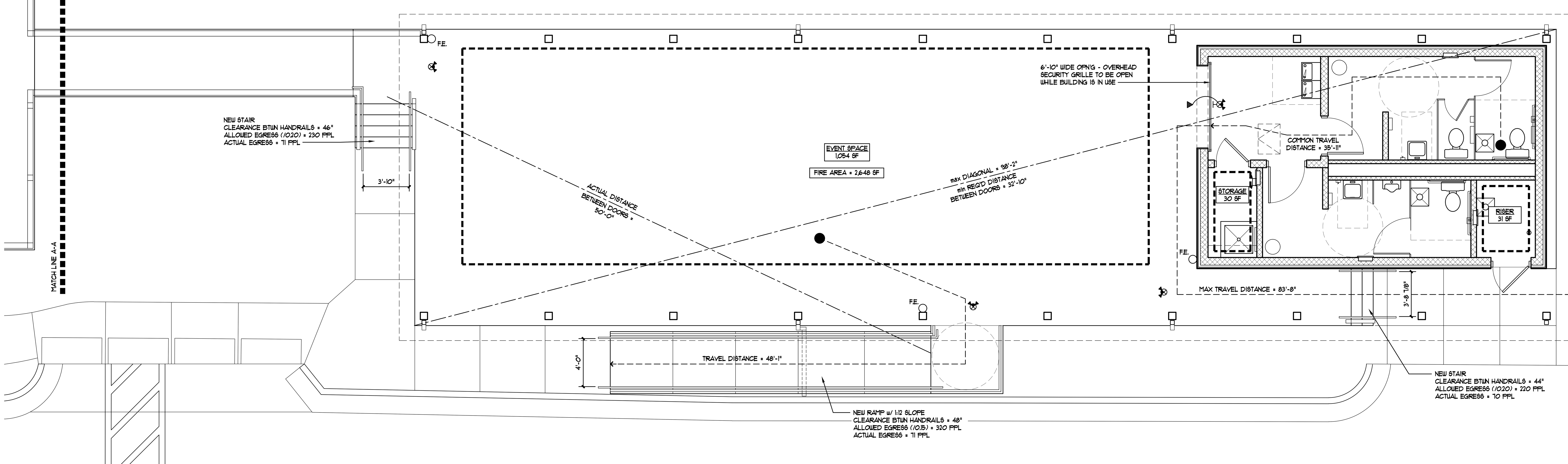
EGRESS LIGHTING LEGEND:

- NEW EXIT LIGHT FIXTURE
- NEW COMBO EXIT SIGN & EM. LIGHT FIXTURE
- NEW EXT. EM. LIGHT FIXTURE

NOTE: SEE ELEC FOR FIXTURE SELECTIONS

OVERALL OCCUPANCY LOAD CALCS:

DEPOT OCCUPANT LOAD = 257 PPL
PLATFORM OCCUPANT LOAD = 212 PPL



1413 LIFE SAFETY PLAN @ PLATFORM ADDITION
1/4" = 1'-0"

BP0123081

EGRESS LIGHTING LEGEND:

- NEW EXIT LIGHT FIXTURE
- NEW COMBO EXIT SIGN & EM. LIGHT FIXTURE
- NEW EXT. EM. LIGHT FIXTURE

NOTE: SEE ELEC FOR FIXTURE SELECTIONS

OCCUPANCY LOAD CALCS @ DEPOT:

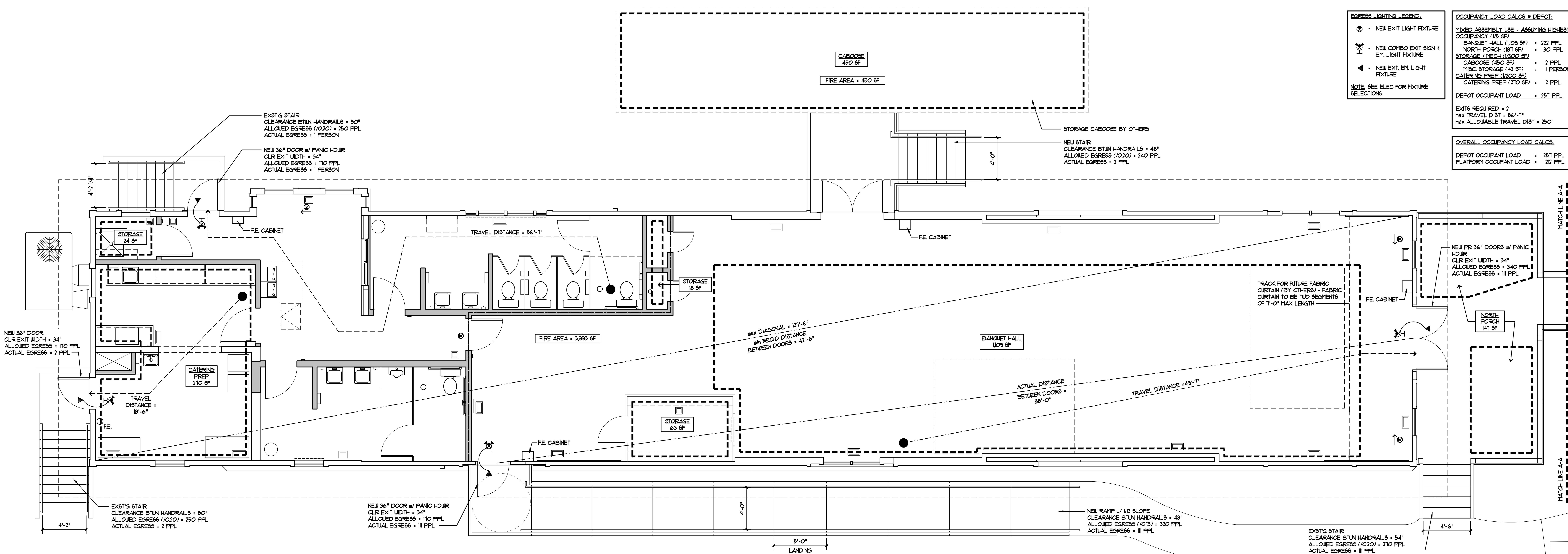
MIXED ASSEMBLY USE - ASSUMING HIGHEST OCCUPANCY (1/5 SF)
BANQUET HALL (1,109 SF) = 222 PPL
NORTH PORCH (187 SF) = 30 PPL
STORAGE / MECH (1/300 SF)
CABOOSE (450 SF) = 2 PPL
MISC. STORAGE (42 SF) = 1 PERSON
CATERING PREP (1/200 SF)
CATERING PREP (270 SF) = 2 PPL

DEPOT OCCUPANT LOAD = 257 PPL

EXITS REQUIRED = 2
max TRAVEL DIST = 56'-7"
max ALLOWABLE TRAVEL DIST = 250'

OVERALL OCCUPANCY LOAD CALCS:

DEPOT OCCUPANT LOAD = 257 PPL
PLATFORM OCCUPANT LOAD = 212 PPL



1401 LIFE SAFETY PLAN @ PLATFORM ADDITION
1/4" = 1'-0"

BP0123081

NORTH CAROLINA REGISTERED ARCHITECT SEAL 7183 ANDREW J. LOPINA
ALLIANCE ARCHITECTURE OF THE TRIAD, PC REGISTERED ARCHITECTURAL CORPORATION LICENSE NO. 50943 NORTH CAROLINA WINSTON-SALEM, NC

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REVISIONS

SPRING HOPE RAILROAD DEPOT

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101 South Ash Street
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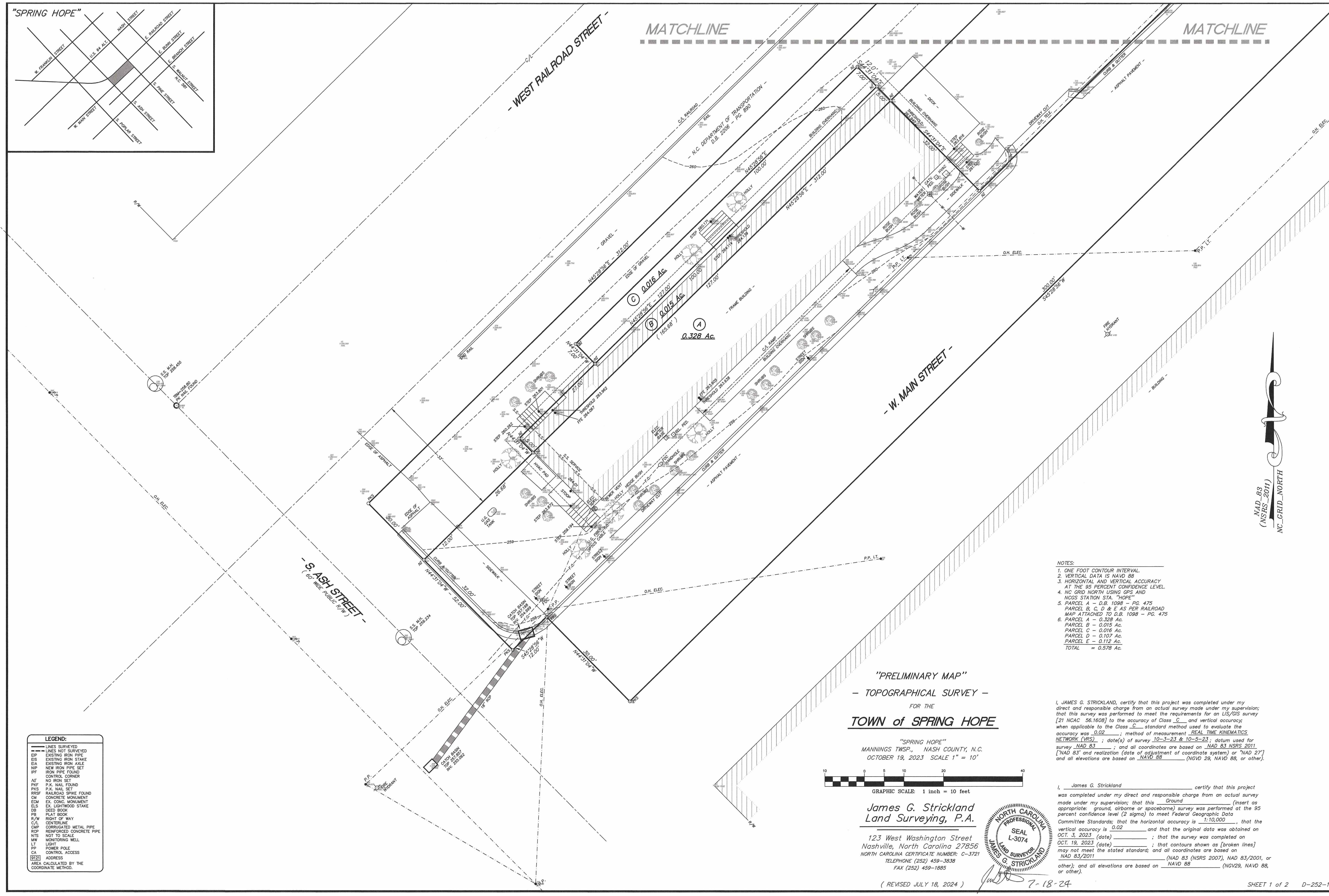
JOB 23081
DATE February 28, 2025
DRAWN T. Doom
SHEET CS1.4



NOTES:

1. ONE FOOT CONTOUR INTERVAL.
2. VERTICAL DATA IS NAVD 88
3. HORIZONTAL AND VERTICAL ACCURACY AT THE 95 PERCENT CONFIDENCE LEVEL.
4. NC GRID NORTH USING GPS AND NCGS STATION STA. "HOPE"
5. PARCEL A – D.B. 1098 – PG. 475
   PARCEL B, C, D & E AS PER RAILROAD MAP ATTACHED TO D.B. 1098 – PG. 475
6. PARCEL A – 0.328 Ac.
   PARCEL B – 0.015 Ac.
   PARCEL C – 0.016 Ac.
   PARCEL D – 0.107 Ac.
   PARCEL E – 0.112 Ac.
   TOTAL = 0.578 Ac.

"PRELIMINARY MAP"

– TOPOGRAPHICAL SURVEY –

FOR THE

TOWN of SPRING HOPE

"SPRING HOPE"
MANNINGS TWSP., NASH COUNTY, N.C.
OCTOBER 19, 2023 SCALE 1" = 10'

10 0 5 10 20 40
GRAPHIC SCALE: 1 inch = 10 feet

James G. Strickland
Land Surveying, P.A.

123 West Washington Street
Nashville, North Carolina 27856
NORTH CAROLINA CERTIFICATE NUMBER: C–3721
TELEPHONE (252) 459–3838
FAX (252) 459–1885

(REVISED JULY 18, 2024)

NORTH CAROLINA PROFESSIONAL SEAL L-3074 LAND SURVEYOR JAMES G. STRICKLAND

7-18-24

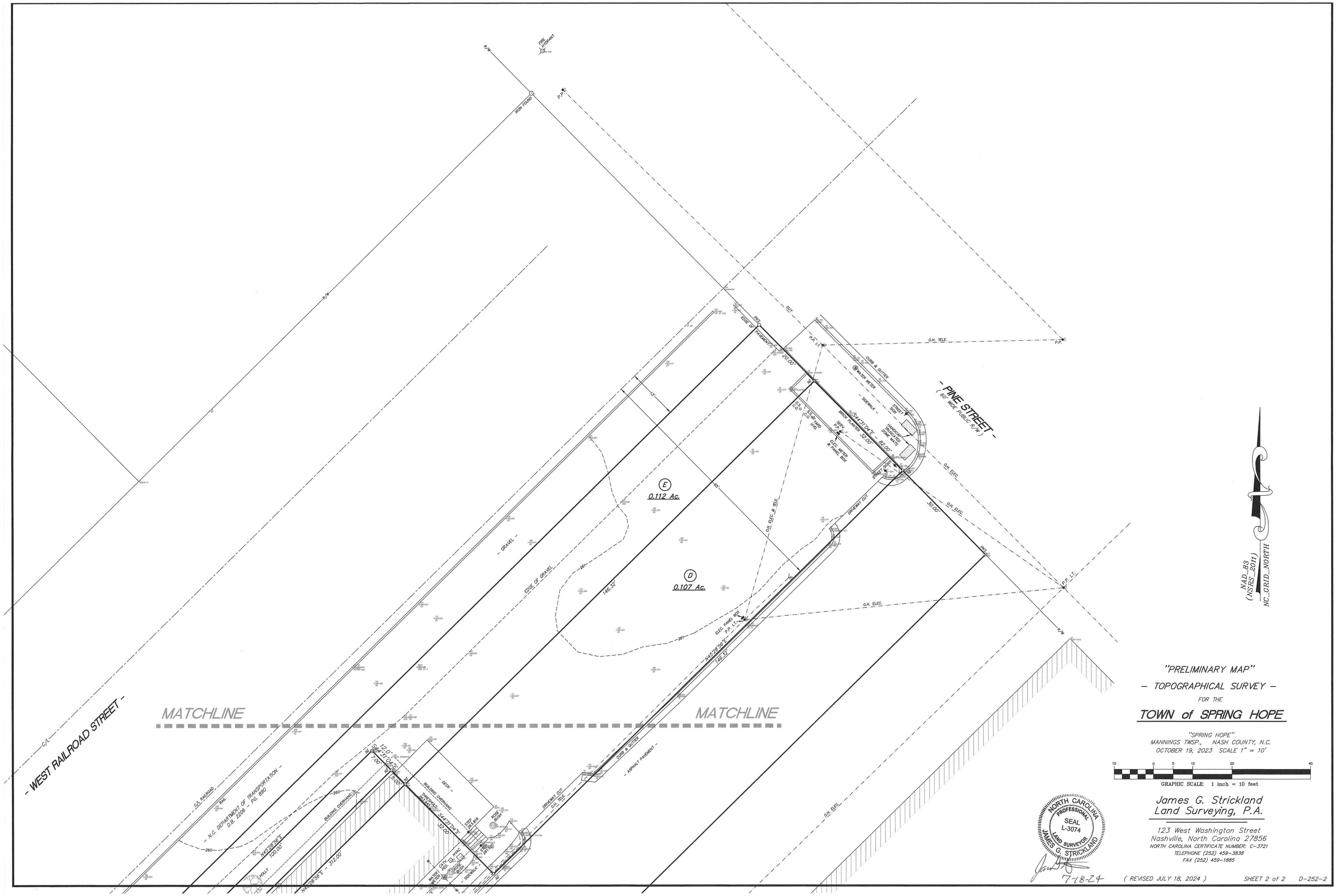
I, JAMES G. STRICKLAND, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision; that this survey was performed to meet the requirements for an LIS/GIS survey [21 NCAC 56.1608] to the accuracy of Class C and vertical accuracy; when applicable to the Class C standard method used to evaluate the accuracy was 0.02 ; method of measurement REAL TIME KINEMATICS NETWORK (VRS) ; date(s) of survey 10–3–23 & 10–5–23 ; datum used for survey NAD 83 ; and all coordinates are based on NAD 83 NSRS 2011 ['NAD 83' and realization (date of adjustment of coordinate system) or "NAD 27'] and all elevations are based on NAVD 88 (NGVD 29, NAVD 88, or other).

I, James G. Strickland certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision; that this Ground (insert as appropriate: ground, airborne or spaceborne) survey was performed at the 95 percent confidence level (2 sigma) to meet Federal Geographic Data Committee Standards; that the horizontal accuracy is 1:10,000 , that the vertical accuracy is 0.02 and that the original data was obtained on OCT. 3, 2023 (date) ; that the survey was completed on OCT. 19, 2023 (date) ; that contours shown as [broken lines] may not meet the stated standard; and all coordinates are based on NAD 83/2011 (NAD 83 (NSRS 2007), NAD 83/2001, or other); and all elevations are based on NAVD 88 (NGV29, NAVD 88, or other).

LEGEND:

———	LINES SURVEYED
– – –	LINES NOT SURVEYED
EIP	EXISTING IRON PIPE
EIS	EXISTING IRON STAKE
EIA	EXISTING IRON AXLE
NIP	NEW IRON PIPE SET
IPF	IRON PIPE FOUND
	CONTROL CORNER
NI	NO IRON SET
PKF	P.K. NAIL FOUND
PKS	P.K. NAIL SET
RRSF	RAILROAD SPIKE FOUND
CM	CONCRETE MONUMENT
ECM	EX. CONC. MONUMENT
ELS	EX. LIGHTWOOD STAKE
DB	DEED BOOK
PB	PLAT BOOK
R/W	RIGHT OF WAY
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
NTS	NOT TO SCALE
MW	MONITORING WELL
LT	LIGHT
PP	POWER POLE
CA	CONTROL ACCESS
9121	ADDRESS

AREA CALCULATED BY THE COORDINATE METHOD.



"PRELIMINARY MAP"

- TOPOGRAPHICAL SURVEY -

FOR THE

TOWN of SPRING HOPE

"SPRING HOPE"
MANNINGS TWSP., NASH COUNTY, N.C.
OCTOBER 19, 2023 SCALE 1" = 10'

GRAPHIC SCALE: 1 inch = 10 feet

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Land Surveying, P.A.

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Nashville, North Carolina 27856
NORTH CAROLINA CERTIFICATE NUMBER: C-3721
TELEPHONE (252) 459-3838
FAX (252) 459-1885

NORTH CAROLINA PROFESSIONAL SEAL L-3074 LAND SURVEYOR JAMES G. STRICKLAND

7-18-24

(REVISED JULY 18, 2024)

SHEET 2 of 2 D-252-2

DEMOLITION GENERAL NOTES

1. LOCATION AND TOPOGRAPHIC INFORMATION PROVIDED BY A SURVEY COMPLETED BY JAMES G. STRICKLAND LAND SURVEYING, P.A., DATED OCTOBER 19, 2023, REVISED JULY 18, 2024; PROJ.# D-252-1.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL APPLICABLE OSHA REGULATIONS PERTAINING TO CONSTRUCTION ON-SITE.
3. CONTRACTOR SHALL PROVIDE THE NECESSARY SIGNAGE AND FLAGMEN WHEN WORKING WITHIN THE PUBLIC ROAD RIGHT-OF-WAY. UTILIZE TEMPORARY TRAFFIC CONTROL DEVICES TO ENSURE THE SAFETY OF EMPLOYEES AND THE GENERAL PUBLIC.
4. PERIMETER EROSION CONTROL DEVICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MOST CURRENT STANDARDS OF THE LAND QUALITY SECTION OF THE NCDEQ.
5. COORDINATE WITH ADJACENT PROPERTY OWNERS FOR ANY WORK REQUIRED OUTSIDE OF PROPERTY BOUNDARY.
6. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES PRIOR TO COMMENCEMENT OF ANY WORK.
7. THE CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL CENTER (800) 632-4949 AT LEAST THREE DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL ILLUSTRATED UNDERGROUND UTILITIES AND SHALL EXERCISE REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND UTILITIES. NOTIFY ENGINEER IMMEDIATELY IF ANY ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE A REVISION TO THE DESIGN.
8. ALL UTILITIES OR STRUCTURES NOT DESIGNATED FOR REMOVAL OR MODIFICATION ARE TO REMAIN AND BE PROTECTED. ALL UTILITIES OR STRUCTURES DESIGNATED FOR MODIFICATION SHALL BE PROTECTED BY THE CONTRACTOR DURING CONSTRUCTION.
9. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL ILLUSTRATED UNDERGROUND UTILITIES AND PROPOSED UTILITY CROSSINGS. THE CONTRACTOR SHALL EXERCISE REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND UTILITIES. NOTIFY ENGINEER IMMEDIATELY IF ANY ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE DESIGN REVISIONS.
10. CONTACT THE TOWN OF SPRING HOPE PUBLIC WORKS DEPARTMENT (252-478-5186) PRIOR TO TERMINATING OR INSTALLING WATER OR SEWER CONNECTIONS. ALL CONSTRUCTION, MATERIALS AND SANITATION PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NORTH CAROLINA PLUMBING CODE AND THE TOWN OF SPRING HOPE STANDARDS, SPECIFICATIONS AND DETAILS. ALL UTILITY WORK TO BE PERFORMED BY LICENSED UTILITY CONTRACTOR.
11. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND DEMOLITION AREA. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES AND LANDSCAPING TO REMAIN.
12. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS, SUCH AS ICE, FLOODING AND POLLUTION, WHEN USING WATER. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
13. CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF DEMOLISHED ITEMS AND MATERIALS PROMPTLY. ON-SITE STORAGE OR SALE OF REMOVED ITEMS IS PROHIBITED. ON-SITE BURNING OF DEMOLISHED MATERIALS WILL NOT BE ALLOWED.
14. SALVAGEABLE FILL MATERIALS FROM SITE DEMOLITION DETERMINED ACCEPTABLE BY AN INDEPENDENT SOILS TESTING LABORATORY MAY BE UTILIZED FOR FILL MATERIAL WHERE APPROPRIATE.
15. NO SIGNAGE SHALL BE REMOVED TEMPORARILY OR PERMANENTLY FROM THE PUBLIC RIGHT-OF-WAY. SIGNAGE SHALL BE PROTECTED DURING ALL CONSTRUCTION ACTIVITIES. ANY SIGNS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTORS EXPENSE.
16. ALL EXISTING TREES NOT DESIGNATED FOR REMOVAL SHALL REMAIN AND BE PROTECTED DURING ALL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL PROVIDE TREE PROTECTION FENCING TO PROTECT EXISTING ROOT SYSTEM AND CANOPY BY SETTING FENCING BACK ONE FOOT RADIUS FOR EACH INCH OF DIAMETER OF TREE.
17. ALL POWER POLES, GUY WIRES AND OVERHEAD LINES NOT DESIGNATED FOR REMOVAL SHALL REMAIN AND BE PROTECTED DURING ALL CONSTRUCTION ACTIVITIES.
18. EXISTING WATER CONNECTIONS NOT INTENDED FOR REUSE SHALL BE TERMINATED AT THE WATER MAIN. ¾" THROUGH 2" CONNECTIONS SHALL BE CUT-OFF AT THE CORPORATION AND THE SERVICE LINE CUT THROUGH AT THE CORPORATION. LARGER CONNECTIONS SHALL HAVE THE TAPPING SLEEVE AND VALVE OR TEE REMOVED AND REPLACED WITH MECHANICAL JOINT SLEEVES AND PIPE INSTALLED TO THE TOWN OF SPRING HOPE STANDARDS. VAULTS OR BOXES SHALL BE PROPERLY REMOVED OR DEMOLISHED. EXISTING SEWER CONNECTIONS NOT INTENDED FOR REUSE SHALL BE ABANDONED BY REMOVING THE CLEANOUT STACK, REMOVING THE LATERAL PIPE TO THE MAIN AND INSTALLING A WATERTIGHT PLUG AT THE TAPPING SADDLE OR WYE. CONNECTIONS INTENDED FOR REUSE ARE SUBJECT TO ASSESSMENT AND UPGRADE.

KEYNOTES

- (A) EXISTING BRICK PLANTER AND FILL MATERIAL TO BE REMOVED.
- (B) OVERHEAD UTILITY LINES TO BE REMOVED OR REROUTED AS NECESSARY TO ACCOMMODATE NEW CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDERS FOR REMOVAL AND SCHEDULE. REFER TO CONTRACT DOCUMENTS FOR BIDDING INSTRUCTIONS RELATED TO FEES
- (C) EXISTING ELECTRICAL PANEL TO BE DISCONNECTED AND EQUIPMENT REMOVED FROM POLE. VERIFY THE PANEL NO LONGER PROVIDES SERVICE TO ANY REMAINING BUILDINGS IN SERVICE. COORDINATE REMOVAL WITH OWNER AND DUKE ENERGY. COORDINATE WITH OWNER FOR COMPONENTS THAT MAY BE SALVAGEABLE.
- (D) COORDINATE WITH UTILITY PROVIDER FOR REMOVAL OR RELOCATION OF EXISTING UTILITY POLE WITH STREET LIGHT.
- (E) EXISTING WATER METER AND WATER SERVICE LINE TO OUTDOOR FAUCETS TO REMAIN. RE-ROUTE SERVICE LINE TO FAUCETS TO BEYOND THE LIMITS OF NEW BUILDING AND FOOTINGS.
- (F) EXISTING OUTDOOR FAUCETS TO BE REMAIN IN SERVICE (LOCATIONS ARE APPROXIMATE). LOCATE AND REROUTE THE EXISTING $\frac{3}{4}$" WATER LINE (AND VALVE) THAT ARE LOCATED WITHIN THE LIMITS OF THE NEW PLATFORM
- (G) EXISTING YARD HYDRANT TO BE REMOVED.
- (H) EXISTING WATER METER AND WATER SERVICE LINE TO BE REMOVED. REMOVE EXISTING PIPE TO CORPORATION/TAP AT WATER MAIN. SAW CUT EXISTING PAVEMENT AND CURB AND GUTTER AS REQUIRED FOR LINE REMOVAL. COORDINATE WITH TOWN FOR ASPHALT PATCHING. CONCRETE REPAIRS TO BE PROVIDED BY CONTRACTOR. SIDEWALK, CURB & GUTTER TO MATCH EXISTING.
- (I) EXISTING SANITARY SEWER SERVICE AND CLEANOUTS TO BE REMOVED FROM BENEATH DEPOT TO RIGHT OF WAY AND CAPPED. SEE SITE UTILITY PLAN AND PLUMBING PLANS FOR PROPOSED SANITARY SEWER IMPROVEMENTS. COORDINATE WITH TOWN FOR ABANDONMENT OF SERVICE CONNECTION NORTH OF RAILROAD TRACKS.
- (J) EXISTING RAMPS/STEPS DESIGNATED FOR REMOVAL OR MODIFICATION. REFER TO ARCHITECTURAL PLANS (A1.1).
- (K) EXISTING CONCRETE SIDEWALK/LANDING TO BE REMOVED TO ACCOMODATE NEW RAMP AND ACCESSIBLE GRADES. SAW CUT EXISTING CONCRETE/RAMP/STEPS/STOOP TO PROVIDE STRAIGHT AND UNIFORM LINE FOR REMOVAL.
- (L) EXISTING PAD FOR MECHANICAL EQUIPMENT TO BE REMOVED. REFER ALSO TO ARCHITECTURAL PLANS. (A1.1).
- (M) EXISTING SHRUB/TREE TO BE REMOVED.
- —x— (N) TEMPORARY, PERIMETER CONSTRUCTION FENCING. REFER TO ADD-ALTERNATE 4 IN ARCHITECTURAL SPECIFICATIONS.

EROSION CONTROL LEGEND & KEY NOTES

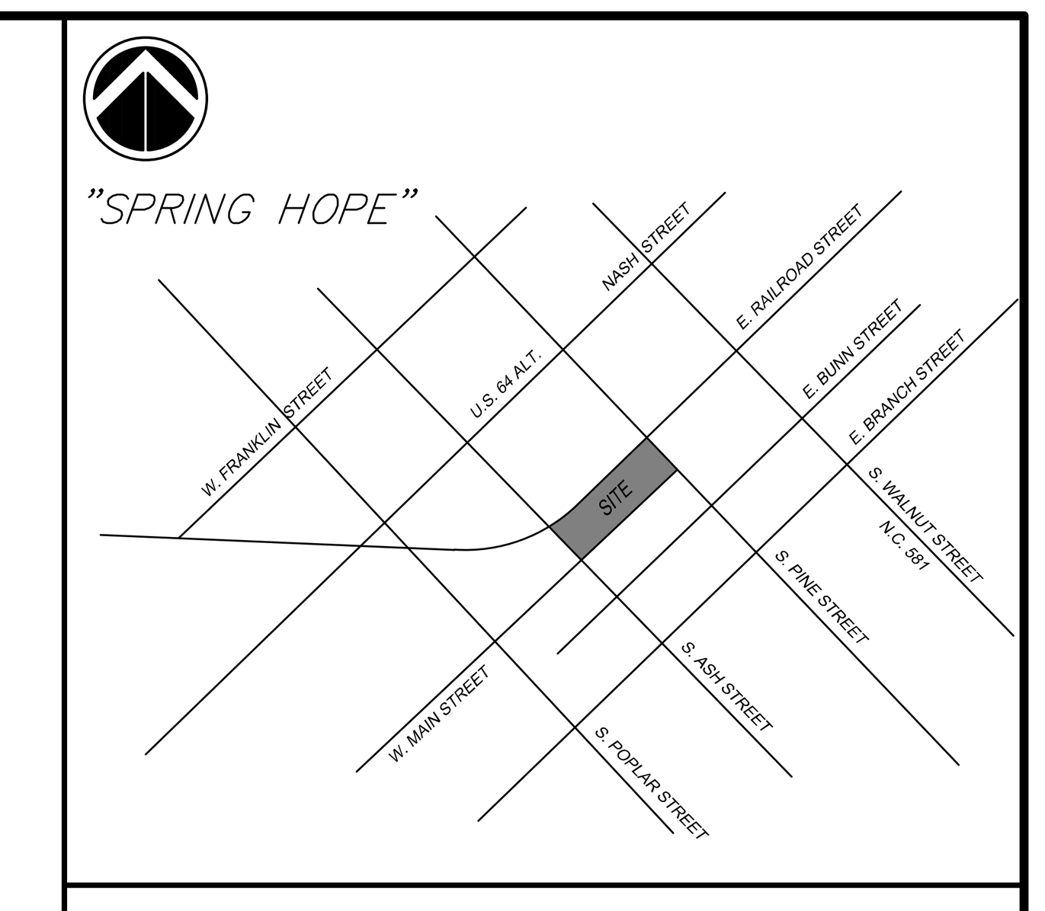
(***6.XX*** *= STD. PRACTICE, FROM NC E&SC MANUAL; <1 ACRE, PERMIT NOT REQUIRED*)

- NEW TEMPORARY CONSTRUCTION ENTRANCE/EXIT. (***6.06***)
- —SF— NEW TEMPORARY SEDIMENT FENCE. (***6.62***)
- TEMPORARY INLET PROTECTION - SILT SACK. *REMOVE CURB FILTER FOR DROP INLETS.* FOR PUBLIC CURB INLETS, COORDINATE WITH THE TOWN.

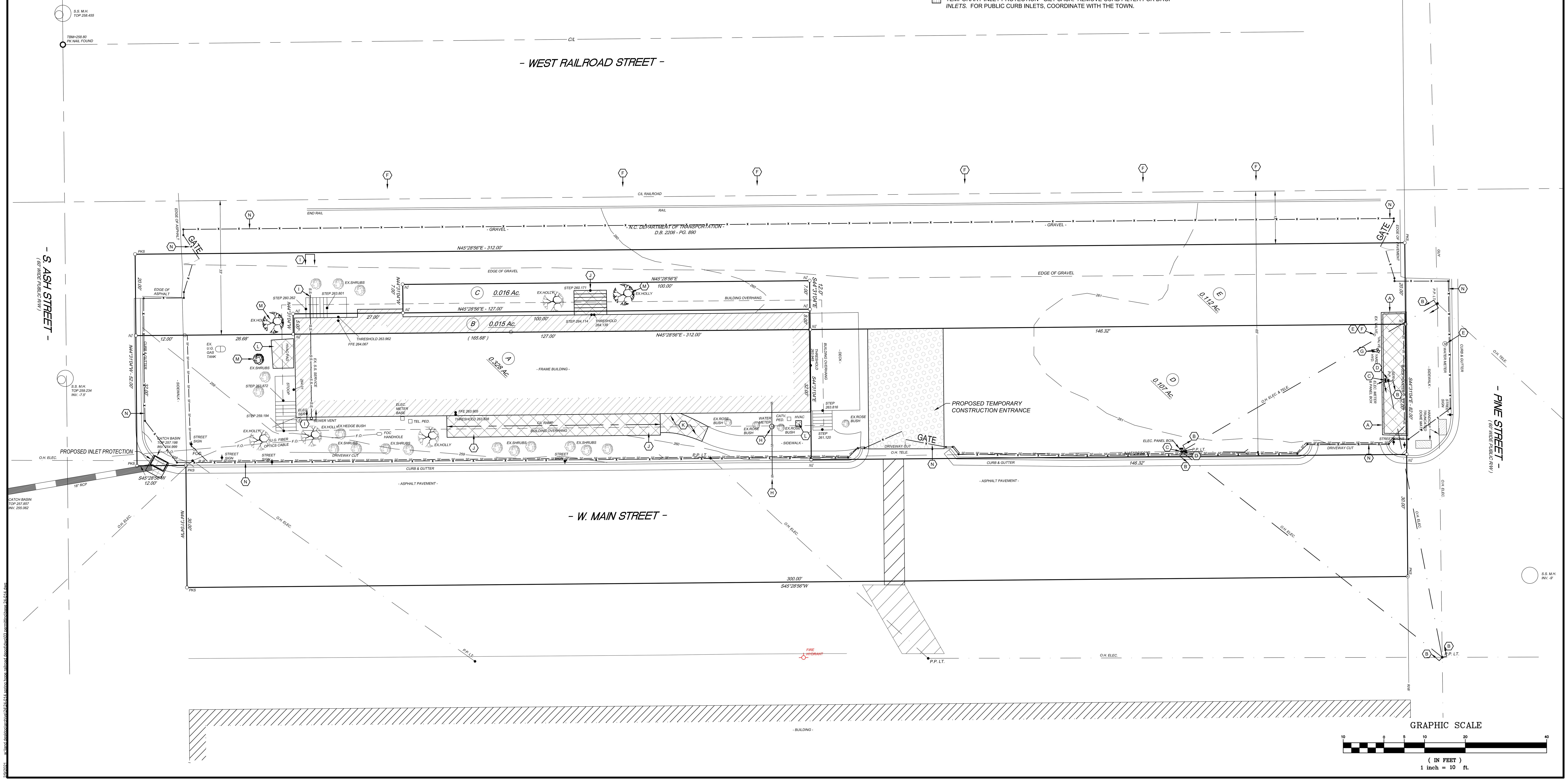
PROPERTY INFORMATION:

PARCEL ID NUMBER: 276905092450
ZONING: CB

TOWN OF SPRING HOPE
118 RAILROAD STREET
SPRING HOPE, NORTH CAROLINA 27882
P: 252.478.5186



VICINITY MAP
NOT TO SCALE



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ADI# 24-014

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 023450 WM. KEVIN DAVIE 1/9/25

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2601 Pilgrim Court, Suite 130 | Winston-Salem, NC 27106
Ph 336.722.4447

REVISIONS

SPRING HOPE RAILROAD DEPOT

Building Rehabilitation & Platform Addition

101 South Ash Street
Spring Hope, North Carolina 27882

JOB	23081
DATE	October 16, 2024
DRAWN	

SHEET
SITE EXISTING CONDITIONS & DEMOLITION PLAN
C1

UTILITY CONNECTION NOTES FOR BUILDING PLANS

GENERAL:

1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
2. STABILIZATION STONE UNDER PIPING TO BE PLACED AS REQUIRED BY TOWN INSPECTOR WHEN CONDITIONS WARRANT.
3. AS A MINIMUM REQUIREMENT, ALL GRADED AREAS NOT UNDER PAVEMENT AND WITHIN THE RIGHT-OF- WAY AND/OR EASEMENTS SHALL BE PREPARED, FERTILIZED AND LIMED, SEEDED, AND MULCHED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
4. ALL WORK MUST CARRY A ONE-YEAR WARRANTY TO COVER ALL DEFECTS IN MATERIALS AND WORKMANSHIP.
5. CONTACT TOWN OF SPRING HOPE PUBLIC WORKS DEPARTMENT (252-478-5186) TO ARRANGE FOR CONSTRUCTION INSPECTION. A TOWN INSPECTOR WILL VERIFY PER THE APPROVED PLANS THAT THE BACKFLOW PREVENTER TYPE, VAULT, EXACT LOCATION, AND INSPECTION REQUIREMENTS HAVE BEEN SATISFIED. A TOWN INSPECTOR MUST BE PRESENT WHEN MAKING OR TERMINATING WATER AND SEWER CONNECTIONS INTO NEW OR EXISTING WATER AND SEWER LINES.
6. ALL CONSTRUCTION, MATERIALS, AND SANITATION PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CURRENT NORTH CAROLINA PLUMBING CODE AND THE TOWN OF SPRING HOPE.
7. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND ANNUAL TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT.
8. BACKFLOW PREVENTION ASSEMBLY SIZE SHALL MATCH THE DIMENSION OF THE WATER METER.
9. FLUSHING OF FIRE LINES MUST BE WITNESSED BY FIRE DEPARTMENT PERSONNEL. COORDINATE WITH THE FIRE DEPARTMENT TO SCHEDULE THESE ACTIVITIES.
10. EXISTING WATER CONNECTIONS NOT INTENDED FOR REUSE SHALL BE TERMINATED AT THE WATER MAIN. ¾" THROUGH 2" CONNECTIONS SHALL BE CUT-OFF AT THE CORPORATION AND THE SERVICE LINE CUT THROUGH AT THE CORPORATION. LARGER CONNECTIONS SHALL HAVE THE TAPPING SLEEVE AND VALVE OR TEE REMOVED AND REPLACED WITH MECHANICAL JOINT SLEEVES AND PIPE INSTALLED TO THE TOWN OF SPRING HOPE STANDARDS. VAULTS OR BOXES SHALL BE PROPERLY REMOVED OR DEMOLISHED. EXISTING SEWER CONNECTIONS NOT INTENDED FOR REUSE SHALL BE ABANDONED BY REMOVING THE CLEANOUT STACK, REMOVING THE LATERAL PIPE TO THE MAIN AND INSTALLING A WATERTIGHT PLUG AT THE TAPPING SADDLE OR WYE. CONNECTIONS INTENDED FOR REUSE ARE SUBJECT TO ASSESSMENT AND UPGRADE.
11. CONTRACTOR TO FLUSH/DISINFECT PRIVATE WATER LINES IN ACCORDANCE WITH THE NC PLUMBING CODE.

WATER AND/OR SANITARY SEWER:

1. ACCEPTABLE WORKING CONDITIONS OF SANITARY SEWER STRUCTURES AND PIPING SHALL BE VERIFIED BY THE CONTRACTOR AND ALL CONDITIONS FOUND TO BE UNACCEPTABLE SHALL BE REPORTED TO THE SPRING HOPE PUBLIC WORKS DEPARTMENT PRIOR TO ANY CONNECTIONS, EXTENSIONS, OR STRUCTURES BEING INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REPAIR OF UNACCEPTABLE CONDITIONS THAT RESULT FROM FAILURE TO REPORT SUCH CONDITIONS PRIOR TO COMMENCING WORK OR THAT RESULT FROM WORK BEING PERFORMED.
2. SANITARY SEWER CONNECTIONS SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE WITH 4-INCH CLEANOUTS AND SHALL MEET TOWN OF SPRING HOPE REQUIREMENTS.

KEYNOTES

(A) NEW STEPS. REFER TO ARCHITECTURAL PLANS (A2.1-2.2).

(B) NEW RAMP IN ACCORDANCE WITH ADA ACCESSIBILITY GUIDELINES. REFER TO ARCHITECTURAL PLANS (A2.1-2.2).

(C) **VERIFY EXISTING PUBLIC SANITARY SEWER INVERT PRIOR TO INSTALLING BUILDING SERVICE(S).** COORDINATE WITH ENGINEER TO REVIEW PROPOSED ALIGNMENT AND DEPTH.

(D) PROPOSED 4"CAST IRON SANITARY SEWER SERVICE AT 1.0% MINIMUM GRADE TO A POINT 5'-0" FROM BUILDING. PROVIDE TRANSITION GASKET AT CONNECTION IF GOING FROM PVC TO CAST IRON. COORDINATE WITH ARCHITECTURAL/PLUMBING PLANS FOR EXACT LOCATION.

(E) PROPOSED 4" CAST IRON CLEAN OUT TO TOWN OF SPRING HOPE STANDARD. PROVIDE TRAFFIC RATED CLEAN OUT WITH REVERSE/FLUSH CAP AND A CONCRETE COLLAR.

(F) FIELD CORE EXISTING PRIVATE MANHOLE AND INSTALL FLEXIBLE RUBBER BOOT FOR TIE-IN OF PROPOSED SANITARY SEWER. COORDINATE WITH THE TOWN OF SPRING HOPE PUBLIC WORKS DEPARTMENT. BACKFILL TO BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY.

(G) PROVIDE 6"X4" TAPPING SLEEVE AND VALVE. COORDINATE TIE-IN TO EXISTING MAIN WITH THE TOWN OF SPRING HOPE PUBLIC WORKS DEPARTMENT. BACKFILL TO BE COMPACTED TO 100% OF MAXIMUM DRY DENSITY.

(H) NEW 4" DIP FIRE PROTECTION SERVICE. A NC LICENSED UTILITY CONTRACTOR SHALL INSTALL THE 4" FIRE LINE WITH DOUBLE CHECK DETECTOR BACKFLOW PREVENTER INSTALLED IN PLATFORM RISER ROOM (REFER TO SHEET F-001). VERIFY RISER ROOM REQUIREMENTS. CONTINUE 4" FIRE PROTECTION LINE TO EXISTING DEPOT BUILDING AS SHOWN. ALL PIPING SHALL BE DUCTILE IRON MECHANICAL RESTRAINED JOINT (OR RESTRAINED WITH MEGA LUG RETAINING GLANDS) FROM THE CONNECTION AT THE MAIN TO THE BUILDING RISER ROOM. WHERE FIRE PROTECTION LINES (MAIN SUPPLY & FDC) GO INTO THE BUILDING, UTILITY CONTRACTOR TO TURN PIPING UP AND CAP 12" ABOVE THE PROPOSED FINISHED FLOOR. COORDINATE WITH ARCHITECTURAL/PLUMBING PLANS FOR EXACT LOCATION. INCLUDE FLUSHING AND STATIC PRESSURE TEST IN ACCORDANCE WITH FIRE SYSTEM REQUIREMENTS IN UTILITY PRICING. COORDINATE WITH GENERAL CONTRACTOR. EXTEND SEPARATE 4" LINE FROM RISER ROOM TO FDC CONNECTION LOCATED WITHIN 100 FEET OF EXISTING PUBLIC FIRE HYRANT. COORDINATE FDC CONNECTION WITH LOCAL REQUIREMENTS. PROVIDE WAFER CHECK VALVE AND ½" BALL DRIP. *UTILITY CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO MARK RAMP FOUNDATIONS FOR ROUTING UNDERGROUND PIPING TO AVOID.*

(I) PROPOSED 1¼" DOMESTIC WATER CONNECTION (TO 6" WATER MAIN) WITH 1½" NEPTUNE METER AND BOX LOCATED AT RIGHT-OF-WAY AND DOUBLE CHECK VALVE LOCATED WITHIN PLATFORM RISER ROOM TO TOWN OF SPRING HOPE STANDARD. 1½" LINE RUNS FROM THE MAIN TO THE METER BOX WITH 1½" X 1¼" REDUCER AFTER THE METER. CONTINUE 1¼" LINE TO PLATFORM RISER ROOM. (REFER TO SHEETS P-101 & P-402).

(J) PROPOSED 1¼" DOMESTIC WATER CONNECTION (TO 6" WATER MAIN) WITH 1½" NEPTUNE METER AND DOUBLE CHECK VALVE LOCATED AT THE RIGHT-OF-WAY TO TOWN OF SPRING HOPE STANDARD. 1½" LINE RUNS FROM THE MAIN TO THE METER BOX WITH 1½" X 1¼" REDUCER AFTER THE BACKFLOW. CONTINUE 1¼" LINE TO DEPOT. (REFER TO SHEETS P-101 & P-401).

SAW CUT PAVEMENT AND CURB AND GUTTER TO PROVIDE AND STRAIGHT AND UNIFORM LINE FOR REMOVAL, COORDINATE WITH TOWN FOR PAVEMENT PATCH. PROVIDE REPLACEMENT CURB AND GUTTER AS REQUIRED TO MATCH EXISTING, CONTRACTOR TO OBTAIN STREET CUT PERMIT FROM TOWN OF SPRING HOPE PUBLIC WORKS DEPARTMENT.

EROSION CONTROL LEGEND & KEY NOTES

(***6.XX*** *= STD. PRACTICE, FROM NC E&SC MANUAL; <1 ACRE, PERMIT NOT REQUIRED*)

NEW TEMPORARY CONSTRUCTION ENTRANCE/EXIT. (***6.06***)

SF — NEW TEMPORARY SEDIMENT FENCE. (***6.62***)

TEMPORARY INLET PROTECTION - SILT SACK. *REMOVE CURB FILTER FOR DROP INLETS.* FOR PUBLIC CURB INLETS, COORDINATE WITH THE TOWN.

BY OTHERS

(K) REPLACE EXISTING HANDICAP RAMP IN ACCORDANCE WITH ADA ACCESSIBILITY GUIDELINES. HANDICAP RAMP SHALL HAVE DETECTABLE WARNINGS INSTALLED IN ACCORDANCE WITH TOWN OF SPRING HOPE REQUIREMENTS.

(L) NEW 4" THICK CONCRETE SIDEWALK. REFER TO ARCHITECTURAL PLANS FOR RAMP AND STAIR LOCATIONS AND DETAILS.

(WCR) (M) PROVIDE FOR 6" THICK 4,000 PSI CONCRETE AT EXISTING DRIVEWAY CUT WITH NEW HANDICAP RAMP IN ACCORDANCE WITH ADA ACCESSIBILITY GUIDELINES. HANDICAP RAMP SHALL HAVE DETECTABLE WARNINGS INSTALLED IN ACCORDANCE WITH TOWN OF SPRING HOPE REQUIREMENTS. PROVIDE PEDESTRIAN CROSSING TO EXISTING ACCESSIBLE PARKING SPACES (2) LOCATED ON SOUTH SIDE OF W. MAIN STREET. COORDINATE ALL WORK WITH TOWN OF SPRING HOPE PUBLIC WORKS.

PROVIDE REPLACEMENT SIDEWALK AS REQUIRED TO MATCH EXISTING CONDITIONS.

PROPERTY INFORMATION:
PARCEL ID NUMBER: 276905092450
ZONING: CB

TOWN OF SPRING HOPE
118 RAILROAD STREET
SPRING HOPE, NORTH CAROLINA 27882
P: 252.478.5186

REVIEW INFORMATION:
TYPE OF REVIEW: BUILDING PERMIT
JURISDICTION: TOWN OF SPRING HOPE

SITE SIZES & COVERAGES:
TOTAL ACREAGE: 0.578 ACRES
SITE COVERAGE: (*100% ALLOWABLE*)

BUILDING TO LAND	22.0%
PAVEMENT TO LAND	53.8%
OPEN SPACE	24.2%
TOTAL	100%
BUILDING SQUARE FOOTAGE:	1,660 SF

ZONING:

EXISTING ZONING:	CB *(NO CHANGE)*
USES:	COMMUNITY CENTER GOVERNMENT OFFICE LIMITED EVENT VENUE OFFICE, PUBLIC

BUILDING SETBACKS:

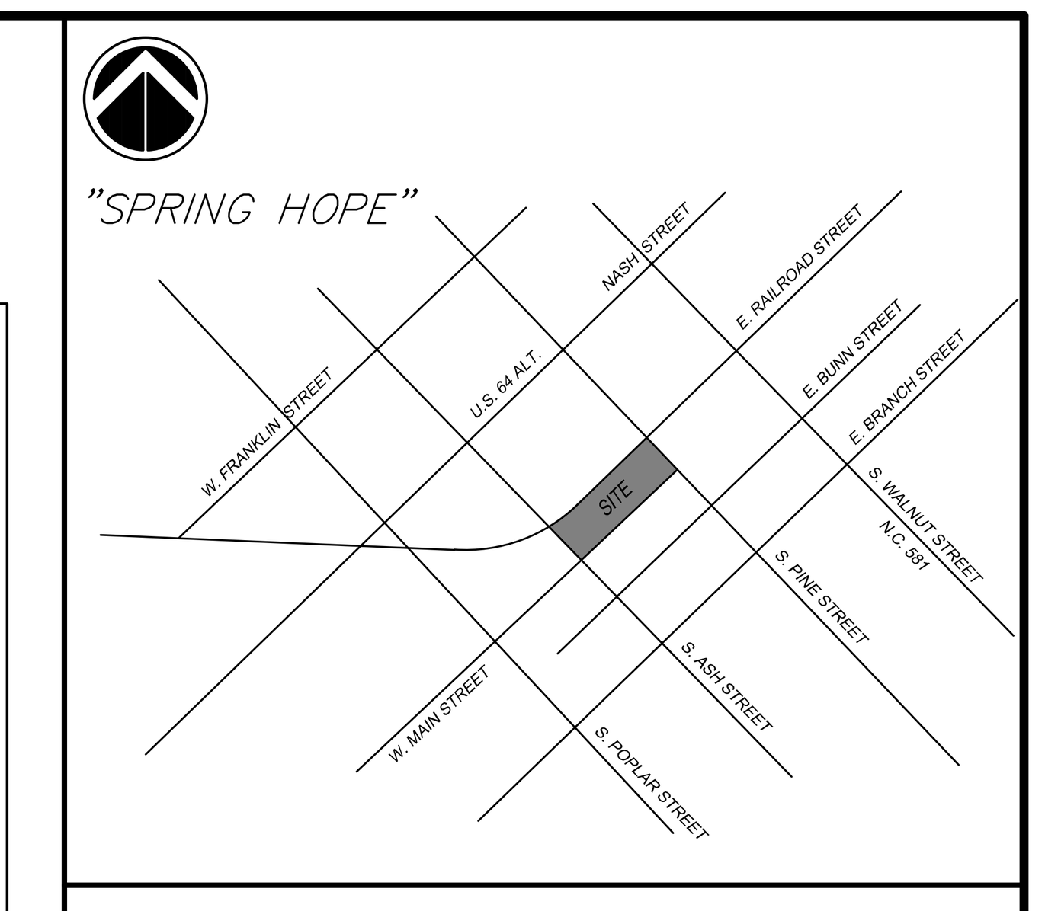
FRONT:	NONE
REAR:	NONE (AGAINST ALLEY)
SIDE:	0' / 5'

OFF-STREET PARKING & LOADING:
10 SPACES PER 1,000 SF GFA (DEFINED SEATING)
2,163 SF x 10 SPACES / 1,000 SF = 22 SPACES (*INCL. 1 HC*)
TO BE SERVED BY ON-STREET PARKING AND PUBLIC PARKING WITHIN 400' (CB DISTRICT).

BUFFERYARDS:
ADJACENT ZONING: N/A - PUBLIC ROW

GENERAL NOTES

1. ALL DEVELOPMENT SHALL CONFORM WITH THE TOWN OF SPRING HOPE "CODE OF ORDINANCES".
2. VERIFY ALL BUILDING DIMENSIONS WITH ARCHITECT PRIOR TO START OF CONSTRUCTION.
3. LOCATION AND TOPOGRAPHIC INFORMATION PROVIDED BY A SURVEY COMPLETED BY JAMES G. STRICKLAND LAND SURVEYING, P.A., DATED OCTOBER 19, 2023, REVISED JULY 18, 2024; PROJ.# D-252-1.



VICINITY MAP
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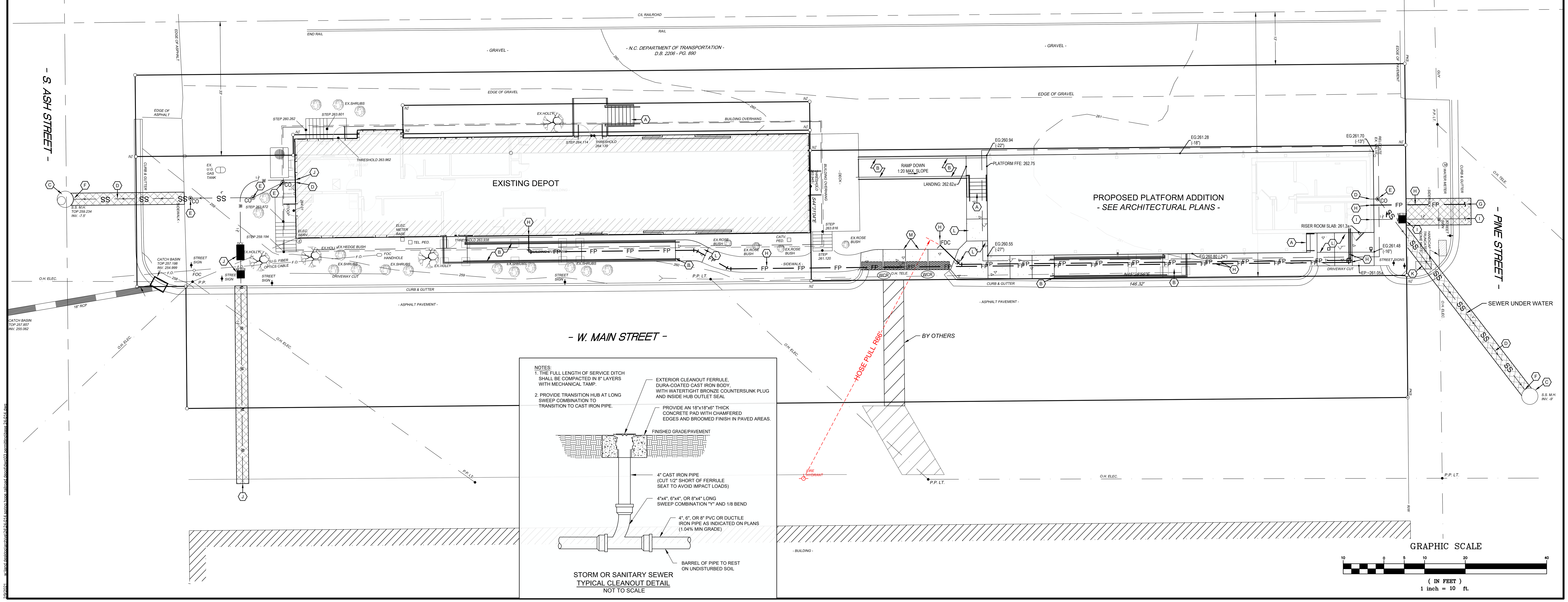

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FIRM LICENSE C-1981
ADI# 24-014

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ALLIANCE ARCHITECTURE OF THE TRIAD
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REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

JOB	23081
DATE	October 16, 2024
DRAWN	

SHEET
SITE LAYOUT & UTILITY PLAN
C2

2/9/2021 w:\land desktop\archive\24\24-014 spring hope railroad depot\dwg\03 permitting\base 24-014.dwg

LEGEND

DL0123081

REMOVE, SALVAGE, MILL, & REINSTALL EXSTG FLOORING IN THIS AREA. SEE SPECS.

LOCATION OF LINE OF SAWCUT TO REMOVE ORIGINAL WOOD TIMBER FLOORING

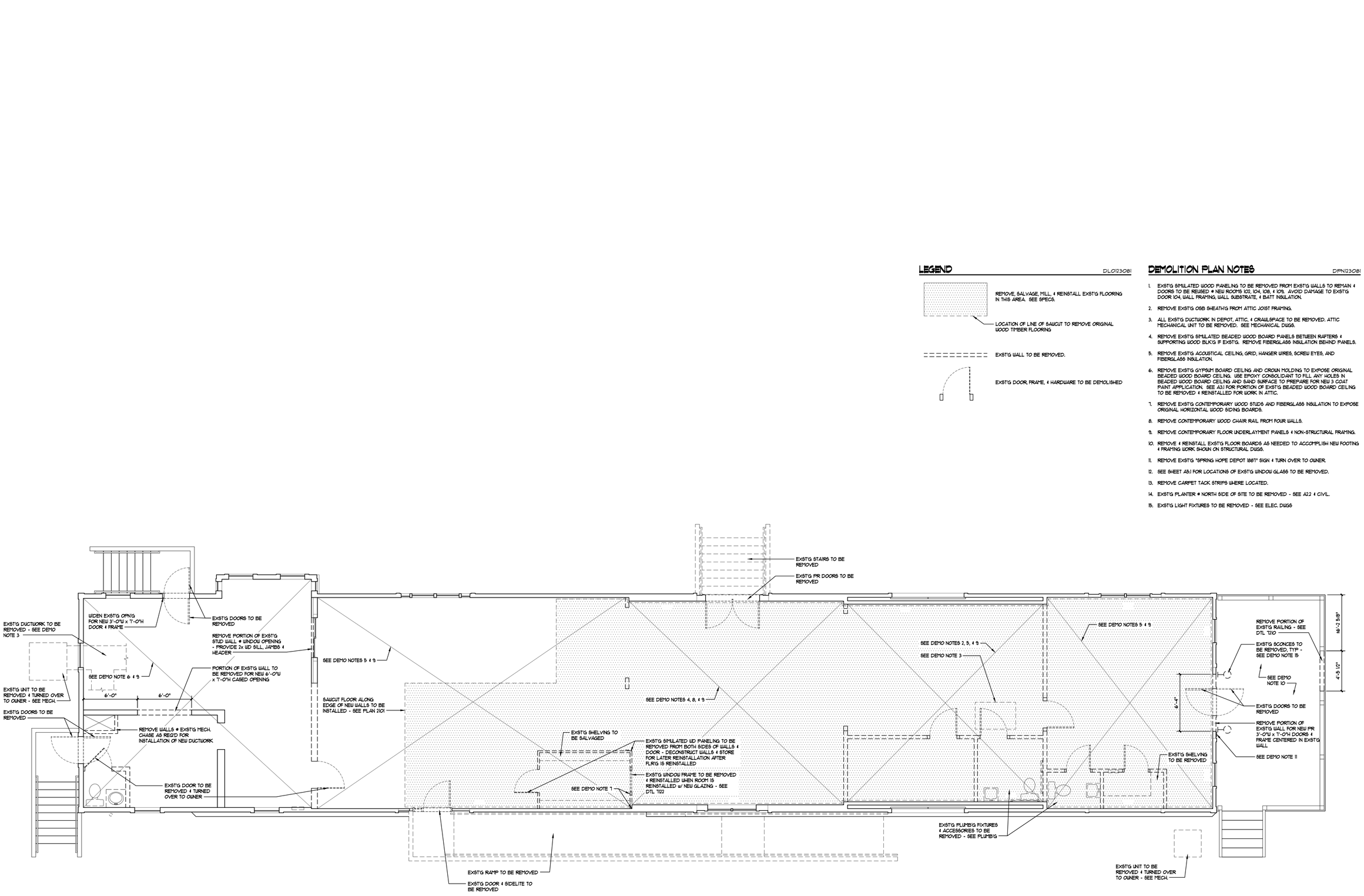
EXSTG WALL TO BE REMOVED.

EXSTG DOOR, FRAME, & HARDWARE TO BE DEMOLISHED

DEMOLITION PLAN NOTES

DPN123081

1. EXSTG SIMULATED WOOD PANELING TO BE REMOVED FROM EXSTG WALLS TO REMAIN & DOORS TO BE REUSED @ NEW ROOMS 107, 104, 108, & 109. AVOID DAMAGE TO EXSTG DOOR 104, WALL FRAMING, WALL SUBSTRATE, & BATT INSULATION.
2. REMOVE EXSTG OSB SHEATH'G FROM ATTIC JOIST FRAMING.
3. ALL EXSTG DUCTWORK IN DEPOT, ATTIC, & CRAWLSPACE TO BE REMOVED. ATTIC MECHANICAL UNIT TO BE REMOVED. SEE MECHANICAL DWGS.
4. REMOVE EXSTG SIMULATED BEADED WOOD BOARD PANELS BETWEEN RAFTERS & SUPPORTING WOOD BLK'G IF EXSTG. REMOVE FIBERGLASS INSULATION BEHIND PANELS.
5. REMOVE EXSTG ACOUSTICAL CEILING, GRID, HANGER WIRES, SCREW EYES, AND FIBERGLASS INSULATION.
6. REMOVE EXSTG GYPSUM BOARD CEILING AND CROWN MOLDING TO EXPOSE ORIGINAL BEADED WOOD BOARD CEILING. USE EPOXY CONSOLIDANT TO FILL ANY HOLES IN BEADED WOOD BOARD CEILING AND SAND SURFACE TO PREPARE FOR NEW 3 COAT PAINT APPLICATION. SEE A3.1 FOR PORTION OF EXSTG BEADED WOOD BOARD CEILING TO BE REMOVED & REINSTALLED FOR WORK IN ATTIC.
7. REMOVE EXSTG CONTEMPORARY WOOD STUDS AND FIBERGLASS INSULATION TO EXPOSE ORIGINAL HORIZONTAL WOOD SIDING BOARDS.
8. REMOVE CONTEMPORARY WOOD CHAIR RAIL FROM FOUR WALLS.
9. REMOVE CONTEMPORARY FLOOR UNDERLAYMENT PANELS & NON-STRUCTURAL FRAMING.
10. REMOVE & REINSTALL EXSTG FLOOR BOARDS AS NEEDED TO ACCOMPLISH NEW FOOTING & FRAMING WORK SHOWN ON STRUCTURAL DWGS.
11. REMOVE EXSTG "SPRING HOPE DEPOT 1887" SIGN & TURN OVER TO OWNER.
12. SEE SHEET A3.1 FOR LOCATIONS OF EXSTG WINDOW GLASS TO BE REMOVED.
13. REMOVE CARPET TACK STRIPS WHERE LOCATED.
14. EXSTG PLANTER @ NORTH SIDE OF SITE TO BE REMOVED - SEE A2.2 & CIVIL.
15. EXSTG LIGHT FIXTURES TO BE REMOVED - SEE ELEC. DWGS



1101 DEMOLITION PLAN

1/4" = 1'-0"

BP0123081

NORTH CAROLINA REGISTERED ARCHITECT
ANDREW J. LOPINOT
LICENSE NO. 30943
ALLIANCE ARCHITECTURE OF THE TRIAD, PC
WINSTON-SALEM, NC
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REVISIONS

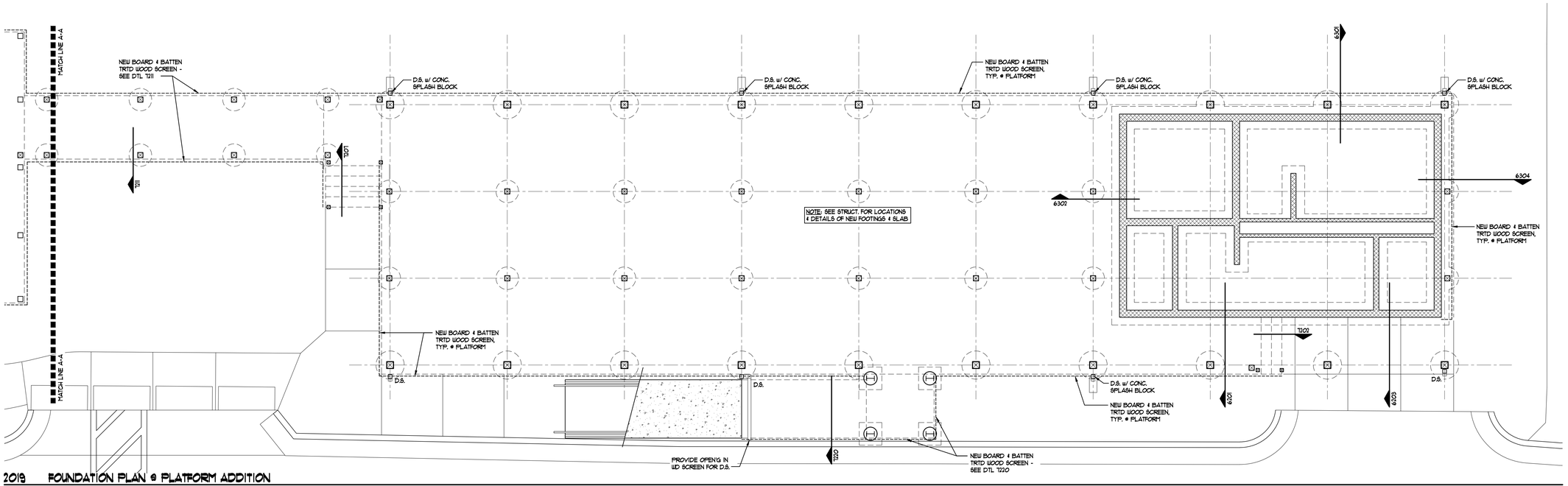
SPRING HOPE RAILROAD DEPOT

Building Rehabilitation & Platform Addition

101 South Ash Street
Spring Hope, North Carolina 27882

JOB 23081
DATE February 28, 2025
DRAWN T. Doorn
SHEET A1.1

dir-23081

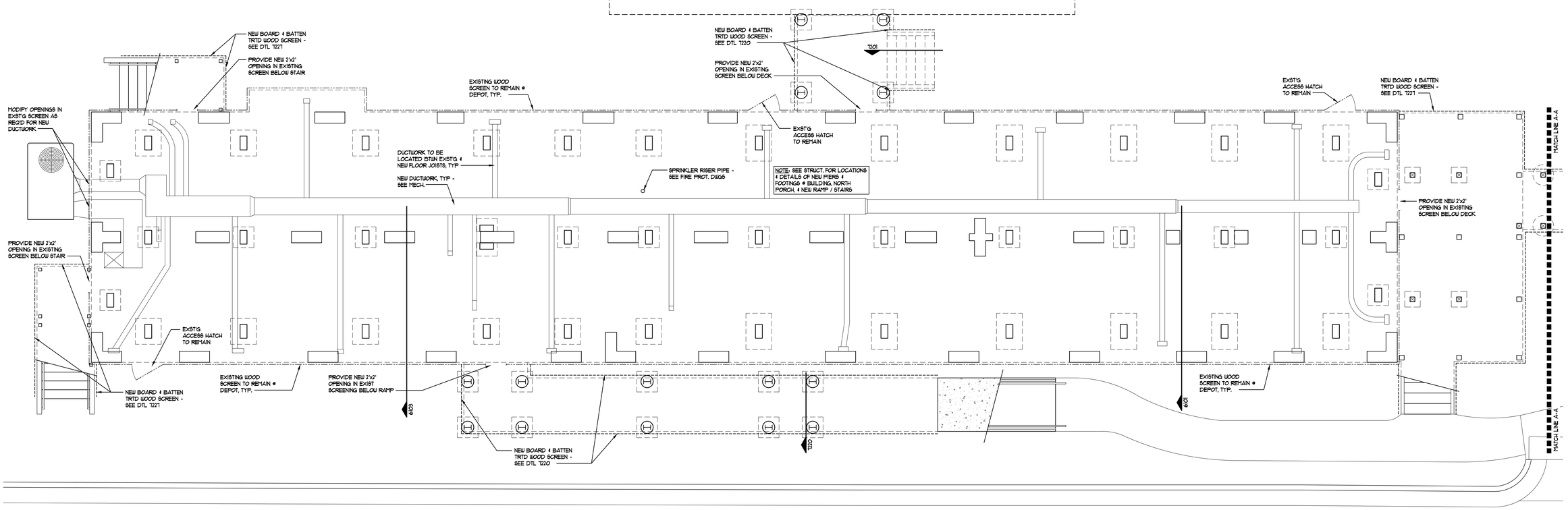


2019 FOUNDATION PLAN @ PLATFORM ADDITION

1/4" = 1'-0"

BP0123081

NORTH



2001 FOUNDATION PLAN @ DEPOT

1/4" = 1'-0"

BP0123081

020-2026

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REVISIONS

SPRING HOPE RAILROAD DEPOT

Building Rehabilitation & Platform Addition

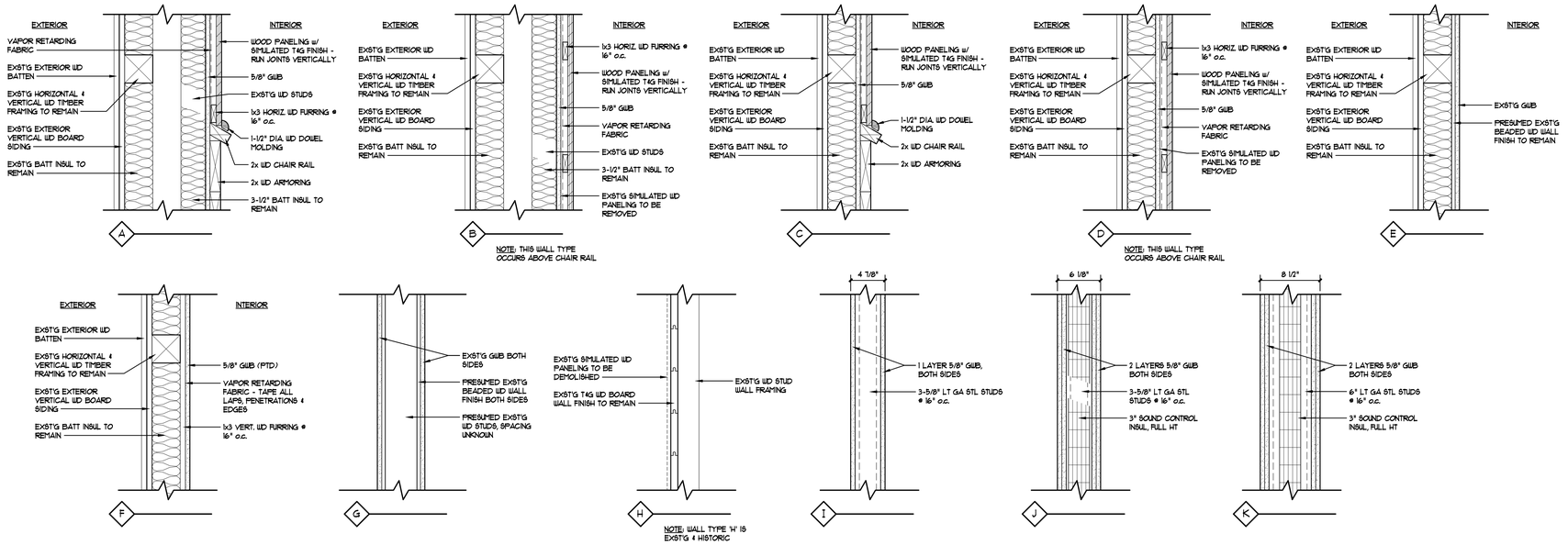
101 South Ash Street
Spring Hope, North Carolina 27882

JOB 23081

DATE February 28, 2025

DRAWN T. Deem

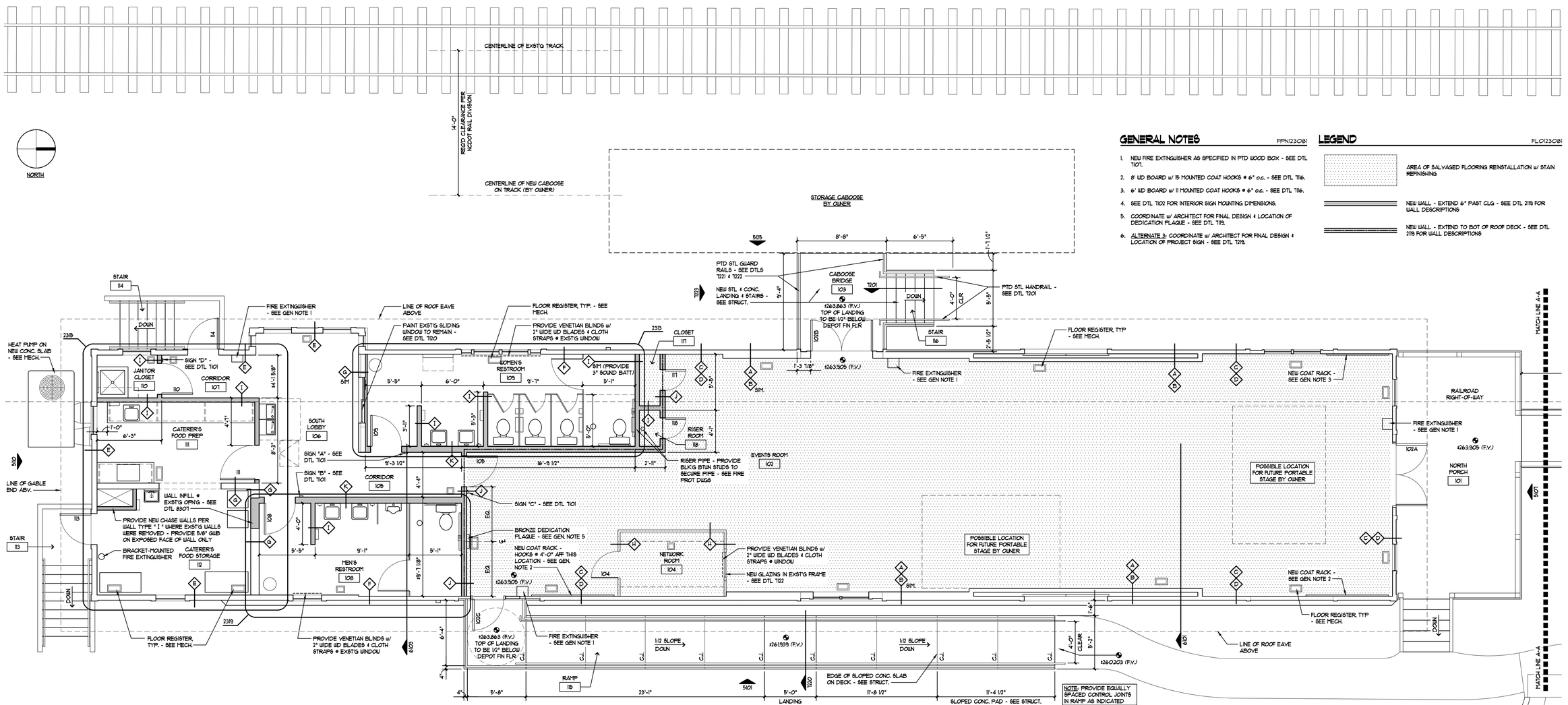
SHEET A2.0



2119 WALL TYPES LEGEND

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

WALL123081



2101 FLOOR PLAN

1/4" = 1'-0"

BP0123081

GENERAL NOTES

FPN123081

1. NEW FIRE EXTINGUISHER AS SPECIFIED IN PTD WOOD BOX - SEE DTL 1107.
2. 8' WD BOARD w/ 15 MOUNTED COAT HOOKS @ 6" o.c. - SEE DTL 1116.
3. 6' WD BOARD w/ 11 MOUNTED COAT HOOKS @ 6" o.c. - SEE DTL 1116.
4. SEE DTL 1102 FOR INTERIOR SIGN MOUNTING DIMENSIONS.
5. COORDINATE w/ ARCHITECT FOR FINAL DESIGN & LOCATION OF DEDICATION PLAQUE - SEE DTL 1119.
6. ALTERNATE 3: COORDINATE w/ ARCHITECT FOR FINAL DESIGN & LOCATION OF PROJECT SIGN - SEE DTL 1219.

LEGEND

FLO123081

- AREA OF SALVAGED FLOORING REINSTALLATION w/ STAIN REFINISHING
- NEW WALL - EXTEND 6" PAST CLG - SEE DTL 2119 FOR WALL DESCRIPTIONS
- NEW WALL - EXTEND TO BOT OF ROOF DECK - SEE DTL 2119 FOR WALL DESCRIPTIONS

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NORTH CAROLINA REGISTERED ARCHITECT ANDREW J. LOPINOT 9/18/2025

ALLIANCE ARCHITECTURE OF THE TRIAD, PC LICENSE NO. 50943 NORTH CAROLINA WINSTON-SALEM, NC

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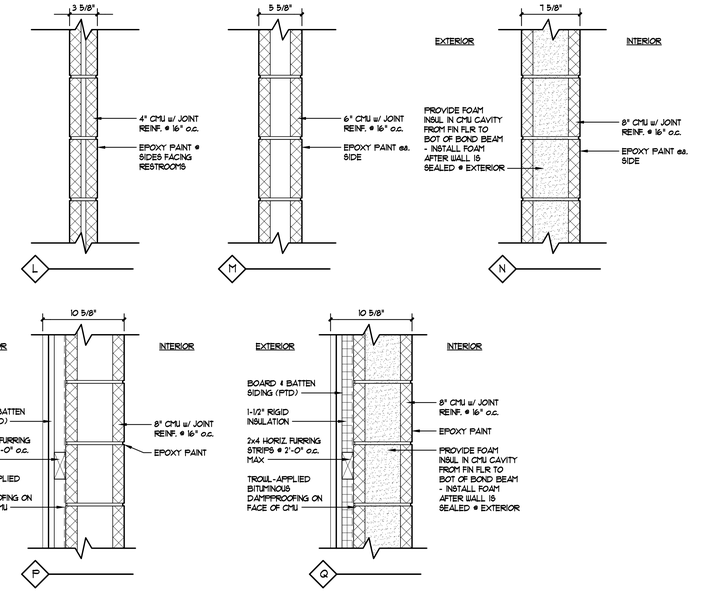
SHEET A2.1

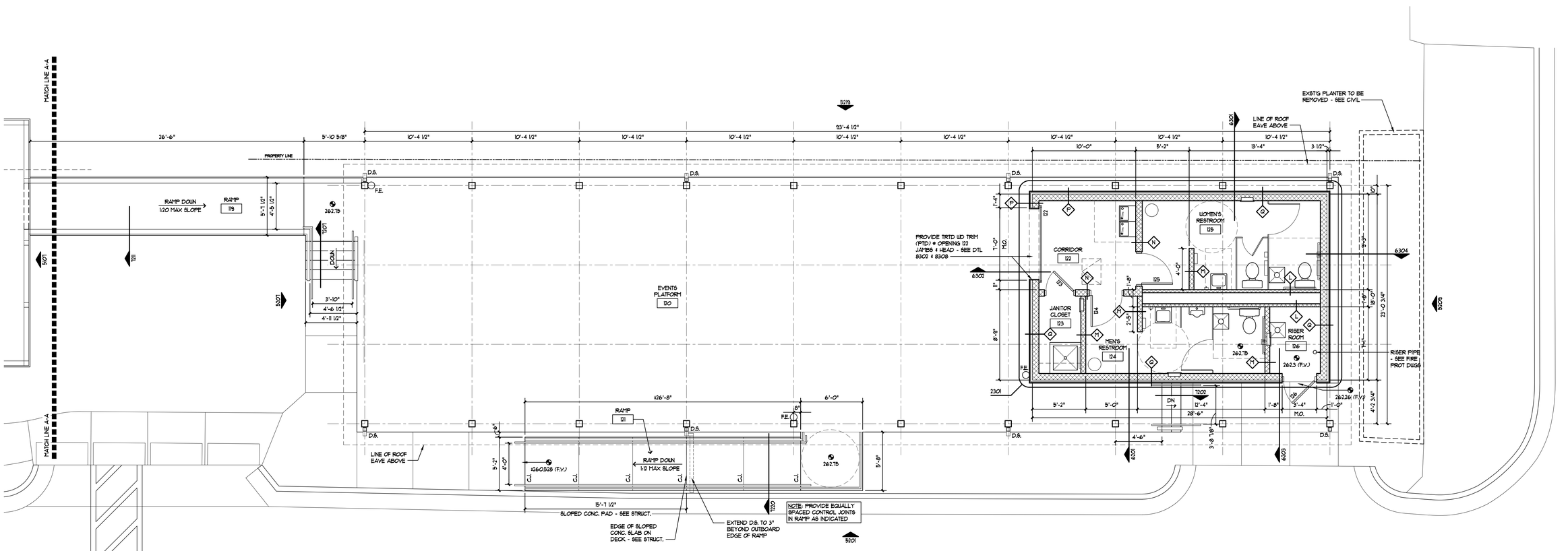
05-2506



2213 WALL SECTION DETAIL

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

WALL23081



2201 FLOOR PLAN @ PLATFORM ADDITION

1/4" = 1'-0"

W80016.45

A22-2508

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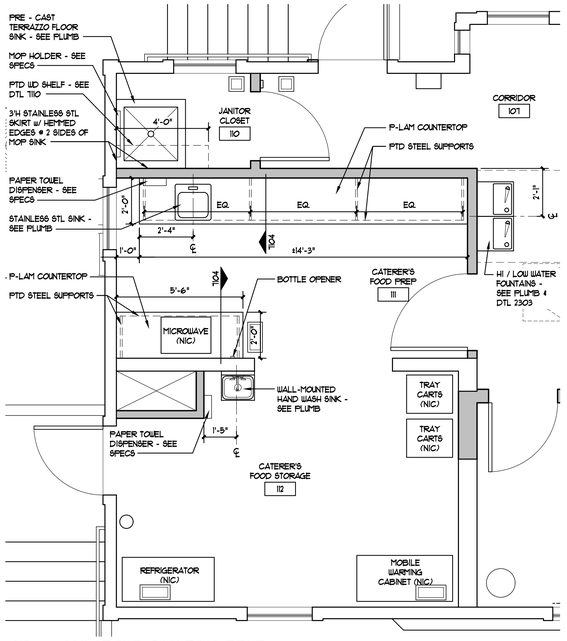
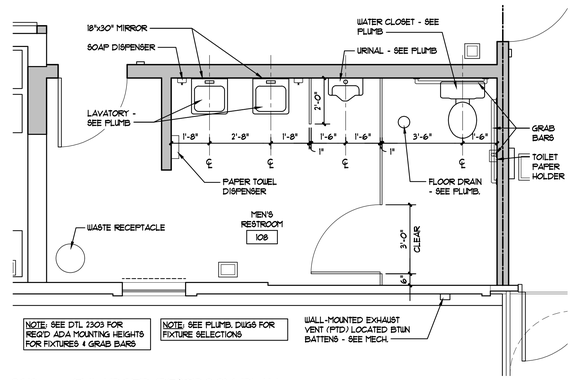
SHEET A2.2



2315 ENLARGED CATERING PREP

3/8" = 1'-0"

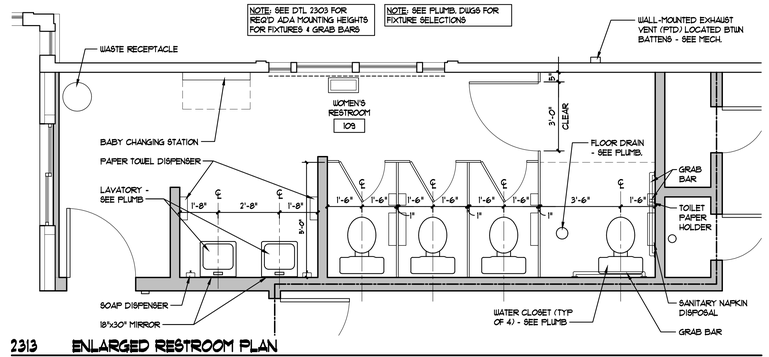
BP0123081



2319 ENLARGED RESTROOM PLAN

3/8" = 1'-0"

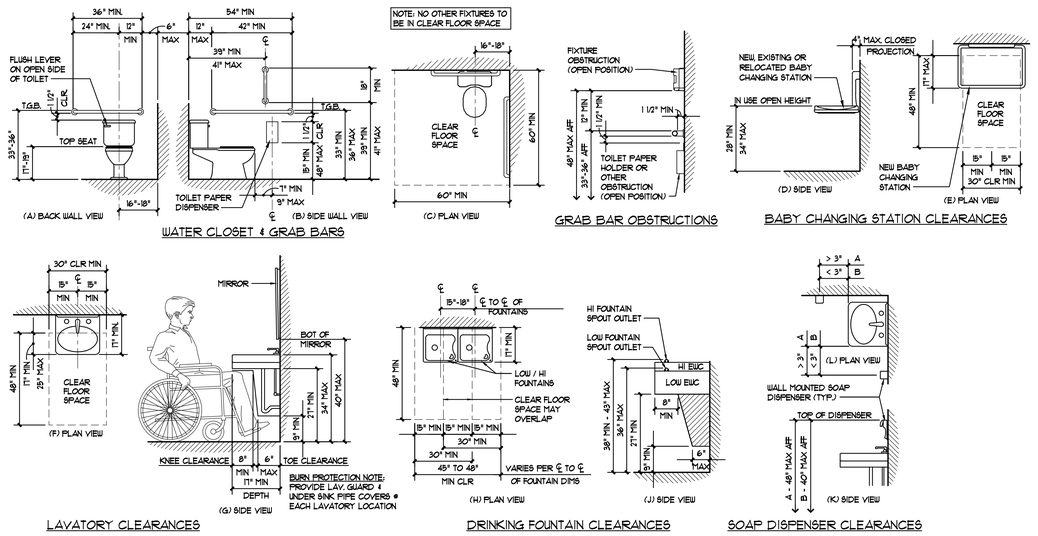
BP0123081



2313 ENLARGED RESTROOM PLAN

3/8" = 1'-0"

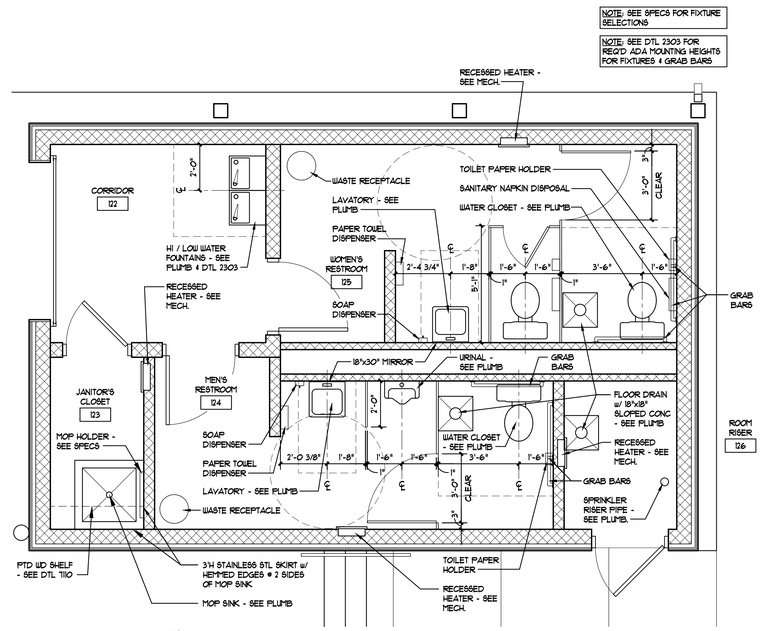
BP0123081



2303 RESTROOM ACCESSIBILITY DETAILS

NOT TO SCALE

HC0123081



2301 ENLARGED RESTROOM PLAN

3/8" = 1'-0"

BP0123081

NORTH CAROLINA REGISTERED ARCHITECT
ANDREW J. LOPINOT
ALLIANCE ARCHITECTURE OF THE TRIAD, PC
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REVISIONS

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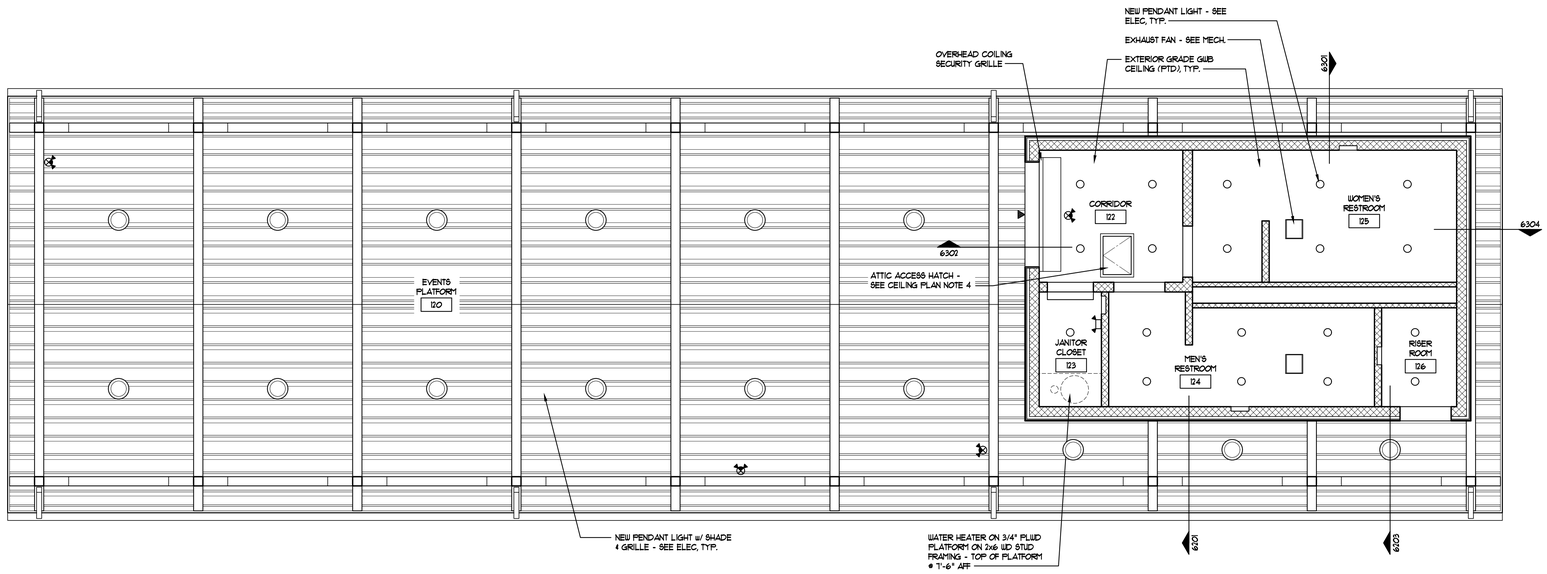
JOB 23081
DATE February 28, 2025
DRAWN T. Doorn
SHEET A2.3

025-2026



3113 REFLECTED CEILING PLAN @ PLATFORM

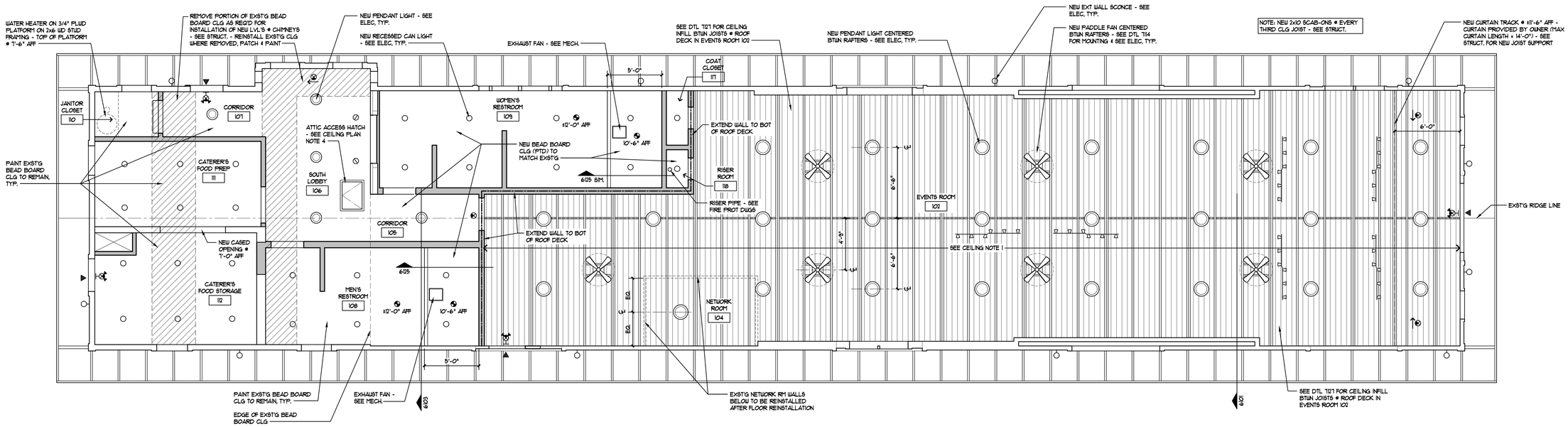
1/4" = 1'-0"

BP0123081

CEILING PLAN NOTES

RCPN23081

1. EXST'G UNFINISHED CLG JOISTS, RAFTERS, AUXILIARY FRAMING & ROOF DECK TO REMAIN. VACUUM CLEAN ALL DUST & DIRT PARTICLES FROM ALL WOOD & OTHER SURFACES.
2. NEW PADDLE FANS @ EXPOSED CEILINGS TO BE CENTERED BTWN RAFTERS. SEE DTL. 1114 FOR PADDLE FAN MOUNTING DETAIL & SEE ELEC. FOR FIXTURE SELECTION.
3. NEW PENDANT LIGHTS @ EXPOSED CEILING IN DEPOT TO BE CENTERED BTWN RAFTERS. SEE ELEC. FOR FIXTURE SELECTIONS.
4. NEW ATTIC ACCESS HATCH - 22"x30" STL CLG ACCESS DOOR & FRAME (PTD) - VERIFY LOCATION OF INSTALLATION w/ ARCHITECT. PROVIDE WD BLK'G ON 4 SIDES FOR FLANGE ATTACHMENT TO EXST'G WD BEAD BOARD CLG @ DEPOT.



3101 REFLECTED CEILING PLAN @ DEPOT

1/4" = 1'-0"

BP0123081

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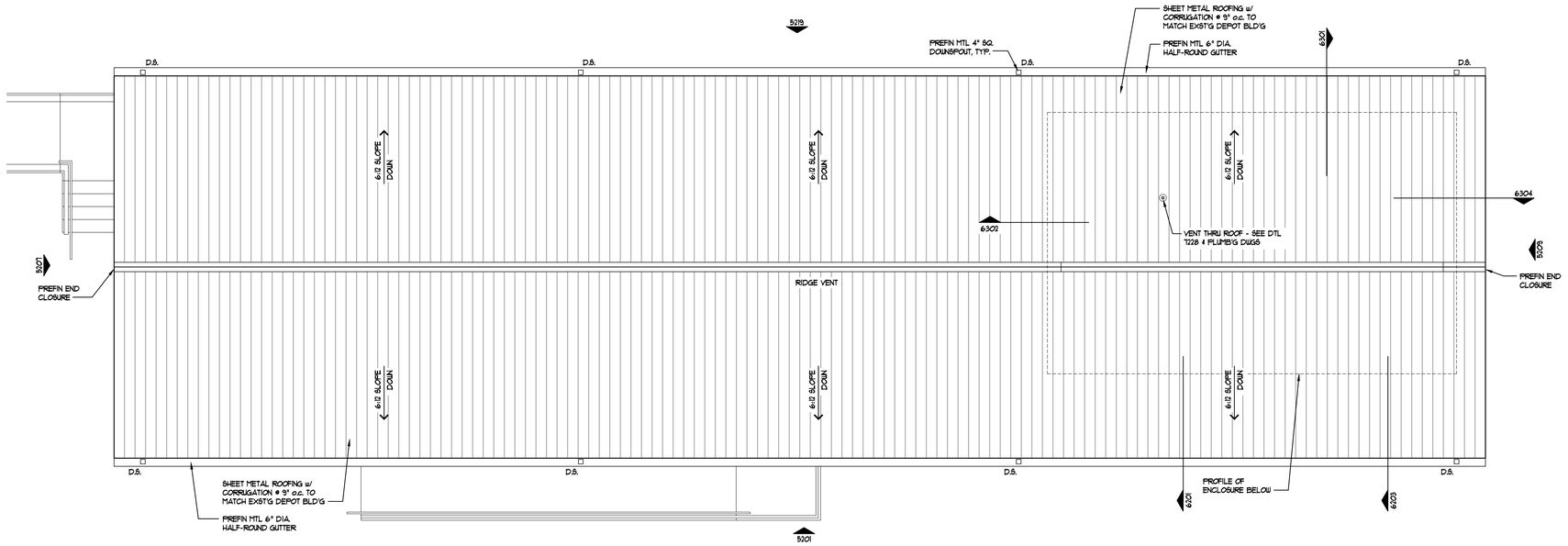
SHEET A3.1

d5-25081



4113 ROOF PLAN @ PLATFORM

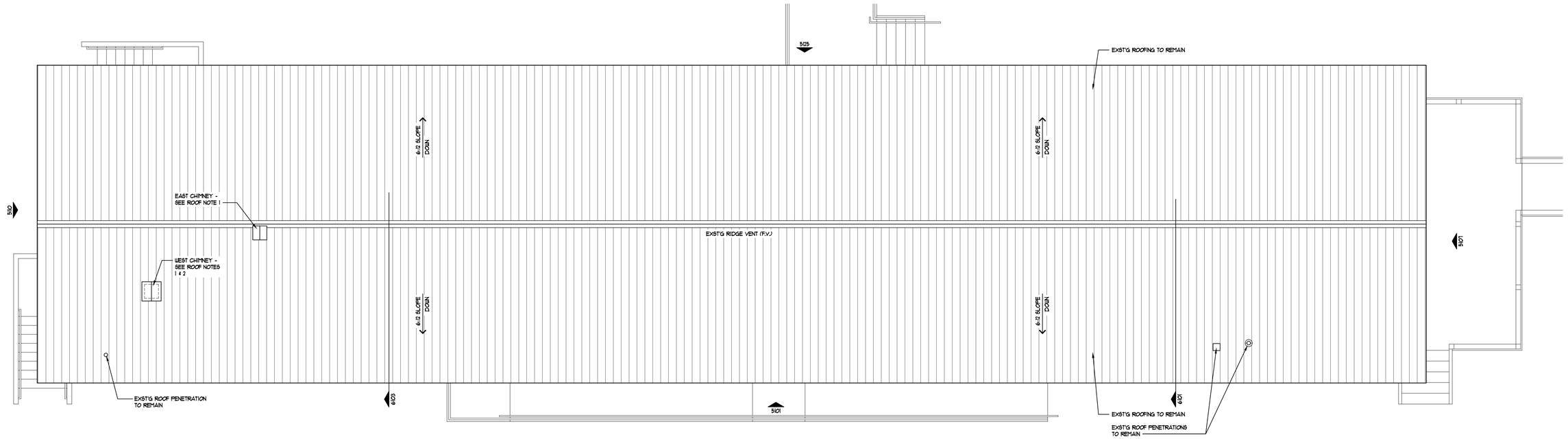
1/4" = 1'-0"

BP0123081

ROOF PLAN NOTES

RPN23081

1. ALTERNATE 2: AT EAST & WEST CHIMNEYS, DECONSTRUCT, SALVAGE, CLEAN, & REINSTALL CHIMNEY MASONRY w/ NEW MORTAR. ALL WORK TO MATCH EXSTG. SEE DETAILS 7203 & 7204.
2. ALTERNATE 2: PLUMBING VENT TO BE DIRECTED UP WEST CHIMNEY FLUE - SEE PLUMBING DWGS & DTL 7205 FOR VENT FLASH'G.



4101 ROOF PLAN @ DEPOT

1/4" = 1'-0"

BP0123081

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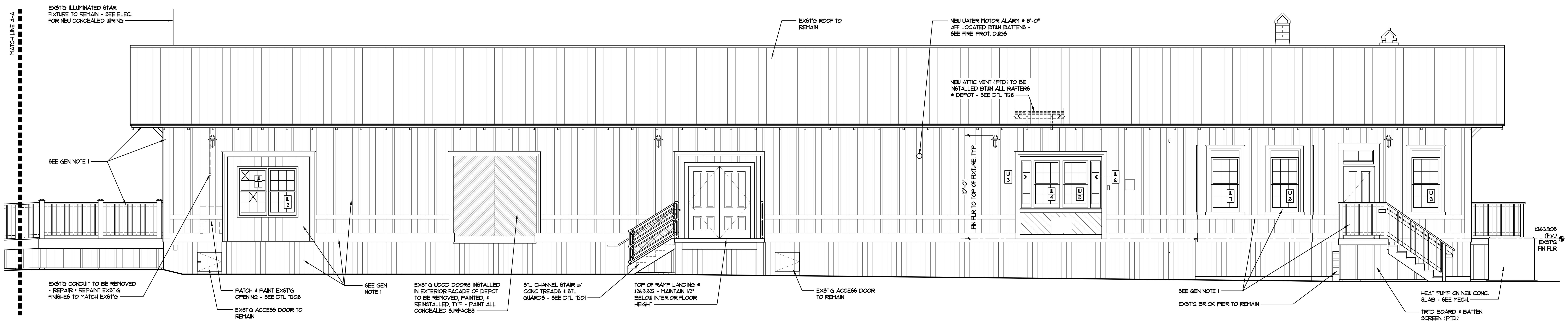
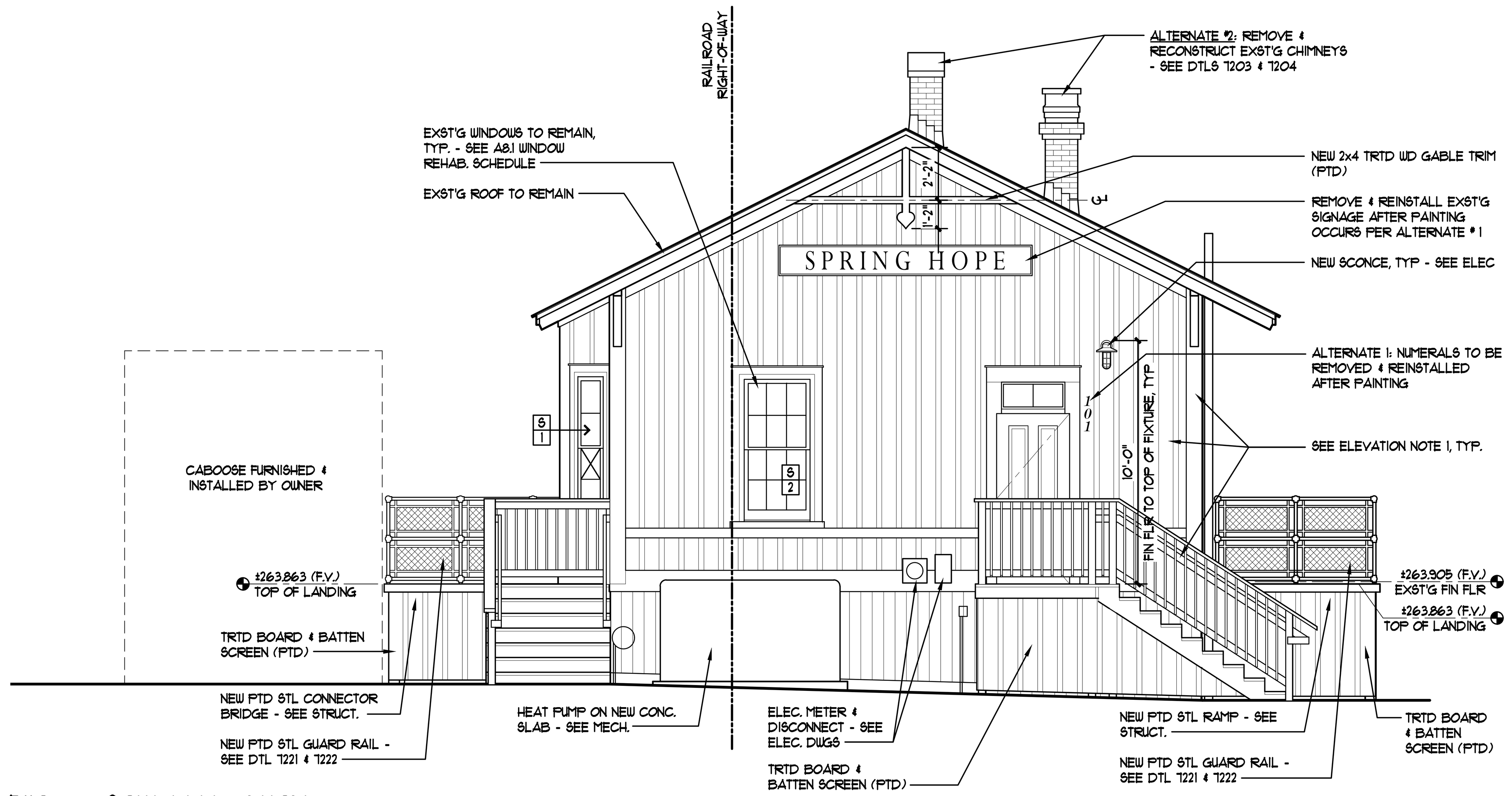
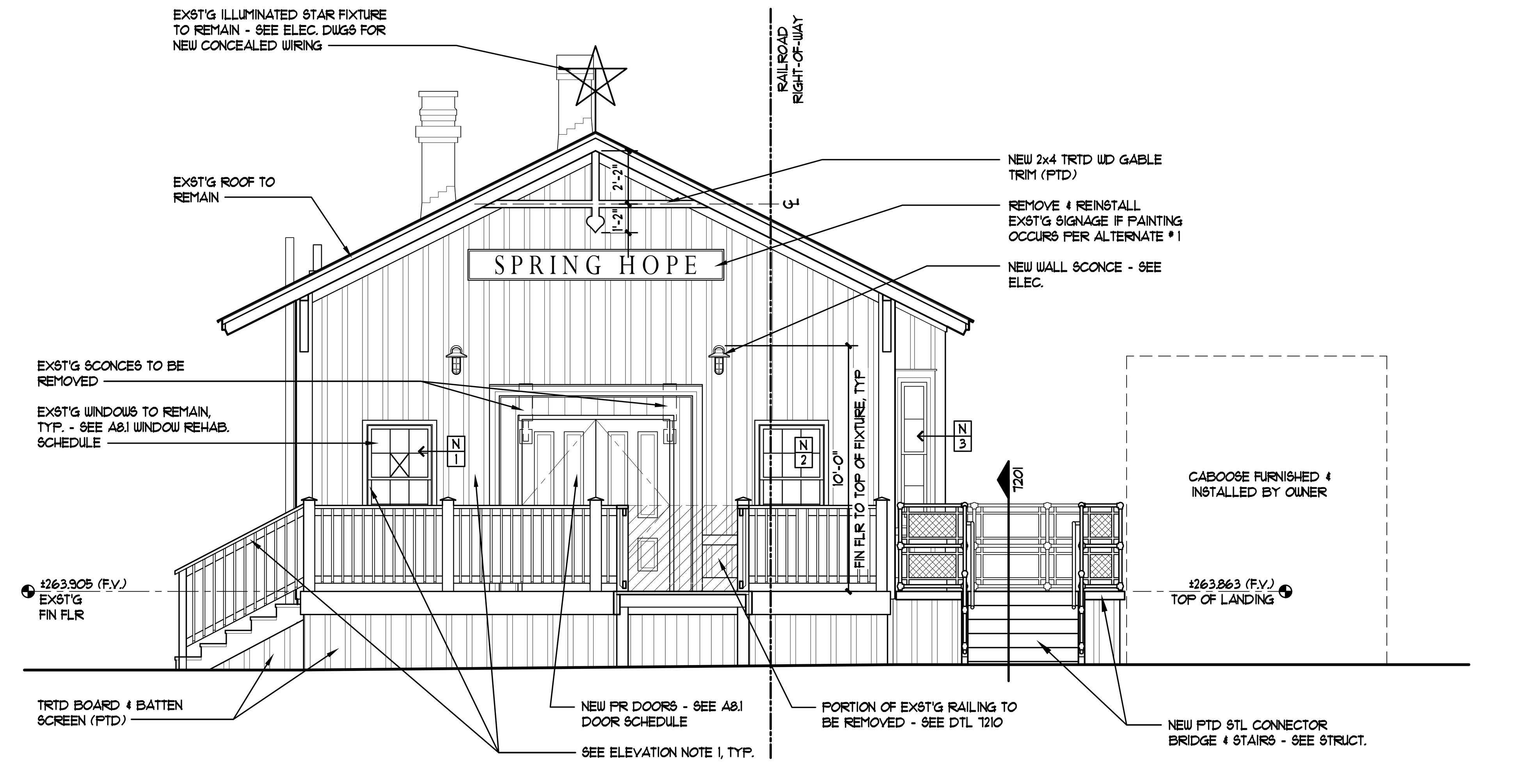
d4l-25081



5125 **WEST ELEVATION**
1/4" = 1'-0"
BE0123081



5110 **SOUTH ELEVATION**
1/4" = 1'-0"
BE0123081



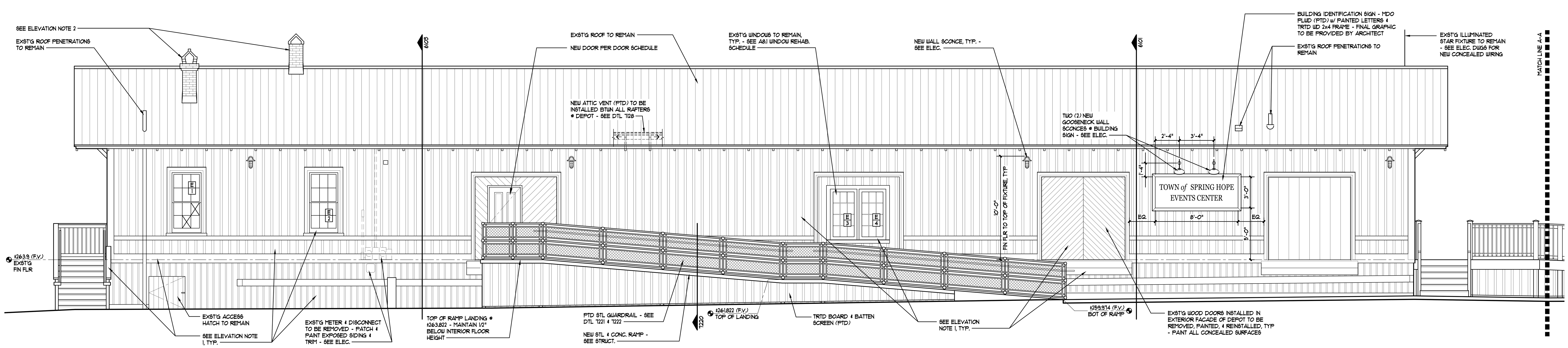
5107 **NORTH ELEVATION**
1/4" = 1'-0"
BE0123081

ELEVATION NOTES GEN123081

1. ALTERNATE 1: STRIP EXST'G PAINT FROM ALL EXTERIOR WD SURFACES @ DEPOT & REPAINT w/ 3 COAT APPLICATION.
2. ALTERNATE 2: DISASSEMBLE EXST'G CHIMNEYS TO EXST'G STL PLATE SUPPORT & RECONSTRUCT USING EXST'G CLEANED MASONRY. FURNISH & INSTALL NEW MTL FLASHING & COUNTERFLASHING - SEE DETAILS 1203 & 1204.

ELEVATION LEGEND

EXST'G PANE OF GLASS TO BE REMOVED & REPLACED - SEE SPECS.



5101 **EAST ELEVATION**
1/4" = 1'-0"
BE0123081

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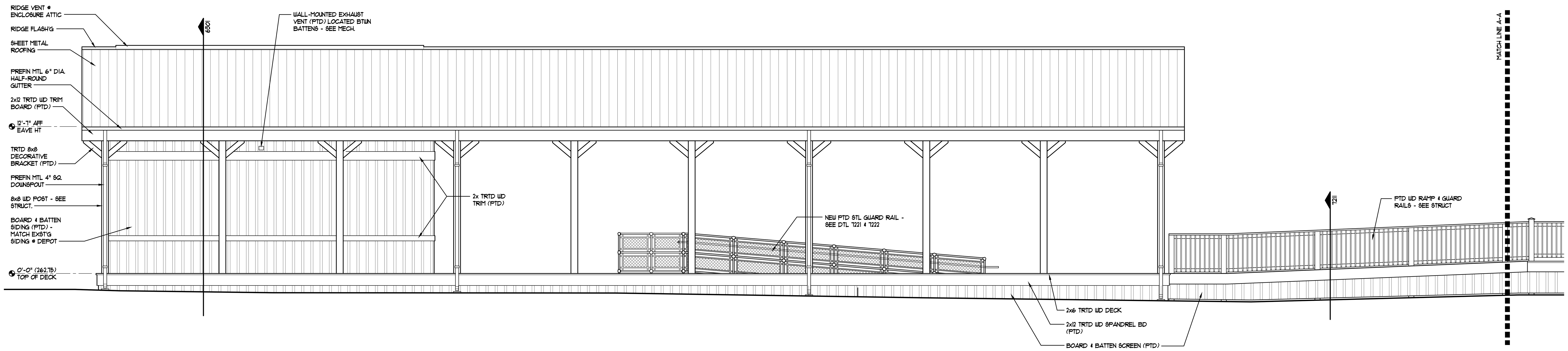
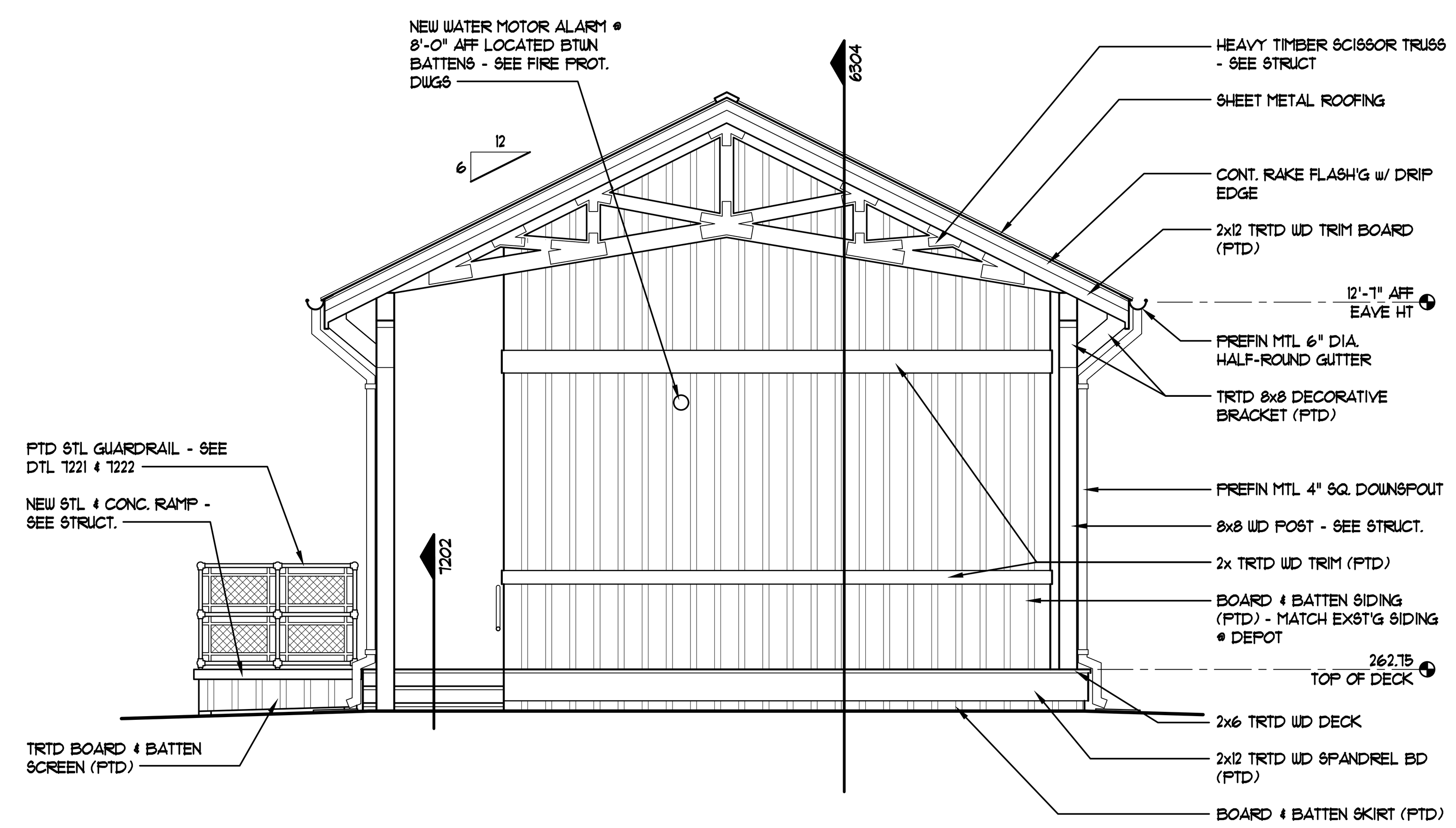
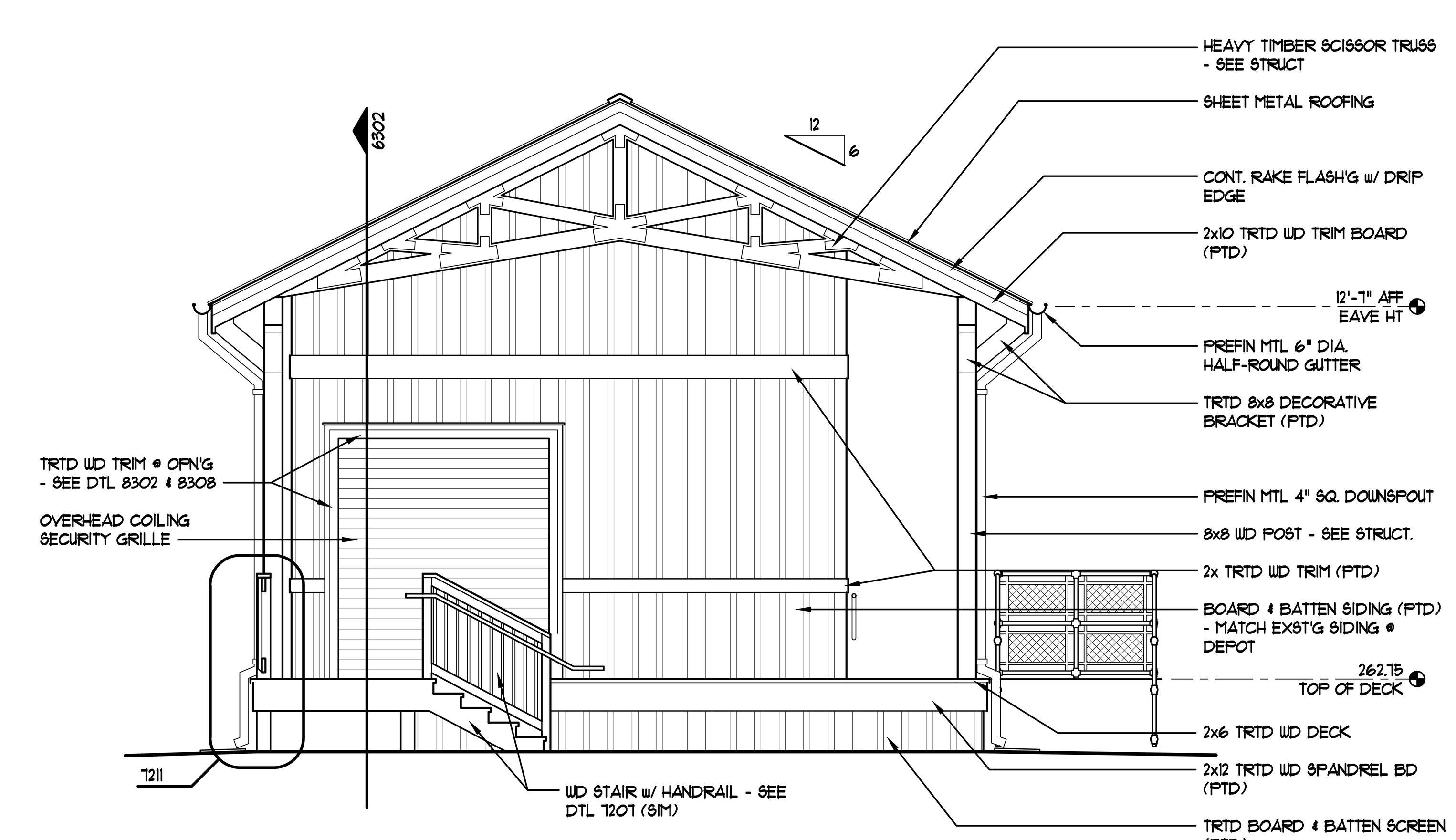
SHEET A5.1



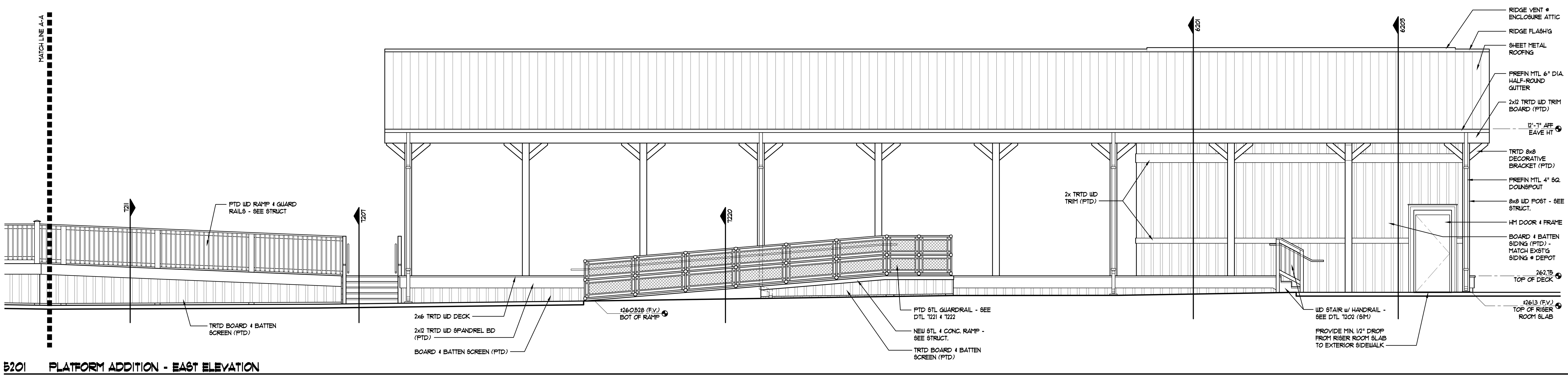
5219 **PLATFORM ADDITION - WEST ELEVATION**
1/4" = 1'-0"
BE0123081



5209 **PLATFORM ADDITION - NORTH ELEVATION**
1/4" = 1'-0"
BE0123081



5207 **PLATFORM ADDITION - SOUTH ELEVATION**
1/4" = 1'-0"
BE0123081



5201 **PLATFORM ADDITION - EAST ELEVATION**
1/4" = 1'-0"
BE0123081

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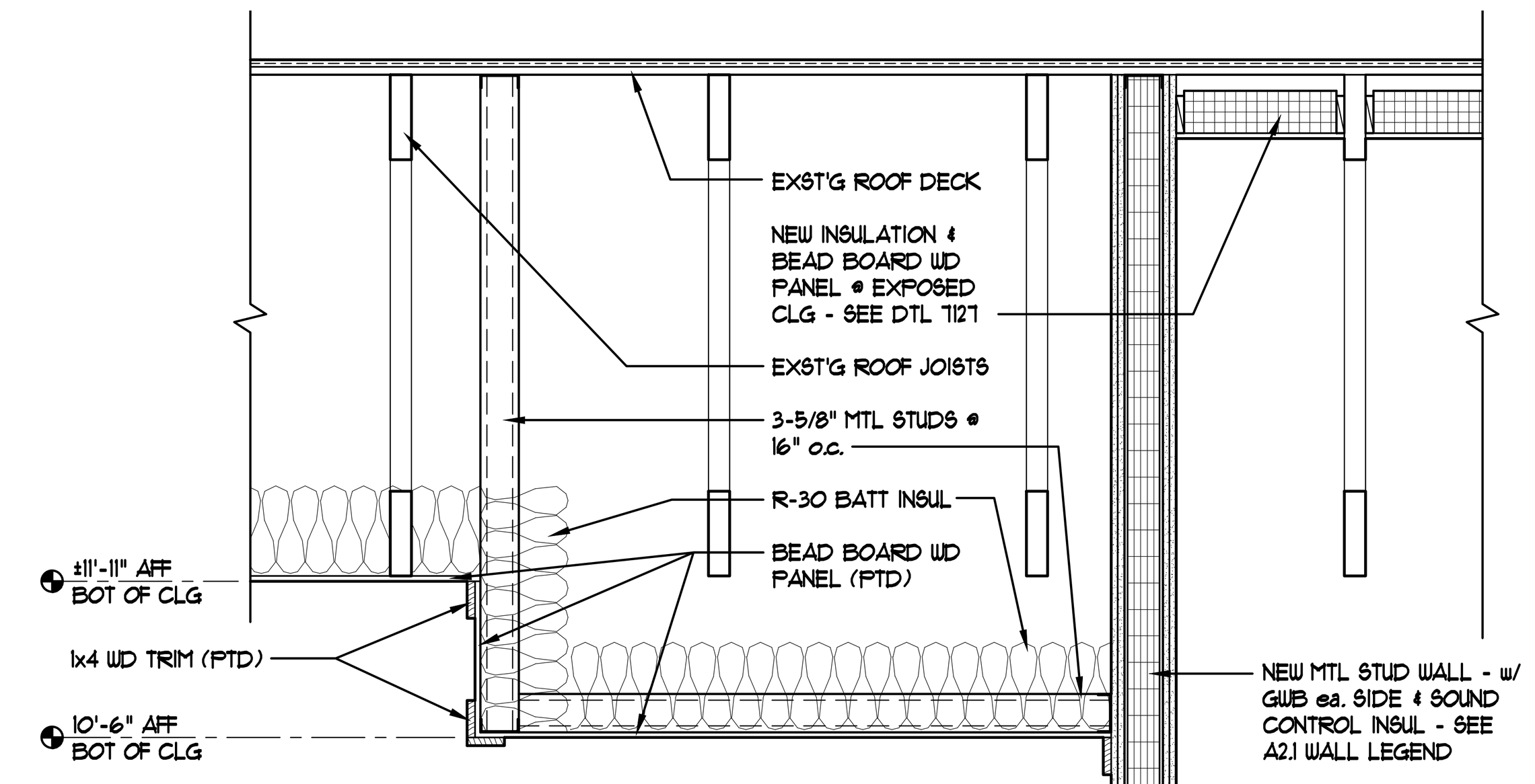
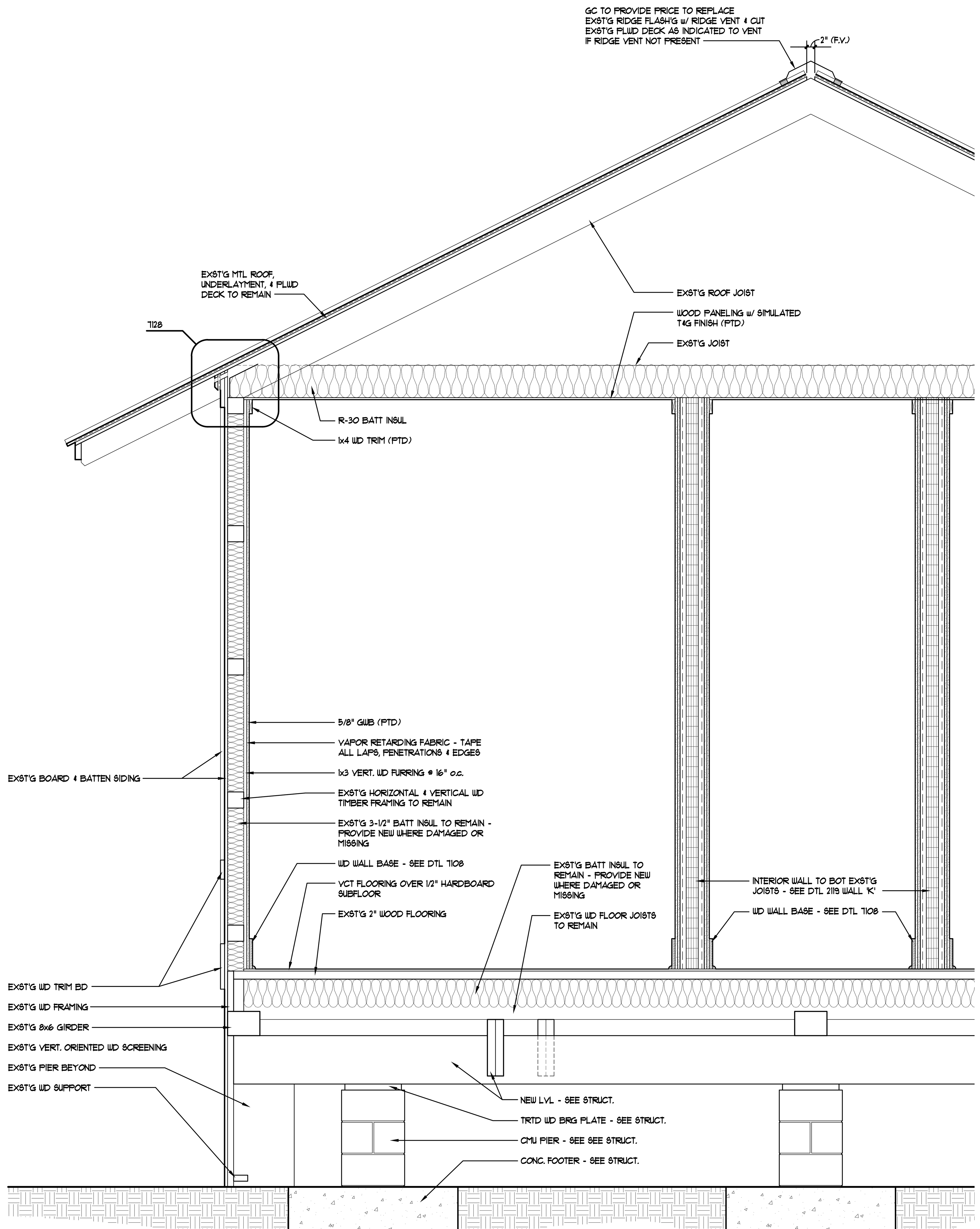
DATE	February 28, 2025
DRAWN	T. Doom
SHEET	A5.2

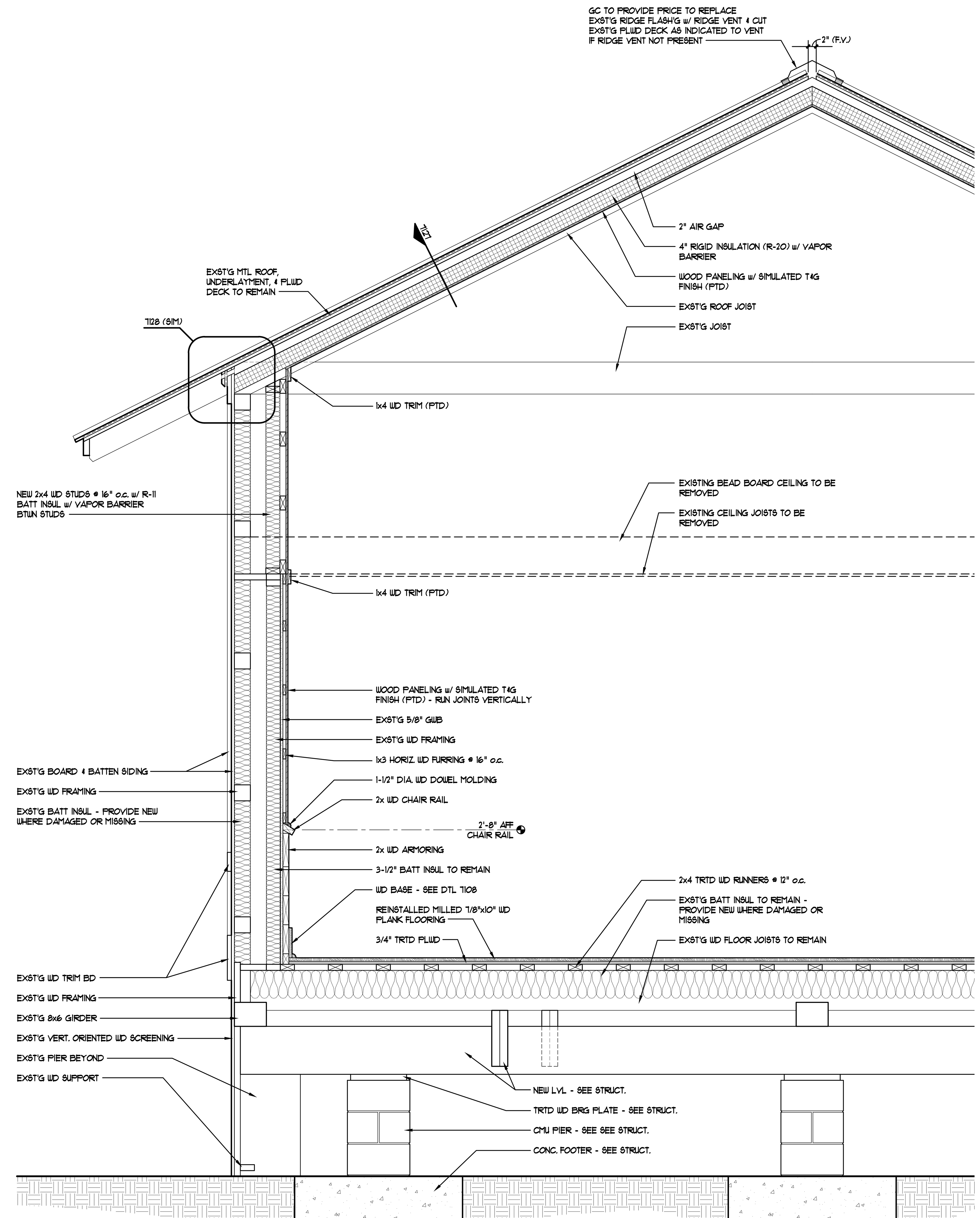
d25081



6125 WALL SECTION DETAIL
3/4" = 1'-0"
WS0123081



6103 WALL SECTION DETAIL @ DEPOT
3/4" = 1'-0"
WS001645



6101 BUILDING SECTION DETAIL @ DEPOT
3/4" = 1'-0"
WS001645

NORTH CAROLINA REGISTERED ARCHITECT SEAL
ANDREW J. LOPINA

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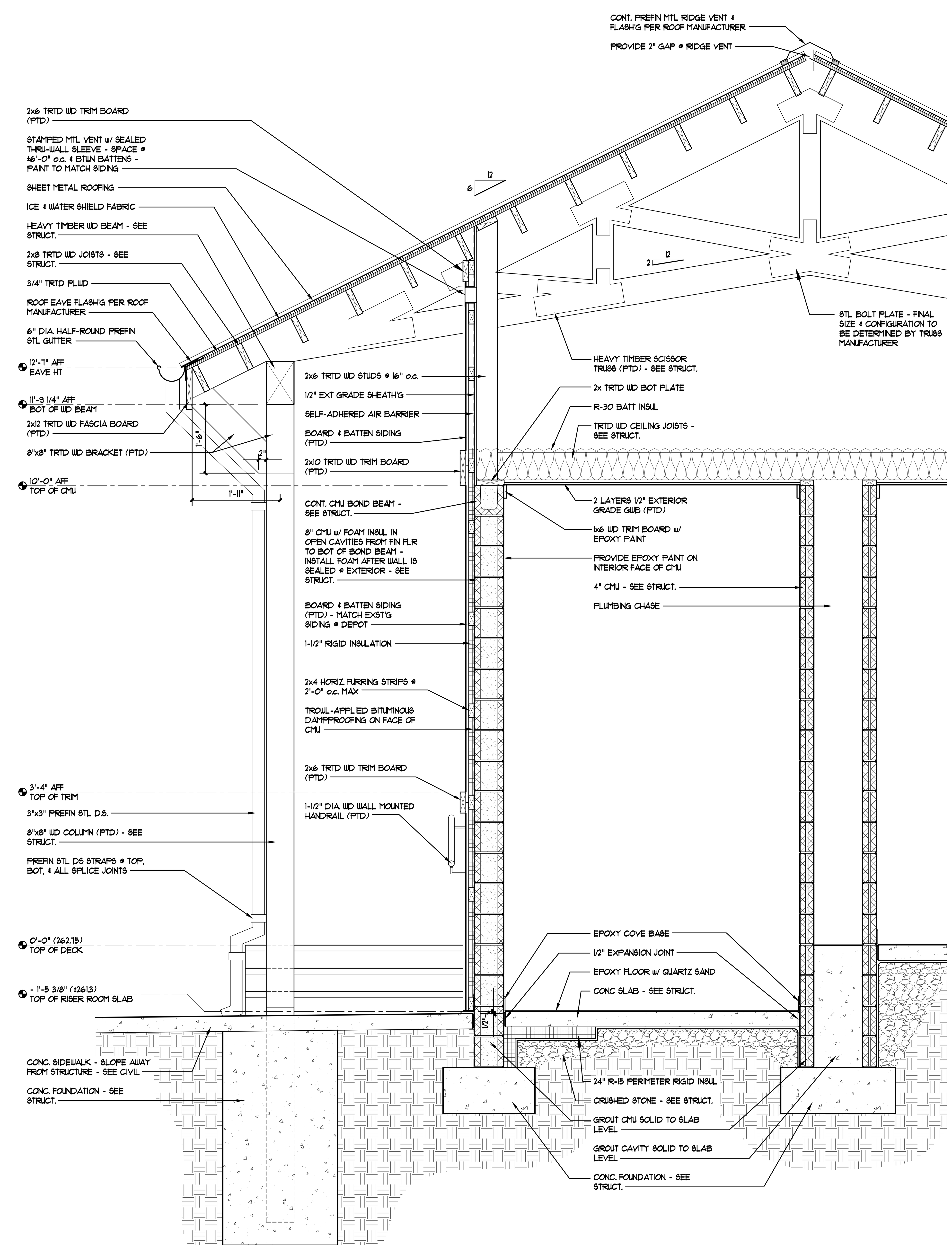
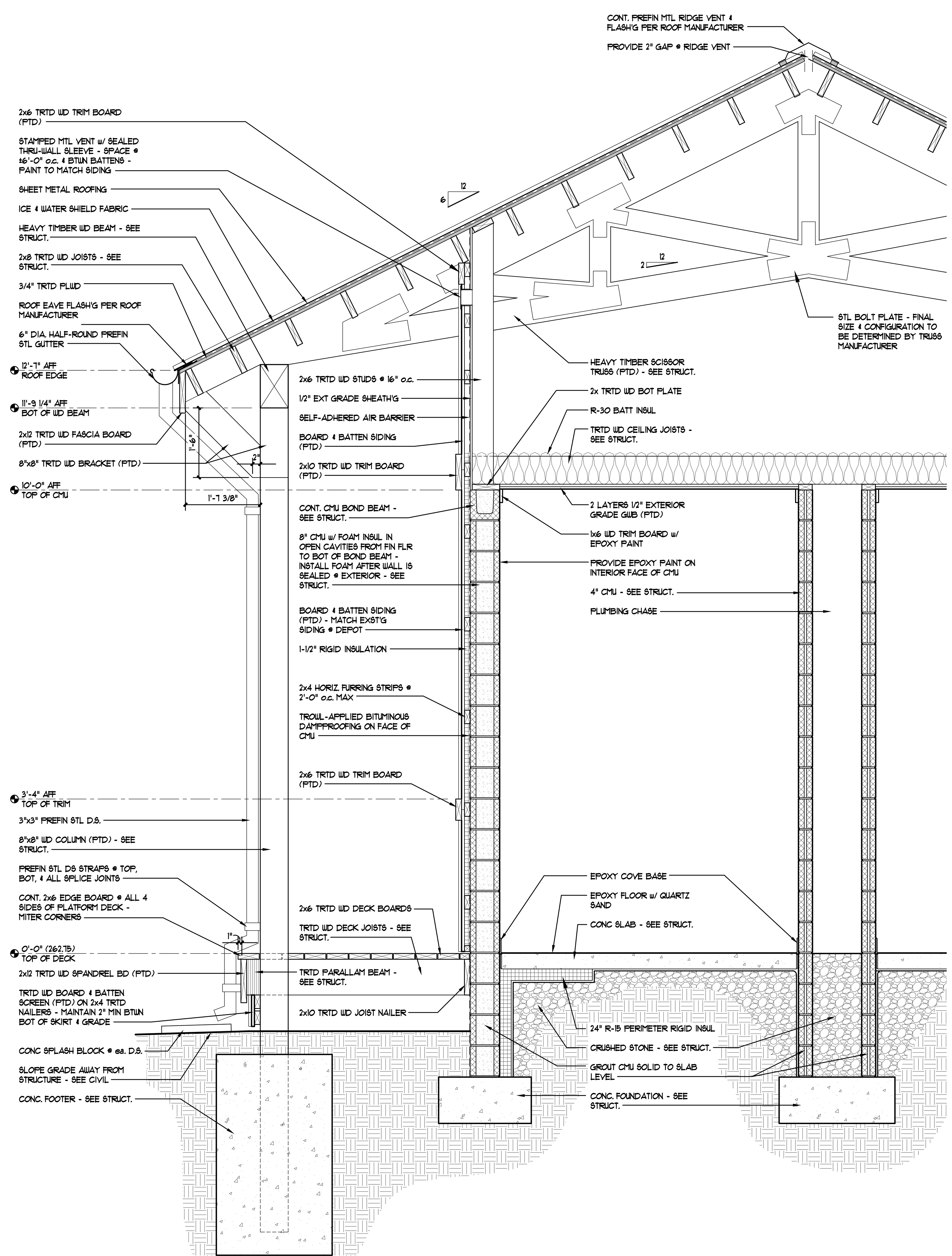
SHEET A6.1



6203 WALL SECTION DETAIL @ PLATFORM
3/4" = 1'-0" WS001645



6201 BUILDING SECTION DETAIL @ PLATFORM
3/4" = 1'-0" WS001645

NORTH CAROLINA
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ANDREW J. LOPINA
2/28/2025

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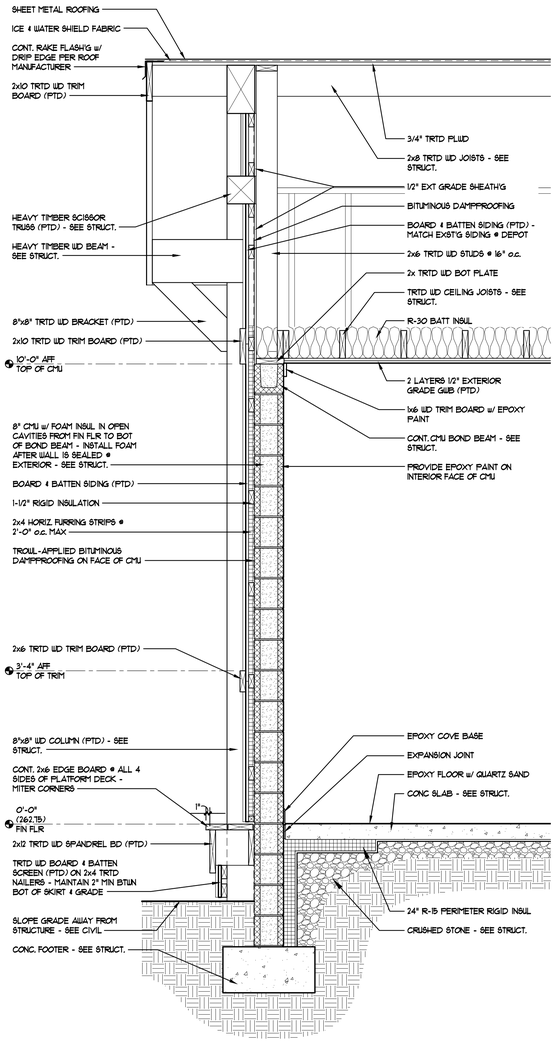
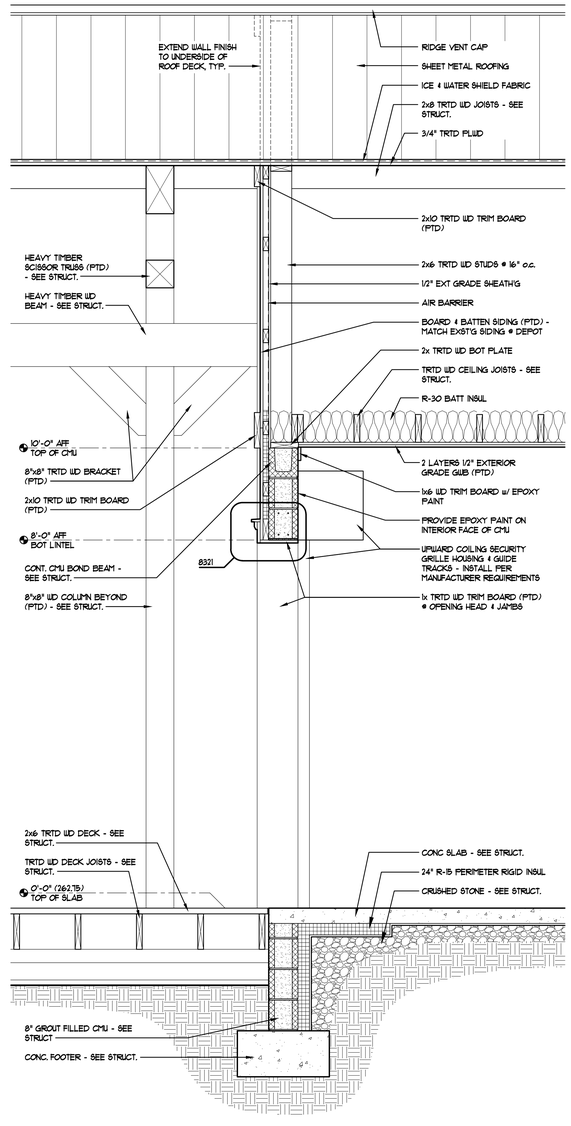
SHEET A6.2



6304 WALL SECTION DETAIL @ PLATFORM

3/4" = 1'-0"

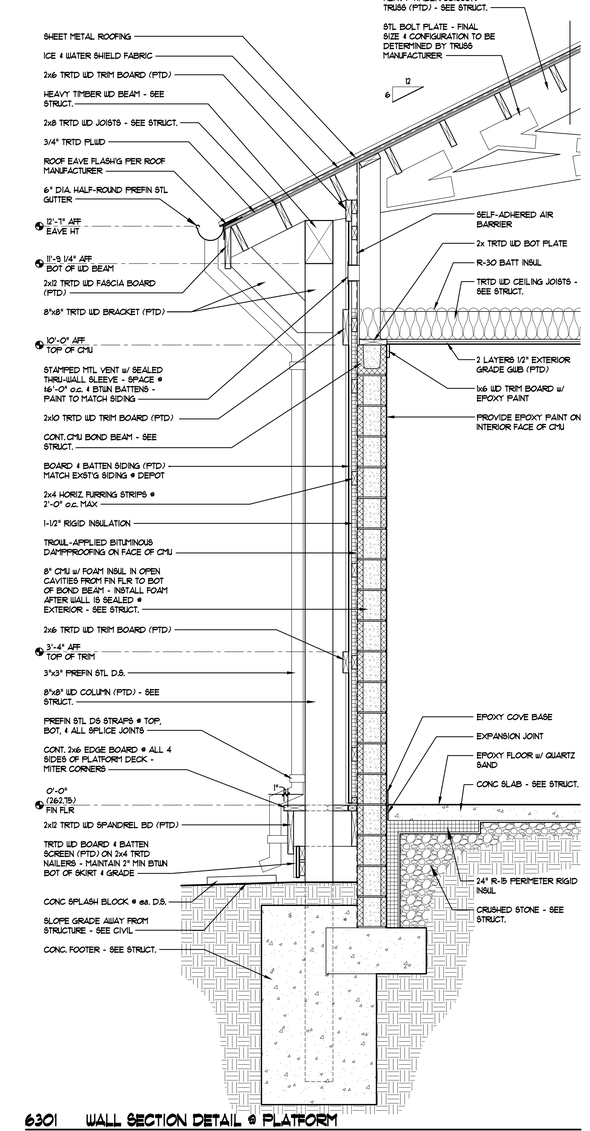
WB0223081



6302 WALL SECTION DETAIL @ PLATFORM

3/4" = 1'-0"

WB0223081



6301 WALL SECTION DETAIL @ PLATFORM

3/4" = 1'-0"

WB0223081

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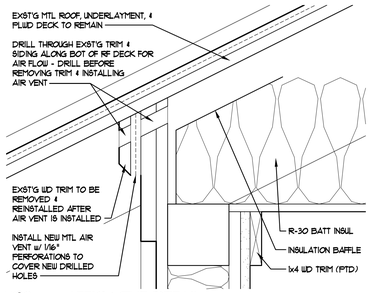
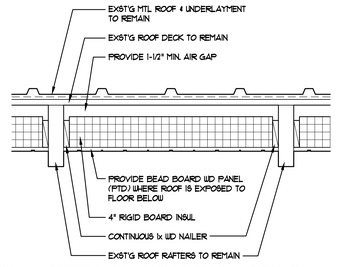
SHEET	A6.3

a6.3-2026



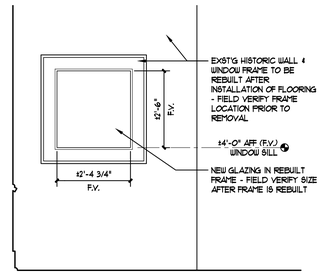
7128 ATTIC VENT DETAIL

1-1/2" = 1'-0" D0132308|



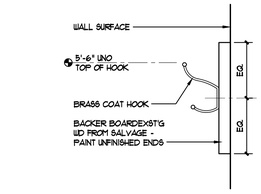
7127 ROOF INSULATION DETAIL @ DEPOT

1-1/2" = 1'-0" D0132308|



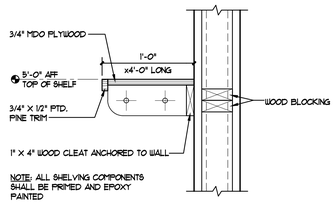
7122 NETWORK ROOM WINDOW ELEVATION

1/2" = 1'-0" D0142308|



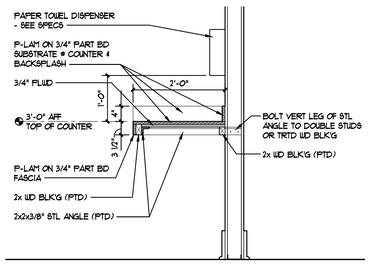
7116 COAT HOOK DETAIL

1-1/2" = 1'-0" D0112308|



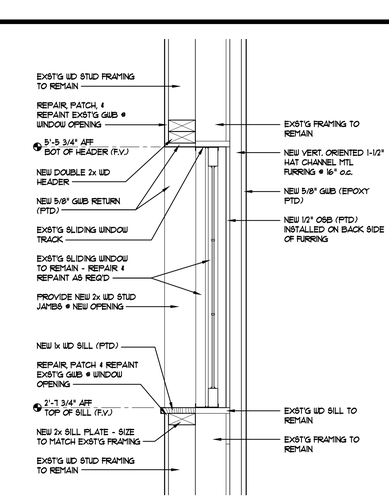
7110 CLOSET SHELF DETAIL

1-1/2" = 1'-0" D0102308|



7104 COUNTER DETAIL

3/4" = 1'-0" D0122308|



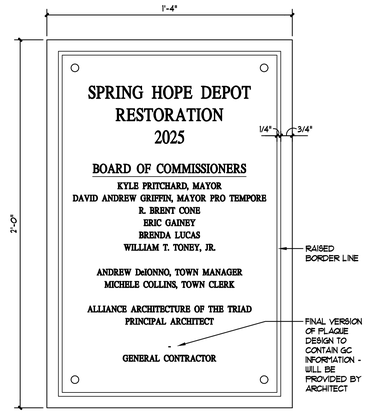
7120 WALL SECTION DETAIL @ INT. WINDOW

1-1/2" = 1'-0" D0142308|

NOTE: ARCHITECT TO PROVIDE FINAL COPY OF PLAQUE DESIGN ONCE GC IS SELECTED.

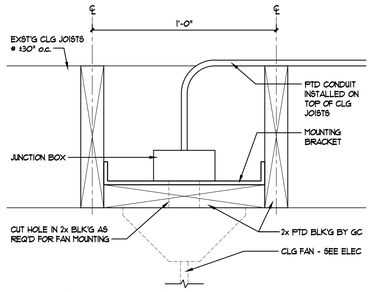
NOTE: CONFER w/ ARCHITECT ON EXACT MOUNTING LOCATION

NOTE: PROVIDE BLK'G IN WALL FOR SIGN ATTACHMENT



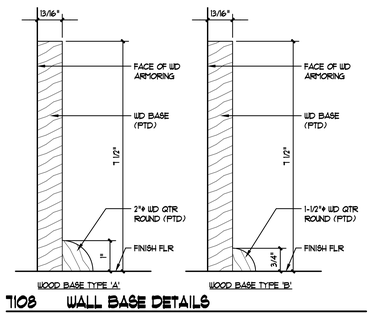
7119 DEDICATION SIGN DETAIL

3" = 1'-0" D0082308|



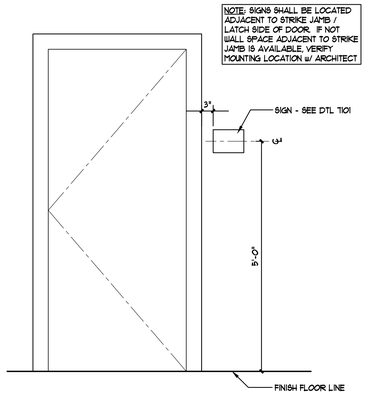
7114 CEILING FAN MOUNTING DETAIL

3" = 1'-0" D0022308|



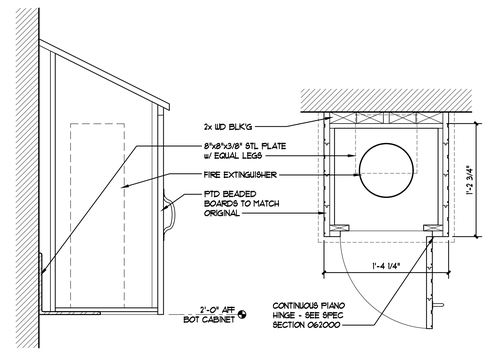
7108 WALL BASE DETAILS

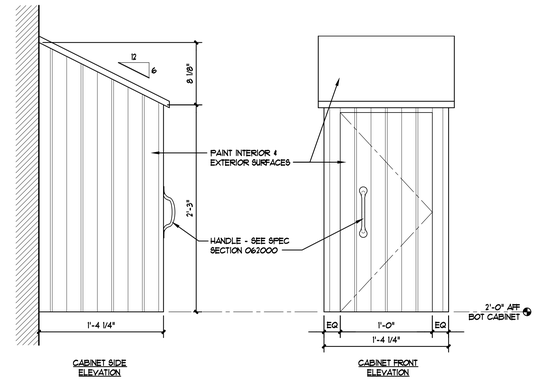
6" = 1'-0" D0072308|



7102 INTERIOR SIGN MOUNTING DETAIL

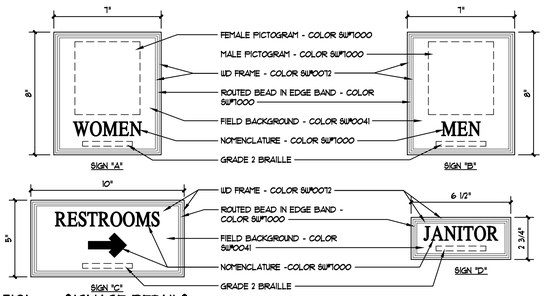
3/4" = 1'-0" D0042308|





7107 FIRE EXTINGUISHER CABINET DETAILS

1-1/2" = 1'-0" D0032308|



7101 SIGNAGE DETAILS

3" = 1'-0" D0052308|

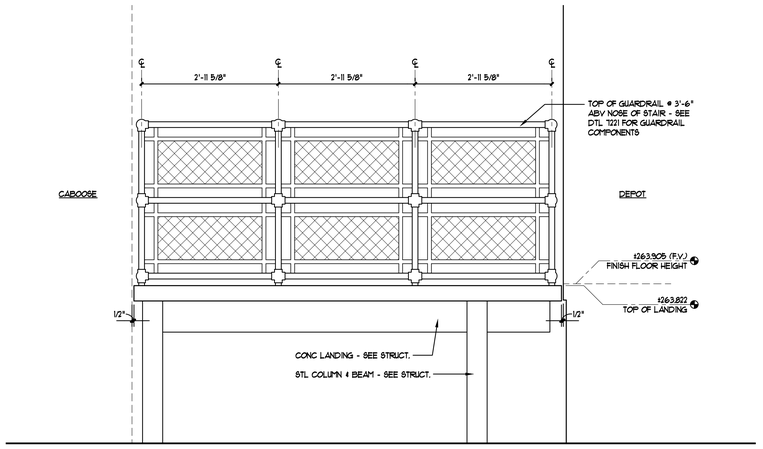
ALLIANCE ARCHITECTURE OF THE TRIAD
2601 Pilgrim Court, Suite 130 | Winston-Salem, NC 27106 | Ph. 336-722-4447

REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

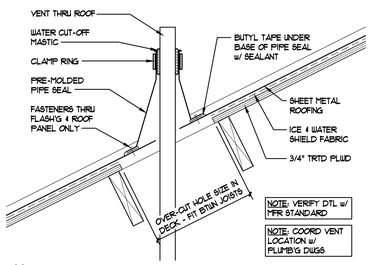
JOB 25081
DATE February 28, 2025
DRAWN T. Doorn
SHEET A1.1

dft-25081



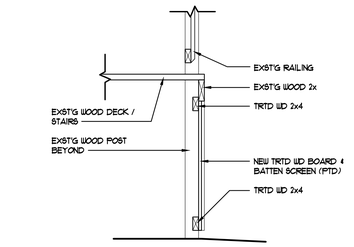
7223 GUARD RAIL ELEVATION

3/4" = 1'-0" D0062308I



7228 VENT THRU ROOF DETAIL

1-1/2" = 1'-0" D0162308I



7227 SCREEN DETAIL

3/4" = 1'-0" D0062308I

SPRING HOPE RAILROAD DEPOT
REHABILITATION
&
PLATFORM ADDITION

THIS PROJECT IS FUNDED BY GRANTS PROVIDED THROUGH THE N.C. DEPARTMENT OF COMMERCE AND MATCHING FUNDS PROVIDED BY THE TOWN OF SPRING HOPE

ALLIANCE ARCHITECTURE OF THE TRIAD
ARCHITECT

DAVID E. GALL,
HISTORIC PRESERVATION CONSULTANT

ALLIED DESIGN, INC.
CIVIL ENGINEER

MEPC STRUCTURAL ENGINEERS
STRUCTURAL ENGINEER

BEEKMAN POINT ENGINEERING
PLUMBING & MECHANICAL ENGINEER

S.E.C.I.
ELECTRICAL ENGINEER

-
GENERAL CONTRACTOR

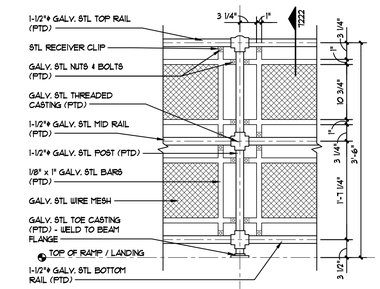
4'x8' TRTD PLWD SIGN

6x6 TRTD WD POST

NOTE: ARCHITECT TO PROVIDE FINAL COPY OF PROJECT SIGN DESIGN ONCE GC IS SELECTED.

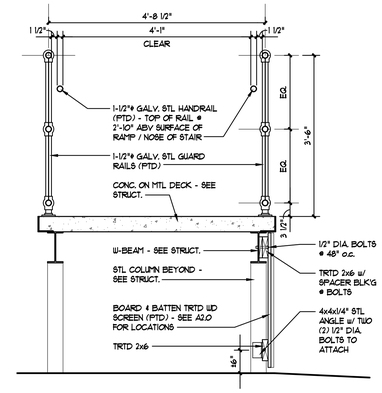
7219 ALTERNATE 3: PROJECT SIGN

1" = 1'-0" D0012308I



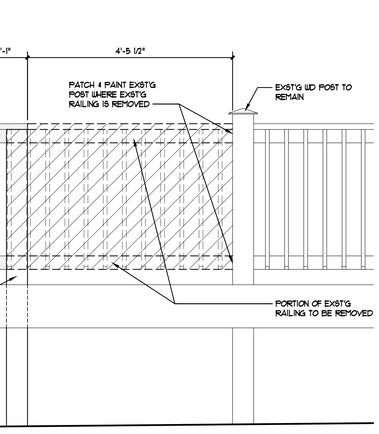
7221 GUARD RAIL ELEVATION

1" = 1'-0" D0062308I



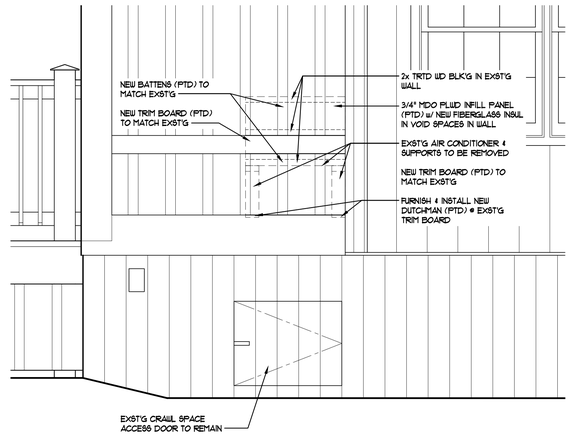
7220 RAMP SECTION

3/4" = 1'-0" D0062308I



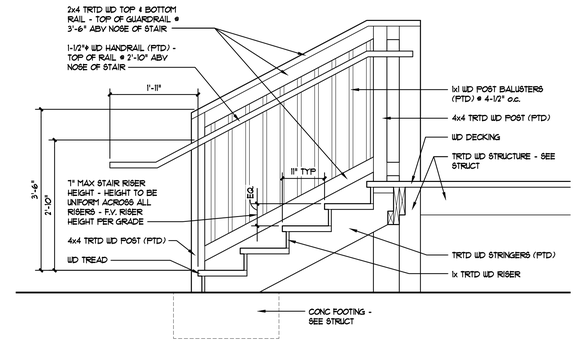
7210 NORTH PORCH RAILING DETAIL

3/4" = 1'-0" W80223081



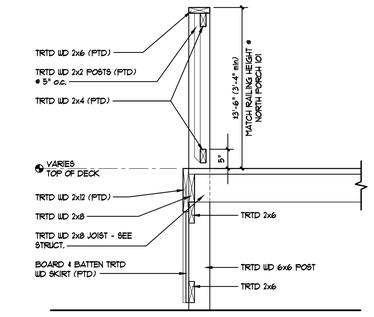
7208 WALL PATCH DETAIL

3/4" = 1'-0" BE01230BI



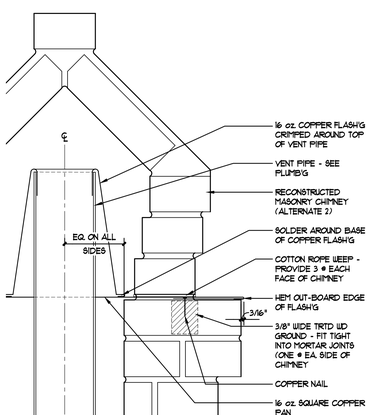
7207 STAIR DETAIL @ PLATFORM

3/4" = 1'-0" W80223081



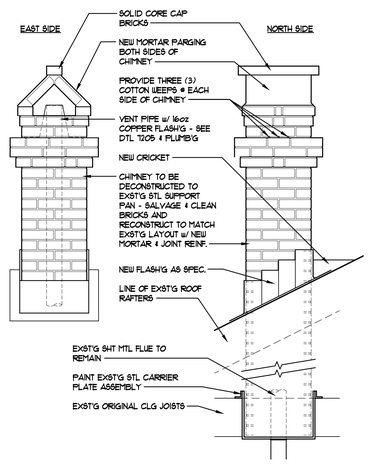
7211 SECTION @ BRIDGE CONNECTOR

3/4" = 1'-0" W80223081



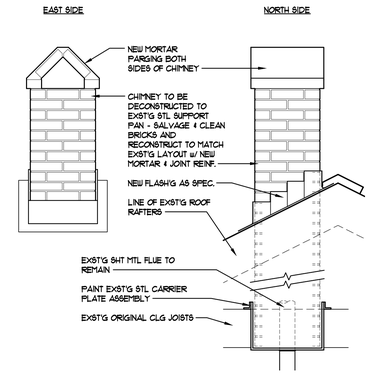
7205 CHIMNEY FLASHING DETAIL

3" = 1'-0" D0012308I



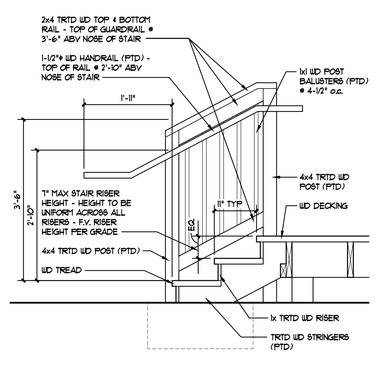
7204 ALTERNATE 2: WEST CHIMNEY ELEVATIONS

3/4" = 1'-0" D0012308I



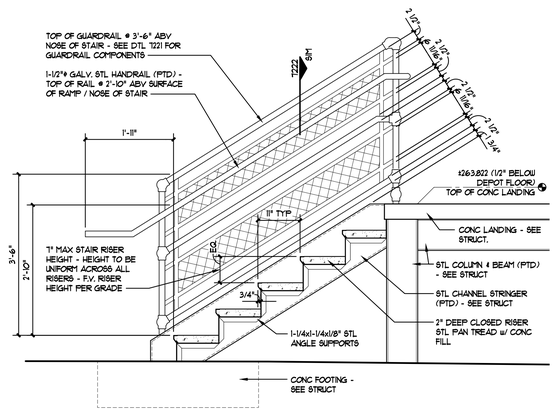
7203 ALTERNATE 2: EAST CHIMNEY ELEVATIONS

3/4" = 1'-0" D0012308I



7202 STAIR DETAIL @ PLATFORM

3/4" = 1'-0" D0012308I



7201 STAIR DETAIL @ DEPOT

3/4" = 1'-0" W80223081

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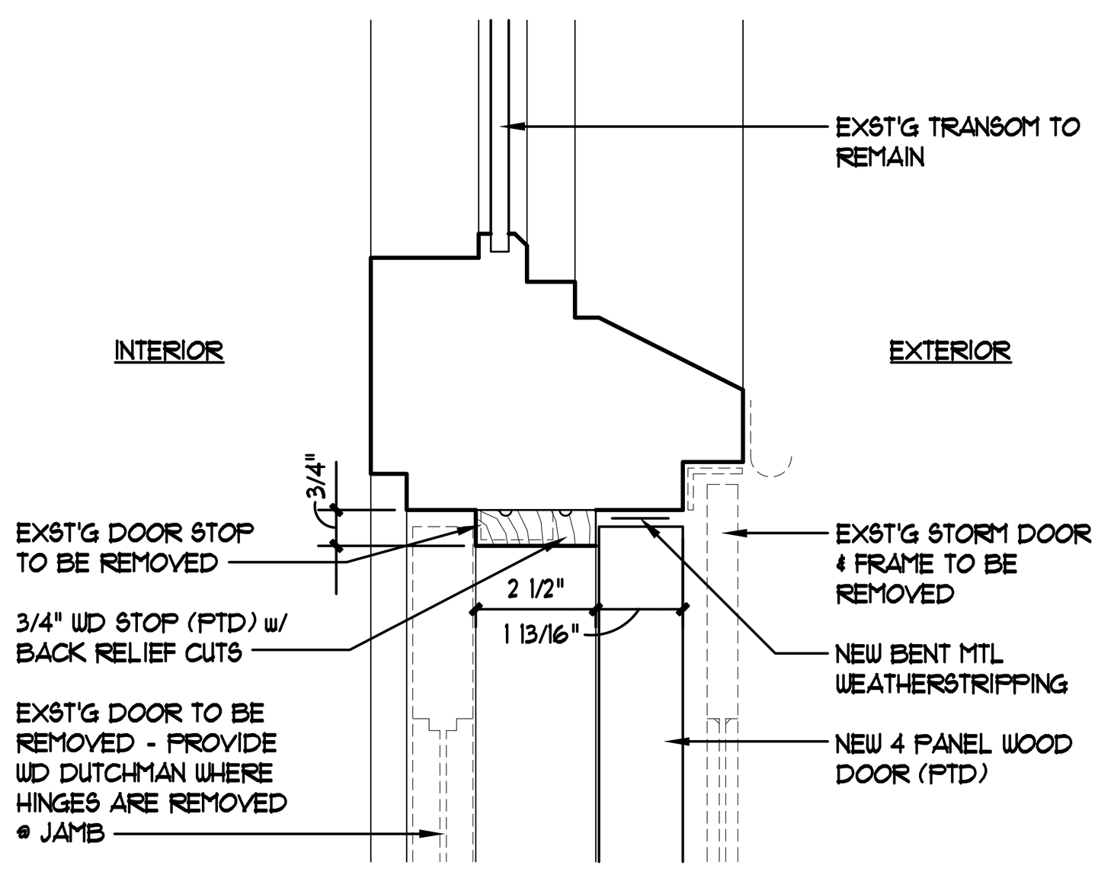
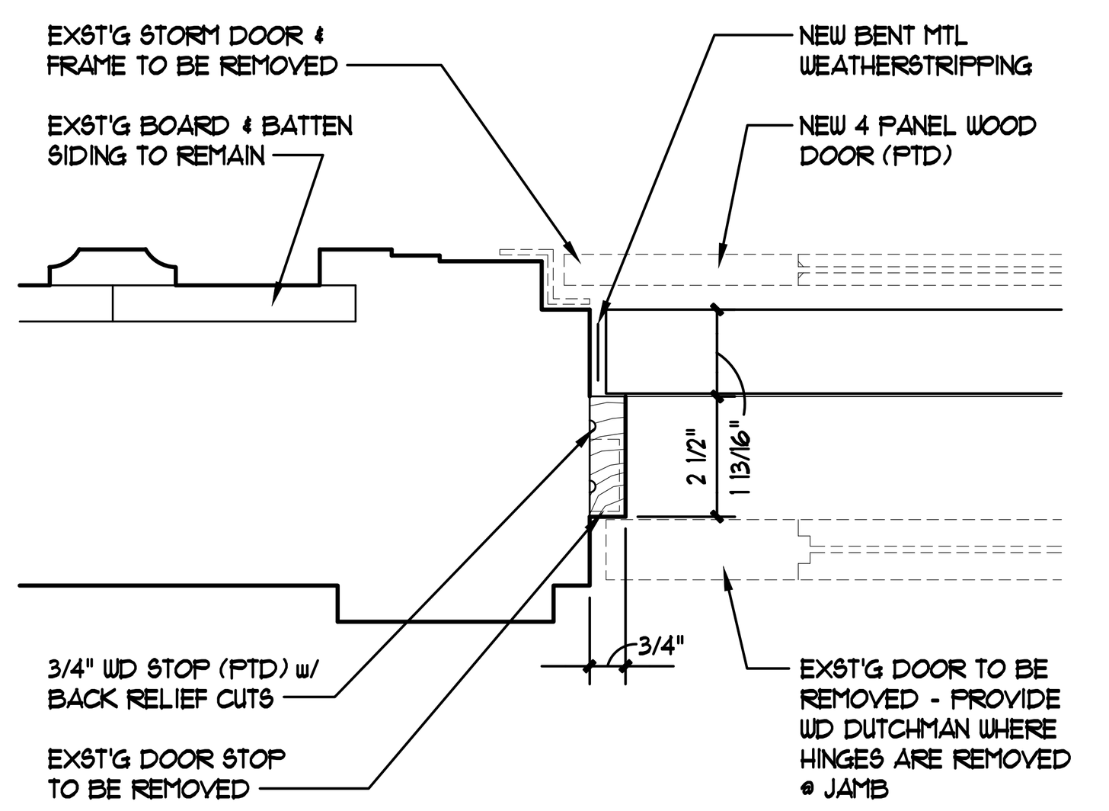
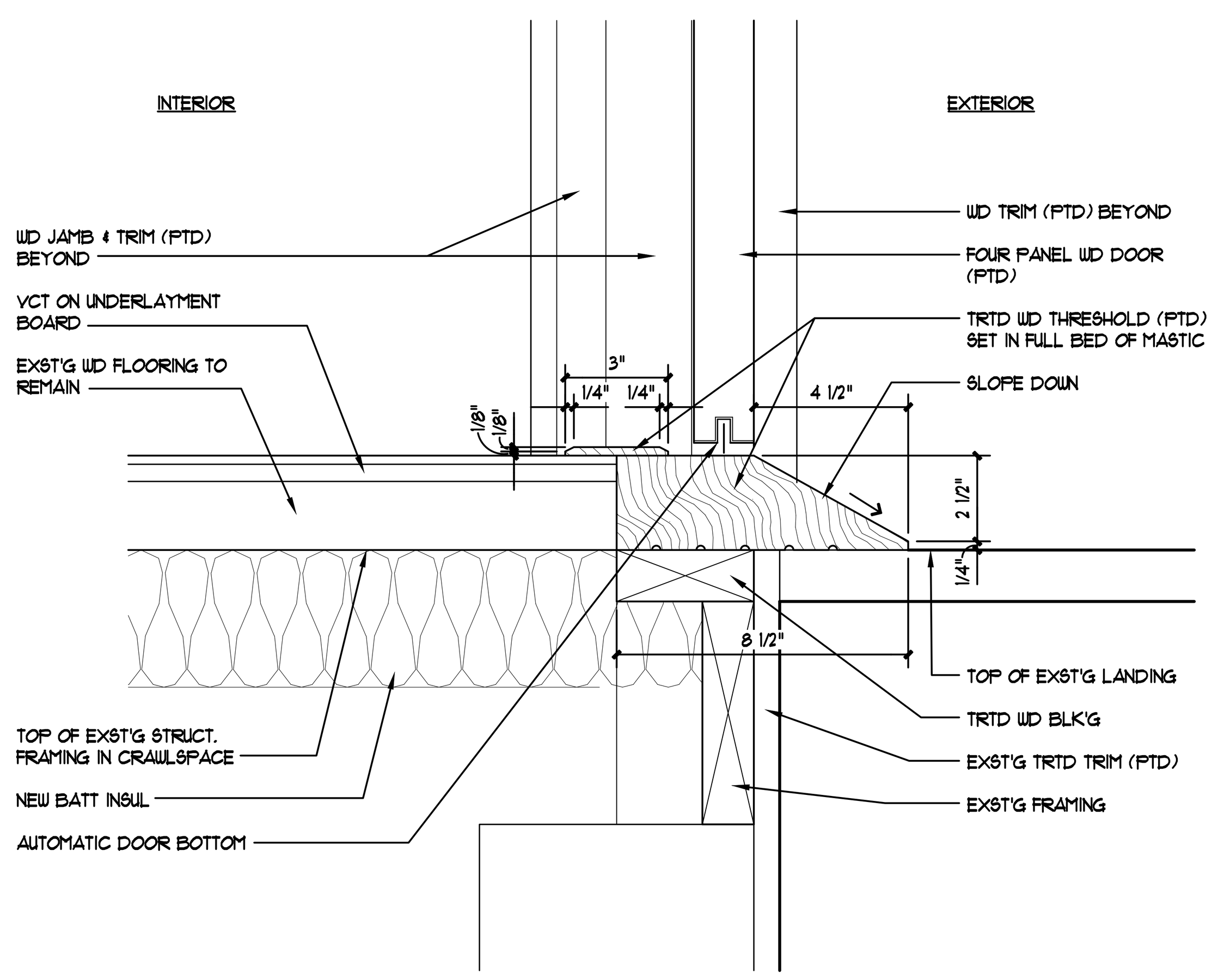
d12-25081



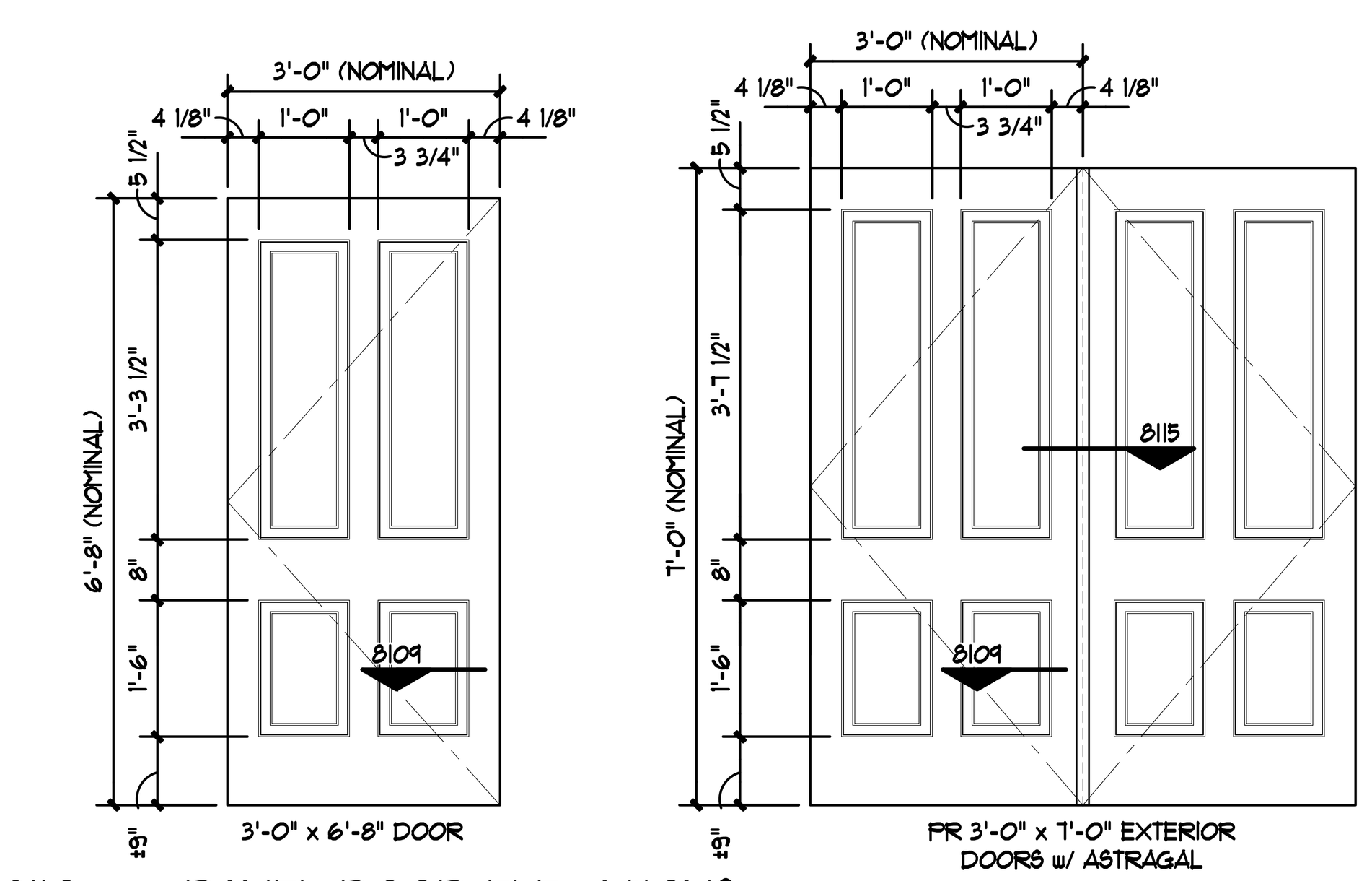
8130 DOOR HEAD DETAIL
3" = 1'-0"
DOOR23081



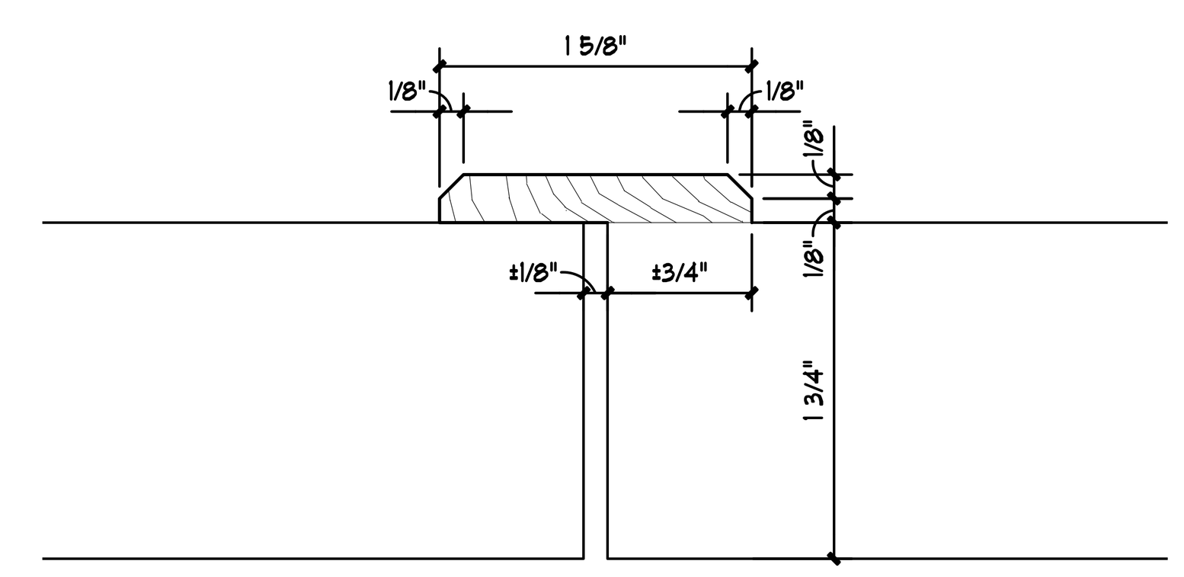
8124 DOOR JAMB DETAIL
3" = 1'-0"
DOOR23081



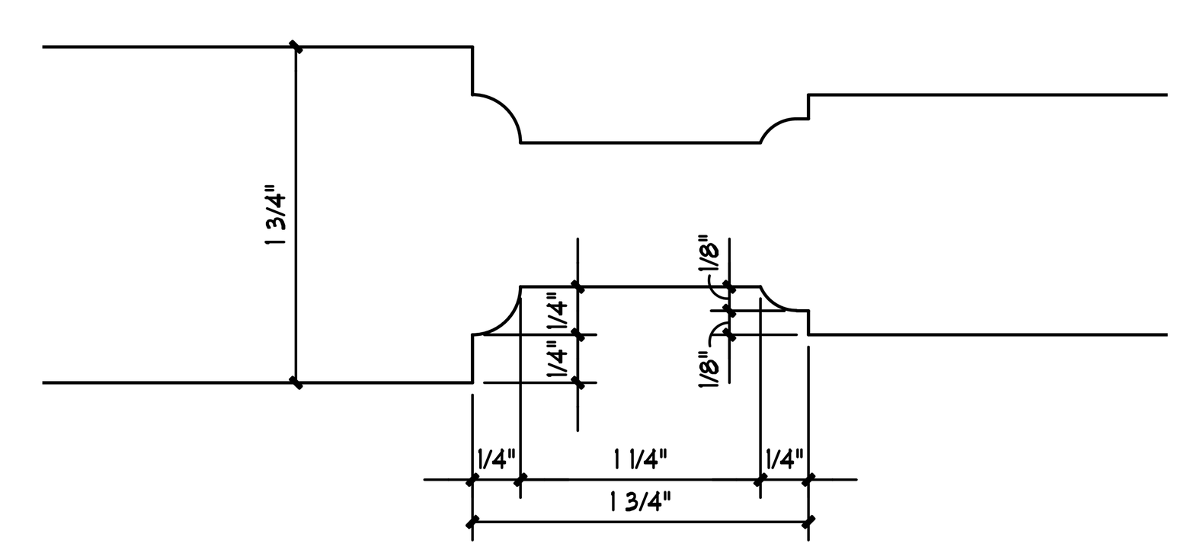
8111 DOOR THRESHOLD DETAIL
3" = 1'-0"
DOOR23081



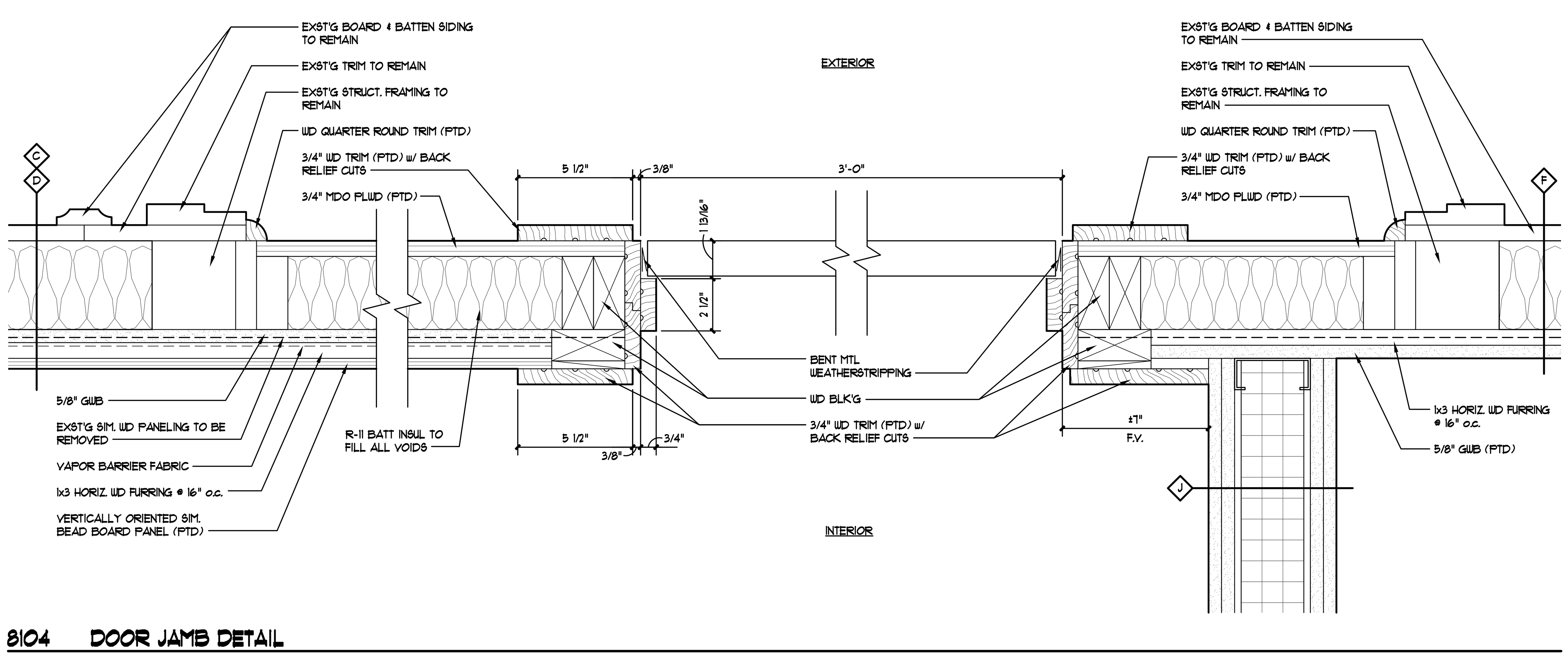
8110 PANEL DOOR ELEVATIONS
1/2" = 1'-0"
DOOR23081



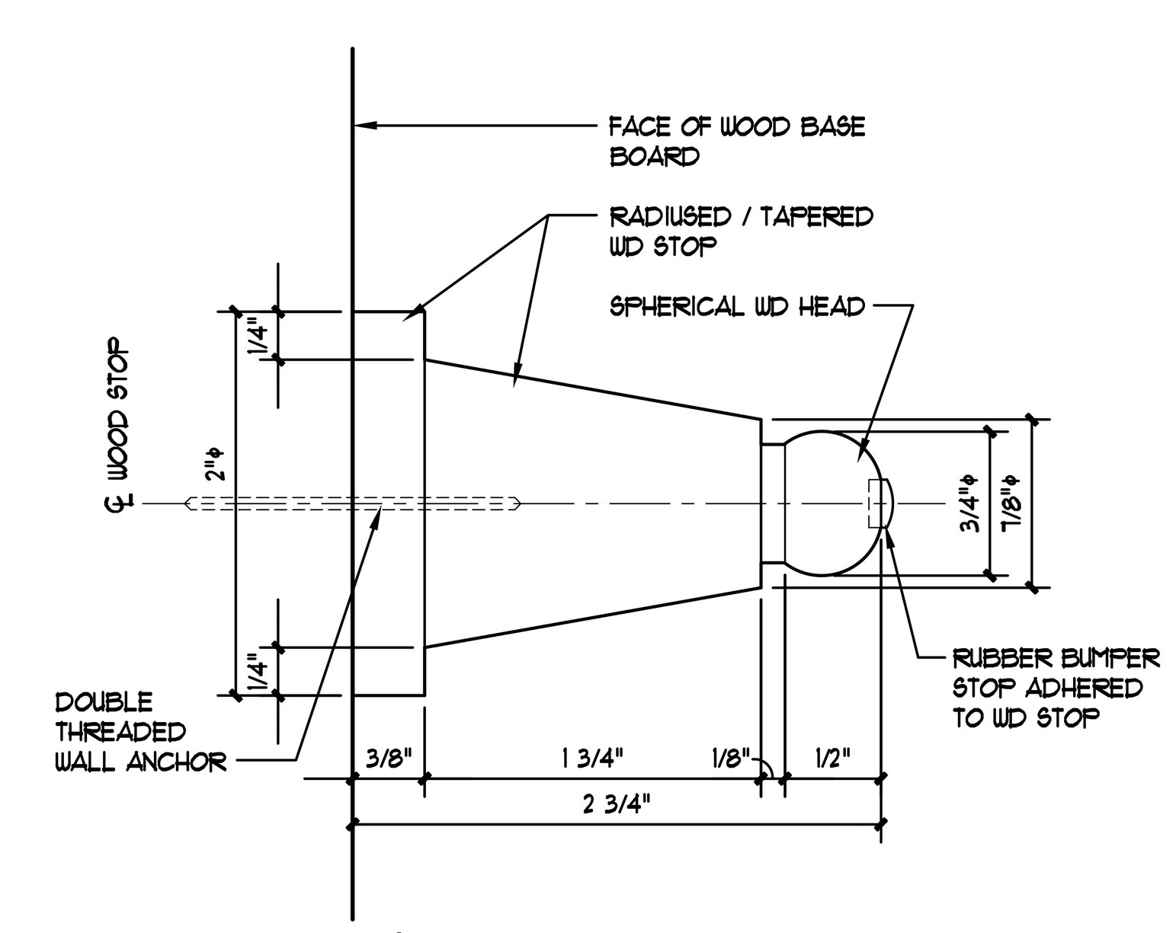
8115 DOOR ASTRAGAL DETAIL
12" = 1'-0"
DOOR23081



8109 PANEL DOOR PROFILE DETAIL
12" = 1'-0"
DOOR23081



8104 DOOR JAMB DETAIL
3" = 1'-0"
DOOR23081



8103 DOOR STOP DETAIL
12" = 1'-0"
DOOR23081

ROOM FINISH SCHEDULE

FIN123081

ROOM NUMBER	ROOM NAME	FLOOR 1 REINSTALLED STAINED WOOD	FLOOR 2 VCT	FLOOR 3 BROOM FINISH CONCRETE	FLOOR 4 WOOD DECK	FLOOR 5 QUARTZ SAND EPOXY	BASE 1 PTD WOOD - TYPE 'A'	BASE 2 EPOXY PTD WOOD - TYPE 'B'	BASE 3 PTD WOOD - TYPE 'B'	BASE 4 EPOXY BASE	WAINSCOT 1 PTD WOOD ARMORING	WAINSCOT: NOTE: INSIDE & OUTSIDE CORNERS OF CHAIR RAIL TO BE MITERED	WALLS 1 PTD WOOD	WALLS 2 PTD GWB	WALLS 3 EPOXY PTD GWB	WALLS 4 EPOXY PTD CMU	CEILING 1 UNFINISHED EXST'G WD	CEILING 2 PAINTED GWB	CEILING 3 EPOXY PTD BEADED WD BOARD	CEILING 4 STAINED BEADED PLWD PANELS	CEILING 5 EPOXY PTD EXT. GRADE GWB	CEILING 6 PTD WOOD CEILING	HT	REMARKS
101	NORTH PORCH				4																			SEE ALTERNATE 1, SEE FIN NOTES 3, 4
102	EVENT SPACE	1					1				1		1				1			4			VARIES	SEE FIN NOTES 5, 6
103	CABOOSE BRIDGE			3																				SEE FIN NOTES 1, 2
104	NETWORK ROOM	1											1				1			4			VARIES	-
105	CORRIDOR		2						3					2					3				12'-0" F.V.	-
106	SOUTH LOBBY		2						3					2					3				12'-0" F.V.	-
107	CORRIDOR		2						3					2					3				12'-0" F.V.	-
108	MEN'S RESTROOM		2					2							3				3				12'-0" F.V.	-
109	WOMEN'S RESTROOM		2					2							3				3				12'-0" F.V.	-
110	JANITOR'S CLOSET		2					2							3				3				12'-0" F.V.	-
111	CATERER'S FOOD PREP		2					2							3				3				12'-0" F.V.	-
112	CATERER'S FOOD STOR		2					2							3				3				12'-0" F.V.	-
113	SOUTH STAIR																							SEE ALTERNATE 1
114	STAIR																							SEE ALTERNATE 1
115	RAMP			3																				SEE FIN NOTES 1, 2, 4
116	STAIR																							SEE FIN NOTES 1, 2, 4
117	CLOSET	1							3					2			1						12'-0" F.V.	-
118	RISER ROOM	1							3					2			1						12'-0" F.V.	-
119	RAMP				4																			-
120	EVENTS PLATFORM				4																	6	VARIES	-
121	RAMP			3																				-
122	CORRIDOR			3												4					5		10'-0"	-
123	JANITOR CLOSET					5				4						4					5		10'-0"	-
124	MEN'S RESTROOM					5				4						4					5		10'-0"	-
125	WOMEN'S RESTROOM					5				4						4					5		10'-0"	-
126	RISER ROOM					5				4						4					5		10'-0"*	*CLG HEIGHT MEASURED FROM 262.75 HEIGHT

FINISH NOTES

1. PAINT ALL EXPOSED SURFACES OF STRUCT STL, INCLUDING UNDERSIDE OF STL DECK & STAIR.
2. PAINT POST & RAILING ASSEMBLIES.
3. PAINT AREAS WHERE EXST'G LIGHT FIXTURES ARE REMOVED.
4. PAINT NEW DOORS & FRAMES.
5. PAINT EXPOSED ELEC CONDUITS & JUNCTION BOXES.
6. PAINT NEW WD BLK'G SUPPORTING NEW PADDLE FANS, LIGHT FIXTURES, & CURTAIN TRACK.

WINDOW REHABILITATION SCHEDULE

WIN123081

WINDOW NUMBER	1 REMOVE SASHES FROM FRAME	2 REMOVE, STRIP, & CLEAN EXST'G HARDWARE	3 REMOVE & CLEAN EXST'G GLAZING	4 REMOVE DIRT & SOOT	5 REPLACE BROKEN GLASS	6 STRIP PAINT FROM SASH	7 FURNISH / INSTALL NEW HARDWARE	8 REINSTALL GLAZING w/ NEW PUTTY	9 PAINT SASH	10 REPLACE SASH ROPES & WEIGHTS	11 FURNISH / INSTALL WEATHERSTRIPPING	12 REMOVE WINDOW TREATMENT / HARDWARE	13 REPAIR / REPLACE PULLEY WHEELS	14 STRIP PAINT FROM FRAME	15 PAINT FRAME	16 REINSTALL SASH IN FRAME	TYPE OF SASH	REMARKS
N1		2	3	4	5		7		9			12			15		DH	NOTE # 1, 4
N2		2	3	4			7		9			12			15		DH	NOTE # 1, 4
N3	1		3	4			7	8	9	10	11		13		15	16	DH	NOTE # 4, 5
W1		2	3	4			7		9			12			15		DH	NOTE # 1, 4
W2		2	3	4			7		9			12			15		DH	NOTE # 1, 4
W3			3	4			7		9						15		FIXED	NOTE # 4
W4			3	4			7		9						15		DH	NOTE # 1, 4
W5			3	4			7		9						15		DH	NOTE # 1, 4
W6			3	4			7		9						15		FIXED	NOTE # 1, 4
W7	1		3	4			7	8	9	10	11	12	13		15	16	DH	NOTE # 4, 5
W8	1		3	4			7	8	9	10	11	12	13		15	16	DH	NOTE # 4, 5
W9	1		3	4			7	8	9	10	11	12	13		15	16	DH	NOTE # 4, 5
S1	1		3	4	5		7	8	9	10	11	12	13		15	16	DH	NOTE # 3, 4, 5
S2	1		3	4			7	8	9	10	11	12	13		15	16	DH	NOTE # 4, 5
E1	1		3	4	5		7	8	9	10	11	12	13		15	16	DH	NOTE # 4, 5
E2	1		3	4			7	8	9	10	11	12	13		15	16	DH	NOTE # 4, 5
E3			3	4			7		9						15		FIXED	NOTE # 1
E4			3	4			7		9						15		FIXED	NOTE # 1, 3

WINDOW REHABILITATION NOTES

1. FURNISH & INSTALL NEW SASH PULL. SEE SPECS.
2. REMOVE, CLEAN, REPAIR, & REINSTALL EXST'G SASH LOCKS. VERIFY ALL SASHES LOCK AFTER WORK IS COMPLETE.
3. REMOVE LOGO FROM GLASS.
4. BASE BID: PAINT ONLY INTERIOR WOOD.
5. FURNISH + INSTALL SASH PULL, SASH LOCK, PULLY WHEELS, ROPES, COUNTERWEIGHTS, AND BENT METAL WEATHERSTRIPPING. SEE SPECS.
6. SEE ALT. # 1 FOR EXTERIOR PAINT REMOVAL AND NEW PAINT WORK.

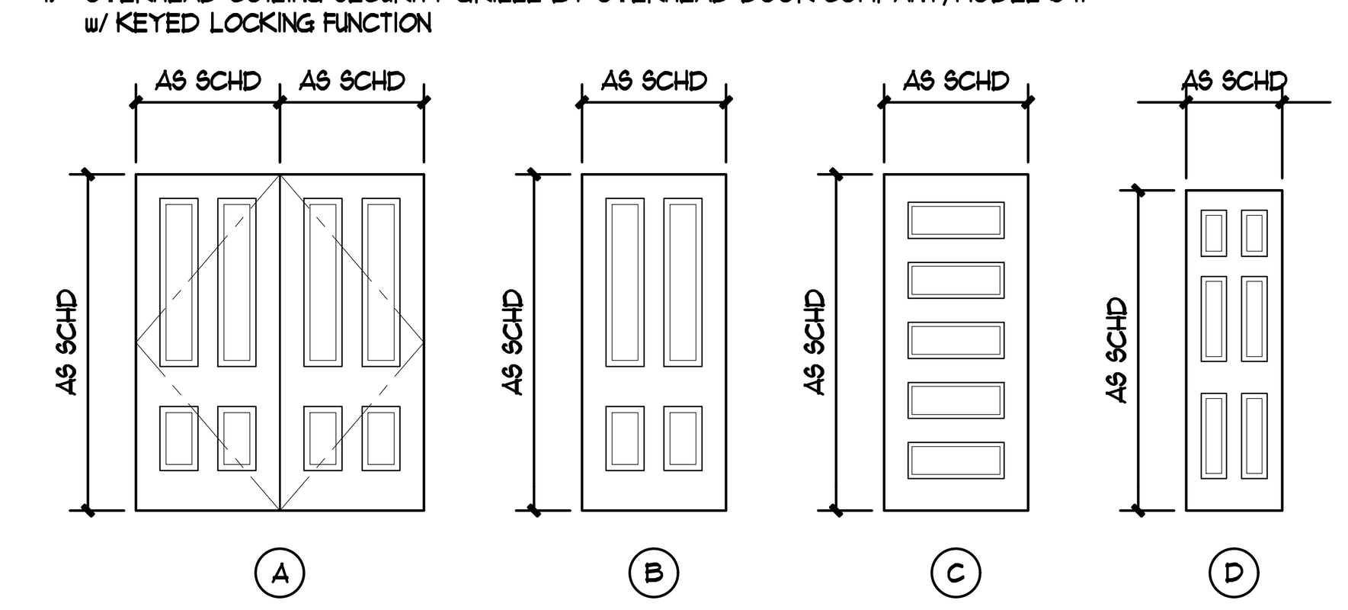
DOOR & FRAME SCHEDULE

DOOR23081

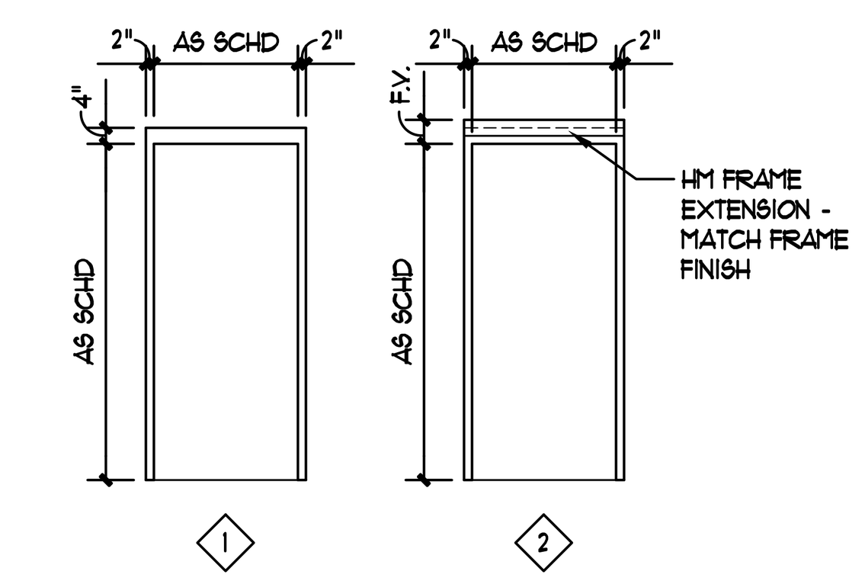
DOOR NO.	DOOR W	DOOR H	DOOR T	DOOR MAT	DOOR TYPE	GLASS	LOUVER W	LOUVER H	FRAME MAT	FRAME TYPE	DETAILS THOLD	DETAILS JAMB	DETAILS HEAD	HDWR SET	REMARKS
102A	PR 3'-0"	7'-0"	1 3/4"	WD	A				WD		8215	8202	8221	01	SEE NOTE 6
102B	PR 3'-0"	7'-0"	1 3/4"	WD	A				WD		8217	8204	8223	01	SEE NOTE 6
102C	3'-0"	7'-0"	1 3/4"	WD	B				WD		8214	8104	8220	02	SEE NOTE 6
104				WD					WD					13	SEE NOTE 2
105	3'-0"	7'-0"	1 3/4"	WD	B				WD		8207	8201	8213	05	SEE NOTES 5, 6
108	2'-11 3/4"	6'-10 3/4"	1 3/8"	WD	B				WD			8219	8225	06	SEE NOTES 3, 5
109	3'-0 7/8"	7'-4 9/16"	1 3/8"	WD	B				WD			8219	8225	06	SEE NOTES 3, 5
110	3'-0"	6'-11 1/2"	1 5/16"	WD	C				WD			8201	8213	07	SEE NOTES 3, 5
111	3'-0"	7'-0"	1 3/4"	WD	B				WD			8201	8213	08	SEE NOTES 5, 6
113	3'-0"	6'-8"	1 3/4"	WD	B				WD		8301	8124 SIM	8130 SIM	03	SEE NOTE 6
114	3'-0"	6'-8"	1 3/4"	WD	B				WD		8111	8124	8130	04	SEE NOTE 6
117	1'-11 5/8"	6'-7 3/4"	1 3/4"	WD	D				WD			8201	8213	12	SEE NOTE 4
118	2'-0 1/4"	6'-8 1/4"	1 11/16"	WD	D				WD			8201	8213	12	SEE NOTE 4
122	7'-0"	8'-0"		MTL	F				MTL			8302	8308	-	OVERHEAD COILING GRILLE, SEE NOTE 7
123	3'-0"	7'-0"	1 3/4"	HM	E				HM	1	8320	8325	8319	11	INSULATED
124	3'-0"	7'-0"	1 3/4"	HM	E				HM	1	8320	8325	8319	10	INSULATED
125	3'-0"	7'-0"	1 3/4"	HM	E				HM	1	8320	8325	8319	10	INSULATED
126	3'-0"	7'-0"	1 3/4"	HM	E				HM	2	8326	8327	8321	09	INSULATED

DOOR & FRAME NOTES

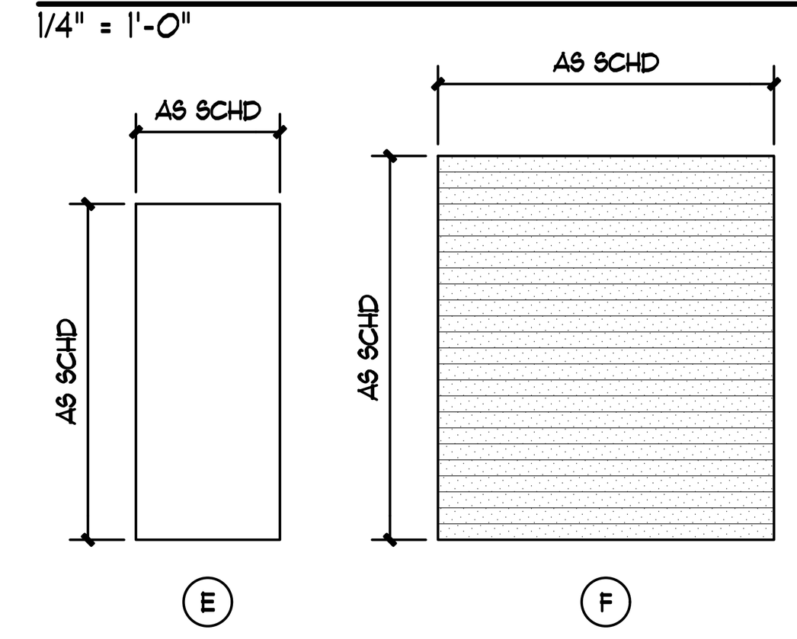
1. EXST'G HISTORIC FOUR PANEL DOOR TO BE REUSED
2. EXST'G HISTORIC VERTICAL BOARD SOLID WOOD DOOR & FRAME TO BE REUSED
3. HISTORIC FOUR PANEL DOOR TO BE PROVIDED BY OWNER & INSTALLED BY G.C.
4. HISTORIC SIX PANEL DOOR TO BE PROVIDED BY OWNER & INSTALLED BY G.C.
5. PROVIDE PTD WD DOOR STOP PER DTL 8103
6. SEE DTL 8110 FOR NEW WOOD 4-PANEL DOOR DIMENSIONS & CROSS-SECTION
7. OVERHEAD COILING SECURITY GRILLE BY OVERHEAD DOOR COMPANY, MODEL 671 w/ KEYED LOCKING FUNCTION



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



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



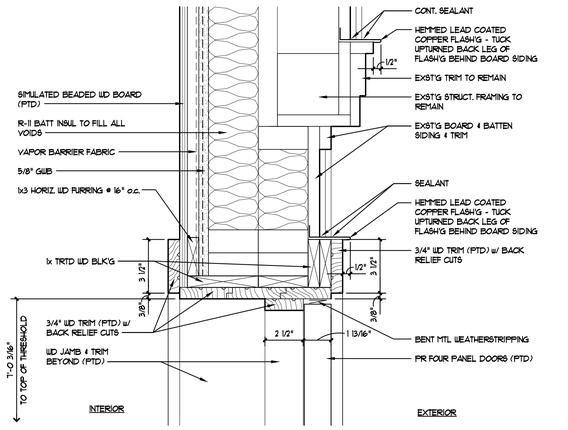
DOOR TYPES @ PLATFORM
1/4" = 1'-0"

ALLIANCE ARCHITECTURE OF THE TRIAD
2601 Pilgrim Court, Suite 130 | Winston-Salem, NC 27106 | Ph. 336-722-4447

REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

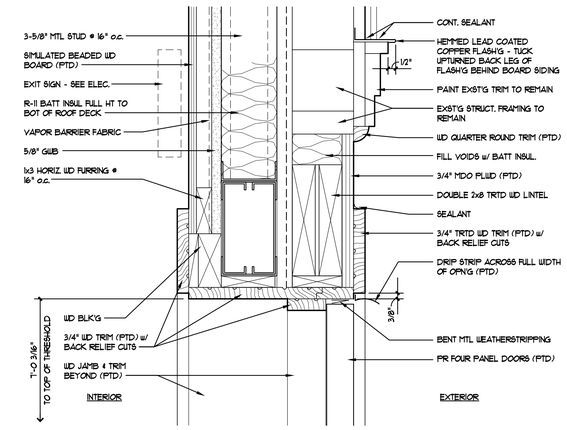
JOB 23081
DATE February 28, 2025
DRAWN T. Doom
SHEET A8.1



8223 DOOR HEAD DETAIL

3" = 1'-0"

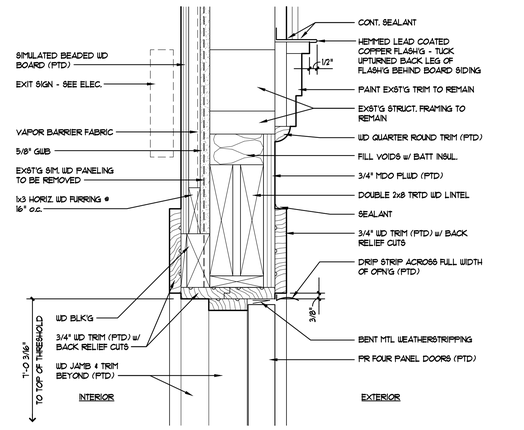
D0082308|



8221 DOOR HEAD DETAIL

3" = 1'-0"

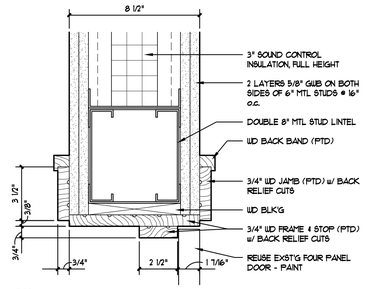
D0082308|



8220 DOOR HEAD DETAIL

3" = 1'-0"

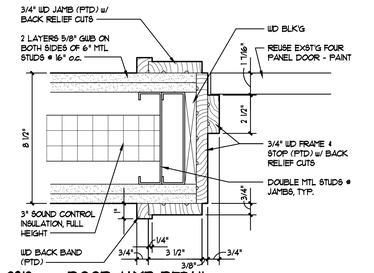
D0082308|



8225 DOOR HEAD DETAIL

3" = 1'-0"

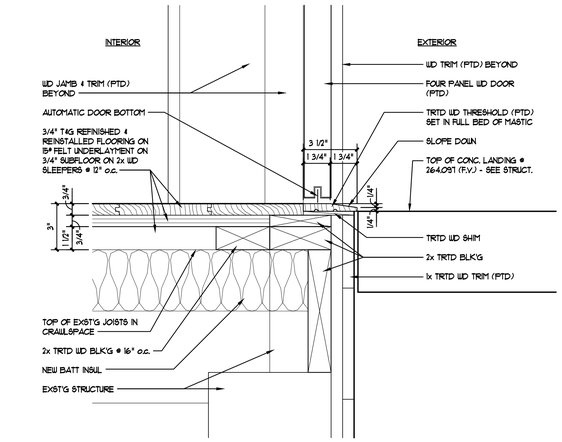
D0082308|



8219 DOOR JAMB DETAIL

3" = 1'-0"

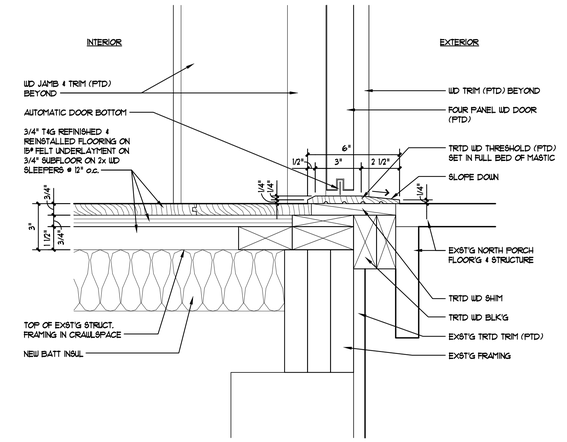
D0082308|



8217 DOOR THRESHOLD DETAIL

3" = 1'-0"

D0082308|



8215 DOOR THRESHOLD DETAIL

3" = 1'-0"

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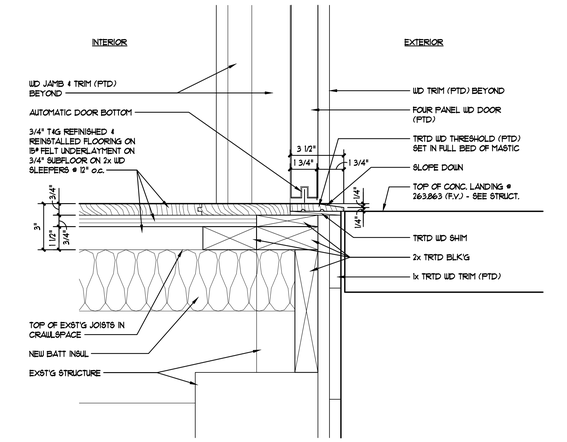
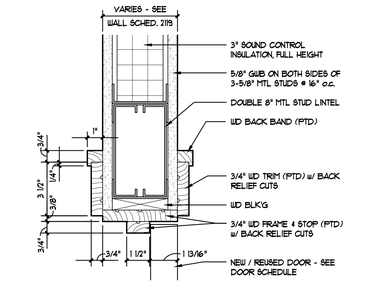


8214 DOOR THRESHOLD DETAIL

3" = 1'-0"

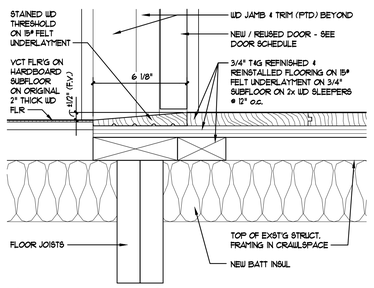
D0082308|



8213 DOOR HEAD DETAIL

3" = 1'-0"

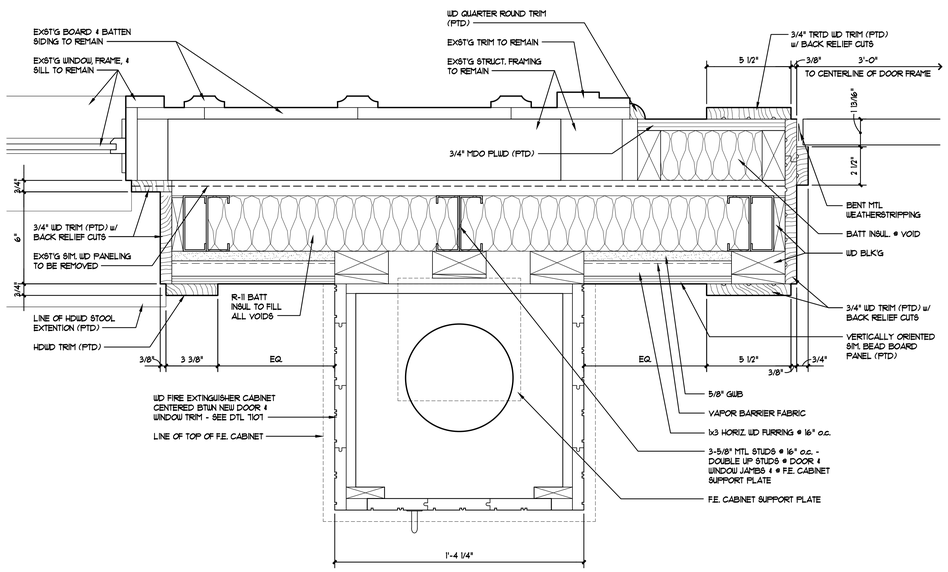
D0082308|



8207 DOOR THRESHOLD DETAIL

3" = 1'-0"

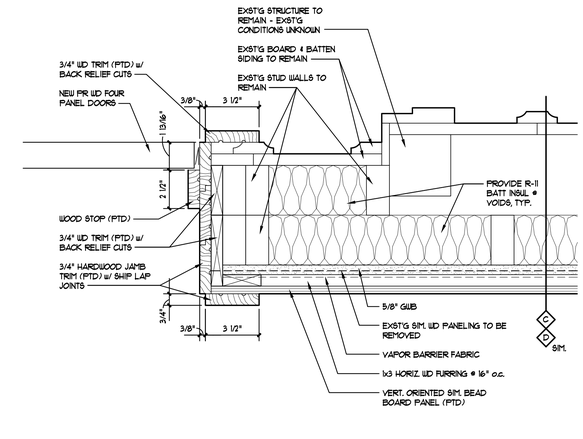
D0082308|



8202 DOOR JAMB DETAIL

3" = 1'-0"

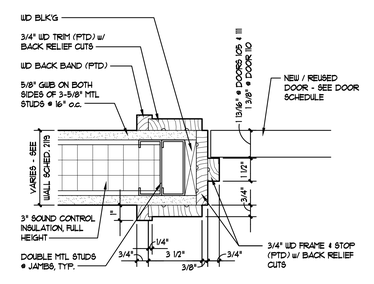
D0082308|



8204 DOOR JAMB DETAIL

3" = 1'-0"

D0082308|



8201 DOOR JAMB DETAIL

3" = 1'-0"

D0082308|

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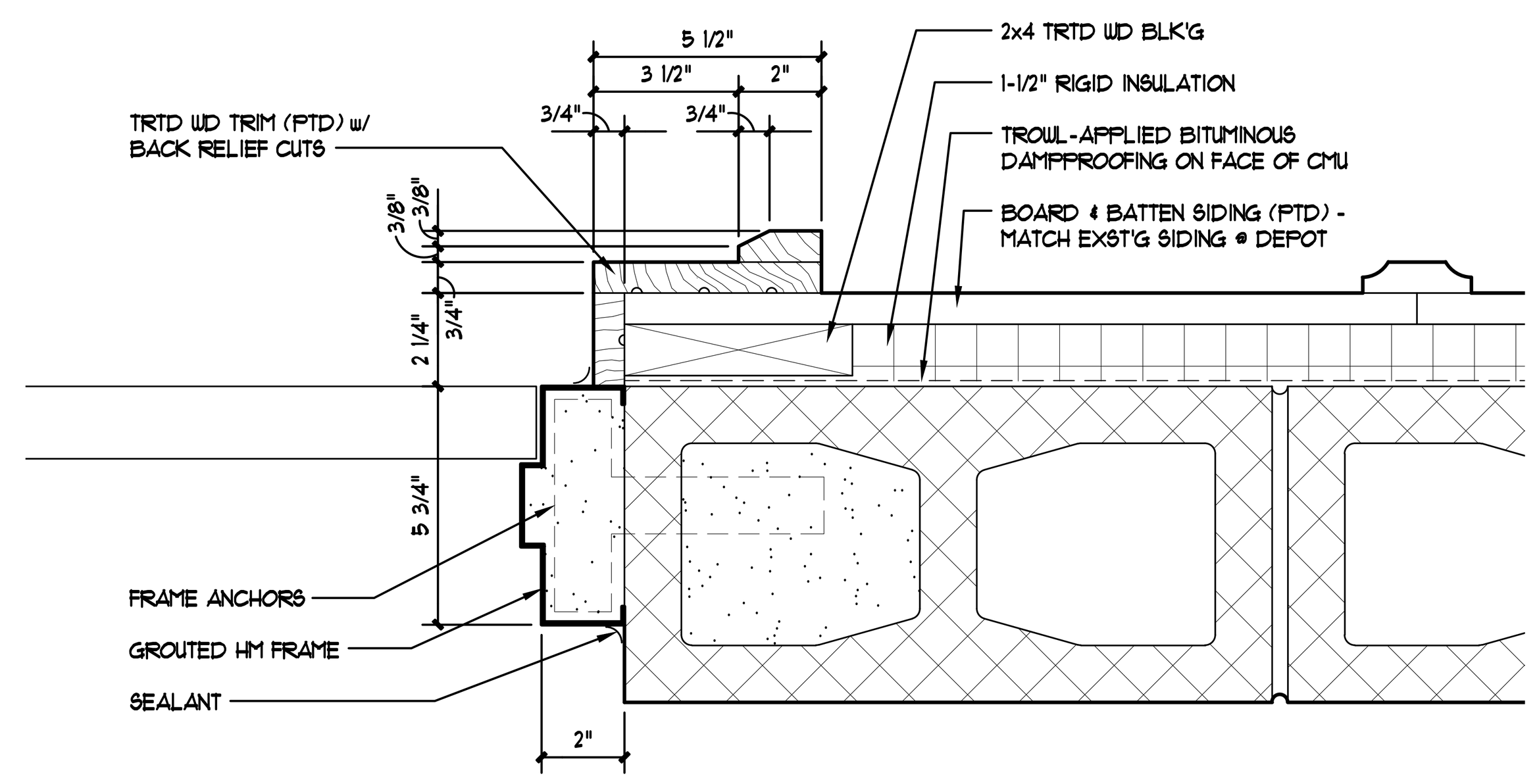
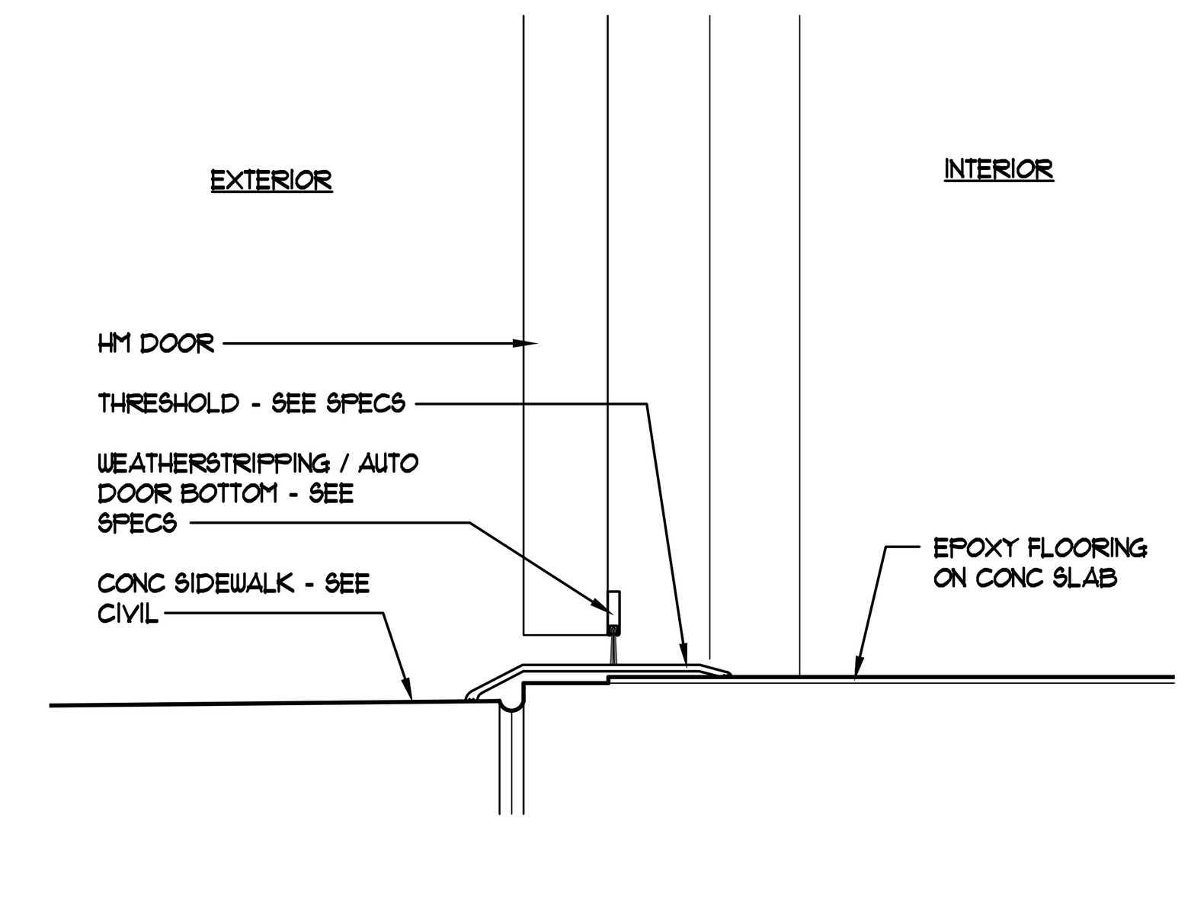
SHEET A8.2

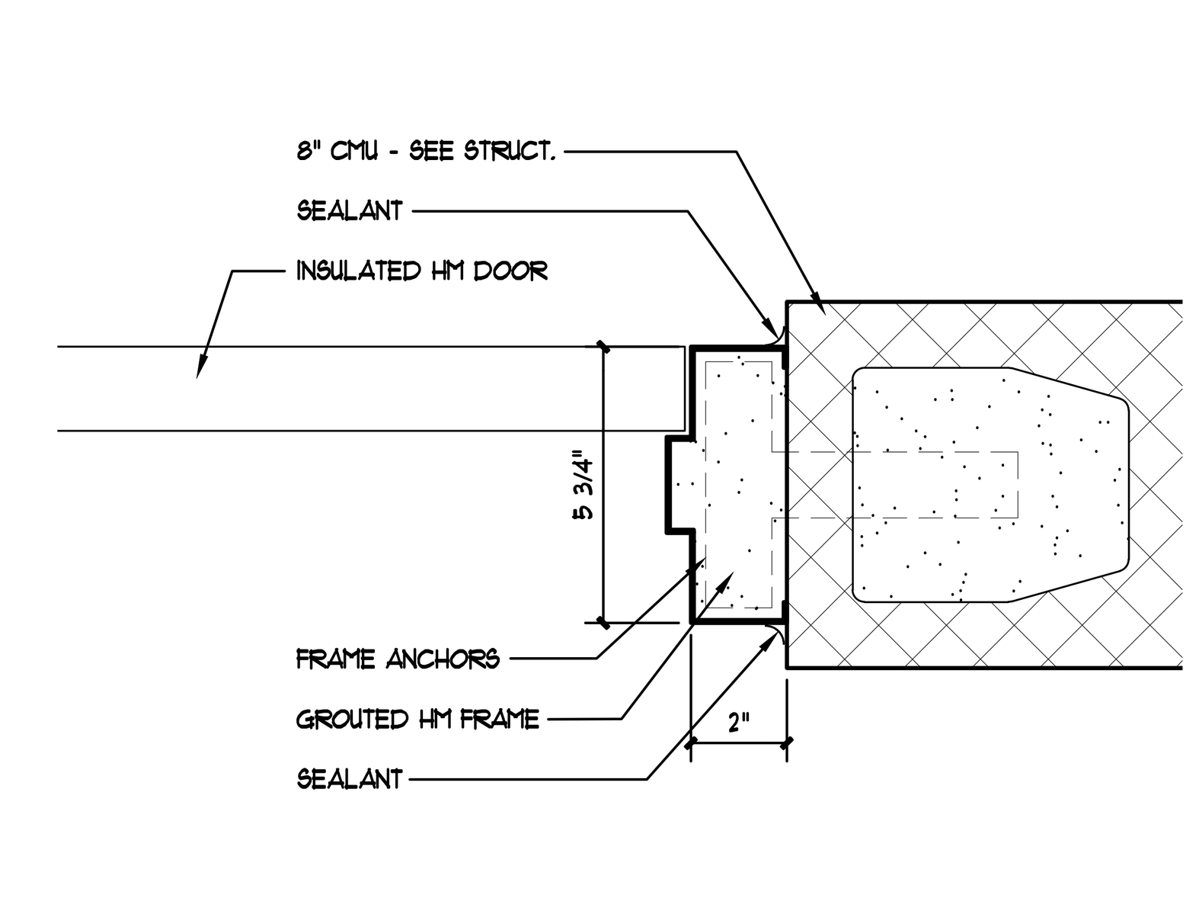
a8.2-23081



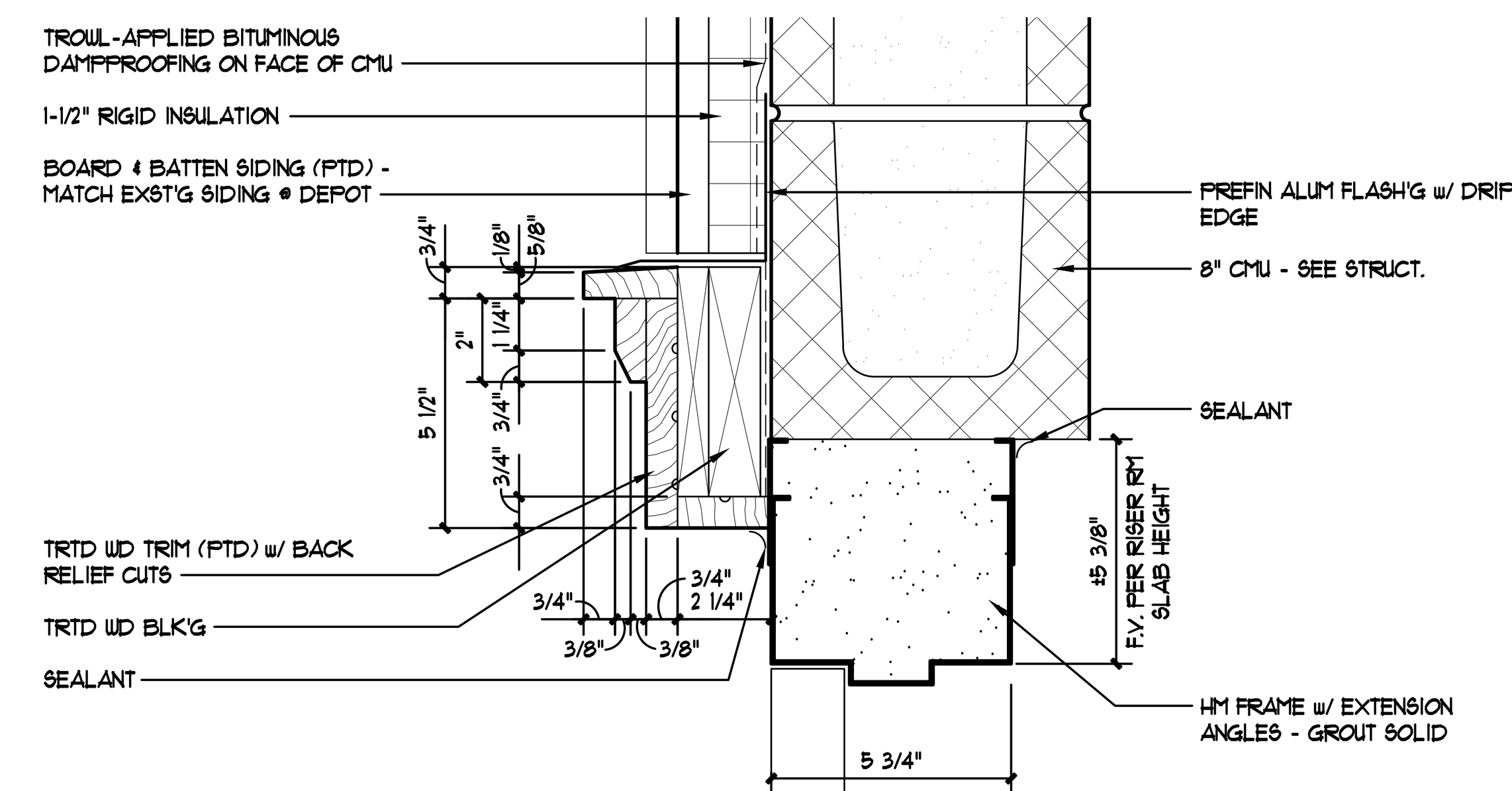
8327 DOOR JAMB DETAIL
3" = 1'-0"
DOO923081



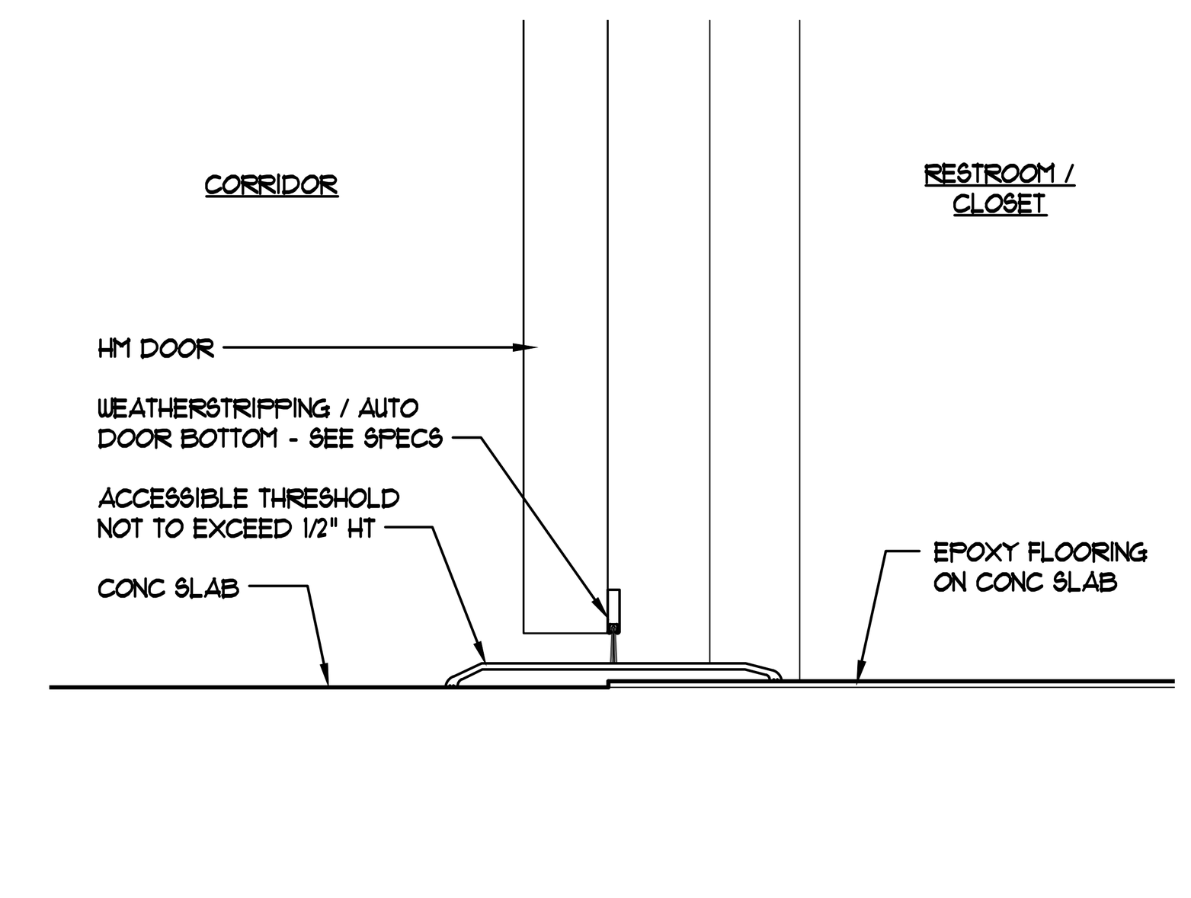
8326 DOOR SILL DETAIL
3" = 1'-0"
DOO923081



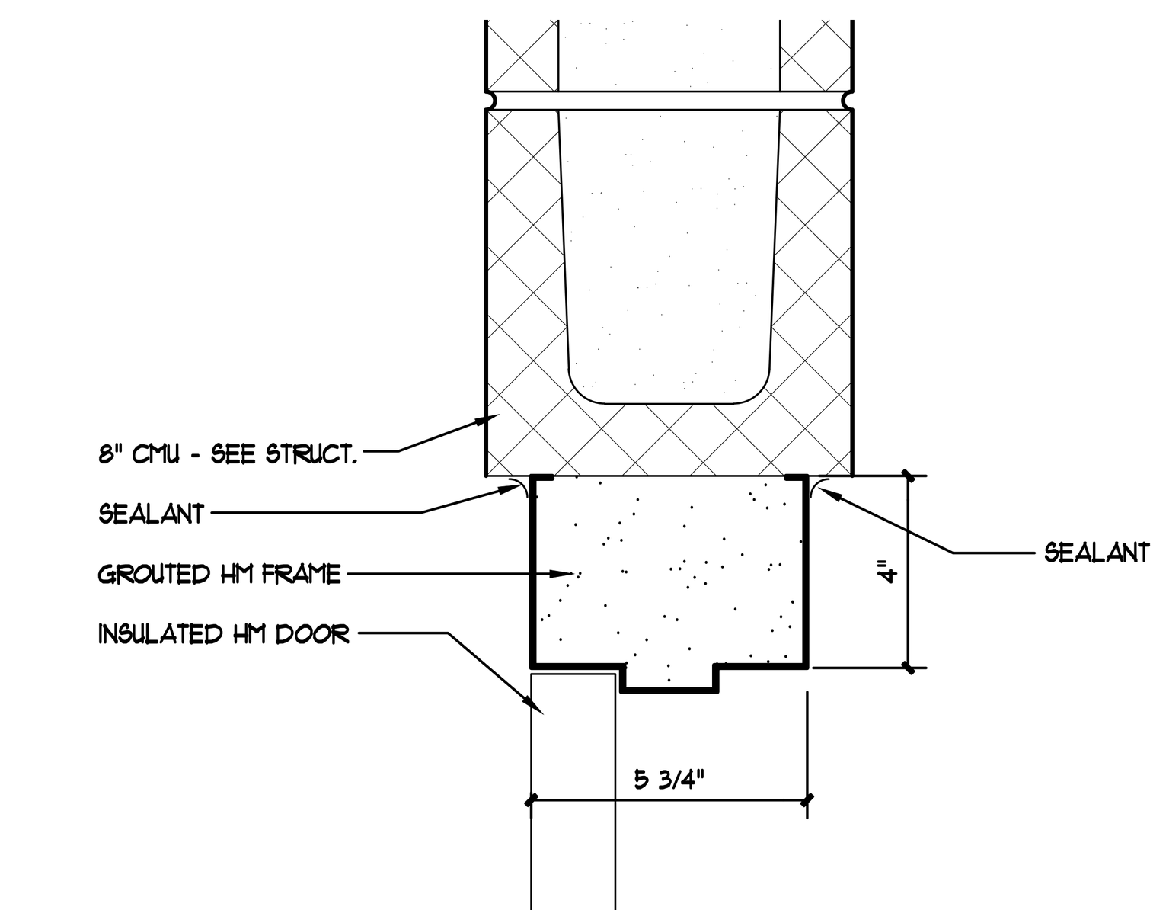
8325 DOOR JAMB DETAIL
3" = 1'-0"
DOO923081



8321 DOOR HEAD DETAIL
3" = 1'-0"
DOO923081



8320 DOOR SILL DETAIL
3" = 1'-0"
DOO923081



8319 DOOR HEAD DETAIL
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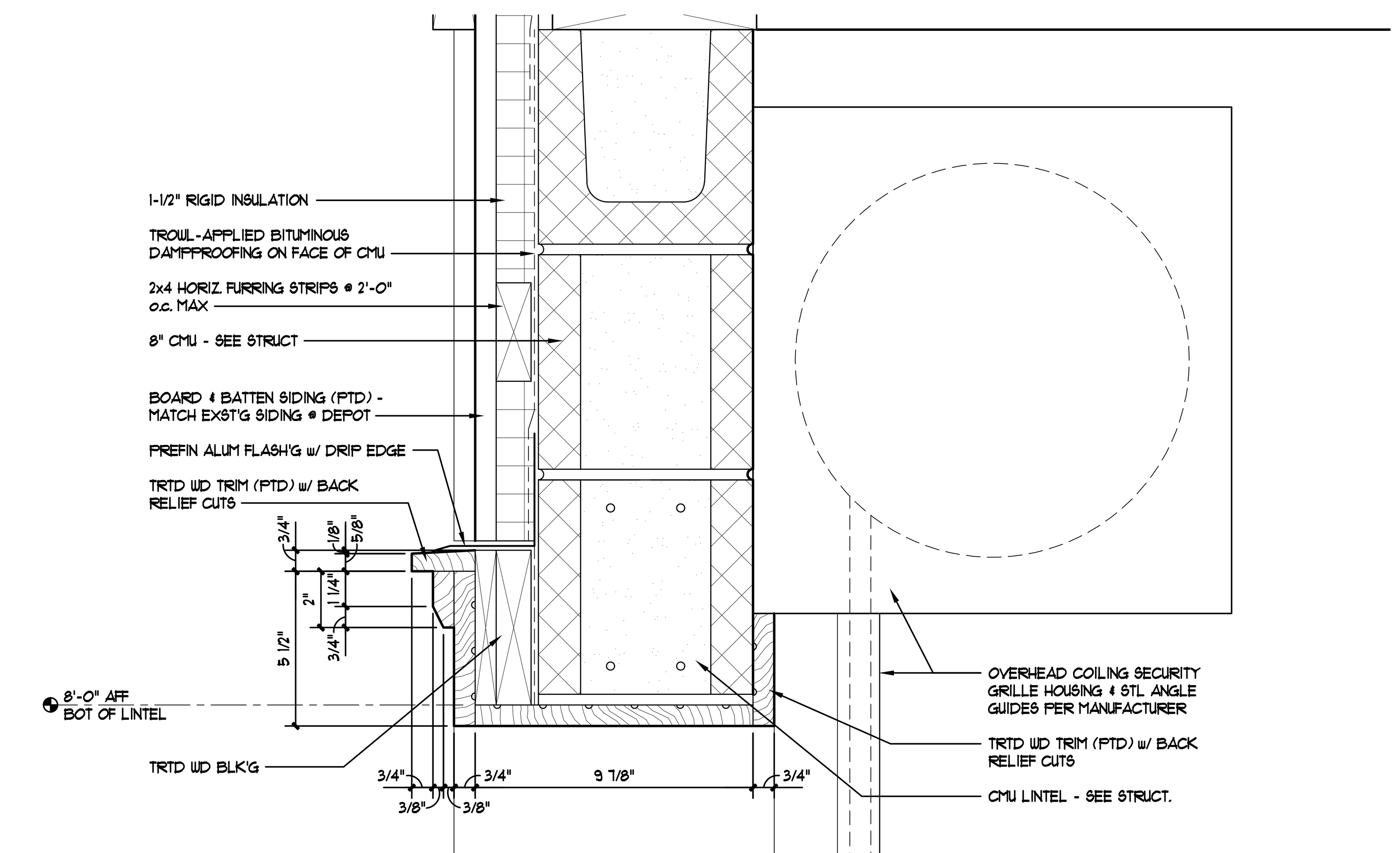
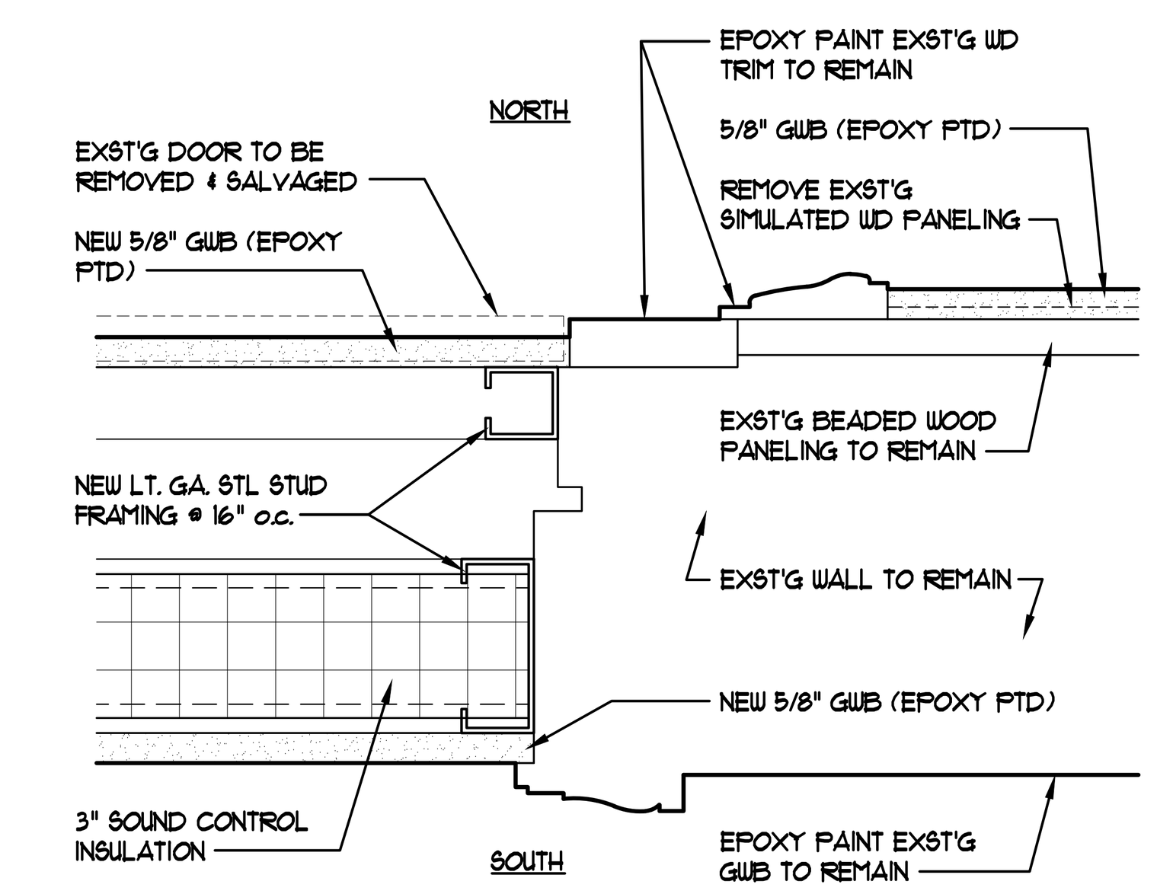
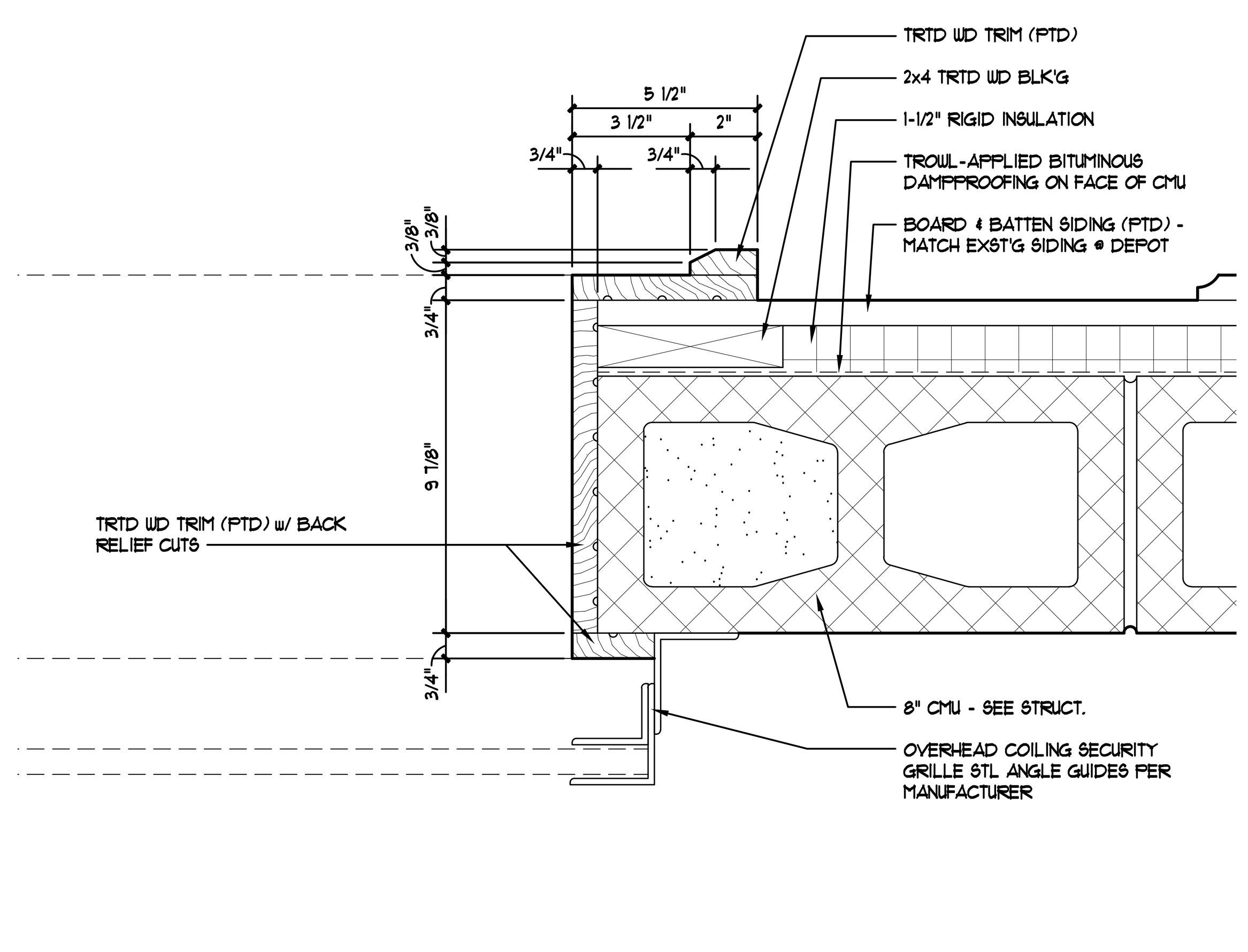


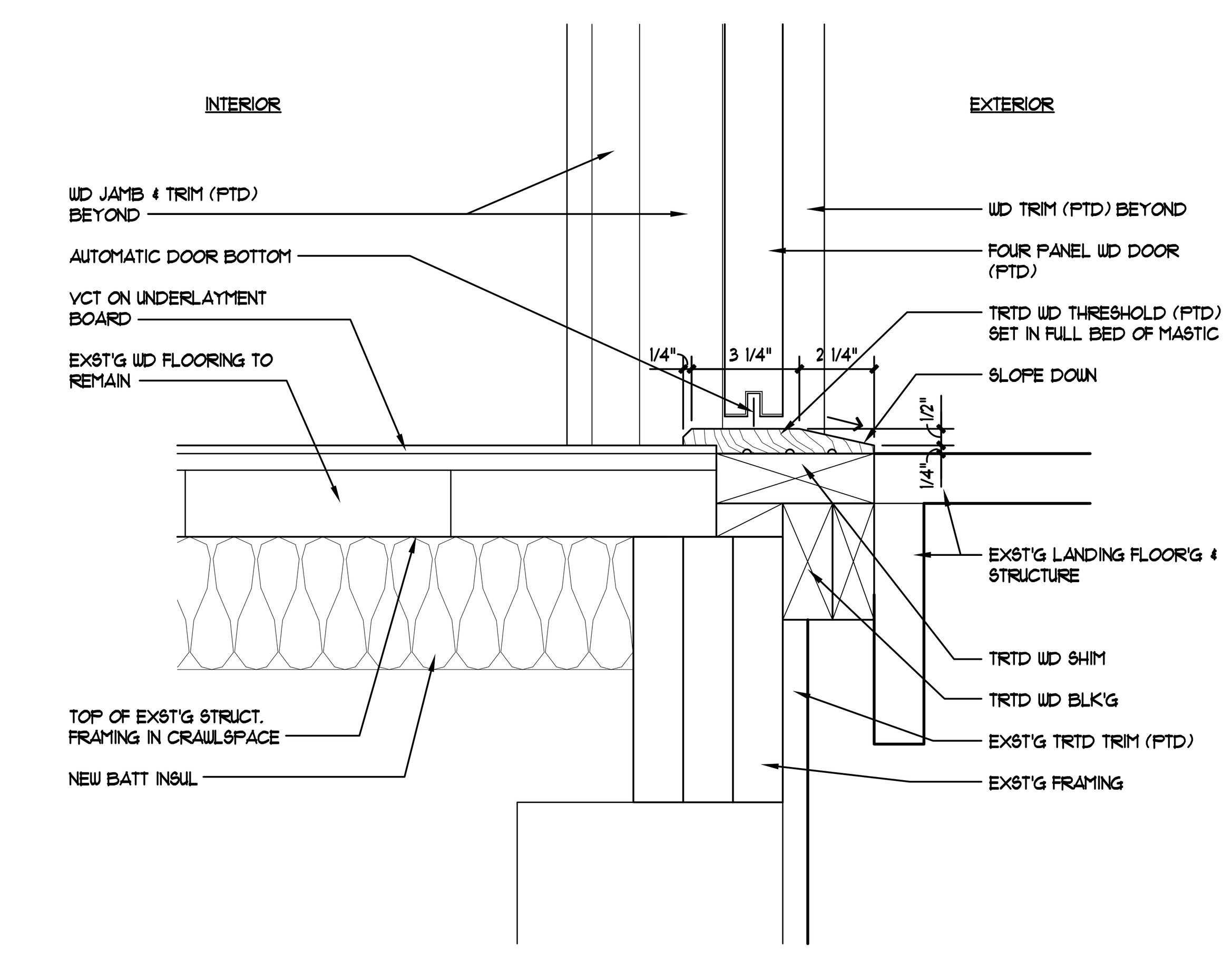
8308 COILING DOOR HEAD DETAIL
3" = 1'-0"
DOO923081



8307 WALL INFILL DETAIL
3" = 1'-0"
DOO923081



8302 COILING DOOR JAMB DETAIL
3" = 1'-0"
DOO923081



8301 DOOR THRESHOLD DETAIL
3" = 1'-0"
DOO923081

NORTH CAROLINA
REGISTERED ARCHITECT
ANDREW J. LOPINA
2/28/2025

ALLIANCE ARCHITECTURE OF THE TRIAD
LICENSE NO. 50943
NORTH CAROLINA
WINSTON-SALEM, NC

ALLIANCE ARCHITECTURE OF THE TRIAD
2601 Pilgrim Court, Suite 130 | Winston-Salem, NC 27106 | Ph. 336-722-4447

REVISIONS

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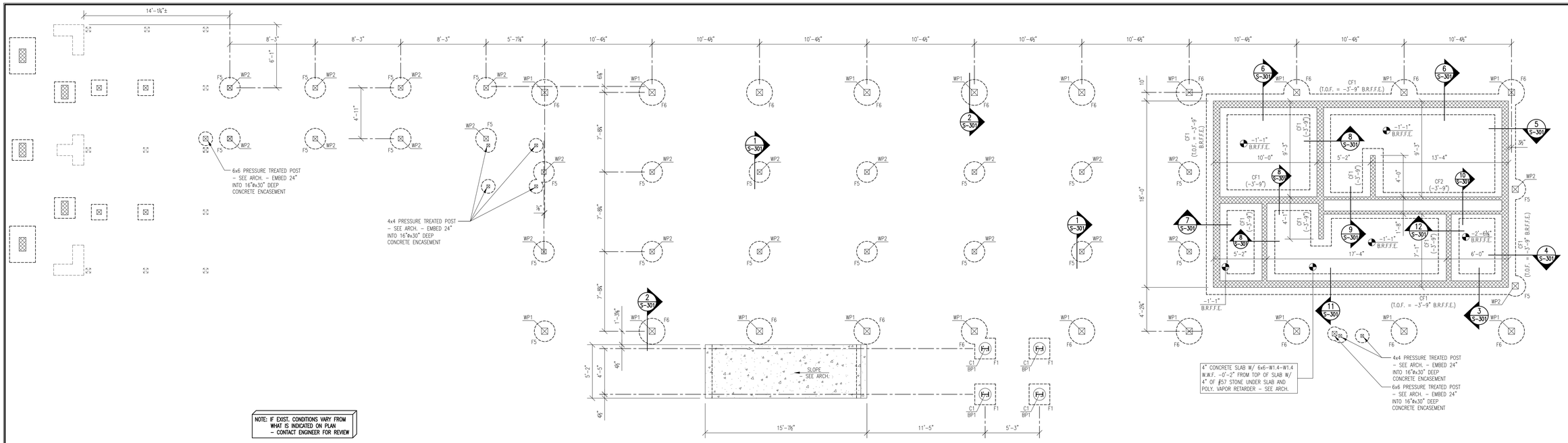
101 South Ash Street
Spring Hope, North Carolina 27882

JOB 25081
DATE February 28, 2025
DRAWN T. Doom
SHEET
A8.3

d25-25081

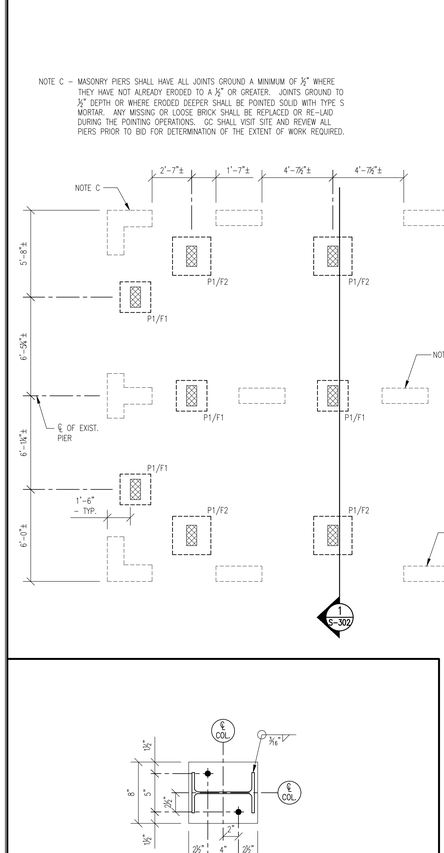


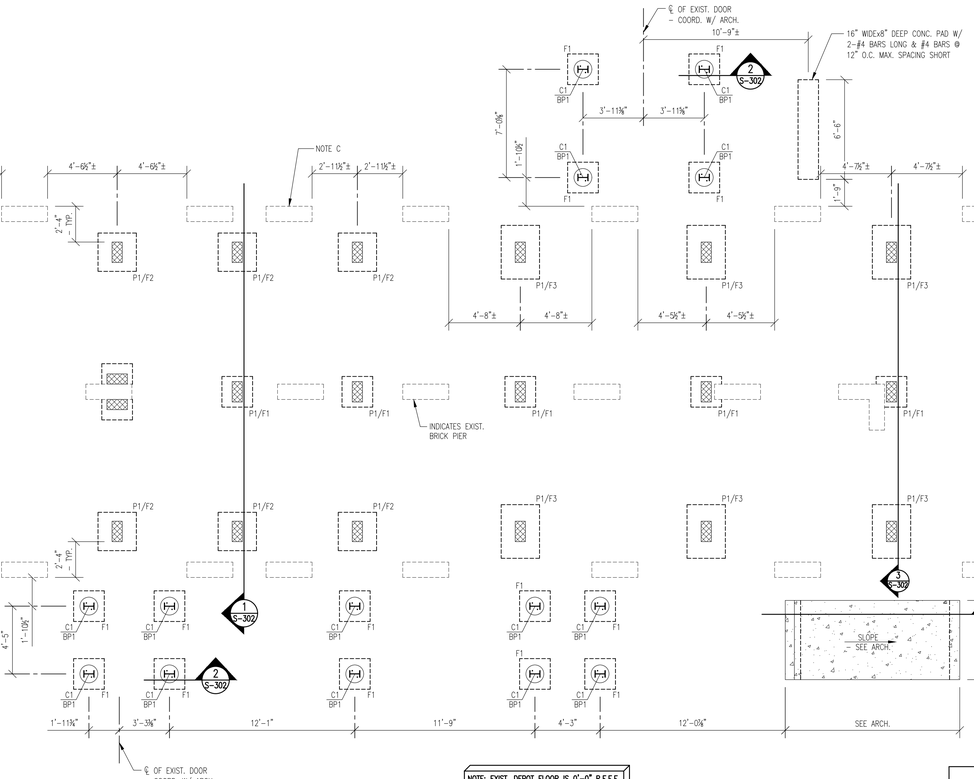
NOTE: IF EXIST. CONDITIONS VARY FROM WHAT IS INDICATED ON PLAN – CONTACT ENGINEER FOR REVIEW

PLATFORM FOUNDATION PLAN

SCALE: ¼" = 1'-0"

NOTE C – MASONRY PIERS SHALL HAVE ALL JOINTS GROUND A MINIMUM OF ½" WHERE THEY HAVE NOT ALREADY ERODED TO A ½" OR GREATER. JOINTS GROUND TO ½" DEPTH OR WHERE ERODED DEEPER SHALL BE POINTED SOLID WITH TYPE S MORTAR. ANY MISSING OR LOOSE BRICK SHALL BE REPLACED OR RE-LAID DURING THE POINTING OPERATIONS. GC SHALL VISIT SITE AND REVIEW ALL PIERS PRIOR TO BID FOR DETERMINATION OF THE EXTENT OF WORK REQUIRED.





NOTE: EXIST. DEPOT FLOOR IS 0'-0" R.F.F.E.

DEPOT FOUNDATION MODIFICATION PLAN

SCALE: ¼" = 1'-0"

COLUMN: W8x18
AB = 2–¾"ø THREADED RODS – DRILL FTG. 6" & EPOXY IN PLACE
tp = ¾"

SECTION NO.		SCALE
TYPICAL	BP1 – BASE PLATE DETAIL	NO SCALE

GENERAL NOTES – FOUNDATION MODIFICATION PLAN:

1. FOUNDATION DESIGN BASED ON A PRESUMPTIVE SOIL BEARING PRESSURE OF 2000 PSF. GC SHALL HAVE SOIL TESTING FIRM TO VERIFY PRESUMPTIVE BEARING PRESSURE PRIOR TO PLACEMENT OF THE CONCRETE FOOTINGS. ANY AREAS DETERMINED NOT TO PROVIDE THIS STATED SOIL BEARING PRESSURE SHALL BE BROUGHT TO THE ENGINEERS ATTENTION.
2. GC SHOULD AVOID LEAVING OPEN TRENCH EXCAVATIONS FOR THE FOOTINGS FOR LONG PERIODS WHEN INCLEMENT WEATHER IS ANTICIPATED. IN GENERAL ALL EXCAVATIONS MADE SHOULD BE POURED ON THE DAY OF THE EXCAVATION IF INCLEMENT WEATHER IS EXPECTED.
3. CONTRACTOR SHALL COORDINATE FOR LOCAL INSPECTING AUTHORITY TO REVIEW AND APPROVE ALL FOOTING TRENCHES PRIOR TO THE PLACEMENT OF ANY FOOTING CONCRETE. IF FOOTINGS FAIL INSPECTION CONTRACTOR SHALL CONTACT THE ENGINEER FOR RECOMMENDATIONS.

COLUMN SCHEDULE

MARK	DESCRIPTION	T.O.F.	BOTTOM OF BP
C1	W8x18	FIELD DETERMINE	+0'-1½" FROM T.O.F.

Fy = 36ksi (CHANNEL)
Fy = 50ksi (W SHAPE)

CMU PIER SCHEDULE

MARK	DESCRIPTION	REINFORCEMENT
P1	8"x16" CMU PIER	1–#4 VERT. BAR EA. CELL – GROUT FILL SOLID – HOOK 8" INTO FTG.

WOOD POST SCHEDULE

MARK	DESCRIPTION	T.O.F.
WP1	8x8 PRESSURE TREATED POST	FIELD DETERMINE
WP2	6x6 PRESSURE TREATED POST	FIELD DETERMINE
WP3	6x6 PRESSURE TREATED POST	SEE 4/S-302

FOUNDATION SCHEDULE

MARK	SIZE	REINFORCEMENT	COMMENTS
CF1	2'-0"xCONT.x1'-0"	3–#5 BARS CONT. W/ #5 BARS TRANSV. @ 24" O.C. MAX. SPACING	N/A
CF2	2'-6"xCONT.x1'-0"	3–#5 BARS CONT. W/ #5 BARS TRANSV. @ 24" O.C. MAX. SPACING	N/A
F1	2'-0"x2'-0"x1'-0"	3–#4 BARS E.W.	N/A
F2	2'-6"x2'-6"x1'-0"	4–#4 BARS E.W.	N/A
F3	3'-6"x2'-6"x1'-0"	4–#4 LONG BARS 5–#4 SHORT BARS	N/A
F4	1'-6"x1'-6"x1'-0"	4–#4 BARS E.W.	N/A
F5	24"ø x3'-0" DEEP	1–#4 BAR 4" & 6" FROM BOT. OF POST – HOLD BOT. OF POST 6" UP FROM BOT. OF CONC. ENCASEMENT	SEE 1/S-301
F6	30"ø x5'-0" DEEP	1–#4 BAR 4" & 6" FROM BOT. OF POST – HOLD BOT. OF POST 6" UP FROM BOT. OF CONC. ENCASEMENT	SEE 2/S-301

f'c = 3500psi

MOOREFIELD ENGINEERING, PC
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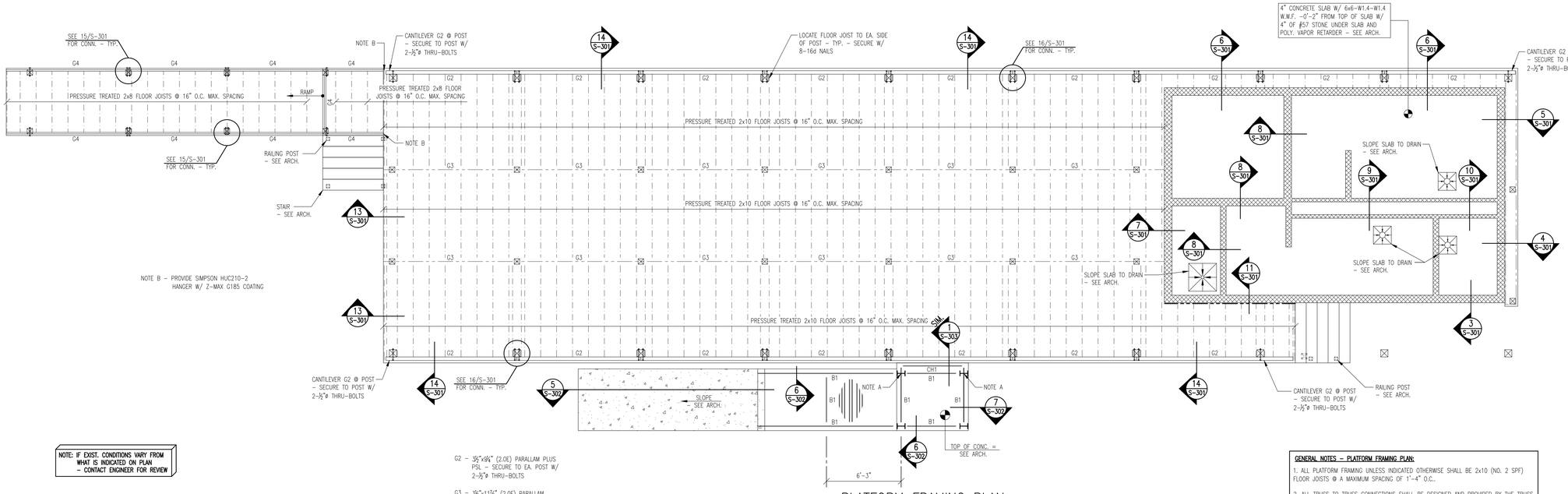
www.mepc-consultants.com
MEPC NO.: 12-24
NORTH CAROLINA PROFESSIONAL SEAL 20707 ENGINEER JERRY W. MOOREFIELD
Jerry W. Moorefield
2025.02.26
14:20:40 -05'00'
FIRM REGISTRATION NO.: C-1323

ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston-Salem, NC 27106 | Ph. 336-722-4447

REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

JOB	23081
DATE	2-28-25
DRAWN	MRM
SHEET	S-101



PLATFORM FRAMING PLAN

SCALE: ¼" = 1'-0"

NOTE: IF EXIST. CONDITIONS VARY FROM WHAT IS INDICATED ON PLAN – CONTACT ENGINEER FOR REVIEW

G2 – 3½"x9¼" (2.0E) PARALLAM PLUS PSL – SECURE TO EA. POST W/ 2-½"ø THRU-BOLTS

G3 – 3½"x11⅞" (2.0E) PARALLAM PLUS PSL

G4 – PRESSURE TREATED 2–2x10 (NO. 2 SPF) GIRDER

GENERAL NOTES – PLATFORM FRAMING PLAN:

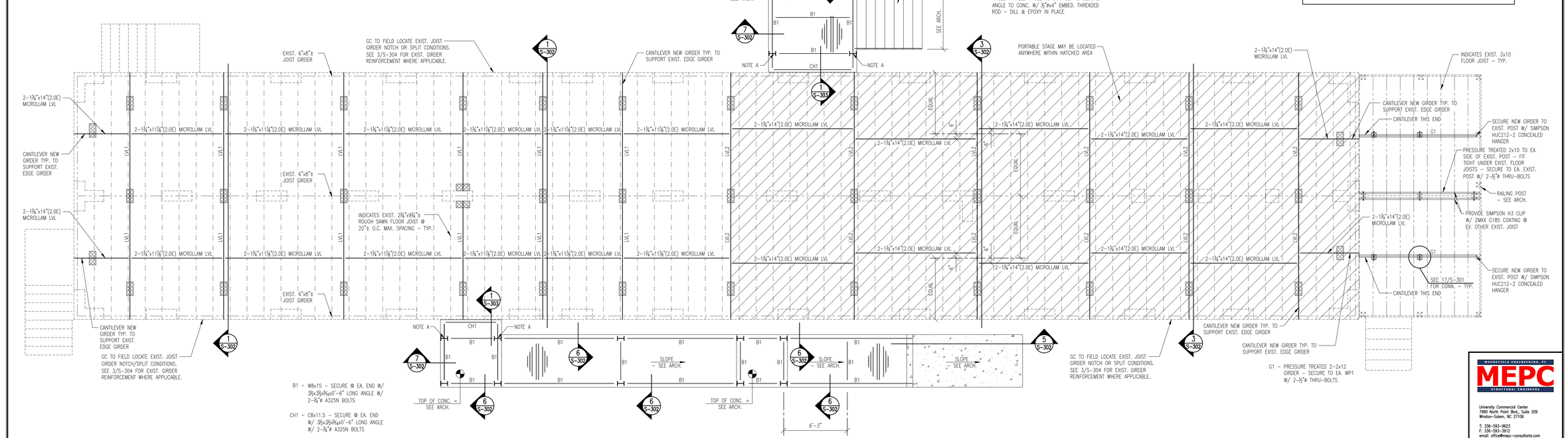
1. ALL PLATFORM FRAMING UNLESS INDICATED OTHERWISE SHALL BE 2x10 (NO. 2 SPF) FLOOR JOISTS @ A MAXIMUM SPACING OF 1'-4" O.C..

2. ALL TRUSS TO TRUSS CONNECTIONS SHALL BE DESIGNED AND PROVIDED BY THE TRUSS SUPPLIER. POSITIVE ANCHORAGE OF ALL TRUSS FRAMING SHALL BE MADE USING WIND CLIPS AS INDICATED ON THE PLANS. MINIMUM OF 1–SIMPSON H10A WIND CLIP PER TRUSS/RAFTER END.

3. INSTALL ALL TOP CHORD, BOTTOM CHORD & WEB BRACING MEMBERS AS SHOWN ON THE TRUSS ERECTION DRAWINGS.

4. TRUSS SUPPLIER TO COORDINATE W/ MECHANICAL PLANS FOR HVAC EQUIPMENT WHICH REQUIRES SUPPORT FROM TRUSS FRAMING FOR PROPER TRUSS DESIGN. SEE MECHANICAL PLANS.

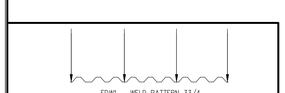
5. TRUSS DESIGN LOADS:
   TOP CHORD
   DEAD LOAD = 10psf
   LIVE LOAD = 20psf
   BOTTOM CHORD
   DEAD LOAD = 10psf
   LIVE LOAD = 5psf



DEPOT FLOOR FRAMING MODIFICATION/BRIDGE/RAMP FRAMING PLAN

SCALE: ¼" = 1'-0"

NOTE: ALL FUNGAL GROWTH ON EXISTING FLOOR JOIST, GIRDERS, AND SUB-FLOOR MEMBERS SHALL BE CLEANED AND TREATED ANTI-MICROBIAL AS REQUIRED. ANY MEMBER NOTED TO SHOW SIGNS OF DAMAGE OR DECAY SHALL BE REPAIRED. IF JOIST ARE FOUND TO BE DECAYED OR DAMAGED, THEY SHALL BE REINFORCED WITH A #2 SYP 2X10 MINIMUM. CONTACT ENGINEER TO REVIEW CONDITIONS PRIOR TO MAKING ANY MODIFICATIONS.



FDW1 – WELD PATTERN 33/4

– SUPPORT FASTENERS = WELDS W/ WELD WASHERS
– SIDELAP FASTENERS = 1–#10 TEK SCREW

SECTION NO.	FDWP1 – FLOOR DECK FASTENER LAYOUT	SCALE
TYPICAL		NO SCALE

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MEPC NO.: 12-24

NORTH CAROLINA PROFESSIONAL SEAL 20707 ENGINEER JERRY W. MOOREFIELD
Jerry W. Moorefield
2025.02.26 14:21:26 -05'00'
FIRM REGISTRATION NO.: C-1323

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JOB	23081
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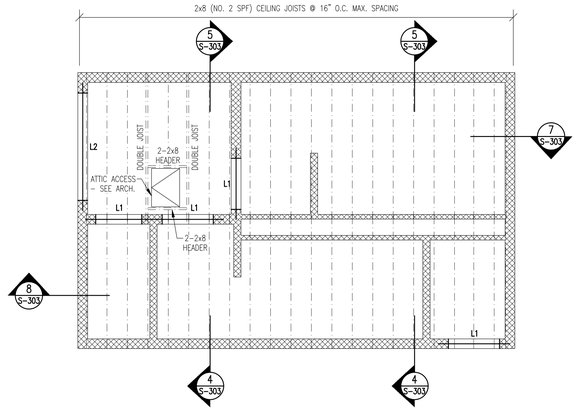
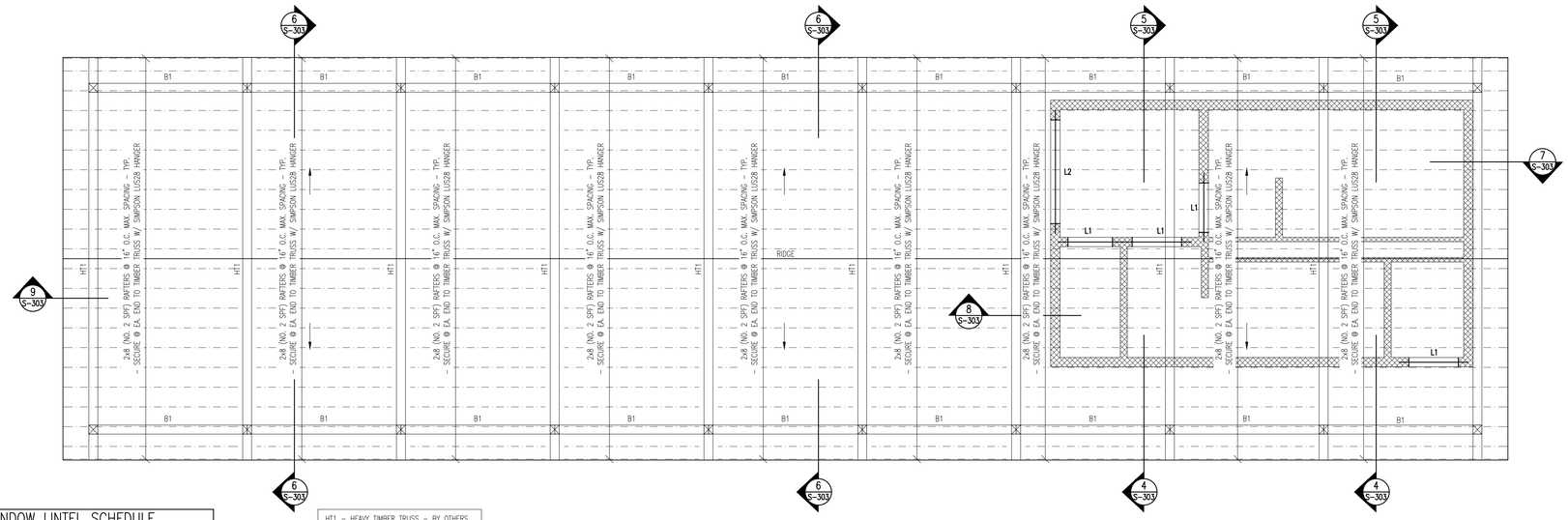
DRAWN	MRM
SHEET	S-102



PLATFORM CEILING FRAMING PLAN

SCALE: ¼" = 1'-0"



PLATFORM ROOF FRAMING PLAN

SCALE: ¼" = 1'-0"

DOOR/WINDOW LINTEL SCHEDULE		
MARK	SIZE	SUPPORT CONDITION
L1	8"x8" CMU W/ 2-#5 BARS	8" MIN. CMU
L2	8"x16" CMU W/ 2-#5 BARS TOP & BOT.	16" MIN. CMU

NOTE: SEE ARCHITECTURAL PLANS FOR WINDOW AND DOOR OPENING LOCATIONS.

NOTE: IF EXIST. CONDITIONS VARY FROM WHAT IS INDICATED ON PLAN - CONTACT ENGINEER FOR REVIEW

HT1 - HEAVY TIMBER TRUSS - BY OTHERS - SEE 10/S-303 FOR PROFILE

B1 - PRESSURE TREATED 8x12 (NO. 2 SYP) - SEE 6/S-303 FOR CONN. @ POST

GENERAL NOTES - PLATFORM ROOF FRAMING PLAN:

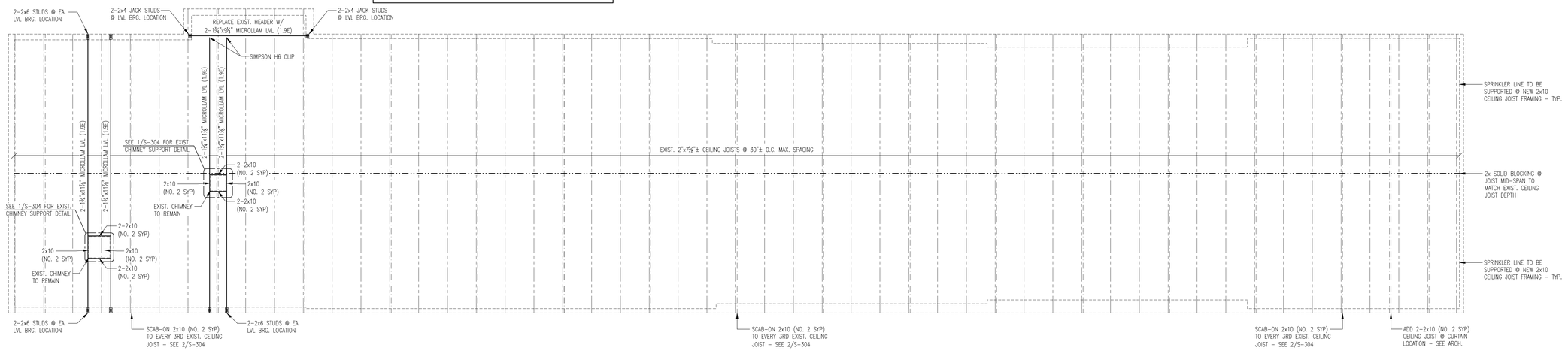
1. ALL ROOF FRAMING UNLESS INDICATED OTHERWISE SHALL BE 2x8 (NO. 2 SPF) RAFTERS @ A MAXIMUM SPACING OF 1'-4" O.C.. DESIGN OF HEAVY TIMBER WOOD TRUSS COMPONENTS SHALL BE BY NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.

2. ALL TRUSS TO TRUSS CONNECTIONS SHALL BE DESIGNED AND PROVIDED BY THE TRUSS SUPPLIER. POSITIVE ANCHORAGE OF ALL TRUSS FRAMING SHALL BE MADE USING WIND CLIPS AS INDICATED ON THE PLANS. MINIMUM OF 1-SIMPSON H10A WIND CLIP PER TRUSS/RAFTER END.

3. INSTALL ALL TOP CHORD, BOTTOM CHORD & WEB BRACING MEMBERS AS SHOWN ON THE TRUSS ERECTION DRAWINGS.

4. TRUSS SUPPLIER TO COORDINATE W/ MECHANICAL PLANS FOR HVAC EQUIPMENT WHICH REQUIRES SUPPORT FROM TRUSS FRAMING FOR PROPER TRUSS DESIGN. SEE MECHANICAL PLANS.

5. TRUSS DESIGN LOADS:
   TOP CHORD
   DEAD LOAD = 10psf
   LIVE LOAD = 20psf
   BOTTOM CHORD
   DEAD LOAD = 10psf
   LIVE LOAD = 5psf



DEPOT CEILING FRAMING PLAN

SCALE: ¼" = 1'-0"

ALLIANCE ARCHITECTURE OF THE TRIAD
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MOOREFIELD ENGINEERING, PC
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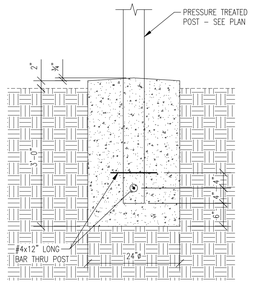
email: office@mepc-consultants.com
www.mepc-consultants.com
MEPC NO.: 12-24

NORTH CAROLINA PROFESSIONAL SEAL 20707 ENGINEER JERRY W. MOOREFIELD
Jerry W. Moorefield 2025.02.26 14:21:59 -05'00'
FIRM REGISTRATION NO.: C-1323

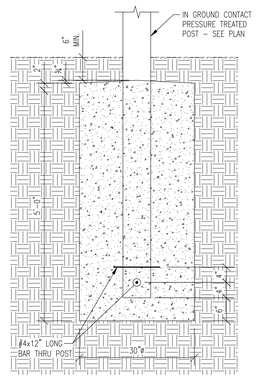
REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

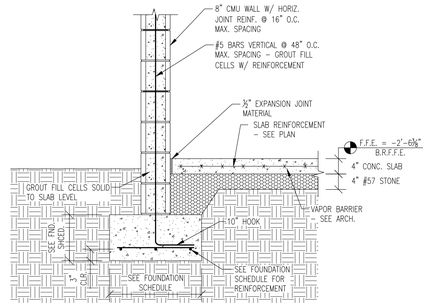
JOB	23081
DATE	2-28-25
DRAWN	MRM
SHEET	S-103



SECTION NO.		SECTION	SCALE
1	S-301		¾" = 1'-0"



SECTION NO.		SECTION	SCALE
2	S-301		¾" = 1'-0"



SECTION NO.		SECTION	SCALE
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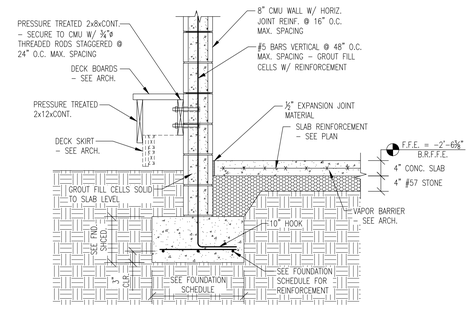

SECTION NO.		SECTION	SCALE
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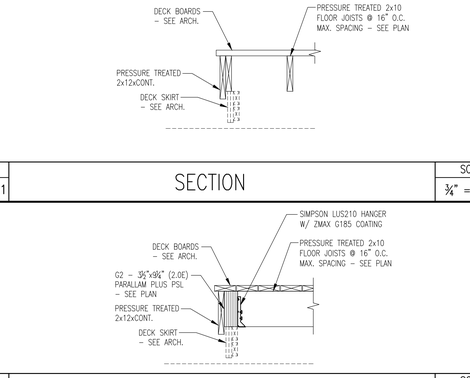

SECTION NO.		SECTION	SCALE
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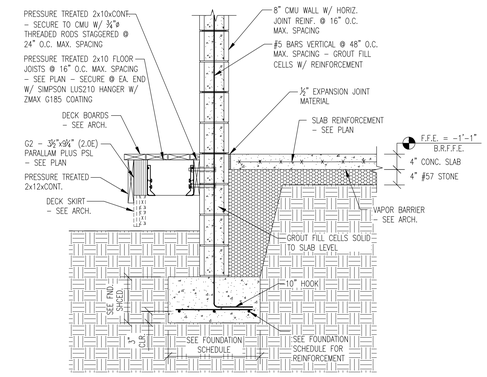
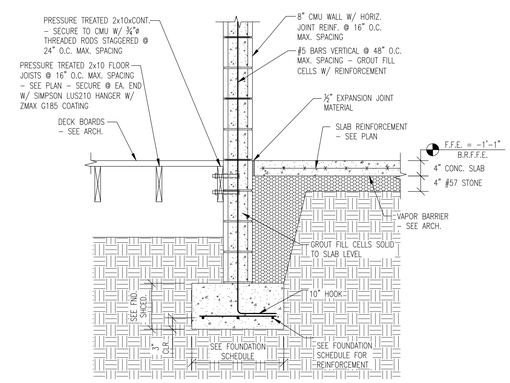
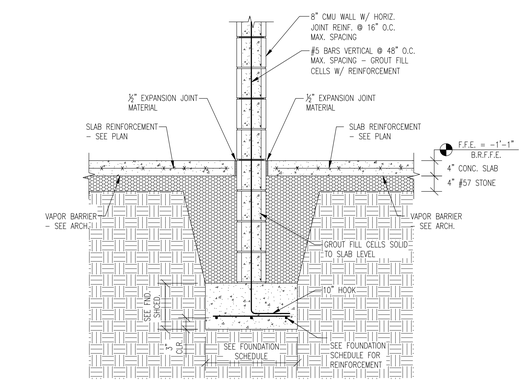


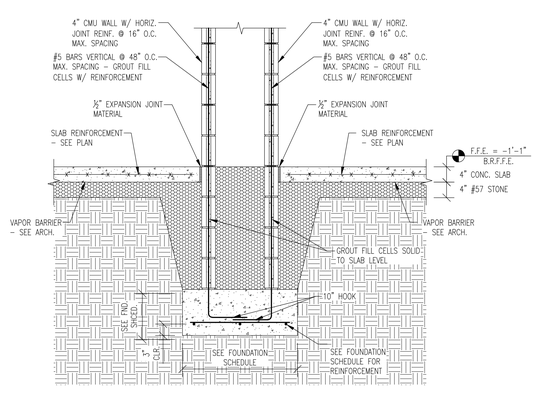
SECTION NO.		SECTION	SCALE
6	S-301		¾" = 1'-0"



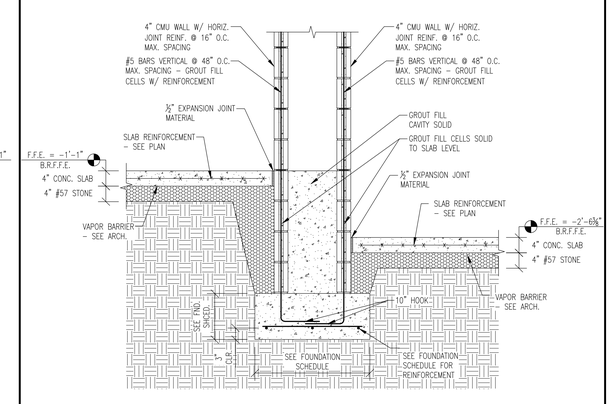
SECTION NO.		SECTION	SCALE
7	S-301		¾" = 1'-0"



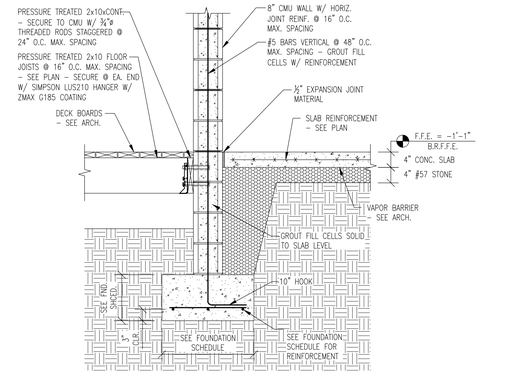
SECTION NO.		SECTION	SCALE
8	S-301		¾" = 1'-0"



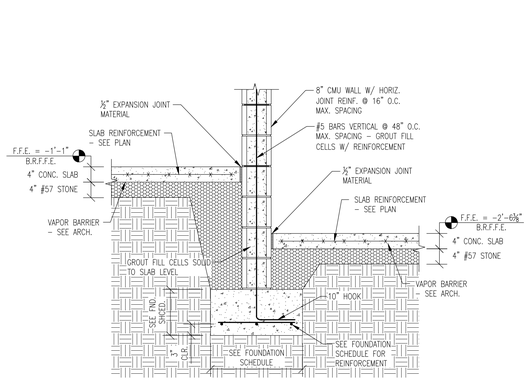
SECTION NO.		SECTION	SCALE
9	S-301		¾" = 1'-0"



SECTION NO.		SECTION	SCALE
10	S-301		¾" = 1'-0"



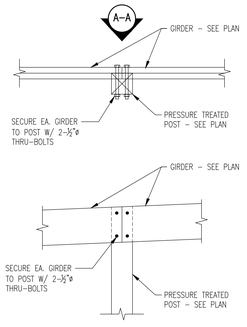
SECTION NO.		SECTION	SCALE
11	S-301		¾" = 1'-0"



SECTION NO.		SECTION	SCALE
12	S-301		¾" = 1'-0"

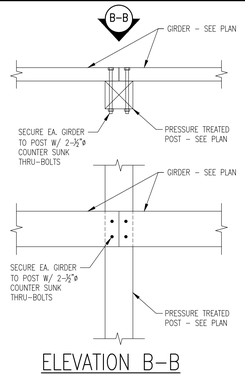
SECTION NO.		SECTION	SCALE
13	S-301		¾" = 1'-0"

SECTION NO.		SECTION	SCALE
14	S-301		¾" = 1'-0"



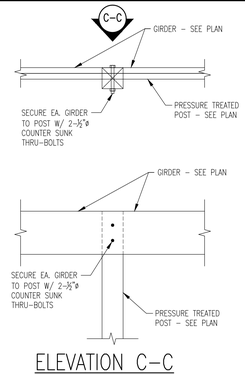
ELEVATION A–A

SECTION NO.		CONNECTION DETAIL	SCALE
15	S-301		¾" = 1'-0"



ELEVATION B–B

SECTION NO.		CONNECTION DETAIL	SCALE
16	S-301		¾" = 1'-0"



ELEVATION C–C

SECTION NO.		CONNECTION DETAIL	SCALE
17	S-301		¾" = 1'-0"

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MEPC NO.: 12-24
NORTH CAROLINA PROFESSIONAL SEAL 20707 ENGINEER JERRY W. MOOREFIELD
Jerry W. Moorefield
2025.02.26
14:22:33 -05'00'
FIRM REGISTRATION NO.: C-1323

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720 Coliseum Drive, Suite 112 | Winston-Salem, NC 27106 | Ph. 336-722-4447

REVISIONS

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Building Rehabilitation & Platform Addition
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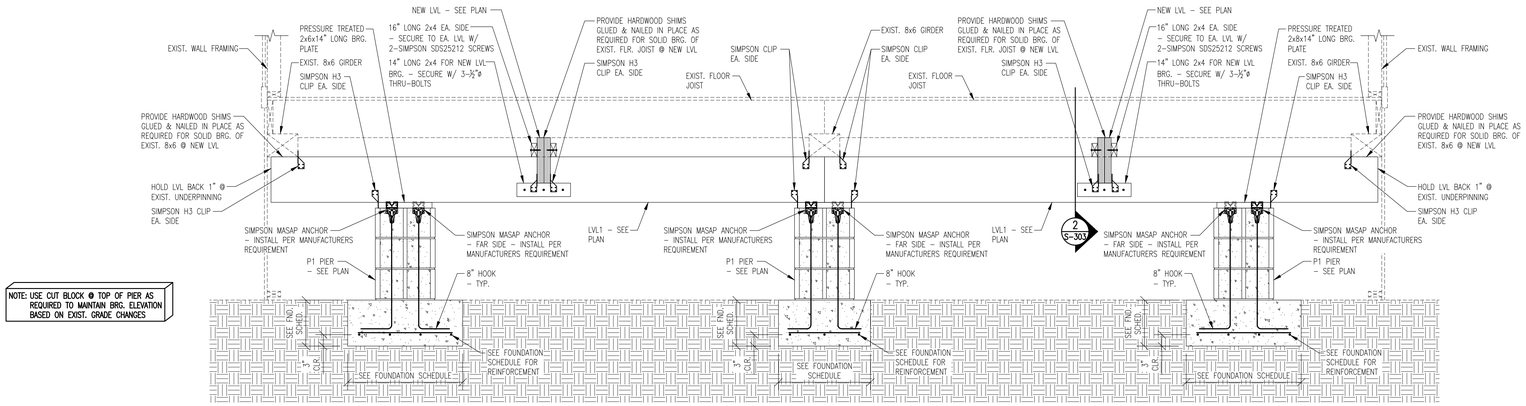
Spring Hope, North Carolina 27882

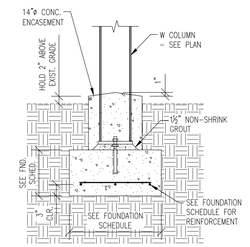
JOB	23081
DATE	2-28-25
DRAWN	MRM
SHEET	S-301



NOTE: USE CUT BLOCK ❶ TOP OF PIER AS REQUIRED TO MAINTAIN BRG. ELEVATION BASED ON EXIST. GRADE CHANGES

SECTION NO.		SCALE
1	S–302	¾" = 1'–0"

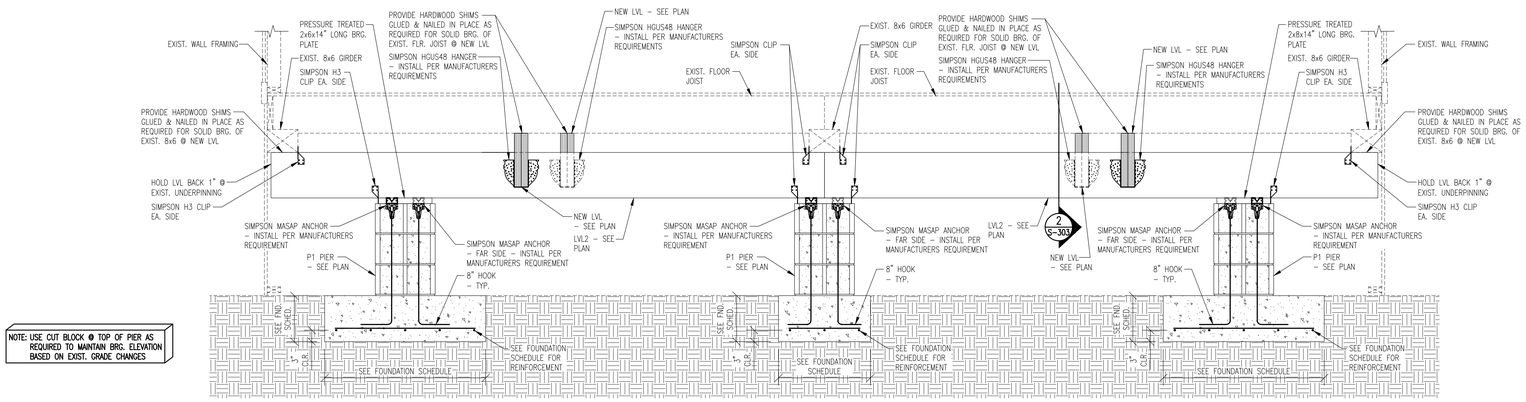
SECTION



NOTE: ALL EXPOSED STEEL TO BE HOT–DIP GALVANIZED

SECTION NO.		SCALE
2	S–302	¾" = 1'–0"

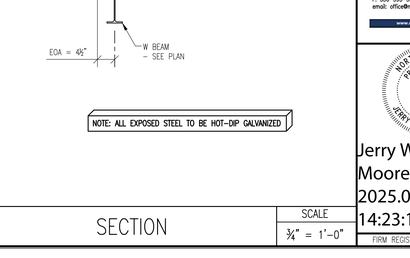
SECTION



NOTE: USE CUT BLOCK ❶ TOP OF PIER AS REQUIRED TO MAINTAIN BRG. ELEVATION BASED ON EXIST. GRADE CHANGES

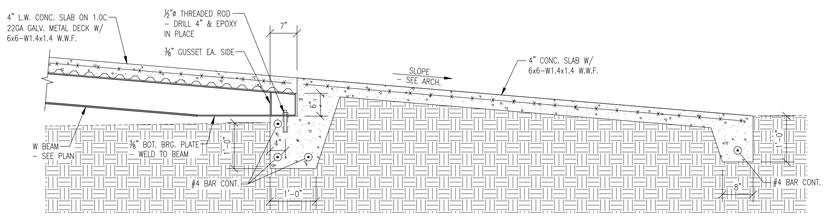
SECTION NO.		SCALE
3	S–302	¾" = 1'–0"

SECTION



SECTION NO.		SCALE
4	S–302	¾" = 1'–0"

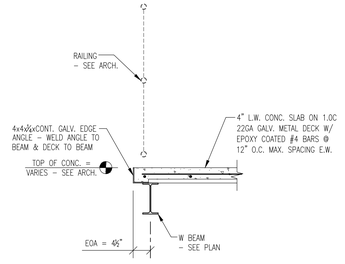
SECTION



NOTE: ALL EXPOSED STEEL TO BE HOT–DIP GALVANIZED

SECTION NO.		SCALE
5	S–302	¾" = 1'–0"

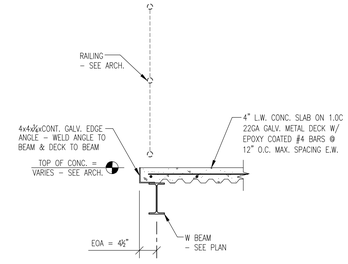
SECTION



NOTE: ALL EXPOSED STEEL TO BE HOT–DIP GALVANIZED

SECTION NO.		SCALE
6	S–302	¾" = 1'–0"

SECTION



NOTE: ALL EXPOSED STEEL TO BE HOT–DIP GALVANIZED

SECTION NO.		SCALE
7	S–302	¾" = 1'–0"

SECTION

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www.mepc–consultants.com
MEPC NO.: 12–24

NORTH CAROLINA PROFESSIONAL SEAL 20707 ENGINEER JERRY W. MOOREFIELD

Jerry W. Moorefield 2025.02.26 14:23:10 -05'00'

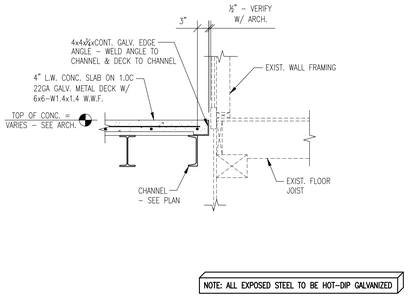
FIRM REGISTRATION NO.: C–1323

ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston–Salem, NC 27106 | Ph. 336–722–4447

REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

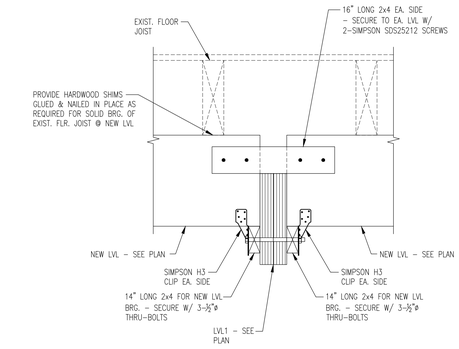
JOB	23081
DATE	2–28–25
DRAWN	MRM
SHEET	S–302



NOTE: ALL EXPOSED STEEL TO BE HOT–DIP GALVANIZED

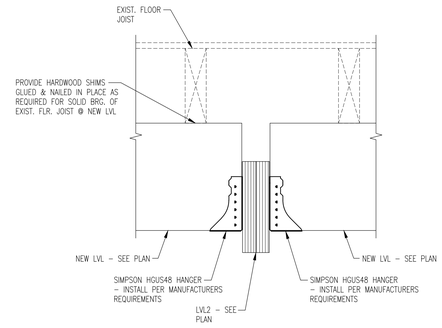
SECTION NO.		SCALE
1	S–303	¾" = 1'–0"

SECTION



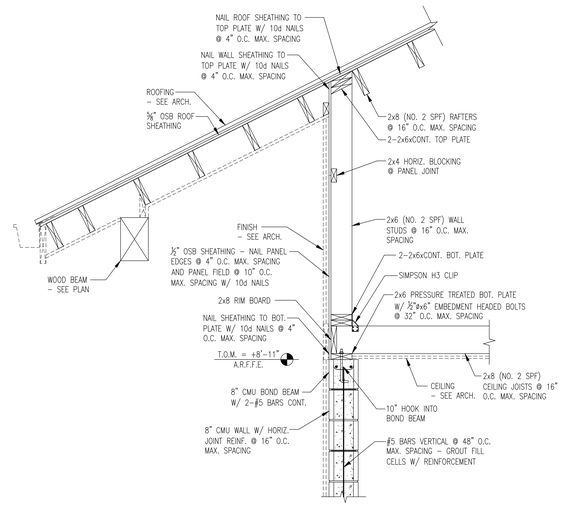
SECTION NO.		SCALE
2	S–303	¾" = 1'–0"

SECTION



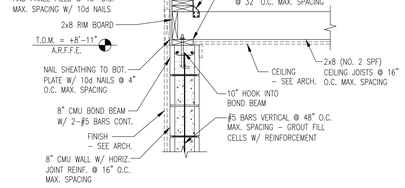
SECTION NO.		SCALE
3	S–303	1½" = 1'–0"

SECTION



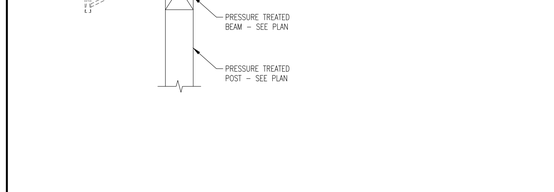
SECTION NO.		SCALE
4	S–303	¾" = 1'–0"

SECTION



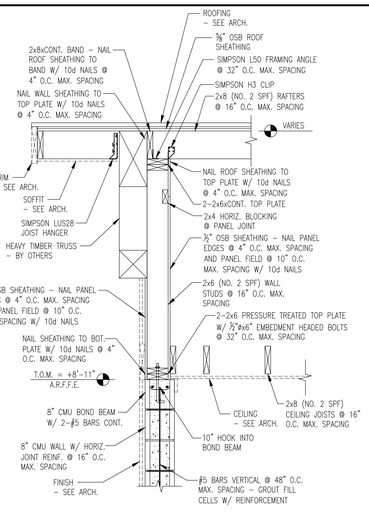
SECTION NO.		SCALE
5	S–303	¾" = 1'–0"

SECTION



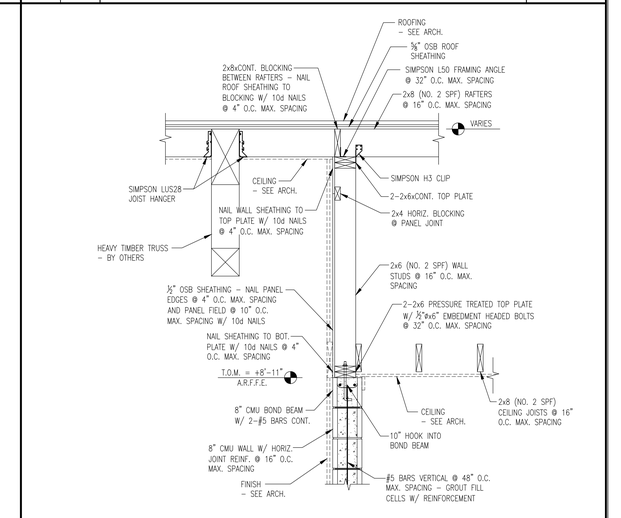
SECTION NO.		SCALE
6	S–303	¾" = 1'–0"

SECTION



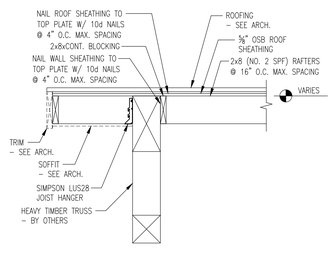
SECTION NO.		SCALE
7	S–303	¾" = 1'–0"

SECTION



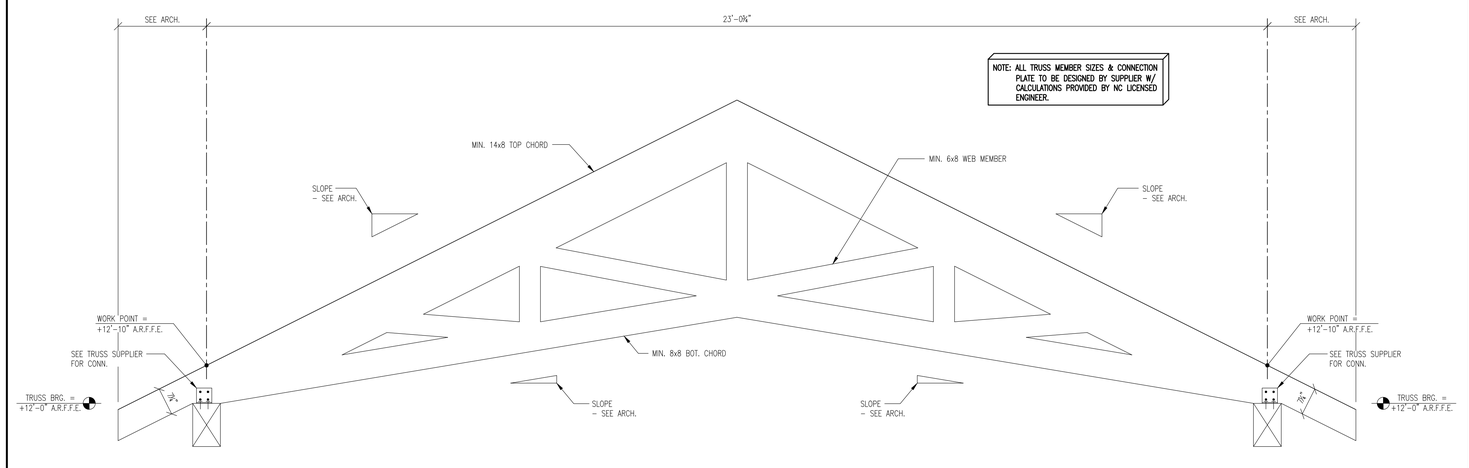
SECTION NO.		SCALE
8	S–303	¾" = 1'–0"

SECTION



SECTION NO.		SCALE
9	S–303	¾" = 1'–0"

SECTION



SECTION NO.		SCALE
10	S–303	¾" = 1'–0"

HT1 – HEAVY TIMBER TRUSS PROFILE

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MEPC NO.: 12–24
NORTH CAROLINA PROFESSIONAL SEAL 20707 ENGINEER JERRY W. MOOREFIELD
Jerry W. Moorefield 2025.02.26 14:23:43 -05'00'
FIRM REGISTRATION NO.: C–1323

ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston–Salem, NC 27106 | Ph. 336–722–4447

REVISIONS

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JOB	23081
DATE	2–28–25
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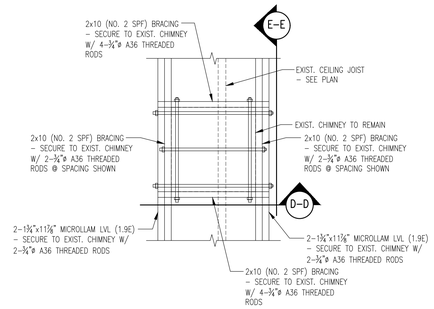
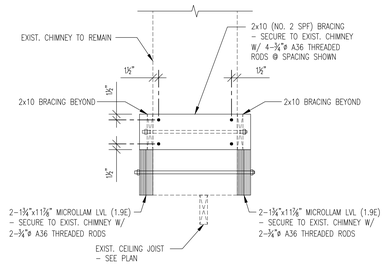
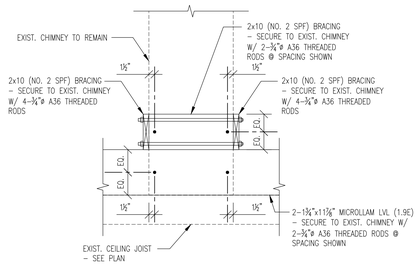
SHEET	S–303



PLAN VIEW

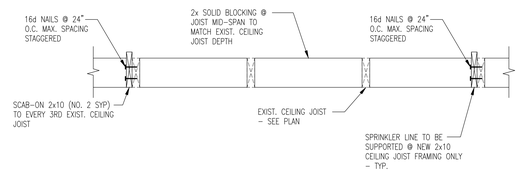


SECTION D–D

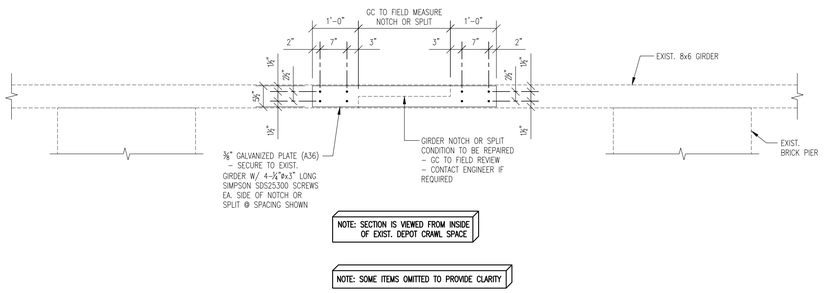


SECTION E–E

SECTION NO.		EXISTING CHIMNEY SUPPORT DETAIL	SCALE
1	S–304		¾" = 1'–0"



SECTION NO.		SECTION	SCALE
2	S–304		¾" = 1'–0"



SECTION NO.		SECTION	SCALE
3	S–304		¾" = 1'–0"

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Jerry W. Moorefield
2025.02.26
14:24:16 -05'00'

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DATE	2–28–25
DRAWN	MRM
SHEET	S–304

SPECIFICATIONS:

CODES, SPECIFICATIONS AND STANDARDS

A. APPLICABLE BUILDING CODE: THE CONTRACT DOCUMENTS ARE BASED ON THE REQUIREMENTS OF THE:
1. 2018 NORTH CAROLINA BUILDING CODE
2. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318–14)
3. 2010 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ANSI/AISC 360–10)

SUBMITTALS

A. SHOP DRAWINGS AND SUBMITTALS SHALL BE SUBMITTED TO THE ENGINEER BEFORE BEGINNING CONSTRUCTION AND STAMPED APPROVED BY GENERAL CONTRACTOR.
B. CLEARLY SPECIFY AND DEVIATIONS FROM THE CONTRACT DOCUMENTS ON ALL SUBMITTALS.
C. THE CONTRACTOR SHALL REVIEW EACH SUBMITTAL BEFORE SUBMITTING TO THE ENGINEER.
D. THE FOLLOWING SUBMITTALS ARE RECOMMENDED FOR THIS PROJECT:
1. CAST–IN–PLACE CONCRETE
a. COMPLY WITH SUBMITTAL REQUIREMENTS IN ACI 301/318
b. PRODUCT DATA
c. DESIGN MIXTURES (HISTORICAL DATA OR TRIAL BATCH)
d. REBAR SHOP DRAWING
e. SHOP DRAWINGS FOR THE DESIGN, ERECTION, AND REMOVAL OF FORMWORK, SHORES, AND RESHORES APPROVED BY A QUALIFIED PROFESSIONAL ENGINEER WHO APPROVED THE SHOP DRAWINGS.

2. STRUCTURAL STEEL
a. PRODUCT DATA
b. SHOP DRAWINGS
c. WELDING CERTIFICATES

3. CONCRETE MASONRY UNIT ASSEMBLIES
a. PRODUCT DATA

DIVISION 2

GEOTECHNICAL REPORT:
FOUNDATION DESIGN BASED ON PRESUMPTIVE SOIL BEARING PRESSURE OF 2000 PSF. GC SHALL HAVE SOIL TESTING FIRM TO VERIFY PRESUMPTIVE BEARING PRESSURE PRIOR TO PLACEMENT OF THE CONCRETE FOOTINGS. ANY AREAS DETERMINED NOT TO PROVIDE THIS STATED SOIL BEARING PRESSURE SHALL BE BROUGHT TO THE ENGINEERS ATTENTION.

SOIL EXCAVATION AND REPLACEMENT
A. REMOVE ALL LOOSE FILL MATERIAL WITH DEBRIS EXTENDING 5 FOOT BEYOND BUILDING FOOTPRINT TO THE MORE CONSOLIDATED MATERIAL AS APPROVED BY THE GEOTECHNICAL ENGINEER. REPLACE WITH SELECT FILL MATERIAL IN 8" TO 10" LOOSE LIFTS AS DIRECTED BY GEOTECHNICAL ENGINEER. COMPACT SELECT FILL MATERIAL TO 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698.

B. REVIEW SOIL REPORT BORING HOLES FOR INITIAL ESTIMATES OF EXCAVATION DEPTHS. THE GEOTECHNICAL ENGINEER SHALL APPROVE FINAL EXCAVATIONS OF FOOTING AND DRILLED PIER BEARING STRATA.

SLAB–ON–GRADE CONSTRUCTION

A. SUBGRADE PREPARATION
1. IMMEDIATELY PRIOR TO PLACEMENT OF CRUSHED STONE BELOW SLAB, THE LAST ONE FOOT OF SUBGRADE SHOULD BE RECOMPACTED TO 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 TO DENSIFY ANY SOILS DISTURBED BY CONSTRUCTION OPERATIONS.
2. PROVIDE A 6" MINIMUM LAYER OF CLEAN ABC STONE BELOW THE SLAB ON GRADE.
3. PROVIDE VAPOR BARRIER AS SPECIFIED BY ARCHITECT OVER THE FINAL FILL BELOW THE CONCRETE SLABS.

SPREAD FOOTINGS

A. FOOTING EXCAVATION – FOOTINGS SHALL BE NEAT EXCAVATED WHERE POSSIBLE WITH SIDES AND TOP EDGES FREE OF LOOSE OR WET MATERIALS. WHERE NEAT EXCAVATION IS NOT POSSIBLE, FOOTINGS EXCAVATION SHALL BE OPEN CUT WITH EDGES FORMED AND BRACED. ALL FOOTINGS WITH FORMED EDGES SHALL BE BACKFILLED WITH LEAN CONCRETE, CEMENT STABILIZED SAND OR SELECT FILL MATERIAL PLACED IN 8" LIFTS AND COMPACTED TO 95% OF MODIFIED STANDARD PROCTOR MAXIMUM DENSITY OF EACH LIFT. THE BOTTOM EXCAVATION SHALL BE CLEAN AND DRY WITH ALL LOOSE MATERIAL REMOVED FOR AN ESSENTIALLY FLAT BEARING SURFACE. EXCAVATIONS SHALL NOT BE LEFT OVERNIGHT UNLESS A 2" UNREINFORCED SEAL (MUD) SLAB IS PLACED AT THE BOTTOM OF THE FOOTING EXCAVATION.

DIVISION 3

CAST–IN–PLACE CONCRETE

PART 1 – GENERAL

1.1 SECTION REQUIREMENTS

A. SUBMIT CONCRETE MIX DESIGNS.

B. COMPLY WITH ASTM C 94; ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"; AND CRSI'S "MANUAL OF STANDARD PRACTICE."

PART 2 – PRODUCTS

2.1 MATERIALS

A. DEFORMED REINFORCING BARS: ASTM A 615, GRADE 60.

B. WELDED STEEL WIRE FABRIC: ASTM A 185, FLAT SHEETS, NOT ROLLS.

C. PORTLAND CEMENT: ASTM C 150, TYPE 1.

D. FLY ASH: ASTM C 618, TYPE F.

E. AGGREGATES: ASTM C 33, CLASS 4S.

F. FIBER REINFORCEMENT: NOT ALLOWED

G. AIR–ENTRAINING ADMIXTURE: ASTM C 260.

H. CHEMICAL ADMIXTURES: ASTM C 494, WATER REDUCING.

I. WATER STOPS: FLAT DUMBBELL OR CENTER–BULB TYPE, OF EITHER RUBBER (CRD C 513) OR PVC (CRD C 572).

J. VAPOR RETARDER: UNDERSLAB VAPOR BARRIER FOR ALL CONCRETE SLABS AND STONE FILL SHALL BE A TOUGH, FLEXIBLE SANDWICH OF KRAFT PAPER, GLASS REINFORCING FIBERS, AND TWO LAYERS OF 4.0 MIL INERT POLYETHYLENE COMBINED IN ONE LAYER UNDER HEAT AND PRESSURE. THE VAPOR BARRIER SHALL HAVE A MAXIMUM PERM RATING OF 0.12 WHEN TESTED IN ACCORDANCE WITH ASTM E96, PROCEDURE A. THE POLYETHYLENE FILM MUST COMPLY WITH THE NORTH CAROLINA WEIGHTS AND MEASURES ACT (GS.81A) AND NORTH CAROLINA DEPARTMENT OF AGRICULTURAL PACKAGING AND LABELING REGULATIONS (1 NCAC 38.0300) WITH RESPECT TO LENGTH, WIDTH, THICKNESS, AND WEIGHT.

K. LIQUID MEMBRANE–FORMING CURING COMPOUND: ASTM C 309, CLEAR.

2.2 MIXES

A. PROPORTION NORMAL–WEIGHT CONCRETE MIXES TO PROVIDE THE FOLLOWING PROPERTIES:

1. COMPRESSIVE STRENGTH: 3500 PSI (24.13 MPA) AT 28 DAYS.
2. SLUMP LIMIT: 4 INCHES (100 MM) AT POINT OF PLACEMENT.
3. WATER–CEMENT RATIO: 0.50 MAXIMUM AT POINT OF PLACEMENT.
4. AIR CONTENT: 5.5 TO 7.0 PERCENT FOR CONCRETE EXPOSED TO FREEZING AND THAWING, 2 TO 4 PERCENT ELSEWHERE.

PART 3 – EXECUTION

3.1 CONCRETING

A. CONSTRUCT FORMWORK AND MAINTAIN TOLERANCES AND SURFACE IRREGULARITIES WITHIN ACI 117 LIMITS OF CLASS A FOR CONCRETE EXPOSED TO VIEW AND CLASS C FOR OTHER CONCRETE SURFACES.

B. SET WATER STOPS WHERE INDICATED TO ENSURE JOINT WATERTIGHTNESS.

C. PLACE VAPOR RETARDER ON PREPARED SUBGRADE, WITH JOINTS LAPPED 6 INCHES (150 MM) AND SEALED.

D. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT.

E. INSTALL CONSTRUCTION, ISOLATION, AND CONTROL JOINTS.

F. PLACE CONCRETE IN A CONTINUOUS OPERATION AND CONSOLIDATE USING MECHANICAL VIBRATING EQUIPMENT.

G. PROTECT CONCRETE FROM PHYSICAL DAMAGE OR REDUCED STRENGTH DUE TO WEATHER EXTREMES DURING MIXING, PLACING, AND CURING.

H. FORMED SURFACE FINISH: SMOOTH–FORMED FINISH FOR CONCRETE EXPOSED TO VIEW, COATED, OR COVERED BY WATERPROOFING OR OTHER DIRECT–APPLIED MATERIAL; ROUGH–FORMED FINISH ELSEWHERE.

I. UNFORMED SLAB FINISHES: SCRATCH FINISH FOR SURFACES TO RECEIVE MORTAR SETTING BEDS FLOAT FINISH SURFACES FOR INTERIOR STEPS AND RAMPS AND SURFACES TO RECEIVE WATERPROOFING, ROOFING, OR OTHER DIRECT–APPLIED MATERIAL TROWELED FINISH FOR FOOR SURFACES AND FLOORS TO RECEIVE FLOOR COVERINGS, PAINT, OR OTHER THIN FILM–FINISH COATINGS TROWEL AND FINE BROOM FINISH FOR SURFACES TO RECEIVE THIN–SET TILE NONSLIP BROOM FINISH TO EXTERIOR CONCRETE PLATFORMS, STEPS, AND RAMPS.

J. CURE FORMED SURFACES BY MOIST CURING UNTIL FORMS ARE REMOVED.

K. BEGIN CURING UNFORMED CONCRETE AFTER FINISHING. APPLY MEMBRANE–FORMING CURING COMPOUND TO CONCRETE.

L. PROTECT CONCRETE FROM DAMAGE. REPAIR SURFACE DEFECTS IN CONCRETE.

DIVISION 4

UNIT MASONRY ASSEMBLIES

PART 1 – GENERAL

1.1 SECTION REQUIREMENTS

A. COMPLY WITH ACI 530.1/ASCE 6/TMS 602.

PART 2 – PRODUCTS

2.1 MASONRY UNITS

A. CONCRETE MASONRY UNITS: ASTM C 90; WEIGHT CLASSIFICATION, LIGHTWEIGHT TYPE II, NONMOISTURE–CONTROLLED UNITS. f'm=1500PSI

1. SPECIAL SHAPES FOR LINTELS, CORNERS, JAMBS, SASH, CONTROL JOINTS, AND OTHER SPECIAL CONDITIONS.
2. SQUARE–EDGED UNITS FOR OUTSIDE CORNERS, UNLESS OTHERWISE INDICATED.

2.2 MORTAR (NEW MASONRY ONLY)

A. MORTAR: ASTM C 270, PROPORTION SPECIFICATION, FOR JOB–MIXED MORTAR; AND ASTM C 1142 FOR READY–MIXED MORTAR.

1. DO NOT USE CALCIUM CHLORIDE IN MORTAR.
2. FOR MASONRY BELOW GRADE, IN CONTACT WITH EARTH, REINFORCED MASONRY, AND WHERE INDICATED, USE TYPE S.
3. FOR EXTERIOR, ABOVE–GRADE, LOAD–BEARING AND NON–LOAD–BEARING WALLS AND PARAPET WALLS; FOR INTERIOR LOAD–BEARING WALLS; FOR INTERIOR NON–LOAD–BEARING PARTITIONS, AND FOR OTHER APPLICATIONS WHERE ANOTHER TYPE IS NOT INDICATED, USE TYPE N.

2.3 GROUT

A. GROUT FILL CELLS WITH f'c = 3000PSI SAND MIX GROUT.

2.4 JOINT REINFORCEMENT, TIES, AND ANCHORS

A. PROVIDE JOINT REINFORCEMENT FORMED FROM GALVANIZED CARBON–STEEL WIRE, ASTM A 153, CLASS B–2, FOR BOTH INTERIOR AND EXTERIOR WALLS.

1. WIRE DIAMETER FOR SIDE RODS: 0.1483 INCH (3.8 MM).
2. WIRE DIAMETER FOR CROSS RODS: 0.1483 INCH (3.8 MM).
3. FOR SINGLE–WYTHE MASONRY, PROVIDE TRUSS DESIGN.
4. FOR MULTIWYTHE MASONRY, PROVIDE TRUSS DESIGN WITH 3 SIDE RODS.

B. VENEER ANCHORS: BOND BRICK VENEER WITH CMU WITH HORIZONTAL JOIN REINFORCEMENT.

2.5 EMBEDDED FLASHING MATERIALS

A. SHEET METAL FLASHING: SEE ARCHITECT

2.6 MISCELLANEOUS MASONRY ACCESSORIES

A. WEEP HOLES: SEE ARCHITECT. (FOR NEW MASONRY ONLY)

B. MASONRY CLEANER: ½–CUP TETRASODIUM POLYPHOSPHATE AND ½–CUP LAUNDRY DETERGENT DISSOLVED IN 1 GAL. OF WATER.

PART 3 – EXECUTION

3.1 INSTALLATION, GENERAL

A. CUT MASONRY UNITS WITH MOTOR–DRIVEN SAWS. INSTALL CUT UNITS WITH CUT SURFACES AND, WHERE POSSIBLE, CUT EDGES CONCEALED.

B. MIX UNITS FOR EXPOSED UNIT MASONRY FROM SEVERAL PALLETS OR CUBES AS THEY ARE PLACED TO PRODUCE UNIFORM BLEND OF COLORS AND TEXTURES.

C. STOPPING AND RESUMING WORK: IN EACH COURSE, RACK BACK UNITS; DO NOT TOOTH.

D. FILL CORES IN HOLLOW CONCRETE MASONRY UNITS WITH GROUT 24 INCHES (600 MM) UNDER BEARING PLATES, BEAMS, LINTELS, POSTS, AND SIMILAR ITEMS, UNLESS OTHERWISE INDICATED.

ADD VERTICAL WALL CONTROL JOINTS @ 30' MAX. HORIZONTAL SPACING. MASONRY CONTRACTOR TO LOCATE WALL CONTROL JOINTS.

F. TOOL EXPOSED JOINTS SLIGHTLY CONCAVE WHEN THUMBPRINT HARD, UNLESS OTHERWISE INDICATED.

G. KEEP CAVITIES CLEAN OF MORTAR DROPPINGS AND OTHER MATERIALS DURING CONSTRUCTION. STRIKE JOINTS FACING CAVITIES FLUSH.

3.2 LINTELS

A. INSTALL STEEL LINTELS WHERE INDICATED.

B. MASONRY LINTELS WHERE SHOWN. PRECAST LINTELS MADE FROM CONCRETE MATCHING CONCRETE MASONRY UNITS IN COLOR, TEXTURE, AND COMPRESSIVE STRENGTH AND WITH REINFORCEMENT BARS INDICATED OR REQUIRED TO SUPPORT LOADS INDICATED.

C. MINIMUM BEARING OF 8 INCHES (200 MM) AT EACH JAMB, UNLESS OTHERWISE INDICATED.

3.3 FLASHING AND WEEP HOLES (SEE ARCH.)

3.6 CLEANING (FOR NEW MASONRY ONLY)

A. CLEAN STONE MASONRY VENEER AS WORK PROGRESSES. REMOVE MORTAR FINS AND SMEARS BEFORE TOOLING JOINTS.

B. FINAL CLEANING: AFTER MORTAR IS THOROUGHLY SET AND CURED, REMOVE LARGE MORTAR PARTICLES AND SCRUB UNIT MASONRY.

1. WET WALL SURFACES WITH WATER, APPLY CLEANER, THEN REMOVE CLEANER BY RINSING THOROUGHLY WITH CLEAR WATER.

DIVISION 5

STRUCTURAL STEEL

PART 1 – GENERAL

1.1 SECTION REQUIREMENTS

A. COMPLY WITH AISC'S "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS––ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN," RCSC'S "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A 325 OR A 490 BOLTS," AND AWS D1.1 "STRUCTURAL WELDING CODE–STEEL."

PART 2 – PRODUCTS

2.1 STRUCTURAL STEEL AND ACCESSORIES

A. STRUCTURAL–STEEL SHAPES, PLATES, AND BARS: ASTM A992, CARBON STEEL.

B. COLD–FORMED STRUCTURAL–STEEL TUBING: ASTM A 500, GRADE B.

C. ANCHOR RODS, BOLTS, NUTS: ASTM A 36 (ASTM A 36M), UNHEADED RODS.

D. BOLTS, NUTS, AND WASHERS: ASTM A 325 (ASTM A 325M), TYPE 1, HIGH–STRENGTH HEAVY HEX STEEL STRUCTURAL BOLTS, HEAVY HEX CARBON–STEEL NUTS, AND HARDENED CARBON–STEEL WASHERS, UNCOATED.

E. PRIMER: LEAD– AND CHROMATE–FREE, NONASPHALTIC, RUST–INHIBITING PRIMER.

F. GROUT: ASTM C 1107, NONMETALLIC, SHRINKAGE RESISTANT, PREMIXED.

2.2 FABRICATION

A. FABRICATE STRUCTURAL STEEL ACCORDING TO AISC SPECIFICATIONS AND TOLERANCE LIMITS OF AISC'S "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" FOR STRUCTURAL STEEL.

B. SHOP PRIMING: PREPARE SURFACES ACCORDING TO SSPC–SP 2 OR SSPC–SP 3. SHOP PRIME STEEL TO A DRY FILM THICKNESS OF AT LEAST 1.5 MILS (0.038 MM). DO NOT PRIME SURFACES TO BE EMBEDDED IN CONCRETE OR MORTAR OR TO BE FIELD WELDED.

PART 3 – EXECUTION

3.1 ERECTION

A. ERECT STRUCTURAL STEEL ACCORDING TO AISC SPECIFICATIONS AND WITHIN ERECTION TOLERANCES OF AISC'S "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES."

B. SET BASE AND BEARING PLATES ON WEDGES, SHIMS, OR SETTING NUTS. TIGHTEN ANCHOR BOLTS, CUT OFF WEDGES OR SHIMS FLUSH WITH EDGE OF PLATE, AND PACK GROUT SOLIDLY BETWEEN BEARING SURFACES AND PLATES.

C. BOLTED CONNECTIONS: INSTALL AND TIGHTEN NONHIGH–STRENGTH BOLTS, UNLESS HIGH–STRENGTH BOLTS ARE INDICATED. SNUG TIGHTEN HIGH–STRENGTH BOLTS ACCORDING TO RCSC'S "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A 325 OR A 490 BOLTS."

D. WELD CONNECTIONS: COMPLY WITH AWS D1.1.

STEEL DECK

PART 1 – GENERAL

1.1 SECTION REQUIREMENTS

A. COMPLY WITH SDI PUBLICATION NO. 28, "SPECIFICATIONS AND COMMENTARY FOR STEEL ROOF DECK AND NON–COMPOSITE STEEL FORM DECK".

B. COMPLY WITH AWS D1.1, "STRUCTURAL WELDING CODE––STEEL," AND AWS D1.3, "STRUCTURAL WELDING CODE––SHEET STEEL."

PART 2 – PRODUCTS

2.1 MATERIALS

A. GALVANIZED STEEL SHEET: ASTM A 653 (ASTM A 653M), STRUCTURAL QUALITY, AND AS FOLLOWS:

1. ZINC–COATING WEIGHT: G60 (Z180).
2. GRADE: GRADE 60 .

2.2 DECKING

A. FLOOR DECK: FABRICATE PANELS FROM PRIME PAINTED STEEL WITHOUT TOP–FLANGE STIFFENING GROOVES AND AS FOLLOWS:

1. PRIME–PAINTED STEEL SHEET: ASTM A611, GRADE C MINIMUM, SHOP PRIMED WITH GRAY OR WHITE BAKED–ON, LEAD– AND CHROMATE–FREE RUST–INHIBITIVE PRIMER.
2. DECK PROFILE: VULCRAFT TYPE C OR EQUAL.
3. PROFILE DEPTH: TYPE C, 1 INCHES (25.4 MM).
4. DESIGN UNCOATED STEEL THICKNESS: 0.0295" (0.7493MM)

2.3 MISCELLANEOUS

A. ACCESSORIES: MANUFACTURER'S RECOMMENDED ROOF DECK ACCESSORY MATERIALS.

B. SHEAR CONNECTORS: AWS D1.1, TYPE B, HEADED–STUD TYPE, COLD–FINISHED CARBON STEEL.

C. GALVANIZING REPAIR PAINT: SSPC–PAINT 20 OR DOD–P–21035.

PART 3 – EXECUTION

3.1 DECK INSTALLATION

A. INSTALL DECK PANELS AND ACCESSORIES ACCORDING TO SDI PUBLICATION NO. 28.

B. PLACE, ADJUST, ALIGN, AND BEAR DECK PANELS ON STRUCTURE. DO NOT STRETCH OR CONTRACT SIDE LAP INTERLOCKS.

C. PLACE DECK PANELS FLAT AND SQUARE AND WELD TO STRUCTURE WITHOUT WARP OR DEFLECTION.

D. CUT, REINFORCE, AND FIT DECK PANELS AND ACCESSORIES AROUND OPENINGS AND PROJECTIONS.

E. ROOF DECK ACCESSORIES: INSTALL FINISH STRIPS, COVER PLATES, END CLOSURES, AND REINFORCING CHANNELS. WELD TO SUBSTRATE.

F. FLOOR POUR STOPS AND GIRDER FILLERS: WELD POUR STOPS AND GIRDER FILLERS TO STRUCTURE.

G. FLOOR DECK CLOSURES: WELD TIGHT–FITTING CLOSURES AT OPEN ENDS OF RIBS AND SIDES OF DECKING. WELD COVER PLATES AT CHANGES IN DIRECTION OF FLOOR DECK PANELS.

H. WELD SHEAR CONNECTORS THROUGH DECK TO STRUCTURE.

I. PREPARE AND REPAIR DAMAGED GALVANIZED COATINGS ON BOTH SURFACES WITH GALVANIZED REPAIR PAINT ACCORDING TO ASTM A 780.

J. WIRE BRUSH, CLEAN, AND PAINT SCARRED AREAS, WELDS, AND RUST SPOTS ON BOTH SURFACES OF PAINTED DECK PANELS.

DIVISION 6

ROUGH CARPENTRY

PART 1 – GENERAL

1.1 SECTION REQUIREMENTS

A. SUBMIT MODEL CODE EVALUATION REPORTS FOR FIRE–RETARDANT–TREATED WOOD.

PART 2 – PRODUCTS

2.1 LUMBER, GENERAL (SEE 061000 FOR ADDITIONAL INFORMATION)

A. DRESSED LUMBER, S4S, PERCENT MAXIMUM MOISTURE CONTENT FOR 2–INCH (38–MM) THICKNESS OR LESS, MARKED WITH GRADE STAMP OF INSPECTION AGENCY.

A. PRESERVATIVE–TREATED MATERIALS: AWPA C2 LUMBER AND AWPA C9 PLYWOOD, LABELED BY AN INSPECTION AGENCY APPROVED BY ALSC'S BOARD OF REVIEW. AFTER TREATMENT, KILN–DRY LUMBER AND PLYWOOD TO 19 AND 15 PERCENT MOISTURE CONTENT, RESPECTIVELY. TREAT INDICATED ITEMS AND THE FOLLOWING:

1. WOOD MEMBERS IN CONNECTION WITH ROOFING, FLASHING, VAPOR BARRIERS, AND WATERPROOFING.
2. CONCEALED MEMBERS IN CONTACT WITH MASONRY OR CONCRETE.
3. WOOD FRAMING MEMBERS LESS THAN 18 INCHES (460 MM) ABOVE GRADE.
4. WOOD FLOOR PLATES INSTALLED OVER CONCRETE SLABS DIRECTLY IN CONTACT WITH EARTH.

2.3 LUMBER

A. DIMENSION LUMBER: THE FOLLOWING GRADES PER INSPECTION AGENCY INDICATED.

5. STRUCTURAL MEMBERS: AS INDICATED ON PLANS AND SECTIONS.

B. CONCEALED BOARDS: 19 PERCENT MAXIMUM MOISTURE CONTENT: MIXED SOUTHERN PINE: NO. 2 PER SPIB RULES.

C. MISCELLANEOUS LUMBER: NO. 2 GRADE: SPRUCE–PINE–FIR: NELMA, NLGA, WCLIB, OR WWPA.

2.4 PANEL PRODUCTS

A. WOOD–BASED STRUCTURAL–USE PANELS: DOC PS 2. PROVIDE PLYWOOD COMPLYING WITH DOC PS 1, WHERE PLYWOOD IS INDICATED.

1. FACTORY MARK PANELS EVIDENCING COMPLIANCE WITH GRADE REQUIREMENTS.
2. PANELS WITH SPAN RATINGS REQUIRED BY SUPPORT SPACING INDICATED.
3. ROOF SHEATHING: APA–RATED STRUCTURAL I SHEATHING, EXTERIOR.

2.5 MISCELLANEOUS PRODUCTS

A. AIR–INFILTRATION BARRIER: SEE ARCH.
B. FASTENERS: SIZE AND TYPE INDICATED. WHERE ROUGH CARPENTRY IS EXPOSED TO WEATHER, IN GROUND CONTACT, OR IN AREA OF HIGH RELATIVE HUMIDITY, PROVIDE FASTENERS WITH A HOT–DIP ZINC COATING PER ASTM A 153 OR OF TYPE 304 STAINLESS STEEL.

1. POWER–DRIVEN FASTENERS: CABO NER–272.
2. BOLTS: STEEL BOLTS COMPLYING WITH ASTM A 307, GRADE A (ASTM F 568, PROPERTY CLASS 4.6); WITH ASTM A 563 (ASTM A 563M) HEX NUTS AND, WHERE INDICATED, FLAT WASHERS.

C. METAL FRAMING ANCHORS: HOT–DIP GALVANIZED STEEL OF STRUCTURAL CAPACITY, TYPE, AND SIZE INDICATED.

D. SILL–SEALER: GLASS–FIBER INSULATION, 1–INCH (25–MM) THICK, COMPRESSIBLE TO 1/32 INCH (0.8 MM).

E. ADHESIVES FOR FIELD GLUING PANELS TO FRAMING: APA AFG–01.

PART 3 – EXECUTION

3.1 INSTALLATION

A. FIT ROUGH CARPENTRY TO OTHER CONSTRUCTION; SCRIBE AND COPE FOR ACCURATE FIT. CORRELATE LOCATION OF FURRING, BLOCKING, AND SIMILAR SUPPORTS TO ALLOW ATTACHMENT OF OTHER CONSTRUCTION.

B. SECURELY ATTACH ROUGH CARPENTRY WORK TO SUBSTRATE BY ANCHORING AND FASTENING AS INDICATED, COMPLYING WITH THE FOLLOWING:

1. CABO NER–272 FOR POWER–DRIVEN STAPLES, P–NAILS, AND ALLIED FASTENERS.
2. PUBLISHED REQUIREMENTS OF METAL FRAMING ANCHOR MANUFACTURER.
3. CONNECTIONS & FASTENING per 2304.9 OF THE NORTH CAROLINA STATE BUILDING CODE, BUILDING CODE 2012.

C. USE HOT–DIP GALVANIZED OR STAINLESS–STEEL NAILS WHERE ROUGH CARPENTRY IS EXPOSED TO WEATHER, IN GROUND CONTACT, OR IN AREA OF HIGH RELATIVE HUMIDITY.

D. INSTALLATION OF STRUCTURAL–USE PANELS: COMPLY WITH APPLICABLE RECOMMENDATIONS CONTAINED IN APA FORM NO. E30 AND AS FOLLOWS:

1. SHEATHING: NAIL/SCREW TO FRAMING PER STRUCTURAL PLANS. WHERE NOT SPECIFICALLY INDICATED IN THE PLANS INSTALL PER THE MANUFACTURES SUGGESTED REQUIREMENTS.

STRUCTURAL ABBREVIATIONS

@ = AT
A.B. = ANCHOR BOLTS
ABC = AGGREGATE BASE COARSE
A.E.F.F.E. = ABOVE EXISTING FINISHED FLOOR ELEVATION
A.F.F.E. = ABOVE FINISHED FLOOR ELEVATION
A.R.F.F.E. = ABOVE REFERENCED FINISHED FLOOR ELEVATION
ALT. = ALTERNATE
ARCH. = ARCHITECTURAL
B.F.F.E. = BELOW FINISHED FLOOR ELEVATION
B.M.B.M. = BY METAL BUILDING MANUFACTURE
B.R.F.F.E. = BELOW REFERENCED FINISHED FLOOR ELEVATION
BLDG. = BUILDING
BOT. = BOTTOM
B.O.W. = BOTTOM OF WALL
BRG. = BEARING
C.J. = COLD JOINT
CL = CENTER LINE
CLR. = CLEAR
CMU = CONCRETE MASONRY UNIT
COL. = COLUMN
CONC.= CONCRETE
CONN. = CONNECTION
CONST. = CONSTRUCTION
CONT. = CONTINUOUS
COOR. = COORDINATE
DET. = DETAIL
DIA. = DIAMETER
DIM. = DIMENSION
DWGS. = DRAWINGS
DWL. = DOWEL
E.A. = EACH
E.F.F.E. = EXISTING FINISHED FLOOR ELEVATION
E.J. = EXPANSION JOINT
ELEV. = ELEVATION
E.W. = EACH WAY
EXP. = EXPANSION
EXIST. = EXISTING
EXT. = EXTENSION
FLR. = FLOOR
FD – FLOOR DRAIN
FND. = FOUNDATION
FP = FULL PENETRATION
FTG. = FOOTING
HK. = HOOK
HORIZ. = HORIZONTAL
HSS = HOLLOW STRUCTURAL SECTION (TUBE OR PIPE)
INT. = INTERIOR
JT. = JOINT
K = KIP (1000 lbs)
LLH = LONG LEG HORIZONTAL
LLV = LONG LEG VERTICAL
MANUF. = MANUFACTURER
MAS. = MASONRY
MAX. = MAXIMUM
MECH. = MECHANICAL
MIN. = MINIMUM
NOM. = NOMINAL
O.C. = ON CENTER SPACING
OPNG. = OPENING
PC. = PRECAST
PL. = PLATE
REINF. = REINFORCEMENT
REQD. = REQUIRED
R.F.F.E. = REFERENCED FINISHED FLOOR ELEVATION
SC. = SLIP CRITICAL
SCHD. = SCHEDULE
SECT. = SECTION
S.J. = SAWED CUT JOINT
T&B = TOP AND BOTTOM
T.O.F. = TOP OF FOOTING
T.O.P. = TOP OF PIER
T.O.S. = TOP OF STEEL
T.O.W. = TOP OF WALL
TYP. = TYPICAL
U.N.O. = UNLESS NOTED OTHERWISE
VERT. = VERTICAL
W = WIDE FLANGE MEMBER
W/ = WITH
WWF = WELDED WIRE FABRIC
* = COORD. WITH SITE PLAN

EXISTING DEPOT CODE LOADS

DESIGN LOADS (NCBC 2018):
A. FLOOR LIVE LOAD: SECTION 1607.10
1. ELEVATED FLOOR/RAMP = 100 PSF
2. ELEVATED FLOOR W/ STAGE = 150 PSF
B. ROOF LIVE LOAD: SECTION 1607.12
1. ROOF = 20 PSF
C. ROOF SNOW LOAD DATA: SECTION 1608 (EXISTING)
1. FLAT ROOF SNOW LOAD, P_f = 10.5 PSF
2. SNOW EXPOSURE FACTOR, C_e = 1.0
3. SNOW IMPORTANCE FACTOR, I_s = 1.0
4. ROOF THERMAL FACTOR, C_t = 1.0
C. WIND DESIGN DATA: SECTION 1609 (EXISTING)
1. ULTIMATE DESIGN WIND SPEED, V_{ULT} = 115
2. RISK CATEGORY = II
3. WIND EXPOSURE CATEGORY = B
4. COMPONENTS & CLADDING DESIGN PRESSURES (V_{ULT}):
a. ROOF INTERIOR ZONES = 22 PSF
b. ROOF EDGE ZONES = 38 PSF
c. ROOF CORNER ZONES = 56 PSF
d. WALL INTERIOR ZONES = 26 PSF
e. WALL EDGE ZONES = 32 PSF
D. EARTHQUAKE DESIGN DATA: SECTION 1613 (EXISTING)
1. RISK CATEGORY = N/A
2. SEISMIC IMPORTANCE FACTOR, I_e = N/A
3. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS:
a. SHORT PERIOD, S_s = N/A
b. 1 SECOND PERIOD, S_1 = N/A
4. SITE CLASS = N/A
5. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:
a. SHORT PERIOD, S_{ds} = N/A
b. 1 SECOND PERIOD, S_{d1} = N/A
6. SEISMIC DESIGN CATEGORY = N/A
7. BASIC SEISMIC FORCE–RESISTING SYSTEM: N/A
8. DESIGN BASE SHEAR
a. Vx = N/A
b. Vy = N/A
9. SEISMIC RESPONSE COEFFICIENT, C_S = N/A
10. RESPONSE MODIFICATION COEFFICIENT, R = N/A
11. ANALYSIS PROCEDURE: N/A

NEW PLATFORM CODE LOADS

DESIGN LOADS (NCBC 2018):
A. FLOOR LIVE LOAD: SECTION 1607.10
1. ELEVATED FLOOR/RAMP = 100 PSF
2. ELEVATED FLOOR W/ STAGE = 150 PSF
B. ROOF LIVE LOAD: SECTION 1607.12
1. ROOF = 20 PSF
C. ROOF SNOW LOAD DATA: SECTION 1608
1. FLAT ROOF SNOW LOAD, P_f = 11.6 PSF
2. SNOW EXPOSURE FACTOR, C_e = 1.0
3. SNOW IMPORTANCE FACTOR, I_s = 1.0
4. ROOF THERMAL FACTOR, C_t = 1.1
C. WIND DESIGN DATA: SECTION 1609
1. ULTIMATE DESIGN WIND SPEED, V_{ULT} = 115
2. RISK CATEGORY = II
3. WIND EXPOSURE CATEGORY = B
4. COMPONENTS & CLADDING DESIGN PRESSURES (V_{ULT}):
a. ROOF INTERIOR ZONES = 22 PSF
b. ROOF EDGE ZONES = 38 PSF
c. ROOF CORNER ZONES = 56 PSF
d. WALL INTERIOR ZONES = 26 PSF
e. WALL EDGE ZONES = 32 PSF
D. EARTHQUAKE DESIGN DATA: SECTION 1613 (EXISTING)
1. RISK CATEGORY = II
2. SEISMIC IMPORTANCE FACTOR, I_e = I
3. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS:
a. SHORT PERIOD, S_s = 0.135
b. 1 SECOND PERIOD, S_1 = 0.068
4. SITE CLASS = D
5. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:
a. SHORT PERIOD, S_{ds} = 0.144
b. 1 SECOND PERIOD, S_{d1} = 0.109
6. SEISMIC DESIGN CATEGORY = B
7. BASIC SEISMIC FORCE–RESISTING SYSTEM: INTERMEDIATE MASONRY SHEAR WALLS
8. DESIGN BASE SHEAR
a. Vx = 2^K
b. Vy = 4^K
9. SEISMIC RESPONSE COEFFICIENT, C_S = 0.043
10. RESPONSE MODIFICATION COEFFICIENT, R = 3.5
11. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE (1613)

MOOREFIELD ENGINEERING, PC
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NORTH CAROLINA PROFESSIONAL SEAL 20707 ENGINEER JERRY W. MOOREFIELD
Jerry W. Moorefield
2025.02.26
14:24:51 -05'00'
FIRM REGISTRATION NO.: C–1323

REVISIONS

ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston-Salem, NC 27106 | Ph. 336-722-4447

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

JOB 23081
DATE 2-28-25
DRAWN MRM
SHEET
S-701

GENERAL PLAN SYMBOLS

Symbol	Description
1 (triangle)	PLAN REVISION NUMBER
1 / M-001	DETAIL NUMBER ON SHEET / SHEET NUMBER WHERE DETAIL IS PLACED
1 (hexagon)	KEYNOTE SYMBOL
	CONTINUATION SYMBOL
	POINT WHERE NEW CONNECTS TO EXISTING
Room 9	ROOM NAME / NUMBER
	AREA BEING DEMOLISHED
	AREA NOT IN CONTRACT

ABBREVIATIONS

Ø	ROUND	LVR	LOUVER
ABV	ABOVE	MAX	MAXIMUM
AD	AREA DRAIN	MD	MOTORIZED DAMPER
ADD	ADDENDUM	MECH	MECHANICAL
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
ALT	ALTERNATE	MIN	MINIMUM
AP	ACCESS PANEL	MISC	MISCELLANEOUS
ARCH	ARCHITECT/ARCHITECTURAL	MTR	MOTOR
BFF	BELOW FINISHED FLOOR	NC	NORMALLY CLOSED
BLW	BELOW	NIC	NOT IN CONTRACT
CAP	CAPACITY	NO	NUMBER
CB	CATCH BASIN	NO	NORMALLY OPEN
CLG	CEILING	NTS	NOT TO SCALE
CO	CLEAN OUT	PD	PRESSURE DROP
CW	COLD WATER	PIV	POST INDICATOR VALVE
D	DEGREE	PRESS	PRESSURE
DIA	DIAMETER	PRV	PRESSURE REDUCING VALVE
DN	DOWN	PSI	POUNDS PER SQUARE INCH
EA	EACH	PSIG	POUNDS PER SQUARE INCH GAUGE
ELEC	ELECTRICAL	PWR	POWER
EQUIP	EQUIPMENT	REC	RECESSED
E/A	EXHAUST AIR	RED	REDUCER
F	DEGREES FAHRENHEIT	RM	ROOM
FD	FLOOR DRAIN	RPM	REVOLUTIONS PER MINUTE
FDC	FIRE DEPARTMENT CONNECTION	SF	SQUARE FOOT
FL	FLOOR	SAN	SANITARY
FO	FUEL OIL	SF	SQUARE FOOT
FOV	FUEL OIL VENT	SD	SMOKE DAMPER
FOR	FUEL OIL RETURN	SM	SURFACE MOUNT
FOS	FUEL OIL SUPPLY	SP	STANDPIPE
FPM	FEET PER MINUTE	SP	STATIC PRESSURE
FT	FOOT/FEET	T	THERMOSTAT
GAL	GALLON	TD	TEMPERATURE DROP
GF	GAS-FIRED	TEMP	TEMPERATURE
GC	GENERAL CONTRACTOR	TYP	TYPICAL
GPM	GALLONS PER MINUTE	UG	UNDERGROUND
HB	HOSE BIB	V	VENT
HP	HORSE POWER	VENT	VENTILATION
HTR	HEATER	W	WASTE
HYD	HYDRANT	WH	WALL HYDRANT
ID	INDIRECT		
IN	INCH		
INV	INVERT		
LB	POUND		

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK
ACCU	AIR COOLING CONDENSING UNIT	EWH	ELECTRIC WATER HEATER
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT
AS	AIR SEPARATOR	FP	FIRE PUMP
B	BOILER	GI	GREASE INTERCEPTOR
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR
CT	COOLING TOWER	HWP	HEATING WATER PUMP
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
EF	EXHAUST FAN	UH	UNIT HEATER
EDC	ELECTRIC DUCT COIL	WH	WATER HEATER

* NOTE *
ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

FIRE PROTECTION SYMBOLS

Symbol	Description
2"	NOMINAL PIPE SIZE
	ABOVE GROUND PIPING
	BELOW GROUND PIPING
	PIPE SLOPE (WHEN APPLICABLE)
(E)	EXISTING PIPE TO REMAIN
	PIPE TO BE DEMOLISHED
FP-W	FIRE SPRINKLER - WET
FP-D	FIRE SPRINKLER - DRY
FP-PA	FIRE SPRINKLER - PREACTION
F/W	FIRE AND WATER SERVICE
FP-O	FIRE SPRINKLER - OTHER
	UPRIGHT SPRINKLER
	PENDENT SPRINKLER
	RECESSED SPRINKLER
	CONCEALED HEAD
D	UPRIGHT SPRINKLER - DRY
	SIDEWALL SPRINKLER
	EXTENDED COVERAGE SPRINKLER
	STANDPIPE VALVE
48"x18" S/A	OBSTRUCTION FROM DUCTWORK 48" AND GREATER
	CHECK VALVE
	ALARM CHECK VALVE
	TAMPER DETECTION VALVE
	DRY PIPE VALVE
	INDICATING BUTTERFLY VALVE
	POST INDICATOR VALVE
	VALVE NONRISING STEM
	OS&Y VALVE
	PREACTION VALVE
	DELUGE VALVE
	THRUST BLOCK
	PIPE ANCHOR
	FREESTANDING SIAMESE FIRE DEPARTMENT CONNECTION
	SIAMESE FIRE DEPARTMENT CONNECTION
	SINGLE FIRE DEPARTMENT CONNECTION
	RISER ASSEMBLY
	DOUBLE CHECK (OS&Y)
	DOUBLE CHECK (BUTTERFLY WITH TAMPER)
	REDUCED PRESSURE ZONE
X	EQUIPMENT IDENTITY

EARTHQUAKE DESIGN DATA

LOCATION NAME	SEISMIC IMPORTANCE FACTOR	SEISMIC USE GROUP	MAPPED SPECTRAL RESPONSE ACCELERATIONS	SITE CLASS	SPECTRAL RESPONSE CATEGORY	SEISMIC DESIGN CATEGORY	RESPONSE MODIFICATION FACTOR
SPRING HOPE, NC	Ip = 1.25	II	Ss = 0.107; S1 = 0.052	D	SDs = 0.114; SD1 = 0.083	B	Rp = 4.5

FIRE PROTECTION SPRINKLER SCHEDULE

AREA DESIGNATION	SPACE NAME/FUNCTION	DESCRIPTION	BASIS OF DESIGN	HOSE STREAM GPM	SYSTEM TYPE	DENSITY (GPM/SQFT)	REMOTE AREA	SPRINKLER TEMP RATING	WATER SUPPLY DURATION	NOTES
ZONE 1	PLATFORM/CORE AREA/BELOW FLOOR	LIGHT HAZARD	NFPA 13	100	DOUBLE INTERLOCK PRE-ACTION	0.1	1500	165	30	1
ZONE 1A	RISER ROOM	ORDINARY HAZARD GROUP I	NFPA 13	250	DOUBLE INTERLOCK PRE-ACTION	0.15	1500	165	60	1
ZONE 2	EVENTS ROOM/CORE AREA	LIGHT HAZARD	NFPA 13	100	DOUBLE INTERLOCK PRE-ACTION	0.1	1500	165	30	2
ZONE 3	ATTIC	LIGHT HAZARD	NFPA 13	100	DOUBLE INTERLOCK PRE-ACTION	0.1	1500	225	30	2
ZONE 3A	BELOW FLOOR	LIGHT HAZARD	NFPA 13	100	DOUBLE INTERLOCK PRE-ACTION	0.1	1500	165	30	2

NOTES:
1. ZONE 1 AND ZONE 1A SHALL BE SERVED FROM THE SAME PRE-ACTION VALVE.
2. ZONE 2, ZONE 3, AND ZONE 3A SHALL BE SERVED FROM THE SAME PRE-ACTION VALVE.

FIRE PROTECTION GENERAL NOTES

1. PROVIDE A COMPLETE WET TYPE FIRE PROTECTION SYSTEM AS REQUIRED TO ACCOMMODATE THE FLOOR PLAN AND CEILING TYPES INCLUDING MAINS, BRANCHES, HEADS, VALVES, AND ACCESSORIES AS REQUIRED. THE SYSTEM SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS OF THE STATE BUILDING CODE, LOCAL FIRE DEPARTMENT, AND ALL FEDERAL, STATE, AND LOCAL AUTHORITIES, NFPA, AND FACTORY MUTUAL.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED BASED UPON ACTUAL WATER FLOW TEST DATA OBTAINED AT OR NEAR THE JOB SITE.
3. REFER TO REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION REGARDING SPRINKLER HEAD LOCATION AND PIPE, UNLESS NOTED OTHERWISE.
4. THE FIRE PROTECTION CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR PROPER INSTALLATION OF THE FIRE PROTECTION SYSTEMS ALARM DEVICES INVOLVED WITH FIRE SPRINKLER SYSTEM.
5. ALL SPRINKLER SYSTEM PIPING SHALL BE CONCEALED ABOVE THE SUSPENDED CEILING SYSTEM, UNLESS NOTED OTHERWISE. WRITTEN AUTHORIZATION SHALL BE OBTAINED FROM THE ARCHITECT PRIOR TO EXPOSING ANY PIPING IN ANY ROOM WHICH HAS A SUSPENDED CEILING.
6. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE ALL ADDITIONAL SPRINKLER HEADS AS REQUIRED TO ENSURE AN APPROVED FIRE PROTECTION SYSTEM AT NO ADDITIONAL COST TO THE OWNER.
7. AUXILIARY DRAINS SHALL BE EXPOSED WITH 1" DRAIN VALVES. WHEN 5 OR MORE GALLONS ARE TRAPPED, THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE FIXED PIPING TO AN ADEQUATELY SIZED RECEPTOR WHICH IS CAPABLE OF ACCEPTING THE FULL FLOW OF THE DRAIN. WHEN LESS THAN 5 GALLONS ARE TRAPPED, A HOSE BIB SHALL BE PROVIDED AT THE DRAIN VALVE.
8. AUXILIARY DRAINS SHALL NOT BE LOCATED ABOVE PLASTER OR GYPSUM BOARD CEILING SYSTEMS. ONLY BY A SPECIFIC WRITTEN INSTRUCTION FROM THE ENGINEER WILL A VARIANCE BE PROVIDED.
9. AN INSPECTOR'S TEST CONNECTION SHALL BE PROVIDED FOR EACH FIRE SPRINKLER ZONE. THIS CONTRACTOR SHALL PROVIDE FIXED PIPING FROM THE TEST CONNECTION TO AN ADEQUATELY SIZED RECEPTOR WHICH IS CAPABLE OF ACCEPTING THE FULL FLOW OF THE TEST. EXTERIOR DISCHARGE OF THE TEST CONNECTION SHALL BE PERMITTED ONLY BY SPECIFIC WRITTEN INSTRUCTION FROM THE ENGINEER.
10. SHOW ALL ROOM NUMBERS ON SHOP DRAWING PLANS.
11. THE CONTRACTOR SHALL PERFORM A FIRE FLOW TEST IN ACCORDANCE WITH NFPA 291. A FIRE PROTECTION ENGINEER OR AN ENGINEER EXPERIENCED IN WATER FLOW TESTING SHALL PERFORM OR WITNESS THE REQUIRED FLOW TESTING AND SIGN THE REPORT PRIOR TO THE FIRST SPRINKLER SYSTEM SUBMITTAL.
12. ROUTE SPRINKLER PIPING SUCH THAT IT DOES NOT RUN ABOVE ELECTRICAL PANELS, SWITCHGEAR, OR SIMILAR EQUIPMENT. SPRINKLER MAINS SHALL NOT RUN THROUGH ELECTRICAL OR COMMUNICATION ROOMS. SPRINKLER HEADS IN THESE ROOMS SHALL BE SERVED BY A DEDICATED BRANCH LINE FOR EACH ROOM.
13. THIS DRAWING INDICATES A GENERAL PIPING ARRANGEMENT AND SUGGESTED SIZING ONLY. THIS CONTRACTOR SHALL DETERMINE THE ACTUAL PIPE SIZING REQUIRED AND COORDINATE WORK WITH ALL OTHER TRADES TO AVOID CONFLICTS.
14. THIS CONTRACTOR SHALL PREPARE HYDRAULIC CALCULATIONS BASED UPON THE CONFIGURATION OF THE ACTUAL SYSTEM DESIGN AS SHOWN ON THIS CONTRACTOR'S SHOP DRAWINGS.
15. ALL PREACTION SYSTEMS SHALL BE PROVIDED WITH ALL REQUIRED DETECTOR DEVICES FROM THE PREACTION SYSTEM MANUFACTURER.

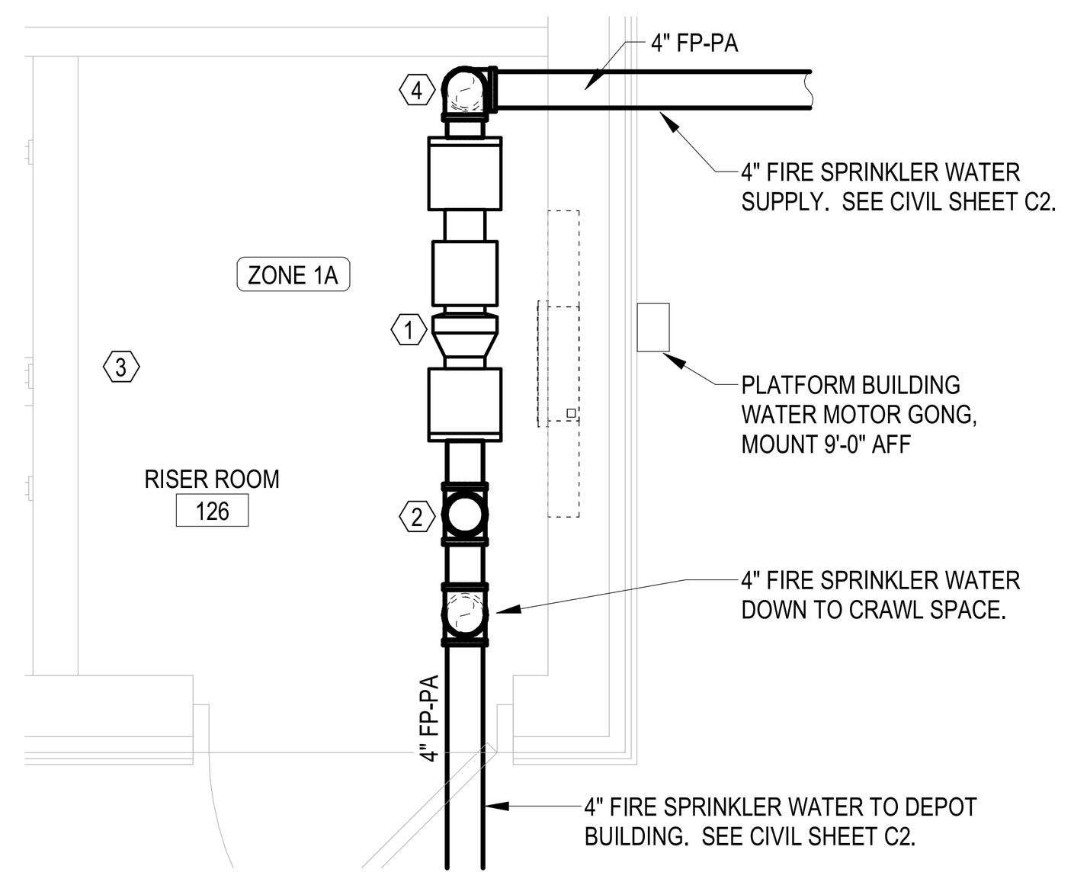
THE DEPOT BUILDING IS PART OF THE SPRING HOPE HISTORIC DISTRICT AND IS LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES.

FIRE PROTECTION SHEET INDEX

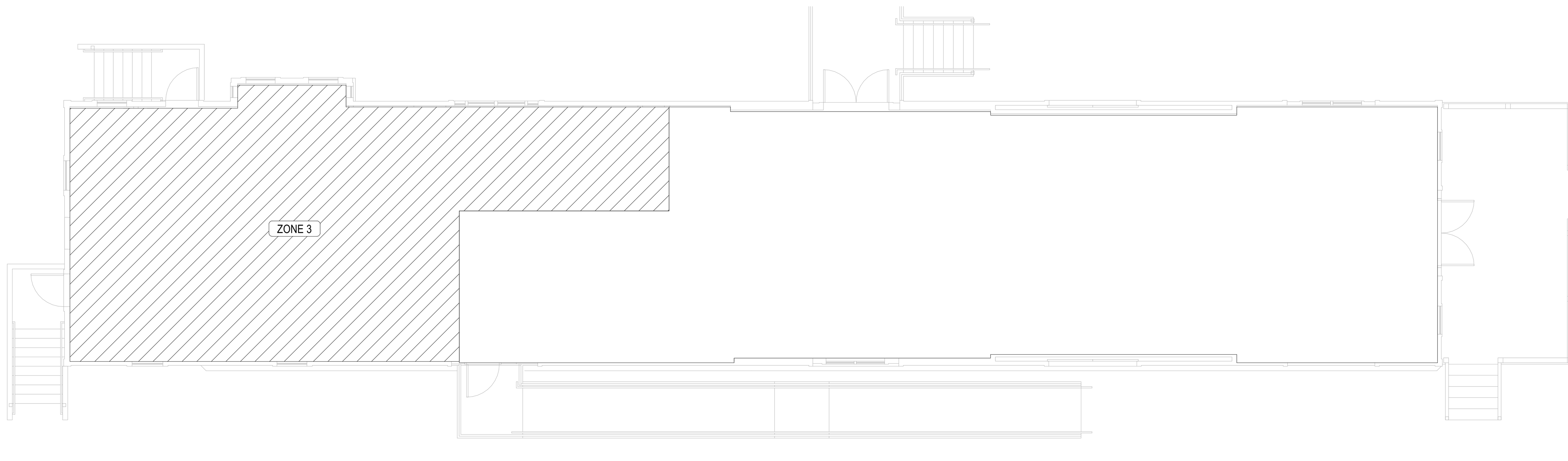
SHEET	NAME	REV	DESCRIPTION	DATE
F-001	FIRE PROTECTION TITLE SHEET	0	ISSUE FOR CONSTRUCTION	02-28-2025
F-501	FIRE PROTECTION DETAILS	0	ISSUE FOR CONSTRUCTION	02-28-2025

KEYNOTES

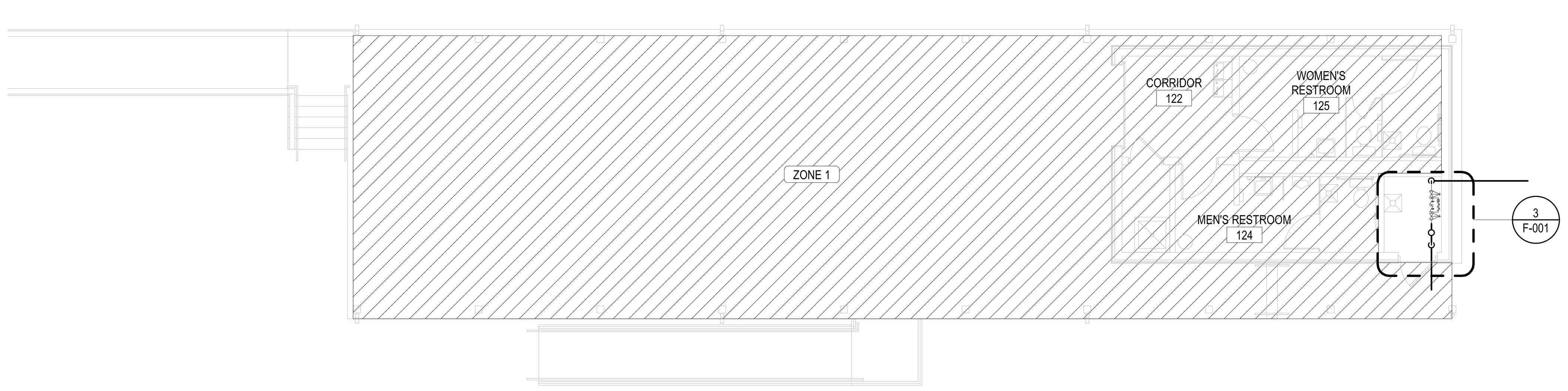
1	DOUBLE CHECK DETECTOR BACKFLOW PREVENTER (BFP) EQUIVALENT TO ZURN MODEL 350DC.
2	4" DOUBLE INTERLOCK PRE-ACTION RISER SERVING PLATFORM BUILDING.
3	APPROXIMATE LOCATION OF WALL UNIT HEATER BY MECHANICAL CONTRACTOR.
4	4" SPRINKLER THROUGH SLAB WITH SLEEVE TO PREACTION VALVE. HEAT TRACE AND INSULATE EXPOSED PIPING IN CRAWLSPACE. DESIGN TO MAINTAIN 55F AT AN EXTERNAL TEMPERATURE OF 0F. (COORDINATE WITH ELECTRICAL) BASIS OF DESIGN CHROMALOX MODEL CPR, 8 W/FT, 120V.
5	4" DOUBLE INTERLOCK PRE-ACTION RISER TO SERVE DEPOT BUILDING.
6	WATER MOTOR GONG. MOUNT 8'-0" AFF.
7	4" SPRINKLER PIPE UP INTO CRAWLSPACE. HEAT TRACE AND INSULATE E EXPOSED PIPING IN CRAWLSPACE. DESIGN TO MAINTAIN 55F AT AN EXTERNAL TEMPERATURE OF 0F. (COORDINATE WITH ELECTRICAL) BASIS OF DESIGN CHROMALOX MODEL CPR, 8 W/FT, 120V.
8	4" SPRINKLER SUPPLY LINE FROM CRAWLSPACE TO RISER.



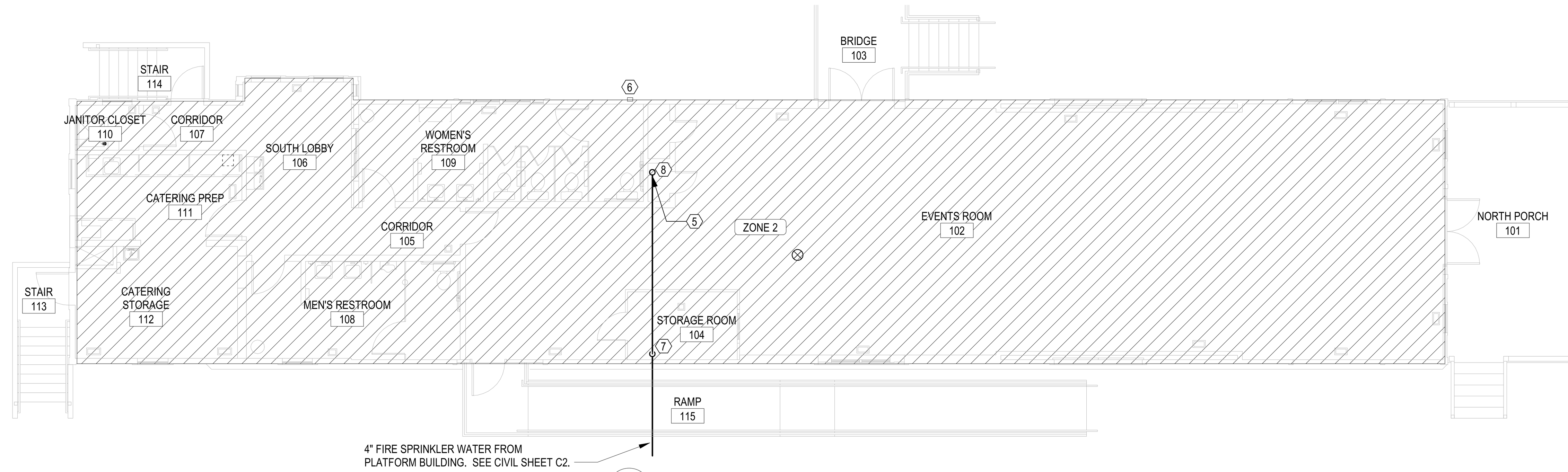
3 F-001 ENLARGED PLATFORM BUILDING RISER ROOM PLAN
1/2" = 1'-0"



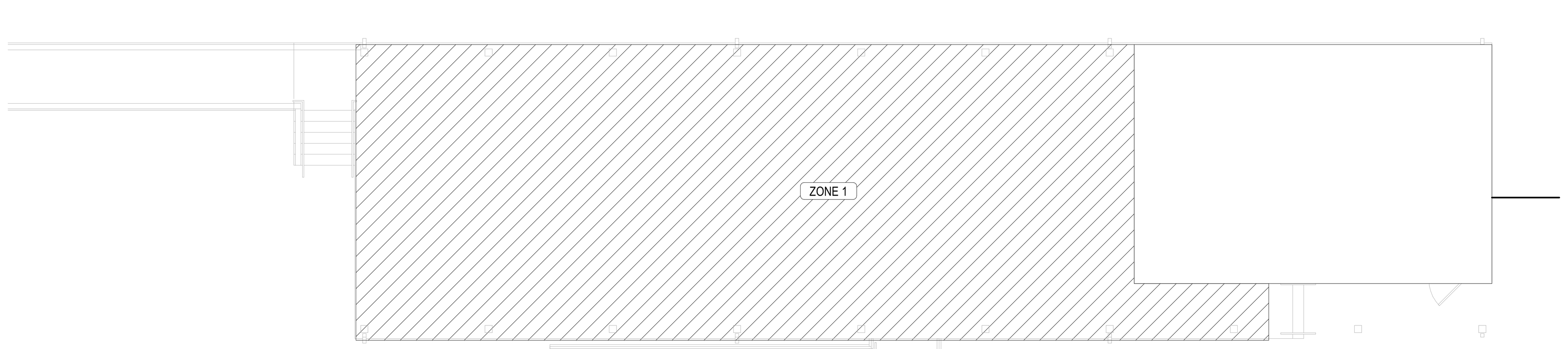
4 F-001 OVERALL DEPOT FIRE PROTECTION ATTIC PLAN
1/8" = 1'-0"



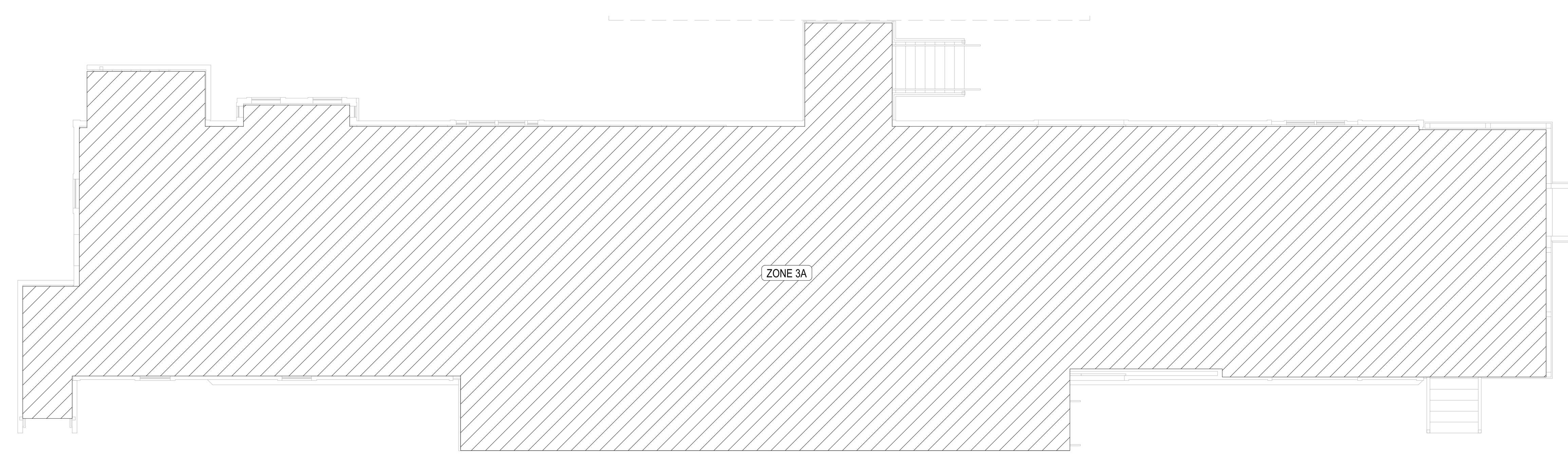
2 F-001 OVERALL PLATFORM BUILDING FIRE PROTECTION PLAN
1/8" = 1'-0"



1 F-001 OVERALL DEPOT FIRE PROTECTION PLAN
1/8" = 1'-0"



7 F-001 OVERALL PLATFORM FIRE PROTECTION BELOW FLOOR PLAN
1/8" = 1'-0"



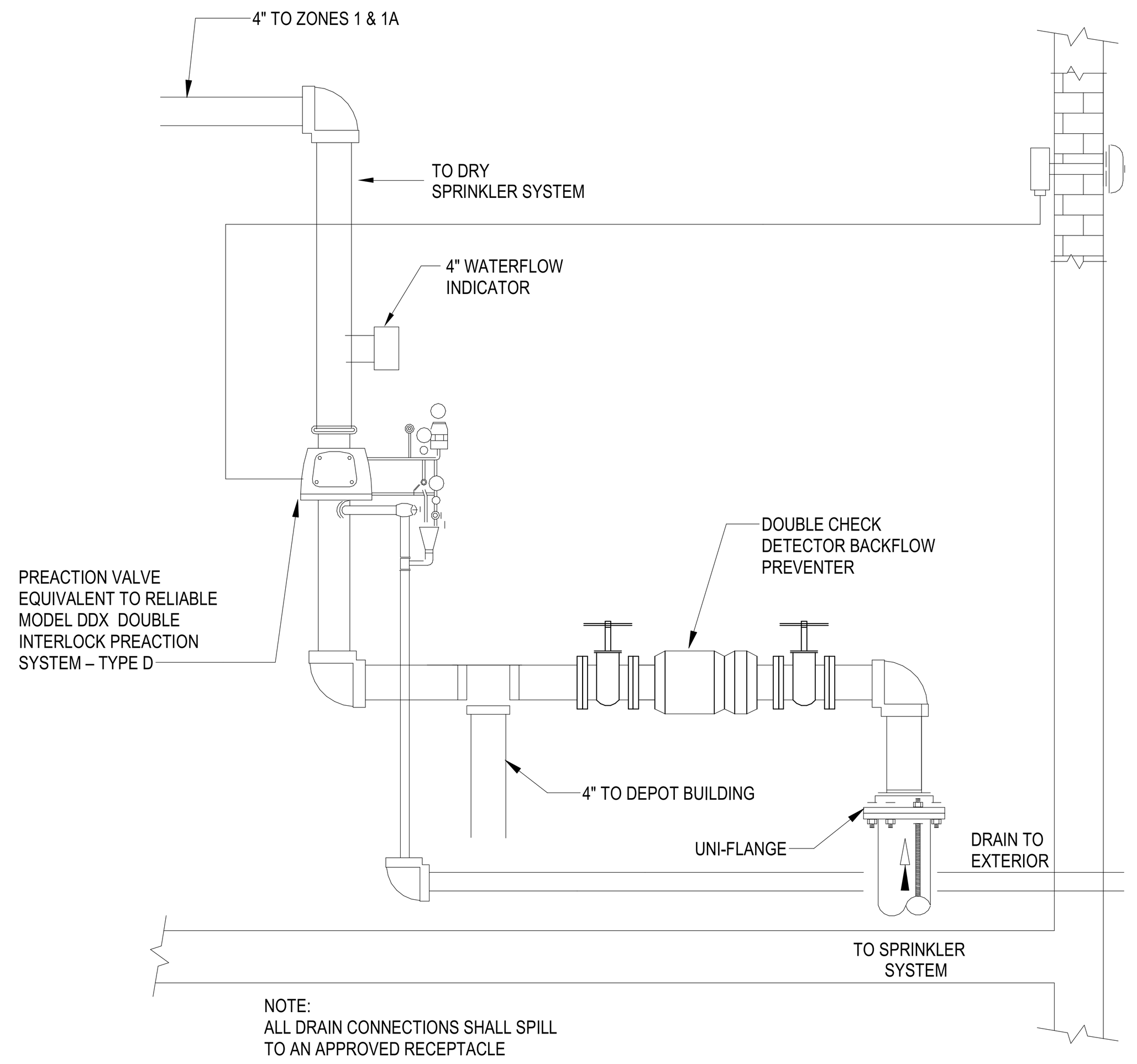
6 F-001 OVERALL DEPOT FIRE PROTECTION BELOW FLOOR PLAN
1/8" = 1'-0"

Beekman Point ENGINEERING
SEAL 046074 ANTHONY SHANE DUTTERA NORTH CAROLINA PROFESSIONAL ENGINEER 02/28/2025
ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston-Salem, NC 27106 | Ph. 336-722-4447

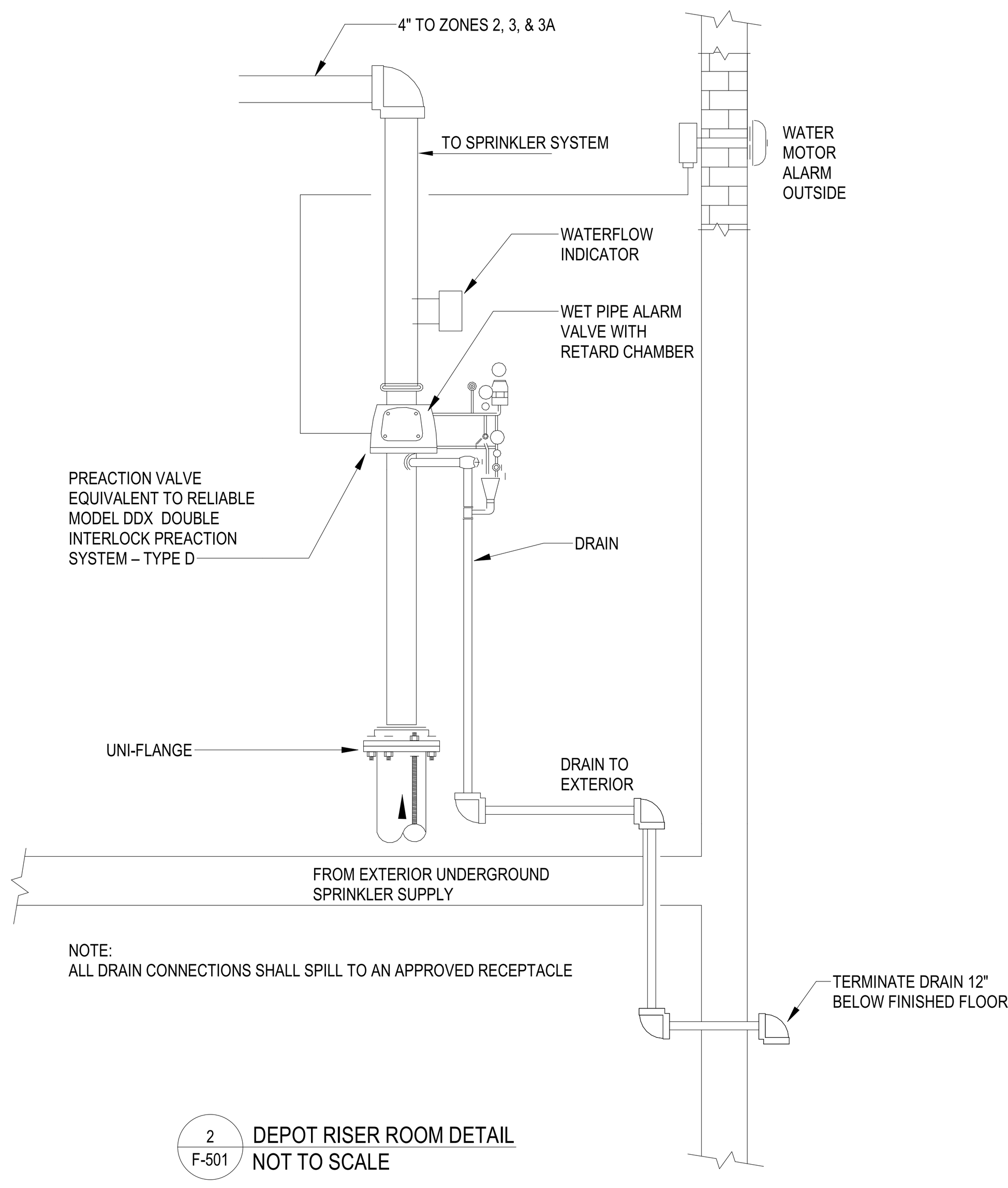
NO	REVISION	DATE
0	ISSUE FOR CONSTRUCTION	02-28-2025

SPRING HOPE
RAILROAD DEPOT
Interior Renovation
101 SOUTH ASH STREET
SPRING HOPE, NORTH CAROLINA 27882

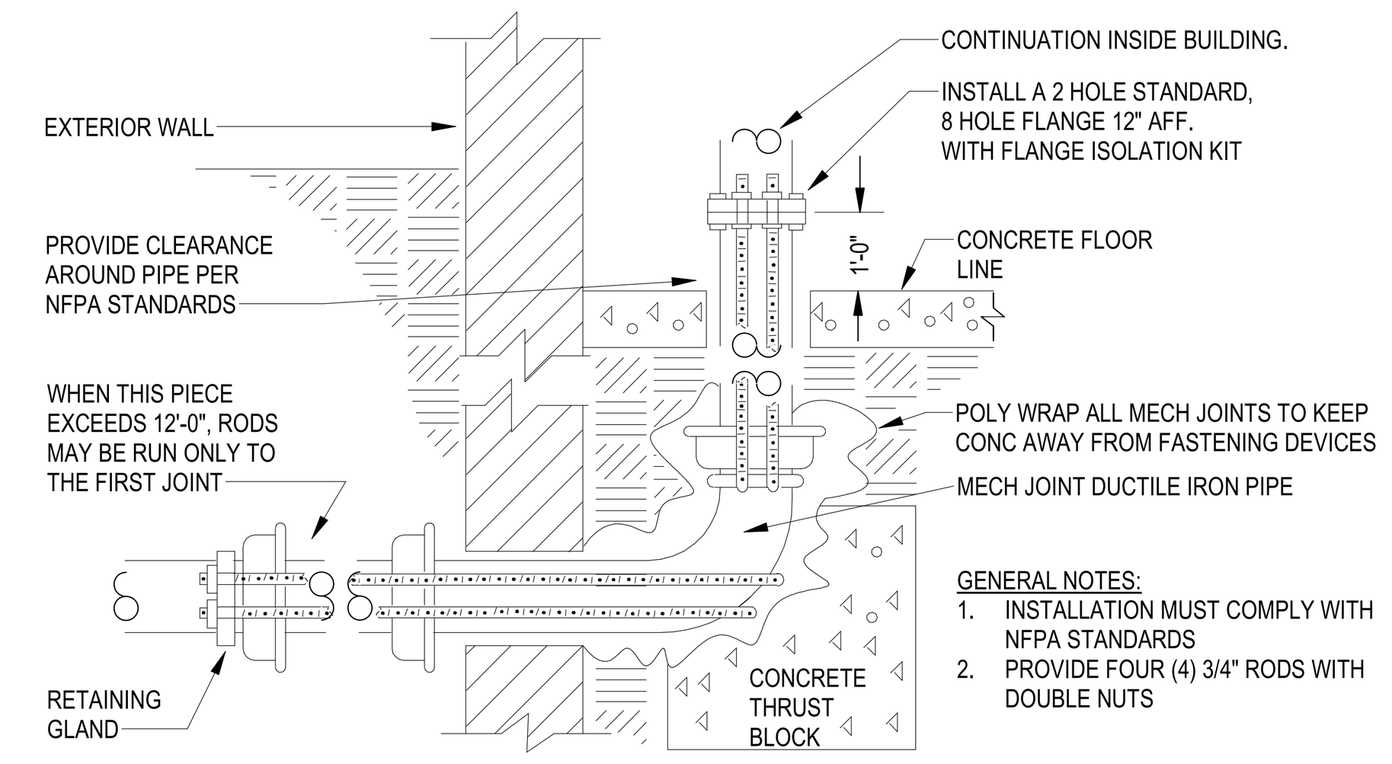
JOB	240015
DATE	02-28-2025
DRAWN	DP
SHEET	F-001



1 F-501 PLATFORM RISER ROOM DETAIL
NOT TO SCALE



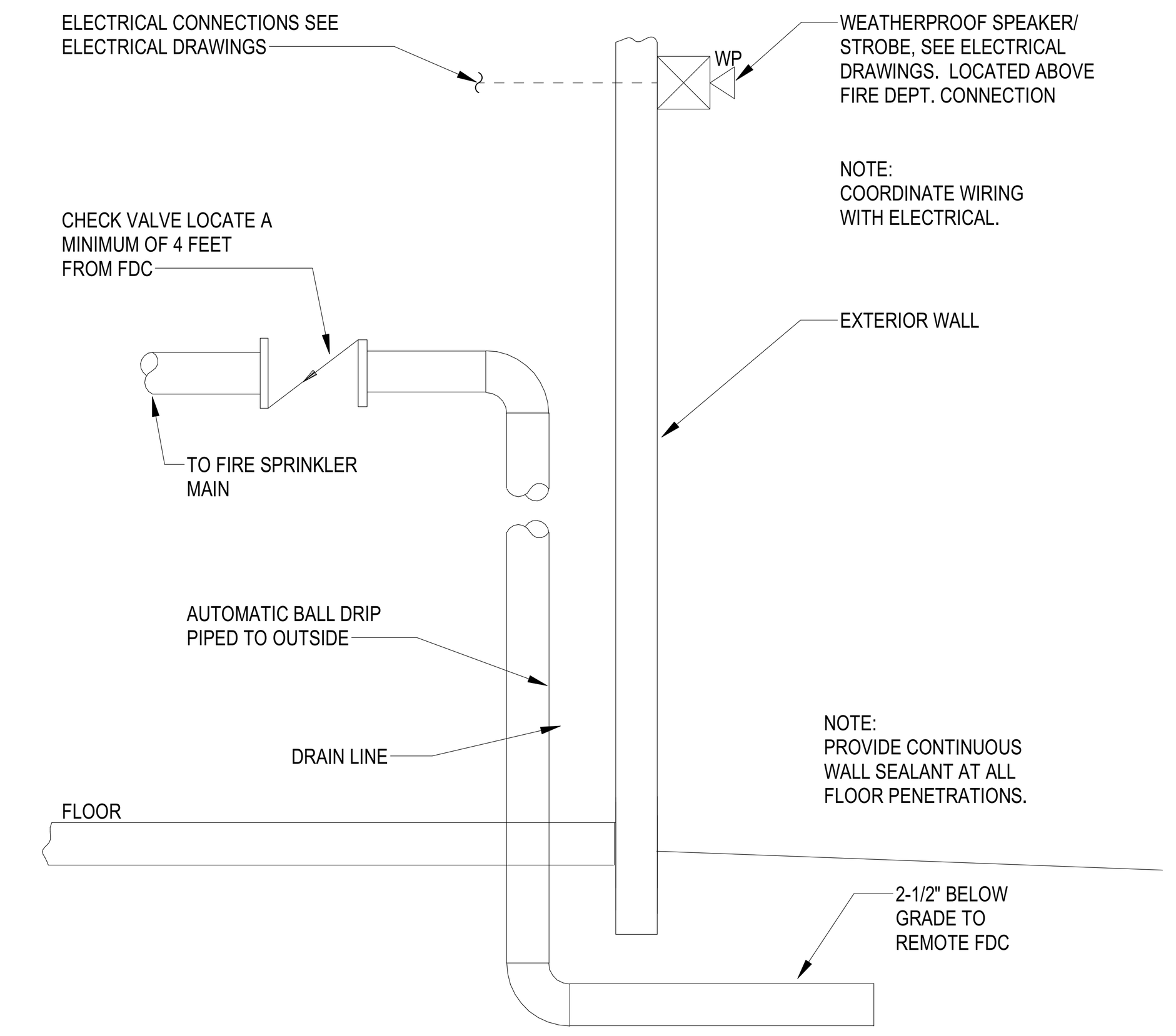
2 F-501 DEPOT RISER ROOM DETAIL
NOT TO SCALE



NOTES:
1. ACCEPTABLE ALTERNATIVE TO MECHANICAL JOINTS AND FITTINGS FOR LEAD-IN PIPING IS STAINLESS STEEL, SINGLE PIECE 90 DEGREE FITTING AS DESCRIBED IN SPECIFICATION.

2. THE TOP OF THE PIPE SHALL BE BURIED NOT LESS THAN ONE FOOT BELOW THE FROST LINE.

3 F-501 WATER SERVICE LINE EXTENSION DETAIL
NOT TO SCALE



4 F-501 FIRE DEPARTMENT CONNECTION DETAIL
NOT TO SCALE

Beekman Point ENGINEERING

NORTH CAROLINA PROFESSIONAL SEAL 046074 ENGINEER ANTHONY SHANE DUTTERA 02/28/2025

ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston-Salem, NC 27106 | Ph. 336-722-4447

NO	REVISION	DATE
0	ISSUE FOR CONSTRUCTION	02-28-2025

SPRING HOPE
RAILROAD DEPOT
Interior Renovation
101 SOUTH ASH STREET
SPRING HOPE, NORTH CAROLINA 27882

JOB	240015
DATE	02-28-2025
DRAWN	DP
SHEET	F-501

GENERAL PLAN SYMBOLS

1 / P-001 — SHEET NAME / SCALE	NUMBER OF DETAIL ON SHEET; NUMBER OF SHEET WHERE DETAIL APPEARS
1 (triangle)	PLAN REVISION NUMBER
1 (circle)	KEYNOTE SYMBOL
(break)	CONTINUATION SYMBOL
(symbol)	POINT WHERE NEW CONNECTS TO EXISTING
NAME / ---	ROOM NAME / NUMBER
(hatch)	AREA BEING DEMOLISHED
(crosshatch)	AREA NOT IN CONTRACT

ABBREVIATIONS

Ø	ROUND	LVR	LOUVER
ABV	ABOVE	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	M/A	MIXED AIR
AD	AREA DRAIN	MAX	MAXIMUM
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR
AFF	ABOVE FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MD	MOTORIZED DAMPER
ALT	ALTERNATE	MECH	MECHANICAL
AP	ACCESS PANEL	MFR	MANUFACTURER
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS
BLW	BELOW	MTR	MOTOR
BTU	BRITISH THERMAL UNITS	MU/A	MAKE-UP/AIR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NOISE CRITERIA
CAP	CAPACITY	NC	NORMALLY CLOSED
CB	CATCH BASIN	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NUMBER
CLG	CEILING	NO	NORMALLY OPEN
CO	CLEAN OUT	NTS	NOT TO SCALE
CW	COLD WATER	O	OXYGEN
D	DEGREE	O/A	OUTSIDE AIR
DB	DRY BULB	ORD	OVERFLOW ROOF DRAIN
DIA	DIAMETER	PD	PRESSURE DROP
DN	DOWN	PIV	POST INDICATOR VALVE
DW	DISTILLED WATER	PLBG	PLUMBING
EA	EACH	PRESS	PRESSURE
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
ELEC	ELECTRICAL	PSI	POUNDS PER SQUARE INCH
EQUIP	EQUIPMENT	PSIG	POUNDS PER SQUARE INCH GAUGE
EWC	ELECTRIC WATER COOLER	PWR	POWER
EWT	ENTERING WATER TEMPERATURE	R	DUCT RISER
E/A	EXHAUST AIR	R/A	RETURN AIR
EXIST	EXISTING	RCP	RADIANT CEILING PANEL
F	DEGREES FAHRENHEIT	RD	ROOF DRAIN
FCO	FLOOR CLEAN OUT	REC	RECESSED
FD	FLOOR DRAIN	RED	REDUCER
FDC	FIRE DEPARTMENT CONNECTION	RH	RELATIVE HUMIDITY
FL	FLOOR	RL/A	RELIEF AIR
FO	FUEL OIL	RM	ROOM
FOV	FUEL OIL VENT	RPM	REVOLUTIONS PER MINUTE
FOR	FUEL OIL RETURN	RW	RAIN WATER
FOS	FUEL OIL SUPPLY	SF	SQUARE FOOT
FPM	FEET PER MINUTE	S/A	SUPPLY AIR
FS	FLOOR SINK	SAN	SANITARY
FT	FOOT/FEET	SF	SQUARE FOOT
FTR	FIN TUBE RADIATION	SD	SMOKE DAMPER
GAL	GALLON	SM	SURFACE MOUNT
GF	GAS-FIRED	SP	STANDPIPE
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	STM	STEAM
GW	GREASE WASTE	T	THERMOSTAT
HB	HOSE BIB	TD	TEMPERATURE DROP
HP	HORSE POWER	TDR	TRENCH DRAIN
HTG	HEATING	TEMP	TEMPERATURE
HTR	HEATER	TYP	TYPICAL
HW	HOT WATER	UG	UNDERGROUND
HYD	HYDRANT	VAC	VACUUM
ID	INDIRECT	V	VENT
IN	INCH	VAV	VARIABLE AIR VOLUME
INV	INVERT	VENT	VENTILATION
LB	POUND	VTR	VENT THROUGH ROOF
LB/HR	POUNDS PER HOUR	W	WASTE
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB
LP	LOW PRESSURE	WCO	WALL CLEAN OUT
LPG	LIQUEFIED PETROLEUM GAS	WH	WALL HYDRANT

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK
ACCU	AIR COOLING CONDENSING UNIT	EWH	ELECTRIC WATER HEATER
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT
AS	AIR SEPARATOR	FP	FIRE PUMP
B	BOILER	GI	GREASE INTERCEPTOR
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR
CT	COOLING TOWER	HWP	HEATING WATER PUMP
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
EF	EXHAUST FAN	UH	UNIT HEATER
EDC	ELECTRIC DUCT COIL	WH	WATER HEATER

* NOTE *
ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

PLUMBING SYMBOLS

2"	NOMINAL PIPE SIZE
	ABOVE GROUND PIPING
1/8" / 12" SLOPE	BELOW GROUND PIPING PIPE SLOPE (When Applicable)
(E)	EXISTING PIPE TO REMAIN
	PIPE TO BE DEMOLISHED
CW	DOMESTIC - COLD WATER
NPW	NON-POTABLE WATER
S-CW	SOFT - COLD WATER
F-CW	FILTERED - COLD WATER
RO	REVERSE OSMOSIS WATER
HW	DOMESTIC - HOT WATER
HW 140°	140° DOMESTIC - HOT WATER
HW-R	HOT WATER - RECIRCULATION
HW-R 140°	140° HOT WATER - RECIRCULATION
SS	SANITARY WASTE
V	SANITARY VENT
WV	SANITARY WET VENT
CWV	COMBINATION DWV
CD	CONDENSATE DRAIN
ID	INDIRECT DRAIN
GW	GREASE WASTE
GV	GREASE VENT
OW	OIL WASTE
OV	OIL VENT
PD	PUMP DISCHARGE
SHWR	SOLAR HOT WATER - RETURN
SHWS	SOLAR HOT WATER - SUPPLY
SD	STORM DRAIN
SDO	STORM DRAIN - OVERFLOW
CA	COMPRESSED AIR
NG	NATURAL GAS
LP	LIQUID PROPANE
	PIPE RISE / DROP

PIPE ACCESSORY NOTES

4" FCO	CLEANOUT
2" BACKWATER	SWING CHECK
2" CHECK	CHECK VALVE
2" CHECK	ALTERNATE CHECK VALVE
2" BALANCE	BALANCING VALVE
2" CIRC	CIRCUIT SETTER
2" GATE	GATE VALVE
2" QUICK	QUICK OPENING VALVE
2" S/O	BALL VALVE
2" STRAIN	FLUID STRAINER
1" GAS-CNTRL	EMERGENCY GAS SHUTOFF
1" PLUG	PLUG VALVE
1" GAS COCK	GAS SHUTOFF COCK
1" REG	GAS REGULATOR
1" T/V	THERMOSTATIC VALVE
PRIMER	TRAP PRIMER
2" M-CNTRL	ELEC. CONTROL VALVE
TMV-XT/P	MIXING VALVE
TMVEM	EMERGENCY MIXER
2" PRV	PRESSURE REDUCING VALVE
2" METER	WATER METER
1 1/2" METER	IRRIGATION METER
	DOUBLE CHECK VALVE
	REDUCED PRESSURE ZONE

PLUMBING FIXTURE NOTES

Floor Drain 0" FD-1 2 DFU	DESIGN SIZE IDENTITY TYPE DRAINAGE FIXTURE UNITS
2" FD-3	FLOOR DRAIN W/ DEEP SEAL TRAP
2" FD-3P	FLOOR DRAIN W/ TRAP PRIMER "P" INDICATES PRIMER CONNECTION
2" FD-7	FLOOR DRAIN W/ INTEGRAL CLEANOUT
3" AD-1	AREA DRAIN (NO TRAP)
6" DD-1	DECK DRAIN
3" HD-1	HUB DRAIN (FUNNEL TYPE)
3" FS-4	FLOOR SINK
8" SD-12	ROOF DRAIN
6" SD-1 2,000 SF	COMBINATION DRAIN RAINFALL SURFACE AREA

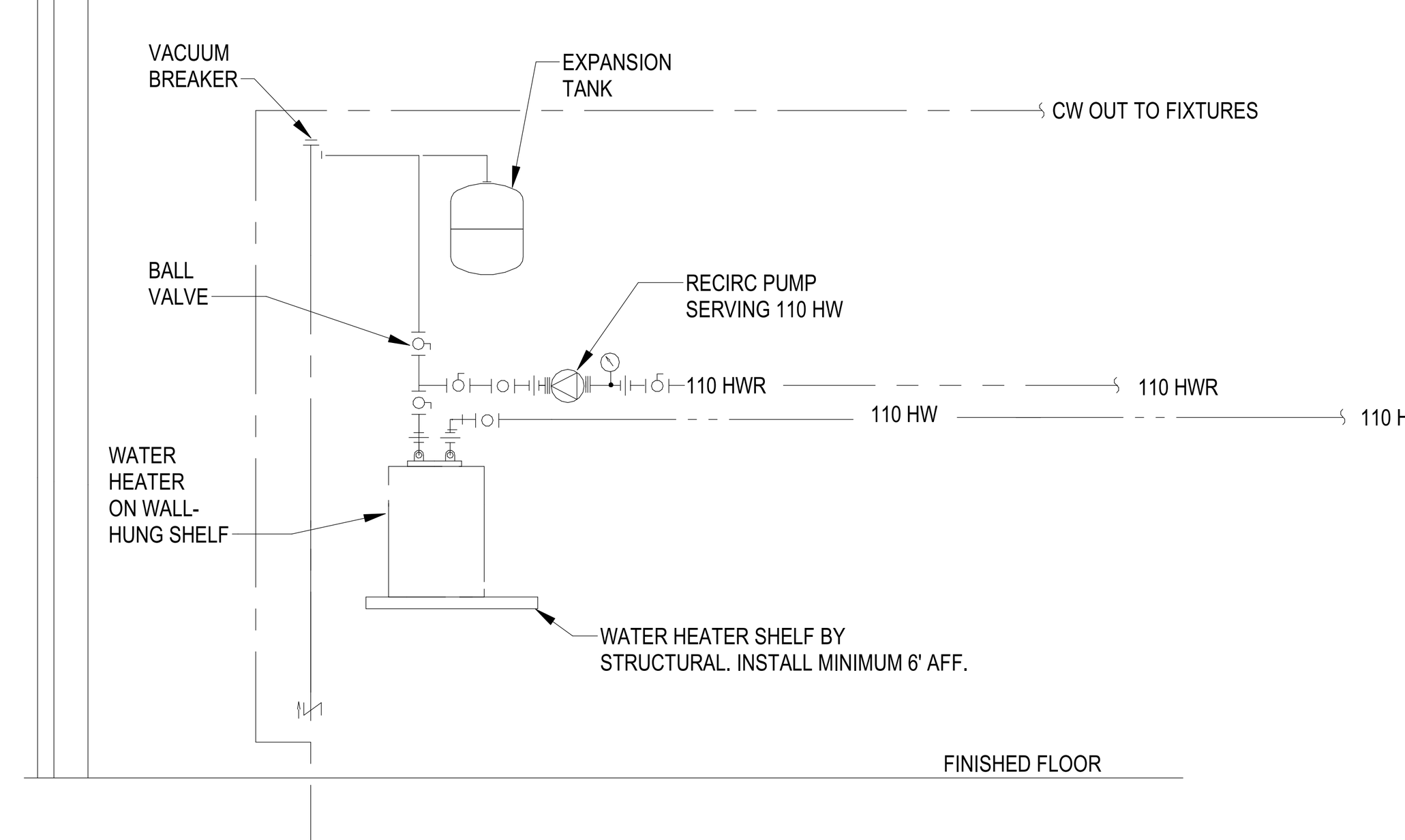
PLUMBING GENERAL NOTES

1. BEFORE STARTING ANY WORK, VERIFY THE ADEQUACY, LOCATION, SIZE, AND AVAILABILITY OF ALL UTILITIES CONCERNED, INCLUDING SEWER INVERT ELEVATIONS, AND WATER PRESSURE.
2. THESE PLANS ARE DIAGRAMMATIC IN NATURE AND SHALL NOT BE SCALED TO DETERMINE THE EXACT LOCATION OR EXTENT OF THE WORK. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION. QUANTITY OF ROUGH-INS SHOWN ON THE FLOOR PLANS MATCH SCHEDULED FIXTURE MODELS.
3. THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES FOR CLEARANCES AND WORK INCLUDED PRIOR TO START OF WORK.
4. ALL VENTS THRU ROOF SHALL BE MINIMUM OF TEN FEET FROM ANY FRESH AIR INTAKES.
5. CLEANOUTS SHALL BE INSTALLED PER CODE REQUIREMENTS.
6. PENETRATIONS OF RATED ASSEMBLIES SHALL BE FIRE STOPPED. FIRE STOPPING SHALL BE AN APPROVED MATERIAL AND SHALL BE U.L. LISTED.
7. COORDINATE WITH ELECTRICAL SECTION PRIOR TO ORDERING EQUIPMENT FOR AVAILABLE VOLTAGE AT EQUIPMENT LOCATIONS.
8. ALL FIXTURES SHALL BE PROTECTED DURING CONSTRUCTION FROM ANY DAMAGE. REFINISHED FIXTURES WILL NOT BE ACCEPTABLE UNDER ANY CONDITIONS.
9. HANDICAPPED USE PLUMBING FIXTURES SHALL BE MOUNTED AT REQUIRED HEIGHTS AND WITH ALL RELATED ACCESSORIES AS REQUIRED BY THE ADMINISTRATIVE AUTHORITIES.
10. ALL DOMESTIC WATER FIXTURES, PIPING VALVES, ETC. IN POTABLE WATER SYSTEMS SHALL COMPLY WITH HEALTH AND SAFETY CODES.
11. ALL HOSE BIBBS SHALL HAVE AN APPROVED VACUUM BREAKER.
12. PROVIDE FLASHING AND/OR COUNTER FLASHING OF ALL EXTERIOR PENETRATIONS.
13. UNLESS SPECIFICALLY SHOWN ON THESE PLANS, NO STRUCTURAL MEMBER SHALL BE CUT, DRILLED, NOTCHED OR WELDED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER.
14. WATER SUPPLY PIPING BELOW GRADE UNDER CONCRETE SLABS SHALL BE INSTALLED SUCH THAT NO JOINTS ARE LOCATED BENEATH THE SLAB. WHERE NECESSARY, PROVIDE OFFSET UP IN FINISHED WALL OR SIMILAR TO ACCOMMODATE JOINTS. PROVIDE LOCKING ACCESS PANEL UNLESS DIRECTED OTHERWISE. COORDINATE FINISH WITH ARCHITECT.
15. HANGERS, CLAMPS AND GUIDES FURNISHED FOR SUPPORT OF NON-METALLIC PIPES SHALL BE PADDED WITH 1/8" THICK RUBBER, NEOPRENE, OR SOFT RESILIENT CLOTH.
16. WATER CLOSETS FOR PUBLIC USE ARE TO BE ELONGATED BOWLS WITH OPEN FRONT TOILET SEAT.
17. WASTE & VENT: EACH SECTION SHALL BE FILLED WITH WATER, BUT NO SECTION SHALL BE TESTED WITH LESS THAN A TEN-FOOT HEAD OF WATER. THE WATER SHALL BE KEPT IN THE SYSTEM, OR IN THE PORTION UNDER TEST, FOR NOT LESS THAN FIFTEEN MINUTES BEFORE INSPECTION STARTS.
18. WATER: UPON COMPLETION OF A SECTION OR OF THE ENTIRE HOT AND COLD WATER SUPPLY SYSTEM, IT SHALL BE TESTED AND PROVED TIGHT UNDER A WATER PRESSURE NOT LESS THAN THE WORKING PRESSURE UNDER WHICH IT IS TO BE USED. THE WATER USED FOR TESTS SHALL BE OBTAINED FROM A POTABLE SOURCE OF SUPPLY. EXCEPT FOR PLASTIC PIPING, A FIFTY PSI AIR PRESSURE SHALL BE PERMITTED TO BE SUBSTITUTED FOR THE WATER TEST. IN EITHER METHOD OF TEST, THE PIPING SHALL WITHSTAND THE TEST WITHOUT LEAKING FOR A PERIOD OF NOT LESS THAN FIFTEEN MINUTES.
19. THE DOMESTIC WATER PIPING SYSTEM SHALL BE FLUSHED WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT THE POINTS OF OUTLET. THE SYSTEM SHALL BE DISINFECTED WITH CHLORINE PER THE REQUIREMENTS OF AWWA C651. FOLLOWING DISINFECTION THE SYSTEM SHALL BE FLUSHED WITH CLEAN POTABLE WATER UNTIL THE CHLORINE IS PURGED FROM THE SYSTEM.

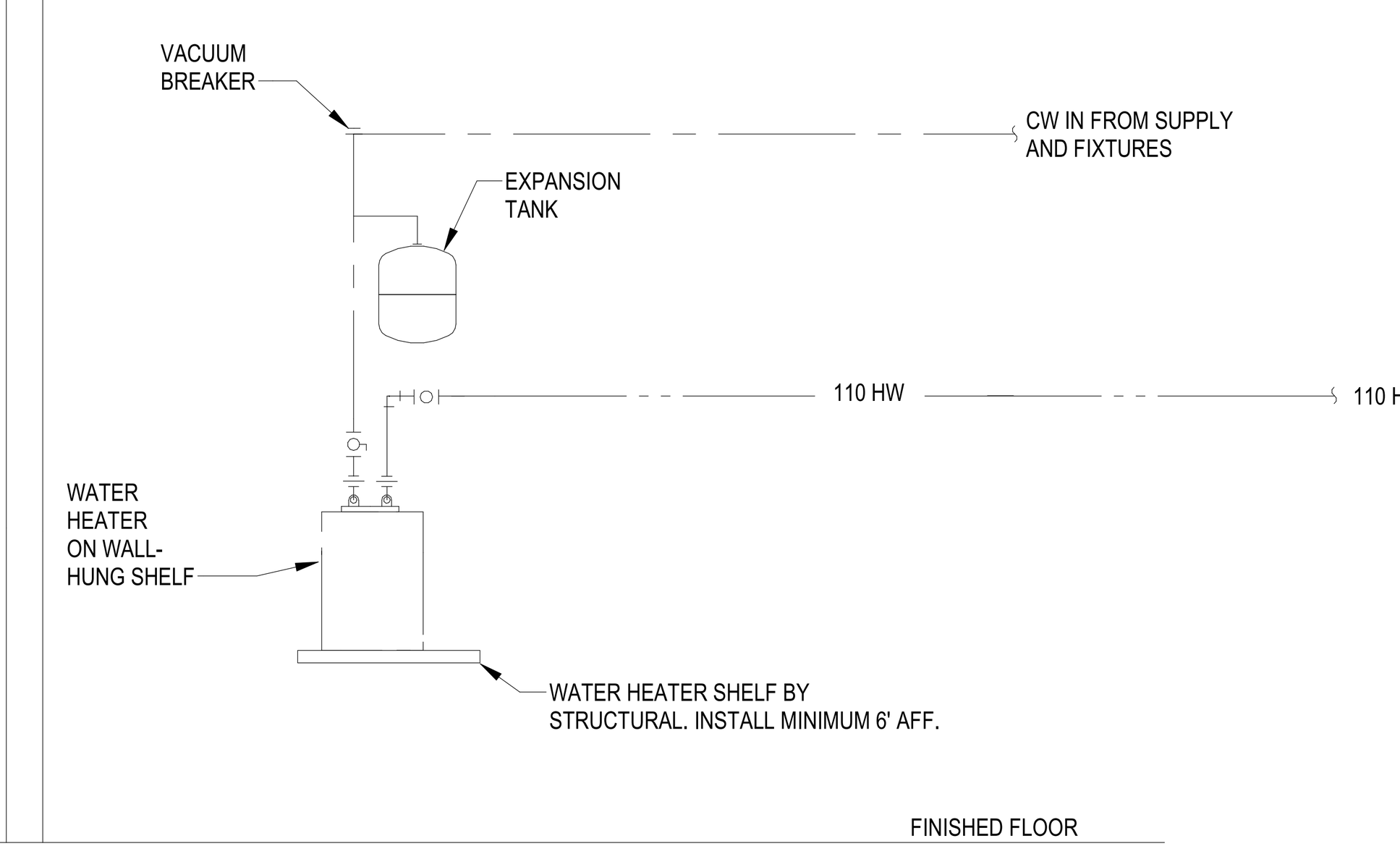
THE DEPOT BUILDING IS PART OF THE SPRING HOPE HISTORIC DISTRICT AND IS LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES.

PLUMBING PIPING SPECIFICATIONS

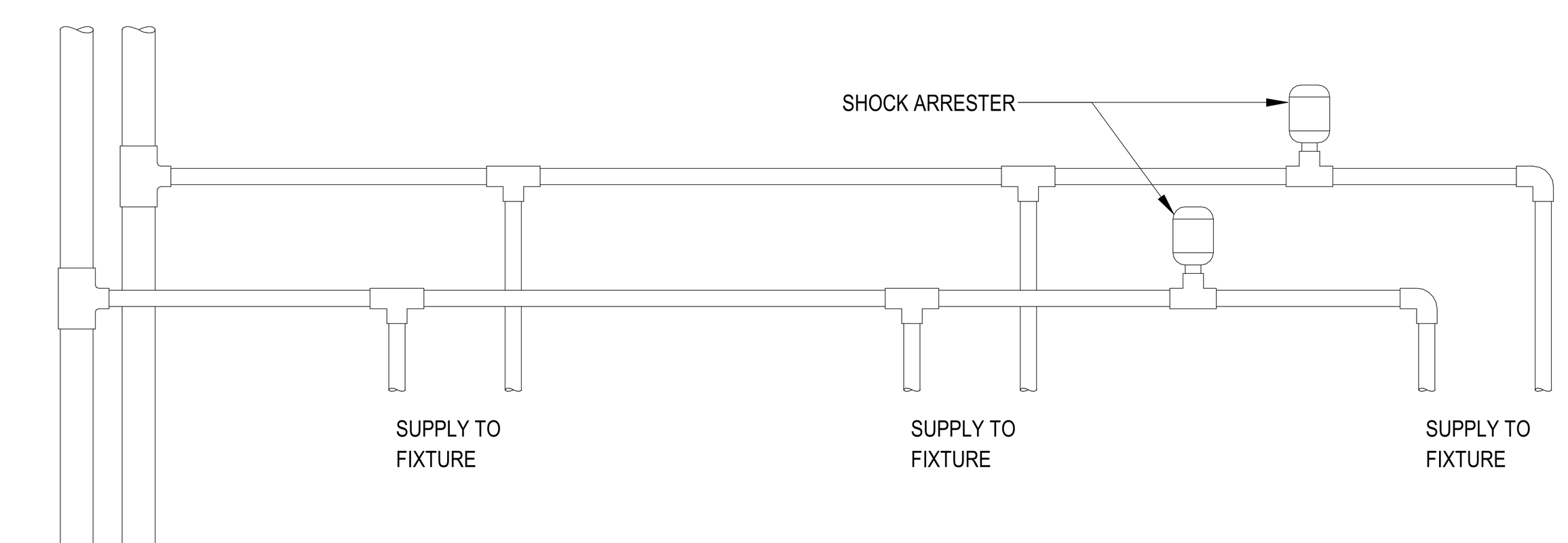
1. DOMESTIC WATER:
   A. UNDERGROUND WATER PIPING SHALL BE TYPE K COPPER.
   B. COLD AND HOT WATER VALVES 2 INCHES AND SMALLER SHALL BE RATED FOR POTABLE, BALL, MSS SP-110, BALL VALVE SHALL BE FULL PORT THREE PIECE OR TWO PIECE WITH A UNION DESIGN WITH ADJUSTABLE STEM PACKAGE. THREADED STEM 150 PSIG AND A CWP RATING OF 600 PSIG. THE BODY MATERIAL SHALL BE BRONZE ASTM B584, ALLOY C844. THE ENDS SHALL BE NON-LEAD SOLDER.
   C. COLD WATER PIPING SHALL BE INSULATED WITH 1" THICK GLASS FIBER ('K' OF 0.24 AT 75F) WITH VAPOR BARRIER. HOT WATER PIPING SHALL BE INSULATED WITH 1-1/2" THICK GLASS FIBER ('K' OF 0.24 AT 75F) WITHOUT VAPOR BARRIER.
   D. ALL CHECK VALVES IN DHR PIPING SHALL BE SPRING TYPE CHECK VALVES.
   E. PEX-A PIPING ABOVE GROUND SHALL BE CROSS-LINKED POLYETHYLENE (PEX) TUBING CONFORMING TO ASTM F876 AND ASTM F877. ALL DCW PIPING SHALL BE BLUE AND ALL DHW PIPING SHALL BE RED. INSTALL ALL PIPING IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
   F. COLD AND HOT WATER VALVES IN PEX-A SYSTEMS SHALL HAVE PEX PRESS FITTINGS AND SHALL BE MANUFACTURED FROM UNS C83600, C87700 OR C87710 BRONZE AND MEET THE REQUIREMENTS OF ASTM F877 TESTED AS A SYSTEM WITH PEX TUBING. PEX ADAPTER FITTINGS SHALL CONFORM TO ONE OF THE FOLLOWING ASTM STANDARDS; F877, F1807, F2159, OR ASME B1.20.2 AND BE LISTED TO THE CSA B137.5. THE ADAPTER FITTINGS SHALL MATE TO NPT THREADS, COPPER TUBING, COPPER FITTINGS, OR PRESS FITTINGS. THE TUBING AND FITTINGS SHALL BE CERTIFIED IN ACCORDANCE WITH ANSI/ANSF 14/61 TO VERIFY SUITABILITY TO TRANSPORT POTABLE WATER.
   G. PEX TUBING SHALL BE SUPPORTED EVERY 32" HORIZONTALLY WITH MANUFACTURER APPROVED STAINLESS STEEL SUSPENSION CLIPS OR PLASTIC INSULATORS. PEX TUBING MUST BE SUPPORTED AT EACH FLOOR OR CEILING PENETRATION AND EVERY FOUR FEET IN BETWEEM.
2. WASTE AND VENT:
   A. ALL WASTE, DRAIN, AND VENT PIPING SHALL BE STANDARD WEIGHT, TYPE 1, PVC INSTALLED IN ACCORDANCE WITH ASTM D2321.
   B. ABOVE GRADE WASTE, DRAIN, AND VENT PIPING INSTALLED IN RETURN AIR PLENUMS SHALL BE SERVICE WEIGHT TAR-COATED, HUBLESS, CAST IRON SOIL PIPE WITH HUBLESS FITTINGS FABRICATED IN ACCORDANCE WITH ASTM A74 AND ASTM A888. PROVIDE WITH ASTM C564 NEOPRENE SEALING SLEEVE AND STAINLESS STEEL CLAMP ASSEMBLY.



1 P-001 SHELF WATER HEATER DETAIL - DEPOT
NOT TO SCALE



2 P-001 SHELF WATER HEATER DETAIL - PLATFORM
NOT TO SCALE

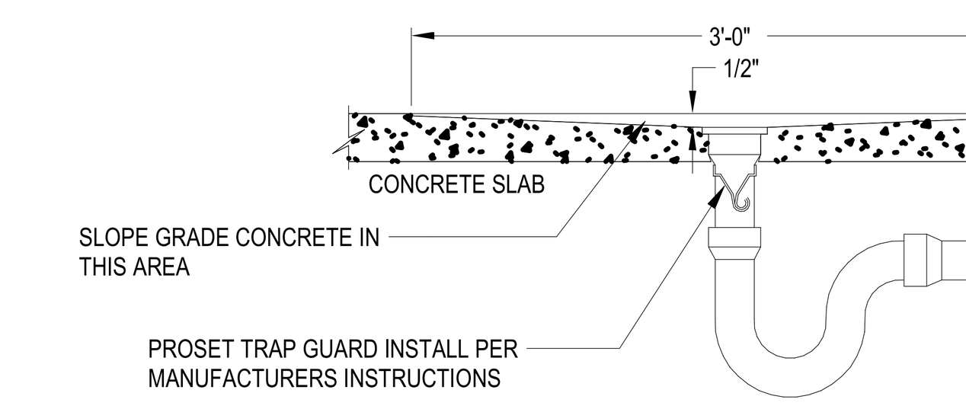


SHOCK ARRESTER SCHEDULE

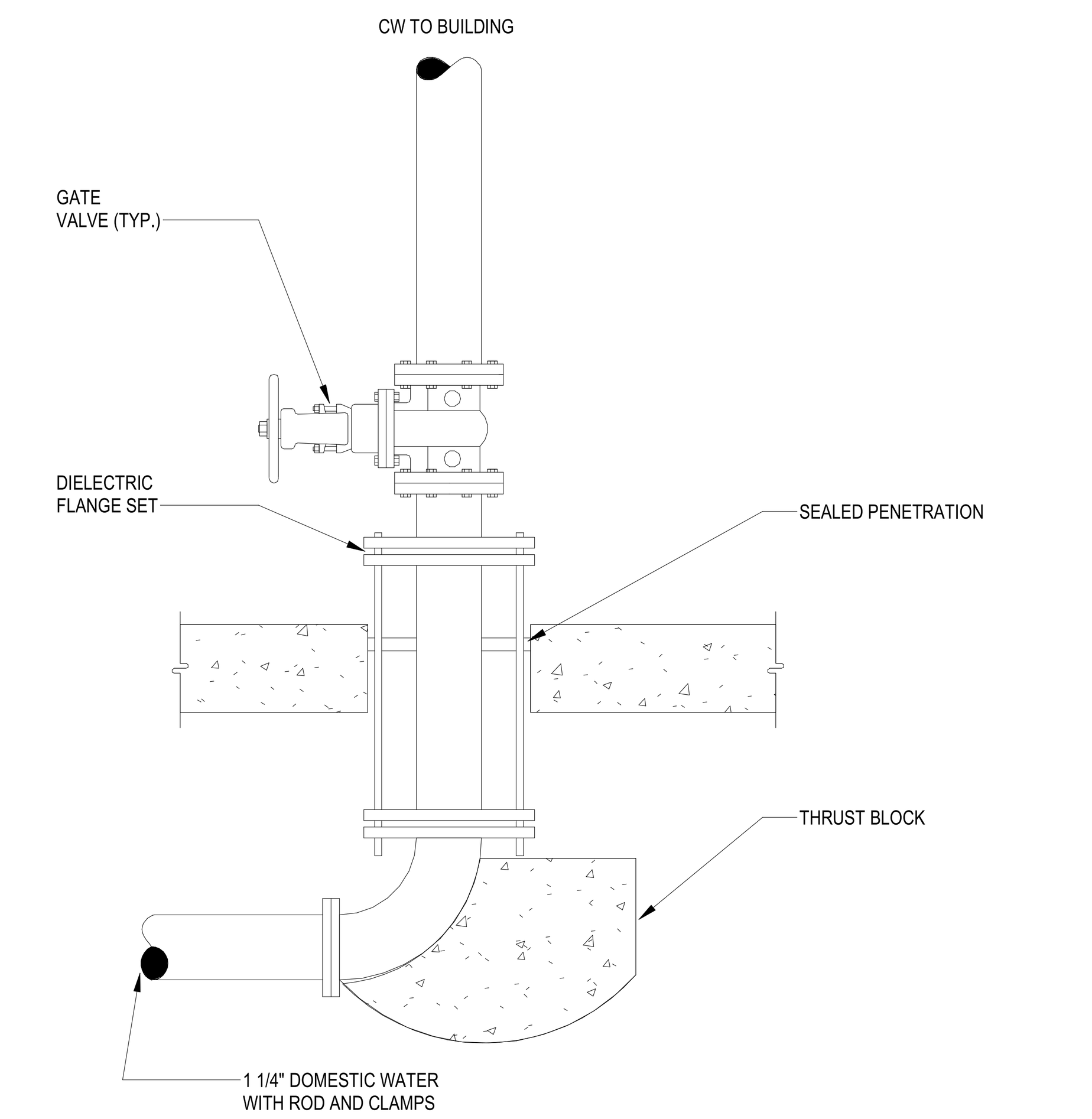
ZURN SHOKTROL NO.	J.R.SMITH HYDROTROL NO.	JOSAM ABSORBOTRON NO.	FIXTURE UNITS
Z-1700 SERIES #100	5005	75001	1-11
Z-1700 SERIES #200	5010	75002	12-32
Z-1700 SERIES #300	5020	75003	33-60
Z-1700 SERIES #400	5030	75004	61-113
Z-1700 SERIES #500	5040	75005	114-154

NOTES:
1. ARRESTERS SHALL BE ACCESSIBLE FOR REPLACEMENT.
2. APPROVED ARRESTERS SHALL BE INSTALLED ON WATER DISTRIBUTION SYSTEMS IN WHICH QUICK CLOSING VALVES ARE INSTALLED. MULTIPLE ARRESTOR INSTALLATIONS SHALL BE AS PER P.D.I. STANDARDS.

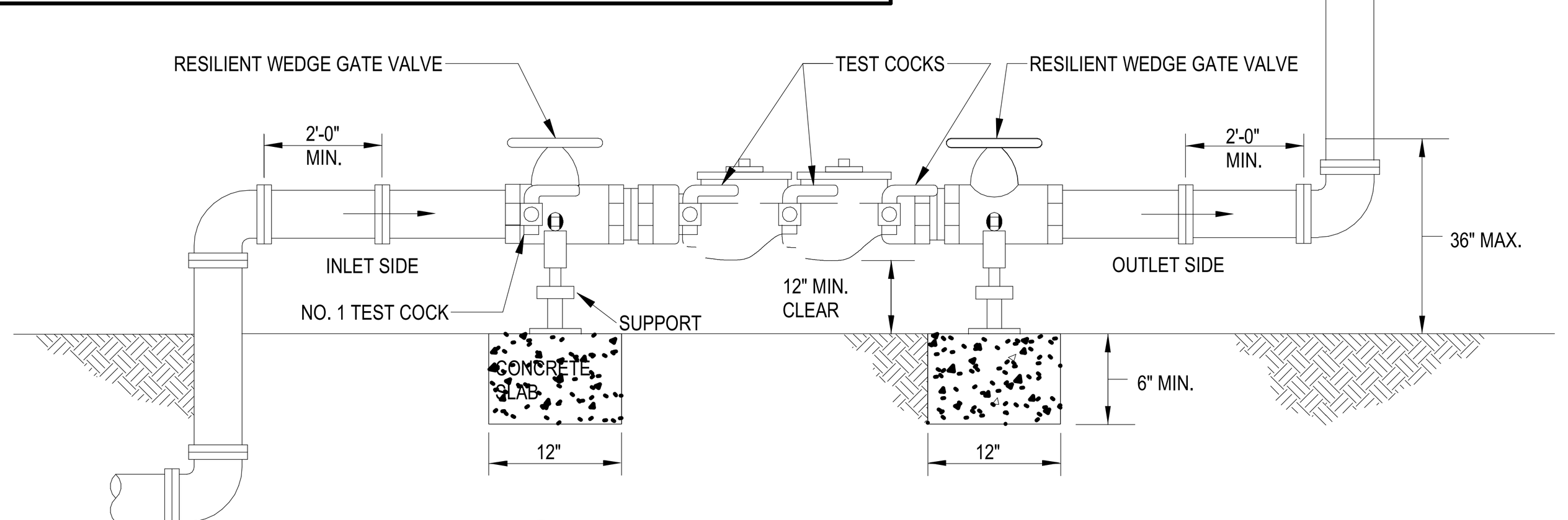
4 P-001 SHOCK ARRESTER INSTALLATION DETAIL
NOT TO SCALE



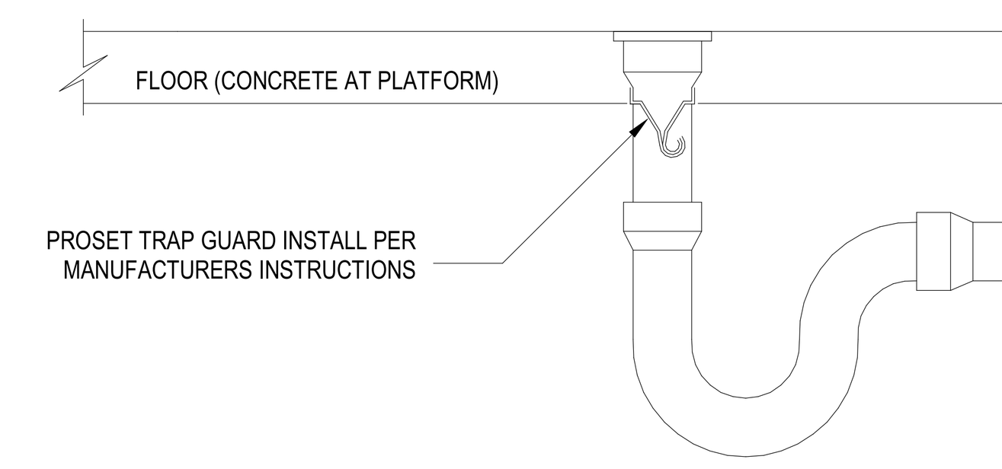
7 P-001 FLOOR DRAIN WITH TRAP GUARD DETAIL
NOT TO SCALE



5 P-001 WATER SERVICE ENTRANCE DETAIL
NOT TO SCALE



6 P-001 DOUBLE CHECK VALVE ASSEMBLY DETAIL
NOT TO SCALE



3 P-001 FLOOR DRAIN DETAIL
NOT TO SCALE

PLUMBING SHEET INDEX

SHEET	NAME	REV	DESCRIPTION	DATE
P-001	PLUMBING TITLE SHEET	0	ISSUE FOR CONSTRUCTION	02-28-2025
P-101	PLUMBING PLAN	0	ISSUE FOR CONSTRUCTION	02-28-2025
P-401	ENLARGED PLUMBING PLANS	0	ISSUE FOR CONSTRUCTION	02-28-2025
P-402	ENLARGED PLUMBING PLANS	0	ISSUE FOR CONSTRUCTION	02-28-2025

ELECTRIC WATER HEATER SCHEDULE

IDENTITY	DESCRIPTION	MANUFACTURER	MODEL	PRODUCT TYPE	DOMESTIC PIPING SIZE	TEMP. RANGE COLD	TEMP. RANGE HOT	TEMP. RISE	RECOVERY CAPACITY	STORAGE CAPACITY	UNIT HAS ELECTRIC HEAT	ELECTRIC HEAT RATING	ELECTRIC HEAT LOAD	ELECTRIC HEAT ELEMENT(S)	ELECTRICAL VOLTAGE	ELECTRICAL PHASE	SPECIFICATION
WH-01	WATER HEATER	AO SMITH	DEL-20	STORAGE	1"	50 °F	120 °F	70 °F	24 GPH	20 gal	Yes	6.0 kW	16.7 A	1	208 V	3	PROVIDE EXPANSION TANK WITH MINIMUM 1.0 GALLON ACCEPTANCE VOLUME. TOTAL EQUIPMENT WEIGHT 250 POUNDS.
WH-02	WATER HEATER	AO SMITH	DEL-20	STORAGE	3/4"	50 °F	120 °F	70 °F	24 GPH	20 gal	Yes	6.0 kW	16.7 A	1	208 V	3	PROVIDE EXPANSION TANK WITH MINIMUM 1.0 GALLON ACCEPTANCE VOLUME. TOTAL EQUIPMENT WEIGHT 250 POUNDS.

FLOOR DRAIN SCHEDULE

TYPE IDENTITY	MANUFACTURER	MODEL	PRODUCT TYPE	BODY MATERIAL	STRAINER TYPE	DRAIN-WASTE-VENT VENT CONNECTION	DRAIN SIZE	DWV TEE	VENT SIZE	PRIMER TAP INCLUDE	PRODUCT SPECIFICATION
FD-1	ZURN	EZ-5	ROUND STRAINER	CAST IRON	NICKEL BRONZE	Yes	3"	3"	2"	No	EPOXY COATED CAST IRON FLOOR DRAIN, REVERSIBLE CLAMPING COLLAR WITH PRIMARY & SECONDARY WEEPHOLES, ADJUSTABLE ROUND HEEL PROOF NICKEL BRONZE STRAINER, AND NO HUB OUTLET.

PLUMBING FIXTURE SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	PRODUCT TYPE	INSTALLATION TYPE	MATERIAL DESCRIPTION	FINISH	TRIM MANUFACTURER M/N	TRIM TYPE	DOMESTIC CONNECTIONS COLD WATER	HOT WATER	PIPING SIZE(S)	DRAIN-WASTE-VENT DRAIN SIZE	VENT SIZE	PRODUCT SPECIFICATION
HB-1	HOSE BIBB	WOODFORD	24	HOSE BIBB	WALL HUNG	STAINLESS STEEL	CHROME	INCLUDED		Yes	No	1/2"			OPERATING KEY; LEAD-FREE CERAMIC DISC; 3/4" MALE HOSE CONX; ANTI-SIPHON VACUUM BREAKER. INSTALL ON END OF PIPE.
JS-1	JANITOR SINK	FIAT	TSB-200	MOP BASIN	FLOOR SET	MOLDED STONE	MOLDED STONE	FIAT / 830AA	MANUAL	Yes	Yes	1/2"	2"	2"	24"x24"x12"; PROVIDE FAUCET MODEL 830AA; HOSE AND BRACKET MODEL 832AA; STRAINER DRAIN AND P-TRAP.
LAV-1	LAVATORY	ZURN	Z5350	WALL HUNG	CONCEALED HANGER	WHITE VITREOUS CHINA	WHITE	ZURN / Z8946-1-NT	MANUAL	Yes	Yes	1/2"	1 1/2"	2"	WHITE; VITREOUS CHINA; FAUCET Z7440-XL, Z8743-PC GRID DRAIN; Z8700-PC CAST BRASS P-TRAP WITH CLEANOUT, Z8804 ANGLE STOP VALVES.
LAV-1A	LAVATORY	ZURN	Z5350	WALL HUNG ADA	CONCEALED HANGER	WHITE VITREOUS CHINA	WHITE	ZURN / Z8946-1-NT	MANUAL	Yes	Yes	1/2"	1 1/2"	2"	WHITE; VITREOUS CHINA; FAUCET Z7440-XL, Z8743-PC GRID DRAIN; Z8700-PC CAST BRASS P-TRAP WITH CLEANOUT, Z8804 ANGLE STOP VALVES. MOUNT AT ADA COMPLIANT HEIGHT.
LAV-2A	LAVATORY	ACORN	ELPS1	WALL HUNG ADA	CONCEALED HANGER	STAINLESS STEEL	STAINLESS STEEL	INCLUDED	MANUAL	Yes	Yes	1/2"	1 1/2"	2"	STAINLESS STEEL; SW000-F50 FAUCET; DRAIN INCLUDED; SW000-PT P-TRAP, ZURN Z8804 ANGLE STOP VALVES. MOUNT AT ADA COMPLIANT HEIGHT.
S-1	SINK	ELKAY	LR2522SC	SINGLE BOWL	DROP-IN	STAINLESS STEEL	STAINLESS STEEL	INCLUDED	MANUAL	Yes	Yes	1/2"	1 1/2"	2"	SINGLE COMPARTMENT, ADA COMPLIANT, SELF-RIMMING, 18 GAUGE. DOUBLE LEVER SWIVEL FAUCET. INCLUDED BASKET STRAINER, P-TRAP, TAILPIECES, SUPPLIES AND STOPS. INSULATE WATER AND WASTE TO MEET ADA REQUIREMENTS. MOUNT AT ADA COMPLIANT HEIGHT.
S-2	SINK	ELKAY	LR2522SC	SINGLE BOWL	DROP-IN	STAINLESS STEEL	STAINLESS STEEL	INCLUDED	MANUAL	Yes	Yes	1/2"	1 1/2"	2"	SINGLE COMPARTMENT, ADA COMPLIANT, SELF-RIMMING, 18 GAUGE. DOUBLE LEVER SWIVEL FAUCET. INCLUDED BASKET STRAINER, P-TRAP, TAILPIECES, SUPPLIES AND STOPS. INSULATE WATER AND WASTE TO MEET ADA REQUIREMENTS. MOUNT AT ADA COMPLIANT HEIGHT.
U-1A	URINAL	ZURN	Z5758	WALL HUNG ADA	WALL HUNG	WHITE VITREOUS CHINA	WHITE	Z6003AV	MANUAL	Yes	No	3/4"	2"	2"	WALL HUNG URINAL WITH WASHOUT ACTION, TOP SPUD, SIZE 18" WITH INTEGRAL EXTENDED SHIELDS SUPPORTED BY THROUGH GOING BOLTS AND C.P. NUTS. MANUAL ACTIVATED FLUSHOMETER. MOUNT AT ADA COMPLIANT HEIGHT.
U-2A	URINAL	ACORN	1709HEU-FVL	WALL HUNG ADA	WALL HUNG	STAINLESS STEEL	STAINLESS STEEL	INCLUDED	MANUAL	Yes	No	3/4"	2"	2"	WALL HUNG HIGH EFFICIENCY URINAL, TOP SPUD, SIZE 17" TO COMPLY WITH ANSI, ADA, AND UFAS REQUIREMENTS. MANUAL LEVER HANDLE FLUSH VALVE (-FVL) ACTIVATED. MOUNT AT ADA COMPLIANT HEIGHT.
WC-1	WATER CLOSET	AMERICAN STANDARD	215FC.004	TANK	FLOOR SET	WHITE VITREOUS CHINA	WHITE	4188A.064	COVER	Yes	No	1/2"	3"	2"	ELONGATED FLOOR MOUNTED TANK TYPE WATER CLOSET, WITH CHURCH 295CT ELONGATED OPEN FRONT SEAT. WITH TANK COVER LOCKING DEVICE, PROVIDE A 1/4" BRASS BALL VALVE AT WALL CONNECTION.
WC-1A	WATER CLOSET	AMERICAN STANDARD	215FC.004	TANK	FLOOR SET	WHITE VITREOUS CHINA	WHITE	4188A.064	COVER	Yes	No	1/2"	3"	2"	ELONGATED FLOOR MOUNTED TANK TYPE WATER CLOSET, WITH CHURCH 295CT ELONGATED OPEN FRONT SEAT. WITH TANK COVER LOCKING DEVICE, PROVIDE A 1/4" BRASS BALL VALVE AT WALL CONNECTION. MOUNT AT ADA COMPLIANT HEIGHT.
WC-2	WATER CLOSET	SANITAL	SN-T112A-98	TANK	FLOOR SET	STAINLESS STEEL	STAINLESS STEEL	INCLUDED	MANUAL	Yes	No	1/2"	3"	2"	ELONGATED FLOOR MOUNTED TANK TYPE WATER CLOSET, WITH INCLUDED ELONGATED OPEN FRONT SEAT. LH FLUSH LEVER. PROVIDE A 1/4" BRASS BALL VALVE AT WALL CONNECTION, SCREWED IN TANK COVER.
WC-2A	WATER CLOSET	SANITAL	SN-T112A-98	TANK	FLOOR SET	STAINLESS STEEL	STAINLESS STEEL	INCLUDED	MANUAL	Yes	No	1/2"	3"	2"	ELONGATED FLOOR MOUNTED TANK TYPE WATER CLOSET, WITH INCLUDED ELONGATED OPEN FRONT SEAT. LH FLUSH LEVER. PROVIDE A 1/4" BRASS BALL VALVE AT WALL CONNECTION. SCREWED IN TANK COVER. MOUNT AT ADA COMPLIANT HEIGHT.
WF-1	WATER FOUNTAIN	HAWS	1501	DRINKING FOUNTAIN	WALL HUNG	WHITE ENAMELED IRON	WHITE	INCLUDED	MANUAL	Yes	No	1/2"	1 1/4"	2"	DUAL LEVEL WALL HUNG WATER FOUNTAIN. THE UNIT SHALL INCLUDE SELF CLOSING EASY TOUCH FRONT PUSHBAR CONTROLS, SAFETY BUBBLER, FULLY AUTOMATIC, COMPLETE AND READY TO OPERATE. PROVIDE HAWS 6715 MOUNTING FRAME. PROVIDE CHILLER HAWS MODEL HCR8, 115V/1PH, 5 AMPS.
WF-2	WATER FOUNTAIN	ELKAY	VRCTLDDMWSK	DRINKING FOUNTAIN	WALL HUNG	STAINLESS STEEL	STAINLESS STEEL	INCLUDED	MANUAL	Yes	No	1/2"	1 1/4"	2"	DUAL LEVEL WALL HUNG WATER COOLER WITH BOTTLE FILLING STATION. THE UNIT SHALL BE COMPLETE WITH CABINET, MOUNTING FRAME, SELF CLOSING EASY TOUCH SIDE AND FRONT PUSHBAR CONTROLS, FLEXIGUARD SAFETY BUBBLER, NON-REFRIGERATED, COMPLETE AND READY TO OPERATE.

DOMESTIC CIRCULATOR PUMP SCHEDULE

IDENTITY	MANUFACTURER	MODEL	PRODUCT TYPE	PUMP DESIGN FLOW	HEAD	RPM	DESIGN PIPE SIZE	CONNECTIONS SUCTION	DISCHARGE	MOTOR POWER	FLA	ELECTRICAL VOLTAGE	PHASE	SPECIFICATION
DCP-01	BELL AND GOSSETT	NBF-10S/LW	INLINE	5.0 GPM	12.7 FT	2800	1/2"	1/2"	1/2"	52 W	1.8 A	115 V	1	IMPELLER TYPE: NORYL. CONSTRUCTION: LEAD-FREE BRONZE. SERVES WH-01.

Beekman Point ENGINEERING
295 Seven Farms Drive, Suite C-321
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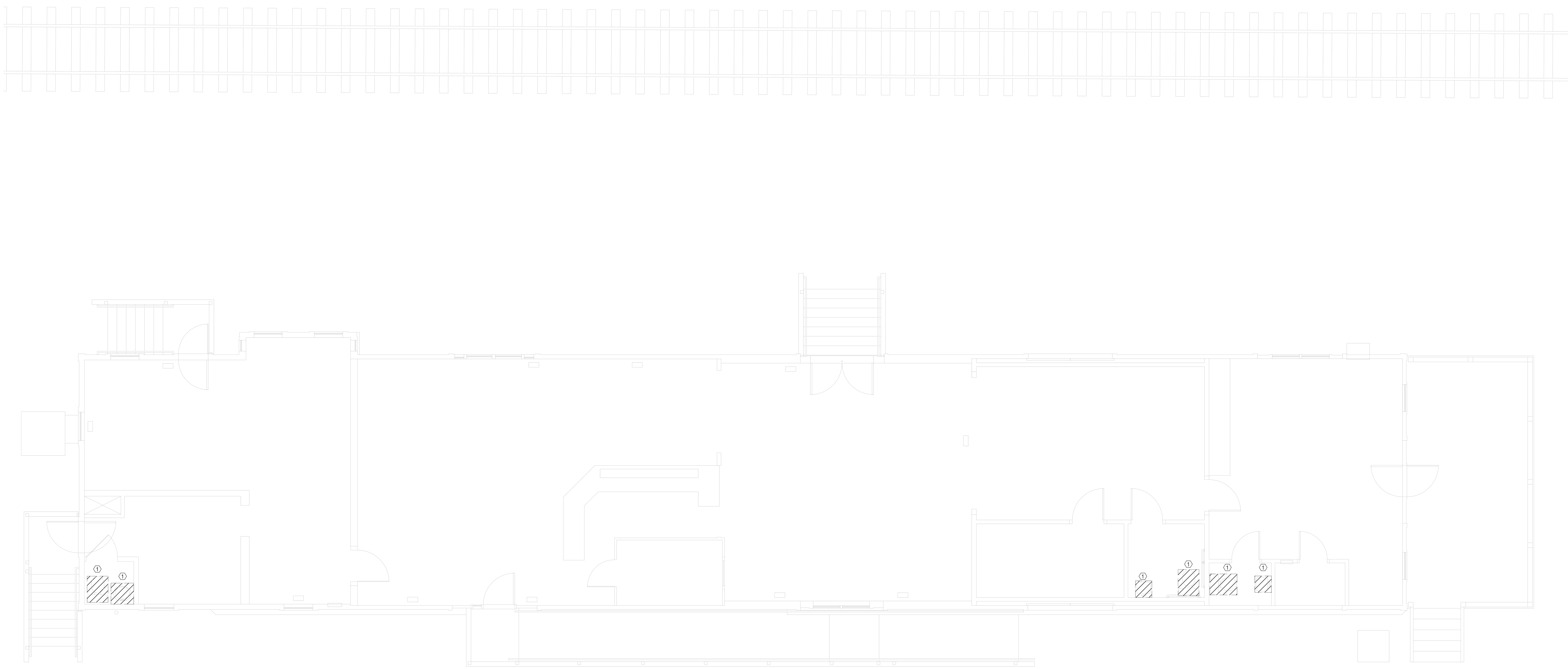
(843)471-5488
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046074 ANTHONY SHANE DUTTERA 02/28/2025
ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston-Salem, NC 27106 | Ph. 336-722-4447

DATE 02-28-2025
REVISION: ISSUE FOR CONSTRUCTION
NO 0

SPRING HOPE RAILROAD DEPOT
Interior Renovation
101 SOUTH ASH STREET
SPRING HOPE, NORTH CAROLINA 27882

JOB	240015
DATE	02-28-2025
DRAWN	JS
SHEET	P-001

KEYNOTES	
1	DEMOLISH ALL FIXTURES AND PIPING BACK TO BUILDING INLET.



1 PD-101 OVERALL PLUMBING DEMO PLAN
1/4" = 1'-0"

Beekman Point ENGINEERING
295 Seven Farms Drive,
Suite C-321
Daniel Island, SC 29492
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046074 ANTHONY SHANE DUTTERA
02/28/2025

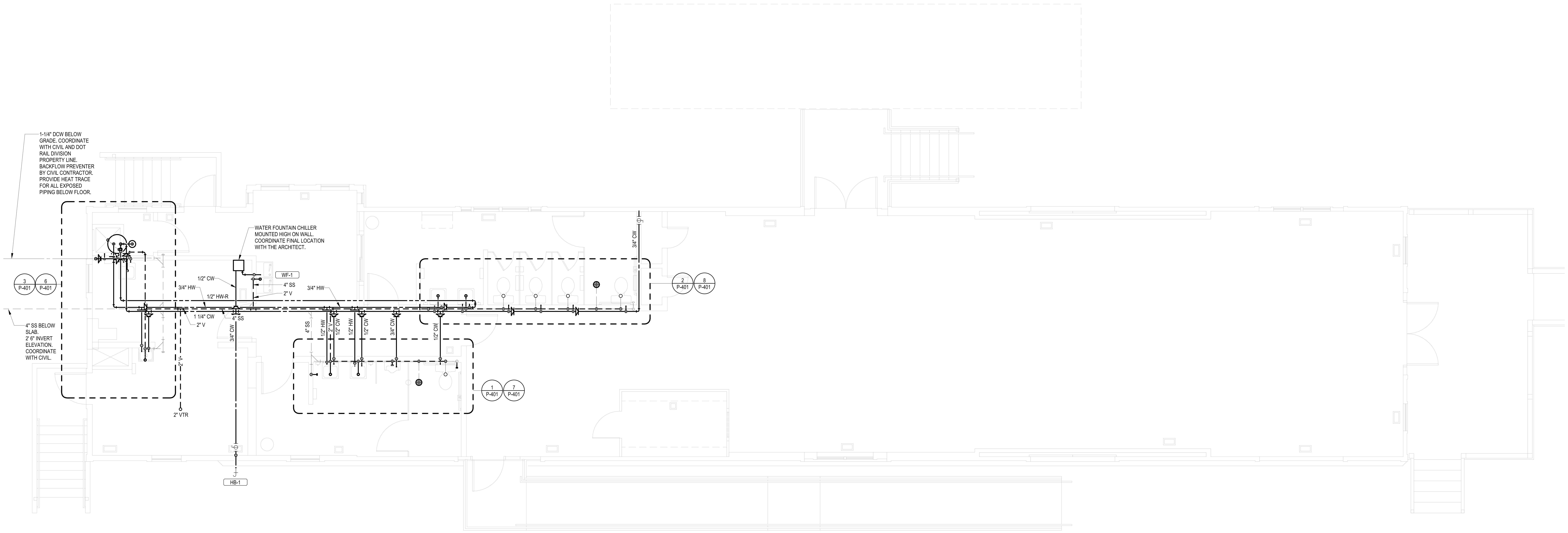
ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston-Salem, NC 27106 | Ph. 336-722-4447

NO	REVISION	DATE
0	ISSUE FOR CONSTRUCTION	02-28-2025

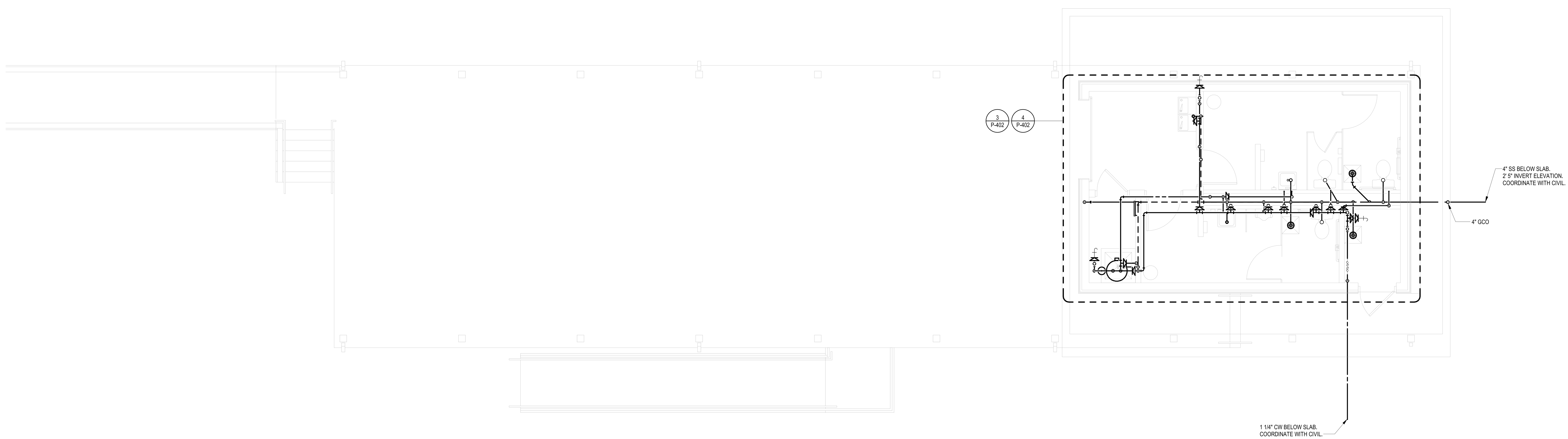
SPRING HOPE
RAILROAD DEPOT
Interior Renovation
101 SOUTH ASH STREET
SPRING HOPE, NORTH CAROLINA 27882

JOB	240015
DATE	02-28-2025
DRAWN	JS
SHEET	

PD-101



1 P-101 OVERALL PLUMBING PLAN - DEPOT
1/4" = 1'-0"



2 P-101 OVERALL PLUMBING PLAN - PLATFORM
1/4" = 1'-0"

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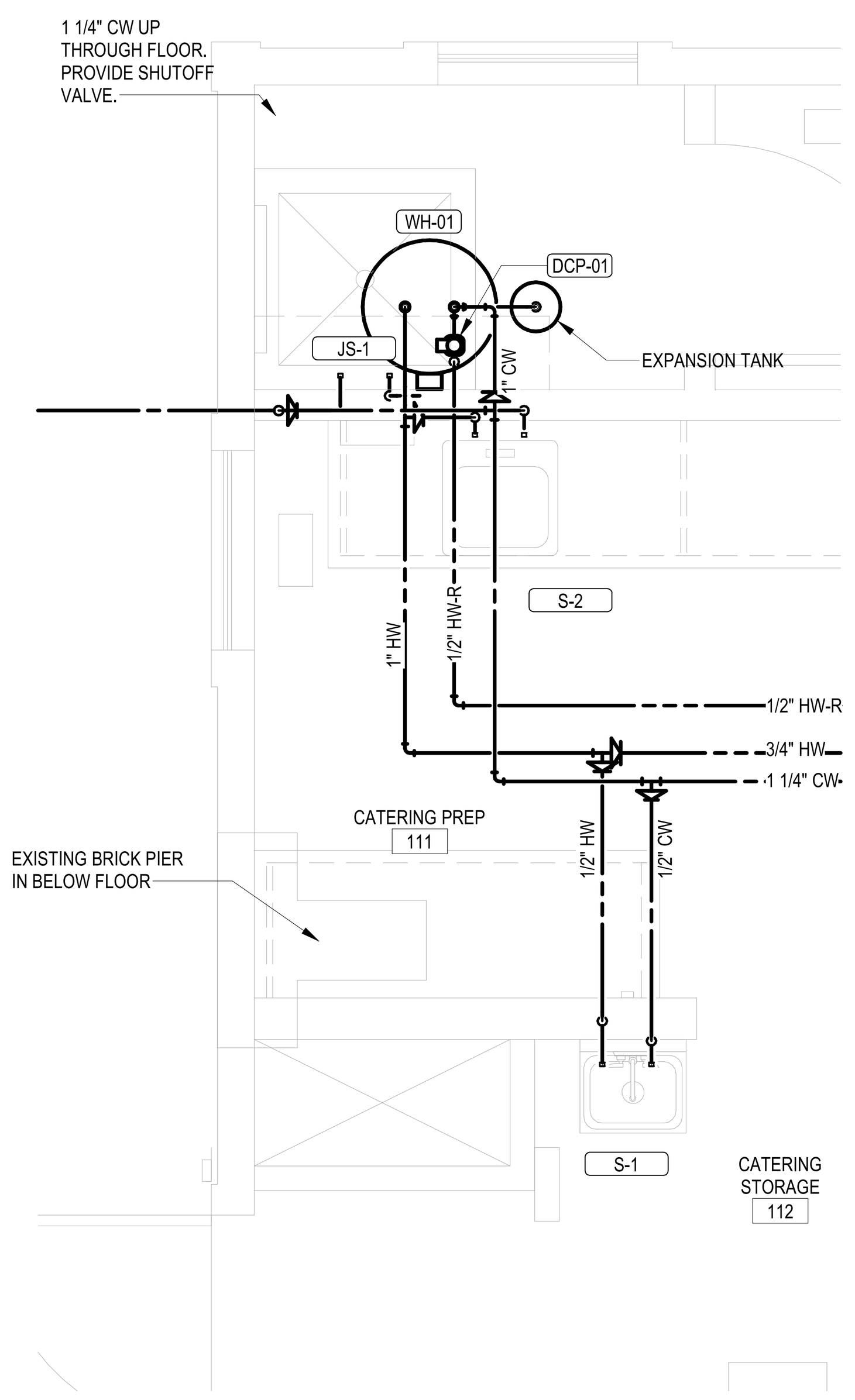
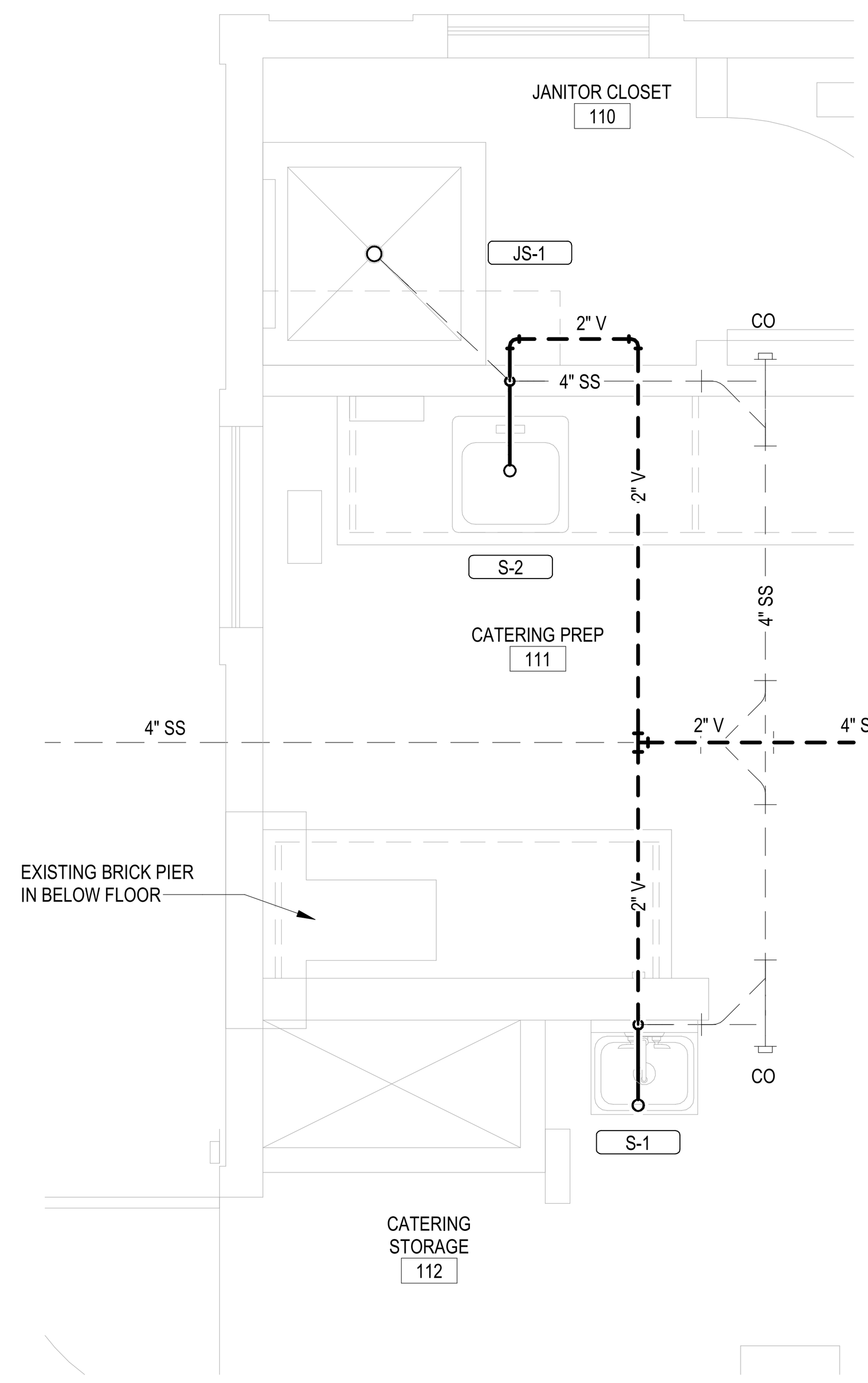
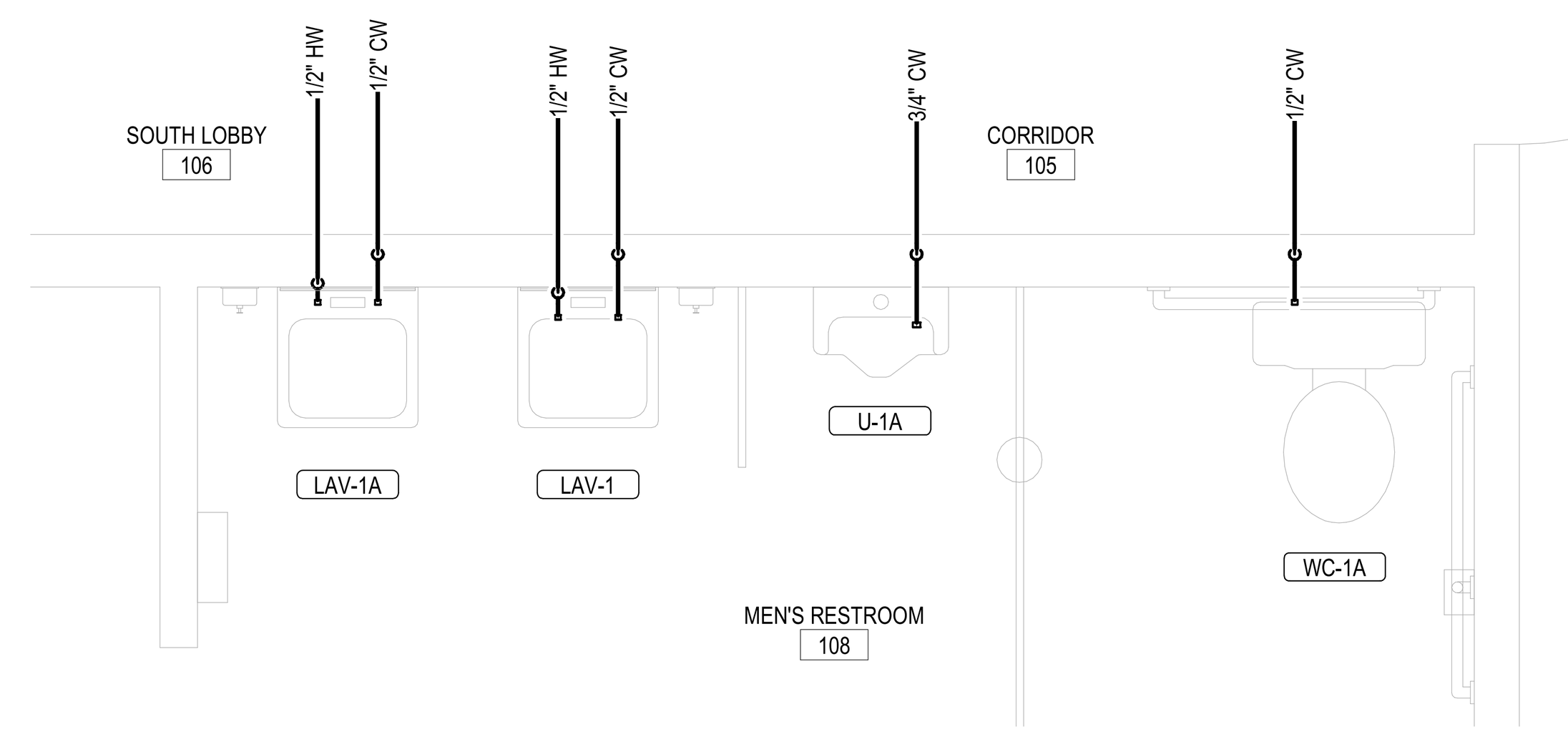
KEYNOTES	
1	TERMINATE VENT PIPING IN EXISTING CHIMNEY (SEE ARCHITECTURAL FLASHING DETAIL)



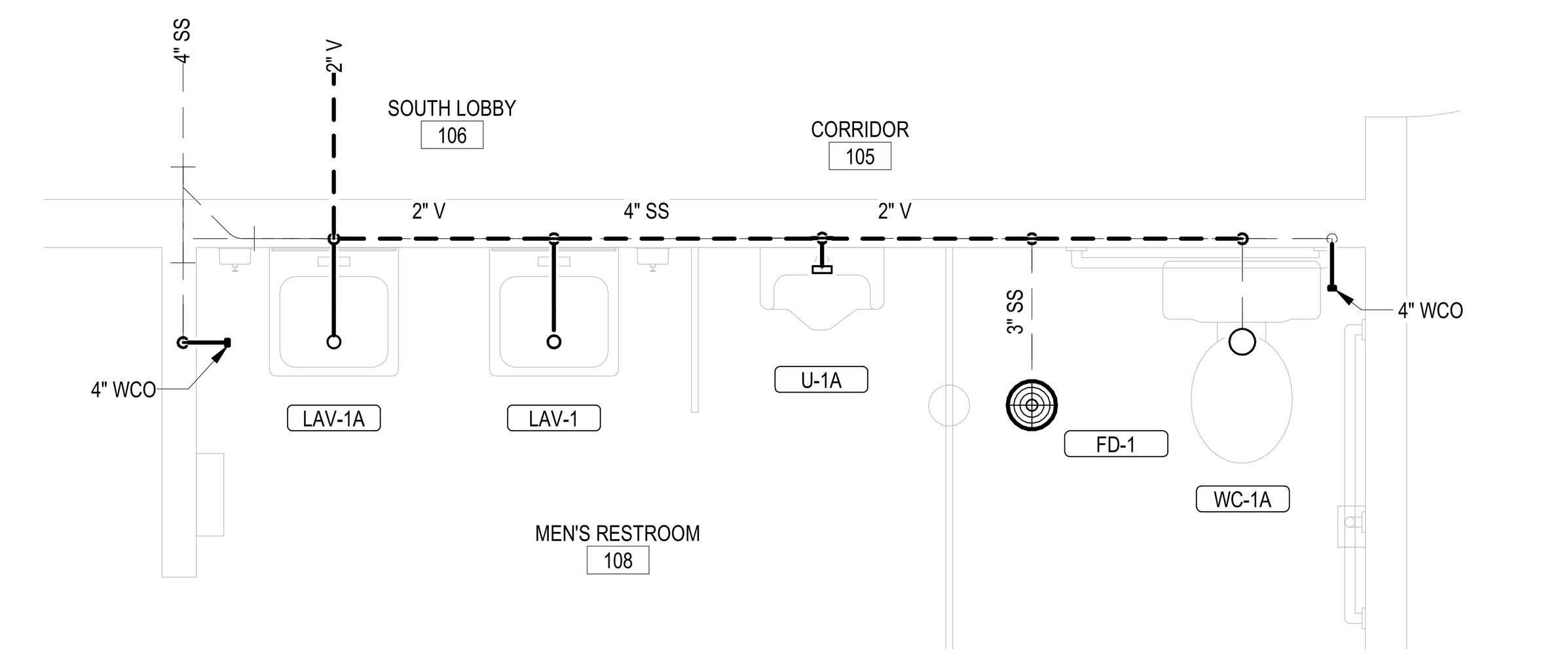
3 P-401 DOMESTIC PLUMBING PLAN - 107/111/112
1/2" = 1'-0"



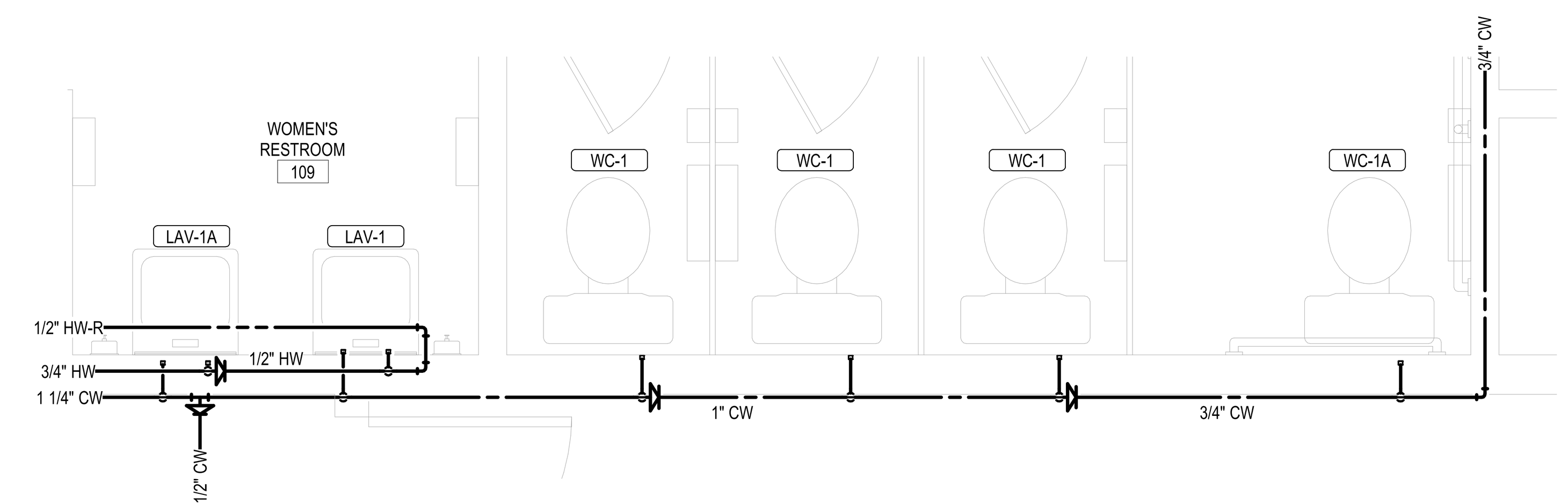
6 P-401 WASTE AND VENT PLUMBING PLAN - 107/111/112
1/2" = 1'-0"



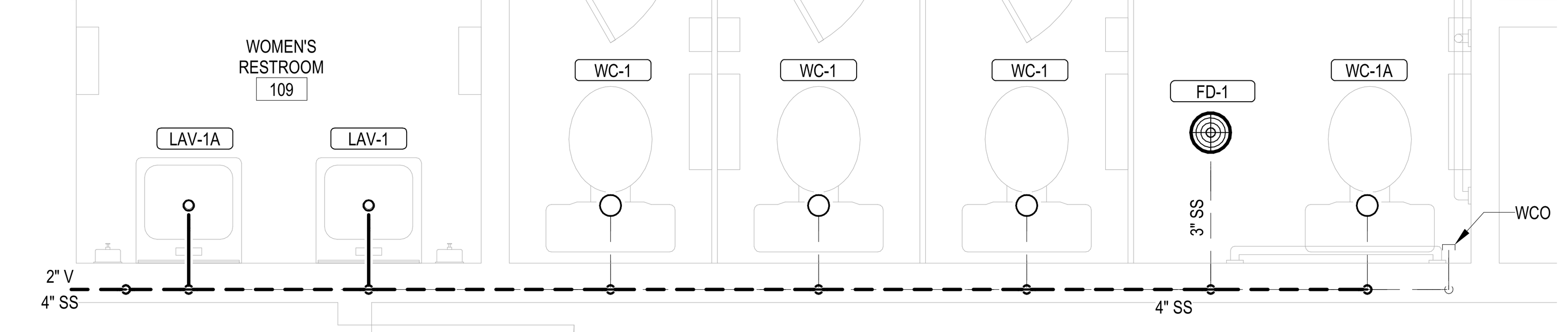
1 P-401 DOMESTIC PLUMBING PLAN - 105/108
1/2" = 1'-0"



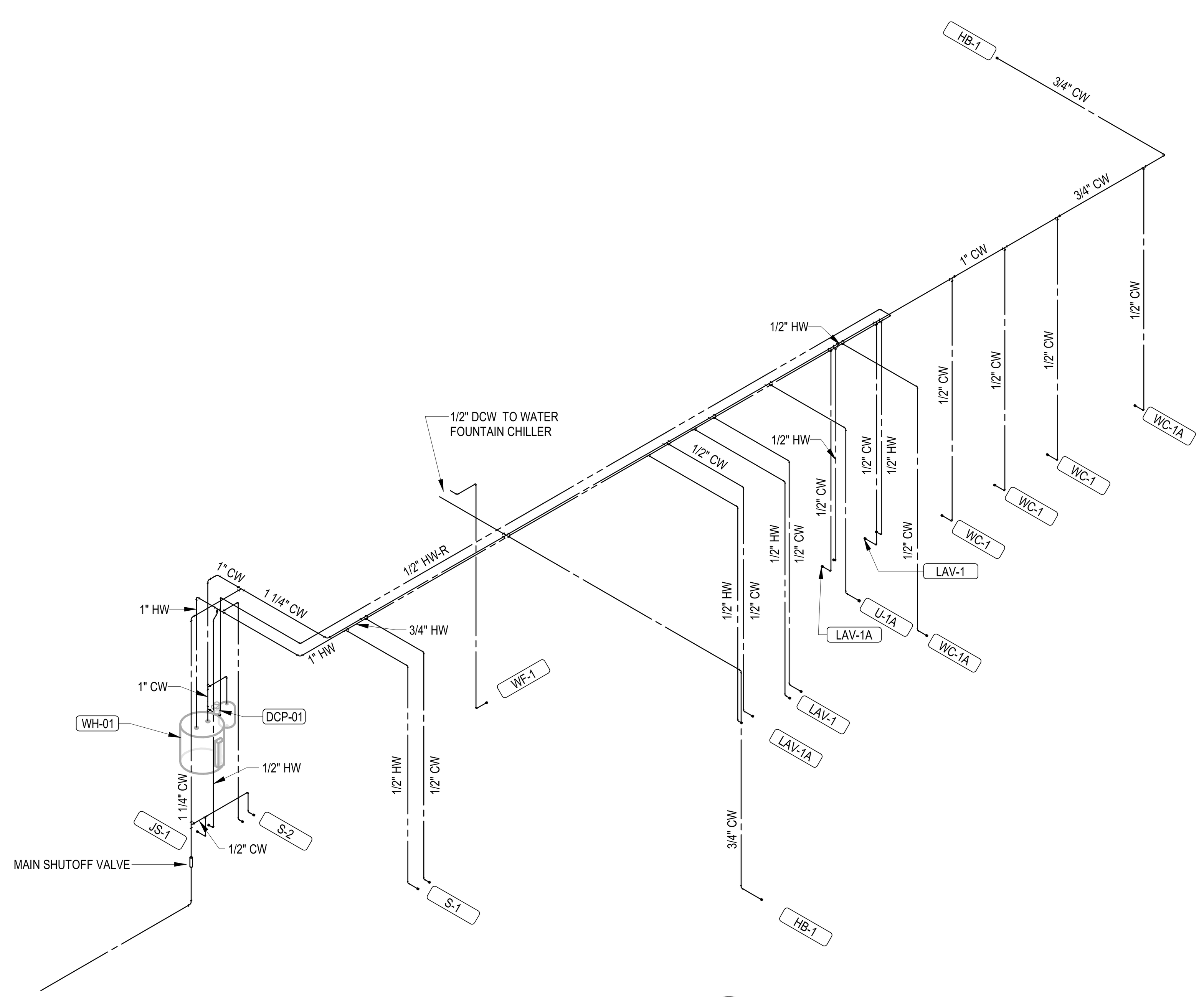
7 P-401 WASTE AND VENT PLUMBING PLAN - 105/108
1/2" = 1'-0"



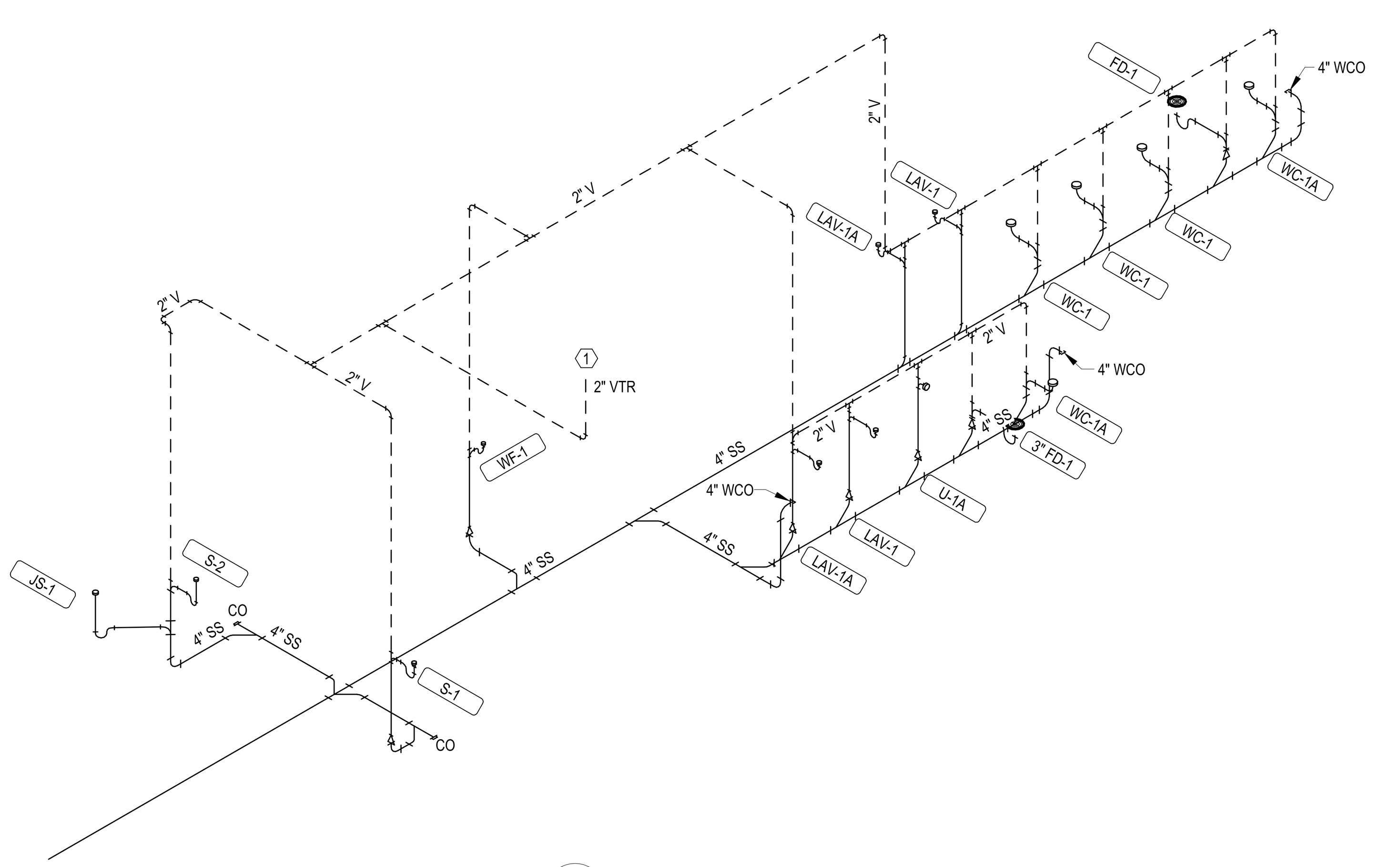
2 P-401 DOMESTIC PLUMBING PLAN - 109
1/2" = 1'-0"



8 P-401 WASTE AND VENT PLUMBING PLAN - 109
1/2" = 1'-0"



4 P-401 DOMESTIC WATER RISER DIAGRAM - DEPOT
NOT TO SCALE



5 P-401 WASTE & VENT RISER DIAGRAM - DEPOT
NOT TO SCALE

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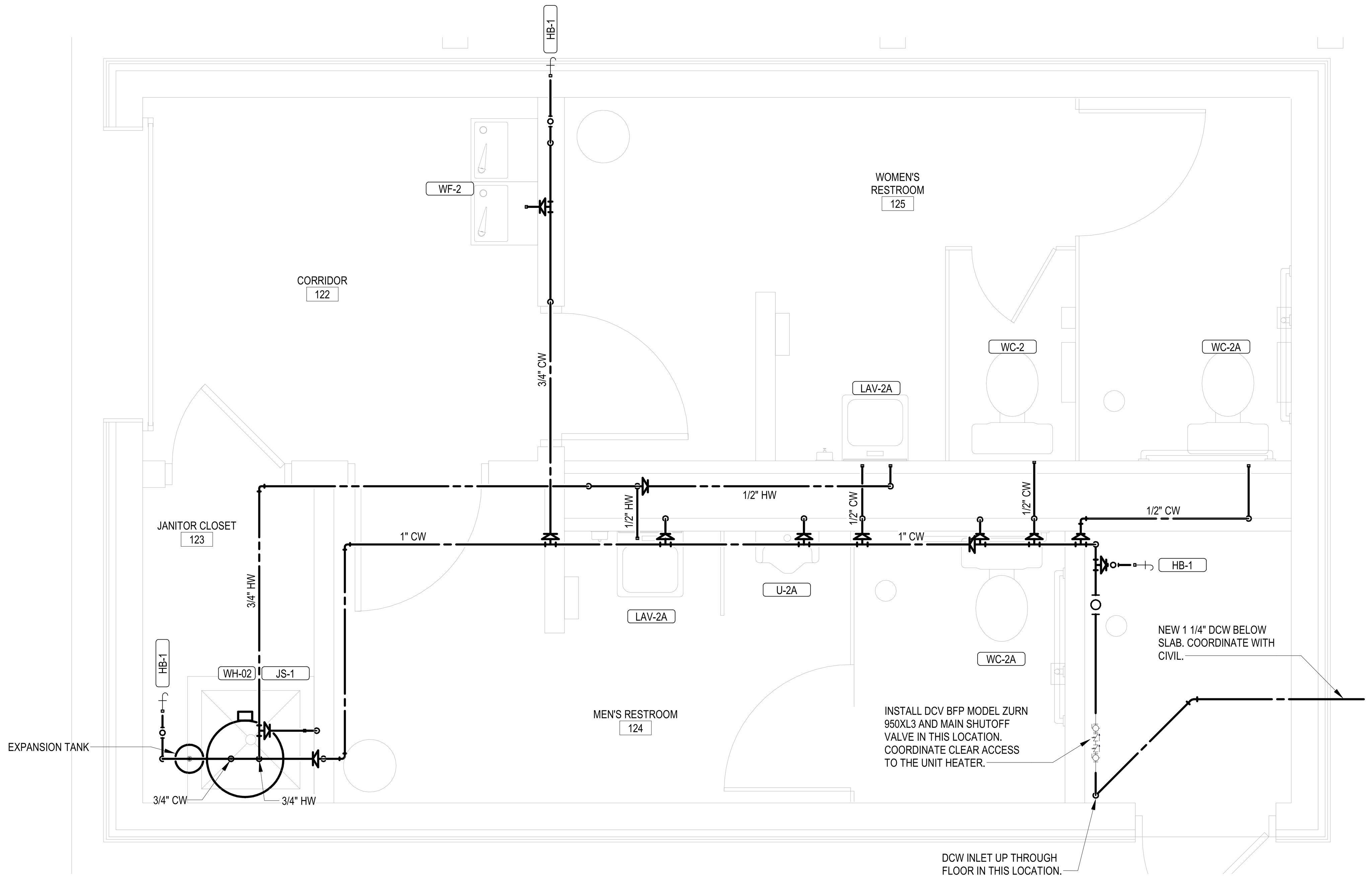
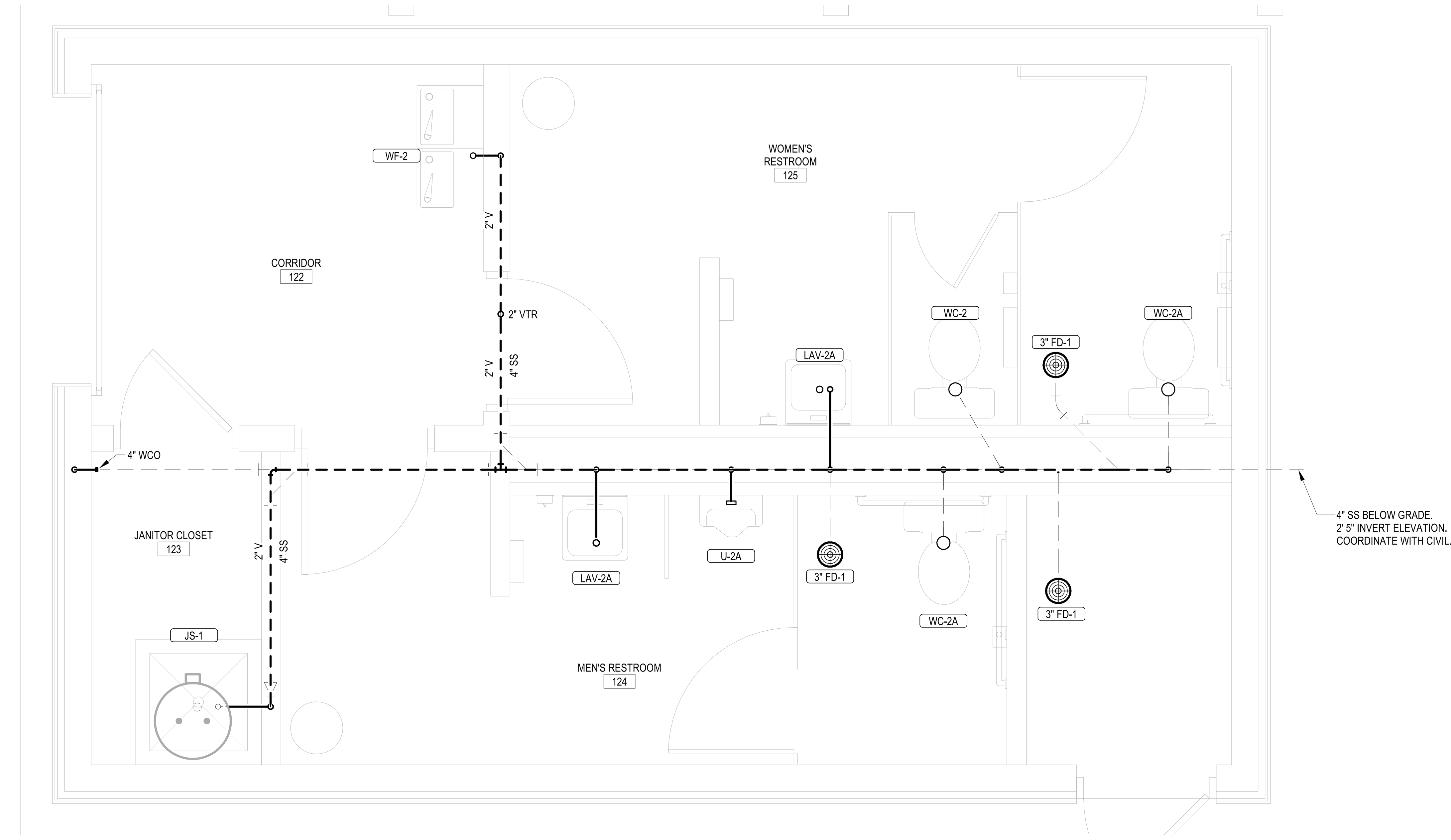
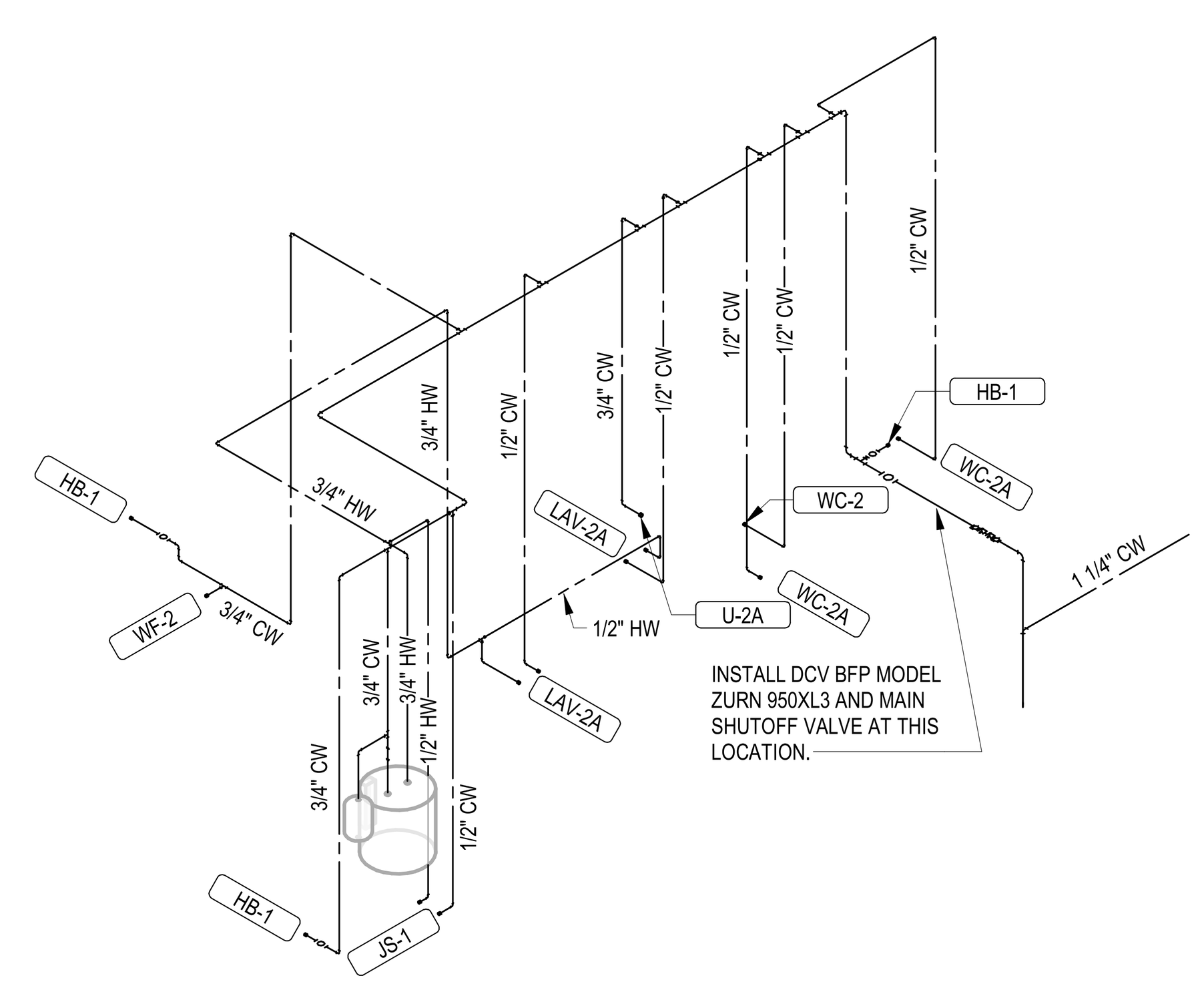


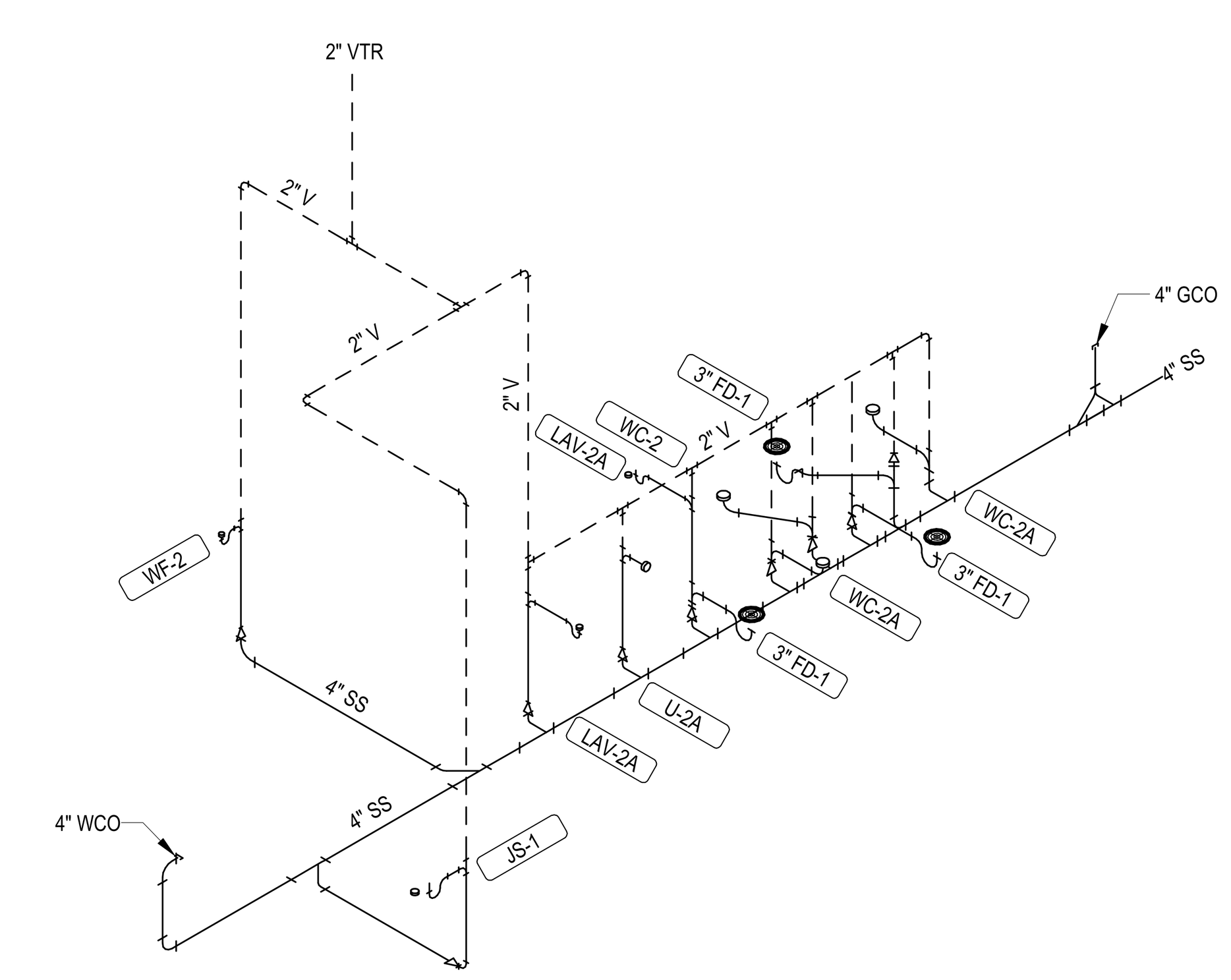
3 P-402 DOMESTIC PLUMBING PLAN - 122-126
1/2" = 1'-0"



4 P-402 WASTE AND VENT PLUMBING PLAN - 122-126
1/2" = 1'-0"



1 P-402 DOMESTIC WATER RISER DIAGRAM - PLATFORM
NOT TO SCALE



2 P-402 WASTE & VENT RISER DIAGRAM - PLATFORM
NOT TO SCALE

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GENERAL PLAN SYMBOLS

Symbol	Description
1	PLAN REVISION NUMBER
1	DETAIL NUMBER ON SHEET
M-001	SHEET NUMBER WHERE DETAIL IS PLACED
1	KEYNOTE SYMBOL
	CONTINUATION SYMBOL
	POINT WHERE NEW CONNECTS TO EXISTING
Room 10	ROOM NAME / NUMBER
	AREA BEING DEMOLISHED
	AREA NOT IN CONTRACT

ABBREVIATIONS

Ø	ROUND	LVR	LOUVER
ABV	ABOVE	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	M/A	MIXED AIR
AD	AREA DRAIN	MAX	MAXIMUM
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR
AFF	ABOVE FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MD	MOTORIZED DAMPER
ALT	ALTERNATE	MECH	MECHANICAL
AP	ACCESS PANEL	MFR	MANUFACTURER
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS
BLW	BELOW	MTR	MOTOR
BTU	BRITISH THERMAL UNITS	MU/A	MAKE-UP/AIR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NOISE CRITERIA
CAP	CAPACITY	NC	NORMALLY CLOSED
CB	CATCH BASIN	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NUMBER
CLG	CEILING	NO	NORMALLY OPEN
CO	CLEAN OUT	NTS	NOT TO SCALE
CW	COLD WATER	O	OXYGEN
D	DEGREE	O/A	OUTSIDE AIR
DB	DRY BULB	ORD	OVERFLOW ROOF DRAIN
DIA	DIAMETER	PD	PRESSURE DROP
DN	DOWN	PIV	POST INDICATOR VALVE
DW	DISTILLED WATER	PLBG	PLUMBING
EA	EACH	PRESS	PRESSURE
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
ELEC	ELECTRICAL	PSI	POUNDS PER SQUARE INCH
EQUIP	EQUIPMENT	PSIG	POUNDS PER SQUARE INCH GAUGE
EWC	ELECTRIC WATER COOLER	PWR	POWER
EWT	ENTERING WATER TEMPERATURE	R	DUCT RISER
E/A	EXHAUST AIR	R/A	RETURN AIR
EXIST	EXISTING	RCP	RADIANT CEILING PANEL
F	DEGREES FAHRENHEIT	RD	ROOF DRAIN
FCO	FLOOR CLEAN OUT	REC	RECESSED
FD	FLOOR DRAIN	RED	REDUCER
FDC	FIRE DEPARTMENT CONNECTION	RH	RELATIVE HUMIDITY
FL	FLOOR	RL/A	RELIEF AIR
FO	FUEL OIL	RM	ROOM
FOV	FUEL OIL VENT	RPM	REVOLUTIONS PER MINUTE
FOR	FUEL OIL RETURN	RW	RAIN WATER
FOS	FUEL OIL SUPPLY	SF	SQUARE FOOT
FPM	FEET PER MINUTE	S/A	SUPPLY AIR
FS	FLOOR SINK	SAN	SANITARY
FT	FOOT/FEET	SF	SQUARE FOOT
FTR	FIN TUBE RADIATION	SD	SMOKE DAMPER
GAL	GALLON	SM	SURFACE MOUNT
GF	GAS-FIRED	SP	STANDPIPE
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	STM	STEAM
GW	GREASE WASTE	T	THERMOSTAT
HB	HOSE BIB	TD	TEMPERATURE DROP
HP	HORSE POWER	TDR	TRENCH DRAIN
HTG	HEATING	TEMP	TEMPERATURE
HTR	HEATER	TYP	TYPICAL
HW	HOT WATER	UG	UNDERGROUND
HYD	HYDRANT	VAC	VACUUM
ID	INDIRECT	V	VENT
IN	INCH	VAV	VARIABLE AIR VOLUME
INV	INVERT	VENT	VENTILATION
LB	POUND	VTR	VENT THROUGH ROOF
LB/HR	POUNDS PER HOUR	W	WASTE
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB
LP	LOW PRESSURE	WCO	WALL CLEAN OUT
LPG	LIQUEFIED PETROLEUM GAS	WH	WALL HYDRANT

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK
ACCU	AIR COOLING CONDENSING UNIT	EWH	ELECTRIC WATER HEATER
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT
AS	AIR SEPARATOR	FP	FIRE PUMP
B	BOILER	GI	GREASE INTERCEPTOR
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR
CT	COOLING TOWER	HWP	HEATING WATER PUMP
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
EF	EXHAUST FAN	UH	UNIT HEATER
EDC	ELECTRIC DUCT COIL	WH	WATER HEATER

* NOTE *
ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

HVAC SYMBOLS

Symbol	Description
24"x12"	SQ. DUCT SIZE (WIDTH X HEIGHT)
24"/12"	OVAL DUCT SIZE (WIDTH / HEIGHT)
18"Ø	ROUND DUCT SIZE (DIAMETER)
(E)	EXISTING DUCT TO REMAIN
	DUCT TO BE DEMOLISHED
S/A	SUPPLY AIR
V/A	VENTILATION AIR
O/A	OUTDOOR AIR
R/A	RETURN AIR
T/A	TRANSFER AIR
L/A	BUILDING RELIEF AIR
E/A	GENERAL EXHAUST AIR
KED	KITCHEN EXHAUST DUCT
LH	LABORATORY HOOD
ETS	ENV. TOBACCO SMOKE
FLUE	FLUE GAS VENT
C/A	COMBUSTION AIR
	RECT. SUPPLY DUCT RISE / DROP
	ROUND SUPPLY DUCT RISE / DROP
	RECT. RETURN DUCT RISE / DROP
	ROUND RETURN DUCT RISE / DROP
	RECT. EXHAUST DUCT RISE / DROP
	ROUND EXHAUST DUCT RISE / DROP

GRILLE, REGISTER, DIFFUSERS

Symbol	Tag	Description
SQUARE CEILING DIFFUSER	CD1 / 500 / 14"Ø/24x24 / 28 / H15/23/33	TYPE (SEE SCHEDULE); AIRFLOW; NECK SIZE / MODULE SIZE; CATALOG THROW PERFORMANCE; THROW PATTERN; MAX NC RATING
ROUND CEILING DIFFUSER	CD11 / 100 / 6"Ø / TYP. X 4	AIRFLOW; NECK SIZE; TYPE COUNT FOR SPACE
SIDEWALL SUPPLY GRILLE	SG1 / 500 / 18"x10" / AFF:9'-0"	AIRFLOW; NOMINAL DUCT SIZE; MOUNTING ELEVATION (CENTERLINE)
LINEAR DIFFUSER	LD8 / 200 / 8"Ø/2s/4'-0"L	AIRFLOW; NECK SIZE/ SLOT(S)/ ACTIVE LENGTH
SIDEWALL RETURN GRILLE	RG1 / 800 / 16"x16" / AFF:9'-0"	AIRFLOW; NOMINAL DUCT SIZE; MOUNTING ELEVATION (CENTERLINE)
CEILING RETURN	RD1 / 500 / 12"Ø/24x24 / 26	AIRFLOW; NECK SIZE / MODULE SIZE; MAX NC RATING

MECHANICAL EQUIPMENT

Tag	Description
RTU-1	UNIT IDENTITY
10.0 ton	NOMINAL COOLING CAPACITY
RTU-1 / 180000 Btu/h	HEATING CAPACITY
180 CFH	GAS SUPPLY INPUT RATE
ET-1 / 379 lb	OPERATING WEIGHT
EF-XX / 500 CFM	DESIGN AIRFLOW RATE
VAV 1-2 / 3.7 GPM	DESIGN WATER FLOW
AC-1 / AFF:7'-0"	BOTTOM OF EQUIPMENT HEIGHT
AHU-2	EXISTING TO REMAIN EQUIPMENT
(R)AHU-3	EXISTING RELOCATED EQUIPMENT
	EQUIPMENT BY OTHERS (REFER TO OTHER DISCIPLINES)

MECHANICAL PIPING SYMBOLS

Symbol	Description
2"	NOMINAL PIPE SIZE
	ABOVE GROUND PIPING
	BELOW GROUND PIPING
1/8" / 1'-0"	PIPE SLOPE (WHEN APPLICABLE)
(E)	EXISTING PIPE TO REMAIN
	PIPE TO BE DEMOLISHED
CHWR	CHILLED WATER - RETURN
CHWS	CHILLED WATER - SUPPLY
CD	CONDENSATE DRAIN
CWR	CONDENSER WATER - RETURN
CWS	CONDENSER WATER - SUPPLY
GWR	GEOTHERMAL WATER - RETURN
GWS	GEOTHERMAL WATER - SUPPLY
HWR	HOT WATER - RETURN
HWS	HOT WATER - SUPPLY
NG	NATURAL GAS
LP	LIQUID PROPANE
RL	REFRIGERANT LIQUID
RS	REFRIGERANT GAS
RD	REFRIGERANT DISCHARGE
STM	STEAM SUPPLY
CDR	STEAM CONDENSATE - RETURN
	PIPE RISE / DROP

VALVE TYPES

Symbol	Description
2" SHUTOFF	BALL VALVE
2" BAL	BALANCING VALVE
2" BFV	BUTTERFLY VALVE
2" CHECK	CHECK VALVE
2" CHECK	ALTERNATE CHECK VALVE
3" CIRC	CIRCUIT SETTER
2" GATE	GATE VALVE
2" GLOBE	GLOBE VALVE
2" LOCK	LOCKED SHIELD VALVE
2" PRV	PRESSURE REDUCING VALVE
2" QUICK	QUICK OPENING VALVE
2" STRAIN	FLUID STRAINER
2" M-CNTRL	ELEC. CONTROL VALVE
4" 3-WAY CNTRL	3-WAY ELEC. VALVE
1" GAS-CNTRL	EMERGENCY GAS SHUTOFF
1" PLUG	PLUG VALVE
1" GAS COCK	GAS SHUTOFF COCK
1" REG	GAS REGULATOR

MECHANICAL DEVICES

Symbol	Description
AHU-1	UNIT IDENTITY
TS	TEMPERATURE SENSOR
TH	TEMP / HUMIDITY SENSOR
TC	TEMP / CO2 SENSOR
T	THERMOSTAT
H	HUMIDISTAT
HS	HUMIDITY SENSOR
CO2	CARBON DIOXIDE DETECTOR
CO	CARBON MONOXIDE DETECTOR
H2	HYDROGEN GAS DETECTOR
HZG	HAZARDOUS GAS DETECTOR
NO2	NITROGEN DIOXIDE DETECTOR
O2	OXYGEN GAS DETECTOR

DAMPER TYPES

Symbol	Description
B	MANUAL DAMPER
M	MOTORIZED DAMPER
D	BACKDRAFT DAMPER
S	SMOKE DAMPER
	FIRE DAMPER
S	COMB. FIRE / SMOKE DAMPER

MECHANICAL GENERAL NOTES

1. PROVIDE ALL MATERIALS AND LABOR FOR COMPLETE AND PROPERLY FUNCTIONING MECHANICAL SYSTEMS. WARRANTY ALL WORK AND ALL MATERIALS, EQUIPMENT AND DEVICES FOR A PERIOD OF ONE YEAR AFTER OWNER'S ACCEPTANCE.
2. WORK SHALL CONFORM TO OR MEET THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE INTERNATIONAL MECHANICAL CODE, SMACNA, ASHRAE AND ALL FEDERAL, STATE AND LOCAL CODES AND ORDINANCES WHICH APPLY TO THIS WORK.
3. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO BE SCALED FOR DIMENSIONS.
4. ALL MATERIALS, EQUIPMENT AND DEVICES SHALL MEET THE REQUIREMENTS OF UL WHERE UL STANDARDS ARE ESTABLISHED FOR THOSE ITEMS. ALL ITEMS SHALL BE CLASSIFIED BY UL AS SUITABLE FOR THE PURPOSE USED.
5. COORDINATE LOCATION OF MECHANICAL WORK WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES. PROVIDE OWNER TRAINING ON SYSTEM OPERATION.
6. INSTALL ALL EQUIPMENT AND MATERIAL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN, PRINTED INSTRUCTIONS AND RECOMMENDATIONS.
7. PROVIDE OWNER WITH CERTIFICATES OF FINAL INSPECTION AND ACCEPTANCE FROM AUTHORITY HAVING JURISDICTION.
8. MAKE CONNECTIONS FROM MECHANICAL EQUIPMENT TO DUCTWORK USING FLEXIBLE DUCT CONNECTIONS.
9. DUCT SIZES INDICATED ARE NET FREE INSIDE DIMENSIONS OF RECTANGULAR METAL DUCT. AT CONTRACTOR'S OPTION, EQUIVALENT SIZE ROUND DUCT MAY BE USED.
10. ALL TRANSFER DUCTWORK SHALL BE INTERNALLY LINED WITH MINIMUM 1" ACOUSTIC LINING.
11. PROVIDE FLOAT SWITCH IN ALL SECONDARY PANS TO SHUT OFF UNITS WHEN DRAINS BECOME OBSTRUCTED.
12. CONTRACTOR SHALL FURNISH AND INSTALL ALL MANUAL DAMPERS NEEDED FOR AN OPERATIONAL SYSTEM. ALL DAMPERS SHALL BE OFFSET, LOCKING, QUADRANT TYPE DAMPERS.
13. WHERE PIPES PENETRATE FIRE RATED WALLS, FLOORS OR CEILING, SEAL OPENING AROUND PIPES WITH UL LISTED FIRE STOPPING MATERIAL TO MAINTAIN THE FIRE RATING OF THE WALL, FLOOR OR CEILING IN ACCORDANCE WITH UL LISTED DESIGN FOR 1 HOUR PENETRATIONS. SUBMIT UL DESIGN FOR FIRE RATED PENETRATIONS SEALS TO ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO START OF WORK.
14. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL AN AIR FILTER PER MANUFACTURER'S INSTRUCTIONS PRIOR TO SYSTEM OPERATION. PROVIDE 3 SETS OF REPLACEMENT FILTERS FOR EACH AIR HANDLER. TOOLS SHALL NOT BE REQUIRED TO REPLACE ANY FILTER.
15. ALL SUPPLY, RETURN AND EXHAUST DUCTWORK SHALL BE SINGLE WALL GALVANIZED STEEL. ALL JOINTS AND SEAMS SHALL BE CLEANED, COATED AND SEALED WITH MASTIC OR MASTIC TAPE PRIOR TO APPLYING THE EXTERNAL INSULATION.
16. UNLESS INDICATED AS A RADIUS ELBOW, ALL DUCT ELBOWS AND TEES SHALL HAVE TURNING VANES.
17. ALL INDOOR CONDENSATE AND REFRIGERANT PIPING SHALL BE INSULATED WITH 1.5" ELASTOMERIC INSULATION. ALL REFRIGERANT PIPING EXPOSED TO OUTDOORS SHALL BE INSULATED WITH 1.5" ELASTOMERIC FOAM INSULATION WITH MINIMUM 0.16" ALUMINUM JACKET AND ALL JOINTS SHALL BE TAPED WITH ALUMINUM TAPE AROUND FULL CIRCUMFERENCE. EQUIVALENT MATERIALS APPROVED.
18. PROVIDE ALL OPERATION AND MAINTENANCE MANUALS FOR MECHANICAL EQUIPMENT TO BUILDING OWNER. CONTRACTOR SHALL FILL OUT WARRANTY PAPERWORK AND DELIVER TO ENGINEER AND ARCHITECT OR MAIL TO MANUFACTURER IN ADEQUATE TIME SUCH THAT OWNER MAY OBTAIN MAXIMUM WARRANTY COVERAGE FROM THE MANUFACTURER.
19. CONDENSATE DRAINS SHALL BE SUPPLIED FOR ALL COOLING EQUIPMENT. CONTRACTOR SHALL ENSURE PROPER INSTALLATION AND DRAINAGE AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODES. CONDENSATE PIPING SHALL BE SCHEDULE 40 CPVC.
20. PROVIDE LABELS FOR ABOVE GROUND PIPING. LABELS SHALL BE SELF-ADHESIVE AND COMPLY WITH ANSI/ASME 13.1. PIPE WITH OUTSIDE DIAMETER 3/4" TO 1-1/4" SHALL HAVE MINIMUM TEXT HEIGHT OF 1/2". PIPE WITH OUTSIDE DIAMETER 1-1/2" TO 2" SHALL HAVE MINIMUM TEXT HEIGHT OF 3/4". PIPE WITH OUTSIDE DIAMETER GREATER THAN 2" SHALL HAVE TEXT HEIGHT OF 1-1/4". DOMESTIC COLD WATER, CONDENSATE AND LOW-PRESSURE STEAM SHALL BE GREEN LABELS WITH WHITE LETTERING. NATURAL GAS SHALL BE YELLOW LABELS WITH BLACK LETTERING. ALL DOMESTIC WATER AND GAS PIPING LABELS SHALL INCLUDE FLOW DIRECTION ARROWS. PIPING SHALL BE LABELED AS INDICATED IN THE ABBREVIATIONS SCHEDULE. ATTACH LABELING TO PIPE EVERY 10 FEET.
21. MECHANICAL CONTRACTOR SHALL VERIFY DUCT PLUS INSULATION HAS ADEQUATE SPACE FOR SPECIFIED CEILING HEIGHT ON ARCHITECTURAL PLANS PLUS DECONFLICT FIRE SPRINKLERS, ELECTRICAL, LIGHTING SYSTEMS AND OTHER SYSTEMS LOCATED ABOVE THE CEILING PRIOR TO INSTALLING DUCT.
22. UNLESS OTHERWISE INDICATED, RIGID DUCT SHALL HAVE A CONSTANT UPPER ELEVATION AND REMAIN ADJACENT TO THE STRUCTURE ABOVE. CHANGES IN DUCT HEIGHT SHALL BE MADE SUCH THAT THE BOTTOM ELEVATION OF THE DUCT IS MODIFIED.
23. ALL EXPOSED ROUND AND OVAL SUPPLY DUCTWORK, SHALL BE DOUBLE WALL GALVANIZED STEEL WITH GASKETED JOINTS. THE DUCT SHALL HAVE AN INNER PERFORATED DUCT, A RETAINING LAYER, 1" THICK FLEXIBLE FIBERGLASS INSULATION LAYER AND A SOLID OUTER DUCT. PROVIDE LINDAB OR APPROVED EQUAL. ALL EXPOSED GALVANIZED DUCT SHALL BE PAINTABLE.
24. CONTRACTOR SHALL PROVIDE SLOPED OR FLAT ROOF CURBS FOR THE SPECIFIC ROOF SLOPE ON THIS PROJECT.
25. FLEXIBLE DUCT SHALL BE R-8 AND LIMITED TO A MAXIMUM RUN OF 5FT, UNLESS OTHERWISE SPECIFIED ON THE PLANS, OR PRE-APPROVED BY EOR.
26. WHERE A PLENUM RETURN IS SHOWN, ALL MATERIALS USED IN THE PLENUM SHALL MEET THE 25 FLAME SPREAD INDEX AND 50 DEVELOPED SMOKE SPREAD INDEX OR LESS AS SPECIFIED IN ASTM E84.
27. THE DEPOT BUILDING IS PART OF THE SPRING HOPE HISTORIC DISTRICT AND IS LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES

PROJECT GENERAL NOTES

1. REMOVE ALL UNUSED PIPING, DUCTWORK AND ACCESSORIES.
2. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING, PRIOR TO FINAL BID, ALL EXISTING CONDITIONS FOR PLUMBING AND MECHANICAL SYSTEMS.
3. THE MECHANICAL CONTRACTOR SHALL PERFORM SERVICE AND REPAIR ON THE EXISTING EQUIPMENT AND ITS ACCESSORIES AS FOLLOWS: CLEAN ALL COILS, REPLACE THE FILTERS AND BELTS, INSPECT, REPAIR, OR REPLACE THE ECONOMIZERS, DRIVES AND FAN BEARINGS, MOTORS, CONTROL COMPONENTS, VALVES AND ANY OTHER ITEM NECESSARY FOR A COMPLETE AND PROPER OPERATING SYSTEM. THIS CONTRACTOR SHALL ALSO VISIT THE SITE, PRIOR TO FINAL BIDDING, AND VERIFY ALL EXISTING SITE CONDITIONS. PROVIDE ALL MATERIAL AND COMPONENTS AS NEEDED TO BRING THE UNITS TO FULL COMPLIANCE OF THE LANDLORD'S CRITERIA AND LOCAL AUTHORITY HAVING JURISDICTION.
4. WHERE FLOOR DRAINS OCCUR WITHIN THE LIMITS OF CONSTRUCTION, PREVENT CONSTRUCTION DEBRIS FROM ENTERING DRAIN BODY BY SEALING DRAIN OPENING PRIOR TO START OF WORK. UNSEAL DRAINS AT COMPLETION OF CONSTRUCTION.
5. COORDINATE INSTALLATION OF PIPING, DUCTWORK, CONDUIT, LIGHTS, CABLE TRAY, STRUCTURE, AND EQUIPMENT TO PREVENT CONFLICTS.
6. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL THE CONDITIONS BOTH EXISTING AND THOSE ILLUSTRATED BY THESE DOCUMENTS AS WELL AS THOSE WHICH CAN BE REASONABLY ANTICIPATED INCLUDING, BUT NOT LIMITED TO ARCHITECTURAL, ELECTRICAL, VENTILATION, PLUMBING, AND OTHER SYSTEMS INVOLVED ON THIS PROJECT.
7. FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO THE INTERNATIONAL BUILDING CODE AND INTERNATIONAL MECHANICAL CODE.
8. LOCATE EQUIPMENT REQUIRING ACCESS 2'-0" MAXIMUM ABOVE CEILING.
9. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT EDITION OF ALL APPLICABLE CODES, AND LOCAL CODES AS APPLIED BY THE AUTHORITY HAVING JURISDICTION.
10. LOCATE DUCTWORK, PIPING AND MECHANICAL EQUIPMENT AWAY FROM THE SPACE ABOVE ELECTRICAL PANELS, TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT.
11. PENETRATIONS OF RATED ASSEMBLIES SHALL BE FIRE STOPPED. FIRE STOPPING SHALL BE AN APPROVED MATERIAL AND SHALL BE U.L. LISTED.
12. PROVIDE SLEEVES AND/OR OPENINGS TO RUN PIPES AND DUCTS THROUGH FOUNDATIONS, FLOORS, WALLS, AND ROOF.
13. MAINTAIN CLEAR ACCESS TO SERVICE EQUIPMENT AND OTHER ACCESSORIES REQUIRING SERVICE, VISUAL INSPECTION OR HAND OPERATION. WHERE INDICATED OR REQUIRED, PROVIDE ACCESS PANELS OF THE TYPE SELECTED TO SUIT MATERIALS IN WHICH INSTALLED.
14. ADJUST PIPING AND DUCTWORK SIZES TO PROPERLY CONNECT TO MECHANICAL EQUIPMENT.
15. PIPE SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN.
16. FOR DETAILS, EQUIPMENT CONNECTIONS, AND PIPE SIZES NOT SHOWN ON THE SEGMENTS, REFER TO DETAILS, SCHEDULES, AND SPECIFICATIONS.
17. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AT A LEVEL OF QUALITY AND WORKMANSHIP CONSISTENT WITH THE SPECIFICATIONS.
18. LOCATIONS OF PIPING, DUCTWORK AND EQUIPMENT AS INDICATED ON THE DRAWING, ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID INTERFERENCE IN THE FIELD.
19. INSTALL EXPOSED PIPING AND DUCTWORK AS HIGH AS PRACTICAL IN ROOMS WITHOUT CEILINGS.
20. THE CONTRACTOR'S WORK SCHEDULE SHALL BE SUBMITTED TO AND APPROVED BY THE ARCHITECT.
21. PRIOR TO STARTING WORK, SUBMIT SHOP DRAWINGS FOR ALL MECHANICAL EQUIPMENT, PLUMBING FIXTURES, AND DIFFUSERS.
22. PROVIDE ONE YEAR WARRANTY FOR ALL WORKMANSHIP AND MATERIALS AFTER THE DATE OF FINAL ACCEPTANCE.
23. PRIOR TO BIDDING ON THE PROJECT AND PRIOR TO STARTING CONSTRUCTION THE CONTRACTOR SHALL REVIEW PLANS FROM OTHER DISCIPLINES, BECOME FULLY KNOWLEDGEABLE ABOUT THE PROJECT, REQUIREMENTS, AND NECESSARY EQUIPMENT REQUIRED TO COMPLETE THE PROJECT IN A COMPLIANT FASHION. THIS INCLUDES BUT NOT LIMITED TO ARCHITECTURAL, STRUCTURAL, CIVIL, AND OTHER MEP PLANS.

DUCTWORK INSULATION SPECIFICATIONS

CONCEALED ROUND AND RECTANGULAR DUCT INSULATION SPECIFICATIONS

GENERAL
1. SUPPLY AND RETURN DUCT EXPOSED TO MECHANICALLY CONDITIONED AIR (I.E. PLENUMS) SHALL BE INSULATED TO R-6 EQUIVALENT TO OWENS CORNING SOFTR DUCT WRAP FRK OR ARMAFLEX ELASTOMERIC FOAM.
2. SUPPLY AND RETURN DUCT EXPOSED TO OUTSIDE AIR SHALL BE INSULATED TO R-8 EQUIVALENT TO OWENS CORNING SOFTR WRAP FRK OR ARMAFLEX ELASTOMERIC FOAM.
3. SEAL ALL DUCT INSULATION PER MANUFACTURER'S INSTRUCTIONS. WHERE NOT SPECIFIED BY MANUFACTURER, PROVIDE A MINIMUM 1" TAPE OVERLAP ON JOINTS WITH TAPES. DO NOT USE STAPLES.
4. PLENUM RETURN DUCT SHALL BE PROVIDED WITH 1" DUCT LINER EQUIVALENT TO OWENS CORNING QUIETR.

FLEXIBLE FIBERGLASS DUCT LINER
1. FLEXIBLE FIBERGLASS DUCT LINER MADE OF GLASS FIBERS BONDED WITH A THERMOSETTING RESIN, WITH SURFACE TREATMENT MEETING ASTM C1071.
2. THERMAL CONDUCTIVITY, "K" AT 75 DEGREES F MEAN TEMP 0.23 MAXIMUM; BASED ON 1-INCH THICKNESS.
3. MAXIMUM/MINIMUM SERVICE TEMPERATURE: 250 / 0 DEGREES F.
4. DENSITY OF NOT LESS THAN 2.00 LB. PER CU. FT.
5. MAXIMUM FLAME SPREAD/SMOKE DEVELOPMENT: 25/50.
6. NOISE REDUCTION COEFFICIENT OF .70 MINIMUM WHEN TESTED IN ACCORDANCE WITH ASTM C423 WHEN USING A TYPE "A" MOUNTING.
7. MAXIMUM RATED VELOCITY OF 5000 FPM.
8. THE AIR STREAM SURFACE SHALL HAVE A 100% COVERAGE COATING OF ACRYLIC POLYMER FORMULATED WITH AN IMMOBILIZED EPA REGISTERED ANTI-MICROBIAL AGENT PROVEN RESISTANT TO MICROBIAL GROWTH AS DETERMINED BY ASTM G21 AND G22.

FIBERGLASS DUCT WRAP
1. DUCT WRAP: RESIN BONDED FIBROUS GLASS BLANKET WITH A DAMAGE-RESISTANT, FLAME RETARDANT, REINFORCED ALUMINUM FOIL (FRK) FACING.
2. GREENGUARD INDOOR AIR QUALITY CERTIFIED® AND GREENGUARD GOLD CERTIFIED.
3. ASTM C1290, TYPE III, TO MAXIMUM SERVICE TEMPERATURE OF 250°F (121°C), AND ASTM C1136, TYPE II, FACING MATERIAL.
4. R-6: TYPE 100 (1.00 LBM/CUBIC FOOT) WITH A MINIMUM INSTALLED R-VALUE OF 6.0.
5. R-8: TYPE 75 (0.75 LBM CUBIC FOOT) WITH A MINIMUM INSTALLED R-VALUE 8.0.

ELASTOMERIC FOAM, 'ARMAFLEX'
1. MOLDED CLOSED CELL ELASTOMERIC FOAM, 'ARMAFLEX', COMPLYING WITH ASTM C 534; TYPE II; FLEXIBLE, CELLULAR ELASTOMERIC, SHEETS.
2. THERMAL CONDUCTIVITY, "K" VALUE OF 0.27 AT 75 DEGREES F MEAN TEMPERATURE.
3. MAXIMUM/MINIMUM SERVICE TEMPERATURE: 220 / -70 DEGREES F.
4. MAXIMUM WATER VAPOR PERMEABILITY OF 0.08 TESTED IN ACCORDANCE WITH ASTM E 96 PROCEDURE A.
5. DENSITY OF NOT LESS THAN 5 LB. PER CU. FT.
6. MAXIMUM FLAME SPREAD/SMOKE DEVELOPMENT: 25/50.

MECHANICAL SHEET INDEX

SHEET	NAME	REV	DESCRIPTION	DATE
M-001	MECHANICAL TITLE SHEET	0	ISSUE FOR CONSTRUCTION	02-28-2025
MD101	MECHANICAL DEMOLITION SHEET	0	ISSUE FOR CONSTRUCTION	02-28-2025
M-101	OVERALL MECHANICAL FLOOR PLAN	0	ISSUE FOR CONSTRUCTION	02-28-2025
M-601	MECHANICAL SCHEDULES AND DETAILS	0	ISSUE FOR CONSTRUCTION	02-28-2025
M-701	MECHANICAL CONTROLS	0	ISSUE FOR CONSTRUCTION	02-28-2025

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
- winter dry bulb: 18F
- summer dry bulb: 90.2F

Interior design conditions
- winter dry bulb: 68F
- summer dry bulb: 75F
- relative humidity: 50%

Building heating load: 51.05 MBH

Building cooling load: 51.3 MBH

Mechanical Spacing Conditioning System
- Unitary
  - description of unit: SINGLE ZONE VAV
  - heating efficiency: 99%
  - cooling efficiency: 14.6 SEER
  - size category of unit: 10 TON
- Boiler
  - Size category. If oversized, state reason.: ____
- Chiller
  - Size category. If oversized, state reason.: ____

List equipment efficiencies: 11.0 EER 14.6 SEER

2018 NC Administrative Code and Policies — Revised 6/15/2020

Beekman Point ENGINEERING
295 Seven Farms Drive, Suite C-321
Daniel Island, SC 29492
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(843)471-5488

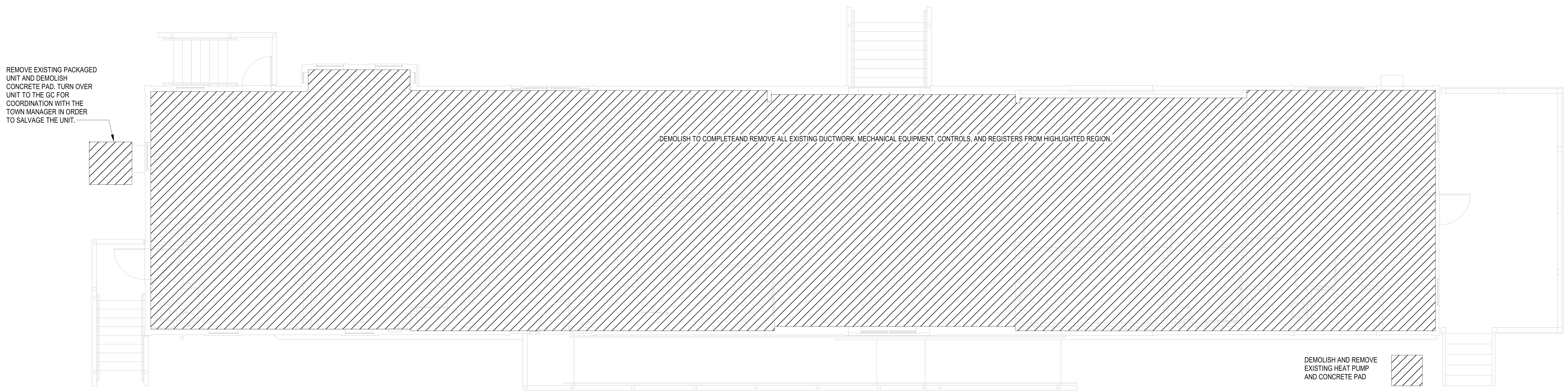
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046074 ANTHONY SHANE DUTTERA 02/28/2025

ALLIANCE ARCHITECTURE OF THE TRIAD
720 Coliseum Drive, Suite 112 | Winston-Salem, NC 27106 | Ph. 336-722-4447

NO	REVISION	DATE
0	ISSUE FOR CONSTRUCTION	02-28-2025

SPRING HOPE RAILROAD DEPOT
Interior Renovation
101 SOUTH ASH STREET
SPRING HOPE, NORTH CAROLINA 27882

JOB	240015
DATE	02-28-2025
DRAWN	JD
SHEET	M-001



1 MD101 OVERALL MECHANICAL DEPOT DEMOLITION PLAN
3/16" = 1'-0"

N

Beekman Point ENGINEERING

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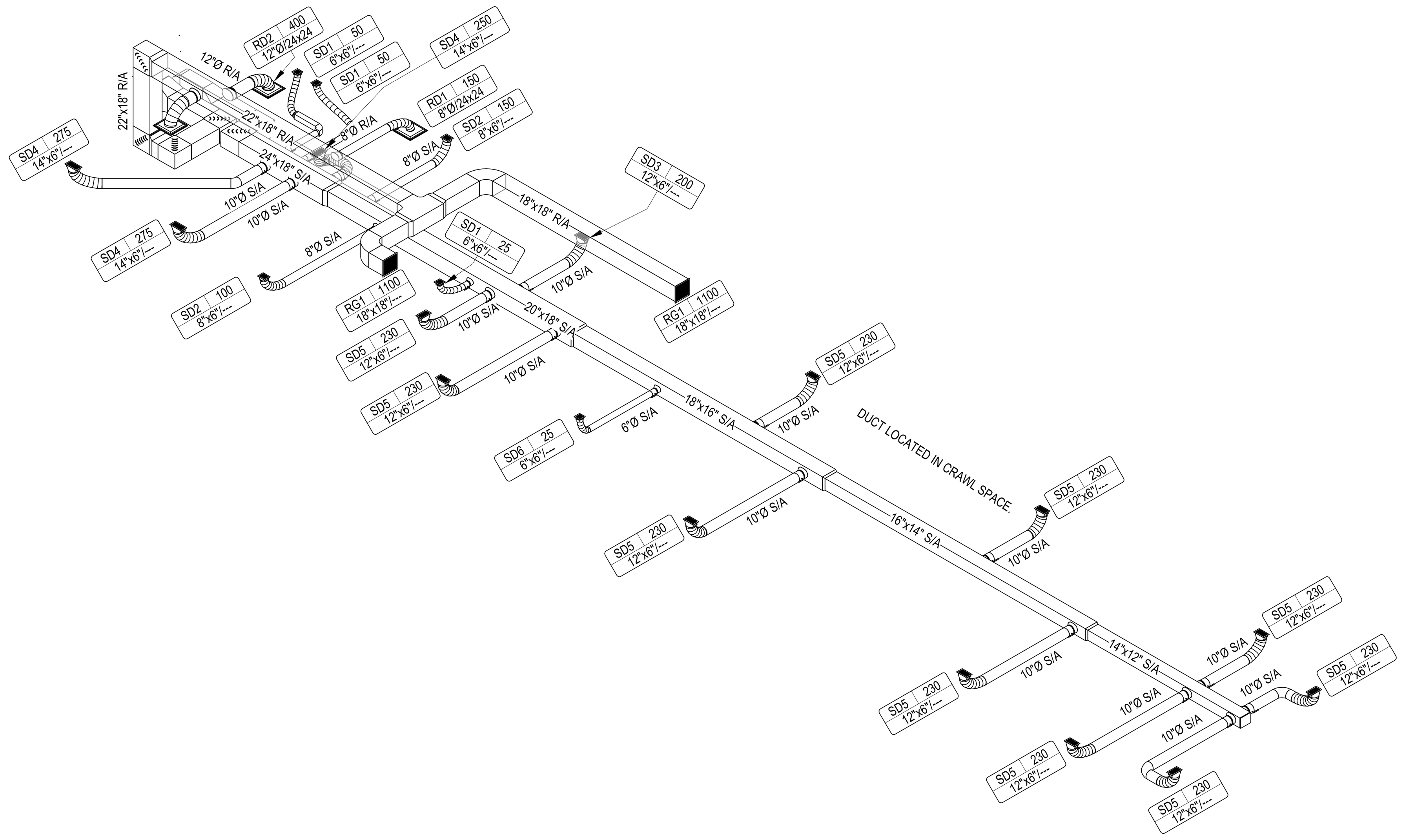
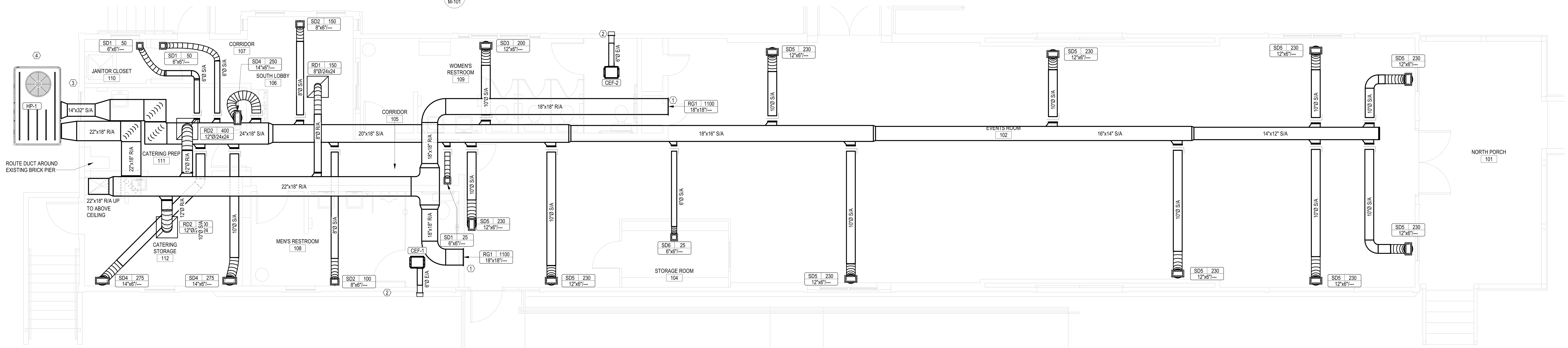
JOB	240015
DATE	02-28-2025
DRAWN	Author
SHEET	MD101



1 M-101 DUCTWORK RISER DIAGRAM



2 M-101 OVERALL MECHANICAL DEPOT FLOOR PLAN
1/4" = 1'-0"

3 M-101 OVERALL MECHANICAL PLATFORM FLOOR PLAN
1/4" = 1'-0"

HVAC SHEET NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A COMPLETE AND WORKING SYSTEM.
2. INSTALL, SUPPORT, & BRACE NEW DUCTWORK AND ACCESSORIES PER SMACNA GUIDELINES.
3. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS. CONTRACTOR SHALL MAKE ALLOWANCE FOR ANY INTERIOR LINING, INSULATION, ETC.ALL NEW DUCT ELBOWS SHALL BE RADIUS TYPE. WHERE NECESSARY, CONTRACTOR MAY SUBSTITUTE MITERED ELBOWS WITH TURNING VANES.
4. PROVIDE FLAT BLADE MANUAL VOLUME DAMPERS AT ALL TERMINAL DUCT BRANCHES AND AS INDICATED.
5. COORDINATE ALL EXTERIOR PENETRATIONS INCLUDING ROOF PENETRATIONS WITH OTHER TRADES TO PROVIDE A COMPLETE AND FULLY WEATHER-PROOF INSTALLATION.
6. CONTRACTOR SHALL ENGAGE A TESTING AND BALANCE FIRM CERTIFIED BY AABC TO PERFORM TESTING AND BALANCING PROCEDURES ON EACH SYSTEM ACCORDING TO THE PROCEDURES CONTAINED IN AABC'S "NATIONAL STANDARDS" AND PROVIDE TWO COPIES OF THE CERTIFIED TAB REPORTS.
7. THIS DRAWING IS DIAGRAMMATIC IN NATURE AND SHALL NOT BE SCALED TO DETERMINE THE EXACT LOCATION OR EXTENT OF THE WORK. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF THE WORK.
8. THIS DRAWING IS BASED ON VISUALLY OBSERVABLE EXISTING CONDITIONS AS OF THE TIME OF DESIGN. CONTRACTOR SHALL BE RESPONSIBLE TO FULLY VERIFY ALL EXISTING CONDITIONS, COMPONENTS, ETC. PRIOR TO THE START OF THE WORK. ANY DEVIATION FROM THIS DRAWING IN KIND, OR IN LOCATION EXCEEDING 1'-0", SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

KEYNOTES

1	MOUNT RETURN AIR GRILLE AT 12FT 6IN +/- AFF.
2	TERMINATE 6" EXHAUST DUCT WITH WALLCAP EQUIVALENT TO GREENHECK WC-6.
3	SUPPLY DUCT RUNS UNDERNEATH STRUCTURE.
4	OUTSIDE AIR ENTERS FROM UNIT INTAKE.

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SHEET	M-101

PACKAGED HEAT PUMP SCHEDULE

ID	MANUFACTURER	MODEL	PRODUCT TYPE	NOMINAL CAPACITY	OUTDOOR AIR FLOW	SUPPLY FAN CAPACITY		SUPPLY FAN MOTOR		COOLING COIL						ECONOMIZER		HEAT PUMP HEATING			ELECTRIC RESISTANCE HEATING	ELECTRICAL				REFRIGERANT TYPE	EFFICIENCY	WEIGHT	DISCONNECT FURNISHED BY	NOTES
						DESIGN AIRFLOW	ESP	QTY	SIZE	TOTAL	SENSIBLE	EDB	EWB	LDB	LWB	DBT SETPOINT	ENTHALPY SETPOINT	OUTPUT	EAT	LAT		MCA	MOCP	VOLTAGE	PHASE					
HP-1	TRANE	WSC120H3	PACKAGED HEAT PUMP	10 ton	550 CFM	3,700 CFM	1.00 in-wg	1	3.00 hp	116,930 Btu/h	92,640 Btu/h	80 °F	67 °F	58.52 °F	57.43 °F	65°F	22.0 BTU/lb	102,120 Btu/h	70 °F	95.55 °F	18.0 kW	101.0 A	110.0 A	208 V	3	R-410A	11.0 EER, 14.60 SEER	1239 lb	MANUF.	1,2,3,4,5,6,7,8

NOTES:
1. PROVIDE MODEL SELECTED OR EQUIVALENT BY CARRIER OR YORK
2. LOCAL DISCONNECT, POWERED CONVENIENCE OUTLET, AND SINGLE POINT POWER CONNECTION.
3. HINGED PANELS, AND HAIL GUARD.
4. SINGLE ZONE VAV UNIT.
5. BAROMETRIC RELIEF, LOW LEAKAGE DAMPERS, AND REFERENCE ENTHALPY ECONOMIZER.
6. INSTALL ON CONCRETE HOUSEKEEPING PAD. PROVIDE GROUND MOUNT CURB WITH SPRING VIBRATION ISOLATORS.
7. LOCKOUT HEAT PUMP HEATING BELOW 35F.
8. SEE SEQUENCE OF OPERATIONS FOR ADDITIONAL REQUIREMENTS.

GRILLES, REGISTERS, AND DIFFUSERS SCHEDULE

ID	MANUFACTURER	MODEL	MATERIAL	NECK			FACE SIZE	MAX NC	PRODUCT SPECIFICATION	NOTES
					RECTANGULAR					
				ROUND	HEIGHT	WIDTH				
RD1	TITUS	PAR-AA	ALUMINUM	8"			24x24	13	PERFORATED CEILING RETURN DIFFUSER	1,2,3,4,5,6,7
RD2	TITUS	PAR-AA	ALUMINUM	12"			24x24	22	PERFORATED CEILING RETURN DIFFUSER	1,2,3,4,5,6,7
RG1	TITUS	350FL	ALUMINUM		18"	18"	---	21	ALUMINUM LOUVERED RETURN GRILLE	1,2,3,4,5,6
SD1	REGGIO	SCROLL	CAST IRON		6"	6"	---	15	CAST IRON SCROLL VENT GRILLE	1,2,3,4,5
SD2	REGGIO	SCROLL	CAST IRON		6"	8"	---	17	CAST IRON SCROLL VENT GRILLE	1,2,3,4,5
SD3	REGGIO	SCROLL	CAST IRON		6"	12"	---	13	CAST IRON SCROLL VENT GRILLE	1,2,3,4,5
SD4	REGGIO	SCROLL	CAST IRON		6"	14"	---	14	CAST IRON SCROLL VENT GRILLE	1,2,3,4,5
SD5	REGGIO	SCROLL	CAST IRON		6"	12"	---	13	CAST IRON SCROLL VENT GRILLE	1,2,3,4,5
SD6	REGGIO	SCROLL	CAST IRON		6"	6"	---	15	CAST IRON SCROLL VENT GRILLE	1,2,3,4,5

NOTES:
1. PROVIDE MODEL SELECTED OR APPROVED EQUAL BY PRICE, NAILOR, KRUEGER, OR TUTTLE & BAILEY.
2. PROVIDE WITH ALUMINUM CONSTRUCTION AND STANDARD FINISH. WHERE CEILING RADIATION DAMPERS ARE REQUIRED, CONTRACTOR SHALL PROVIDE STEEL DIFFUSERS.
3. COLOR BY ARCHITECT. PROVIDE SELECTION OPTIONS TO OWNER.
4. PROVIDE WITH OPTIONAL SURFACE MOUNT KIT AS REQUIRED.
5. PROVIDE SQUARE TO ROUND TRANSITIONS AS REQUIRED.
6. FACTORY PRIME FOR FIELD PAINTING BY GC.
7. PROVIDE SURFACE MOUNT BORDER INSTALLATION.

CEILING EXHAUST FAN SCHEDULE

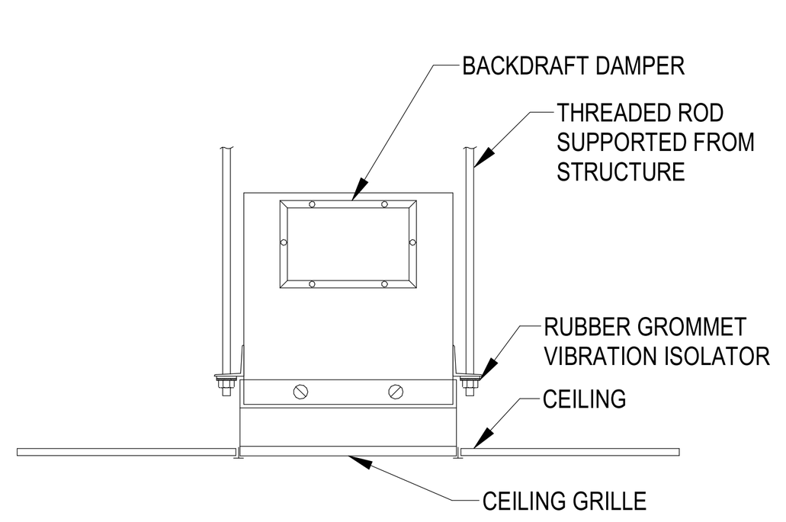
ID	MANUFACTURER	MODEL	PRODUCT TYPE	FAN DESIGN			DRIVE TYPE	MOTOR	ELECTRICAL					WEIGHT	DISCONNECT FURNISHED BY	NOTES
				CAPACITY	ESP	RPM		POWER	FLA	MCA	MOCP	VOLTAGE	PHASE			
CEF-1	GREENHECK	SP-B150	CEILING EXHAUST FAN	140 CFM	0.35 in-wg	1050	ECM	128 W	1.8 A	2.3 A	15 A	115 V	1	10 lb	DIV 26	1,2,3,4
CEF-2	GREENHECK	SP-A390-VG	CEILING EXHAUST FAN	280 CFM	0.30 in-wg	1179	ECM	47 W	1.5 A	1.875 A	15 A	115 V	1	24 lb	DIV 26	1,2,3,4
CEF-3	GREENHECK	SP-B150	CEILING EXHAUST FAN	140 CFM	0.35 in-wg	1050	ECM	128 W	1.8 A	2.3 A	15 A	115 V	1	10 lb	DIV 26	1,2,3,4
CEF-4	GREENHECK	SP-B150	CEILING EXHAUST FAN	140 CFM	0.35 in-wg	1050	ECM	128 W	1.8 A	2.3 A	15 A	115 V	1	10 lb	DIV 26	1,2,3,4

NOTES:
1. PROVIDE MODEL SELECTED OR EQUIVALENT BY COOK.
2. PROVIDE WITH A UNIT DISCONNECT SWITCH AND BACKDRAFT DAMPER.
3. CONTROL WITH LOCAL SWITCH OR OCCUPANCY SENSOR, COORDINATE WITH ELECTRICAL.
4. FACTORY PRIME FOR FIELD PAINTING BY GC.

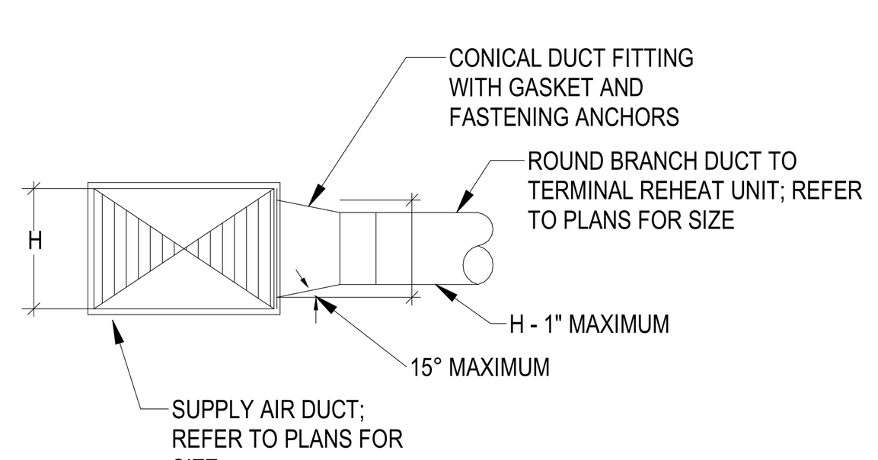
ELECTRIC CABINET HEATER SCHEDULE

ID	MANUFACTURER	MODEL	PRODUCT TYPE	FAN CAPCITY	HEATING DESIGN	HEATING ELEMENT			SOUND RATING	ELECTRICAL				WEIGHT	DISCONNECT FURNISHED BY	NOTES
					OUTPUT	RATING	FLA	ELEMENTS		MCA	MOCP	VOLTAGE	PHASE			
ECH-1	REZNOR	ECH-AK2-2	WALL RECESSED	160 CFM	6,825 Btu/h	2.0 kW	7.21 A	1	55 dBa	9.0 A	20.0 A	208 V	1	24 lb	MANUF.	1,2,3,4,5
ECH-2	REZNOR	ECH-AK2-2	WALL RECESSED	160 CFM	6,825 Btu/h	2.0 kW	7.21 A	1	55 dBa	9.0 A	20.0 A	208 V	1	24 lb	MANUF.	1,2,3,4,5
ECH-3	REZNOR	ECH-AK2-4	WALL RECESSED	160 CFM	13,660 Btu/h	4.0 kW	14.42 A	1	55 dBa	18.0 A	20.0 A	208 V	1	24 lb	MANUF.	1,2,3,4,5
ECH-4	REZNOR	ECH-AK2-4	WALL RECESSED	160 CFM	13,660 Btu/h	4.0 kW	14.42 A	1	55 dBa	18.0 A	20.0 A	208 V	1	24 lb	MANUF.	1,2,3,4,5

NOTES:
1. PROVIDE MODEL SELECTED OR APPROVED EQUIVALENT.
2. PROVIDE WITH MANUFACTURER MOUNTING BRACKET AND ALL REQUIRED HARDWARE FOR COMPLETE INSTALLATION IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.
3. COORDINATE WITH ELECTRICAL FOR CONTROL POWER CONNECTIONS.
4. PROVIDE WITH INTEGRAL THERMOSTAT AND SET TO 50 F.
5. PROVIDE WITH MANUFACTURER 20 A DISCONNECT OPTION BA21.

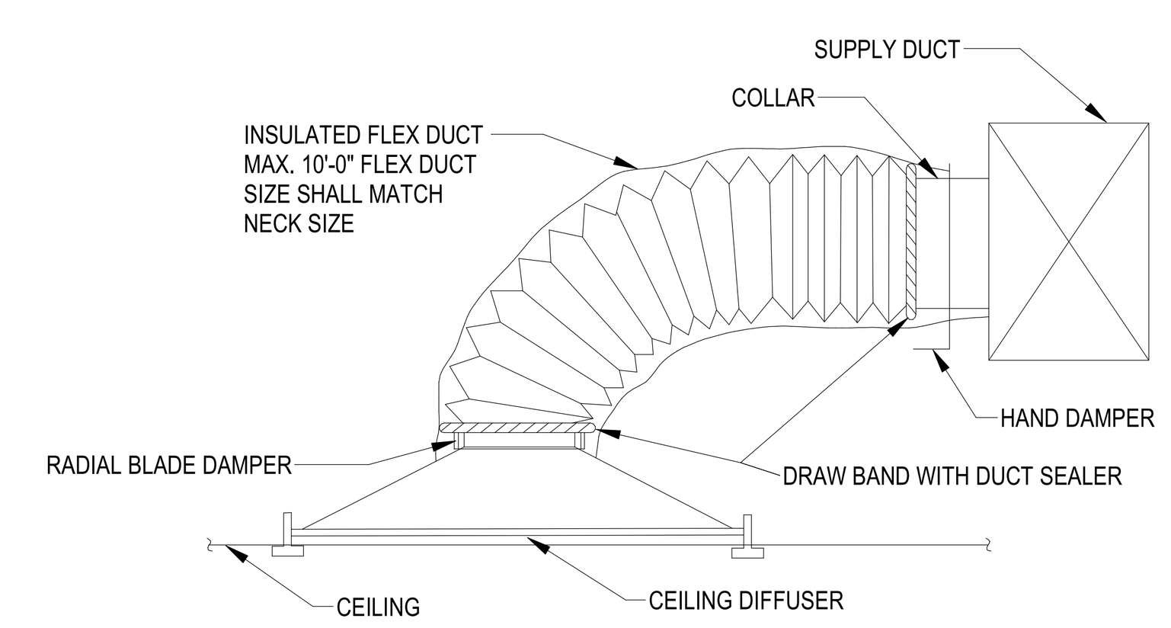


2 / M-601 VENT TYPICAL CEILING MOUNTED
NOT TO SCALE

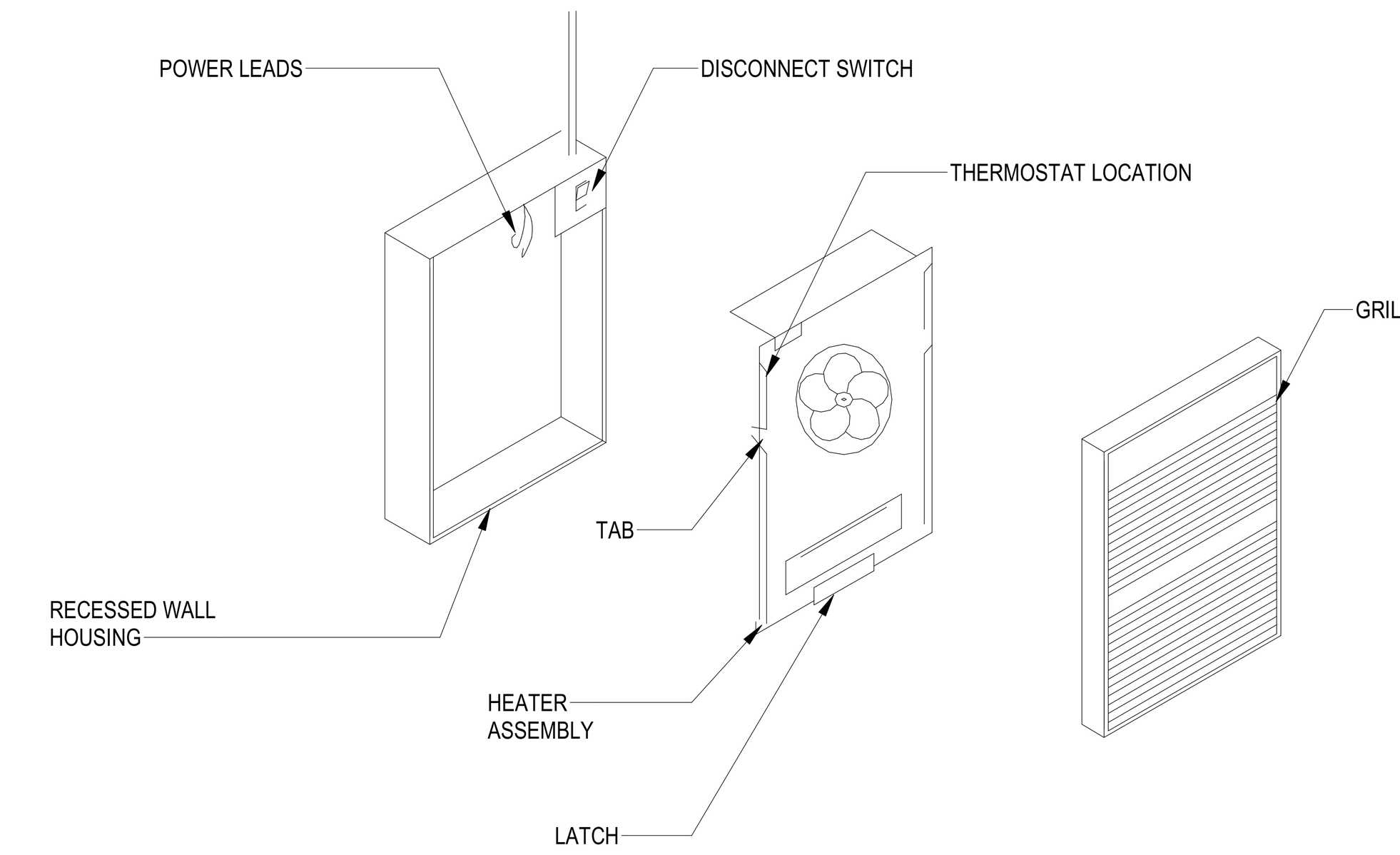


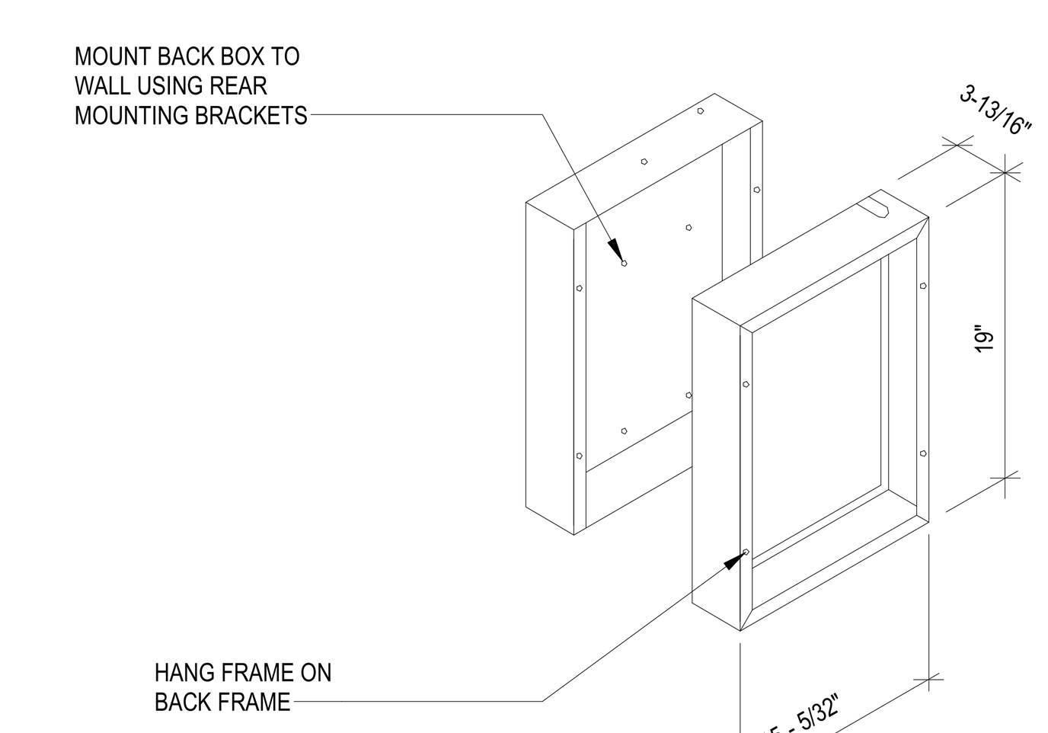
NOTE: CONICAL FITTING SHALL BE SEALED PER SPECIFICATIONS.

3 / M-601 CONICAL DUCT FITTING TAKEOFF DETAIL
NOT TO SCALE



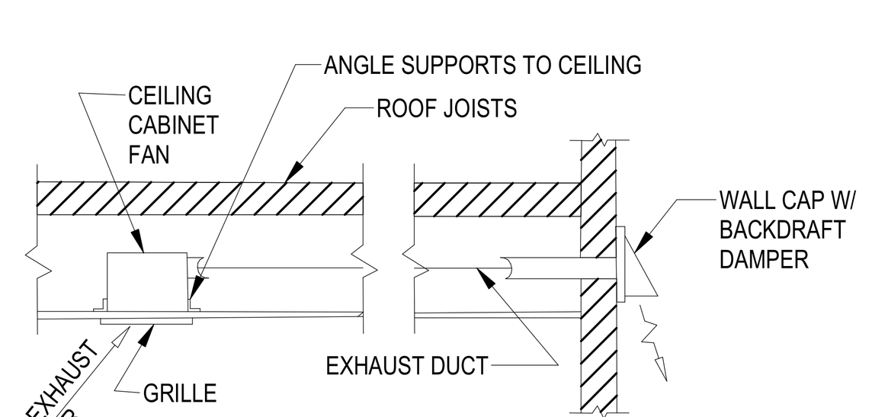
5 / M-601 TYPICAL DIFFUSER CONNECTION DETAIL
NOT TO SCALE



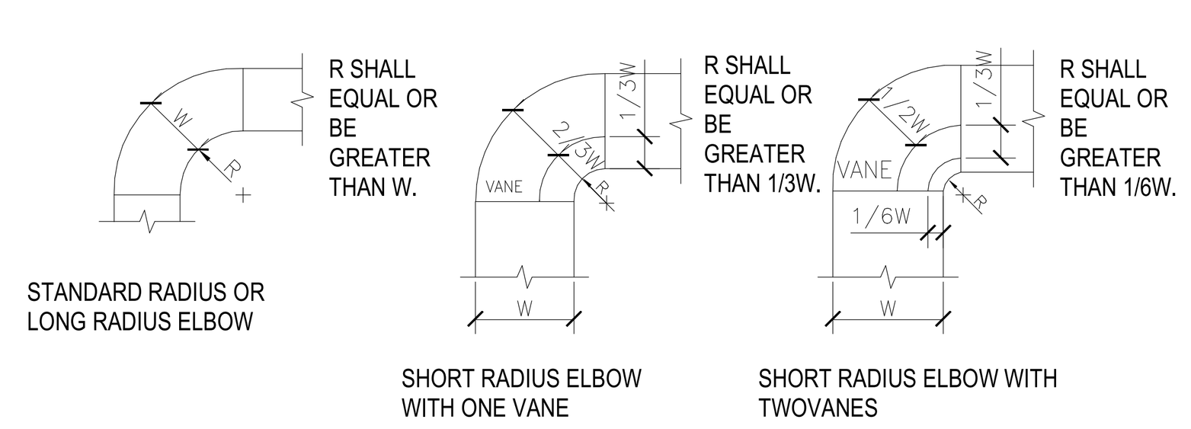


DETAIL NOTES:

1. DO NOT USE A REMOTE THERMOSTAT WITH THIS HEATER. BUILT IN THERMOSTAT CYCLES THE HEATING ELEMENT ONLY. FAN DELAY CONTROL AUTOMATICALLY TURNS FAN ON AND OFF, AND PROVIDES A FAN DELAY OFF FEATURE TO REMOVE RESIDUAL HEAT AFTER THERMOSTAT HAS TURNED HEATING ELEMENTS OFF. WIRING OF HEATER IN ANY MANNER WHICH DEFEATS THE FAN DELAY OFF FEATURE CAN RESULT IN OVERHEATING AND PERMANENT DAMAGE TO THE HEATER, AND WILL VOID THE WARRANTY FOR WALL MOUNTING ONLY WITH AIR DISCHARGE DOWNWARD.
2. DO NOT INSTALL IN FLOOR, CEILING, UPSIDE DOWN (AIR DISCHARGE UPWARD), OR SIDEWAYS.
3. DO NOT OPERATE HEATER WITHOUT GRILLE INSTALLED.
4. MAINTAIN THE FOLLOW CLEARANCES:
   * BOTTOM OF HEATER TO FLOOR - 8"
   * SIDES OF HEATER TO ADJACENT WALL - 8"
   * TOP OF HEATER TO CEILING - 36"
5. THIS HEATER IS HOT WHEN IN USE. DO NOT INSTALL HEATER BEHIND DOOR, BEHIND TOWEL RACK, INSIDE CLOSET, WHERE DRAPERY COULD TOUCH HEATER OR BE DAMAGED BY HEAT, OR WHERE AIRFLOW TO HEATER MAY BE OBSTRUCTED. KEEP ELECTRICAL CORDS, BEDDING, FURNITURE, AND OTHER ITEMS AWAY FROM HEATER.
6. HEATER MUST BE CLEANED PERIODICALLY (AT LEAST ANNUALLY) TO ASSURE PROPER PERFORMANCE AND PREVENT OVERHEATING.

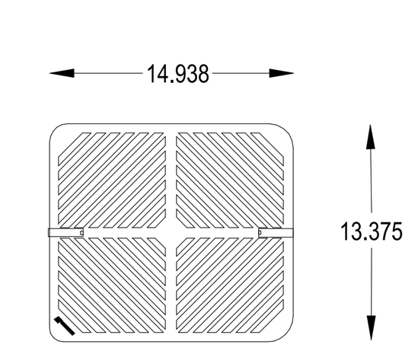


1 / M-601 BATHROOM EXHAUST FAN DETAIL
NOT TO SCALE



NOTES:
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS.
2. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

4 / M-601 DUCT WORK RADIUS ELBOWS DETAIL
NOT TO SCALE



8 / M-601 TYPICAL CEILING EXHAUST FAN GRILLE DETAIL
NOT TO SCALE

9 / M-601 ELECTRIC WALL HEATER DETAIL
NOT TO SCALE

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02/28/2025

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NO	REVISION	DATE
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SPRING HOPE RAILROAD DEPOT
Interior Renovation
101 SOUTH ASH STREET
SPRING HOPE, NORTH CAROLINA 27882

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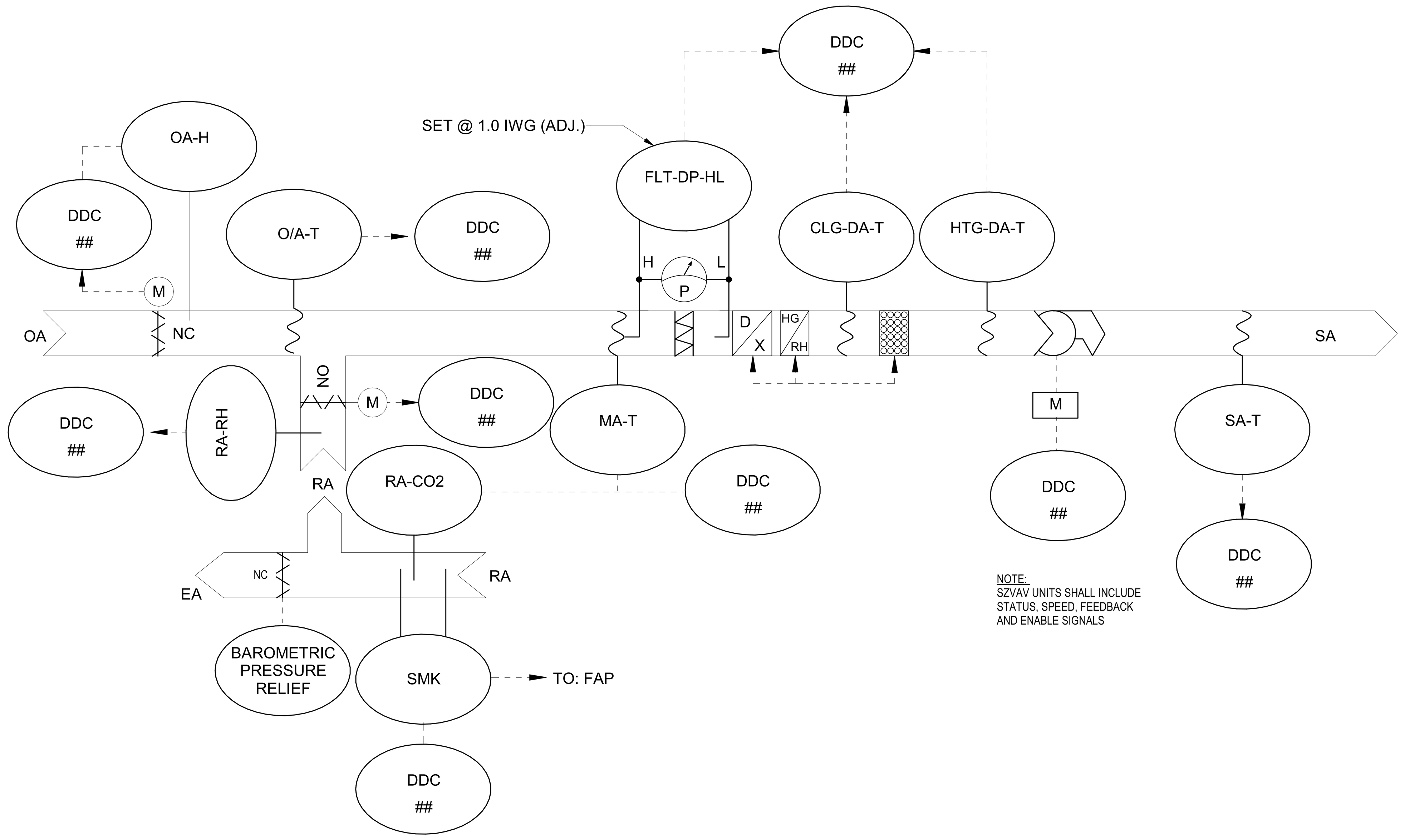
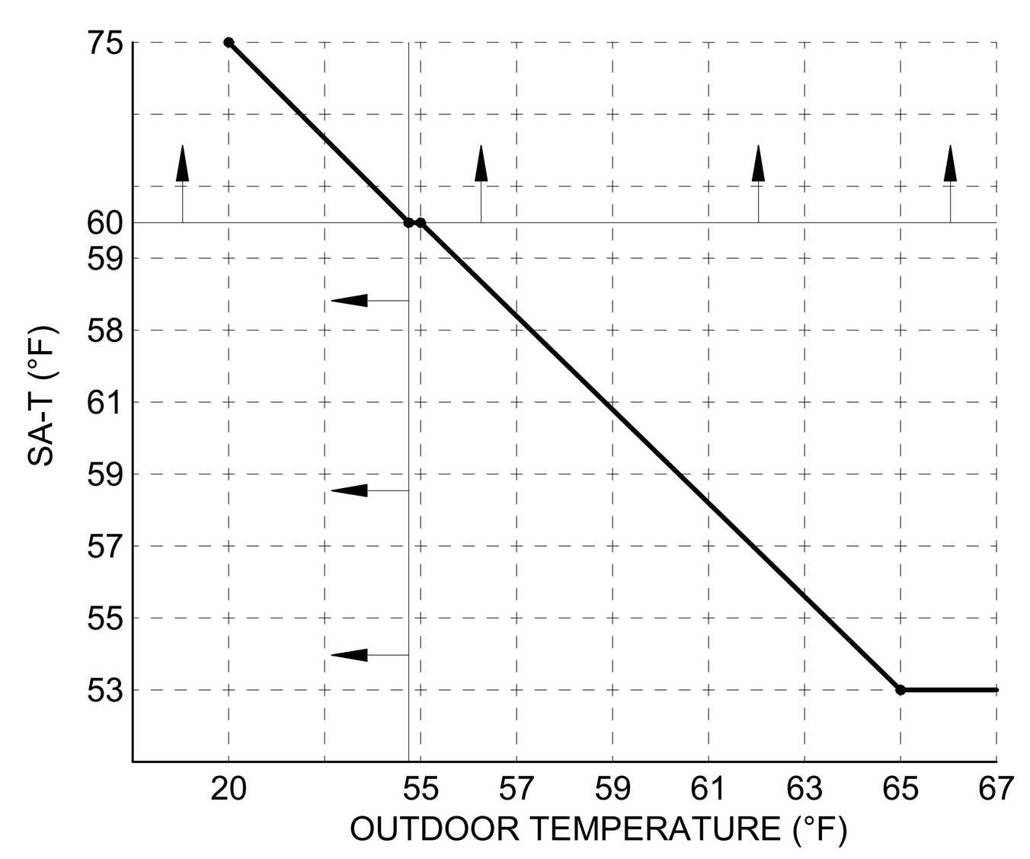
M-601



1
M-701
PACKED HEAT PUMP UNIT CONTROL DIAGRAM
12" = 1'-0"



SINGLE ZONE VAV PACKED HEAT PUMP SEQUENCE OF OPERATIONS

GENERAL: UNIT IS PACKAGED ROOFTOP UNIT WITH AN OUTSIDE AIR DAMPER, REFERENCE ENTHALPY ECONOMIZER WITH LOW LEAKAGE OUTSIDE AIR DAMPER, VARIABLE SPEED SUPPLY FAN (FOR SZVAV ONLY) A FACTORY DEHUMIDIFICATION CYCLE, MODULATING NATURAL GAS HEATING, CONDENSATE HIGH LEVEL SENSOR RETURN AIR HUMIDITY SENSOR, RETURN AIR CO2 SENSOR, SUPPLY AIR TEMPERATURE SENSOR, BAROMETRIC RELIEF DAMPER, AND HOT GAS REHEAT. UNIT SHALL BE FACTORY EQUIPPED WITH A CONTROLS PACKAGE, FREEZE-STAT AND A RETURN AIR SMOKE DETECTOR.

REMOTE OPERATORS INCLUDE: THERMOSTAT WITH COMBINATION OCCUPANCY SENSOR, TEMPERATURE SENSOR, AND SMOKE DECTOR TIE IN TO THE FIRE ALARM CONTROL PANEL (FACP) (BY FIRE ALARM CONTRACTOR). RTU CONTROLLER AND CONTROL INTEGRATION WITH BAS.

THE CONTROLS CONTRACTOR SHALL CONSULT THE MANUFACTURER DOCUMENTATION FOR SPECIFIC PARAMETERS INCLUDING BUT NOT LIMITED TO MINIMUM RUNTIME AND COMPRESSOR STAGING SETPOINTS.

OPERATION:

THE UNIT SHALL RUN CONTINUOUSLY WHILE OCCUPIED.

OCCUPIED MODE
- UPON THREE SUCCESSFUL OCCUPANCY DETECTIONS IN A 3 MINUTE (ADJ.) WINDOW THE CONTROLLER SHALL IMPLEMENT OCCUPIED SETPOINTS:
- COOLING: 75°F +/- USER ADJUSTABLE 3°F
- HEATING: 68°F +/- USER ADJUSTABLE 3°F

UNOCCUPIED MODE
- UPON 30 MINUTES (ADJ.) ELAPSING WITHOUT AN OCCUPANCY DETECTION, THE CONTROLLER SHALL IMPLEMENT UNOCCUPIED SETPOINTS:
- COOLING: 82° F +/- 3°F DEAD BAND
- HEATING: 65° F +/- 3°F DEAD BAND

SUPPLY FAN CONTROL
- FOR SINGLE ZONE VAV UNITS, THE SUPPLY FAN SPEED SHALL BE CONTROLLED BY FACTORY PROGRAMMED SETTINGS.

OUTSIDE AIR:
- OUTSIDE AIR SHALL BE REGULATED BY DEMAND CONTROLLED VENTILATION.
- THE CONTROLLER SHALL MONITOR THE RETURN AIR CO2 CONCENTRATION IN AIR. SHOULD CO2 RISE TO 1000 PPM (ADJ.) THE CONTROLLER SHALL SLOWLY OPEN THE OUTSIDE AIR DAMPER TO PROVIDE UP TO THE SCHEDULED OUTSIDE AIR. WHEN CO2 CONCENTRATION LOWERS TO 500 PPM (ADJ.), THE CONTROLLER SHALL CLOSE THE OUTSIDE AIR DAMPER.

THERMOSTAT CONTROL:
- WHEN TEMPERATURE SENSORS ARE SHOWN ON THE PLANS, THE UNIT SHALL MAINTAIN TEMPERATURE BASED ON AVERAGE OF THE MASTER THERMOSTAT AND TEMPERATURE SENSOR TEMPERATURE READINGS.
- WHEN A SINGLE THERMOSTAT IS SHOWN ON THE PLANS, THE UNIT SHALL RESPOND TO THE THERMOSTAT TEMPERATURE READING.

COOLING MODE:
- COOLING SHALL BE ENABLED WHEN OUTSIDE AIR TEMPERATURE IS 55°F (ADJ.) OR GREATER. THE CONTROLLER SHALL STAGE THE COOLING OPERATION TO INITIALLY PROVIDE 55 °F (ADJ) SUPPLY AIR TEMPERATURE.
- SUPPLY AIR TEMPERATURE SHALL BE RESET BASED ON OUTSIDE AIR TEMPERATURE IN A LINEAR RAMP. SEE PLANS FOR SA-T VS. OA-T RESET GRAPH.

ECONOMIZER MODE:
- THE CONTROLLER SHALL MEASURE THE OUTSIDE AIR TEMPERATURE AND ENTHALPY. ECONOMIZER SHALL BE ENABLED WHEN:
- COOLING IS ACTIVE.
- OA-T IS LESS THAN 65 °F.
- OUTSIDE AIR ENTHALPY IS LESS THAN 22 BTU/LBM.
- MODULATE THE OUTSIDE AIR DAMPER TO MAINTAIN SPACE SETPOINTS. THE ECONOMIZER DAMPER SHALL MAINTAIN MINIMUM OR GREATER OUTSIDE AIR PER THE SCHEDULE IN ECONOMIZER MODE.
- THE ECONOMIZER SHALL BE DISENGAGED WHENEVER OUTSIDE AIR TEMPERATURE DROPS TO 45°F TO °F (ADJ.) OR HEATING MODE IS ENGAGED.

HEATING MODE:
- THE CONTROLLER SHALL ENTER HEATING MODE AND MODULATE THE ELECTRIC HEATER TO PROVIDE 95°F (ADJ.) SUPPLY AIR TEMPERATURE WHENEVER OUTSIDE AIR TEMPERATURE FALLS BELOW 55°F (ADJ.) OR WHEN THE ZONE CALLS FOR HEATING. LIMIT MAXIMUM HEATING SUPPLY TEMPERATURE TO 20°F PLUS ROOM TEMPERATURE, NOT TO EXCEED 120°F.

DEHUMIDIFICATION MODE:
- THE CONTROLLER SHALL MEASURE THE RETURN AIR HUMIDITY AND STAGE THE COOLING FUNCTION TO MAINTAIN RETURN AIR HUMIDITY AT OR BELOW 50% RH (ADJ.).
- DURING DEHUMIDIFICATION, THE CONTROLLER SHALL OVERRIDE THE COOLING SEQUENCE TO LOWER COIL TEMPERATURE TO 53 °F (ADJ.) AND MODULATE HOT GAS REHEAT TO MAINTAIN SUPPLY AIR AT THE SUPPLY AIR TEMPERATURE COOLING SETPOINT.
- UPON RETURN AIR REDUCING TO 40% (ADJ.) RH OR LOWER, THE CONTROLLER SHALL RESTORE THE NORMAL MODE OF OPERATION.

BUILDING PRESSURE CONTROL:
- ADJUST THE BAROMETRIC RELIEF SUCH THAT SPACE PRESSURE IS MAINTAINED AT A SLIGHT POSITIVE PRESSURE (0.1 IN WG).

UNOCCUPIED MODE:
- ENTER UNOCCUPIED MODE WHEN ALL ZONES REPORT NO OCCUPANCY DETECTIONS WITHIN A 30 MINUTE (ADJ.) PERIOD.
- WHILE UNOCCUPIED, THE RTU SHALL ENTER STANDBY MODE WITH THE SUPPLY FAN, COMPRESSORS, AND HEATING DISENGAGED.
- DURING UNOCCUPIED MODE, WHEN THE ZONE CALLS FOR COOLING THE RTU SHALL START IN COOLING MODE UNTIL ALL ZONES ARE SATISFIED THEN RETURN TO STANDBY MODE.
- DURING UNOCCUPIED MODE, WHEN THE ZONE CALLS FOR HEATING, THE RTU SHALL START IN HEATING MODE AND PROVIDE 65 °F (ADJ.) SUPPLY AIR UNTIL ALL ZONES ARE SATISFIED, THEN RETURN TO UNOCCUPIED MODE.
- DURING THE HEATING SEASON IMPLEMENT A MORNING WARM UP SUBROUTINE. THE CONTROLLER SHALL START THE SYSTEM 1-HOUR PRIOR TO SCHEDULED OCCUPANCY AND COMMENCE MORNING WARM-UP.

STARTUP SEQUENCE: UPON SIGNAL OR COMMAND TO STARTUP, THE RTU CONTROLLER SHALL:
- OPEN THE OUTSIDE AIR DAMPER.
- UPON PROOF OF OUTSIDE AIR DAMPERS OPEN, START THE SUPPLY FANS.

SHUTDOWN/STANDBY SEQUENCE: UPON A SIGNAL OR COMMAND TO SHUTDOWN, THE RTU CONTROLLER SHALL:
- STOP THE SUPPLY FANS
- UPON PROOF OF SUPPLY FAN OFF, CLOSE THE OUTSIDE AIR DAMPERS.
- THE SHUTDOWN SEQUENCE SHALL NOT INITIATE UNTIL THE MANUFACTURER MINIMUM RUNTIME IS SATISFIED.

SMOKE DETECTION:
- UPON RECEIPT OF A SMOKE DETECTOR ALARM THE CONTROLLER SHALL INITIATE THE SHUTDOWN SEQUENCE AND SIGNAL THE FACP TO PROVIDE AN ALARM. A MANUAL RESET SHALL BE REQUIRED PRIOR TO OPERATION FOLLOWING A SMOKE DETECTOR SHUTDOWN.

FACP ALARM:
- FIRE ALARM ACTUATION: THE CONTROLLER SHALL ACCEPT A REMOTE SIGNAL FROM THE FACP. UPON ACTUATION OF A FIRE ALARM FROM THE FACP, THE CONTROLLER SHALL INITIATE THE SHUTDOWN/STANDBY SEQUENCE. A MANUAL RESET SHALL BE REQUIRED PRIOR TO OPERATION FOLLOWING A FACP SHUTDOWN.

FREEZESTAT ACTUATION:
- THE UNIT SHALL ENGAGE THE HEATING OPERATION ANYTIME THE FREEZESTAT ACTUATES.

HIGH FILTER DIFFERENTIAL PRESSURE
- SHOULD FILTER DIFFERENTIAL PRESSURE EXCEED 1.0" WG OR OTHER PRESSURE AS SPECIFIED BY MANUFACTURER (CONTROLS CONTRACTOR SHALL PROGRAM VALUE FROM RTU MANUAL) A HIGH FILTER DIFFERENTIAL PRESSURE WARNING SHALL BE PROVIDED. SHOULD DIFFERENTIAL PRESSURE EXCEED MANUFACTURER LIMITATIONS, SHUT DOWN THE UNIT.

CONDENSATE HIGH LEVEL
- SHOULD THE CONDENSATE HIGH LEVEL ACTUATE, SHUTDOWN THE UNIT.

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Spring Hope Railroad Depot

Electrical Plans

ELECTRICAL SHEET LISTING		
1	E-0.1	ELECTRICAL COVER SHEET
2	E-0.2	ELECTRICAL RISER DIAGRAM AND PANEL SCHEDULES
3	ED-1.1	ELECTRICAL DEMO PLAN
4	E-1.1	EXIT, EMERGENCY, AND LIGHTING PLAN
5	E-1.2	EXIT, EMERGENCY, AND LIGHTING PLAN
6	E-2.1	HVAC ELECTRICAL AND POWER PLAN
7	E-2.2	HVAC ELECTRICAL AND POWER PLAN
8	E-3.1	FIRE ALARM PLAN
9	E-3.2	FIRE ALARM PLAN

ELECTRICAL NOTES:

1. THE DEPOT IS RECOGNIZED AS A HISTORIC BUILDING BY THE STATE OF NORTH CAROLINA.
2. ELECTRICAL CONTRACTOR MUST VERIFY AVAILABLE FAULT CURRENT WITH LOCAL POWER COMPANY TO ENSURE PROPER SIZING OF EQUIPMENT.
3. ALL RECEPTACLES WITHIN 6 FT OF SINK MUST BE GROUND FAULT CIRCUIT INTERRUPT PROTECTED.
4. WHERE ELECTRICAL WORK PENETRATES FIRE RATED BARRIERS (WALLS, FLOORS AND CEILINGS) SEAL OPENING AROUND ELECTRICAL WORK WITH U.L. LISTED FIRE STOPPING MATERIAL TO MAINTAIN THE FIRE RATING OF THE BARRIER.
5. RECEPTACLES OR OTHER DEVICES THAT MUST BE RECESSED INTO FIRE RATED PARTITIONS MUST BE OFFSET TO PREVENT A THROUGH PENETRATION.
6. ELECTRICAL CONTRACTOR IS TO VERIFY ELECTRICAL LOADS, LOCATIONS, DISCONNECTING MEANS, AND REQUIREMENTS WITH MECHANICAL AND PLUMBING CONTRACTORS.
7. CONNECT ALL EXIT AND EMERGENCY LIGHTS TO NEAREST UNSWITCHED LIGHTING CIRCUIT IN THE AREA IT SERVES.
8. ELECTRICAL CONTRACTOR TO PROVIDE ACCURATE PANEL SCHEDULES AT COMPLETION OF PROJECT, IDENTIFY ROOMS AND DEVICES SERVED.
9. LABEL ALL DEVICES WITH CIRCUIT NUMBERS FOR EASE OF MAINTENANCE INCLUDING RECEPTACLES AND LIGHT FIXTURES.
10. ELECTRICAL CONTRACTOR IS TO COORDINATE LOCATIONS AND REQUIREMENTS OF ALL TELE/DATA WITH OWNER.
11. ELECTRICAL CONTRACTOR IS TO PROVIDE HEAT TAPE FOR BACKFLOW PREVENTER. CONNECT TO CIRCUIT A-5.
12. SMOKE DUCT DETECTORS ARE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.
13. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL LIGHT FIXTURE SPECIFICATIONS AND ASSOCIATED TRIMS/DRIVERS WITH THE APPLICATION. MODIFY SPECIFICATIONS AS REQUIRED AND OBTAIN OWNER APPROVAL.
14. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE LABEL-LISTED BY A NORTH CAROLINA APPROVED THIRD PARTY TESTING AGENCY.
15. ELECTRICAL EQUIPMENT, CONDUCTORS AND TERMINATIONS SHALL BE COORDINATED AND COMPLY WITH 2020 NEC SECTION 110-14(C).
16. ALL RECEPTACLES LOCATED OUTDOORS, IN DAMP OR WET LOCATIONS, OR OTHERWISE SUBJECT TO NON-CONTROLLED TEMPERATURE AND HUMIDITY ENVIRONMENT SHALL BE WEATHER RESISTANT GFCI TYPE.
17. ALL CONDUIT ROUTING AND EQUIPMENT LOCATIONS ARE SCHEMATIC. ELECTRICAL CONTRACTOR SHALL DETERMINE BEST ROUTING PATH BASED ON FIELD CONDITIONS WITH ARCHITECT AND OWNER APPROVAL.
18. WIRING SIZE SHALL BE #12 AWG MINIMUM FOR TYPICAL 20 AMPERE, 120 VOLT OR 277 VOLT LIGHTING OR RECEPTACLE BRANCH CIRCUIT WITH A MAXIMUM TOTAL LENGTH OF 90 FEET AND 225 FEET, RESPECTIVELY. WHEN CIRCUIT TOTAL LENGTHS EXCEED THOSE LIMITS (MEASURED HORIZONTALLY AND VERTICALLY ALONG THE PATH FROM THE PANEL BOARD TO THE LOAD) WIRING SIZE (INCLUDING PHASE, NEUTRAL, AND EQUIPMENT GROUNDING CONDUCTORS) SHALL BE INCREASED FROM THE SIZES INDICATED IN THE PANEL SCHEDULES AS FOLLOWS:

120V TO GROUND		277V TO GROUND	
SIZE	MAX. TOTAL LENGTH	SIZE	MAX. TOTAL LENGTH
#12	90'	#12	225'
#10	150'	#10	375'
#8	OVER 150'	#8	OVER 375'

19. ALL RECEPTACLES AND LIGHT SWITCHES TO BE BROWN, UNLESS OTHERWISE INDICATED BY THE ARCHITECT/OWNER.

ELECTRICAL SPECIFICATIONS:

The Depot is recognized as a Historic Building by the State of North Carolina.

PART ONE – GENERAL

The Electrical Contractor shall provide all labor, materials, and equipment, and perform all operations necessary for the installation of complete electrical work to meet the intent of, and as indicated on the drawings. Specific items and materials may or may not be addressed in specifications and drawings.

ELECTRICAL CONTRACTOR QUALIFICATIONS: Bidding electrical contractors must have sufficient general knowledge and experience to anticipate the needs of construction of this nature. The Electrical Contractor shall furnish all items required to complete the construction in accordance with reasonable interpretation of the intent of the drawings and specifications.

CODE REQUIREMENTS: All work shall be in accordance with the current State Building Code, local codes, NFPA, Current NEC and all other applicable codes and requirements of the local inspector. These code standards are not acceptable alternatives to reduce the standards or requirements outlined in these plans and specifications. All applicable "OSHA" regulations must be followed while performing this work.

NOTICE TO BIDDERS: Instructions to Bidders, Contract documents, and drawings are all parts of these specifications. The Electrical Contractor shall visit the site to familiarize themselves with existing conditions and the area in which the work is to be performed. The Electrical Contractor shall satisfy himself regarding subsoil conditions for excavations prior to making a proposal. The Electrical Contractor shall review and coordinate electrical service delivery with the electric utility. The Electrical Contractor must include in his bid the fees associated with temporary electrical service and permanent electrical and telephone service installation. This includes any fees to extend electrical and telephone service to the location of this project. Electrical Contractor must also review architectural, mechanical, plumbing, and civil drawings for electrical coordination.

ELECTRICAL PERMITS: Any permits, fees, inspection, and/or test charges required for the electrical work shall be secured and paid for by the Electrical Contractor.

SUBMITTALS: The Contractor shall submit (6) copies of shop drawings or submittal data on the luminaries and the panel board. Submittals shall be checked by the Electrical Contractor for conformance to the plans and specifications prior to being forwarded to the Engineer, and shall bear evidence of said review. Manufacturers and models shown in the schedules are intended to establish a standard of performance, efficiency, appearance, and quality. Any substitutions must meet these standards and be approved by the engineer before installation. All equipment and materials shall be installed in accordance with the recommendations of the manufacturer. Any indications in plans or specifications to the contrary shall be clarified with the Engineer, and any additional cost resulting from a substitution of equipment or material or from a manufacturer's installation requirement shall be paid for by the Electrical Contractor.

DRAWINGS: The drawings are diagrammatic only and are not intended to show minor details and exact locations. Locations of pipes, electrical switches, panels, equipment, luminaries, etc. shall be adjusted to accommodate the work to interferences anticipated and encountered. Equipment whose elevations cannot be changed shall have the right-of-way.

POWER WIRING: The Electrical Contractor shall provide all power wiring including disconnects, overload starters, fuses, breakers, line voltage control wiring, and final connections to the various electrical equipment. The HVAC Contractor shall be responsible for all controls, interlocks, low voltage control wiring and conduit for the HVAC equipment. All disconnects are to be fusible. Mechanical and plumbing contractors to provide single point of connection.

COORDINATION: The Electrical Contractor shall review drawings, specifications, and shop drawings provided by other trades to see if there are any conflicts. If conflicts are determined, then contact the architect/engineer for instructions.

WORKMANSHIP: Exposed work shall be square, plumb, and level with adjacent surfaces and lines shall be neat and uniform in appearance. Conduit, junction boxes, and outlet boxes for switches and receptacles shall be recessed and not exposed. Properly protect work against damage by weather and other trades. Damaged surfaces shall be restored to original condition. Debris produced from this work shall be removed daily from premises. All exposed electrical conduit and equipment in finished areas shall be painted to match adjacent finishes. Touch up scratched or marred surfaces of panelboards, protective devices and similar electrical apparatus prior to applying finish coats of paint to equipment. All material, whether exposed or concealed, shall be firmly and adequately held in place. Make all connections tight and recheck all panel lugs just prior to final inspection.

SUPPORT: Support and fasten all conduits, equipment, etc. securely in place. Secure and adjust hangers and supports to keep conduits in alignment, to carry the weight of the conduits without deflection or sag. Inserts in masonry shall be lead or plastic types install in holes drilled into mortar joints. Wooden plugs, chains, straps, or wire hangers are prohibited. Provide steel supports, frames, bracing, etc., incidental to this scope of work. Refer to 2020 NEC for further direction.

CUTTING/REPAIR: The Electrical Contractor shall provide all cutting and repairing of walls, floors, and ceiling necessary for the installation of work. Set sleeves for conduit as building construction progresses. Exterior walls shall not be pierced. Any cutting of structural members or finished work shall prior approval of architect/structural engineer. Any piping, ductwork, conduits, etc., damaged in any way, by this contractor shall be repaired or replaced at no additional expense to the owner.

IDENTIFICATION: All equipment installed under this contract shall be identified with an engraved laminated phenolic plastic nameplate, white core, and black surface, screwed in place. All generator equipment installed under this contract shall be identified with an engraved laminated phenolic plastic nameplate, white core, and red surface, screwed in place. Labels created by a device similar to a "tapewriter" are not acceptable. All wiring shall be marked with Brady Self-Sticking wire markers. All wiring shall be color coded with no exceptions. Conductors no. 4 and larger may be identified with 3" (minimum) bands of proper color plastic tape near each termination.

FINAL COMPLETION: Upon completion of the work, demonstrate the installation make such tests as may be required to satisfy the architect/engineer and owner that work is installed in accordance with the drawings, specifications, and instructions. Provide a certificate of inspection from the local or state authorities having jurisdiction over the work.

WARRANTY: All equipment and workmanship shall be guaranteed for a period of one year from the date of acceptance. Faulty workmanship and defective materials shall be corrected immediately.

PART TWO – MATERIALS AND EQUIPMENT

All materials and equipment shall be new and of the highest quality in the class specified except for owner supplied equipment. All materials and equipment shall be listed and labeled as required by Where trade names are mentioned they are given as a reference to the quality and performance of the apparatus required. Other brands may be used if approved in writing by the Engineer and if their construction, performance, and efficiency is equal to that specified. The contractor shall submit a complete list of any proposed alternate materials and equipment for use in this project to the Engineer within 10 days following the award of the contract. If such a list is not submitted, the Electrical Contractor shall supply the materials and equipment as specified or (if not specified) as directed by the engineer.

CONDUIT: Conduits run underground or in poured concrete shall be galvanized rigid steel conduit. Exposed PVC conduit shall not be permitted. Sleeves and openings shall be provided as required to accommodate passage of conduits, etc. to be installed. Sleeve shall be no. 16 galvanized sheet steel, rigidly supported. Provide all hangers required to support conduits, pull boxes, etc. Supports improperly installed shall be removed and replaced at no additional expense to the owner. Refer to 2020 NEC for further direction. Conduit exposed in public spaces to be painted (coordinate color with Architect and Owner).

CONDUCTORS: Conductors may be copper or aluminum, sized as indicated on the drawings; minimum size no. 12 AWG, color coded; Type THHN for branch circuits, Type THW or THHN/THWN for feeders; Type USE for underground service conductors. No. 12 wire and smaller shall be solid; No. 8 and larger wire shall be stranded (no exceptions). All conductors, with the exception of control wiring and switch legs, shall be No. 12 or larger. Switch legs may be No. 14.

WIRING METHODS: Type MC and EMT are allowed wiring methods.

PANELBOARDS: Panelboards shall be dead front, safety type, and shall be the thermal magnetic circuit breaker type. Refer to the panel schedule in the drawing for the number of branch circuits, ampere ratings, number of poles, main breakers, etc. Circuits shall be connected to the panel as indicated in the panel schedule. Provide solderless type connectors on main and load side of branch circuits. Provide a circuit directory card indicating device and areas on each circuit. Panelboard shall be equivalent to Square D type "NQOD" rated at the voltage specified in the panel schedule.

SAFETY SWITCHES: Safety switches shall be heavy-duty type, fusible, horsepower rated, 250 volts, quick-break mechanism, listed and labeled per 2020 NEC.

FUSES: Fuses shall be standard 2020 NEC cartridge type, dual element, equivalent to Fusetron. All fuses are to be sized according to manufacturer's recommendations.

OUTLET, JUNCTION AND PULL BOXES: Outlet boxes shall be sized in accordance with the 2020 NEC. Plastic boxes are not acceptable. All faceplates shall be galvanized (verify with Owner and Architect).

TOGGLE SWITCHES: Toggle switches shall be rated 20 Amps, 120/277 Volts, listed and labeled per 2020 NEC, brown in color (verify color with Owner and Architect).

RECEPTACLES: Receptacles shall be grounding type with grounding connection through extra pole permanently connected to panelboard ground bus via green conductor, listed and labeled per 2020 NEC, brown in color (verify color with Owner and Architect). Other colors may be substituted for special outlets that are not normally visible or as otherwise noted on plans, with approval from Owner and Architect.

LIGHTING: The lighting system shall be provided complete, including all luminaries, lamps, supporting members, hangers, etc. All light fixture must be independently supported from the building structure. Refer to the drawings for luminaire type, description, and performance specification. All related parts required for a complete installation shall be provided whether or not specifically mentioned.

LIGHTING CONTROLS: Electrical Contractor to provide complete system and ensure proper operation.

ARC-FLASH: Electrical Contractor is to provide Arc-Flash Analysis/Report prepared by NC licensed engineer and label all new electrical panels. Service entrance to be labeled with available fault current.

LIGHTING SYMBOLS LEGEND

- WALL MOUNTED LED STRIP LIGHT FIXTURE
- WALL MOUNTED EXIT/EMERGENCY COMBO LIGHT FIXTURE
- CEILING MOUNTED SINGLE-FACED EXIT LIGHT FIXTURE
- CEILING MOUNTED EXIT/EMERGENCY COMBO LIGHT FIXTURE
- WALL MOUNTED EMERGENCY LIGHT FIXTURE
- WALL MOUNTED EXTERIOR EGRESS EMERGENCY LIGHT FIXTURE
- 6" RECESSED MOUNTED LED CAN LIGHT FIXTURE
- 6" WALL WASH RECESSED MOUNTED LED CAN LIGHT FIXTURE
- PENDANT MOUNTED LIGHT FIXTURE
- PENDANT MOUNTED LIGHT FIXTURE WITH INTEGRAL BATTERY BACK-UP
- WALL MOUNTED SCONCE LIGHT FIXTURE
- CEILING MOUNTED TRACK LIGHTING
- PADDLE FAN
- S_x SINGLE POLE SWITCH (x = SWITCH DESIGNATION, IF APPLICABLE)
- S_D SINGLE POLE SWITCH WITH DIMMER (MATCH DIMMER TO LIGHT SOURCE CONTROLLED)
- S_{3x} THREE-WAY SWITCH (x = SWITCH DESIGNATION, IF APPLICABLE)
- S_{3D} THREE-WAY SWITCH WITH DIMMER (MATCH DIMMER TO LIGHT SOURCE CONTROLLED)
- S_M MOTOR RATED SWITCH
- (PC) PHOTOCELL CONNECTION (VERIFY LOCATION OF PHOTOCELL)

POWER SYMBOLS LEGEND

- WALL MOUNTED DUPLEX OUTLET
- WALL MOUNTED GROUND FAULT CIRCUIT INTERRUPT DUPLEX OUTLET
- WALL MOUNTED QUAD OUTLET
- (FB) FLOOR BOX (VERIFY REQUIREMENTS)
- (AC) ACCESS CONTROL BACKBOX, CONDUIT STUBBED ABOVE ACCESSIBLE CEILING WITH PULL STRING (VERIFY REQUIREMENTS)
- WALL MOUNTED DATA/VOICE BACKBOX 3/4" STUBBED ABOVE ACCESSIBLE CEILING WITH PULL STRING (VERIFY REQUIREMENTS)
- SAFETY DISCONNECT SWITCH (FUSED AS REQUIRED) (AMPS/VOLTS/POLES/FUSE/NEMA RATING)
- MAFC DEVICE MOUNTED ABOVE FINISHED COUNTER (VERIFY FINAL HEIGHT)
- WP WEATHERPROOF COVER
- VMH VERIFY MOUNTING HEIGHT
- EX. EXISTING
- RX. REMOVE

PLATFORM ONLY
2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code	☒ Performance	☐ Prescriptive
ASHRAE 90.1	☐ Performance	☐ Prescriptive

Lighting schedule (each fixture type)

lamp type required in fixture	LED
number of lamps in fixture	1
ballast type used in the fixture	Driver
number of ballasts in fixture	1
total wattage per fixture	11,19,25
total interior wattage specified vs allowed	0.2KW-VS-0.5KW
total exterior wattage specified vs allowed	0.6KW-VS-0.6KW

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)

- ☐ C406.2 More Efficient HVAC Equipment Performance
- ☒ C406.3 Reduced Lighting Power Density
- ☐ C406.4 Enhanced Digital Lighting Controls
- ☐ C406.5 On-Site Renewable Energy
- ☐ C406.6 Dedicated Outdoor Air System
- ☐ C406.7 Reduced Energy Use in Service Water Heating

ALLIANCE ARCHITECTURE OF THE TRIAD
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SEAL 051045 2/28/2025 ENGINEER JASON WHITE

REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

JOB # 2308 | BECI PROJ. # 24-035
DATE 02/28/2025
DRAWN JHM
SHEET E-0.1
OF 9

LIGHTING FIXTURE SCHEDULE
(SEE NOTES 1,2,3 BELOW)

TYPE	DESCRIPTION	MANUFACTURER: CATALOG NO.	LIGHT SOURCE	VOLTAGE	NOTES
D2	2" STRIP, WALL MOUNTED, 0–10V DIMMING, 10–100% DIMMING RANGE, ADJUSTABLE LUMENS, ADJUSTABLE COLOR TEMPERATURE	LITHONIA: CSS–L24–AL015–MVOLT–SWW3–80CRI	LED (INCLUDED) 2500 LUMENS 4000K CRI 80+	MVOLT	NOTE 4 19 WATTS
EA	EXIT/EMERGENCY COMBINATION FIXTURE, WALL MOUNTED, WHITE HOUSING, RED LETTERS, 90 MINUTE RUN TIME	LITHONIA: LHQM–LED–R	LED (INCLUDED)	MVOLT	– 5 WATTS
EC	EXIT SIGN, CEILING MOUNTED, WHITE HOUSING, RED LETTERS, 90 MINUTE RUN TIME	LITHONIA: LQM–S–W–3–R–MVOLT–EL N	LED (INCLUDED)	MVOLT	– 5 WATTS
ED	EXIT/EMERGENCY COMBINATION FIXTURE, CEILING MOUNTED, WHITE HOUSING, RED LETTERS, 90 MINUTE RUN TIME	LITHONIA: LHQM–LED–R	LED (INCLUDED)	MVOLT	– 5 WATTS
EM	EMERGENCY FIXTURE, WALL MOUNTED, BATTERY BACK UP, WHITE HOUSING, 90 MINUTE RUN TIME	LITHONIA: ELM4L	LED (INCLUDED) 640 LUMENS	MVOLT	– 5 WATTS
ER	EXTERIOR EMERGENCY EGRESS FIXTURE, WET LOCATION RATED, WALL MOUNTED, BATTERY BACK UP, 90 MINUTE RUN TIME, NATURAL ALUMINUM FINISH, WIRED FOR EMERGENCY MODE ONLY	LITHONIA: AFF–QEL–DNAXD–UVOLT–LTP–SDRT –FCT–CW	LED (INCLUDED)	MVOLT	NOTE 5 12 WATTS
EW	EXTERIOR EXIT SIGN, WET LOCATION RATED, CEILING MOUNTED, GRAY HOUSING, RED LETTERS, 90 MINUTE RUN TIME	LITHONIA: WLTE–GY–1–R–EL	LED (INCLUDED)	–	– 5 WATTS
F1	6" DOWNLIGHT, RECESSED, SELF–FLANGED TRIM, CUSTOM PAINTED FLANGE, SEMI–SPECULAR REFLECTOR, 0–10V DIMMING, 10–100% DIMMING RANGE	LITHONIA: LDN6–40/10–L06–AR–LSS–FCPC–MVOLT–GZ10	LED (INCLUDED) 1000 LUMENS 4000K CRI 80+	MVOLT	– 11 WATTS
F2	6" DOWNLIGHT, RECESSED, SELF–FLANGED TRIM, SEMI–SPECULAR REFLECTOR, 0–10V DIMMING, 10–100% DIMMING RANGE	LITHONIA: LDN6–40/15–L06–AR–LSS–MVOLT –GZ10	LED (INCLUDED) 1500 LUMENS 4000K CRI 80+	MVOLT	– 18 WATTS
F3	6" DOWNLIGHT, RECESSED, SELF–FLANGED TRIM, SEMI–SPECULAR REFLECTOR, 0–10V DIMMING, 10–100% DIMMING RANGE	LITHONIA: LDN6–40/20–L06–AR–LSS–MVOLT –GZ10	LED (INCLUDED) 2000 LUMENS 4000K CRI 80+	MVOLT	– 23 WATTS
F4	6" WALL WASH DOWNLIGHT, RECESSED, SELF–FLANGED TRIM, SEMI–SPECULAR REFLECTOR, 0–10V DIMMING, 1–100% DIMMING RANGE	LITHONIA: LDN6–40/10–LW6–AR–LSS–MVOLT –GZ1	LED (INCLUDED) 1000 LUMENS 4000K CRI 80+	MVOLT	NOTE 6 11 WATTS
P1	18" DIAMETER GLOBE, SCHOOL HOUSE FIXTURE, PENDANT MOUNTED, 0–10V DIMMING, ARCHITECTURAL BRONZE FINISH	BASELITE: SCP–SH018–XX–XX–XX–XX–50W–4K–LDM0–10	LED (INCLUDED) 5750 LUMENS 4000K CRI 80+	MVOLT	NOTES 7,9 50 WATTS
P2	12" DIAMETER GLOBE, SCHOOL HOUSE FIXTURE, PENDANT MOUNTED, 0–10V DIMMING, ARCHITECTURAL BRONZE FINISH	BASELITE: SCP–SH012–XX–XX–XX–XX–25W–4K–LDM0–10	LED (INCLUDED) 2800 LUMENS 4000K CRI 80+	MVOLT	NOTES 7,9 25 WATTS
P3	27" DIAMETER WAREHOUSE SHADE, WET LOCATION RATED, PENDANT MOUNTED, WIRE GRILL, 0–10V DIMMING, WIDE DISTRIBUTION, DARK GRAY FINISH	ANP LIGHTING: W527–M024LDD–W–XX–XX–XX–XX–XX–GR27–XX–UNV	LED (INCLUDED) 3000 LUMENS 5000K CRI 80+	MVOLT	NOTES 7,9,10 25 WATTS
P3/EM	27" DIAMETER WAREHOUSE SHADE, WET LOCATION RATED, PENDANT MOUNTED, WIRE GRILL, 0–10V DIMMING, WIDE DISTRIBUTION, BATTERY BACK UP, DARK GRAY FINISH	ANP LIGHTING: W527–M024LDD–W–XX–XX–XX–XX–XX–EMG–LED16–GR27–XX–UNV	LED (INCLUDED) 3000 LUMENS 5000K CRI 80+	MVOLT	NOTES 7,9,10 25 WATTS
P4	WALL MOUNTED SIGN LIGHT, WET LOCATION RATED, 0–10V DIMMING, DARK GRAY FINISH	BASELITE: A810–XX–E1–XX–XX–12W–5K–LDM0–10–XX–XX	LED (INCLUDED) 1500 LUMENS 5000K CRI 80+	MVOLT	NOTE 7,9 12 WATTS
S1	EXTERIOR VAPOR JAR SCONCE, WALL MOUNTED, WET LOCATION RATED, WIRE GUARD, 0–10V DIMMING, WROUGHT IRON FINISH	BASELITE: HW2–XX–XX–XX–XX–LED25W–40K–LDM0–10–XX–XX–XX	LED (INCLUDED) 1500 LUMENS 5000K CRI 80+	MVOLT	NOTES 7,9 25 WATTS
T1	CEILING MOUNTED TRACK, ADJUSTABLE TRACK HEADS, ADJUSTABLE BEAM SPREAD, DIMMABLE, BLACK FINISH	JUNO: R620L–40K–80CRI–PDIM–VBS–BL	LED (INCLUDED) 1200 LUMENS 4000K CRI 80+	120V	NOTE 7,8 15 WATTS
Z1	52" CEILING FAN, NO LIGHT KIT, 5 BLADES, OIL RUBBED BRONZE FINISH, WALNUT PECAN BLADES	MAXIM LIGHTING: 89905–OIWP	–	120V	– –

NOTES:

1. CONTRACTOR TO VERIFY ALL LIGHTING SPECIFICATIONS, FIXTURE REQUIREMENTS, MOUNTING HARDWARE, AND REQUIRED TRIMS WITH OWNER AND ARCHITECT PRIOR TO ORDERING/PURCHASE OF FIXTURES.
2. LIGHTING FIXTURE CATALOG NUMBERS ARE INDICATIVE OF THE STYLE OF FIXTURE REQUIRED. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH FIELD CONDITIONS, ARCHITECT'S FINISH SCHEDULE, AND ARCHITECTURAL RCP TO PROVIDE FIXTURES WITH PROPER TRIM, VOLTAGE, MOUNTING HARDWARE, AND OPTIONS NECESSARY FOR A COMPLETE INSTALLATION. CONTRACTOR TO VERIFY FIXTURE FINISHES WITH OWNER AND ARCHITECT PRIOR TO ORDERING/PURCHASE OF FIXTURES.
3. REGARDLESS OF MODEL NUMBER, THE ELECTRICAL CONTRACTOR SHALL PROVIDE DIMMING DRIVERS FOR ALL LIGHTING FIXTURES INDICATED TO BE CONTROLLED WITH DIMMING SWITCHES.
4. WHEN INSTALLED, ADJUSTABLE LUMENS AND COLOR TEMPERATURE TO BE SET AS SCHEDULED.
5. FIXTURE TO BE INSTALLED AS 'NORMALLY OFF' AND OPERATE ONLY IN EMERGENCY MODE.
6. COORDINATE AIMING OF WALL WASH FIXTURE WITH OWNER IN FIELD.
7. COORDINATE ALL REQUIREMENTS FOR FIXTURE SHADE, GLASS, FINISH, MOUNTING, COLORS, ETC. WITH ARCHITECT PRIOR TO ORDERING/PURCHASE.
8. PROVIDE MANUFACTURER'S RECOMMENDED TRACK. COORDINATE TRACK MOUNTING, FINISH, AND LENGTH WITH ARCHITECT. TRACK LIGHTING SHALL BE AIMED PER ARCHITECT'S DIRECTION.
9. CONTRACTOR TO SUBMIT COLOR SAMPLE TO ARCHITECT/OWNER FOR APPROVAL PRIOR TO ORDERING/PURCHASING FIXTURE.
10. IF CCT OF 5000K IS NOT AVAILABLE, CONTRACTOR TO CONFIRM WITH OWNER IF CCT OF 4000K IS ACCEPTABLE.

PANEL A

54 POLE; SURFACE MOUNTED
LOCATION: CATERER FOOD STOR.
FED FROM DISCONNECT A

BOLT-IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS
COPPER BUS

PNL VOLTAGE: 208Y/120V,3P,4W
PNL AIC (RMS): VERIFY
MAIN LUG ONLY: 400A BUS: 400A

CKT.	AMP	POLE	WIRE SIZES PH	NEUT	EGC	CONDUIT SIZE	LOADS (VA) AØ	BØ	CØ	EQUIPMENT		EQUIPMENT	LOADS (VA) AØ	BØ	CØ	CONDUIT SIZE	WIRE SIZES EGC	NEUT	PH	POLE	AMP	CKT.
1	20	1	12	12	12	1/2"	655			LTG: INTERIOR OVERHEAD	A	-	9703			-	-	-	-	-	-	2
3	20	1	12	12	12	1/2"		275		LTG: EXT. SCONCES	B	HP-1		9703		1.25"	6	-	2	3	110	4
5	20	1	12	12	12	1/2"			500	BACKFLOW HEAT TAPE ^^	C	-			9703	-	-	-	-	-	-	6
7	20	1	12	12	12	1/2"	500			LTG: ATTIC/CRAWLSPACE	A	DCP-1	216			1/2"	12	12	12	1	20	8
9	-	-	-	-	-	-		2000		-	B	MICROWAVE		1560		1/2"	12	12	12	1	20	10
11	25	3	10	-	10	3/4"			2000	WH-1 **	C	REC: CATERER FOOD PREP			360	1/2"	12	12	12	1	20	12
13			-		-		2000				A	REC: CATERER FOOD PREP	540			1/2"	12	12	12	1	20	14
15	20	1	12	12	12	1/2"		1080		REC: CORRIDOR/RESTROOMS ^	B	REFRIGERATOR		648		1/2"	12	12	12	1	20	16
17	20	1	12	12	12	1/2"			720	REC: NETWORK ROOM	C	MOBILE WARMING CABINET			2004	1/2"	12	12	12	1	20	18
19	20	1	12	12	12	1/2"	720			REC: NETWORK ROOM	A	REC: EVENTS ROOM	1080			1/2"	12	12	12	1	20	20
21	20	1	12	12	12	1/2"		900		REC: EVENTS ROOM	B	REC: STAGE		360		1/2"	12	12	12	1	20	22
23	20	1	12	12	12	1/2"			360	REC: STAGE	C	REC: STAGE			360	1/2"	12	12	12	1	20	24
25	20	1	12	12	12	1/2"	360			REC: STAGE	A	REC: FLOORBOX	360			1/2"	12	12	12	1	20	26
27	20	1	12	12	12	1/2"		800		DRY SPRINKLER AIR COMP	B	REC: EXTERIOR		720		1/2"	12	12	12	1	20	28
29	20	1	12	12	12	1/2"			1260	REC: ROOF	C	REC: EXTERIOR			720	1/2"	12	12	12	1	20	30
31	20	1	12	12	12	1/2"	500			SPRINKLER RISER HEAT TAPE ^^	A	WATER COOLER CHILLER	600			1/2"	12	12	12	1	20	32
33	20	1	12	12	12	1/2"		500		CABOOSE POWER **	B	CABOOSE POWER **		500		1/2"	12	12	12	1	20	34
35	20	1	12	12	12	1/2"			500	CABOOSE POWER **	C	CABOOSE POWER **			500	1/2"	12	12	12	1	20	36
37	20	1	12	12	12	1/2"	1680			PADDLE FANS	A	LTG: TRACK LIGHTING	540			1/2"	12	12	12	1	20	38
39	20	1	12	12	12	1/2"		1250		LTG: EVENT PENDANTS	B	SPARE				-	-	-	-	1	20	40
41	20	1	-	-	-	-				SPARE	C	SPARE				-	-	-	-	1	20	42
43	20	1	-	-	-	-				SPARE	A	SPARE				-	-	-	-	1	20	44
45	20	1	-	-	-	-				SPARE	B	SPARE				-	-	-	-	1	20	46
47	20	1	-	-	-	-				SPARE	C	SPARE				-	-	-	-	1	20	48
49	20	1	-	-	-	-				SPARE	A	-	6888			-	-	-	-	-	-	50
51	20	1	-	-	-	-				SPARE	B	PANEL B		6187		REFER TO RISE DIAGRAM				3	125	52
53	20	1	-	-	-	-				SPARE	C	-			6825	-	-	-	-	-	-	54
* = PROVIDE LOCK ON DEVICE							6415	6805	5340	TOTAL			19927	19678	20472	DEMAND LOAD SUMMARY						
** = PROIVDE LOCK OFF DEVICE							AØ	BØ	CØ				AØ	BØ	CØ	3812 VA LIGHTING (CONNECTED X 100%)						
^ = PROVIDE GFCI CIRCUIT BREAKER																12420 VA RECEPTACLES (GENERAL PURPOSE)						
^^ = PROVIDE EQUIPMENT GROUND FAULT CIRCUIT BREAKER (30 MILLIAMP GROUND FAULT)													TOTAL CONNECTED VA			12308 VA RECEPTACLES (DEDICATED)						
													AØ	BØ	CØ	36386 VA HVAC (LARGEST X 125%)						
													26342	26483	25812	8988 VA HVAC (REMAINDER X 100%)						
																12000 VA WATER HEATING (CONNECTED X 100%)						
													TOTAL CONNECTED VA			0 VA NONCOINCIDENT (CONNECTED X 0%)						
													78637			85914 = TOTAL DEMAND VA						
																239 = TOTAL DEMAND AMPS						
																218 = TOTAL CONNECTED AMPS						

PANEL B

42 POLE; SURFACE MOUNTED
LOCATION: JANITOR CLOSET 123
FED FROM PANEL A

BOLT-IN BREAKERS
FULL SOLID NEUTRAL BUS
GROUND BUS
COPPER BUS

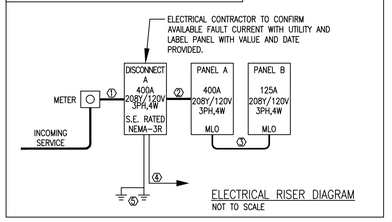
PNL VOLTAGE: 208Y/120V,3P,4W
PNL AIC (RMS): VERIFY
MAIN LUG ONLY: 125A BUS: 125A

CKT.	AMP	POLE	WIRE SIZES PH	NEUT	EGC	CONDUIT SIZE	LOADS (VA) AØ	BØ	CØ	EQUIPMENT		EQUIPMENT	LOADS (VA) AØ	BØ	CØ	CONDUIT SIZE	WIRE SIZES EGC	NEUT	PH	POLE	AMP	CKT.
1	20	1	12	12	12	1/2"	217			LTG: INT. COTTON PLATFORM	A	-	2000			-	-	-	-	-	-	2
3	20	1	12	12	12	1/2"		540		REC: CORR/JAN ^	B	WH-2 **		2000		3/4"	10	-	10	3	25	4
5	20	2	12	-	12	1/2"			749	ECH-2	C				2000	-	-	-	-	-	-	6
7	-	-	-	-	-	-	749			-	A	ECH-1	749			1/2"	12	-	12	2	20	8
9	20	2	12	-	12	1/2"		1498		ECH-4	B	-		749		-	-	-	-	-	-	10
11	-	-	-	-	-	-			1498	-	C	ECH-3			1498	1/2"	12	-	12	2	20	12
13	20	1	12	12	12	1/2"	375			LTG: EXT. COTTON PLATFORM	A	-	1498			-	-	-	-	-	-	14
15	20	1	12	12	12	1/2"		500		FIRE ALARM CONTROL PANEL ~	B	REC: EVENTS PLATFORM		900		1/2"	12	12	12	1	20	16
17	20	1	12	12	12	1/2"			180	REC: EVENTS PLATFORM	C	REC: EVENTS PLATFORM			900	1/2"	12	12	12	1	20	18
19	20	1	12	12	12	1/2"	500			SPRINKLER RISER HEAT TAPE ^^	A	DRY SPRINKLER AIR COMP	800			1/2"	12	12	12	1	20	20
21	20	1	-	-	-	-				SPARE	B	SPARE				-	-	-	-	1	20	22
23	20	1	-	-	-	-				SPARE	C	SPARE				-	-	-	-	1	20	24
25	20	1	-	-	-	-				SPARE	A	SPARE				-	-	-	-	1	20	26
27	20	1	-	-	-	-				SPARE	B	SPARE				-	-	-	-	1	20	28
29	20	1	-	-	-	-				SPARE	C	SPARE				-	-	-	-	1	20	30
31	20	1	-	-	-	-				SPARE	A	SPARE				-	-	-	-	1	20	32
33	20	1	-	-	-	-				SPARE	B	SPARE				-	-	-	-	1	20	34
35	20	1	-	-	-	-				SPARE	C	SPARE				-	-	-	-	1	20	36
37	20	1	-	-	-	-				SPARE	A	SPARE				-	-	-	-	1	20	38
39	20	1	-	-	-	-				SPARE	B	SPARE				-	-	-	-	1	20	40
41	20	1	-	-	-	-				SPARE	C	SPARE				-	-	-	-	1	20	42
* = PROVIDE LOCK ON DEVICE							1841	2538	2427	TOTAL			5047	3649	4398	DEMAND LOAD SUMMARY						
** = PROIVDE LOCK OFF DEVICE							AØ	BØ	CØ				AØ	BØ	CØ	592 VA LIGHTING (CONNECTED X 100%)						
^ = PROVIDE GFCI CIRCUIT BREAKER																2520 VA RECEPTACLES (GENERAL PURPOSE)						
^^ = PROVIDE EQUIPMENT GROUND FAULT CIRCUIT BREAKER (30 MILLIAMP GROUND FAULT)													TOTAL CONNECTED VA			1800 VA RECEPTACLES (DEDICATED)						
~ = PROVIDE RED CIRCUIT BREAKER AND LABEL PER NEC 760.41													AØ	BØ	CØ	3745 VA HVAC (LARGEST X 125%)						
													6888	6187	6825	5992 VA HVAC (REMAINDER X 100%)						
																6000 VA WATER HEATING (CONNECTED X 100%)						
													TOTAL CONNECTED VA			0 VA NONCOINCIDENT (CONNECTED X 0%)						
													19900			20649 = TOTAL DEMAND VA						
																57 = TOTAL DEMAND AMPS						
																55 = TOTAL CONNECTED AMPS						

WIRING LEGEND

① (2) SETS OF 2" CONDUIT WITH (4) 3/0 COPPER IN EACH.
② (2) SETS OF 2" CONDUIT WITH (4) 3/0 COPPER AND (1) #3 COPPER GROUND IN EACH.
③ 1.5" CONDUIT WITH (4) #1 COPPER AND (1) #6 COPPER GROUND.
④ #2 COPPER GROUNDING ELECTRODE CONDUCTOR TO BUILDING STEEL, INCOMING METALLIC WATER LINE, AND 20FT CONCRETE–ENCLOSED GROUNDING ELECTRODE AS AVAILABLE.
⑤ PROVIDE SUPPLEMENTAL GROUND PER NEC 250.53 (#2 COPPER TO (2) MINIMUM 8' DRIVEN GROUND RODS.)

EQUIVALENT CONDUCTORS ARE ALLOWED PER CURRENT NEC



ELECTRICAL RISER DIAGRAM
NOT TO SCALE

GENERAL ELECTRICAL RISER NOTES:

1. CONTRACTOR TO COORDINATE WITH POWER COMPANY, PRIOR TO ANY WORK, AND OBTAIN REQUIREMENTS FOR ELECTRICAL SERVICE. CONTRACTOR TO PROVIDE POWER COMPANY LOAD FORMS, INCLUDING ALL ASSORTED DOCUMENTS REQUIRED BY THE POWER COMPANY, TO THE APPROPRIATE POWER COMPANY REPRESENTATIVE PRIOR TO ANY WORK.
2. COORDINATE ALL WORK RELATED TO THE INSTALLATION OF THE ELECTRICAL SERVICE WITH LOCAL POWER COMPANY. ALL WORK SHALL COMPLY WITH POWER COMPANY'S REQUIREMENTS.

ELECTRICAL PANEL WORK CLEARANCE
SCALE: NTS

NORTH CAROLINA PROFESSIONAL SEAL 051045 2/28/2025 ENGINEER JASON WHITE

B.E.C.I.
SOLUTIONS BY DESIGN

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REVISIONS

SPRING HOPE RAILROAD DEPOT
Building Rehabilitation & Platform Addition
101 South Ash Street
Spring Hope, North Carolina 27882

JOB # 2308 | BECI PROJ. # 24-035
DATE 02/28/2025
DRAWN JJM
SHEET E-0.2
OF 9

GENERAL DEMOLITION NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT, AND PERFORM ALL OPERATIONS NECESSARY FOR THE DEMOLITION OF EXISTING ELECTRICAL WORK TO MEET THE INTENT OF, AND AS INDICATED ON THE DEMOLITION DRAWINGS. SPECIFIC ITEMS AND MATERIALS MAY OR MAY NOT BE ADDRESSED IN SPECIFICATIONS AND DRAWINGS.

2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT STATE BUILDING CODE, LOCAL CODES, NFPA, CURRENT NEC AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS OF THE LOCAL INSPECTOR. THESE CODE STANDARDS ARE NOT ACCEPTABLE ALTERNATIVES TO REDUCE THE STANDARDS OR REQUIREMENTS OUTLINED IN THESE PLANS AND SPECIFICATIONS. ALL APPLICABLE "OSHA" REGULATIONS MUST BE FOLLOWED WHILE PERFORMING THIS WORK.

3. BEFORE SUBMITTING BID, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE (INCLUDING CRAWL SPACE AND ATTIC) TO VERIFY/EXAMINE THE EXACT EXTENT OF EXISTING CONDITIONS.

4. THE ELECTRICAL DEMOLITION DRAWINGS ARE BASED ON EXISTING PLANS AND FIELD INVESTIGATION PRIOR TO DEMOLITION. LOCATIONS OF CONCEALED ELECTRICAL CONDUIT AND EQUIPMENT CAN NOT BE VERIFIED.

5. THE ELECTRICAL DEMOLITION DRAWINGS INDICATE THE GENERAL EXTENT OF THE EXISTING ELECTRICAL SYSTEMS TO BE REMOVED OR RELOCATED. ALL COMPONENTS ASSOCIATED WITH SYSTEMS AND EQUIPMENT TO BE REMOVED OR RELOCATED MAY NOT BE SPECIFICALLY INDICATED BUT SHALL BE REMOVED. ASSOCIATED ELECTRICAL COMPONENTS TO BE REMOVED INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS: HANGERS, WIRING, CABLING, CONDUIT, BOXES, STARTERS, DISCONNECTS, SWITCHES.

6. DISCONNECT EXISTING TO BE REMOVED OR EXISTING TO BE RELOCATED CONDUIT, WIRING, CABLING, AND EQUIPMENT AS INDICATED ON ELECTRICAL DEMOLITION DRAWINGS. UNUSED CONDUIT AND WIRING SHALL BE REMOVED BACK TO THE SOURCE FOR THE UNUSED SEGMENT. UNLESS SPECIFICALLY INDICATED, NO EQUIPMENT, MATERIALS OR ASSOCIATED COMPONENTS SHALL BE ABANDONED IN PLACE.

7. EXERCISE EXTREME CARE WHEN WORKING AROUND EXISTING WORK TO REMAIN. ANY DAMAGE TO EXISTING TO REMAIN OR EXISTING TO BE RELOCATED MATERIALS AND EQUIPMENT SHALL BE CORRECTED OR REPLACED TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.

8. WHERE EXISTING FLOORS, WALLS AND ROOFS MUST BE CUT OR ARE DAMAGED DURING REMOVAL OR RELOCATION OF ELECTRICAL WORK, PATCH THE CUT OR DAMAGED AREAS TO MATCH ADJACENT CONSTRUCTION. ALL CUTTING AND PATCHING IS BY THE GENERAL CONTRACTOR.

9. ELECTRICAL SYSTEMS ASSOCIATED WITH OCCUPIED PORTIONS OF THE BUILDING SHALL BE KEPT IN OPERATION AS MUCH AS POSSIBLE. WHEN REQUIRED, OUTAGES SHALL BE SCHEDULED AND APPROVED IN ADVANCED BY THE OWNER. OUTAGE DURATION SHALL BE KEPT TO A MINIMUM. WHERE NECESSARY, PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN SERVICE.

10. THE CONTINUITY OF ALL EXISTING CONDUITS AND FEEDERS SERVICING AREAS TO REMAIN SHALL BE MAINTAINED. MODIFY THE EXISTING CIRCUITS IF REQUIRED IN ORDER TO MAINTAIN THE EXISTING CIRCUITRY.

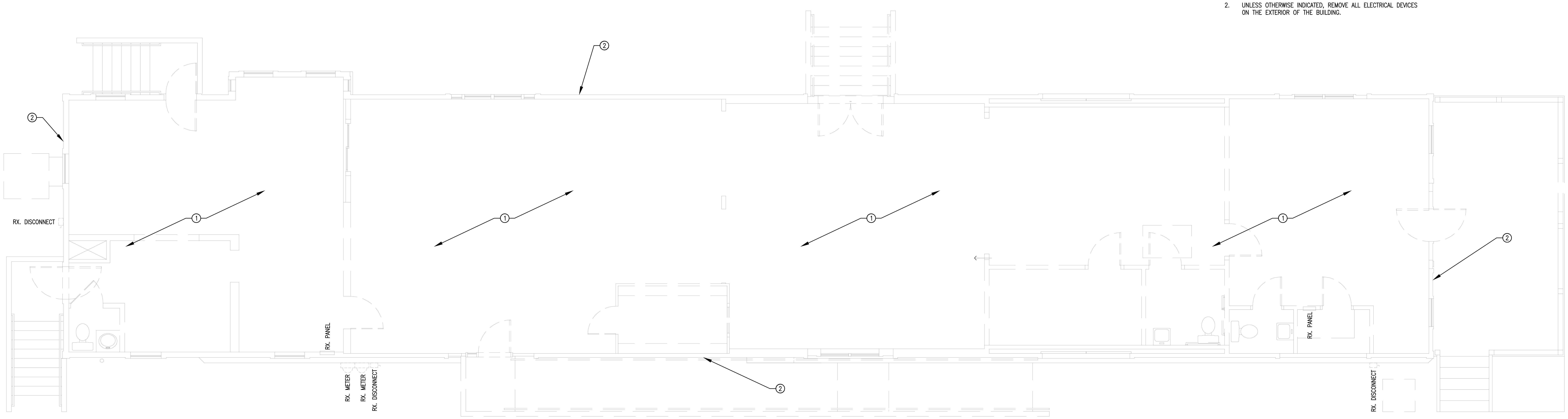
11. ALL ABANDONED CIRCUITRY, ELECTRICAL BOXES, AND CONDUIT SHALL BE DEMOLISHED.

ELECTRICAL GENERAL NOTES:

1. REMOVE ALL ELECTRICAL DEVICES, CONDUIT, WIRING, ETC. IN CRAWL SPACE AND ATTIC.

(–) ELECTRICAL KEYED NOTES:

1. UNLESS OTHERWISE INDICATED, REMOVE ALL ELECTRICAL DEVICES IN THIS SPACE.
2. UNLESS OTHERWISE INDICATED, REMOVE ALL ELECTRICAL DEVICES ON THE EXTERIOR OF THE BUILDING.



1 / ED-1.1 DEPOT ELECTRICAL DEMO PLAN
SCALE: 1/4" = 1' – 0"

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 051045 2/28/2025 JASON WHITE

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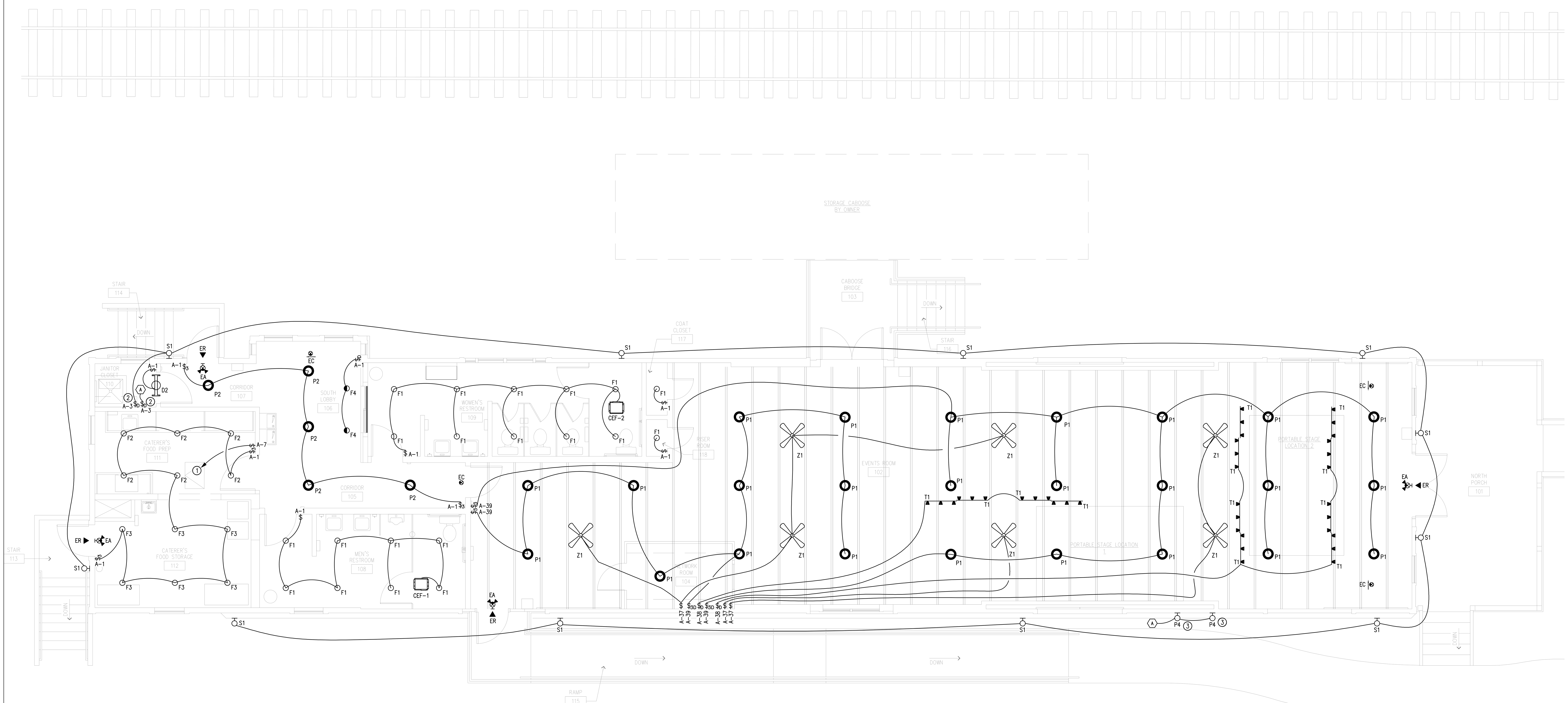
DATE 02/28/2025
DRAWN JHW
SHEET
ED-1.1
OF 9

ELECTRICAL GENERAL NOTES:

1. ALL CONDUIT IS TO BE RUN INSIDE THE CRAWL SPACE, ATTIC, OR ENCLOSED WALL CAVITY WHENEVER POSSIBLE. ANY EXPOSED CONDUIT TO BE PAINTED PER ARCHITECTS SPECIFICATIONS.
2. ALL ELECTRICAL DEVICES ARE TO BE FED FROM BELOW THE FLOOR WHENEVER POSSIBLE.
3. COORDINATE ALL LIGHTING SWITCH LOCATIONS WITH ARCHITECT/OWNER PRIOR TO ROUGH-INS.

ELECTRICAL KEYED NOTES:

1. PROVIDE LIGHTING AS REQUIRED BY CODE IN ATTIC. CONNECT LIGHTING TO SWITCH AND CIRCUIT AS INDICATED.
2. CONNECT TO PHOTOCELL. INSTALL PHOTOCELL SO IT HAS UNOBSTRUCTED VIEW OF THE NORTH SKY.
3. FIXTURES TO BE MOUNTED OVER NEW BUILDING SIGN. COORDINATE LOCATION WITH ARCHITECTURAL ELEVATIONS.



1 E-1.1 DEPOT EXIT, EMERGENCY, AND LIGHTING PLAN
SCALE: 1/4" = 1' - 0"

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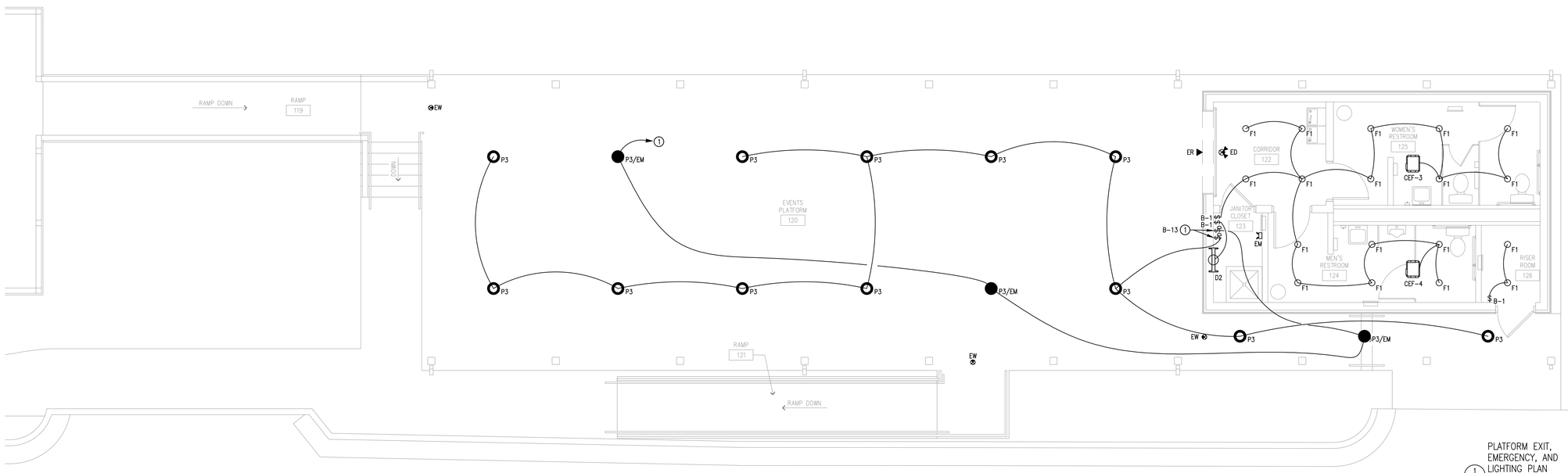
ELECTRICAL GENERAL NOTES:

1. ALL CONDUIT IS TO BE RUN INSIDE THE CRAWL SPACE, ATTIC, OR ENCLOSED WALL CAVITY WHENEVER POSSIBLE. ANY EXPOSED CONDUIT TO BE PAINTED PER ARCHITECTS SPECIFICATIONS.
2. ALL ELECTRICAL DEVICES ARE TO BE FED FROM BELOW THE FLOOR WHENEVER POSSIBLE.
3. COORDINATE ALL LIGHTING SWITCH LOCATIONS WITH ARCHITECT/OWNER PRIOR TO ROUGH-INS.

ELECTRICAL KEYED NOTES:

1. CONNECT TO PHOTOCELL. INSTALL PHOTOCELL SO IT HAS UNOBSTRUCTED VIEW OF THE NORTH SKY.



PLATFORM EXIT, EMERGENCY, AND LIGHTING PLAN

1 / E-1.2 SCALE: 1/4" = 1' - 0"

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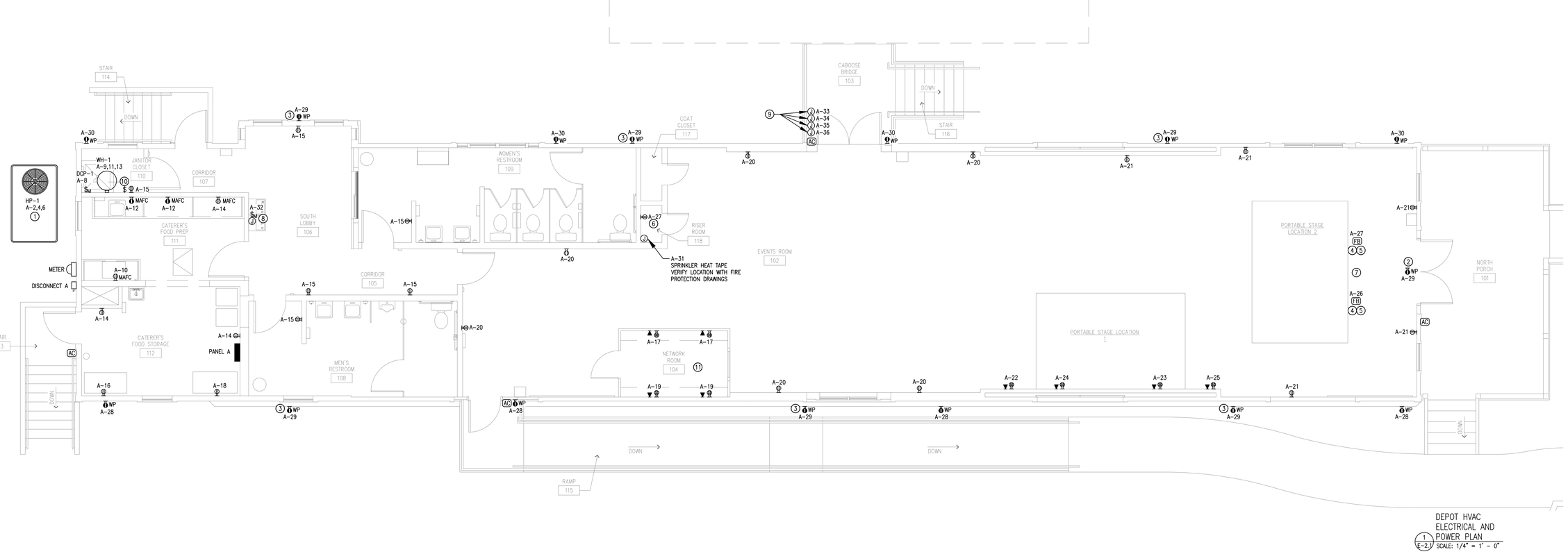
ELECTRICAL KEYED NOTES:

1. UNIT PROVIDED WITH INTEGRAL DISCONNECT, 120V SERVICE RECEPTACLE AND SINGLE POINT POWER CONNECTION.
2. LOCATED ON ROOF FOR HOLIDAY LIGHTING CONNECTION. VERIFY LOCATION WITH OWNER IN FIELD. RECEPTACLE TO BE CONTROLLED BY SWITCH INDICATED IN JANITORS CLOSET 110.
3. LOCATED UNDER ROOF EAVE FOR HOLIDAY LIGHTING CONNECTION. VERIFY LOCATION WITH OWNER IN FIELD. RECEPTACLE TO BE CONTROLLED BY SWITCH INDICATED IN JANITORS CLOSET 110.
4. FLOOR BOX SHALL BE FLUSH, 4-GANG, CAST IRON. PROVIDE (2) NEMA 5-20 RECEPTACLES AND PROVISIONS FOR (2) DATA OUTLETS. PROVIDE FLUSH COVER, ARCHITECT TO CONFIRM COVER COLOR. RECEPTACLE AND DATA OUTLET SHALL BE RECESSED IN BOX AND CONCEALED BY COVER WHEN IN USE.
5. PROVIDE (1) 1" CONDUIT BETWEEN FLOOR BOXES FOR LOW-VOLTAGE WIRING BY OTHERS AND PROVIDE (1) 1" CONDUIT TO NETWORK ROOM FOR LOW-VOLTAGE WIRING BY OTHERS.
6. COORDINATE LOCATION WITH DRY PIPE SPRINKLER AIR COMPRESSOR.
7. COORDINATE LOCATION OF FLOOR BOXES WITH PORTABLE STAGE.
8. COORDINATE LOCATION WITH REMOTE CHILLER FOR WATER COOLER.
9. PROVIDE JUNCTION BOX AND DEDICATED CIRCUIT AS INDICATED, IN CRAWL SPACE, FOR FUTURE CABOOSE LIGHTING AND POWER BY OTHERS. VERIFY LOCATION AND REQUIREMENTS WITH OWNER.
10. CONNECT SWITCH TO RECEPTACLES SERVING HOLIDAY LIGHTING. VERIFY LOCATION WITH OWNER.
11. PROVIDE CONDUIT FROM NETWORK ROOM TO LOCATIONS SPECIFIED BY THE OWNER FOR PAGING SYSTEM, SOUND SYSTEM, AND WIFI. VERIFY REQUIREMENTS AND LOCATIONS WITH OWNER.

ELECTRICAL GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS WITH APPLIANCES PROVIDED BY OTHERS.
2. EXACT LOCATION OF MECHANICAL, PLUMBING, KITCHEN, OWNER FURNISHED EQUIPMENT, ETC. THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL, PLUMBING, AND/OR ARCHITECTURAL DRAWINGS. COORDINATE EXACT LOCATIONS WITH RESPECTIVE CONTRACTORS AND/OR VENDORS PRIOR TO ANY ROUGH-INS.
3. PRIOR TO ROUGH-IN, REVIEW AND COORDINATE WITH ALL OTHER TRADES' CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS, AND ELECTRICAL REQUIREMENTS (VOLTAGE, PHASE, KW, HP, CONNECTION TYPE, ETC.) FOR HVAC AND PLUMBING EQUIPMENT. COORDINATE EXACT MOUNTING LOCATIONS WITH THE SPECIFIC TRADE AND ARCHITECT.
4. ALL CONDUIT IS TO BE RUN INSIDE THE CRAWL SPACE, ATTIC, OR ENCLOSED WALL CAVITY WHENEVER POSSIBLE. ANY EXPOSED CONDUIT TO BE PAINTED PER ARCHITECTS SPECIFICATIONS.
5. ALL ELECTRICAL DEVICES ARE TO BE FED FROM BELOW THE FLOOR WHENEVER POSSIBLE.



DEPOT HVAC ELECTRICAL AND POWER PLAN
1 / E-2.1 SCALE: 1/4" = 1' - 0"

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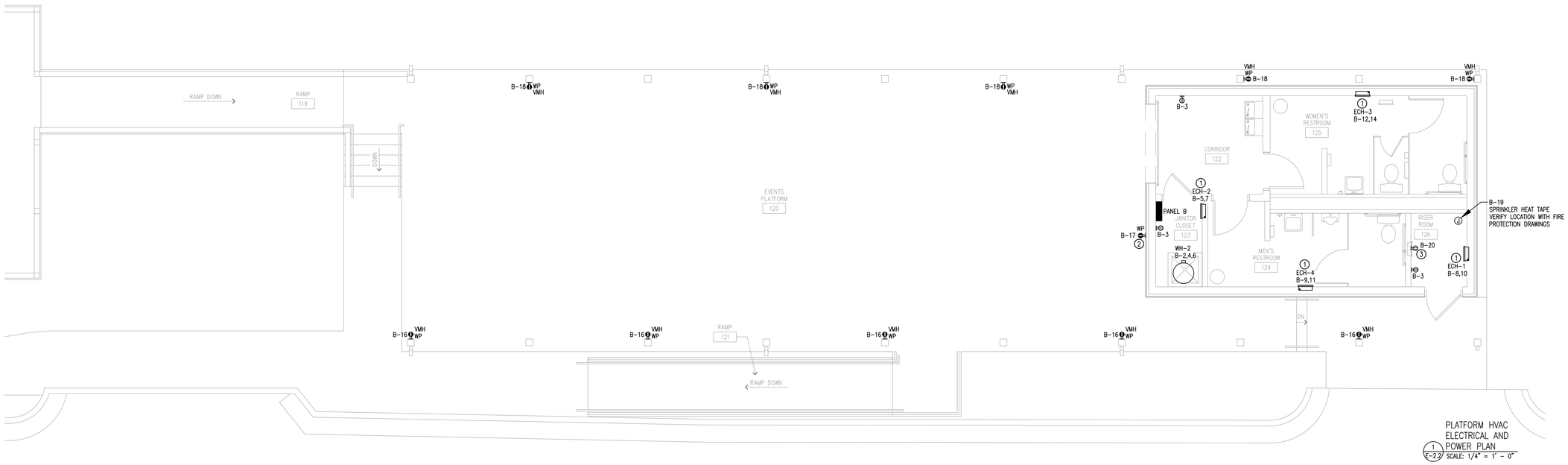
ELECTRICAL KEYED NOTES:

1. UNIT PROVIDED WITH INTEGRAL DISCONNECT.
2. PROVIDE VANDAL-RESISTANT, CAST ALUMINUM, WEATHERPROOF COVER. EQUIVALENT TO LEGRAND WUCAST1.
3. COORDINATE LOCATION WITH DRY PIPE SPRINKLER AIR COMPRESSOR.

ELECTRICAL GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS WITH APPLIANCES PROVIDED BY OTHERS.
2. EXACT LOCATION OF MECHANICAL, PLUMBING, KITCHEN, OWNER FURNISHED EQUIPMENT, ETC. THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL, PLUMBING, AND/OR ARCHITECTURAL DRAWINGS. COORDINATE EXACT LOCATIONS WITH RESPECTIVE CONTRACTORS AND/OR VENDORS PRIOR TO ANY ROUGH-INS.
3. PRIOR TO ROUGH-IN, REVIEW AND COORDINATE WITH ALL OTHER TRADES' CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS, AND ELECTRICAL REQUIREMENTS (VOLTAGE, PHASE, KW, HP, CONNECTION TYPE, ETC.) FOR HVAC AND PLUMBING EQUIPMENT. COORDINATE EXACT MOUNTING LOCATIONS WITH THE SPECIFIC TRADE AND ARCHITECT.
4. ALL CONDUIT IS TO BE RUN INSIDE THE CRAWL SPACE, ATTIC, OR ENCLOSED WALL CAVITY WHENEVER POSSIBLE. ANY EXPOSED CONDUIT TO BE PAINTED PER ARCHITECTS SPECIFICATIONS.
5. ALL ELECTRICAL DEVICES ARE TO BE FED FROM BELOW THE FLOOR WHENEVER POSSIBLE.



PLATFORM HVAC ELECTRICAL AND POWER PLAN

1 / E-2.2 SCALE: 1/4" = 1' - 0"

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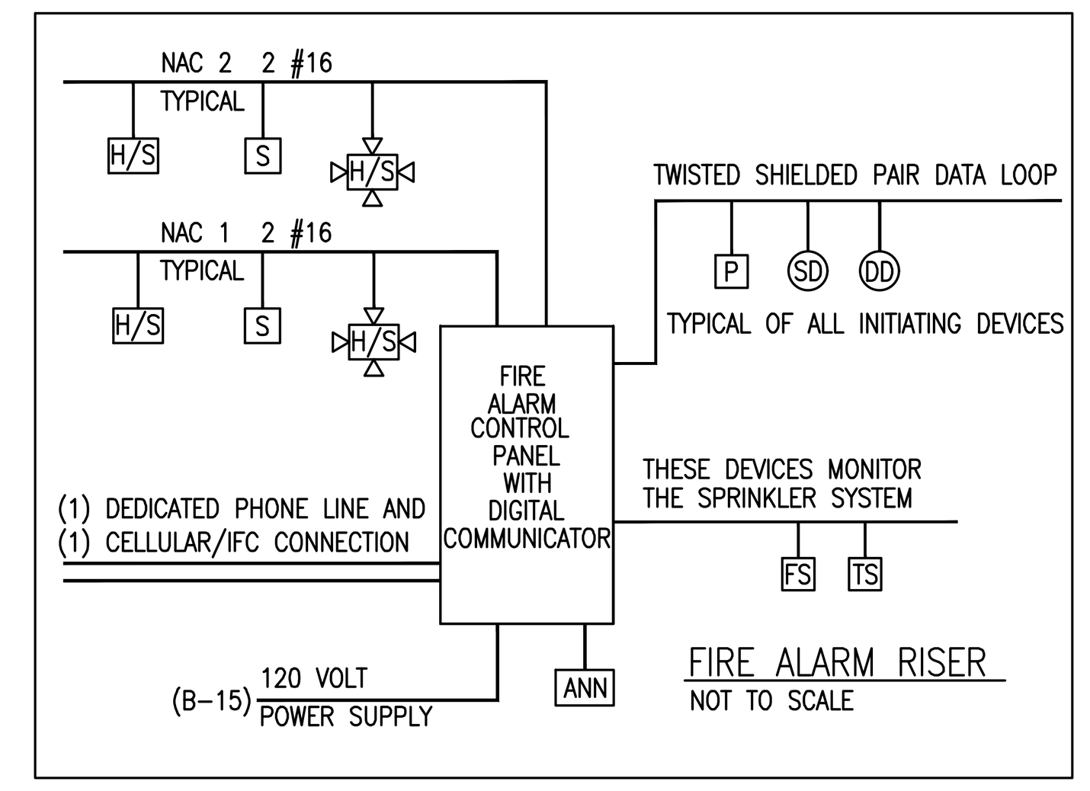


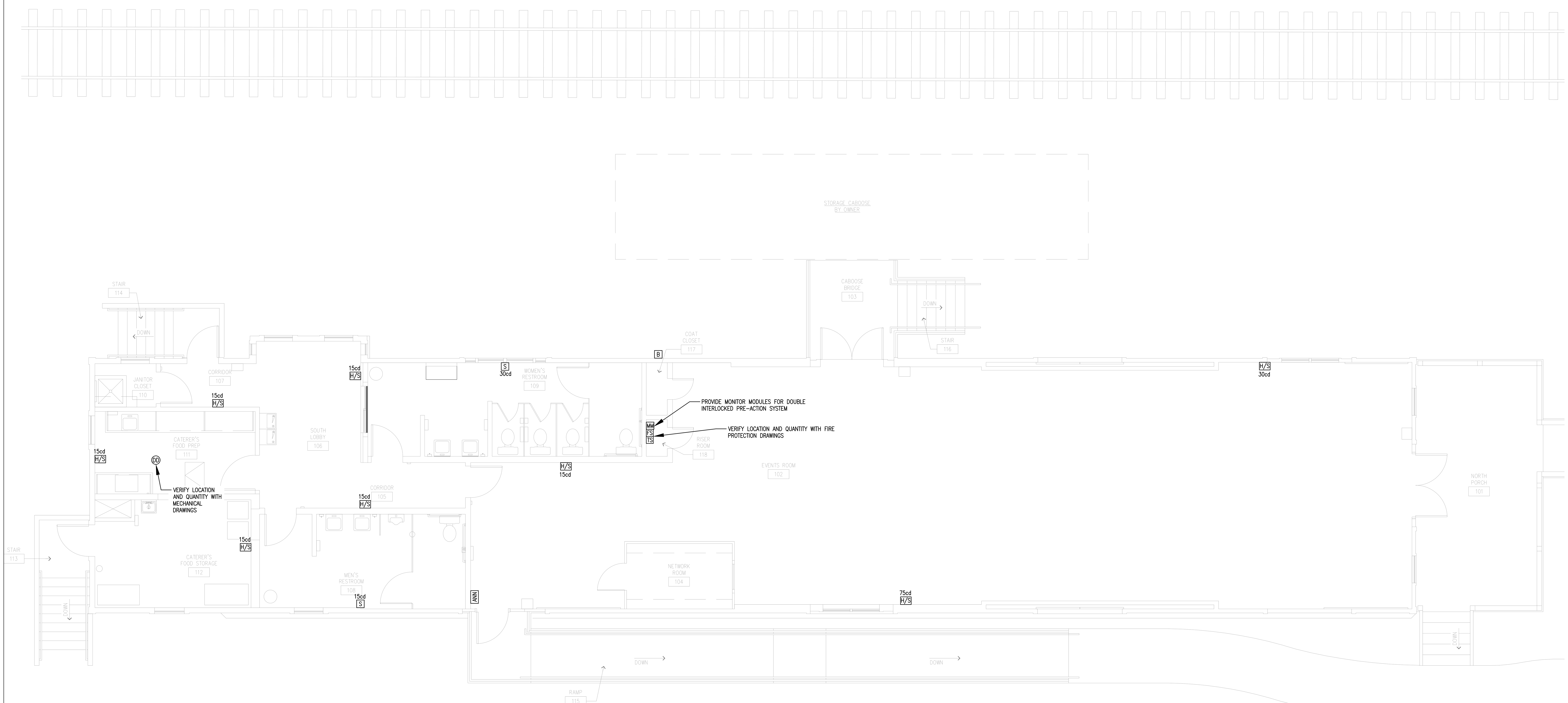
FIRE ALARM RISER
NOT TO SCALE

FIRE ALARM SYSTEMS LEGEND

P	PULL STATION
SD	SMOKE DETECTOR
DD	DUCT DETECTOR (VERIFY REQUIREMENTS)
HD	HEAT DETECTOR
S	WALL MOUNTED STROBE WITH CANDELA RATING
H/S	WALL MOUNTED HORN/STROBE WITH CANDELA RATING
H/S	CEILING MOUNTED HORN/STROBE WITH CANDELA RATING
B	120V SPRINKLER BELL
FACP	FIRE ALARM PANEL
ANN	FIRE ALARM ANNUNCIATOR PANEL
FS	FLOW SWITCH
TS	TAMPER SWITCH
MM	MONITOR MODULE
WP	WEATHERPROOF COVER

FIRE ALARM WIRING NOTE:

1. FIRE ALARM INSTALLER IS TO COORDINATE WITH FIRE MARSHAL ON REQUIRED DOCUMENTATION NEEDED.
2. FIRE ALARM INSTALLER TO VERIFY LOCATION OF FIRE ALARM PANEL AND ANNUNCIATOR PANEL.
3. VERIFY WITH MECHANICAL DRAWINGS FOR DETERMINATION OF UNITS TO RECEIVE DUCT SMOKE DETECTORS. MECHANICAL CONTRACTOR IS TO PROVIDE AND INSTALL IN HVAC UNIT, THEN FIRE ALARM INSTALLER SHOULD WIRE DETECTORS INTO SYSTEM.
4. FIRE ALARM SYSTEM DEPICTED ON ELECTRICAL PLANS IS SCHEMATIC ONLY AND DOES NOT REPRESENT THE FINAL ENGINEERED SYSTEM. FIRE ALARM CONTRACTOR SHALL COORDINATE DEVICE QUANTITIES AND LOCATIONS WITH FIRE MARSHAL AND FIELD CONDITIONS. AS A RESULT OF FIELD CONDITIONS, THE FIRE MARSHAL MAY REQUIRE THE INSTALLATION OF ADDITIONAL DEVICES. THE FIRE ALARM CONTRACTOR SHALL PROVIDE ALL FIRE ALARM PLANS, WIRING DIAGRAMS, VOLTAGE DROP CALCULATIONS, SHOP DRAWINGS, ETC. WHICH MAY BE REQUIRED BY THE FIRE MARSHAL FOR ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
5. COORDINATE DEVICES THAT MONITOR THE SPRINKLER SYSTEM WITH THE FIRE PROTECTION DRAWINGS.



DEPOT FIRE ALARM PLAN
1/E-3.1
SCALE: 1/4" = 1' - 0"

SEAL 051045 2/28/2025 NORTH CAROLINA PROFESSIONAL ENGINEER JASON WHITE

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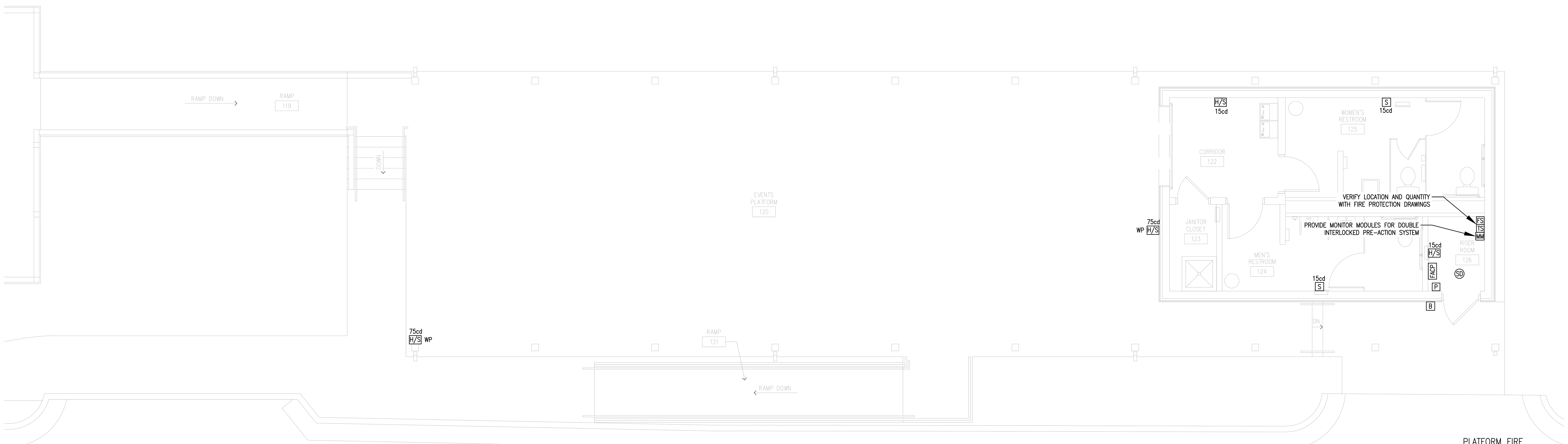

PLATFORM FIRE ALARM PLAN
1 / E-3.2 SCALE: 1/4" = 1' - 0"

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