

MEXICAN RESTAURANT

8601 WEST DODGE ROAD STE. 101 OMAHA, NE.

ABBREVIATIONS

AB: Anchor Bolt AC: Acoustical ACUST: Acoustical ACT: Acoustical Tile AD: Access Door, Area Drain ADA: Americans with Disabilities Act ADD: Addition, Addition ADDL: Additional ADJ: Adjacent, Adjacent AFF: Above Finished Floor ALI: Aluminum Institute of Architects ALUM: Aluminum AMT: Amount ANCH: Anchor ANOD: Anodized APPROX: Approximate ARCH: Architect ASPH: Asphalt ASSOC: Association ASSY: Assembly AT: Acoustical Tile ATM: Automatic Teller Machine AUTO: Automatic AVG: Average B & B: Balled and Burlapped BAL: Balustrade BD: Board BDRM: Bedroom BEL: Below BETA: Between BEV: Bevel BHD: Bulkhead BLDG: Building BLK: Block BLKS: Blocking BLT-IN: Built-in BM: Beam BN: Bulbouse BOT: Bottom BP: Base Plate BPL: Bearing Plate BR: Bedroom BRDG: Bridge, Bridging BRG: Bearing BRZ: Bronze BSMT: Basement BUR: Built-up Roof CAB: Cabinet CARP: Carpet CAT: Catalog CER: Ceramic CFI: Counterflashing CG: Corner Guard CHAM: Chamfer CHAN: Channel CIR: Cast-in-Place CJ: Control Joint CL: Centerline, Clearance CLG: Ceiling CLOS: Closet CLR: Clear CLR OPS: Clear Opening CMU: Concrete Masonry Unit CNTR: Counter	BND: Bulkhead BLDG: Building BLK: Block BLKS: Blocking BLT-IN: Built-in BM: Beam BN: Bulbouse BOT: Bottom BP: Base Plate BPL: Bearing Plate BR: Bedroom BRDG: Bridge, Bridging BRG: Bearing BRZ: Bronze BSMT: Basement BUR: Built-up Roof CAB: Cabinet CARP: Carpet CAT: Catalog CER: Ceramic CFI: Counterflashing CG: Corner Guard CHAM: Chamfer CHAN: Channel CIR: Cast-in-Place CJ: Control Joint CL: Centerline, Clearance CLG: Ceiling CLOS: Closet CLR: Clear CLR OPS: Clear Opening CMU: Concrete Masonry Unit CNTR: Counter	CNTR: Counter CO: Cases Opening COL: Column CON: Construction CONC: Concrete COND: Condenser, Conduit CONN: Connection CONST: Construction CONT: Continuous Control CONTR: Contractor CORR: Corridor CRT: Computer CT: Ceramic Tile DBL: Double DEG: Degree DEMO: Demolition DEPT: Department DET: Detail DFI: Drinking Fountain CER: Ceramic DIA: Diameter DIM: Dimension DISP: Disposal, Dispenser DN: Down DR: Door, Dining Room DS: Downspout DTL: Detail CLG: Ceiling DNSG: Drawings DNR: Drawer FL: Floor FLASH: Flashing FLR: Floor FLUOR: Fluorescent FR: Frame FT: Foot, Feet FTG: Footing FURN: Furnish, Furniture FABR: Fabricate FI: File FD: Floor drain FDN: Foundation FE: Fire Extinguisher FEQ: Fire Extinguisher Cabinet FFF: Finished Floor FFE: Finished Floor Elevation FGR: Fiberglass reinforced FIN: Finish, Finished FIXT: Fixture FL: Floor FLASH: Flashing FLR: Floor FLUOR: Fluorescent FR: Frame FT: Foot, Feet FTG: Footing FURN: Furnish, Furniture	EF: Exhaust Fan EIFS: Exterior Insulation and Finish System EJ: Expansion Joint EL: Elevation, Elevator ELEV: Elevator EQ: Equal EQUIP: Equipment EPL: Each Way EWC: Electric Water Cooler EXIST: Existing EXP: Expansion, Exposed EXT: Exterior FABR: Fabricate FI: File FD: Floor drain FDN: Foundation FE: Fire Extinguisher FEQ: Fire Extinguisher Cabinet FFF: Finished Floor FFE: Finished Floor Elevation FGR: Fiberglass reinforced FIN: Finish, Finished FIXT: Fixture FL: Floor FLASH: Flashing FLR: Floor FLUOR: Fluorescent FR: Frame FT: Foot, Feet FTG: Footing FURN: Furnish, Furniture	FURR: Furring FUT: Future F.V.: Field Verify GA: Gauge GALV: Galvanized GC: General Contractor GEN: General, Generator GL: Glass GND: Ground GRAN: Granite, Granite GYP: Gypsum GYP BDF: Gypsum Board H: Height HB: Hose Bib HC: Handicapped HD: High Density HDR: Header HDWD: Hardwood HGT: Height HORIZ: Horizontal HR: Hour HT: Height HVAC: Heating, Ventilating & Air Conditioning HVY: Heavy I: Inch INFO: Information INSUL: Insulation INT: Interior J-BOX: Junction Box	JANI: Janitor JST: Joist JT: Joint KIT: Kitchen L: Angle, Length LAB: Laboratory LAM: Laminated, Laminated LAV: Lavatory LBR: Load (weight) LIB: Library LIN: Linear LT: Light LGS: Lighting LVR: Louver MACH: Machine MAINT: Maintenance VAS: Vapour MAT: Material MATL: Material MAX: Maximum MECH: Mechanical MED: Medium MET: Metal MEZZ: Mezzanine MFR: Manufacture, Manufacturer MIN: Minimum MISG: Miscellaneous MLDG: Molding MOP: Masonry Opening MTD: Mounted MULL: Mullion	NIC: Not in Contract NOM: Nominal NTS: Not To Scale OC: On Center OFF: Office OHD: Overhead Door OPNG: Opening OPP: Opposite ORP: Overflow Roof Drain P: LAM: Plastic Laminated PE: Persolan Enamel, Professional Engineer PED: Pedestal, Pedestrian PERFI: Perforated PERIM: Perimeter PERP: Perpendicular PERP: Perpendicular PL: Plate, Flan, Plastic Laminated, Plastic PLAS: Plaster, Plastic PLAS LAM: Plastic Laminated PLYWD: Plywood PLUMB: Plumbing PNL: Panel PNT: Point POL: Polish, Polished PR: Pair PRE: Prefinished PREFAB: Prefabricated PT: Point PVC: Polyvinyl Chloride PVT: Polymert PWR: Power	QTY: Quantity R & S: Rod and Shelf RA: Return Air, Registered Architect RAD: Radius RCP: Reinforced Concrete Pipe RD: Roof Drain REBAR: Reinforcing Bar REC: Receiver RECEPT: Receptacle REF: Reflected REFR: Refrigerator, Refrigerator REIN: Reinforcement, or Reinforce REQD: Required REV: Reverse RM: Room RO: Rough Opening ROW: Right of Way RT: Rubber Tile SAN: Sanitary SC: Solid Core SCHED: Schedule SECT: Section SECY: Secretary SERV: Service SFI: Square Foot SH: Sheet SHEATH: Sheathing SHWR: Shower SIM: Similar SPEC: Specification, Specifications SPK: Speaker SQ: Square SS: Stainless Steel STD: Standard STL: Steel STOR: Storage STRUCT: Structural SUSP: Suspended, Suspend SW: Switch SYS: System T: Tread, Thermostat T & B: Tongue & Groove T&B: Tongue & Groove TEL: Telephone TEMP: Tempered TERR: Terrazzo THRESH: Threshold TLT: Toilet TV: Television TYP: Typical UNEXG: Unexcavated UNLN: Unfinished UNO: Unless Noted Otherwise UR: Urinal USG: United States Gypsum Company UT: Utility VAR: Varies VB: Vapor Barrier, Vinyl Base VCT: Vinyl Composition Tile VERT: Vertical VEST: Vestibule VIN: Vinyl	W: Width W/: With W/O: Without WB: Wood Base WC: Water Closet WD: Wood WDM: Window WH: Water Heater WECT: Wainscot WT: Weight WVF: Welded Wire Fabric
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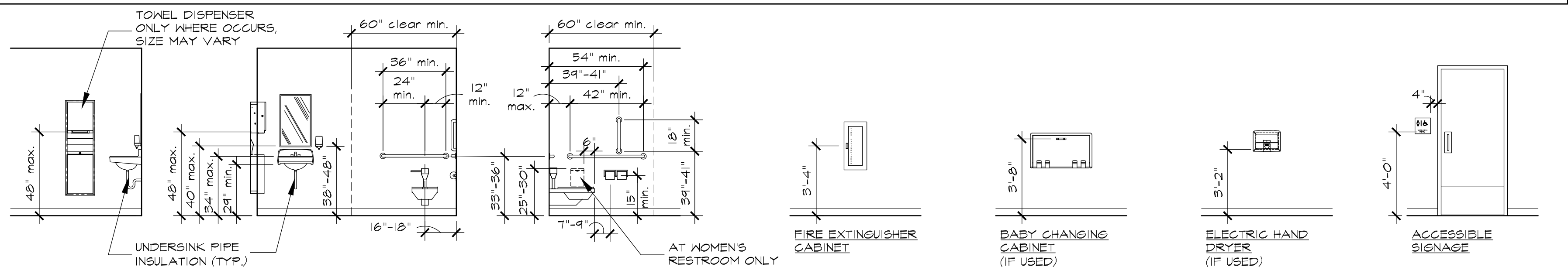
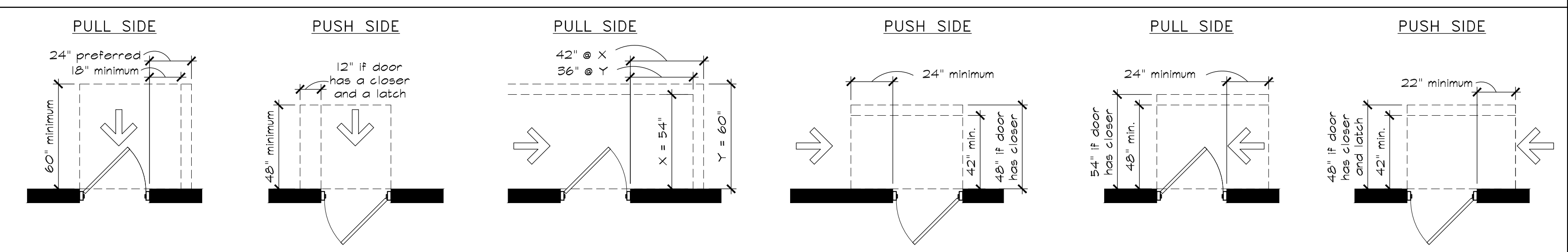
PROJECT CONTACTS

CIVIL ENGINEER NOT USED	ARCHITECT STANLEY J. HOW ARCHITECTS, INC. 14685 CALIFORNIA STREET OMAHA, NEBRASKA 68114 PHONE: 402-464-9000 EMAIL: sjh@sdshow.com	STRUCTURAL ENGINEER RYAN PELSTER PERFORMANCE ENGINEERING 1181 FORT STREET, SUITE 104 OMAHA, NEBRASKA 68164 PHONE: 402-343-3460 EMAIL: rpelster@performancece.com	MECHANICAL ENGINEER NICK LIMPACH MORRISSEY ENGINEERING 4840 NORTH 118TH STREET OMAHA, NEBRASKA 68164 PHONE: 402-491-4144 EMAIL: nlimpach@morriseyengineering.com	ELECTRICAL ENGINEER GEORGE MORRISSEY MORRISSEY ENGINEERING 4840 NORTH 118TH STREET OMAHA, NEBRASKA 68164 PHONE: 402-491-4144 EMAIL: gmorrisey@morriseyengineering.com
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SYMBOL LEGEND

SYMBOL	TAG DESCRIPTION	SYMBOL	TAG DESCRIPTION	SYMBOL	TAG DESCRIPTION	SYMBOL	TAG DESCRIPTION	SYMBOL	TAG DESCRIPTION
(#)	DOOR NUMBER	(#)	ELEVATION	(#)	CENTER LINE	(#)	PLUS / MINUS	(#)	DETAIL MARKER
(#)	COLUMN GRID	(#)	SPOT ELEVATION AND DESCRIPTION	(#)	DIAMETER	(#)	DEGREES	(#)	DETAIL SHEET
(#)	ROOM NAME AND NUMBER	(#)	SPOT ELEVATION	(#)	PLATE	(#)	SECTION MARKER	(#)	VIEW SHEET
(#)	WINDOW FRAME TYPE	(#)	WALL TYPE	(#)	ANGLE	(#)		(#)	

MINIMUM MANEUVERING CLEARANCES AT DOORS



MISCELLANEOUS ACCESSORY MOUNTING LOCATIONS

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

- NOTES:
- ACCESSORIES SHOWN ABOVE ARE FOR REFERENCE ONLY AND MAY NOT BE THE ACTUAL ACCESSORY TYPE. SEE RESTROOM ACCESSORY SCHEDULE FOR ADDITIONAL INFORMATION.
 - ALL RESTROOM ACCESSORIES AND FIXTURES SHALL BE MOUNTED AT HEIGHTS AND LOCATIONS AS SPECIFIED BY LOCAL, STATE OR FEDERAL CODES THAT APPLY. CONTRACTOR SHALL VERIFY WITH GOVERNING JURISDICTION BEFORE INSTALLATION.



TYPICAL ACCESSIBLE SIGNAGE

- SCALE: 3" = 1'-0"
- MOUNT ON WALL ADJACENT TO LATCH SIDE OF DOOR, 60" MAX. TO 48" MIN. FROM FLOOR TO TACTILE CHARACTERS OF SIGN AND APPROXIMATELY 4" AWAY FROM THE DOOR FRAME. MOUNT WITH SILASTIC ADHESIVE, SUITABLE FOR ADHESION TO PAINT OR VINYL. MOUNTING HEIGHTS SHALL BE VERIFIED TO MEET ALL LOCAL, STATE OR FEDERAL CODES THAT APPLY. (VERIFY).
 - PICTOGRAM SHALL BE 1/32" RAISED, SOLID COLOR EQUAL TO ASI, DARK GREY SC-904 IN A 6" HIGH PICTOGRAM AREA. BACKGROUND COLOR EQUAL TO ASI LIGHT BEIGE #5C-806.
 - VERBIAGE SHALL BE SANS SERIF LETTERING STYLE, 1/32" RAISED, 3/4" HIGH, UPPER CASE LETTERS, SOLID COLOR EQUAL TO ASI, DARK GREY SC-904 WITH GRADE 2 BRAILLE TACTILE CHARACTERS.
 - PROVIDE SIGNAGE AS REQUIRED BY CODE. CONTRACTOR SHALL VERIFY.
 - SIGNS SHALL BE EQUAL TO ASI, INTAG SERIES 0.125 ACRYLIC FACEPLATE 7" x 9" (OR 7" x 4" AS SHOWN) WITH RADIUS CORNERS.



SHEET INDEX

COVER	MECHANICAL
A1.1 PROJECT COVER SHEET, SHEET INDEX, SYMBOLS, ABBREVIATIONS, DETAILS, COMCHECK AND CODE INFORMATION A1.2 EXISTING BUILDING REFERENCE SITE PLAN ARCHITECTURAL A2.0 DEMOLITION FLOOR PLAN AND NOTES A2.1 FLOOR PLAN, SCHEDULES, NOTES AND DETAILS A2.2 EGRESS FLOOR PLAN AND NOTES A3.1 DOOR AND FRAME ELEVATIONS, ELEVATIONS, SECTIONS AND DETAILS A3.2 ELEVATIONS A4.1 SECTIONS AND DETAILS A4.2 SECTIONS AND DETAILS A5.1 REFLECTED CEILING PLAN, NOTES AND ROOF PLAN PROJECT MANUAL GENERAL SPECIFICATIONS PM-2 GENERAL SPECIFICATIONS PM-3 GENERAL SPECIFICATIONS	M0.1 FLOOR PLAN - MECHANICAL DEMO M1.1 FLOOR PLAN - HVAC M2.1 FLOOR PLAN - PIPING M3.1 MECHANICAL DETAILS M4.1 MECHANICAL SCHEDULES M5.1 MECHANICAL SPECIFICATIONS M6.1 MECHANICAL SUPPLEMENTAL DRAWINGS M6.2 MECHANICAL SUPPLEMENTAL DRAWINGS ELECTRICAL E1.1 ELECTRICAL PLANS E2.1 ELECTRICAL SPECIFICATIONS

PLAN REVIEW FOR 2018 INTERNATIONAL EXISTING BUILDING CODE 2012 LIFE SAFETY CODE CLASSIFICATION TYPE: CHANGE OF OCCUPANCY

PROJECT NAME: PROPOSED MEXICAN RESTAURANT TENANT 8601 WEST DODGE ROAD SUITE 101 OMAHA, NE 68114

OWNER: NATE DODGE NR DODGE COMPANY 8701 WEST DODGE ROAD OMAHA, NE 68114 402-391-4900

ARCHITECT: REGISTERED DESIGN PROFESSIONAL STANLEY J. HOW ARCHITECTS, INC. 14685 CALIFORNIA STREET OMAHA, NE 68114 REGISTERED DESIGN PROFESSIONAL: STANLEY J. HOW III 14685 CALIFORNIA STREET OMAHA, NE 68114 EMAIL: sjh@sdshow.com 402-464-9000

- CONSTRUCTION TYPE, USE, HEIGHT AND AREA
 TYPE OF BUILDING CONSTRUCTION: I-B (EXISTING)
 NUMBER OF STORIES: 3 (EXISTING)
 TOTAL BUILDING AREA: 12,716 SQUARE FEET (EXISTING)
 AREA PER FLOOR: 1ST: 22,042 (EXISTING) 2ND: 25,337 (EXISTING) 3RD: 25,337 (EXISTING)
 SPRINKLER SYSTEM: NFPA 13 (EXISTING)
- PROPOSED TENANT (LOWER LEVEL): MEXICAN RESTAURANT, BAR AND PATIO, OCCUPANCY TYPE: A-2 RESTAURANT AREA: 2,417 S.F. COOLER/FREEZER/PANTRY: 431.5 S.F. TOTAL: 2,848.5 S.F. PATIO: 549 S.F.
 CONSTRUCTION TYPE: I-B
 SPRINKLER SYSTEM: NFPA 13
 OCCUPANCY SEPARATION: 1 HOUR RATED CONSTRUCTION BETWEEN 'A' AND 'B' OR 'M'
- LIVE LOADS
 ROOF: (INCLUDING DRIFTS) IBC MIN. 25 LBS/SQ. FT. DESIGNED: 25 LBS/SQ. FT. (EXISTING)
 FLOORS: IBC MIN. 100 LBS/SQ. FT. DESIGNED: 100 LBS/SQ. FT. (EXISTING)
 CORRIDORS: IBC MIN. 100 LBS/SQ. FT. DESIGNED: 100 LBS/SQ. FT. (EXISTING)
 WIND LOAD: IBC MIN. 115 MPH / EXP. 'B' DESIGNED: 115 MPH / EXP. 'B' (EXISTING)
- FIRE PROTECTION REQUIRED BASED ON TYPE OF CONSTRUCTION (IBC TABLES 601 & 602)
 EXTERIOR BEARING WALLS: REQUIRED: 0 HR. PROVIDED: 0 HR.
 INTERIOR BEARING WALLS: REQUIRED: 0 HR. PROVIDED: 0 HR.
 EXTERIOR NON-BEARING WALLS: REQUIRED: 0 HR. PROVIDED: 0 HR.
 STRUCTURAL FRAME REQUIRED: REQUIRED: 0 HR. PROVIDED: 0 HR.
 FIRE WALLS: (IBC SECTION 703) REQUIRED: 1 HR. PROVIDED: N/A
 SHAFT ENCLOSURES: REQUIRED: 1 HR. PROVIDED: 1 HR.
 FLOORS: REQUIRED: 0 HR. PROVIDED: 0 HR.
 ROOFS: REQUIRED: 0 HR. PROVIDED: 0 HR.
 ROOFING MATERIAL CLASS: REQUIRED: B PROVIDED: B
 OPENINGS IN EXTERIOR WALLS: REQUIRED: 0 HR. PROVIDED: N/A
 PARAPETS: (IBC SECTION 704.1) REQUIRED: NO PROVIDED: NO
 DRAFT STOPS: (IBC SECTION 711) REQUIRED: NO PROVIDED: NO
- EXIT REQUIREMENTS (IBC CHAPTER 10)
 NUMBER OF EXITS TOTAL TENANT SPACE: REQUIRED: 2 PROVIDED: 2
 EXIT WIDTH TO EXTERIOR: REQUIRED: 33" (36" MIN.) PROVIDED: 72"
 MAXIMUM DISTANCE TO AN EXIT: REQUIRED: 3 FT. 8 IN. PROVIDED: N/A
 CORRIDOR WIDTH: REQUIRED: 5 FT. 6 IN. PROVIDED: N/A
 CORRIDOR PROTECTION REQUIRED: REQUIRED: YES PROVIDED: YES
- ENERGY COMPLIANCE: SEE MECHANICAL ELECTRICAL DRAWINGS FOR APPLICABLE COM-CHECK FORMS.

COMcheck Software Version 4.1.5.5
Envelope Compliance Certificate

Project Information
 Energy Code: 2018 IECC
 Project Title: Proposed Mexican Restaurant (storage space only)
 Location: Omaha, Nebraska
 Climate Zone: 5a
 Project Type: Addition

Construction Site: 8601 Dodge Street Omaha, NE 68114
 Owner/Agent: Nate Dodge NP Dodge 8701 West Dodge Road Suite 300 Omaha, NE 68114 402-964-9000 sjh@sdshow.com
 Designer/Contractor: Stanley J. How Architects 14685 California Street Omaha, NE 68114 402-964-9000 sjh@sdshow.com

Building Area	Room	Area
1-Dining: Bar Lounge/Leisure - Nonresidential		356

Envelope Assemblies	Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof 1: Atic Roof with Steel Joists, (Bldg. Use 1 - Dining Bar Lounge/Leisure)		356	38.0	11.4	0.025	0.027
NR023 Exterior Wall 2: Steel-Framed, 16" o.c., (Bldg. Use 1 - Dining Bar Lounge/Leisure)		205	19.0	12.0	0.047	0.064
EAST Exterior Wall 1: Steel-Framed, 16" o.c., (Bldg. Use 1 - Dining Bar Lounge/Leisure)		218	19.0	12.0	0.047	0.064
Door 1: Insulated Metal, Swinging, (Bldg. Use 1 - Dining Bar Lounge/Leisure)		24	---	---	0.650	0.370

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Envelope PASSES: Design 0.0% better than code

Envelope Compliance Statement
 Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Stanley J. How III - Principal
 Signature: [Signature] Date: July 3, 2024

Project Title: Proposed Mexican Restaurant (storage space only) Report date: 07/03/24
 Data filename: C:\Users\kad\Documents\COMcheck\NP Dodge_8601_Mexican Restaurant (storage area).cck Page 1 of 10

PERFORMANCE Engineering
 11811 Fort Street, Suite 104 - Omaha, NE 68164 399 Perry Street, Suite 204A - Castle Rock, CO 80104
 (402) 343-3960 Fax: (402) 343-3961 (303) 721-3322 Fax: (303) 721-9904
 PE #: 240647

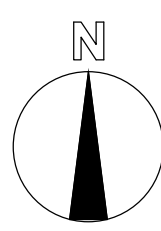
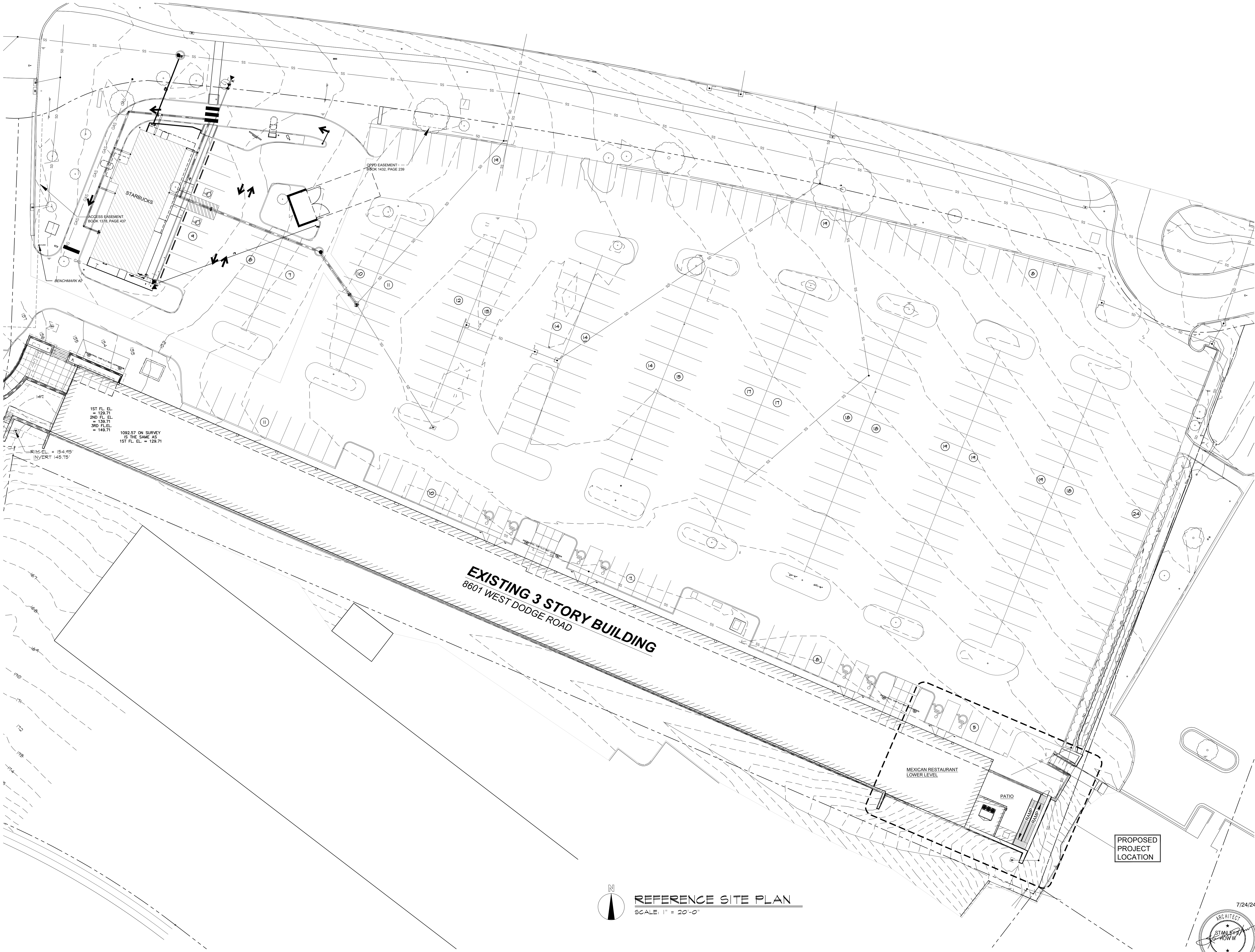
PROFESSIONAL STRUCTURAL ENGINEER
 STANLEY J. HOW III
 STATE OF NEBRASKA

ARCHITECT
 STANLEY J. HOW III
 STATE OF NEBRASKA

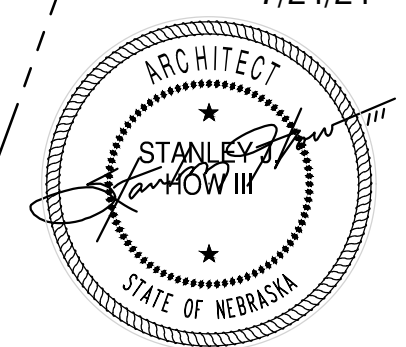
PROJECT COVER SHEET, SHEET INDEX, SYMBOLS, ABBREVIATIONS, DETAILS, COMCHECK AND CODE INFORMATION
 JOB NO. 2017-25
 DATE 7/24
 OMAHA, NEBRASKA
 SHEET A1.1
 REVISIONS
 ASH#1
 REVISED

18111 Fort Street, Suite 104 - Omaha, NE 68164 399 Perry Street, Suite 204A - Castle Rock, CO 80104
 (402) 343-3960 Fax: (402) 343-3961 (303) 721-3322 Fax: (303) 721-9904
 PE #: 240647

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REFERENCE SITE PLAN
SCALE: 1" = 20'-0"



7/24/24

SHEET

A1.2

PROPOSED MEXICAN RESTAURANT

OMAHA, NEBRASKA

JOB NO.
2017-25

DATE
7/24/24

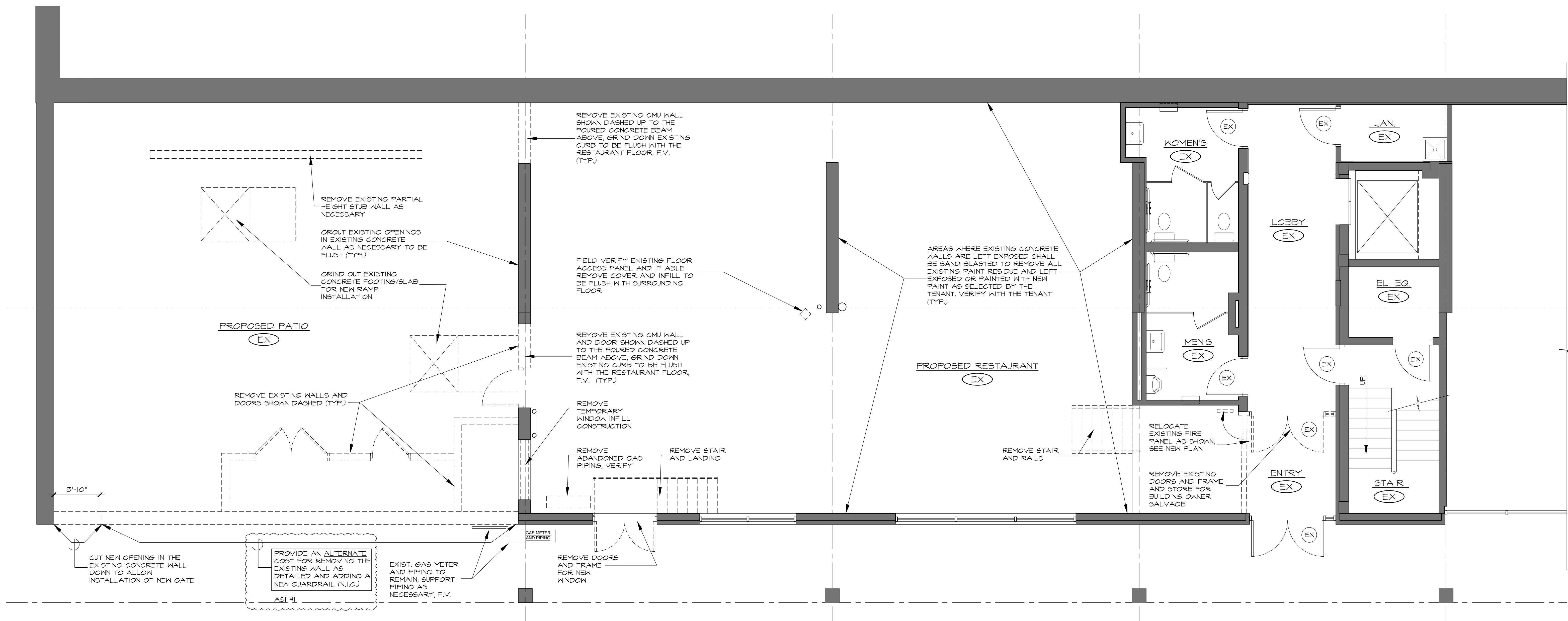
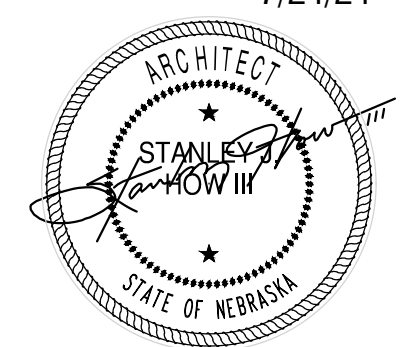


CA-0014

stanley j how
ARCHITECTS
HOW | SEIP
14685 CALIFORNIA ST OMAHA, NE 68154 402.964.9000

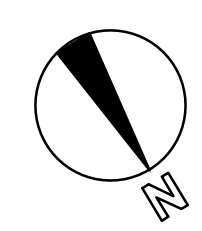
EXISTING BUILDING REFERENCE SITE PLAN

7/27/27
REVISION



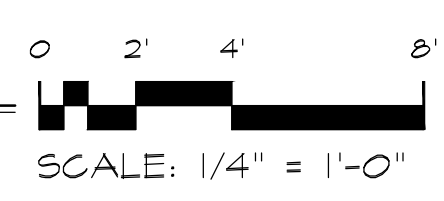
DEMOLITION FLOOR PLAN GENERAL NOTES:

1. GENERAL AND SUB CONTRACTORS SHALL FIELD VERIFY EXISTING CONDITION OF SITE, ALL STRUCTURES, EQUIPMENT AND DEVICES.
2. ALL EXISTING FINISHES SHALL BE REMOVED AND SURFACES PREPARED TO RECEIVE NEW FINISHES AS SCHEDULED, U.N.O.
3. ALL DOORS, FRAMES, WINDOWS, MILLWORK, FIXTURES, ETC... SHOWN DASHED SHALL BE REMOVED, U.N.O.
4. WALLS SHOWN [solid line] ARE EXISTING WALLS TO REMAIN. WALLS SHOWN [dashed line] ARE EXISTING WALLS TO BE REMOVED.
5. ALL DEMOLISHED MATERIALS SHALL BE REMOVED COMPLETELY FROM SITE.
6. ALL SURFACES TO RECEIVE NEW FINISHES SHALL BE PREPARED AS NECESSARY TO ENSURE THE PROPER APPLICATION OF THE NEW FINISHES.
7. ANY DAMAGED OR MODIFIED WALLS, FLOORS OR CEILINGS SHALL BE PATCHED AND REPAIRED AS NECESSARY TO MATCH ADJACENT SURFACES.
8. ALL AREAS WHERE THE CONCRETE FLOOR IS MISSING SHALL BE INFILLED WITH GRANULAR FILL AND NEW 5" CONCRETE SLAB ON STEGO VAPOR BARRIER. FLOOR SHALL BE FLUSH WITH ADJACENT FLOORS.
9. ALL ITEMS SHOWN DASHED SHALL BE REMOVED AS NOTED.

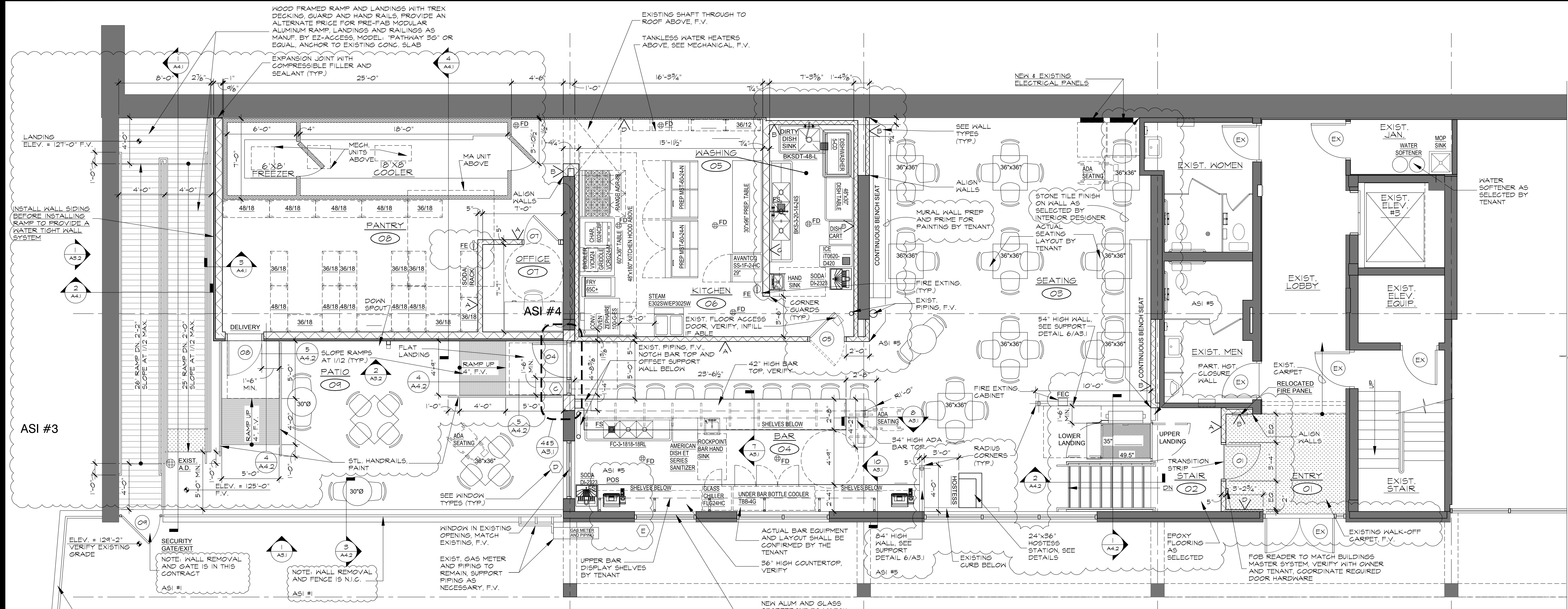


DEMOLITION FLOOR PLAN

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



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

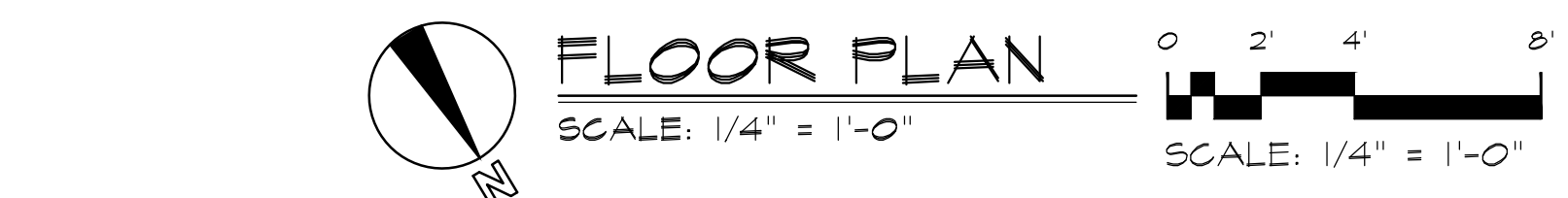


NOTE: THE RESTROOM REMODEL WAS PREVIOUSLY COMPLETED UNDER PERMIT #BLD-23-11329

RESTAURANT USE
TOTAL INDOOR SEATING: 1 OCC. / 15 S.F. = 53 PEOPLE (47 ACTUAL SEATS)
TOTAL OUTDOOR SEATING: 1 OCC. / 15 S.F. = 36 PEOPLE (22 ACTUAL SEATS)
53 x 25 = 14 THEREFORE 35 - 14 = 21 ADDED TO OCC. COUNT
TOTAL RESTAURANT CAPACITY: 74 PEOPLE (69 ACTUAL SEATS)
OCCUPANTS = 34 MEN, 34 WOMEN

FIXTURE REQUIREMENT PER TABLE 49-722(3)
34 MEN (REQ'D) = 1 WC, 0 UR, 1 LAV (PROVIDED) = 2 WC, 1 LAV
34 WOMEN (REQ'D) = 2 WC, 1 LAV (PROVIDED) = 2 WC, 1 LAV
MOP SINK (REQ'D) = 1 (PROVIDED) - 1
DRINKING FOUNTAIN (REQ'D) = 1 DF. (PROVIDED) = 1 HIGH/LOW DF*
*DF NOT REQUIRED IF WATER IS PROVIDED FOR FREE PER NOTE 1

NOTE: FIXTURE COUNT CONFIRMED AS ACCEPTABLE WITH FRANK REIDA AND MARTIN GOMEZ WITH THE CITY OF OMAHA PLUMBING DEPARTMENT PER PHONE CONVERSATION ON 9/7/2023.



FLOOR PLAN GENERAL NOTES:

- GENERAL AND SUB CONTRACTORS SHALL FIELD VERIFY EXISTING CONDITION OF SITE, ALL STRUCTURES AND DEVICES.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS.
- GENERAL CONTRACTOR SHALL PROVIDE APPROPRIATE WOOD BLOCKING AT ALL WALL MOUNTED ITEMS.
- DOORS WITH AN 'EX' TAG ARE EXISTING DOORS TO REMAIN, CONTRACTOR SHALL FIELD VERIFY EACH DOOR, FRAME AND TRIM TO DETERMINE THAT THEY ARE IN GOOD CONDITION AND IF NOT SHALL BE REPLACED WITH NEW. DOOR HARDWARE SHALL BE REPLACED AS NOTED.
- WALLS SHOWN [Symbol] ARE EXISTING WALLS TO REMAIN.
- WALLS SHOWN [Symbol] ARE NEW METAL STUD / FURRING FRAMING WITH 5/8" GYP BD. ALL WALLS BETWEEN KITCHEN/WASHING AND THE SEATING/BAR AREA SHALL HAVE SOUND BATT INSULATION.
- ALL SURFACES TO RECEIVE NEW FINISHES SHALL BE PREPARED AS NECESSARY TO ENSURE THE PROPER APPLICATION OF THE NEW FINISH.
- ALL FINISHES SHALL BE SELECTED BY THE TENANT AND INSTALLED BY THE CONTRACTOR, VERIFY.
- ALL KITCHEN, BAR, COOLER/FREEZER AND OTHER EQUIPMENT SHALL BE SELECTED AND APPROVED BY THE TENANT. CONTRACTOR SHALL VERIFY WITH SPACE PROVIDED AND ENSURE THAT ALL UTILITY CONNECTIONS ARE PROVIDED FOR IT TO OPERATE AS INTENDED.
- ANY DAMAGED OR MODIFIED WALLS, FLOORS OR CEILINGS SHALL BE PATCHED AND REPAIRED AS NECESSARY TO MATCH ADJACENT SURFACES.
- ALL GYP BD IN THE KITCHEN AND BAR AREAS SHALL BE GREEN BOARD OR EQUAL WATER RESISTANT BOARD AS DETAILED.
- 'FD' INDICATES FLOOR DRAIN, 'FE' INDICATES FIRE EXTINGUISHER, 'FEC' INDICATES FIRE EXTINGUISHER CABINET AND 'FS' INDICATES FLOOR SINK, 'AD' INDICATES AREA DRAIN.
- ALL OUTSIDE CORNERS SHALL IN THE GYP BD AND STUCCO WALLS SHALL BE RADIUS CORNERS.

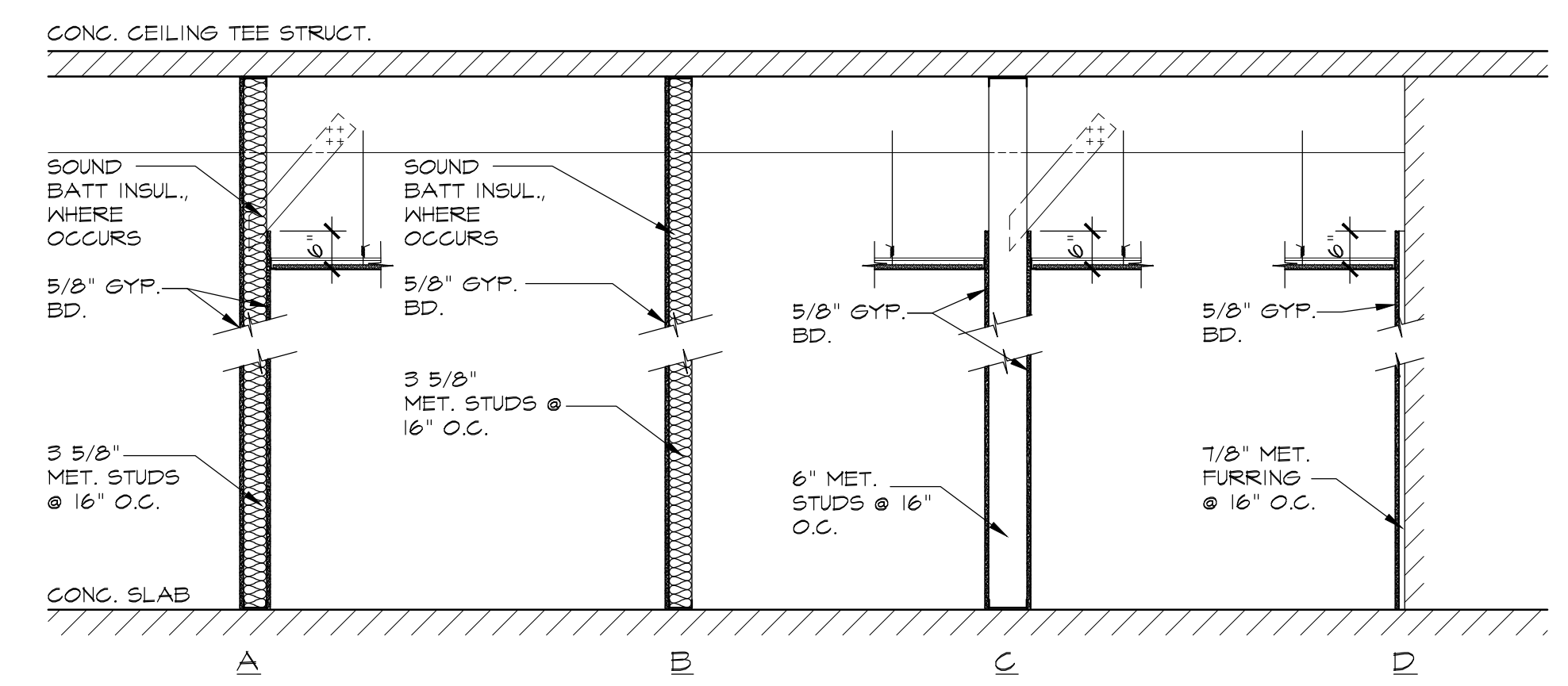
ROOM FINISH SCHEDULE

ROOM NO	ROOM NAME	FLOOR	BASE	WALLS	CEILING	RMK NO	REMARKS
01	ENTRY	EPOXY	VINYL	EXIST. 5/8" GYP BD	EXIST. 7' PAINT	1, 2, 5	1. PREP ALL EXISTING SURFACES AS NECESSARY TO BE UNIFORM AND SMOOTH READY TO ACCEPT NEW FINISHES.
02	STAIR	EPOXY	VINYL	EXIST. 5/8" GYP BD	EXIST. 7' PAINT	1, 2, 5	2. WALKOFF-CARPET SHALL MATCH EXISTING LOBBY ENTRY CARPET-VERIFY WITH BUILDING OWNER.
03	SEATING	EPOXY	VINYL	EXIST. 5/8" GYP BD	EXIST. 7' PAINT	1, 3, 5	3. ALL PAINT SHALL BE EPOXY PAINT.
04	BAR	EPOXY	VINYL	EXIST. 5/8" GYP BD	EXIST. 7' PAINT	1, 3, 5	4. CEILING GRID SHALL BE ALUMINUM AND ACOUSTIC TILES SHALL BE CLEANGABLE.
05	DISH WASHING	EPOXY	EPOXY	GYP BD	FRP	ACoust-1	5. ALL INTERIOR EXPOSED CONCRETE WALL SHALL BE SAND BLASTED TO REMOVE EXISTING PAINT AND LEFT AS BARE CONCRETE OR NEW PAINT AS SELECTED BY TENANT, VERIFY. SEE PLAN FOR GYP BD WALL, MURAL WALL AND WALL TO RECEIVE STONE TILE AS SELECTED BY THE INTERIOR DESIGNER.
06	KITCHEN	EPOXY	EPOXY	GYP BD	FRP	ACoust-1	
07	OFFICE	EPOXY	VINYL	EXIST. 5/8" GYP BD	EXIST. 7' PAINT	ACoust-2	
08	PANTRY	EPOXY	VINYL	EXIST. 5/8" GYP BD	EXIST. 7' PAINT	EXPOSED	

- GENERAL NOTES:
- ALL EPOXY AND VINYL BASES SHALL BE COVED EXCEPT AT CARPETED AREAS.
 - ACT-1- ARMSTRONG 24"x24" KITCHEN ZONE OR EQUAL.
 - ACT-2- ARMSTRONG 24"x24" OPTIMA OR EQUAL, VERIFY CEILINGS WITH TENANT.
 - ALL GYP BD IN THE KITCHEN AND BAR AREAS SHALL BE GREEN BOARD OR EQ. WATER RESISTANT BOARD AS DETAILED.
 - ALL OUTSIDE CORNERS SHALL HAVE RADIUS CORNERS.

DOOR AND FRAME SCHEDULE

DOOR NO	DOOR SIZE	DOOR MAT. TYPE	FRAME MAT. TYPE	DEPTH	HEAD	JAMB	SILL	HOW SET	RMK. NO.	REMARKS
01	3'-0" x 7'-0" x 13/4"	WOOD/GL	HOL MET	A	5 3/4"	3/AS1	3/AS1	---	1, 2, 4	1. DOOR TYPE SHALL MATCH EXISTING BUILDING DOOR TYPES.
04	3'-0" x 7'-0"	ALUM/GL	4	ALUM	C	4 1/2"	---	---	2	2. HARDWARE SHALL MATCH BUILDING STANDARD MANUFACTURER AND FINISH AND CONFORM TO TENANTS LOCKING REQUIREMENTS, VERIFY.
05	ELIASON BI-SHING 3'-0"x7'-0"	ALUM/GL	3	HOL MET	B	5 3/4"	3/AS1	3/AS1	---	3. GATE SHALL BE LOCKABLE FROM THE EXTERIOR AND HAVE A PANIC BAR EXITING DEVICE. SYSTEM SHALL BE POWDER COATED GALVANIZED STEEL. PROVIDE ALTERNATE GOST TO REMOVE ENTIRE NORTH WALL AND INSTALL GUARDRAIL SYSTEM.
07	3'-0" x 7'-0" x 13/4"	SG WOOD	1	HOL MET	A	5 3/4"	3/AS1	3/AS1	---	4. DOOR AND FRAME SHALL BE ONE HOUR RATED WITH FIRE RATED GLAZING.
08	3'-0" x 7'-0" x 13/4"	HOL MET	2	HOL MET	A	5 3/4"	3/AS1	3/AS1	---	
09	3'-8" x 7'-0" GATE	STEEL	5	---	---	---	---	---	5	

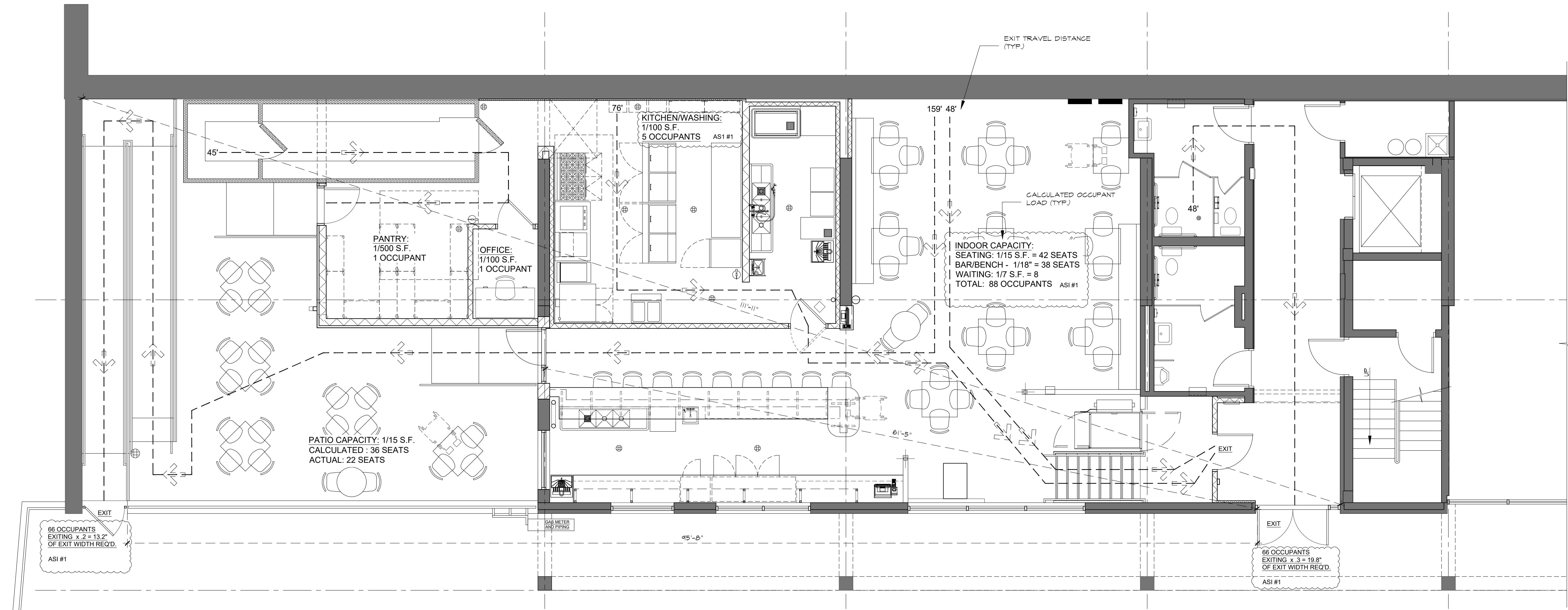


WALL TYPES

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

NOTE: WALL FINISHES SHALL BE SELECTED BY THE TENANT.

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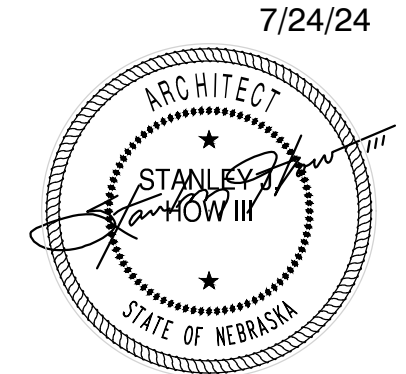
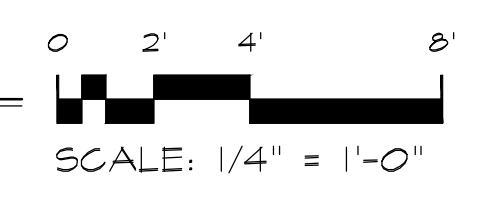
EGRESS INFORMATION:
 GROSS EXISTING BUILDING AREA: +/- 42,392 S.F.

TENANT AREA:
 RESTAURANT: +/- 2,217 S.F. (TOTAL)
 TENANT ADDITION AREA: COOLER/FREEZE/STORAGE +/- 438 S.F.
 PATIO AREA: 538 S.F.

TENANT OCCUPANT LOAD PER CODE:
 LSC = 131 OCC
 IBC = 93 OCC

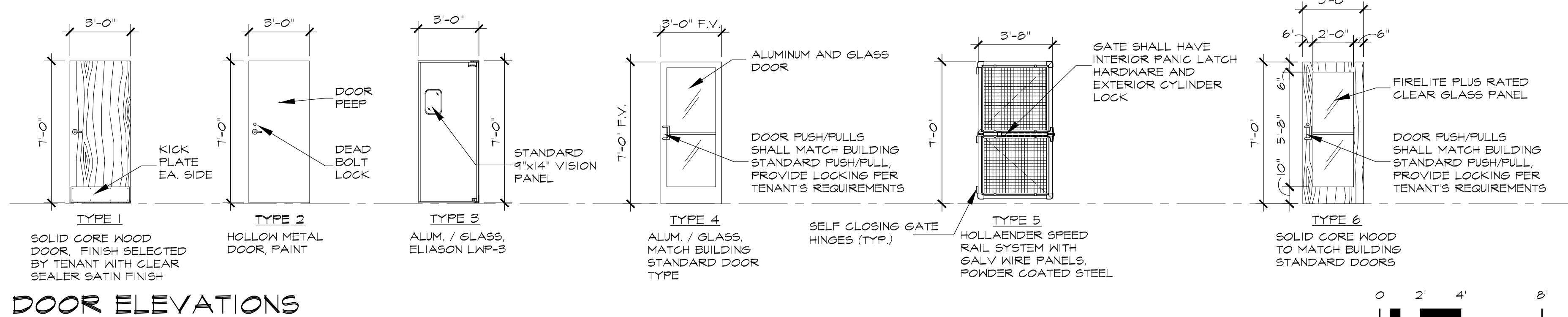
NOTES:
 1. LSC = LIFE SAFETY CODE, IBC = INTERNATIONAL BUILDING CODE.
 2. SEE EGRESS FLOOR PLAN FOR OCCUPANCY LOAD FACTOR PER EACH ROOM OR SPACE TYPE AND NUMBER OF OCCUPANTS.

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



18" x 24" - 2024.07.24 - 25.0001 - 0002 - TENANT - PROPOSED MEXICAN RESTAURANT - FIRST FLOOR PLAN - 07/24/24

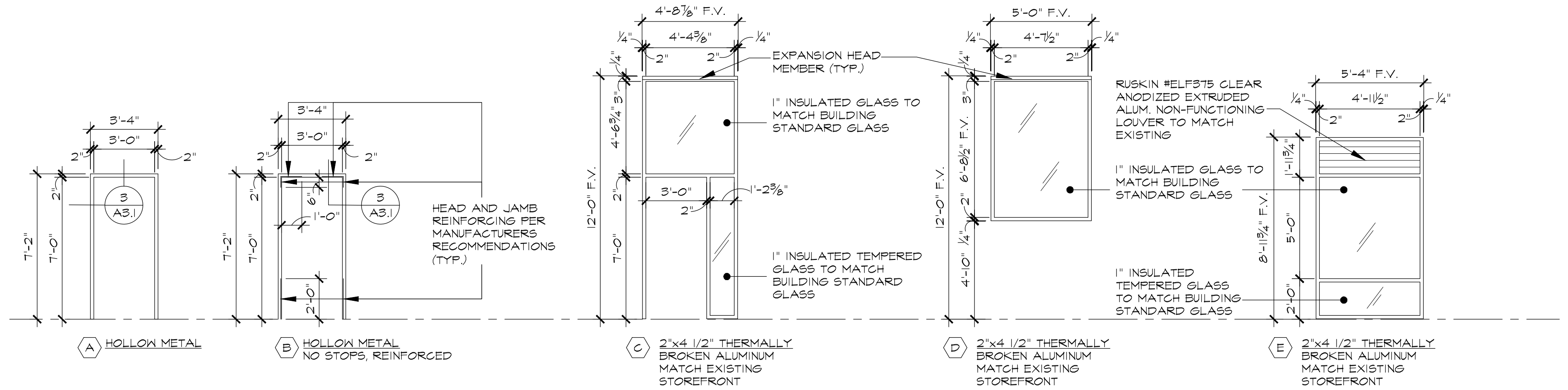
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DOOR ELEVATIONS

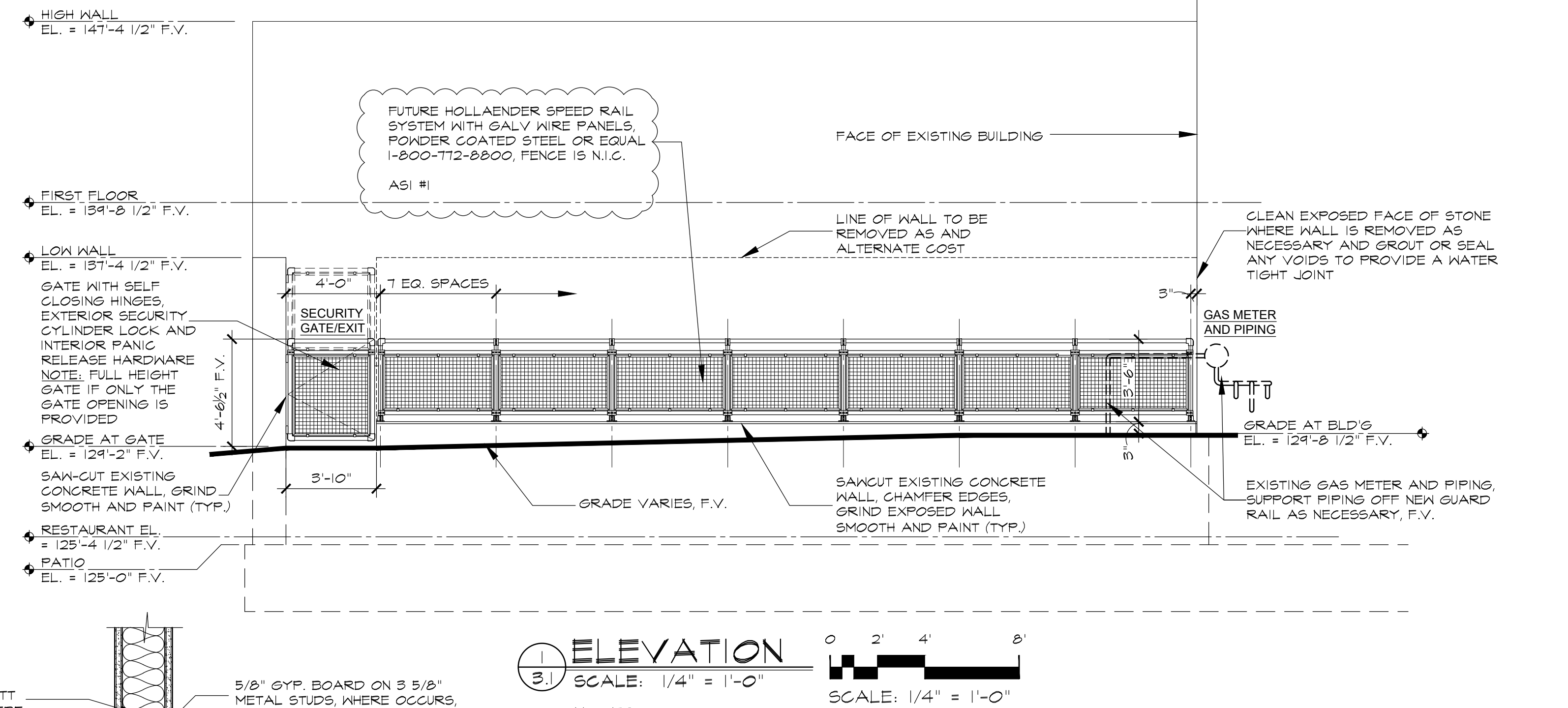
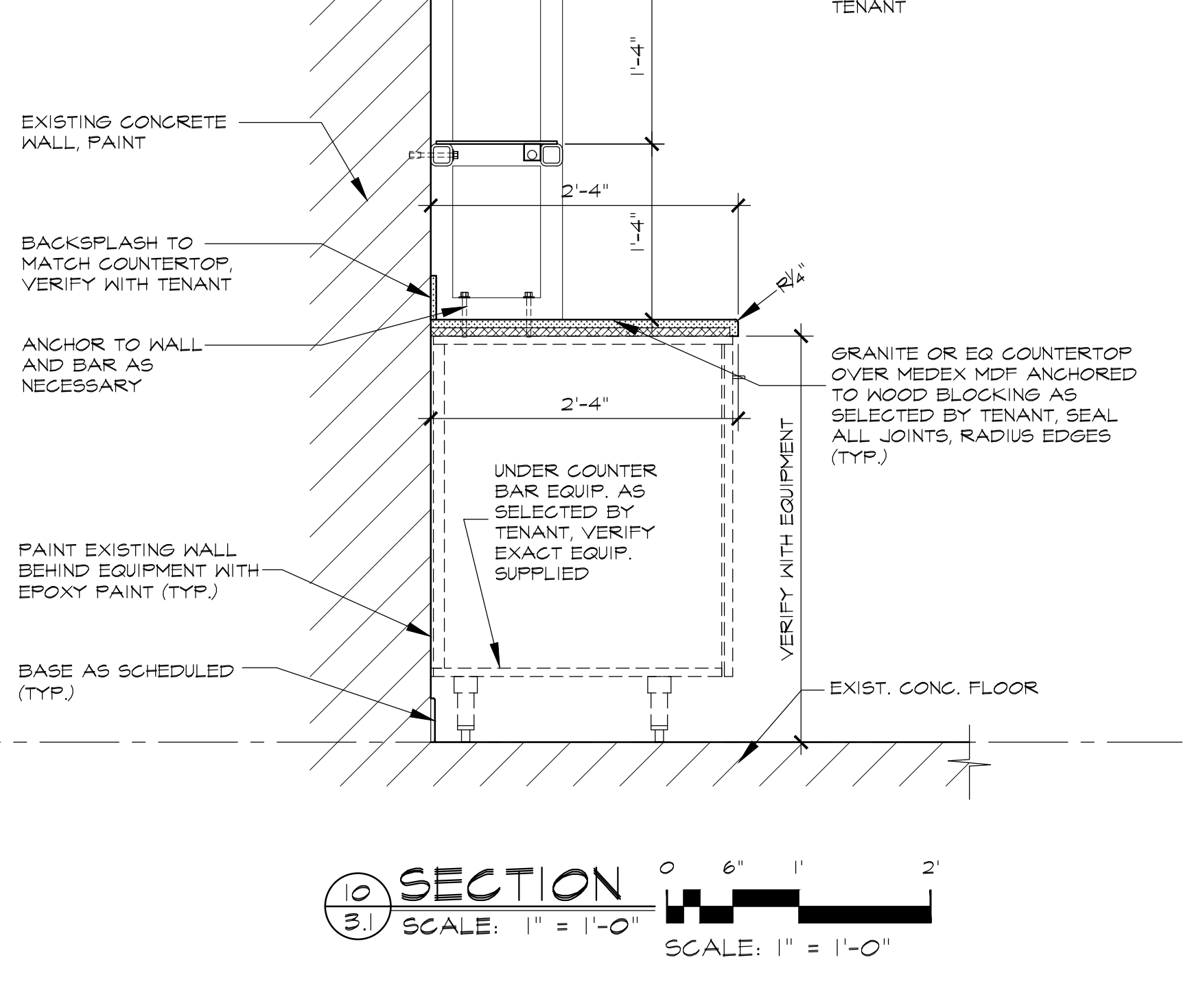
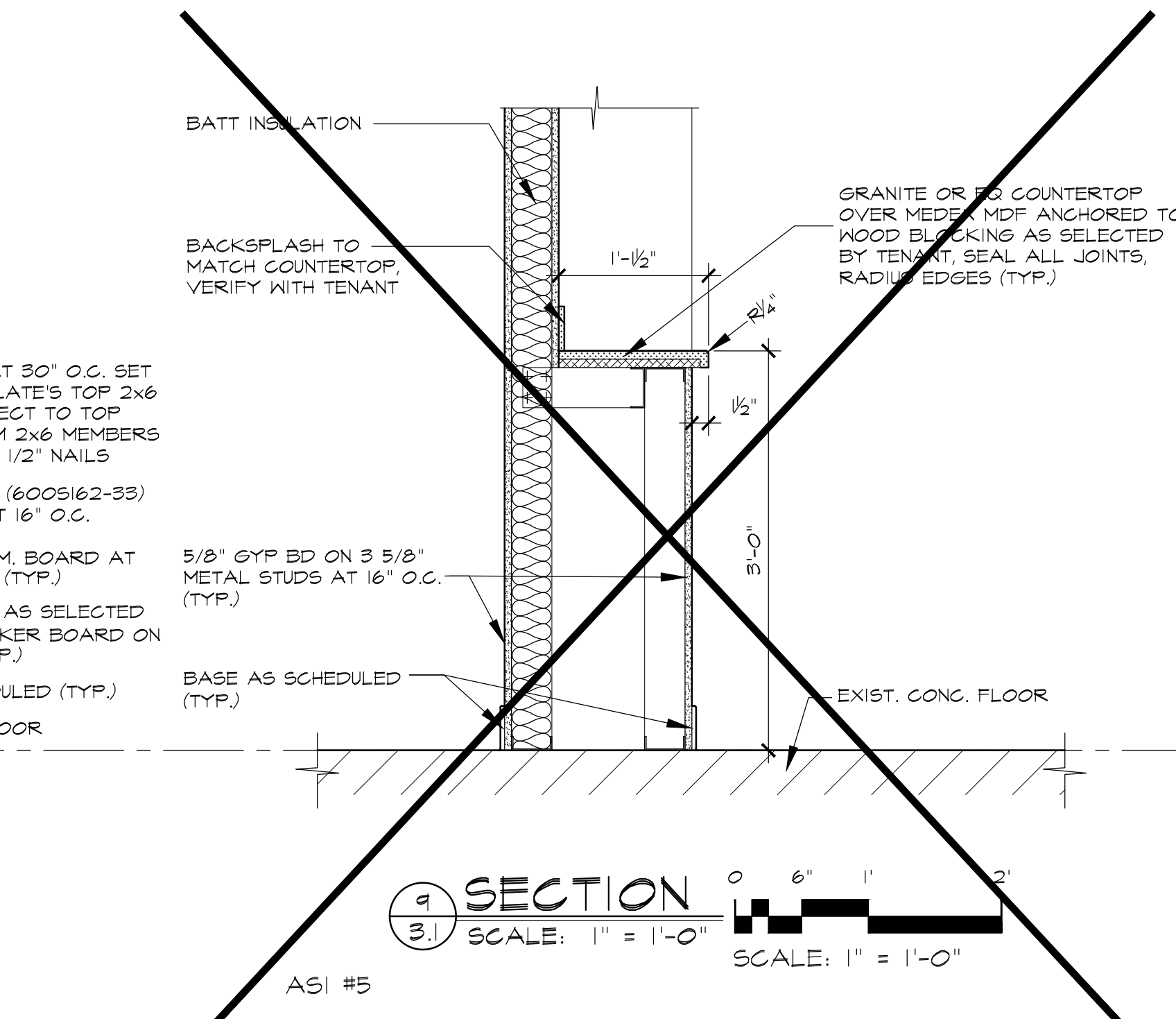
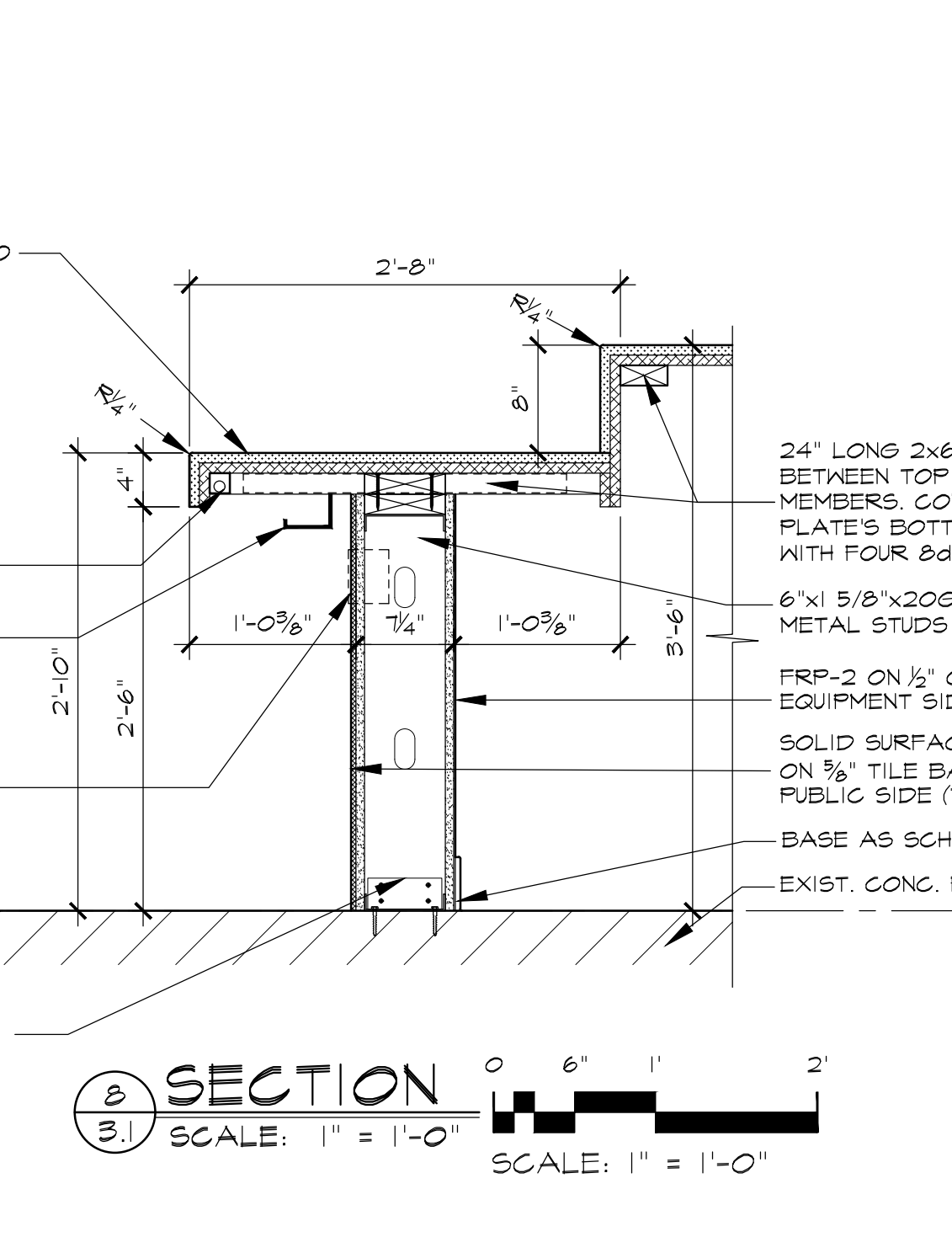
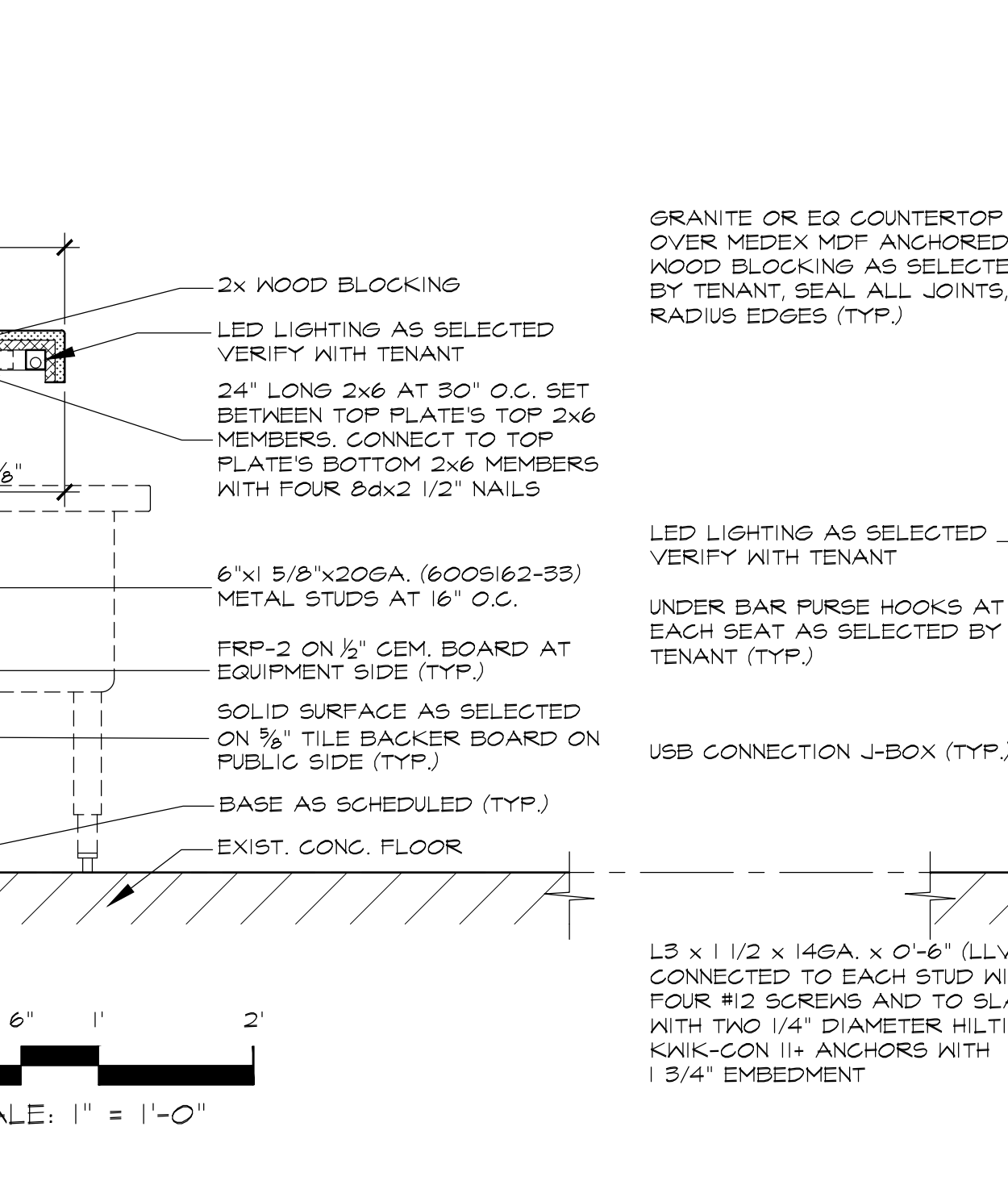
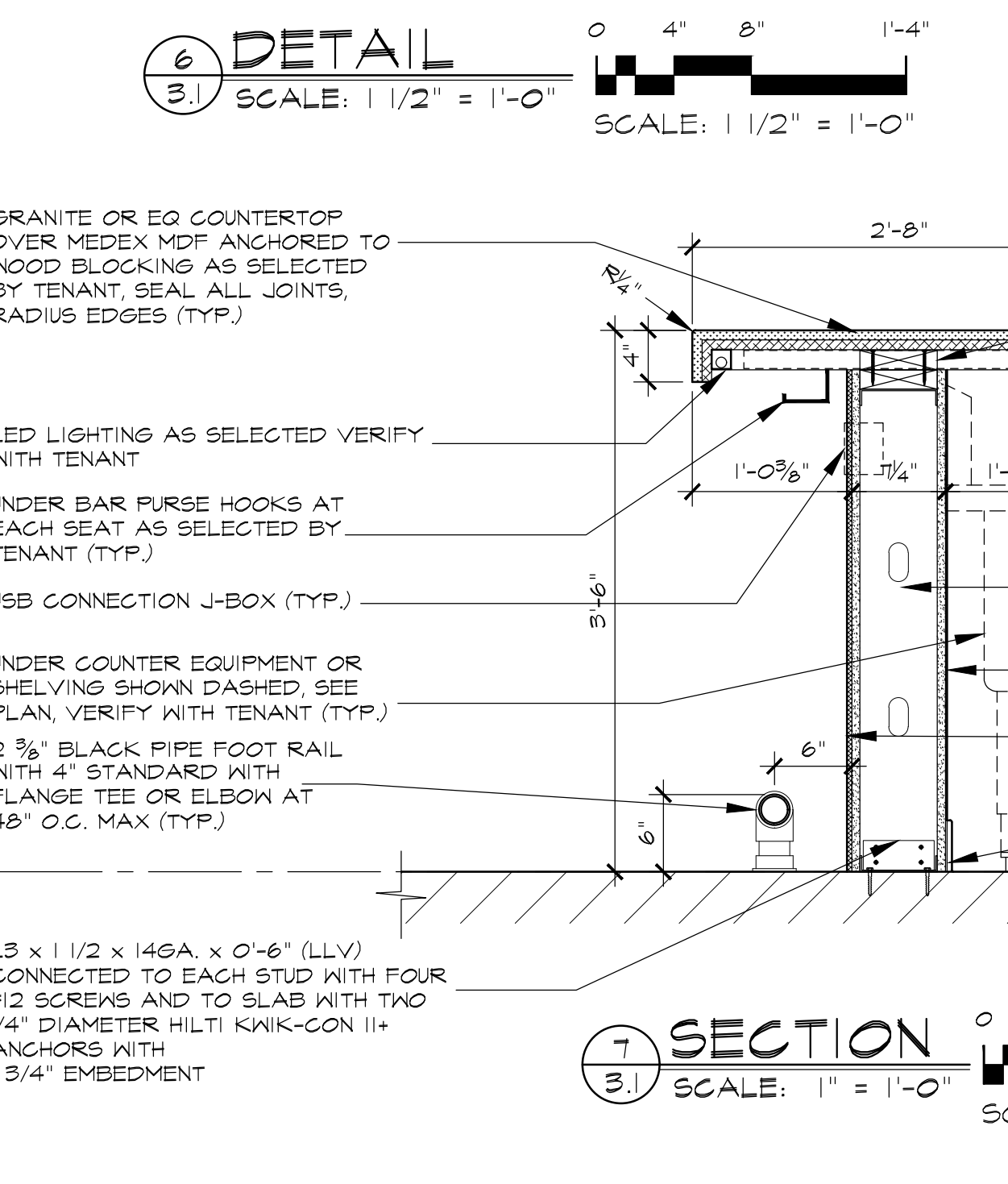
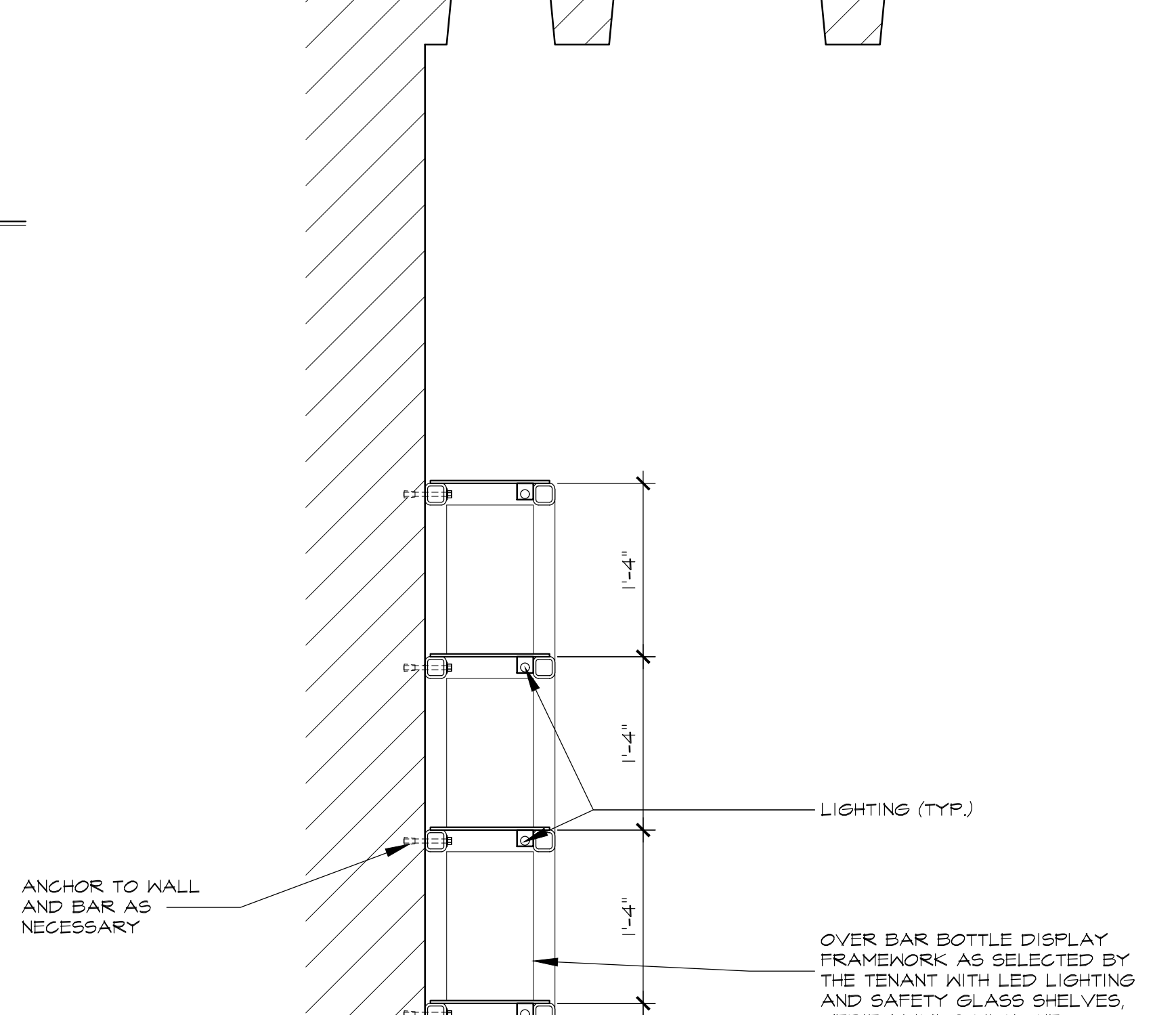
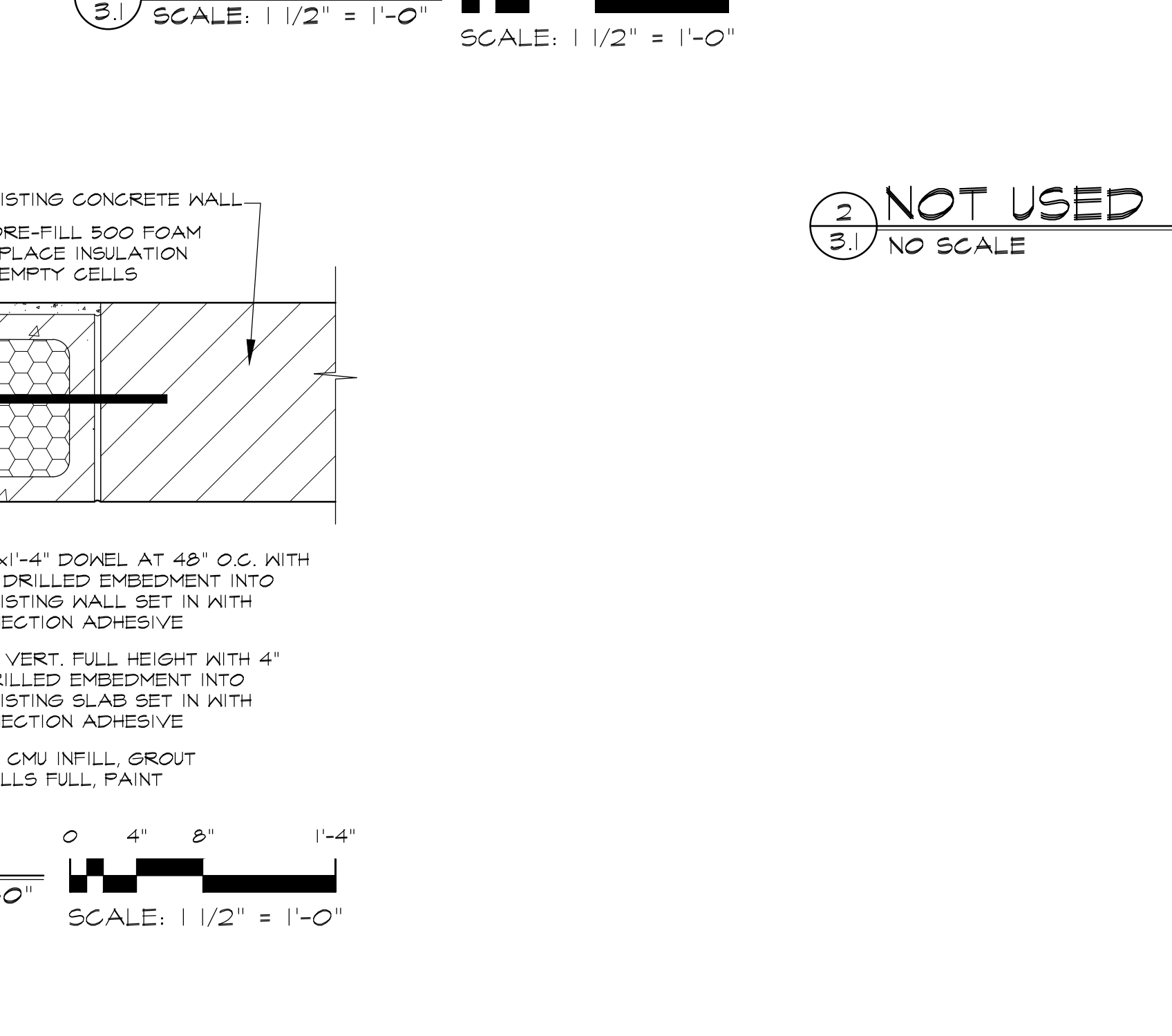
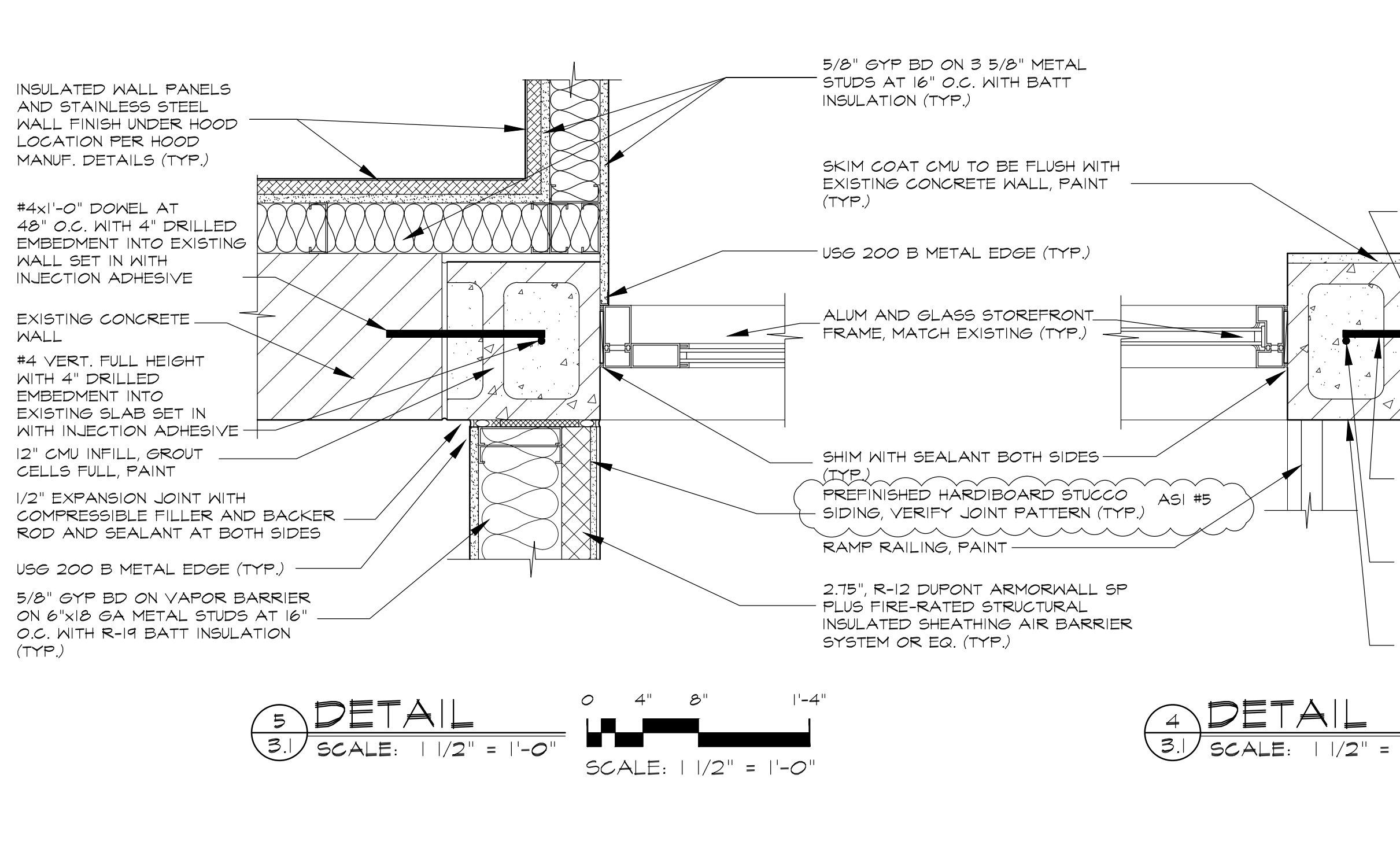
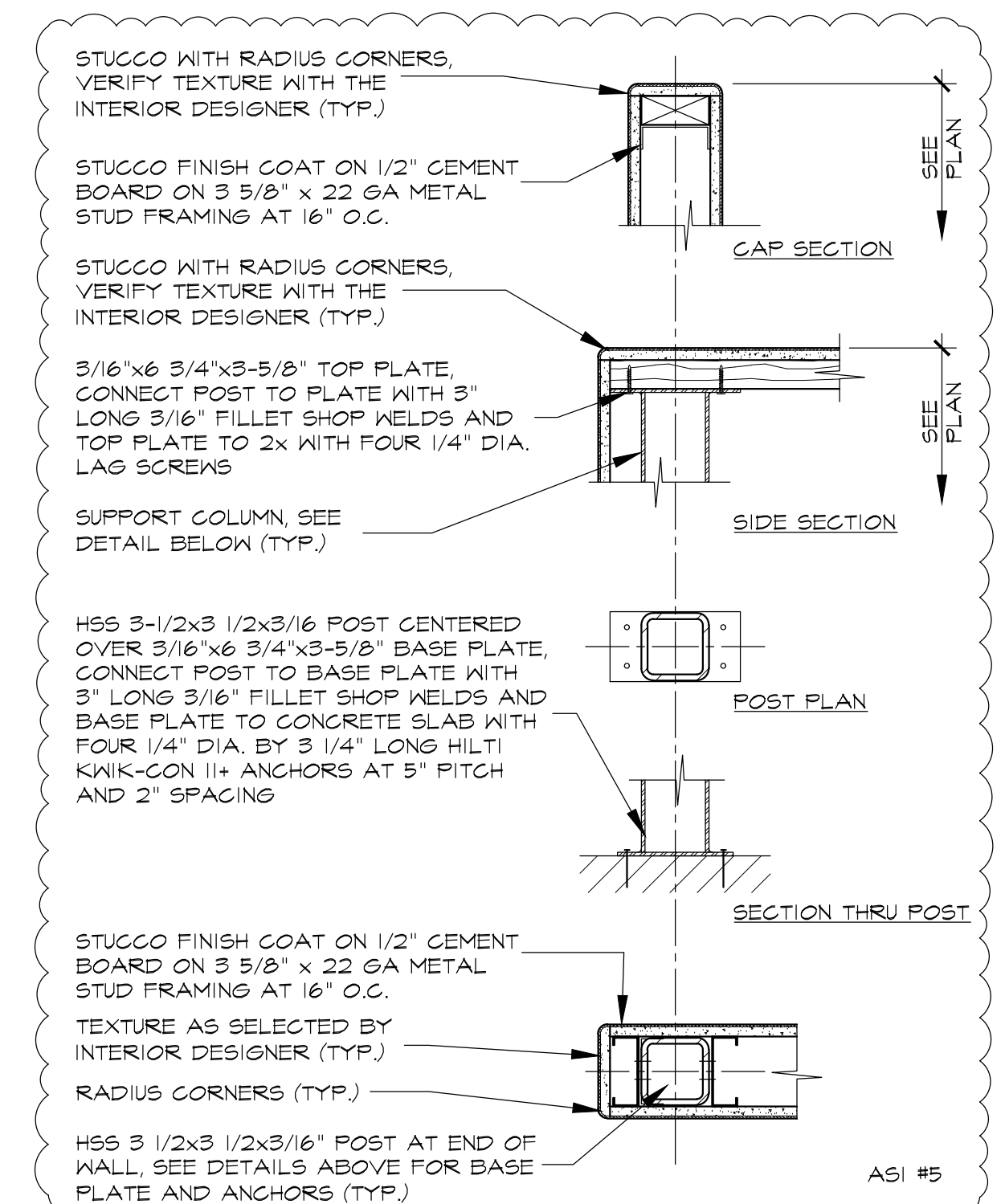
SCALE: 1/4" = 1'-0"

NOTES:
1. ALL ALUMINUM STOREFRONT DOORS, GLASS AND HARDWARE TO MATCH EXISTING BUILDING. FIELD VERIFY WITH BUILDING OWNER. LOCKING HARDWARE SHALL BE PER THE TENANT'S SECURITY REQUIREMENTS.



FRAME ELEVATIONS

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



ELEVATION

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

NOTES:
1. GRIND ANY EXPOSED REBAR TO BE 1" BELOW THE SURFACE OF THE CONCRETE AND FILL VOID WITH WATERPROOF GROUT TO SEAL BEFORE PAINTING.
2. SAW-CUT OPENING AT GATE LOCATION ONLY AND PROVIDE AN ALTERNATE COST TO REMOVE ENTIRE WALL AND ADD NEW GUARDRAIL SYSTEM.

DETAIL

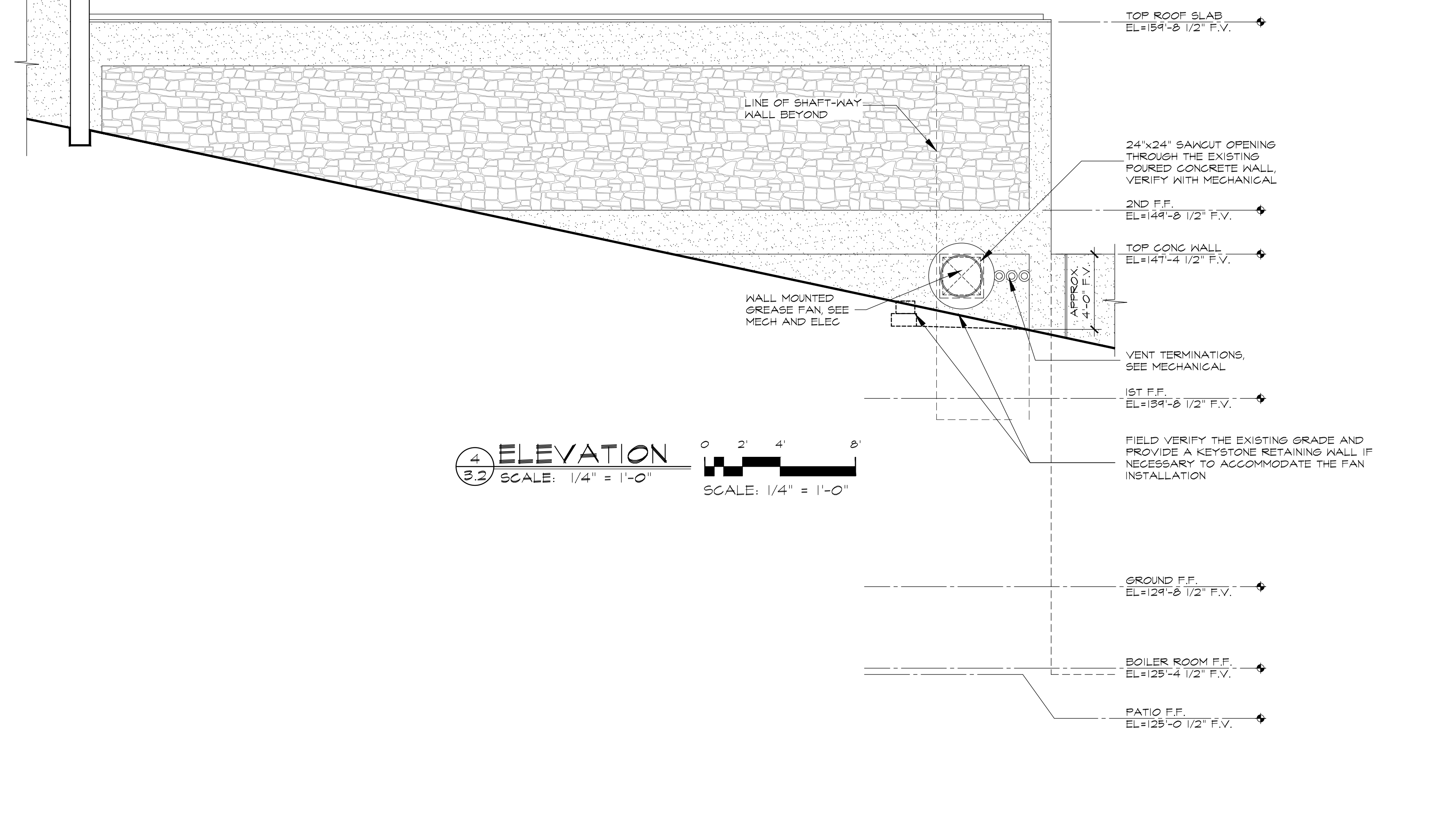
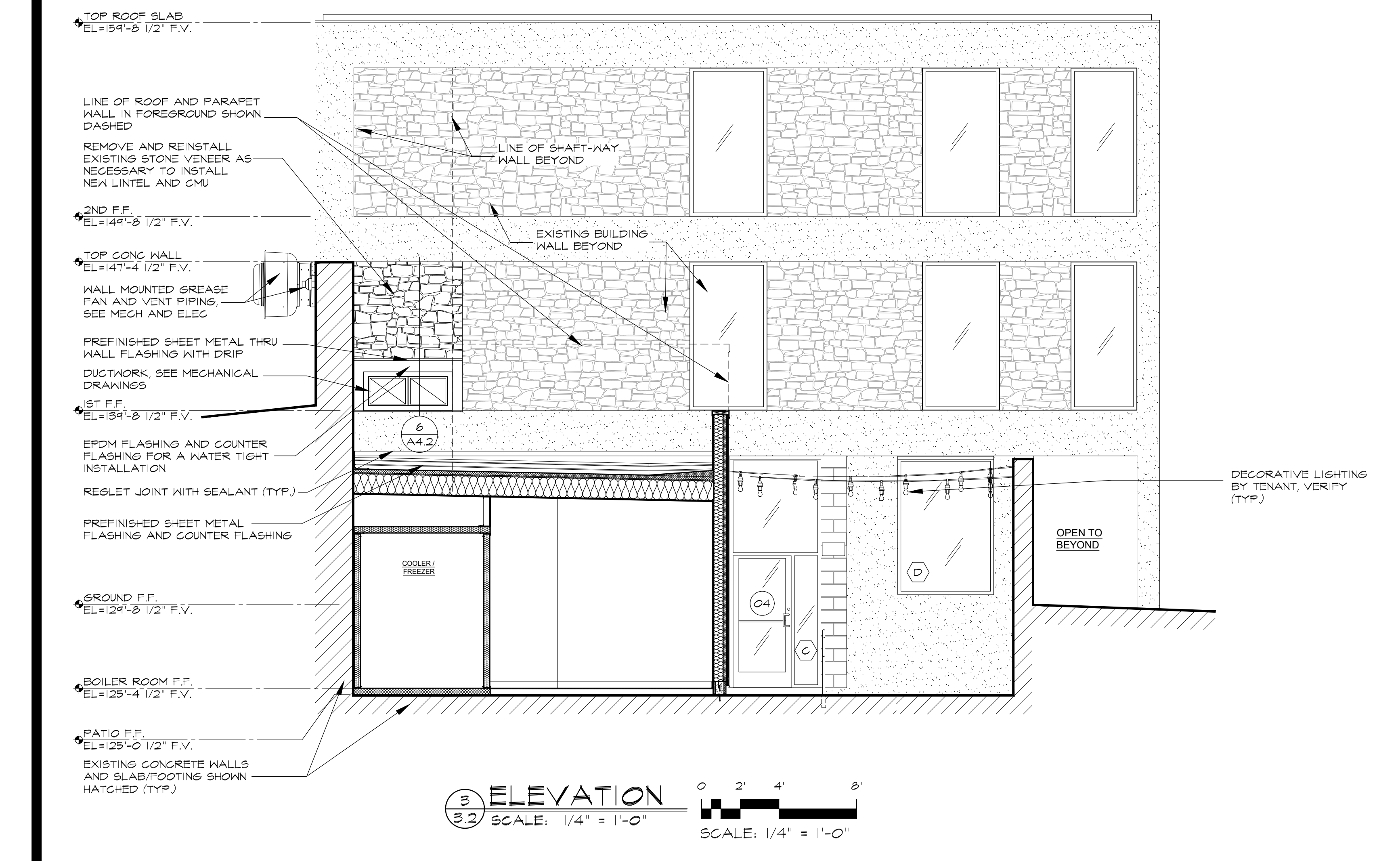
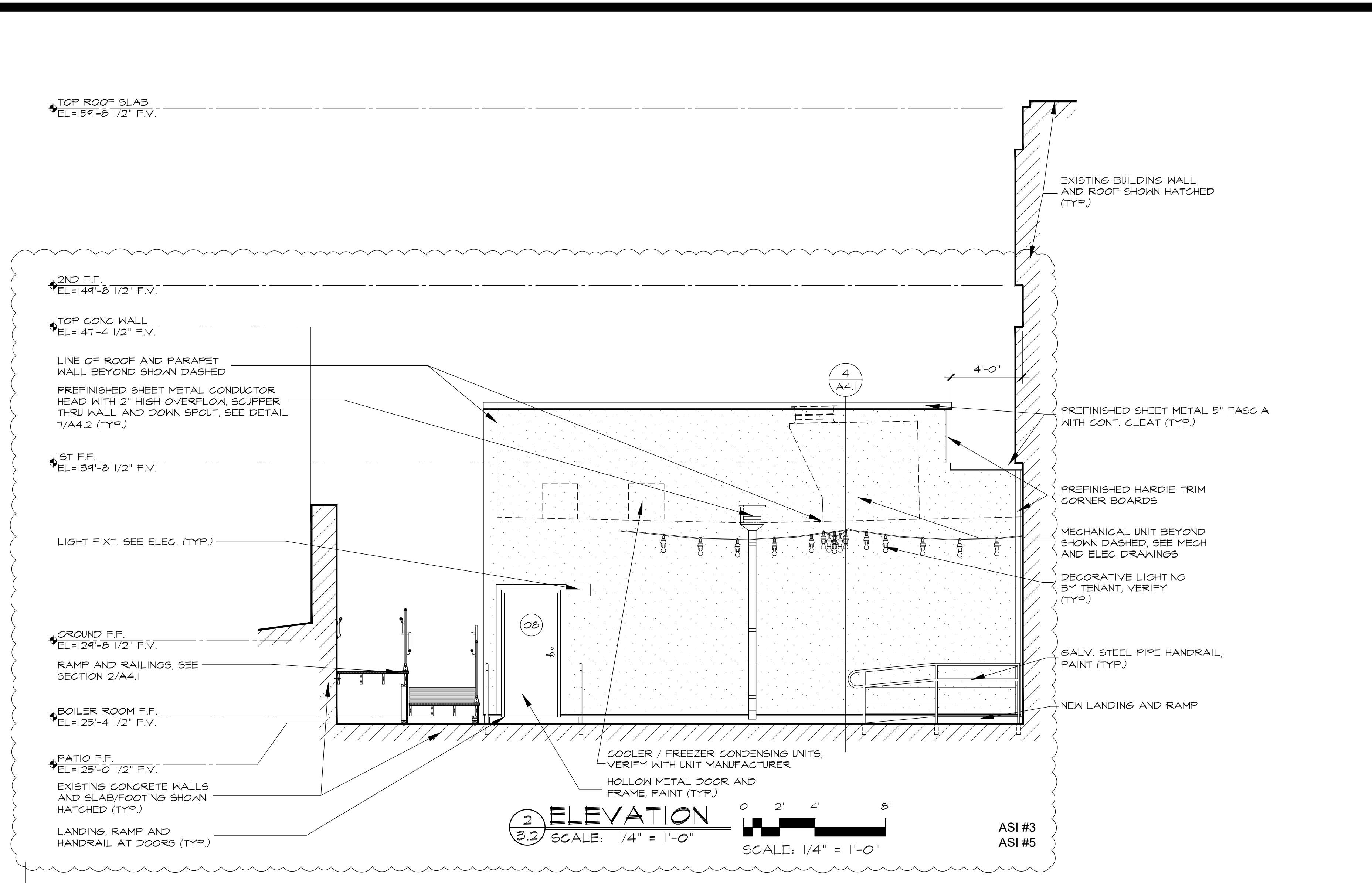
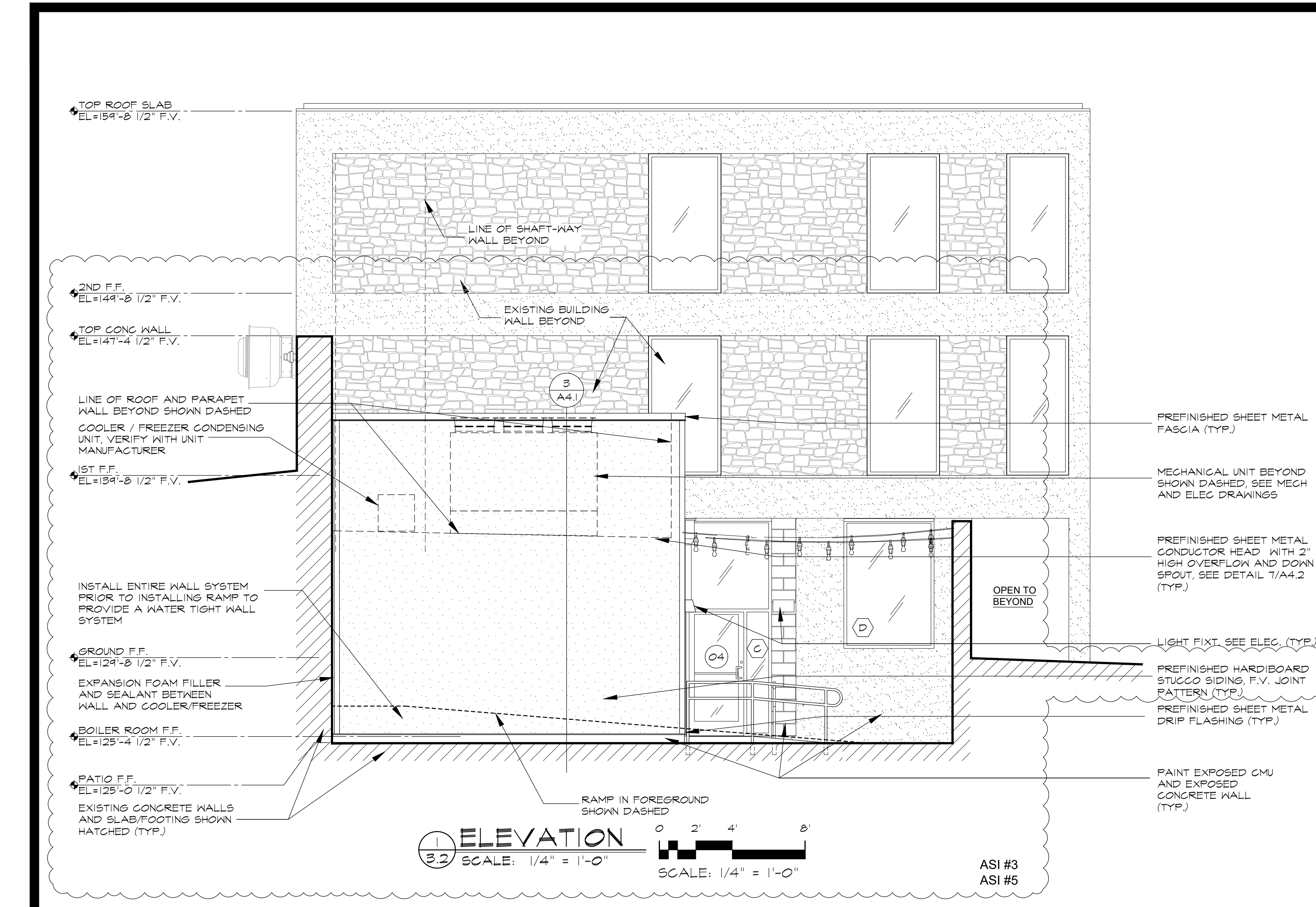
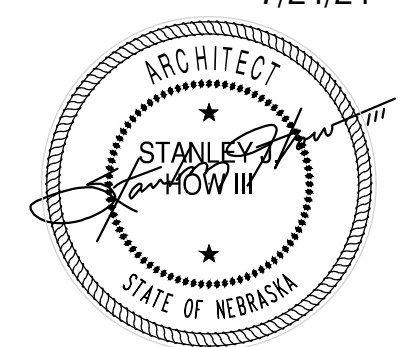
SCALE: 1/2" = 1'-0"

2 NOT USED
SCALE: NO SCALE

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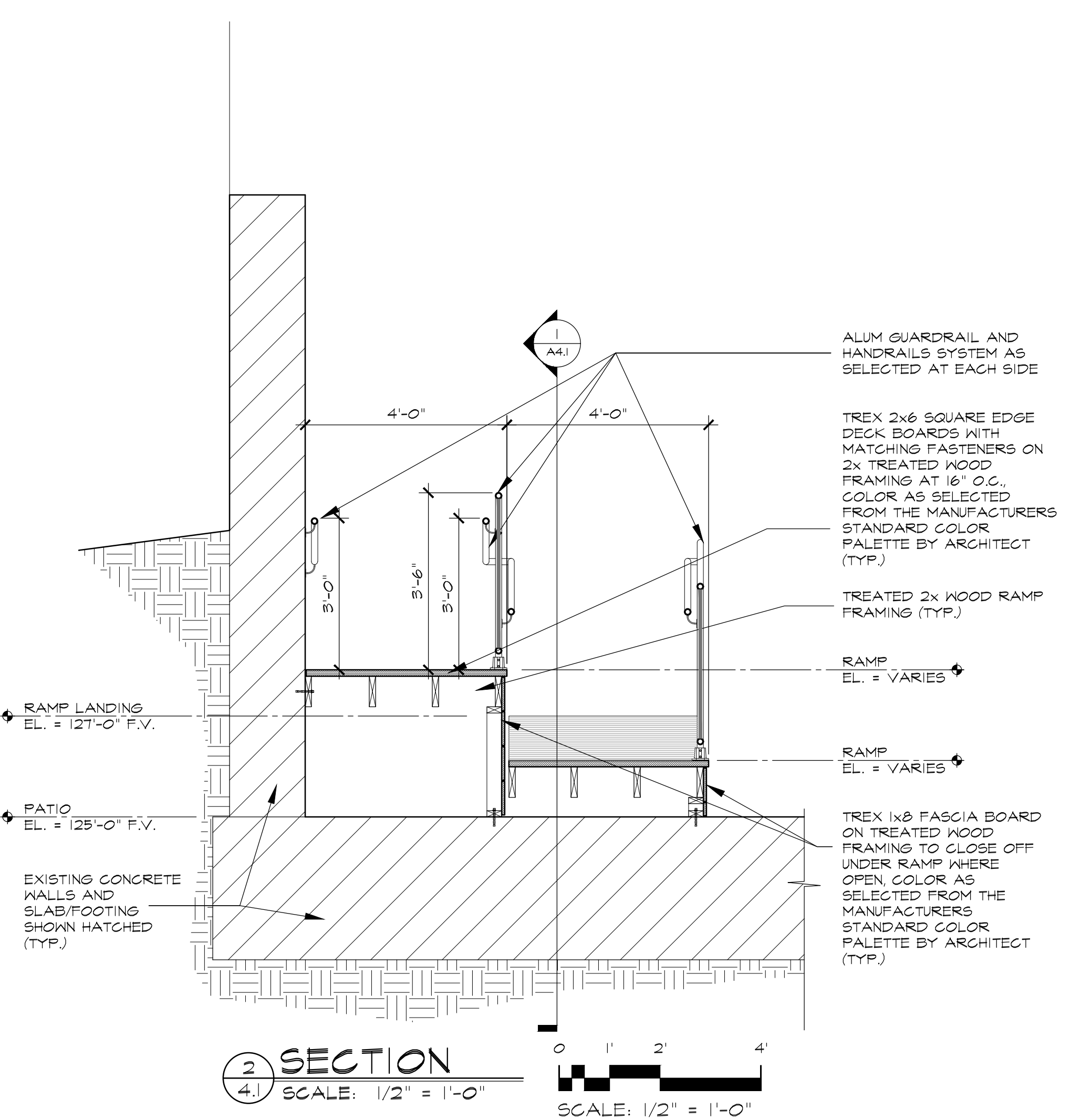
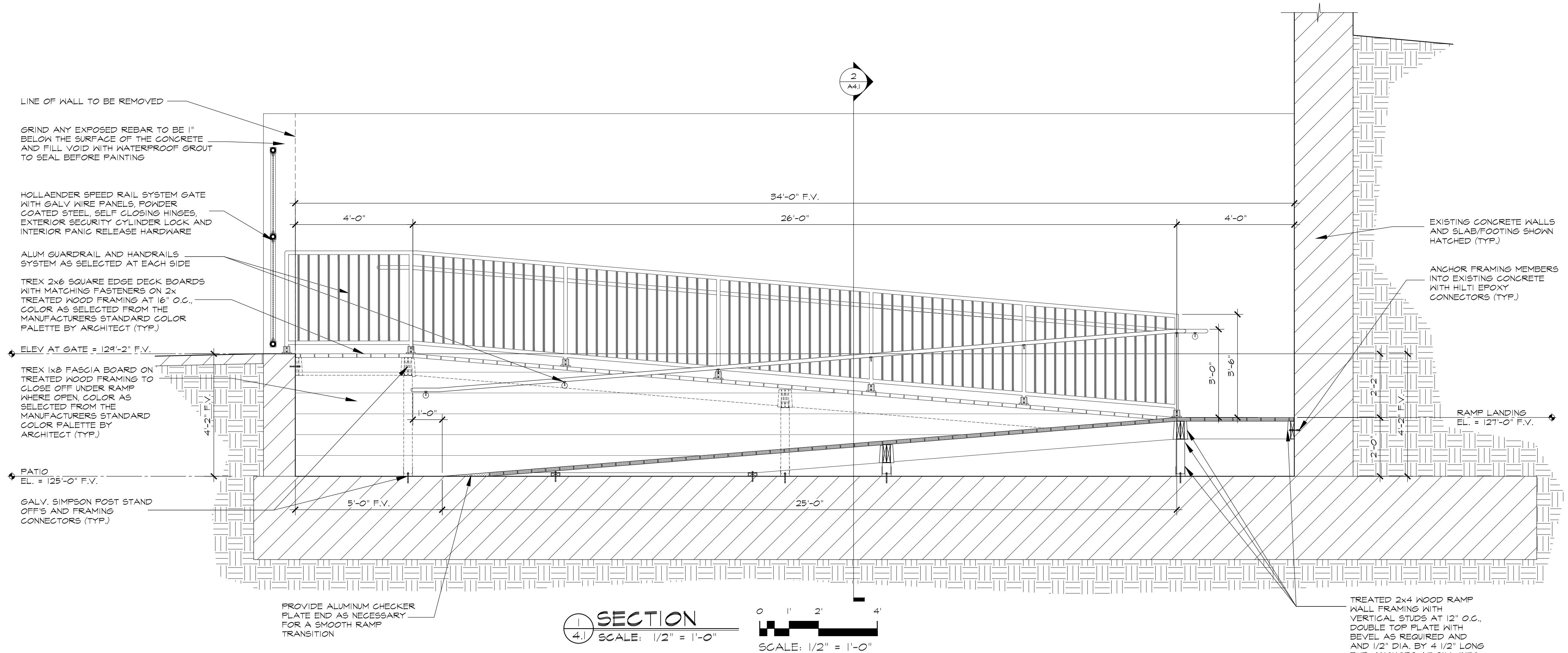
ARCHITECT
STANLEY J. HOW
STATE OF NEBRASKA

18" x 12" - 2017-25-25-001 - 0001 - 0002 - 0003 - 0004 - 0005 - 0006 - 0007 - 0008 - 0009 - 0010 - 0011 - 0012 - 0013 - 0014 - 0015 - 0016 - 0017 - 0018 - 0019 - 0020 - 0021 - 0022 - 0023 - 0024 - 0025 - 0026 - 0027 - 0028 - 0029 - 0030 - 0031 - 0032 - 0033 - 0034 - 0035 - 0036 - 0037 - 0038 - 0039 - 0040 - 0041 - 0042 - 0043 - 0044 - 0045 - 0046 - 0047 - 0048 - 0049 - 0050 - 0051 - 0052 - 0053 - 0054 - 0055 - 0056 - 0057 - 0058 - 0059 - 0060 - 0061 - 0062 - 0063 - 0064 - 0065 - 0066 - 0067 - 0068 - 0069 - 0070 - 0071 - 0072 - 0073 - 0074 - 0075 - 0076 - 0077 - 0078 - 0079 - 0080 - 0081 - 0082 - 0083 - 0084 - 0085 - 0086 - 0087 - 0088 - 0089 - 0090 - 0091 - 0092 - 0093 - 0094 - 0095 - 0096 - 0097 - 0098 - 0099 - 0100

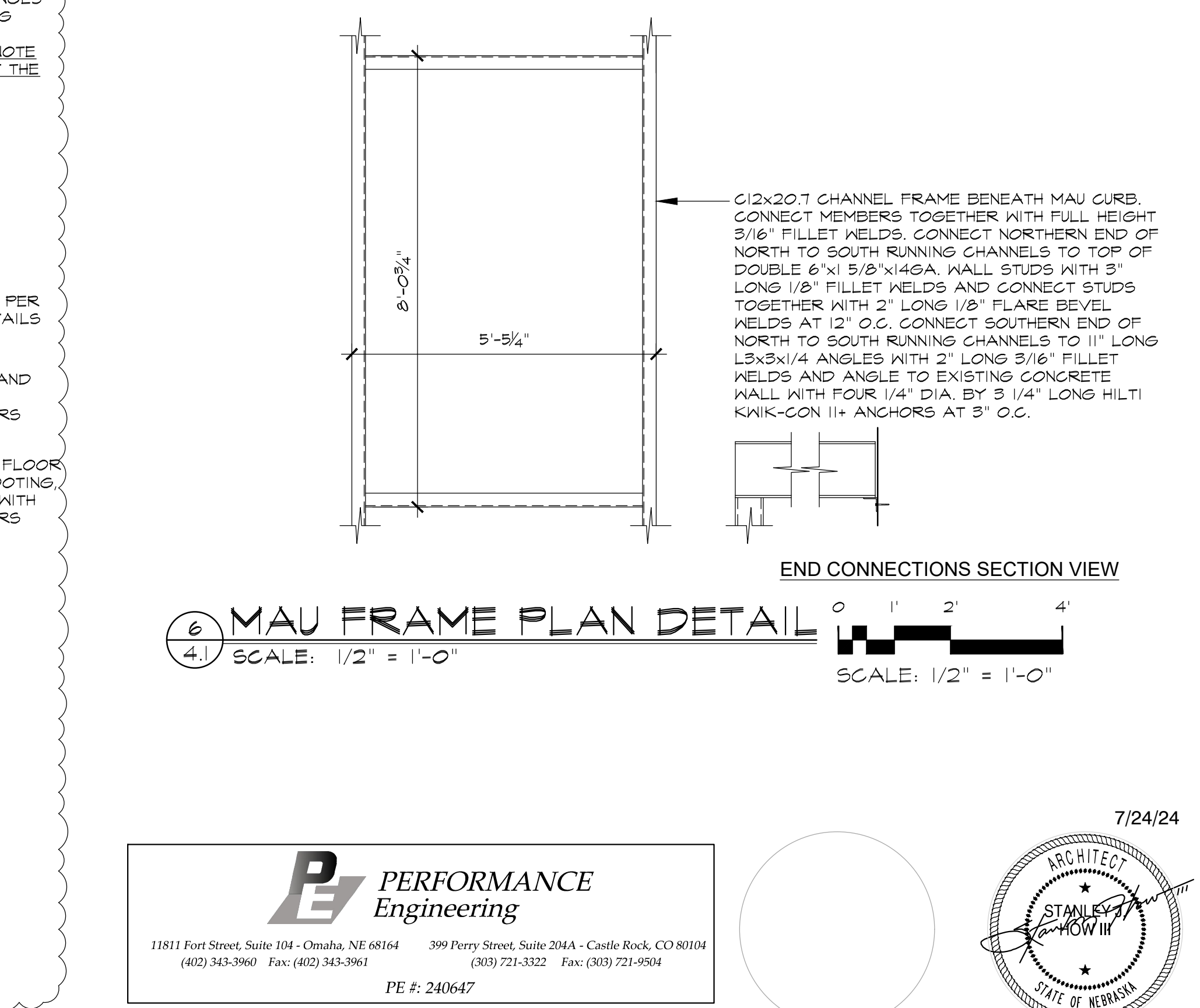
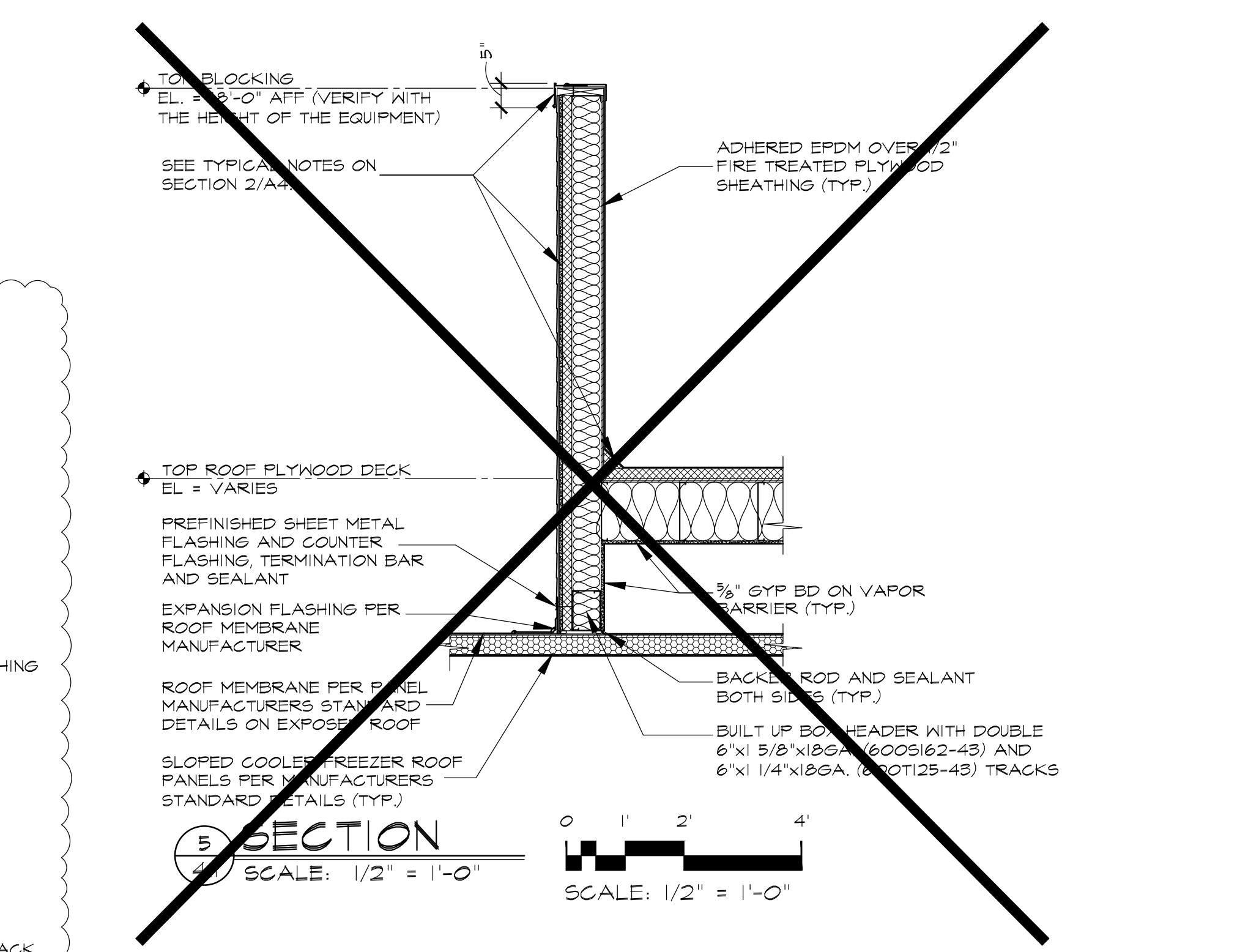
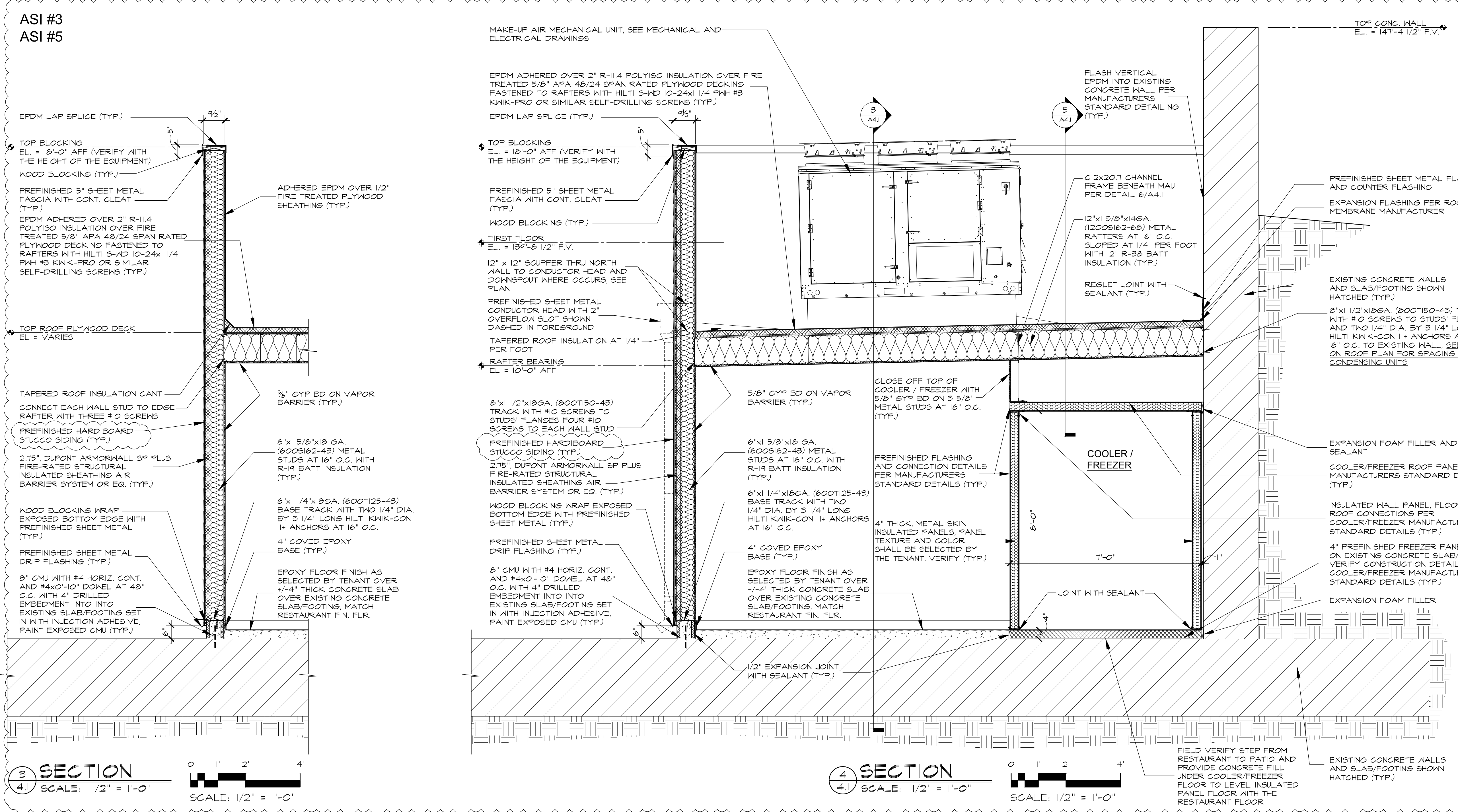


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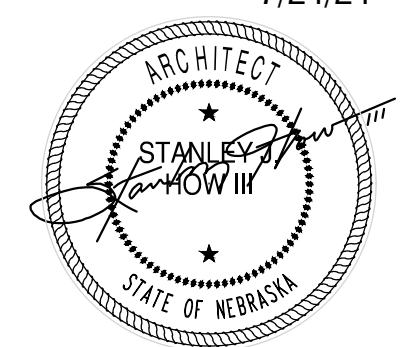


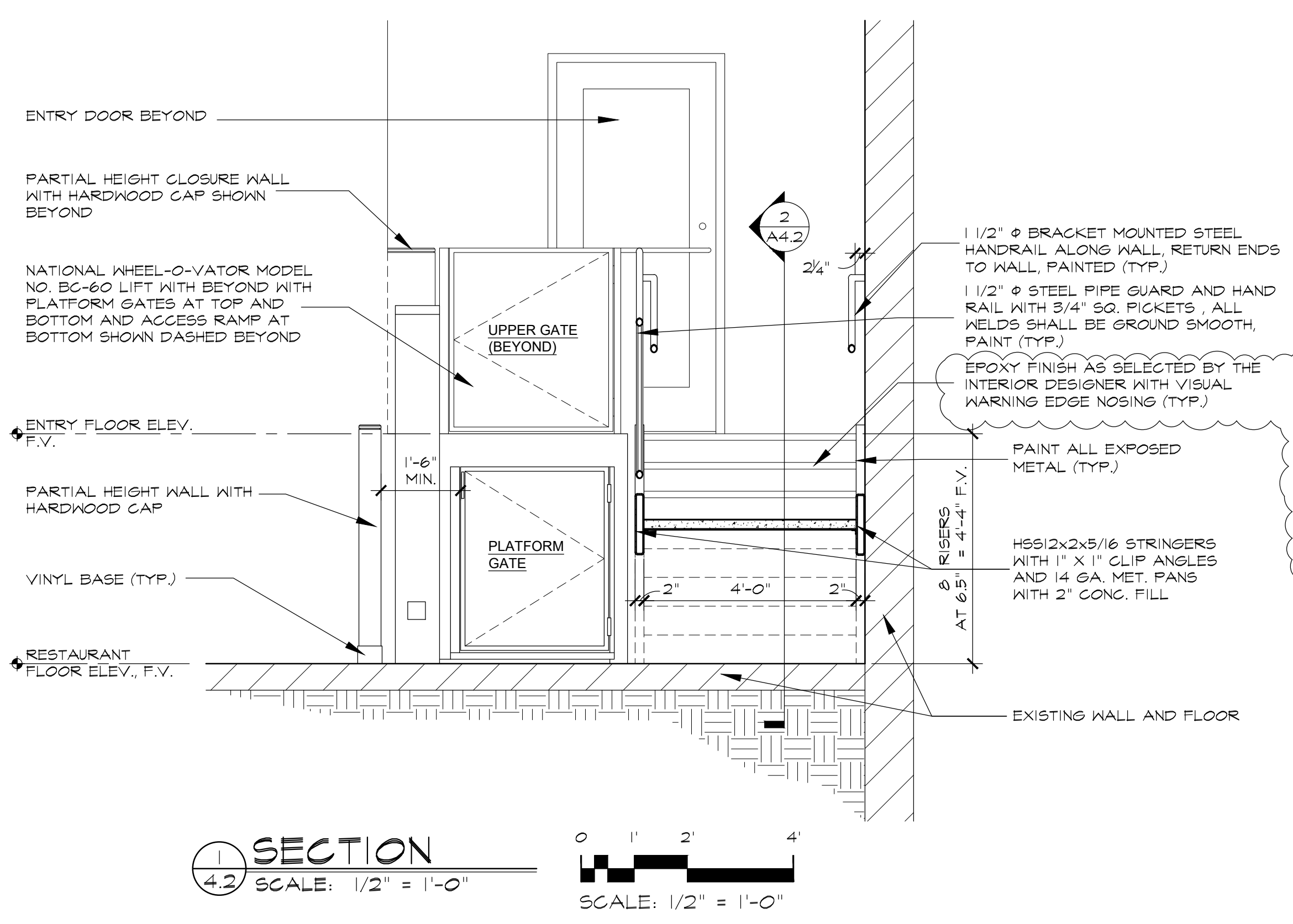
- NOTES:
1. ALL WOOD FRAMING SHALL BE FRAMED WITH TREATED LUMBER.
 2. ALL CONNECTORS SHALL BE SIMPSON GALVANIZED INSTALLED PER CODE. COLUMN BASES SHALL BE STAND-OFF TYPE AND ANCHORED INTO THE EXISTING CONCRETE.
 3. RAMP ALUMINUM GUARD RAIL AND HAND RAILING SYSTEM SHALL BE SELECTED BY THE OWNER, VERIFY.
 4. FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO BEGINNING WORK. RAMP SHALL BE INSTALLED AT 1/2 SLOPE MAXIMUM. PROVIDE ALTERNATE COST TO INSTALL AN ALL ALUMINUM RAMP AND RAILING SYSTEM AS MANUFACTURED BY PATHWAY 36 MODULAR ACCESS WHICH INCLUDE ALUM. RAMP, LANDINGS, SUPPORTS, HAND AND GUARD RAILINGS, ANCHOR RAMP SUPPORTS TO EXISTING CONCRETE, VERIFY SUPPORT QUANTITIES AND LOCATIONS WITH THE MANUFACTURER.



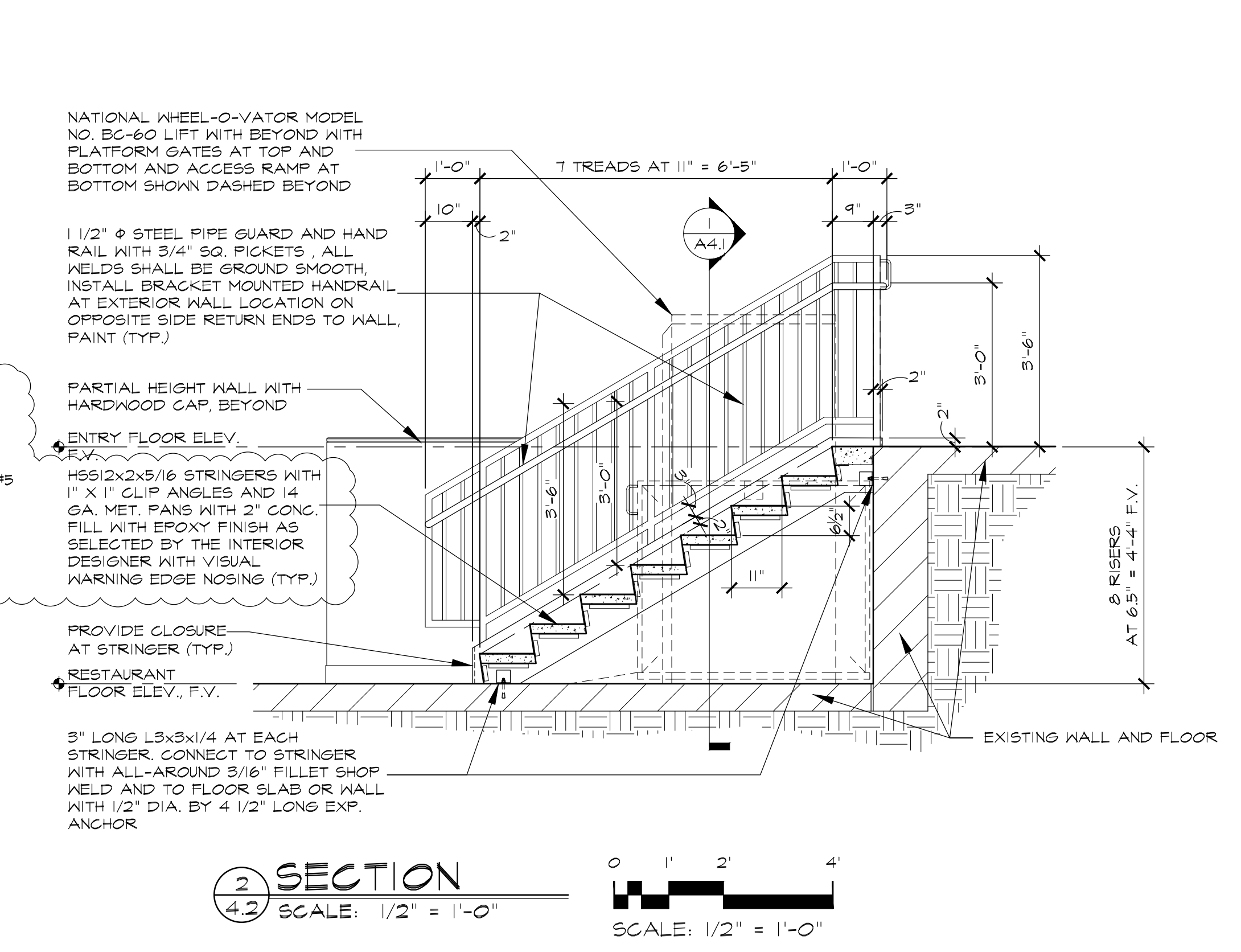
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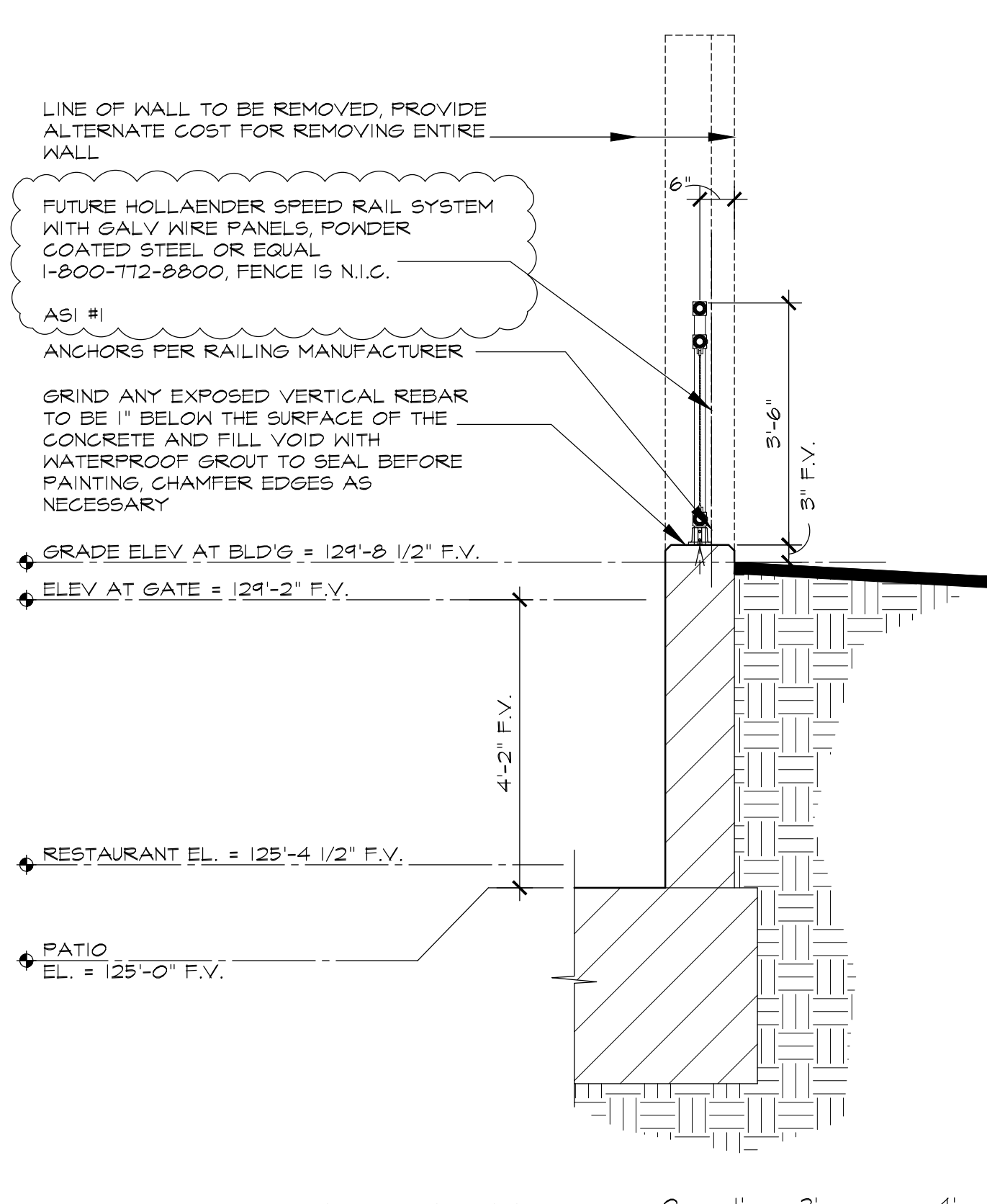




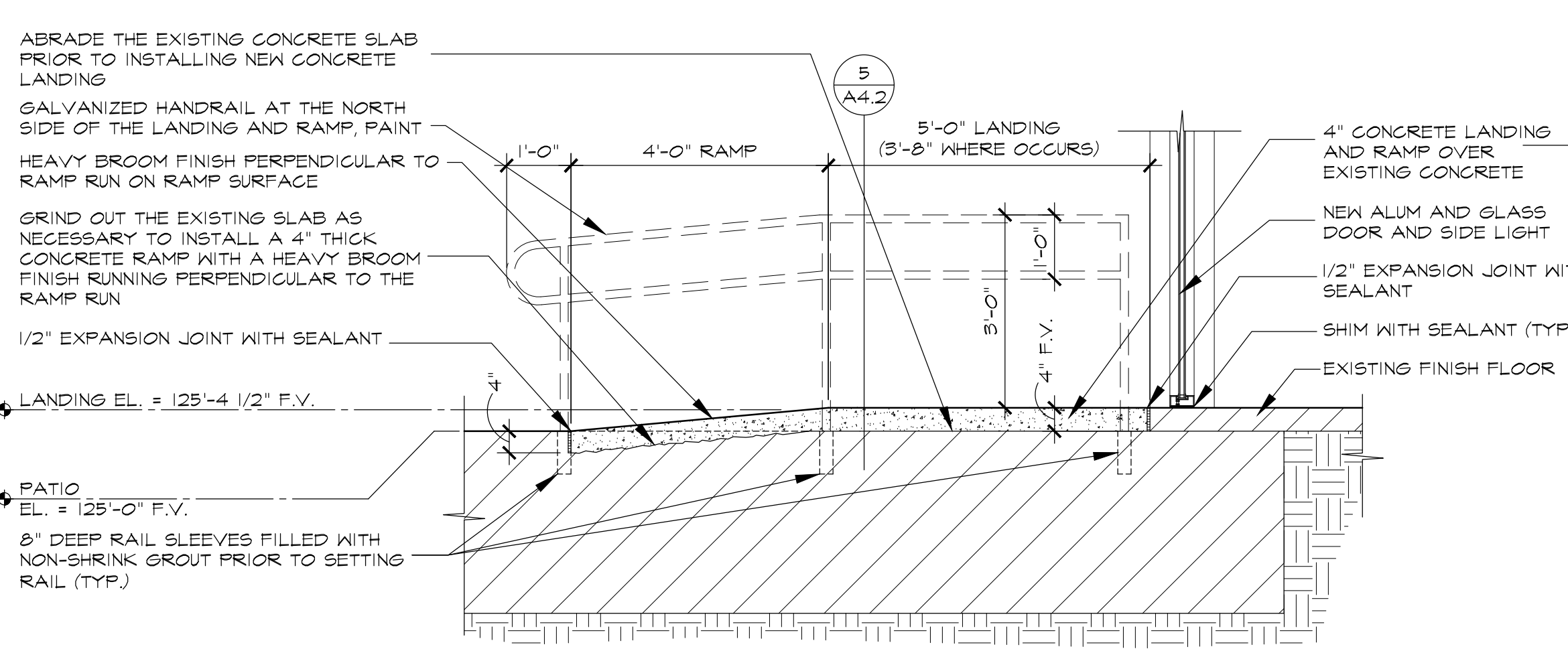
SECTION 1
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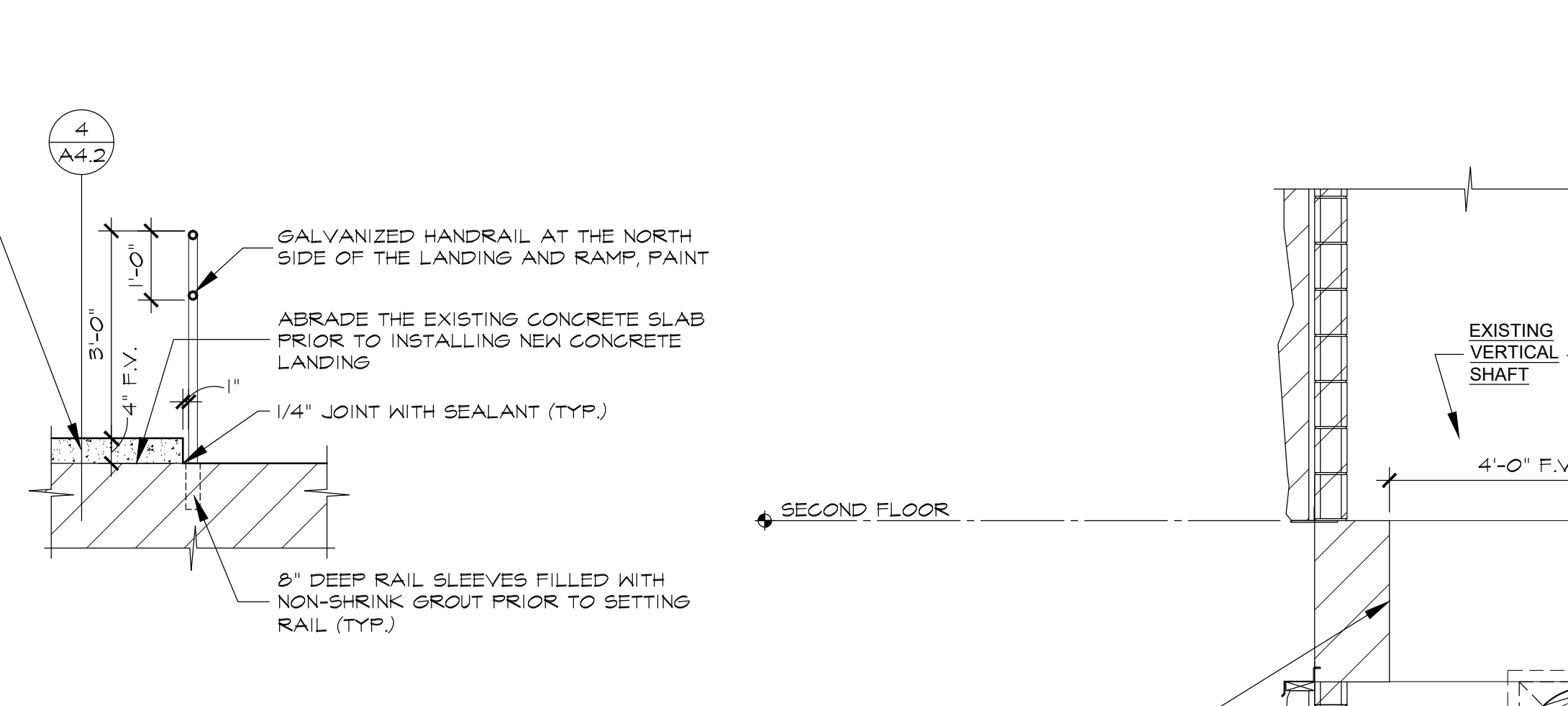
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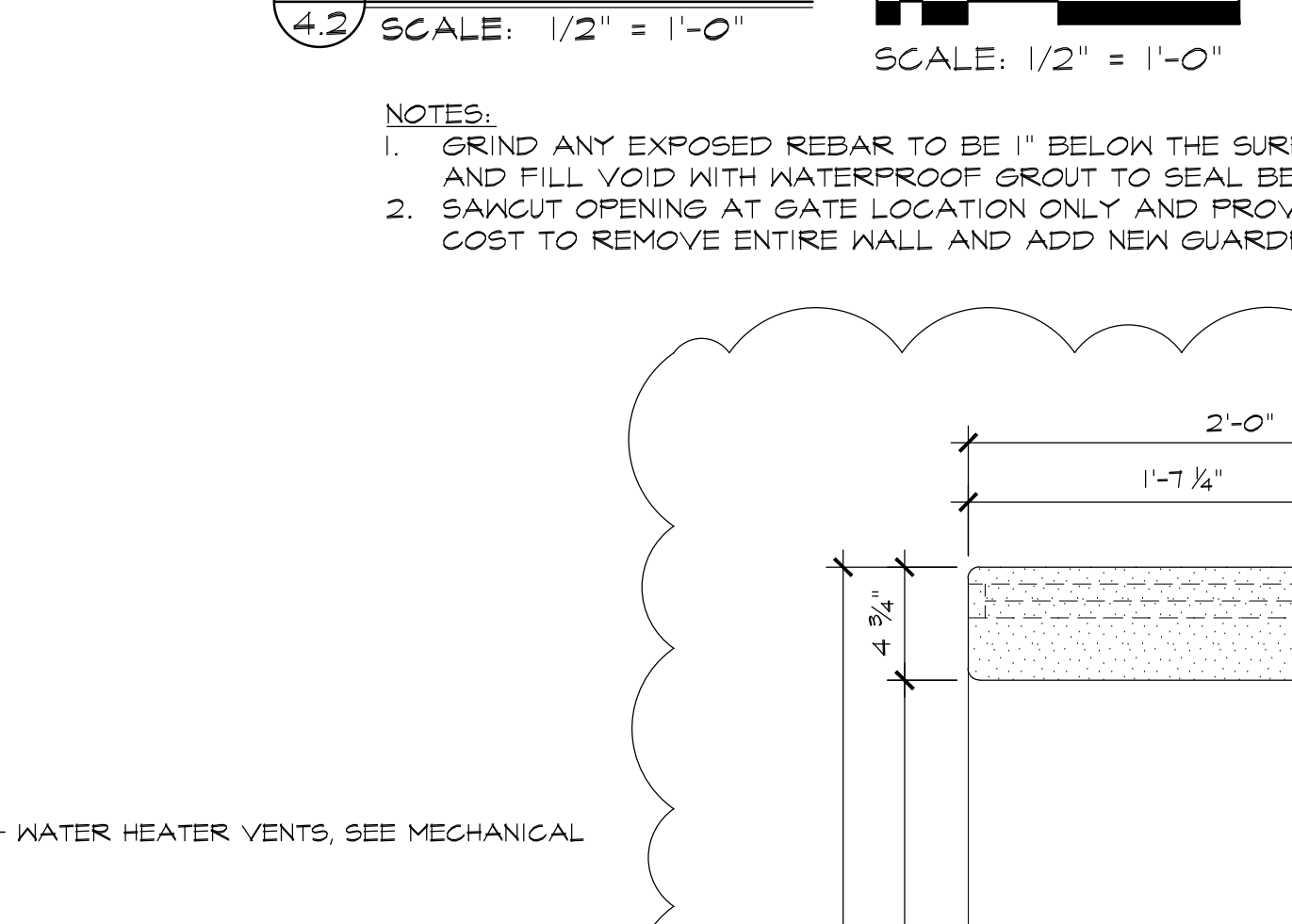
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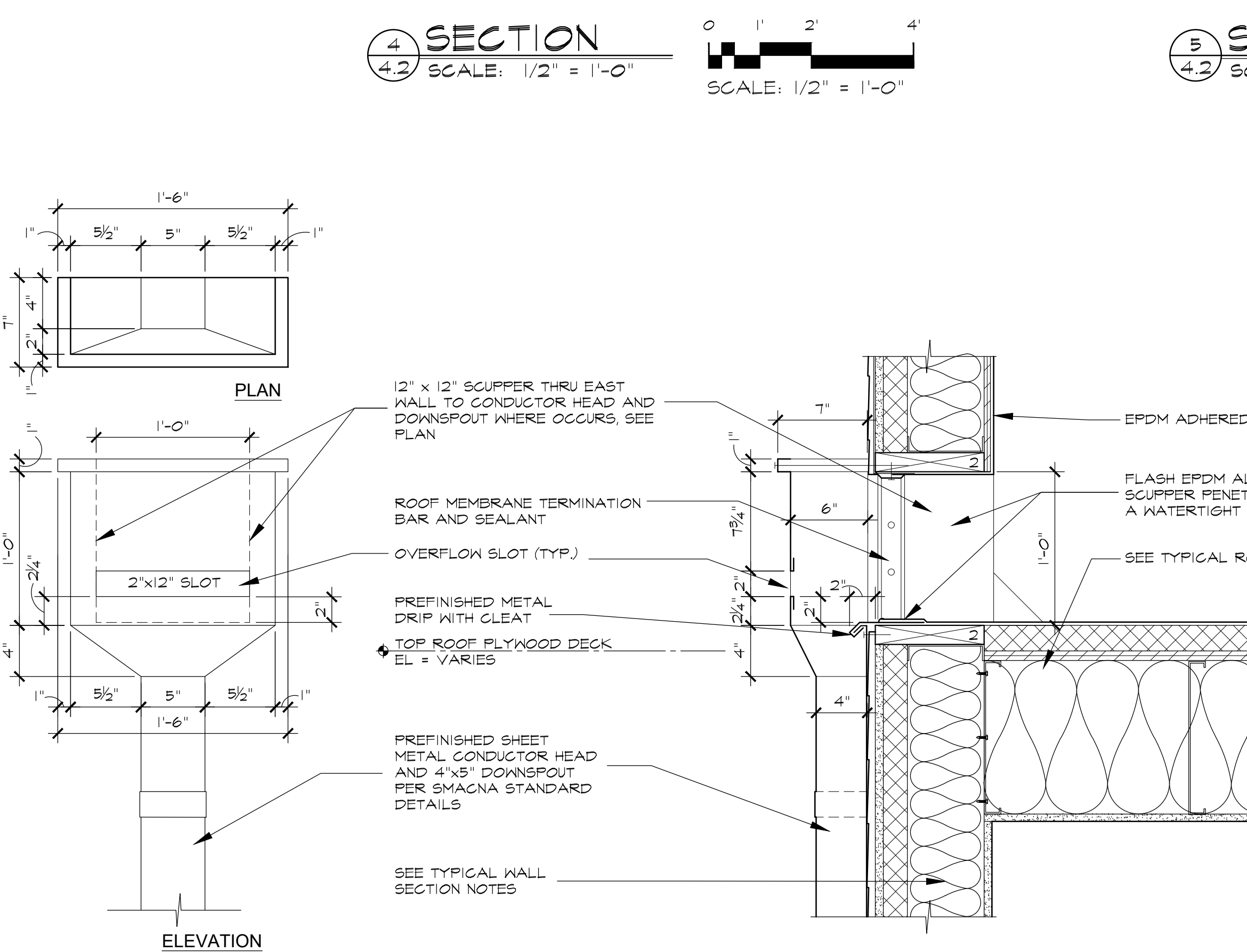
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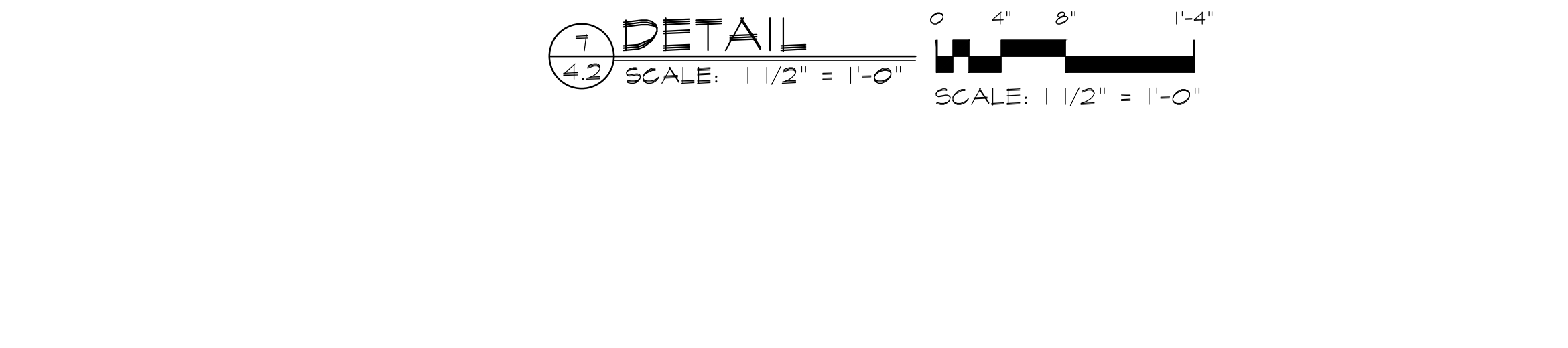
SECTION 5
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SECTION 6
SCALE: 1/2" = 1'-0"



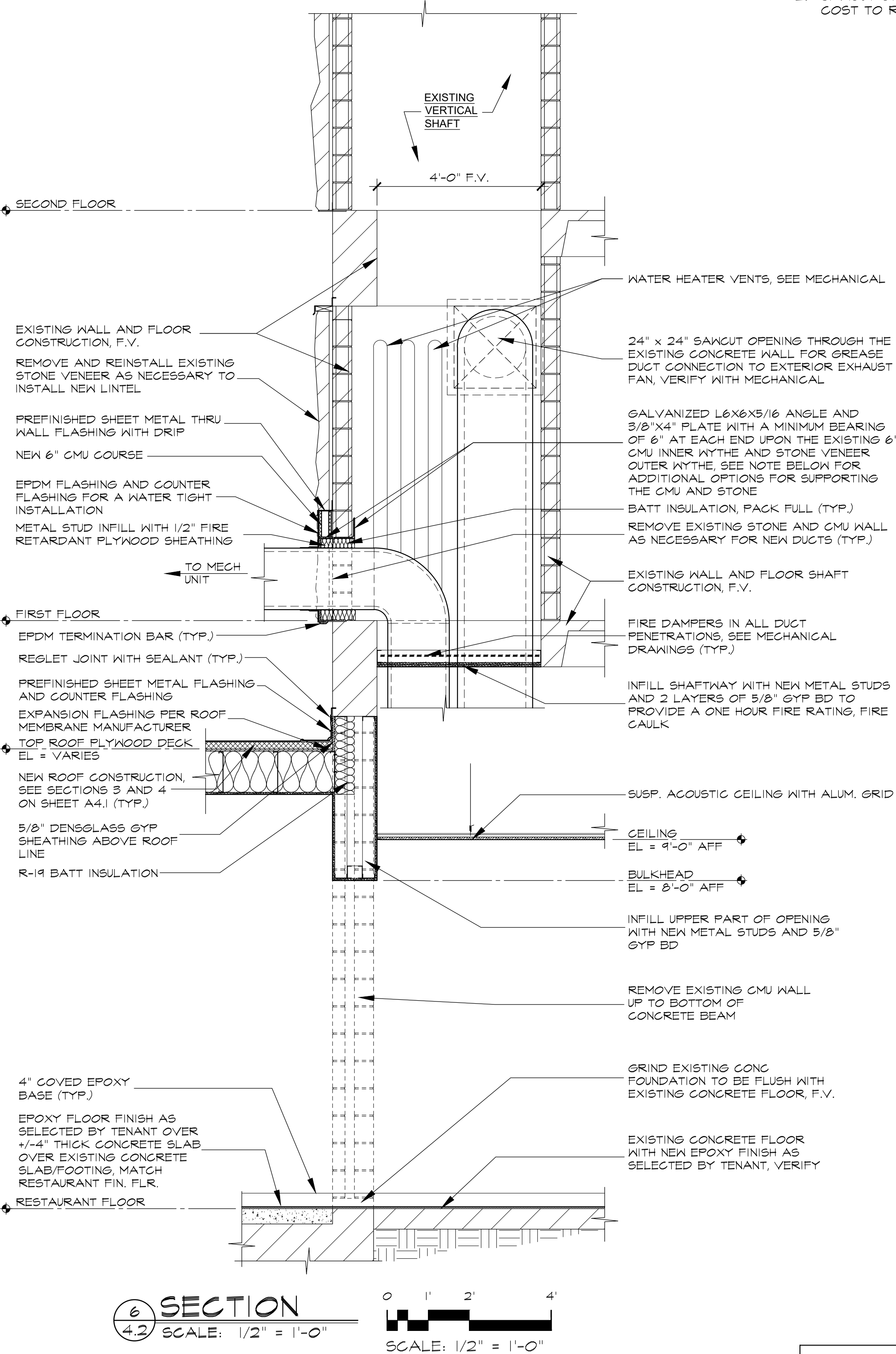
DETAIL 7
SCALE: 1 1/2" = 1'-0"



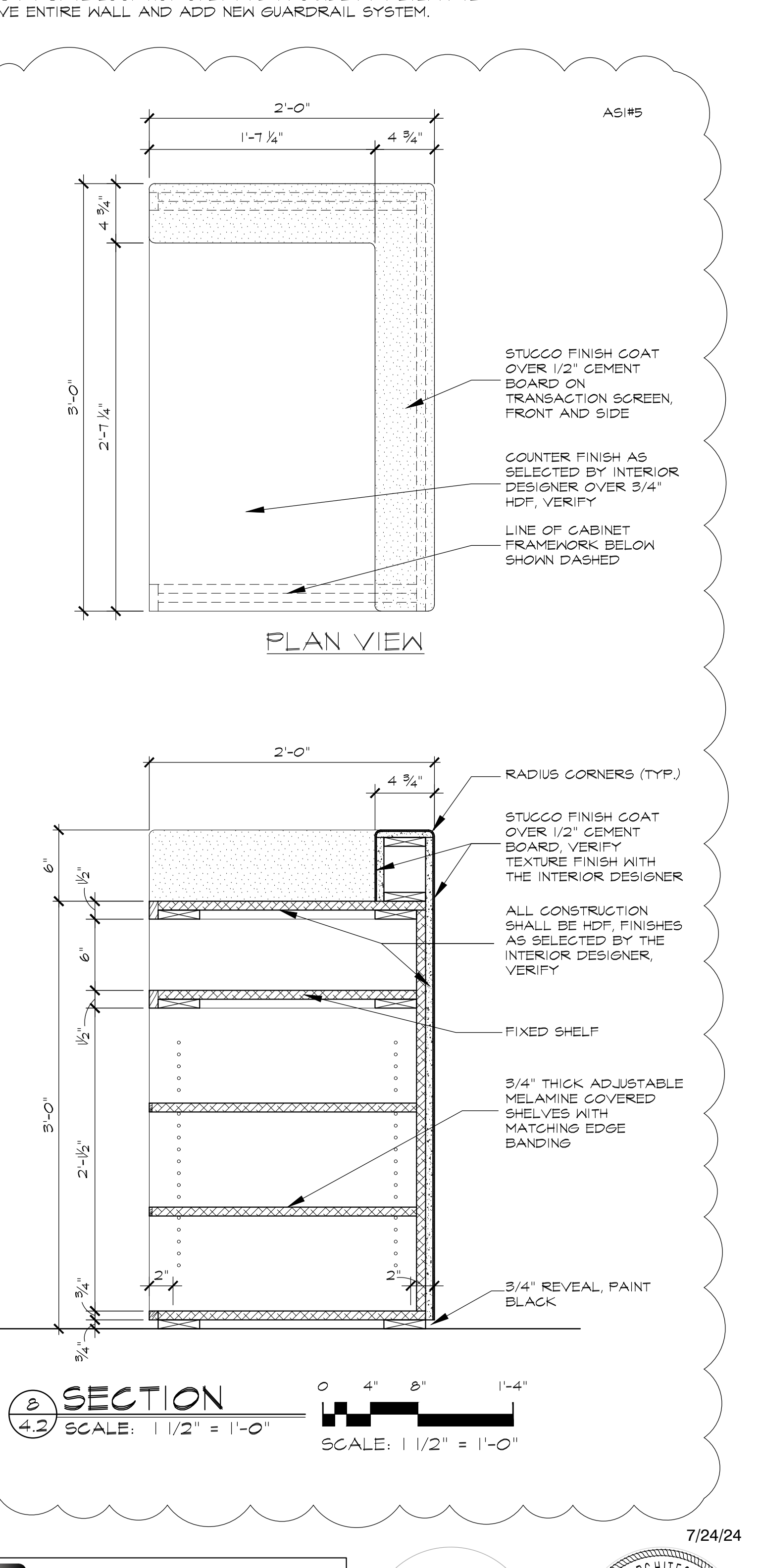
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ELEVATION 9
SCALE: 1 1/2" = 1'-0"



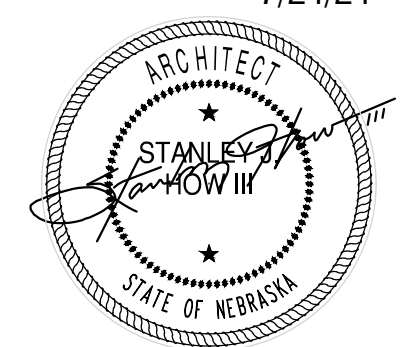
SECTION 10
SCALE: 1/2" = 1'-0"



SECTION 11
SCALE: 1 1/2" = 1'-0"

NOTE: OTHER LEDGER BEARING OPTIONS IT MAY BE FEASIBLE TO SANGUIT INTO THE EXISTING CONCRETE BUILDING AND RETAINING WALLS TO THE SOUTH AT LEAST 4\"/>

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CO 12 CO-1
SECTION 00 12 00
GENERAL CONDITIONS

A. GENERAL CONDITIONS
The "General Conditions of the Contract for Construction" AIA, Document A201-2007, Articles 1 to 15 inclusive, is hereby made a part of this Specification to the same extent as if it were herein written out in full.

END OF SECTION
CO 13 00
SECTION 00 13 00
SUPPLEMENTARY CONDITIONS

1.01 SUMMARY
It is the intent and purpose of these specifications and the accompanying drawings that the Contractor shall furnish all work, supervision, labor, equipment, tools and material to complete the erection of the structure in accordance with these specifications. All items necessary to erect a complete building or to complete the work under the contract shall be furnished as required.

1.02 EXAMINATION OF SITE
The Contractor is requested to visit the site, compare the Drawings and Specifications with any work in place and inform himself as to all conditions including other work, if any, being performed. Failure to visit the site will in no way relieve the Contractor from the necessity of furnishing any materials or performing any work that may be required to complete his work in accordance with Drawings and Specifications without additional cost to the Owner.

1.03 LAYING OUT WORK
The Contractor shall immediately upon entering the project site for purpose of beginning his work, locate all general reference points and take such actions as are necessary to prevent their destruction, lay out his own work and be ready to begin work on the project. The Contractor shall be responsible for all other work executed by him under the contract. He must exercise proper precaution to verify figures shown on the Drawings before laying out the work and he will be held responsible for any error resulting from failure to do so in such precaution.

1.04 TEMPORARY FIELD OFFICE
The General Contractor shall provide and maintain a temporary field office at the site, equipped with desks, chairs and plan files. The office shall be of sufficient size for full use of the Contractor and the Architect's representative. He shall locate the temporary field office at the project site where directed by the Architect and remove when work is completed.

Should relocation of the field office be necessary during the construction period for the purpose of site developments or coordination with other Contractors, the General Contractor shall comply as directed at no additional cost to the Owner.

1.05 TEMPORARY SANITARY FACILITIES
The General Contractor shall provide and maintain temporary sanitary facilities as necessary for use of workers, locate where directed and keep in sanitary condition.

1.06 ELECTRICAL
Each Contractor shall furnish all equipment pertaining to his work including motors, relays, control devices, switches and control panels. The Contractor shall be responsible for all other work executed by him under the contract. He must exercise proper precaution to verify figures shown on the Drawings before laying out the work and he will be held responsible for any error resulting from failure to do so in such precaution.

Each Contractor shall submit complete wiring and control diagrams for Architect's approval and be responsible for proper operation. Wiring shall be in accordance with the Drawings and Specifications and per approved wiring diagrams. The Electrical Contractor shall be responsible for proper overload protection for all motors.

D. Prior to submitting his bid the Electrical Contractor shall examine the General and Mechanical Drawings and Specifications to clarify the extent of his work.

1.07 SUBCONTRACTS
Divisions and sections in these specifications conform roughly to customary trade practice. They are used for convenience only. The Architect is not bound to define the limits of any subcontract and the specifications sections shall not be interpreted in that fashion.

CO 18 00
SECTION 00 18 16
INSURANCE REQUIREMENTS

1.01 GENERAL
A. Contractor shall purchase and maintain insurance to protect Contractor and Owner against all hazards herein enumerated throughout duration of contract. Solid insurance shall be by an insurance company approved by insurance commissioner of Nebraska. All policies shall be in form and amounts with companies satisfactory to Owner.

B. "Insurance," "insurance policy," or "insurance contract" when used in these specifications shall have the same meaning as "insurance policy" provided, however, that when "insurance" as demonstrated by a "Special Inspection" as defined and required by the above code, shall be performed by an independent inspection agency approved by the Building Official to perform such work. The designated Contractor shall also be approved by the Architect and Engineer of Record and shall be paid by the Owner.

C. The special inspector shall observe the work for conformance with approved design drawings and specifications and shall bring all discrepancies to the immediate attention of the Contractor for correction. Uncorrected discrepancies shall be reported to the Building Official and the Architect/Engineer of Record.

D. The special inspector shall furnish inspection reports to the Building Official and the Architect/Engineer of Record at monthly intervals and shall submit a final signed report at the project completion stating whether the work inspected was, to the best of his knowledge, in accordance with approved design drawings and specifications.

1.02 INSURANCE REQUIREMENTS
Contractor shall purchase and maintain such insurance as will protect Contractor from claims set forth below which may arise out of or result from his operations under contract, whether such operations be by Contractor or by any subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

A. Claims under worker's compensation, disability benefit and other similar employee benefits acts.
B. Claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employee.
C. Claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employee.
D. Claims for damages insured by usual personal injury liability coverage which are sustained.

E. By any other person.
F. Claims for damages other than to work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom.
G. Claims for damages because of bodily injury or death of any person or property damage arising out of ownership, maintenance, or use of any motor vehicle.

H. Whenever term "ISOA" appears in these specifications, an equivalent form or better may be substituted.

1.03 LIMITS OF LIABILITY
Insurance required by Section III - Insurance, shall be written as follows:

A. Workers Compensation and Employers' Liability Insurance, as prescribed by Nebraska law with minimum limits above listed covering Employees' Liability limits.
Bodily injury by accident \$100,000 each accident
Bodily injury by disease \$100,000 each disease
Bodily injury by poison \$100,000 policy limit

USLH and/or Jones Act coverage shall be provided where applicable

B. Commercial General Liability Insurance, which shall be no less comprehensive and no more restrictive than coverage provided by a standard form LI 0200 (Commercial General Liability) or CG 0001 (1981) with standard exclusions "a" through "o", with minimum limits shown below covering bodily injury, property damage and personal injury. Any additional exclusions shall be identified on certificate of insurance and shall be subject to approval of Owner.
General Aggregate Limit \$2,000,000
Products Completed Operations Aggregate Limit \$2,000,000
Personal and Advertising Injury Limit \$1,000,000
Each Occurrence Limit \$1,000,000
Fire Damage Limit (any one fire) \$50,000
Medical Damage Limit (any one person) \$50,000

This insurance must include the following features:
1. Coverage for all premises and operations. Policy shall be endorsed to provide the aggregate per project endorsement.
2. Operations by independent contractors.
3. Contractual liability coverage, if work to be performed by Contractor includes construction or demolition operations within 100 feet to any railroad property and affecting any railroad bridge or trestle, tracks, road beds, tunnel, underpass, or crossing, then such policy will include a Railroad's Contractual Liability Endorsement (ISO CG 24 (1) 10 43; see Figure 1.2).

4. Policy shall not exclude coverage for XCU (explosion, collapse, underground)
5. Any fellow employee exclusions shall be deleted as it applies to managerial and supervisory employees.
6. Policy shall not contain a total or absolute pollution exclusion. Coverage shall be provided for pollution exposures arising from products and completed operations.
(As per standard CS0001 Pollution Exclusion or equivalent)

7. Products and completed operations shall be maintained for duration of work and shall be further maintained for a minimum period of three years after final acceptance and payment; unless modified in the Special Provisions. Completed Operations shall provide coverage for work performed by subcontractors.
8. Contractual liability coverage shall be included and shall not be amended by any limiting endorsements. Defense costs shall be in addition to policy limits.

9. In lieu of including Owner as an additional insured on Contractor's commercial general liability insurance, Owner, at his option, may require Contractor to provide an Owner's protective liability policy by special provision, or may allow Contractor to provide an Owner's protective liability policy by change order. If an Owner's protective liability policy is provided, minimum coverage, limits and exclusions shall be as shown above and Contractor's premium cost of obtaining such insurance shall be considered incidental to work and shall not be subject to reimbursement by Contractor if his obligation to secure the quality of work contracts of the project is not affected by the contract. The Contractor shall be responsible for the safety, efficiency and adequacy of his plant, appliance and methods.

1.04 EQUIPMENT AND CONSTRUCTION METHODS
The Contractor shall be responsible for the equipment and methods used in erection of this work covered by the contract, but the Owner reserves the right to approve such equipment and methods.
If, at any time, the Contractor's methods or equipment appear to the Architect and Owner to be unsafe, inefficient or inadequate for securing the safety of workmen, the quality of the work, or the rate of progress required, the Contractor shall be required to alter his methods or equipment, sufficient to adequate conditions to the satisfaction of the Architect and the Owner. By hereby establishing such authority the Architect will in no event assume the responsibility for the safety of workmen.
If, at any time, the Contractor's work force, in the opinion of the Architect and Owner, shall be inadequate for securing the necessary progress as herein stipulated, the Contractor, shall, if so directed, increase his work force or equipment to such extent as to give the reasonable assurance of compliance with the schedule of progress but the failure of the Architect to make such demand shall not relieve the Contractor of his obligation to secure the quality of work contracts of the project. The Contractor shall be responsible for the safety, efficiency and adequacy of his plant, appliance and methods.

Workmanship shall be of the best. The good appearance of finished work shall be of equal importance with its mechanical efficiency. All portions of the work shall be so laid out and installed that the work as a whole is of uniform quality and appearance.

1.17 CLEANING
The Contractor shall maintain all areas during construction free from hazardous or obstructive rubbish and debris, due to performance of his work. When the electrical systems have been installed, the Contractor shall remove all rubbish and debris from the building site, remove all paint, plaster and accumulated dirt from all equipment.

1.18 REQUIREMENTS OF SUBCONTRACTORS
A. Each Contractor or Subcontractor shall be responsible for the various hangers, sleeves, openings, anchorage, fittings and other items necessary to the accomplishment of his work.
B. Each Contractor or Subcontractor shall be responsible for such excavations and backfilling as he shall require. Backfill which settles shall be taken out and re-compacted at no cost to the Owner. Compaction densities shall be as specified elsewhere.
C. Signs advertising materials or subcontractors will NOT be allowed.

F. At Owner's option, minimum insurance limits specified above may be increased by special provision. This increase may be satisfied with a combination of primary and umbrella/excess insurance.

G. Additional insured endorsements: Contractor shall cause the commercial general liability and umbrella policies required by the contract documents to include on a primary and non-contributory basis (i) the Owner as additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the construction operations; (2) the Owner as additional insured for Completed Operations for a two year following substantial completion for claims caused in whole or in part by the Contractor's negligent acts or omissions; (3) the Architect and Architect's Consultants as additional insureds insured under ISO Form CG 2032 (1974) or equivalent; (4) other parties as identified by Owner through special supplemental conditions.

H. Contractor waives all rights of subrogation against Owner, Architect and Architect's Consultants and shall cause his insurers for Commercial General Liability, Workers Compensation, Auto Liability, and Umbrella Liability to endorse said policies to waive all rights of subrogation against Owner, Architect and Architect's Consultants with respect to losses arising out of or in connection with the work.

I. Certificates of insurance acceptable to the Owner, and executed by a licensed representative of the participating insurer, shall be filed with the Owner and Architect prior to commencement of the work, and thereafter the Contractor shall file with the Owner and Architect a copy of each certificate of insurance, copy of endorsement and/or policies shall be provided. Contractor shall promptly notify the Owner and Architect in writing of any cancellation, non-renewal or expiration of any policy of insurance required by this agreement. Contractor shall cause all policies of insurance to be endorsed to provide Owner 30 days notice prior to cancellation (10 days for non-payment of premium). An additional certificate evidencing continuation of liability coverage for completed operations shall be submitted with the final Application for Payment as required by Section 110.2 and thereafter upon renewal or replacement of any policy of insurance required by this agreement.

1.21 NUMBER OF SPECIFIED ITEMS REQUIRED
Whenever in these specifications an article, device or piece of equipment is referred to in the singular number, such reference shall apply to as many such articles as are shown on the drawings or required to complete the installation.

1.22 "AS BUILT" DRAWINGS
The Contractor shall maintain at the construction site one complete set of drawings suitably marked to show all deviations from the original set of drawings and other information as specified. Supplementary sketches may be included, if necessary, to clearly indicate the work in place.

1.23 NEBRASKA STATE SALES TAX
Contractor shall include all Sales Tax in his bid.

1.24 PERMITS, FEES, INSPECTIONS AND ASSESSMENTS
Each Contractor shall take out and pay for all permits, fees and inspections required by State and/or local Authorities which pertain to his portion of work.

1.25 SPECIAL INSPECTIONS
The Contractor shall insure conformance with the 2012 IBC as amended by the City of Omaha Building Code. Special inspections as defined and required by the above code, shall be performed by an independent inspection agency approved by the Building Official to perform such work. The designated Contractor shall also be approved by the Architect and Engineer of Record and shall be paid by the Owner.

The special inspector shall observe the work for conformance with approved design drawings and specifications and shall bring all discrepancies to the immediate attention of the Contractor for correction. Uncorrected discrepancies shall be reported to the Building Official and the Architect/Engineer of Record.

The special inspector shall furnish inspection reports to the Building Official and the Architect/Engineer of Record at monthly intervals and shall submit a final signed report at the project completion stating whether the work inspected was, to the best of his knowledge, in accordance with approved design drawings and specifications.

END OF SECTION
SECTION 02 41 00
FINISH CARPENTRY

1.01 GENERAL
The general provisions of the Contract, including General and Supplementary Conditions and General Regulations (if any) apply to the work specified in this section.

1.02 DESCRIPTION OF WORK
Extent of demolition work is indicated on the drawings.
Demolition requires the selective removal and subsequent off site disposal of the following:
Portions of building structure indicated on drawings and as required to accommodate new construction.
Removal of interior partitions as indicated on drawings.
Removal of mechanical and electrical systems and equipment, as noted.
Removal of existing fixtures and equipment items indicated "salvage".
Removal of all demolished materials from the site.

1.03 SUBMITTALS
Submit schedule indicating proposed methods and sequence of operations for selective demolition work to Architect for review prior to commencement of work. Include coordination for shut-off, capping and continuation of utility services as required. Provide details for dust and noise control protection.
Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.
Co-ordinate with Owner's continuing occupation of portions of existing building.

1.04 PROJECT CONDITIONS
A. Occupancy: Work will be continuously occupying areas of the building immediately adjacent to areas of selective demolition. Select demolition work in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 12 hours advance notice to Owner of demolition activities which will severely impact Owner's normal operations.
B. Condition of Structures: Owner assumes no responsibility for actual condition of items or structures to be demolished.
C. Conditions existing at time of commencement of contract will be maintained by Owner until as practicable. However, variations within structure may occur by Owner's removal and salvage operations prior to start of selective demolition work.
D. Partial Demolition and Removal: Items indicated to be removed but of salvage value to Contractor may be removed from structure on work progress. Transport salvaged items from site as directed by Owner.
E. Storage or size of removed items on site will not be permitted.
F. Protection: Provide temporary barricades and other forms of protection as required to protect Owner's personnel and general public from injury due to demolition work.
G. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from occupied portions of building. Maintain required exits at all times.
H. Provide interior exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to be demolished and adjacent facilities or work to remain.
I. Protect from damage existing fresh work that is to remain in place and becomes exposed during demolition operations.
J. Protect floors with suitable coverings when necessary.
K. Construct temporary insulated dust disposal partitions where required to separate areas where noisy or extensive dirt or dust operations are performed. Equip partitions with dustproof doors and security locks as required.
L. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior walls and interior partitions of new construction to insure that no water leakage or damage occurs to structure or interior areas of existing building.
M. Remove protection at completion of work.
N. Damages: Promptly repair damages caused to adjacent facilities by demolition work at no cost to Owner.
O. Do not close, block or otherwise obstruct streets, walks or other accepted or used facilities without written permission from Owner. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
P. Explosives: Use of explosives will NOT be permitted.
Q. Utility Services: Maintain existing utilities indicated to remain, keep in service, and protect against damage during demolition operation.
R. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding, and pollution.

1.05 PRODUCTS (NOT USED)

1.06 PREPARATION
Provide interior and exterior shoring, bracing or support to prevent movement, settlement or collapse of structure to be demolished and adjacent facilities to remain.
Install shoring or field-fabricated, cold-formed framing and securely anchor to supporting structure.
Bolt or weld half panels of horizontal and vertical joists to produce full, even, true-to-line joints with maximum variation in plane and true position between fabricated panels not exceeding 1/8 inch (3.2 mm).
Demolition and removal of interior partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.
Provide weatherproof closures for exterior openings resulting from demolition work.
Locate, identify shut off and disconnect utility services that are not indicated to remain.
Provide bypass connections to necessary to maintain continuity of service to occupied areas of building. Provide minimum of three (3) days advance notice to Owner if advance of service is necessary.

1.07 DEMOLITION
Demolish concrete and masonry in small sections. Cut concrete and masonry at junctions with construction to remain using power-driven masonry saw or hand tools; do not use power-driven impact tools.
Provide services for effective air and water pollution control as required by local imposing health jurisdiction.
If unanticipated mechanical, electrical or structural elements which conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Architect in written report, accurate detail. Pending resolution of conflict, reorganize selective demolition schedule as necessary to continue overall job progress without delay.

1.08 PATCHING
Patch all areas damaged or opened up by demolition including walls and ceilings exposed by removal of walls, cabinets or other items. All patching shall be in the same materials and finishes as adjacent surfaces.
1.09 SALVAGE MATERIALS
Where indicated on Drawings as "Salvage-Deliver to Owner", or listed below carefully remove indicated items, clean, store and turn over to Owner and obtain receipt. Where indicated on the Drawings as "Salvage-Relinquish" carefully remove indicated items, clean, store and release at appropriate time during new work construction.

1.10 DISPOSAL OF DEMOLISHED MATERIALS
Remove debris, rubbish and other materials resulting from demolition operations from building site. Transport and legally dispose of materials off site.
If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling and protection against exposure or environmental pollution.
Burning of removed materials is NOT permitted on project site.

1.11 CLEAN-UP AND REPAIR
Upon completion of demolition work, remove tools, equipment and demolished materials from site. Remove protections and leave interior areas broom clean.
Repair demolition performed in excess of that required. Return structures and surfaces to remain to condition existing prior to commencement of selective demolition work. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

1.12 COVERAGE
Coverage for any EHS-related work performed by contractor or any tiers of subcontractors of contractor.

SECTION 05 40 00
COLD-FORMED METAL FRAMING

1.1 RELATED DOCUMENTS
General and general provisions of the contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY
This Section includes the following:
1. Exterior wall framing
2. Exterior soffit framing

1.3 DEFINITIONS
A. Minimum Insulated Steel Thickness: Minimum uncoated thickness of cold-formed framing permitted to be used on the Project site shall be not less than 45 percent of the thickness indicated. Lesser thicknesses shall be permitted at discrete cut-outs for cold-rolling.
B. Products: Any entity that processes steel coil fabricated into cold-formed members.

1.4 SUBMITTALS
A. Documents transmitted for submittal review shall be in electronic (pdf) format and transmitted via email.
B. Product Data: For each type of cold-formed metal framing product and accessory indicated.
C. Shop Drawings: Show layout, spacings, sizes, thicknesses, and types of cold-formed metal framing fabrication and fastening and anchorage details, including mechanical fasteners, shop reinforcing elements, opening framing, supplemental framing, strappings, girts, and bracing, fireproofing, corrosion details, and attachment to supporting structure.
D. Mill certificates signed by steel producer or test reports from a qualified independent testing agency indicating steel sheet compliance with requirements.
E. Welding Certificates: Copies of certificates for welding procedures and personnel.
F. Product Test Reports: From a qualified testing agency indicating that each of the following complies with requirements based on comprehensive testing of current products:
1. Expansion anchors.
2. Bolted anchors.
3. Vertical fasteners.
4. Vertical fasteners with structural clips and accessories.

1.5 QUALITY ASSURANCE
A. Installer Qualifications: An experienced installer who has completed cold-formed metal framing similar in material, design, and detail as that indicated for this Project and whose work has resulted in construction with a record of successful installation performance.
B. Mill certificates signed by steel producer or test reports from a qualified independent testing agency indicating steel sheet compliance with requirements, including insulated steel thickness, yield strength, tensile strength, total elongation, chemical requirements, ductility and galvanized-coating thickness.
C. Testing agency qualifications: An independent testing agency, acceptable to authorities having jurisdiction, qualified according to ASTM E 843, or other applicable standards.
D. Welding: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code-Steel" and AWS D1.3, "Structural Welding Code-Sheet Steel".
E. AISI Specifications: Comply with AISI's Specification for the Design of Cold-Formed Steel Structural Members for calculating design strength of cold-formed metal framing.

1.6 DELIVERY, STORAGE, AND HANDLING
A. Protect cold-formed metal framing from corrosion, deformation, and other damage during delivery, storage, and handling.
B. Store cold-formed metal framing protected with a waterproof covering and ventilate to avoid condensation.

1.7 INSTALLATION
A. Manufacturers' subject to compliance with requirements, provide cold-formed metal framing by one of the following:
1. Approved vendor.
2. District specifier.
3. Approved vendor.

1.8 MATERIALS
A. Steel Sheet: ASTM A 653/A 653M structural steel, the coated, of grade and coating as follows:
1. Minimum thickness: 0.0156 inch (0.402 mm) for 16-gauge and less; 50. Class 1 or 2 for minimum uncoated steel thickness of 0.0258 inch (0.651 mm) and greater.
2. GOSTENKHOFF (GOST)

2.2 INSULATION
A. Steel Stud: Manufacturer's standard C-shaped steel studs, of web depth indicated, punched, with stiffened flanges, complying with AISI specifications. As indicated on the structural drawings.
1. Minimum Uncoated-Steel Thickness: As indicated on the structural drawings.
2. Flange Width: As indicated on the structural drawings.
B. Steel Track: Manufacturer's standard U-shaped steel track, of web depth indicated, unpunched, with stiffened flanges, complying with AISI C 195, and as follows:
1. Minimum Uncoated-Steel Thickness: Matching steel studs.
2. Flange Width: 1-1/4 inches (32 mm) unless noted otherwise.

2.3 FABRICATION ACCESSORIES
A. Framing steel-framing accessories of the same material and finish used for framing members, with a minimum yield strength of 33,000 psi (227.5 MPa).
B. Provide accessories of manufacturer's standard thickness and configuration, unless otherwise indicated, as follows:
1. Supplemental framing.
2. Bracing, bracing and steel blocking.
3. End clips.
4. Fasteners.
5. Diagonal bracing.
6. Stud clips, brackets, and girts.
7. Job hangers and end closures.
8. Vertical deflection plates.

2.4 ANCHORS, CLIPS, AND FASTENERS
A. Steel Studs and Clips: ASTM A 36/A 36M, steel, coated by hot-dip process according to ASTM A 123.
B. Anchor Bolts: ASTM F 1554, grade 36, threaded carbon-steel hex-head bolts and carbon-steel nuts and flat, hardened-steel washers; zinc coated by hot-dip process according to ASTM A 153/A 153M, Class C.
C. Expansion Anchors: Fabricated from corrosion-resistant materials, with capability to sustain, without failure, a load equal to 5 times design load as determined by testing per ASTM A 108 conducted by a qualified testing agency.
D. Power-Activated Anchors: Fastener system of light suitable for application indicated, fabricated from corrosion-resistant materials with capability to sustain, without failure, a load equal to 10 times design load, as determined by testing per ASTM E 190 conducted by a qualified testing agency.
E. Mechanical Fasteners: Corrosion-resistant-coated self-drilling self-threading steel drill screws.
1. Head Type: Low-profile head beneath sheathing; manufacturer's standard electrodeless.
F. Welding Electrodes: Comply with AWS standards.

2.5 MISCELLANEOUS MATERIALS
A. Interior Finish: As specified in Part 5 - FINISH CARPENTRY, ASTM A 180.
B. Cement Grout: Portland cement, ASTM C 150; Type I and clean, natural sand, ASTM C 404. Mix at ratio of 1 part cement to 2 1/2 parts sand, by volume, with minimum water used for placement and finishing.
C. Grout: Non-shrink, non-sag, non-stain, non-cracking, non-reinforcing, non-sag grout containing selected silica sand, portland cement, expansion-compressing agents, and plasticizing and water-reducing agents, complying with ASTM C 1107, with fluid consistency and 100% air-entraining time.

2.6 FABRICATION
A. Fabricate cold-formed metal framing and accessories plumb, square, and true to line, and with connections securely fastened, in accordance with applicable codes and requirements in this Section.
1. Fabricate framing assemblies using jigs or templates.
2. Fabricate framing members by welding or screw fastening as specified in this Section.
3. Fasten cold-formed metal framing members by welding, fire, or using a framing member that is not permitted. Comply with AISI D13 requirements and procedures for welding appearance and quality of welds, and methods used in correcting welding work.
4. Fasten cold-formed metal framing members by welding or screw fastening as standard with fabricator. Where tying of framing members is not permitted:
a. Comply with AISI D13 requirements and procedures for welding appearance and quality of welds, and methods used in correcting welding work.
b. Locate mechanical fasteners and install according to Shop Drawings, with screw penetrating joined members by not less than three exposed screw threads.
5. Fasten other bracing to cold-formed metal framing by welding, bolting, or screw fastening according to Shop Drawings.
6. Reinforce, stiffen, and brace framing assemblies to withstand handling, delivery, and erection stresses. Lift fabricated assemblies to prevent damage or permanent distortion.
7. Fabrication Tolerances: Fabricate assemblies level, plumb, and true to line to a maximum allowable tolerance variation of 1/8 inch (3.2 mm) (1/16 inch (1.6 mm) and as follows:
1. Spacing: Spacing indicated framing members no more than plus or minus 1/8 inch (3.2 mm) from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other framing members.
2. Spacing: Fabricate each cold-formed metal framing assembly to a maximum out-of-square tolerance of 1/8 inch (3.2 mm).

2.7 EXAMINATION
Examine supporting substrates and existing structural framing for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after satisfactory conditions have been corrected.

2.8 PREPARATION
Before sprayed fire-resistive materials are applied, install continuous angles, supplementary framing, or tracks to structural steel framing to provide fire-resistive materials removal as well as such of these materials as needed to complete installation of cold-formed metal framing without reducing thickness of fire-resistive materials below that are required to attain fire-resistance rating indicated on drawings. Remove debris and other materials from framing surfaces to be prepared.
A. Cold bearing surfaces uniform and level to ensure full contact of bearing flanges or track webs on supporting concrete or masonry construction.

2.9 INSTALLATION GENERAL
Cold-formed metal framing may be shop or field fabricated for installation, or it may be field assembled.
1. Install cold-formed metal framing according to ASTM C 1007, unless more stringent requirements are indicated.
2. Install shoring or field-fabricated, cold-formed framing and securely anchor to supporting structure.
3. Bolt or weld half panels of horizontal and vertical joists to produce full, even, true-to-line joints with maximum variation in plane and true position between fabricated panels not exceeding 1/8 inch (3.2 mm).
4. Demolition and removal of interior partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.
5. Provide weatherproof closures for exterior openings resulting from demolition work.
6. Locate, identify shut off and disconnect utility services that are not indicated to remain.
7. Provide bypass connections to necessary to maintain continuity of service to occupied areas of building. Provide minimum of three (3) days advance notice to Owner if advance of service is necessary.

2.10 DEMOLITION
Demolish concrete and masonry in small sections. Cut concrete and masonry at junctions with construction to remain using power-driven masonry saw or hand tools; do not use power-driven impact tools.
Provide services for effective air and water pollution control as required by local imposing health jurisdiction.
If unanticipated mechanical, electrical or structural elements which conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Architect in written report, accurate detail. Pending resolution of conflict, reorganize selective demolition schedule as necessary to continue overall job progress without delay.

2.11 PATCHING
Patch all areas damaged or opened up by demolition including walls and ceilings exposed by removal of walls, cabinets or other items. All patching shall be in the same materials and finishes as adjacent surfaces.
2.12 SALVAGE MATERIALS
Where indicated on Drawings as "Salvage-Deliver to Owner", or listed below carefully remove indicated items, clean, store and turn over to Owner and obtain receipt. Where indicated on the Drawings as "Salvage-Relinquish" carefully remove indicated items, clean, store and release at appropriate time during new work construction.

2.13 DISPOSAL OF DEMOLISHED MATERIALS
Remove debris, rubbish and other materials resulting from demolition operations from building site. Transport and legally dispose of materials off site.
If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling and protection against exposure or environmental pollution.
Burning of removed materials is NOT permitted on project site.

2.14 CLEAN-UP AND REPAIR
Upon completion of demolition work, remove tools, equipment and demolished materials from site. Remove protections and leave interior areas broom clean.
Repair demolition performed in excess of that required. Return structures and surfaces to remain to condition existing prior to commencement of selective demolition work. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

2.15 COVERAGE
Coverage for any EHS-related work performed by contractor or any tiers of subcontractors of contractor.

SECTION 05 40 00
COLD-FORMED METAL FRAMING

1.1 RELATED DOCUMENTS
General and general provisions of the contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY
This Section includes the following:
1. Exterior wall framing
2. Exterior soffit framing

1.3 DEFINITIONS
A. Minimum Insulated Steel Thickness: Minimum uncoated thickness of cold-formed framing permitted to be used on the Project site shall be not less than 45 percent of the thickness indicated. Lesser thicknesses shall be permitted at discrete cut-outs for cold-rolling.
B. Products: Any entity that processes steel coil fabricated into cold-formed members.

1.4 SUBMITTALS
A. Documents transmitted for submittal review shall be in electronic (pdf) format and transmitted via email.
B. Product Data: For each type of cold-formed metal framing product and accessory indicated.
C. Shop Drawings: Show layout, spacings, sizes, thicknesses, and types of cold-formed metal framing fabrication and fastening and anchorage details, including mechanical fasteners, shop reinforcing elements, opening framing, supplemental framing, strappings, girts, and bracing, fireproofing, corrosion details, and attachment to supporting structure.
D. Mill certificates signed by steel producer or test reports from a qualified independent testing agency indicating steel sheet compliance with requirements.
E. Welding Certificates: Copies of certificates for welding procedures and personnel.
F. Product Test Reports: From a qualified testing agency indicating that each of the following complies with requirements based on comprehensive testing of current products:
1. Expansion anchors.
2. Bolted anchors.
3. Vertical fasteners.
4. Vertical fasteners with structural clips and accessories.

1.5 QUALITY ASSURANCE
A. Installer Qualifications: An experienced installer who has completed cold-formed metal framing similar in material, design, and detail as that indicated for this Project and whose work has resulted in construction with a record of successful installation performance.
B. Mill certificates signed by steel producer or test reports from a qualified independent testing agency indicating steel sheet compliance with requirements, including insulated steel thickness, yield strength, tensile strength, total elongation, chemical requirements, ductility and galvanized-coating thickness.
C. Testing agency qualifications: An independent testing agency, acceptable to authorities having jurisdiction, qualified according to ASTM E 843, or other applicable standards.
D. Welding: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code-Steel" and AWS D1.3, "Structural Welding Code-Sheet Steel".
E. AISI Specifications: Comply with AISI's Specification for the Design of Cold-Formed Steel Structural Members for calculating design strength of cold-formed metal framing.

1.6 DELIVERY, STORAGE, AND HANDLING
A. Protect cold-formed metal framing from corrosion, deformation, and other damage during delivery, storage, and handling.
B. Store cold-formed metal framing protected with a waterproof covering and ventilate to avoid condensation.

1.7 INSTALLATION
A. Manufacturers' subject to compliance with requirements, provide cold-formed metal framing by one of the following:
1. Approved vendor.
2. District specifier.
3. Approved vendor.

1.8 MATERIALS
A. Steel Sheet: ASTM A 653/A 653M structural steel, the coated, of grade and coating as follows:
1. Minimum thickness: 0.0156 inch (0.402 mm) for 16-gauge and less; 50. Class 1 or 2 for minimum uncoated steel thickness of 0.0258 inch (0.651 mm) and greater.
2. GOSTENKHOFF (GOST)

2.2 INSULATION
A. Steel Stud: Manufacturer's standard C-shaped steel studs, of web depth indicated, punched, with stiffened flanges, complying with AISI specifications. As indicated on the structural drawings.
1. Minimum Uncoated-Steel Thickness: As indicated on the structural drawings.
2. Flange Width: As indicated on the structural drawings.
B. Steel Track: Manufacturer's standard U-shaped steel track, of web depth indicated, unpunched, with stiffened flanges, complying with AISI C 195, and as follows:
1. Minimum Uncoated-Steel Thickness: Matching steel studs.
2. Flange Width: 1-1/4 inches (32 mm) unless noted otherwise.

2.3 FABRICATION ACCESSORIES
A. Framing steel-framing accessories of the same material and finish used for framing members, with a minimum yield strength of 33,000 psi (227.5 MPa).
B. Provide accessories of manufacturer's standard thickness and configuration, unless otherwise indicated, as follows:
1. Supplemental framing.
2. Bracing, bracing and steel blocking.
3. End clips.
4. Fasteners.
5. Diagonal bracing.
6. Stud clips, brackets, and girts.
7. Job hangers and end closures.
8. Vertical deflection plates.

2.4 ANCHORS, CLIPS, AND FASTENERS
A. Steel Studs and Clips: ASTM A 36/A 36M, steel, coated by hot-dip process according to ASTM A 123.
B. Anchor Bolts: ASTM F 1554, grade 36, threaded carbon-steel hex-head bolts and carbon-steel nuts and flat, hardened-steel washers; zinc coated by hot-dip process according to ASTM A 153/A 153M, Class C.
C. Expansion Anchors: Fabricated from corrosion-resistant materials, with capability to sustain, without failure, a load equal to 5 times design load as determined by testing per ASTM A 108 conducted by a qualified testing agency.
D. Power-Activated Anchors: Fastener system of light suitable for application indicated, fabricated from corrosion-resistant materials with capability to sustain, without failure, a load equal to 10 times design load, as determined by testing per ASTM E 190 conducted by a qualified testing agency.
E. Mechanical Fasteners: Corrosion-resistant-coated self-drilling self-threading steel drill screws.
1. Head Type: Low-profile head beneath sheathing; manufacturer's standard electrodeless.
F. Welding Electrodes: Comply with AWS standards.

2.5 MISCELLANEOUS MATERIALS
A. Interior Finish: As specified in Part 5 - FINISH CARPENTRY, ASTM A 180.
B. Cement Grout: Portland cement, ASTM C 150; Type I and clean, natural sand, ASTM C 404. Mix at ratio of 1 part cement to 2 1/2 parts sand, by volume, with minimum water used for placement and finishing.
C. Grout: Non-shrink, non-sag, non-stain, non-cracking, non-reinforcing, non-sag grout containing selected silica sand, portland cement, expansion-compressing agents, and plasticizing and water-reducing agents, complying with ASTM C 1107, with fluid consistency and 100% air-entraining time.

2.6 FABRICATION
A. Fabricate cold-formed metal framing and accessories plumb, square, and true to line, and with connections securely

PART 1 GENERAL

- 1.01 SUMMARY
1.02 SUBMITTALS
1.03 SYSTEM DESCRIPTION

Design and size members to withstand dead loads and live loads caused by pressure and suction of wind as calculated in accordance with U.B.C. code.

Limit maximum deflection to L/175, or flexure limit of glass with full recovery of glazing materials, whichever is less.

Limit air infiltration through assembly to 0.06 cubic feet minimum square feet of assembly surface area, measured at a reference differential pressure across assembly of 0.3 inches water gauge as measured in accordance with ASTM E283.

System to accommodate, without damage to system or components, or deterioration of perimeter seal movement within system movement between system and structural framing components, dynamic loading and release of loads, and deflection of structural framing.

1.04 DELIVERY, STORAGE AND HANDLING
Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging.

Provide equipment and personnel to handle products by methods to prevent damage. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

Store products in accordance with manufacturer's instructions, with seals and labels intact and legible.

Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged and are maintained under required conditions.

PART 2 PRODUCTS

2.01 MATERIALS
Extrusions shall be 6063-T5 alloy and temper (ASTM B 221 alloy 6.5, 10A-T5). The thermal barrier shall consist of a two-part, chemically curing, high density polyurethane, plastomers, where exposed shall be aluminum, stainless steel or plated steel in accordance with ASTM A 164. Perimeter anchors shall be aluminum or steel, providing the steel is properly isolated from the aluminum. Glazing gaskets shall be elastomeric extrusions.

2.02 APPROVED MANUFACTURERS
Specifications are based on standard systems manufactured by Kawneer Company, Inc. Systems by the following manufacturers are approved, subject to being equal or better to the specified systems in performance, appearance, and function:

- A. EFCO Corporation
B. MANKO Window Systems
C. U.S. Aluminum
D. Vitacool

2.03 SYSTEMS

- A. Type 1: Kawneer VG 451-T, 2' x 4-1/2', Center glazed, thermal break frame system.
B. Type 2: Kawneer 350 doors with 10" bottom rail.

2.04 FINISH SPECIFICATIONS

All exposed surfaces shall be free of scratches and other serious blemishes and shall receive an architectural Class 1 color Anodic Coating conforming with Aluminum Association Standard AA-MC22A4244; Permanent color - clear anodized.

2.05 FABRICATION

The framing system shall provide for center glazing on all sides with no projecting stops. Entrance framing members shall be compatible with glass framing in appearance. All single acting entrance frames shall include the Sealar positive barrier weathering, including the EPDM sweep strip.

PART 3 EXECUTION

1.01 INSTALLATION
All glass framing shall be set in correct locations as shown in the details and shall be level, square, plumb and in alignment with other work in accordance with the manufacturer's installation instructions and approved shop drawings. All joints between framing and the building structure shall be sealed in order to secure a watertight installation.

Install doors and hardware in compliance with manufacturer's recommendations. Coordinate hardware installation to assure proper function.

1.02 PROTECTION AND CLEANING

After installation, adequately protect exposed portions of aluminum surfaces from damage by grinding and polishing compounds, plaster, lime, acid, cement, or other contaminants.

Prior to acceptance, remove protective materials and clean exposed members.

1.03 SCHEDULE OF HARDWARE

As scheduled on drawings.

SECTION 05 43 13 ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

- 1.01 SUMMARY
1.02 SUBMITTALS
1.03 SYSTEM DESCRIPTION

Design and size members to withstand dead loads and live loads caused by pressure and suction of wind as calculated in accordance with U.B.C. code.

Limit maximum deflection to L/175, or flexure limit of glass with full recovery of glazing materials, whichever is less.

Limit air infiltration through assembly to 0.06 cubic feet minimum square feet of assembly surface area, measured at a reference differential pressure across assembly of 0.3 inches water gauge as measured in accordance with ASTM E283.

System to accommodate, without damage to system or components, or deterioration of perimeter seal movement within system movement between system and structural framing components, dynamic loading and release of loads, and deflection of structural framing.

1.04 DELIVERY, STORAGE AND HANDLING
Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging.

Provide equipment and personnel to handle products by methods to prevent damage. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

Store products in accordance with manufacturer's instructions, with seals and labels intact and legible.

Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged and are maintained under required conditions.

PART 2 PRODUCTS

2.01 MATERIALS
Extrusions shall be 6063-T5 alloy and temper (ASTM B 221 alloy 6.5, 10A-T5). The thermal barrier shall consist of a two-part, chemically curing, high density polyurethane, plastomers, where exposed shall be aluminum, stainless steel or plated steel in accordance with ASTM A 164. Perimeter anchors shall be aluminum or steel, providing the steel is properly isolated from the aluminum. Glazing gaskets shall be elastomeric extrusions.

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- A. EFCO Corporation
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2.03 SYSTEMS

- A. Type 1: Kawneer VG 451-T, 2' x 4-1/2', Center glazed, thermal break frame system.
B. Type 2: Kawneer 350 doors with 10" bottom rail.

2.04 FINISH SPECIFICATIONS

All exposed surfaces shall be free of scratches and other serious blemishes and shall receive an architectural Class 1 color Anodic Coating conforming with Aluminum Association Standard AA-MC22A4244; Permanent color - clear anodized.

2.05 FABRICATION

The framing system shall provide for center glazing on all sides with no projecting stops. Entrance framing members shall be compatible with glass framing in appearance. All single acting entrance frames shall include the Sealar positive barrier weathering, including the EPDM sweep strip.

PART 3 EXECUTION

1.01 INSTALLATION
All glass framing shall be set in correct locations as shown in the details and shall be level, square, plumb and in alignment with other work in accordance with the manufacturer's installation instructions and approved shop drawings. All joints between framing and the building structure shall be sealed in order to secure a watertight installation.

Install doors and hardware in compliance with manufacturer's recommendations. Coordinate hardware installation to assure proper function.

1.02 PROTECTION AND CLEANING

After installation, adequately protect exposed portions of aluminum surfaces from damage by grinding and polishing compounds, plaster, lime, acid, cement, or other contaminants.

Prior to acceptance, remove protective materials and clean exposed members.

1.03 SCHEDULE OF HARDWARE

As scheduled on drawings.

SECTION 05 43 00 GLAZING

PART 1 GENERAL

- 1.01 SUMMARY
1.02 SUBMITTALS
1.03 QUALITY ASSURANCE

GLASS STANDARDS: Glass installations shall meet the requirements of the Prime Glass Standard PG D-3-45. Heat-treated glass shall meet the requirements of Standard PG D-3-45-205; safety glass shall meet the requirements of Standard PG D-3-45-205.

D. MANUFACTURER'S LABEL: Each piece of glass shall bear the manufacturer's label.

E. HIGHLIGHT AND DRIFT: Installation of each piece of glass is required, except as otherwise shown. Each installation must withstand normal temperature changes, wind loading, impact loading (for operating sash and doors) without failure of any kind including use or breakage of glass failure or sealant or gaskets to remain watertight and airtight; deterioration of glazing materials and other defects in the work.

F. COMPLY WITH COMBINED RECOMMENDATIONS OF GLASS MANUFACTURER AND MANUFACTURER OF SEALANT AND OTHER MATERIALS USED IN GLAZING, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE SHOWN OR SPECIFIED, AND EXCEPT WHERE MANUFACTURER'S TECHNICAL REPRESENTATIVES DIRECT OTHERWISE.

G. COMPLY WITH "GLAZING MANUAL" AND OTHER APPLICABLE PUBLICATIONS BY Flat Glass Marketing Association except as shown and specified otherwise and except as specifically recommended otherwise by the manufacturer of the glass and glazing materials.

H. CUT AND INSTALL colored float and heat absorbing glass as recommended in Technical Services Report No. 1047 by FPG Industries, or similar reports by other manufacturers.

1.04 WARRANTY ON HERMETIC SEALS: Provide hermetic glass manufacturer's written warranty, agreeing to furnish replacement units for insulating glass units which have defective hermetic seals defined to include intrusion of moisture or dirt, permanent condensation at temperatures above 32F, and other visual evidence of seal failure or performance failure, provided manufacturer's instructions for handling, installation, protection, and maintenance have been adhered to during warranty period. Warranty period is ten years.

B. All glass shall be guaranteed for ten years against breakage due to defects in materials, workmanship or installation with all such glass immediately removed and replaced with matching new material at no additional cost to the Owner.

PART 2 PRODUCTS

2.01 MATERIALS
A. TEMPERED CLEAR LOW-E INSULATING: shall be two (2) sheets of 1/4" clear tempered safety glass such as PPG Hercules "C" on each side of a 1/2" sealed air space.

B. CLEAR LOW-E INSULATING: shall be 1" thick units, (1) sheet of 1/4" thick clear float glass on exterior and one (1) sheet clear float glass on interior with a 1/2" sealed air space between.

C. TEMPERED CLEAR GLASS: shall be 1/4" clear tempered safety glass.

D. FIRE RATED GLASS: shall be 3/8" fire rated glass such as "Firelite" glass.

2.02 DELIVERY, STORAGE AND HANDLING

Back glazing sheets of 3 to 12' lengths from vertical. Separate sheets with interleaving of protection paper and cushion top and bottom edges with felt. Cover to protect material from end-splash water or rain or hail but provide for ventilation and circulation of cool, dry air. Maintain temperature above dew point. Protect glazing material from wetting, sandblasting, and other potentially damaging operations before and after installation.

PART 3 EXECUTION

3.01 PREPARATION
Protect glass from edge damage at all times during handling, installation and operation of the building.

Glazing channel dimensions as shown are intended to provide for necessary minimum fits on the glass, minimum edge clearance and adequate sealant thickness, with reasonable tolerances. Tolerances for the completed glass shall be for each opening within the tolerances and necessary dimensions established. Sizes shown on the Drawings are approximate only.

SECTION 05 43 00 ACCOUSTICAL CEILING

PART 1 GENERAL

- 1.01 SUMMARY
1.02 SYSTEM DESCRIPTION
1.03 SUBMITTALS

Acoustical tile shall have been tested under ASTM E84, shall have a Class A rating with a flame spread of 25 or less, and carry an Underwriters Laboratories, Inc. label.

Submit one 12" x 12" square sample of each exposed runner and molding. Architect's review will be for color only. Compliance with all other requirements is exclusive responsibility of the Contractor.

1.04 QUALITY ASSURANCE
Subcontract the installation of acoustical ceilings to an experienced firm which is acceptable to the manufacturer of the acoustical units and suspension system.

1.05 DELIVERY, STORAGE AND HANDLING
Materials shall be delivered to the project in the original packaging, with seals intact and with the manufacturer's name and brand stamped clearly thereon. No seconds or remnants shall be used. No materials shall be delivered or stored in the building until all glass has been completed and all exterior openings closed. All use work, including concrete, masonry, etc., shall be completed and dried out.

1.06 SITE CONDITIONS
Temperature shall be maintained uniformly at a minimum of 60 degrees Fahrenheit before, during and after installation. Humidity shall not exceed 40 percent before, during or after installation.

1.07 MATERIAL FURNISHED TO THE OWNER
At the completion of the project the acoustical ceiling subcontractor shall furnish the Owner with one (1) call carton, sealed, unopened, of all ceiling and tile panel types scheduled for use on this project.

1.08 WARRANTY
Provide manufacturer's 15 year warranty for ceiling systems.

PART 2 PRODUCTS

2.01 MATERIALS
A. Acoustical Tiles: As selected by the owner.

B. Suspension Systems: Double-rod, hot-dip galvanized with 8-30 coating.

PART 3 EXECUTION

3.01 INSTALLATION
A. Install a suspension system to comply with ASTM C636, with hanger support coming from building structure only. Install hangers with concrete nails or drive pins into solid structural members, lagging into hollow anchors or pipe hangers, as appropriate to comply with ASTM C 636. Attachment to ducts, conduits, or other similar supports will not be permitted. Splice hangers not more than 4 feet on center and not more than 24 inches apart. Each member shall have a minimum of 1/2 inch overlap at each member. Extra hanger wires shall be provided as recommended by the grid manufacturer where girths or truffers are installed parallel to main runners.

B. Install edge moldings, corners, special corners, or reveal moldings to coordinate with the grid system at edges of each acoustical ceiling area on or nailed on the reflected ceiling plan, and at all locations where edge of units would otherwise be exposed after completion of work. Secure wall angle molding to building construction by fastening into holes made not more than 3 inches from end of mold and 6 inches on center. All moldings shall be standard wall angle moldings specified except where otherwise shown on drawings.

C. Main tees and cross tees shall be formed out as shown on the drawings and as required for coordination with light fixtures, diffusers, access doors and other equipment. All joints in main tees shall be mechanically spliced, cross tees shall be locked into main tees.

D. Ceiling and tile panels shall be neatly cut and fit where field cutting is required and in accordance with the manufacturer's instructions. Finish and scribe to fit where field cutting is required. Ceiling tiles and panels shall be placed into grid system or other suspension systems unless otherwise specified. Tiles and panels shall be installed where shown on drawings and at vestibules and other areas adjacent to exterior entrance.

3.02 ADJUSTING, CLEANING AND PROTECTION
The ceiling system installer shall advise the Prime Contractor of required protection for the acoustical tile and suspension, including temperature and humidity limitations and dust control, so that all work will be without damage at the time of acceptance by Owner.

Upon completion of the installation, all soiled, defaced, discolored or otherwise damaged tile surfaces shall be cleaned or replaced. Completed acoustical ceiling system installation shall neither be altered nor disturbed by any other trade without specific, prior approval from the prime contractor and ceiling subcontractor.

Contractor is responsible for adjusting all units and accessories for complete and proper placement and alignment. All soiled or otherwise damaged acoustical tiles and accessories shall be replaced with new tiles if minor finish damage cannot be successfully cleaned or repaired to original condition status completely free of damage or soil evidence to the satisfaction of the Architect.

SECTION 05 43 10 FIBERGLASS REINFORCED PLASTIC PANELS

PART 1 GENERAL

- 1.01 SUMMARY
1.02 SUBMITTALS
1.03 QUALITY ASSURANCE

1.04 DELIVERY, STORAGE AND HANDLING
A. Delivery of Materials

1.05 PROJECT CONDITIONS
A. Installation shall not begin until building is enclosed, permanent heating and cooling equipment is in operation, and residual moisture has dissipated.

B. During installation and for not less than 48 hours before, maintain an ambient temperature and relative humidity within limits required by label of adhesive used.

C. Do not allow containers of Kermit 101 adhesive to be opened until all potential sources of flame or spark have been shut down or extinguished and until warnings against their ignition during adhesive application have been posted.

D. Provide ventilation to disperse fumes during application of solvent-based adhesive.

PART 2 PRODUCTS

2.01 MATERIALS
A. Glass (IA) Finish: Wall panels shall be Kermitte Fire-X (glass) with fiberglass reinforced plastic panels as manufactured by Kermitte Company. Color to be Soft Beige. Panel thickness shall be nominal 3/8" or 3/32". Alternate products shall meet or exceed the following properties:

- 1. UL Listed.
2. Flame spread of 20 or lower, smoke developed 200 or lower, per ASTM E-84.
3. Barcol hardness (barcol resistance) of 35 per ASTM D-2583.
4. Panels will exhibit no more than 0.0288% weight loss after a 25-minute Taker Test.
5. Impact strength (IZOD) of 12 ft-lb/in. or per ASTM D-256.
6. FIBRC approval, subject to the conditions of approval as described in FIBRC Report JJ, OF R-3A-3M.
7. USDA accepted.
8. IGBO Report number 4583.

B. Adhesive: As recommended by panel manufacturer for application to substrate.

C. Corner Trim: Panel manufacturer's standard single length extruded vinyl panels; longest length possible-to eliminate joints.

PART 3 EXECUTION

3.01 PREPARATION
A. Examine backup surfaces to determine that corners are plumb and straight; surfaces are smooth, uniform, clean and free from foreign matter, nails, countersinks, joints and cracks or pits and smooth with the adjoining surface.

B. Do not begin installation until backup surfaces are put into satisfactory condition.

C. Do not cut ceiling with carbide tipped saw blades or drill bits, or cut with snips, of this section.

3.02 APPLICATION
A. Do not ceiling with kermitte finished saw blades or drill bits, or cut with snips, of this section.

3.03 CLEANING
A. Remove any adhesive or excessive sealant from face using solvent or cleaner recommended by panel manufacturer.

SECTION 05 43 00 PAINTING

PART 1 GENERAL

- 1.01 SUMMARY
1.02 TYPES OF PAINTS
1.03 QUALITY ASSURANCE

1.04 SUBMITTALS
Following areas of Contract, General Contractor shall submit the following information to the Architect for his approval and shall not proceed with any painting and finishing work until such approval has been given.

A. Name of painting contractor.

B. Name of manufacturer whose products are being prepared for use. Only one line of materials shall be used throughout the job, except for specified special products.

C. Manufacturer's complete and detailed specifications for materials to be used for each application.

1.05 DELIVERY, STORAGE AND HANDLING
Delivery points and enameled ready-mixed to job site. All material must be delivered in their original containers with labels intact.

1.06 SITE CONDITIONS
Areas to be painted shall be clean and free of dust and shall remain in that condition through the painting process.

1.07 EXTERIOR STOCK
A. Provide a typewritten 3" x 5" card to each container showing location where used.

1.08 MANUFACTURERS
The Contractor shall have the option of using materials and finishes manufactured by any one of the following manufacturers hereinafter listed. Materials used throughout shall be the product of one manufacturer only and shall be the first line and top grade materials systems products as produced by the manufacturer selected.

2.02 PAINTING SCHEDULE
METAL WORK - Three (3) coats, in addition to shop prime coat. This to include all exposed structural steel, metal doors and frames, louvers, metal hardware, guard posts and aluminum and steel handrails, conditioning grilles. All involved mechanical equipment shall be painted per Architect's instructions.

1 Coat "54" B6640310 Pro Industrial Pro-Gri Primer
2 Coats "54" B6640150 Pro Industrial DTM Acrylic Semi-Gloss
or
2 Coats "54" B95-150 Pro Industrial Waterbased Alkali Urethane Enamel Semi-Gloss

1 Coat "54" A2483000 Loxon Concrete & Masonry Primer (3.2 mils dry)
2 Coats "54" K93-2000 Duratop Exterior Acrylic Sash Coating

2 Coats "54" B20-2600 Pro Mar 200 Zero VOC Interior Latex Eggshell

1 Coat "54" B20-2600 Pro Mar 200 Zero VOC Interior Latex Primer
2 Coats "54" B20-2600 Pro Mar 200 Zero VOC Interior Latex Eggshell

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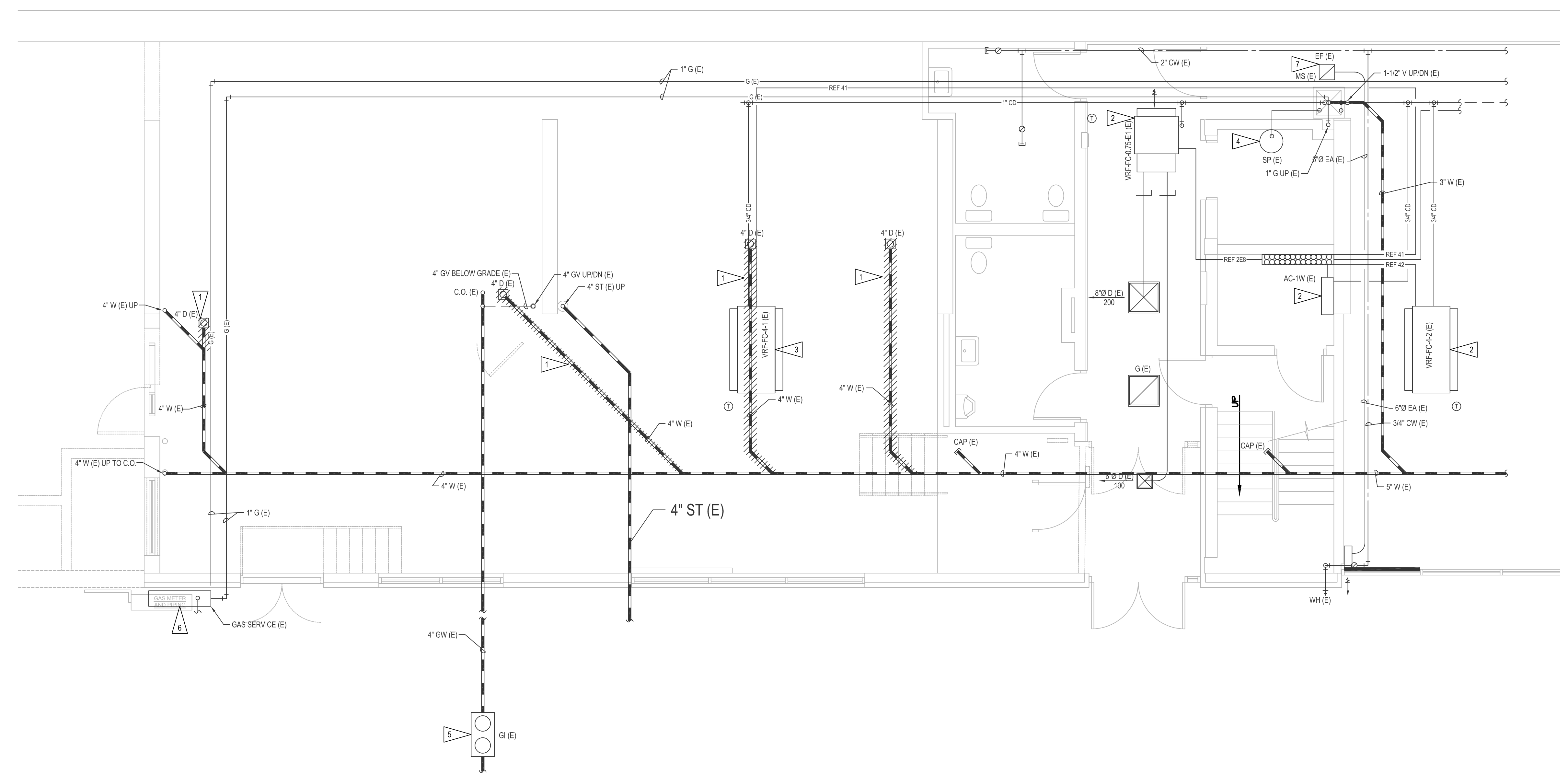
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DEMOLITION NOTES

- ALL MECHANICAL ITEMS SHOWN ARE EXISTING. NOT ALL EXISTING MECHANICAL ITEMS ARE SHOWN. ITEMS SHOWN DASHED/HATCHED ARE TO BE REMOVED.
- EXISTING DRAWINGS ARE BASED ON APPROXIMATIONS FROM FIELD OBSERVATIONS. DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY EXACT LOCATION OF ALL EXISTING EQUIPMENT, DUCTWORK AND PIPING. EQUIPMENT, DUCTWORK AND PIPING DISCOVERED ON SITE TO BE REMOVED BUT NOT INDICATED ON PLANS TO BE IDENTIFIED BY CONTRACTOR AND REMOVED AS REQUIRED.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO PROVIDING NEW WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING REMOVAL AS REQUIRED TO ACCOMMODATE ACTUAL CONDITIONS.
- COORDINATE ALL REQUIRED SHUT-DOWNS WITH GENERAL CONTRACTOR.
- HOLES CUT IN WALLS, FLOORS AND CEILINGS TO PERMIT THE REMOVAL OF EXISTING EQUIPMENT, PIPING, ETC. SHALL BE CAREFULLY MADE AND RESTRICTED TO THE SMALLEST PRACTICAL SIZE. PATCH ALL HOLES NOT REQUIRED FOR NEW WORK TO MATCH EXISTING. SEAL ALL HOLES OF EXTERIOR ENVELOPE WATER TIGHT.
- THE OWNER RESERVES THE FIRST RIGHT OF SALVAGE OF ANY ITEMS REMOVED. CONTRACTOR SHALL REMOVE ALL UNWANTED MATERIALS FROM THE SITE. OWNER'S DUMPSTER OR OTHER TRASH RECEPTACLES ARE NOT TO BE UTILIZED.
- WHERE APPLICABLE, COORDINATE EXTENT OF DEMOLITION WITH NEW WORK.
- COORDINATE ALL ROOF WORK WITH GENERAL CONTRACTOR AND ROOFING CONTRACTORS.
- LOCATION OF BELOW GRADE PIPING IS BASED ON EXISTING DRAWINGS AND HAS NOT BEEN VERIFIED. CONTRACTOR SHALL PROVIDE COMPLETE CAMERA SCOPE AND DOCUMENTATION OF ALL EXISTING BELOW GRADE PIPING. INCLUDE THE FOLLOWING INFORMATION: LOCATION, SIZE, ELEVATION, AND CONDITION OF ALL BELOW GRADE PIPING.
- UNLESS OTHERWISE NOTED ALL BELOW GRADE PIPING SHALL REMAIN. SEE NEW WORK PLAN FOR RECONNECTION TO EXISTING BELOW GRADE PIPING. ALL PIPING NOT USED IN NEW DESIGN SHALL BE CUT, CAPPED, AND ABANDONED IN PLACE. DO NOT ALLOW DEAD LEGS OF SANITARY PIPING.

HAZARDOUS MATERIAL COORDINATION NOTES

- WHENEVER THE CONTRACTOR ENCOUNTERS A MATERIAL WHICH COULD POSSIBLY BE HAZARDOUS, THE CONTRACTOR SHALL STOP WORK AND CONTACT THE OWNER IMMEDIATELY FOR DIRECTION. DO NOT DISTURB THE MATERIAL IN ITS LOCATION.
- CONTRACTORS SHALL AND MUST COORDINATE REMOVAL OF ANY ITEMS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS WITH THE OWNER. REMOVAL OF ANY HAZARDOUS MATERIALS SHALL BE IN ACCORDANCE WITH ANY EPA REQUIREMENTS AS WELL AS ANY REQUIREMENTS OF ANY OTHER AGENCIES WITH JURISDICTION OVER SUCH WORK.

DEMOLITION FLAG NOTES

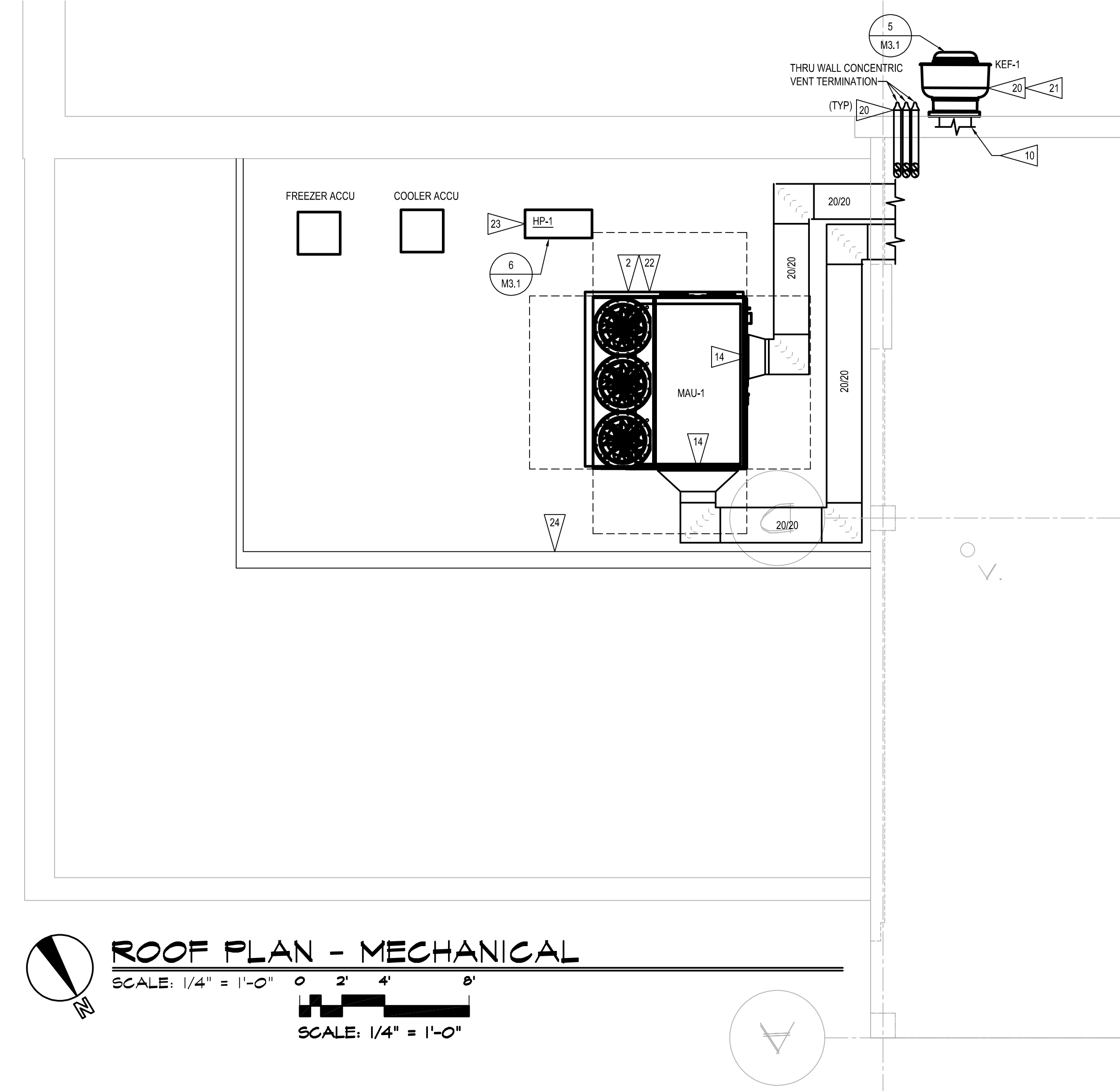
- REMOVE SANITARY PIPING SHOWN HATCHED COMPLETE. REMOVE SANITARY BACK TO MAIN AND CAP. DO NOT ALLOW DEAD LEGS OF PIPING.
- EXISTING VRF UNIT, DUCT, REFRIGERANT PIPING, CONTROLS AND ETC. TO REMAIN.
- RELOCATE VRF UNIT. SEE SHEET M1.1 FOR ADDITIONAL INFORMATION.
- EXISTING SUMP PUMP, PIPING AND CONTROLS TO REMAIN.
- EXISTING GREASE INTERCEPTOR AND PIPING TO REMAIN.
- EXISTING GAS SERVICE TO REMAIN. SEE SHEET M2.1 FOR ADDITIONAL INFORMATION.
- EXISTING EXHAUST FAN, DUCT AND CONTROLS TO REMAIN.

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

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 note:
 do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other appropriate drawings or at site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and verify non-interference with other work. do not fabricate prior to verification of clearance for all trades.





ROOF PLAN - MECHANICAL
SCALE: 1/4" = 1'-0"
SCALE: 1/4" = 1'-0"

GENERAL NOTES

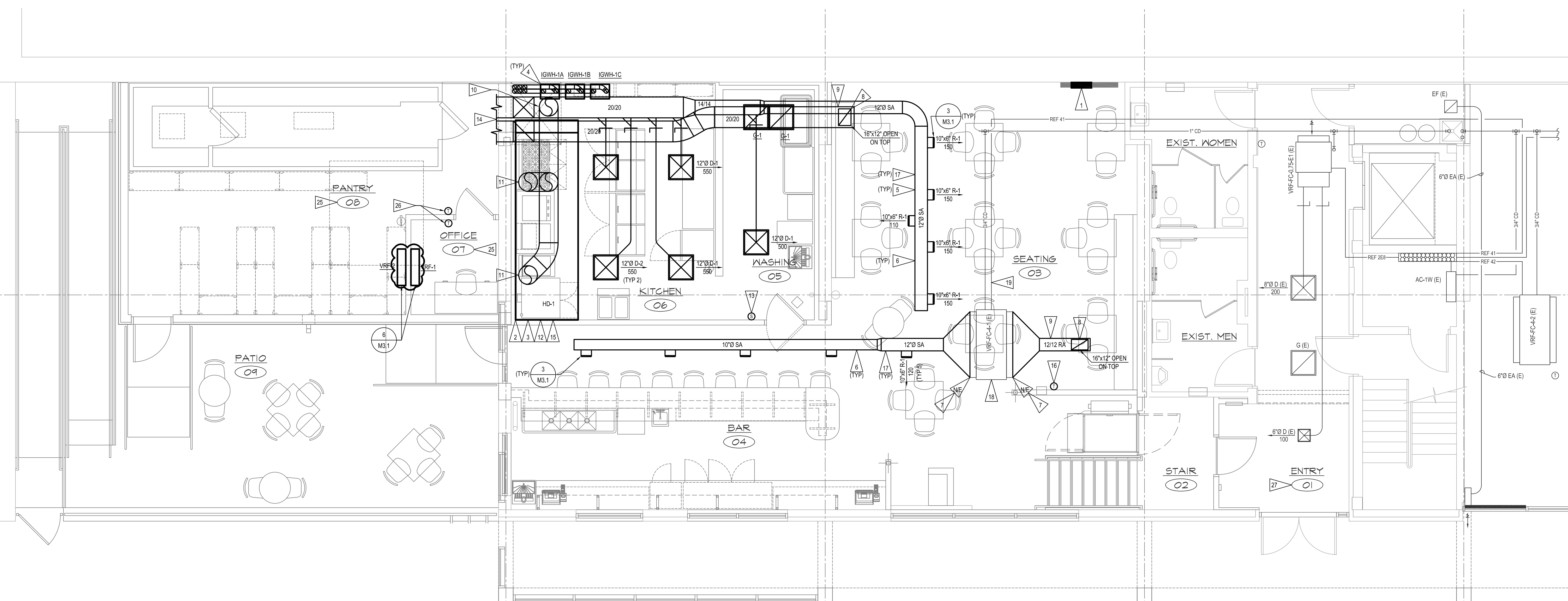
- DO NOT ROUTE DUCTWORK OR LOCATE EQUIPMENT ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- MECHANICAL ITEMS SHOWN LIGHT AND / OR INDICATED WITH (E) ARE EXISTING. ITEMS INDICATED WITH A (R) ARE RELOCATED. ALL ITEMS SHOWN DARK ARE NEW.
- EXISTING DRAWINGS ARE BASED ON EXISTING CONSTRUCTION DOCUMENTS AND APPROXIMATION FROM FIELD OBSERVATIONS. DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY EXACT LOCATION OF ALL MECHANICAL ITEMS. MECHANICAL ITEMS DISCOVERED ON SITE TO BE REMOVED BUT NOT INDICATED ON PLANS TO BE IDENTIFIED BY CONTRACTOR AND REMOVED / RELOCATED AS DIRECTED BY THE ENGINEER.
- PLANS ARE SCHEMATIC IN NATURE. COORDINATE EXACT ROUTING AND EQUIPMENT LOCATIONS WITH ALL OTHER TRADES. PROVIDE OFFSETS AS REQUIRED.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO NEW WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING DUCTWORK AS NECESSARY TO AVOID CONFLICTS WITH EXISTING CONDITIONS AND WITH ALL TRADES OF NEW WORK. AT NO ADDITIONAL COST TO THE OWNER.
- COORDINATE ALL ROOF, WALL, AND FLOOR PENETRATIONS WITH GENERAL CONTRACTOR. SEAL PENETRATIONS OF EXTERIOR ENVELOPE WATER TIGHT.
- MAINTAIN CODE AND MANUFACTURER'S REQUIRED CLEARANCES AROUND ALL MECHANICAL EQUIPMENT TO ALLOW PROPER OPERATION AND FOR EASY MAINTENANCE AND FILTER ACCESS. INSTALL ALL MECHANICAL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENTLY ADOPTED LOCAL AND STATE CODES AS WELL AS OWNER STANDARDS.
- MECHANICAL CONTRACTOR TO PROVIDE ALL LOW VOLTAGE CONTROL WIRING AND ELECTRICAL CONTRACTOR TO PROVIDE ALL POWER AND LINE VOLTAGE CONTROL WIRING REQUIRED FOR COMPLETE OPERATION OF ALL MECHANICAL EQUIPMENT.
- SEE DUCT FITTING DETAIL 1 ON SHEET M3.1.
- SPACE IS LIMITED. COORDINATE DUCT ROUTING WITH STRUCTURE AND ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
- INSTALL ALL VOLUME DAMPERS ABOVE ACCESSIBLE CEILINGS OR IN ACCESSIBLE LOCATIONS.
- ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS DIFFUSER NECK UNLESS NOTED OTHERWISE. SEE DIFFUSER CONNECTION DETAIL 2 ON SHEET M3.1.
- COORDINATE ALL CEILING-MOUNTED DIFFUSER, REGISTER AND GRILLE LOCATIONS WITH ARCHITECTURAL DRAWINGS. ALL DEVICES INSTALLED IN GYP BOARD SHALL BE INSTALLED SYMMETRICALLY TO EACH OTHER AND SYMMETRICALLY WITH LIGHT FIXTURES.
- THERMOSTAT ROUGH-INS BY ELECTRICAL CONTRACTOR. COORDINATE EXACT LOCATIONS WITH ELECTRICAL AND DESIGN ARCHITECT.
- MECHANICAL CONTRACTOR TO COORDINATE MAKEUP AIR UNIT, KITCHEN EXHAUST HOOD, KITCHEN EXHAUST FAN AND KITCHEN EXHAUST CONTROL REQUIREMENTS WITH EQUIPMENT MANUFACTURER AND ELECTRICAL CONTRACTOR. PROVIDE ALL NECESSARY CONTROLS FOR A COMPLETE AND OPERATIONAL SYSTEM MEETING ALL THE REQUIREMENTS PER NFPA 96, 2021 IBC AND ALL LOCAL CODES.
- COORDINATE ALL WORK WITH ACTUAL KITCHEN EQUIPMENT PROVIDED. SEE MECHANICAL SUPPLEMENTAL DRAWINGS SHEETS ME-AM2 FOR MORE INFORMATION REGARDING KITCHEN VENTILATION EQUIPMENT.
- PROVIDE PAINT GRIP FINISH ON ALL SHEET METAL DUCTWORK IN AREAS WHERE EXPOSED. DUCTWORK AND ASSOCIATED REGISTERS TO BE PAINTED BY GENERAL CONTRACTOR. COORDINATE PAINTING REQUIREMENTS WITH ARCHITECTURAL.
- VERIFY ALL HVAC CONNECTIONS AND HOOD SIZE WITH THE KITCHEN EQUIPMENT AND KITCHEN EQUIPMENT SUPPLIER.

KITCHEN HOOD CONTROL & INTERLOCK REQUIREMENTS

- TYPE 1 HOOD SHALL INCLUDE HEAT DETECTOR AND MANUAL PUSH BUTTON STATION. UPON DETECTION OF HEAT OR ACTIVATION OF THE "ON" BUTTON, THE MAKEUP AIR UNIT SHALL PROVIDE TO BE ON. UPON PROOF THAT THE MAKEUP AIR UNIT IS RUNNING, THE KITCHEN EXHAUST FAN WILL BE ACTIVATED. IF THE MAKEUP AIR UNIT DOES NOT GIVE PROOF, THE EXHAUST FAN DOES NOT ACTIVATE. IN A FIRE SITUATION WHERE THE ANSUL SYSTEM OPERATES, THE EXHAUST FAN WILL CONTINUE TO OPERATE AND THE MAKEUP AIR UNIT WILL CEASE OPERATION.
- TYPE 1 HOOD SHALL BE INTERLOCKED WITH KITCHEN ROOFTOP UNIT. KITCHEN ROOFTOP UNIT MUST OPERATE IN "FAN ON" MODE WHILE TYPE 1 HOOD EXHAUST FAN IS OPERATING.

FLAG NOTES

- CONNECT NEW TO EXISTING. FIELD VERIFY EXISTING SIZE AND LOCATION PRIOR TO PROVIDING NEW WORK.
- DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- INTERLOCK HOOD FIRE SUPPRESSION SYSTEM WITH MAKEUP AIR UNIT SUCH THAT MAKEUP AIR UNIT SHUTS DOWN IF FIRE SUPPRESSION SYSTEM IS ACTIVATED.
- INTERLOCK HOOD FIRE SUPPRESSION SYSTEM WITH ALL FUEL SHUTOFFS.
- PROVIDE GAS WATER HEATER VENT UP TO CONCENTRIC TERMINATION PER MANUFACTURER'S RECOMMENDATIONS AND NFPA 54. SEE DETAIL 4 ON SHEET M3.1. SEAL WALL PENETRATION WATER TIGHT.
- INSTALL DUCT TIGHT TO BOTTOM OF STRUCTURE. TRANSITION DUCT TO FOLLOW SLOPE OF ROOF.
- PAINT EXPOSED DUCTWORK AND REGISTERS VISIBLE TO PUBLIC. COORDINATE EXACT COLOR WITH ARCHITECT AND OWNER. CONSTRUCT DUCT TO BE PAINTED WITH GRIP FINISH.
- CONNECT NEW SARA DUCT TO EXISTING SARA DUCT. FIELD VERIFY EXISTING DUCT LOCATION AND SIZE. TRANSITION SARA DUCT TO EXISTING DUCT AS REQUIRED.
- MOUNT DUCT AS HIGH AS POSSIBLE AND MAINTAIN 12" AIR GAP ABOVE OPENING. ELBOW RETURN AIR OPENING UP TOWARD EXISTING STRUCTURE. PROVIDE 1/2"x1/2" WIRE MESH SCREEN WITH FRAME OVER OPENING.
- EXPOSED RECTANGULAR DUCT SHALL BE LINED. ROUTE DUCT TIGHT TO BOTTOM OF STRUCTURE. COORDINATE DUCT ROUTING WITH LIGHT FIXTURES AND ARCHITECTURAL.
- 18"Ø EA DUCT UP IN EXISTING CHASE TO WALL MOUNTED KEF-1. COORDINATE WITH STRUCTURE. TRANSITION TO KEF-1 OPENING SIZE AS REQUIRED. EXHAUST FAN AND OVEN MANUFACTURER'S RECOMMENDATIONS AND CODE REQUIREMENTS.
- ROUTE E.A. DUCTWORK FROM KITCHEN HOOD DUCT COLLAR TO KEF-1. DUCTWORK SHALL BE ALL WELDED CARBON STEEL PER NFPA 96 AND ALL LOCAL CODE REQUIREMENTS. PROVIDE FIRE RATED DUCT INSULATION PER MANUFACTURER'S REQUIREMENTS TO MAINTAIN ZERO CLEARANCE TO COMBUSTIBLES.
- KITCHEN HOOD KEF-1. INSTALL TYPE 1 RANGE HOOD PER NFPA 96, IBC 2021, MANUFACTURER'S RECOMMENDATIONS AND ALL LOCAL CODES.
- PROVIDE MANUAL PULL STATION FOR HOOD FIRE SUPPRESSION SYSTEM PER NFPA 96 REQUIREMENTS. VERIFY LOCATION WITH LOCAL AUTHORITY HAVING JURISDICTION AND COORDINATE THE COMPLETE INSTALLATION WITH ALL OTHER TRADES. REMOVE PULL STATION FOR HOODS SHALL BE NO LESS THAN 10'-0" AND NO MORE THAN 20'-0" FROM HOOD ALONG PATH OF EGRESS PER IFC.
- 2020 G.A. RA DUCT TO MAU-1 LOCATED ON LOWER ROOF. COORDINATE WITH ARCHITECTURE AND STRUCTURE. TRANSITION DUCT TO MAU-1 OPENING SIZE AS REQUIRED.
- TYPE 1 HOOD - LISTED AND LABELED MATERIALS. INSTALLATION, FIRE SUPPRESSION, GREASE DUCT WITH CLEANOUTS CLEARANCES, TERMINATIONS AND MAKEUP AIR ALL IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN IBC 2021 WITH LOCAL AMENDMENTS.
- RELOCATE EXISTING THERMOSTAT TO LOCATION INDICATED. PROVIDE ADDITIONAL CONTROL WIRING AS REQUIRED. COORDINATE T-STAT LOCATION WITH ARCHITECT AND TENANT.
- EXPOSED ROUND DUCT SHALL BE DOUBLE WALL WITH 1" INTERSTITIAL LINER. ROUTE DUCT TIGHT TO BOTTOM OF STRUCTURE. COORDINATE DUCT ROUTING WITH LIGHT FIXTURES AND ARCHITECTURAL. MOUNT DUCT AS HIGH AS POSSIBLE.
- EXISTING VRF UNIT TO REMAIN. PROVIDE COMPLETE SERVICE INCLUDING CLEANING OF COILS COMPLETE CHARGE OF REFRIGERANT, CHANGE OF BELTS AND NEW FILTERS. REPORT ADDITIONAL NEEDED REPAIRS TO BUILDING OWNER. BALANCE SUPPLY AIR TO 600 CFM. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES AROUND UNIT.
- EXISTING REFRIGERANT PIPING UP TO OUTDOOR UNIT TO REMAIN. VERIFY EXACT LOCATION IN FIELD. PROVIDE COMPLETE SERVICE INCLUDING CLEANING, COMPLETE CHARGE OF REFRIGERANT AND CHANGE OF BELTS. REPORT ADDITIONAL NEEDED REPAIRS TO BUILDING OWNER. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES AROUND UNIT.
- MAINTAIN 10'-0" MINIMUM FROM ALL OUTSIDE AIR INTAKES.
- INTERLOCK HOOD EXHAUST FAN WITH MAKEUP AIR UNIT SUCH THAT EXHAUST FAN CANNOT RUN IF MAKEUP AIR UNIT IS NOT RUNNING.
- LOCATE NEW MAKEUP AIR UNIT AT APPROXIMATE LOCATION INDICATED. COORDINATE EXACT LOCATION WITH STRUCTURE. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.
- LOCATE NEW VRF-FHP UNIT AT APPROXIMATE LOCATION INDICATED. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.
- PROVIDE GUARD RAIL FOR MECHANICAL EQUIPMENT LOCATED WITHIN 10'-0" OF ROOF EDGE. COORDINATE WITH ARCHITECT AND ARCHITECTURAL.
- ELECTRIC HEAT BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS.
- INSTALL NEW VRF ROOM SENSORS AND ALL REQUIRED CONTROL WIRING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE SENSOR LOCATION WITH ELECTRICAL CONTRACTOR.
- EXISTING ELECTRIC UNIT HEATERS TO REMAIN. SEE ELECTRICAL.



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

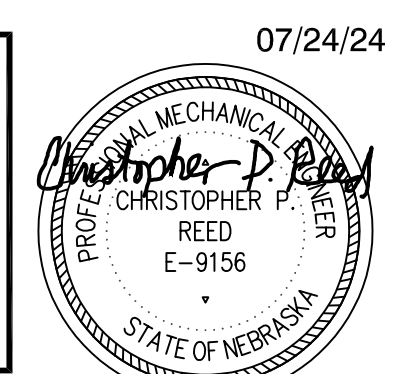
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KITCHEN EQUIPMENT CONNECTION SCHEDULE (1) (2) (3) (4) (15)

MARK	ITEM	CW	HW	FW	WASTE	VENT	GAS	NATURAL GAS LOAD (CFH)	REMARKS
1	THREE COMPARTMENT SINK	3/4"	3/4"	-	(3) 2"	-	-	-	(7) (10)
2	SODA WITH ICE BIN	1/2"	-	-	1"	-	-	-	(5) (11) (13)
3	CONVECTION OVEN	-	-	-	-	-	3/4"	90	(6)
4	CHAR BROILER	-	-	-	-	-	3/4"	80	(6)
5	UNDER COUNTER DISHWASHER	1/2"	1/2"	-	1-1/2"	-	-	-	(5) (8)
6	DISHMACHINE	3/4"	3/4"	-	2"	-	-	-	(5) (8)
7	FRYER	-	-	-	-	-	3/4"	150	(6)
8	GRIDDLE	-	-	-	-	-	3/4"	50	(6)
9	HAND SINK	1/2"	1/2"	-	1-1/2"	1-1/2"	-	-	(14)
10	ICE CUBE MACHINE	-	-	1/2"	3/4"	-	-	-	(5) (9) (12)
11	CONVECTION OVEN	-	-	-	-	-	3/4"	390	(6)
12	WALK-IN FREEZER (EVAP. COIL)	-	-	-	3/4"	-	-	-	(5)
13	WALK-IN COOLER (EVAP. COIL)	-	-	-	3/4"	-	-	-	(5)
14	WATER SOFTENER	1-1/2"	-	-	3/4"	-	-	-	(3) (5) (6) (15)
15	DIRTY DISH SINK	3/4"	3/4"	-	2"	-	-	-	(5)

- VERIFY ALL EQUIPMENT CONNECTIONS AND SIZES WITH EQUIPMENT MANUFACTURER'S AND FOOD SERVICE DRAWINGS. FIELD VERIFY CONNECTION SIZES AND LOCATION OF UTILITIES AS REQUIRED. INSTALL ALL EQUIPMENT PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND LOCAL PLUMBING CODE.
- VERIFY ALL BACKFLOW PREVENTION REQUIREMENTS WITH A.H.I. PROVIDE BACKFLOW PREVENTION DEVICES AS REQUIRED BY LOCAL PLUMBING CODE.
- PROVIDE ISOLATION VALVES, FLOW CONTROL VALVE, SIPHON BREAKER AND LL OTHER SPECIALTIES PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND LOCAL PLUMBING CODE.
- PROVIDE WATER STOPS AT EACH PIECE OF EQUIPMENT. WATER STOPS SHALL BE IN AN ACCESSIBLE LOCATION.
- HARD PIPE INDIRECT WASTE CONNECTION FROM EQUIPMENT DRAIN TO NEAREST FLOOR SINK. MAINTAIN CODE REQUIRED AIR GAP AND DISCHARGE TO FLOOR SINK.
- PROVIDE GAS COOK. LBS. TO OZ. GAS PRESSURE REGULATOR, DIRT LEG AND UNION AT APPLIANCE. VERIFY CONNECTION REQUIREMENTS WITH FOOD SERVICE EQUIPMENT SUPPLIER. PROVIDE QUICK CONNECT FLEXIBLE GAS CONNECTIONS AT KITCHEN APPLIANCES. VENT REGULATOR TO OUTSIDE AS REQUIRED.
- PROVIDE 1/2" WASTE FROM EACH SINK COMPARTMENT DRAIN TO 2" CONTINUOUS WASTE HEADER. DISCHARGE 2" WASTE HEADER INDIRECT TO FLOOR SINK. MAINTAIN CODE REQUIRED AIR GAP AND DISCHARGE TO FLOOR SINK.
- PROVIDE BACKFLOW PREVENTER AT APPLIANCE WATER CONNECTION PER LOCAL PLUMBING CODE REQUIREMENTS.
- ICE MAKER IS AIR-COOLED. PROVIDE BACKFLOW PREVENTER AND ANY REQUIRED SPECIALTIES PER MANUFACTURER'S RECOMMENDATIONS AND LOCAL PLUMBING CODE.
- ROUTE 3/4" CW AND 3/4" HW TO MULTI-COMPARTMENT SINK.
- PROVIDE DRAIN AS REQUIRED PER MANUFACTURER'S RECOMMENDATIONS. PIPE INDIRECT WASTE CONNECTION FROM EQUIPMENT TO NEAREST FLOOR SINK. PIPE FLOOR SINK WITH CORROSIVE RESISTANT MATERIALS PER LOCAL PLUMBING CODE.
- ROUTE 1/2" CW TO FILTER. ROUTE 1/2" FILTERED CW FROM FILTER TO ICE MAKER.
- PROVIDE 6" PVC PIPING BELOW FLOOR AND ABOVE CEILING FROM BAG & BOX TO BEVERAGE DISPENSERS. COORDINATE EXACT ROUTING AND REQUIREMENTS WITH BEVERAGE SUPPLIER.
- PROVIDE BELOW DECK THERMOSTATIC MIXING VALVE SERVING HOT WATER SUPPLY. SET MAX TEMPERATURE TO 110° F.
- INFORMATION INCLUDED IN SCHEDULE HAS BEEN BASED ON LIMITED DESIGN INFORMATION AVAILABLE AT TIME OF CONSTRUCTION DOCUMENTS. COORDINATE EQUIPMENT LOCATIONS, CONDUIT ROUTING, DEVICE MOUNTING HEIGHTS AND POWER CONNECTIONS INCLUDING VOLTAGE, PHASE, BREAKER, CONDUIT AND RECEPTACLE CONFIGURATION WITH OWNER, KITCHEN EQUIPMENT SUPPLIER AND REVIEWED KITCHEN EQUIPMENT SUBMITTALS PRIOR TO ROUGH IN AND PURCHASE OF LONG LEAD TIME EQUIPMENT. COORDINATE ANY CHANGES REQUIRED TO THE INFORMATION ABOVE WITH THE ENGINEER OF RECORD. MAKE ANY CHANGES REQUIRED AT NO ADDITIONAL COST TO OWNER.

GENERAL NOTES

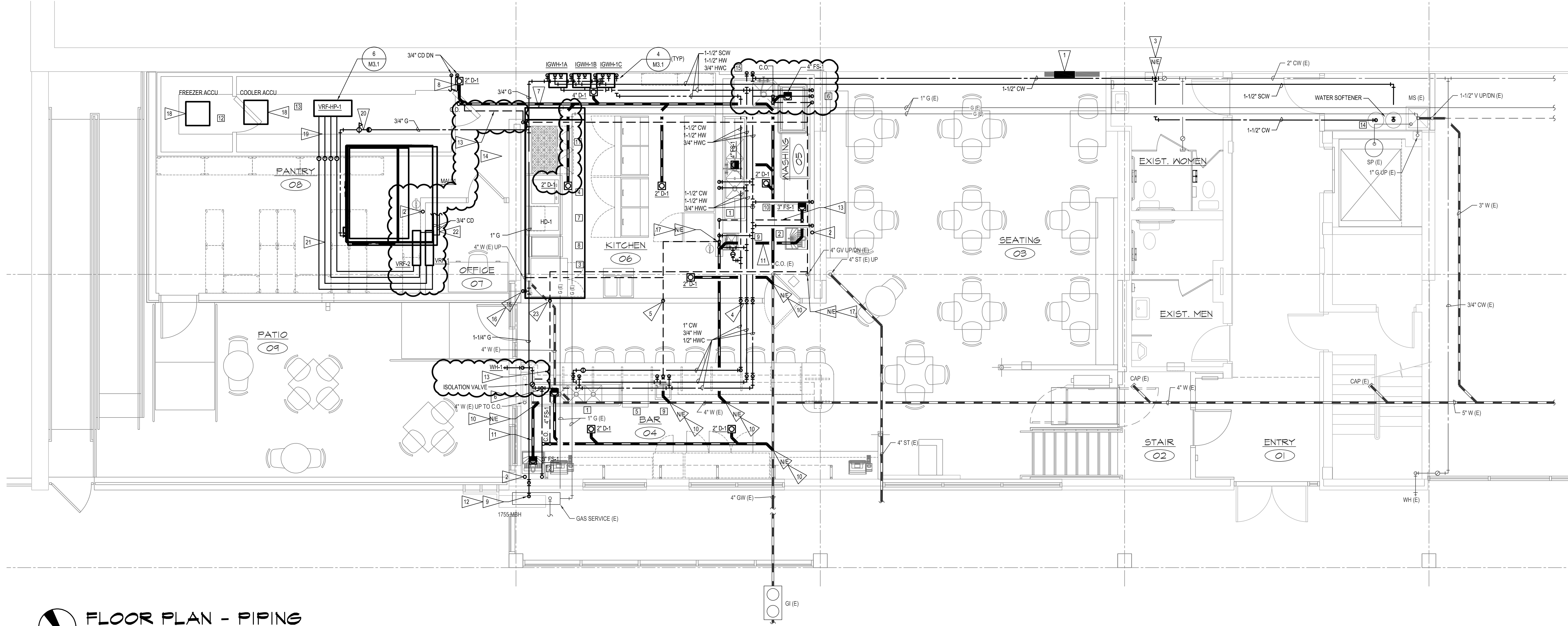
- NOT ALL EXISTING MECHANICAL ITEMS ARE SHOWN ON PLAN. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO NEW WORK. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING PIPING AS NECESSARY TO AVOID CONFLICTS WITH EXISTING CONDITIONS AND WITH ALL TRADES OF NEW WORK.
- MECHANICAL ITEMS SHOWN LIGHT AND / OR INDICATED WITH (E) ARE EXISTING. ALL ITEMS SHOWN DARK ARE NEW. ALL ITEMS INDICATED WITH (R) ARE RELOCATED.
- DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- MECHANICAL CONTRACTOR TO COORDINATE ALL KITCHEN EQUIPMENT REQUIREMENTS WITH FOOD SERVICE EQUIPMENT SUPPLIER AND EQUIPMENT MANUFACTURER.
- MECHANICAL CONTRACTOR TO MAKE FINAL CONNECTIONS TO KITCHEN EQUIPMENT, COORDINATE CONNECTION SIZE, LOCATION AND REQUIRED PLUMBING SPECIALTIES WITH FOOD SERVICE EQUIPMENT SUPPLIER AND EQUIPMENT MANUFACTURER.
- CONNECT BACKFLOW PREVENTERS AT WATER CONNECTIONS TO KITCHEN EQUIPMENT AS REQUIRED BY LOCAL PLUMBING CODE.
- PROVIDE WATER STOPS AT EACH PIECE OF KITCHEN EQUIPMENT. WATER STOPS SHALL BE IN AN ACCESSIBLE LOCATION.
- SPACE ABOVE CEILING IS LIMITED. COORDINATE PIPE ROUTING WITH ALL OTHER TRADES. PROVIDE ALL ADDITIONAL OFFSETS AND TRANSITIONS AS REQUIRED TO COMPLETE INSTALLATION.
- INSTALL ALL ISOLATION VALVES AND BALANCING VALVES IN ACCESSIBLE LOCATIONS.
- ALL PIPING SHOWN FOR CLARITY. ROUTE WASTE, VENT, WATER AND GAS PIPING CONCEALED IN CHASES, IN WALLS OR ABOVE CEILING AS REQUIRED.
- DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS UNLESS OTHERWISE NOTED. PIPING ROUTED IN EXTERIOR WALLS SHALL BE LOCATED ON WARM-IN/WINTER SIDE OF INSULATION.
- NOT ALL CLEANOUTS ARE SHOWN. PROVIDE CLEANOUTS PER LOCAL PLUMBING CODE. COORDINATE CLEANOUT LOCATIONS WITH GENERAL CONTRACTOR.
- COORDINATE ALL BELOW GRADE PIPING WITH EXISTING STRUCTURAL FOOTINGS. OFFSET BELOW GRADE PIPING AS REQUIRED TO AVOID CONFLICTS.
- SEE PLUMBING FIXTURE SCHEDULE ON SHEET M4.1 FOR PLUMBING FIXTURE CONNECTION REQUIREMENTS.
- SEE KITCHEN EQUIPMENT SCHEDULE ON THIS SHEET FOR KITCHEN EQUIPMENT CONNECTION REQUIREMENTS.
- ALL PLUMBING SHALL BE IN ACCORDANCE WITH THE LOCAL PLUMBING CODE.
- VERIFY ALL PLUMBING CONNECTIONS WITH THE KITCHEN EQUIPMENT AND KITCHEN EQUIPMENT SUPPLIER.
- SEE WASTE AND VENT DIAGRAM ON SHEET M3.1 FOR WASTE AND VENT PIPE SIZES.
- SEE FLOOR PLANS FOR HOT WATER CIRCULATION (HWC) MAIN SIZES. ALL HWC BRANCHES SHALL BE 1/2". ALL BALANCE VALVES SHALL BE AUTOMATIC BALANCING VALVES SET AT 0.5 GPM.

FIRE SPRINKLER NOTES

- THE EXISTING BUILDING IS PROTECTED BY A WET PIPE NFPA 13 FIRE SPRINKLER SYSTEM. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS INCLUDING PIPE SIZES AND LOCATIONS. SPRINKLER HEAD LOCATIONS, FLOW SWITCHES, ZONE VALVES, AVAILABLE PRESSURE, ETC. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT AND MATERIALS NECESSARY TO MODIFY SYSTEM TO MEET REQUIREMENTS OF NFPA 13 AND THE AUTHORITY HAVING JURISDICTION.
- EXISTING FIRE SPRINKLER PIPING SHALL BE REMOVED AS REQUIRED FOR NEW WORK ASSOCIATED WITH TENANT FINISH. COORDINATE EXTENT OF DEMOLITION REQUIRED WITH MECHANICAL DRAWINGS AND ARCHITECTURAL DRAWINGS. NEW DUCTWORK AND NEW CEILING HAVE PRIORITY OVER EXISTING FIRE SPRINKLER PIPING. IF CONFLICTS OCCUR WITH EXISTING FIRE SPRINKLER PIPING, EXISTING FIRE SPRINKLER SHALL BE REMOVED.
- MODIFY EXISTING FIRE SPRINKLER SYSTEM TO ACCOMMODATE TENANT FINISH SUCH TO PROVIDE A FIRE SPRINKLER SYSTEM THAT MEETS THE REQUIREMENTS OF NFPA 13 AND AUTHORITY HAVING JURISDICTION.
- CONNECT NEW FIRE SPRINKLER PIPING TO THE EXISTING SPRINKLER PIPING. RELOCATE EXISTING SPRINKLER PIPING AS REQUIRED BY NEW WALLS, CEILING, LIGHTS, MECHANICAL EQUIPMENT, ETC. COORDINATE WITH ALL OTHER TRADES.
- PIPING MATERIAL AND SPRINKLER HEADS SHALL MEET THE REQUIREMENTS OF NFPA 13. CPVC PIPING WILL NOT BE ALLOWED. ENTIRE TENANT FINISH SHALL HAVE NEW FIRE SPRINKLER HEADS. SEE FIRE SPRINKLER SPEC SECTION 211000 ON SHEET M5.1 FOR FIRE SPRINKLER HEAD REQUIREMENTS.
- COORDINATE LOCATION OF ALL SPRINKLER HEADS AND PIPING WITH ALL OTHER TRADES. IF CONFLICTS DO OCCUR SUCH THAT LIGHTS, DUCTWORK OR CEILING SYSTEMS CANNOT BE INSTALLED DUE TO SPRINKLER PIPING INTERFERENCE, THE PIPING SHALL BE RELOCATED AT NO ADDITIONAL EXPENSE TO THE PROJECT.
- SEE SPECIFICATION SECTION 211000 ON SHEET M5.1.

FLAG NOTES

- CONNECT NEW TO EXISTING. FIELD VERIFY EXISTING SIZE AND LOCATION PRIOR TO PROVIDING NEW WORK.
- DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- CONTRACTOR TO PROVIDE 6" PVC PATHWAYS WITH LONG SWEEPS FOR BEER/SODA LINES SHOWN ON FOOD SERVICE EQUIPMENT DRAWINGS FROM COOLER/BAG IN BOX TO BEER/SODA DISPENSER. COORDINATE ABOVE CEILING ROUTING WITH EXISTING CONDITIONS AND ALL OTHER TRADES. COORDINATE ANY BELOW GRADE PIPING WITH EXISTING STRUCTURAL AND BELOW GRADE UTILITIES. COORDINATE ALL REQUIREMENTS WITH BEER/SODA SUPPLIER.
- CONNECT NEW 2" CW TO EXISTING 2" CW WITH ISOLATION VALVE. FIELD VERIFY EXISTING SIZE AND CONNECTION LOCATION OF EXISTING CW. EXTEND AND OFFSET NEW PIPING AS REQUIRED TO MAKE CONNECTION TO EXISTING CW PIPING.
- 1-1/2" ISLAND VENT IN WALL FROM HAND SINK.
- ROUTE 1/2" CW DOWN TIGHT TO BACK OF COUNTER TO BELOW FLOOR. ROUTE 1" CW TO BACK OF COUNTER TO BAR EQUIPMENT.
- ANSUL R102 WET CHEMICAL KITCHEN HOOD FIRE PROTECTION SYSTEM (OR EQUAL). PROVIDE WET CHEMICAL AGENT, PIPING, NOZZLES, AND CONTROLS AS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM. SYSTEM SHALL MEET NFPA 17A, NFPA 98 AND ALL OTHER APPLICABLE CODES. MOUNT SYSTEM ON HOOD PER MANUFACTURER'S RECOMMENDATIONS. LOCATE PULL STATION AS REQUIRED BY CODE. COORDINATE EXACT LOCATION OF ALL SYSTEM COMPONENTS WITH ALL OTHER TRADES. KITCHEN EQUIPMENT PLACEMENT AND KITCHEN EQUIPMENT SUPPLIER. SEE SUPPLEMENTAL MECHANICAL DRAWINGS SHEETS M6.1-M6.2 FOR MORE INFORMATION.
- ROUTE CONDENSATE DRAIN FROM WALK-IN COOLER/FREEZER EVAPORATOR TO INDIRECT DISCHARGE AT FLOOR SINK.
- CONNECT NEW 1/4" GAS AND METER TO EXISTING GAS HEADER. FIELD VERIFY EXISTING SIZE AND CONNECTION LOCATION OF EXISTING GAS. EXTEND AND OFFSET NEW PIPING AS REQUIRED TO MAKE CONNECTION TO EXISTING GAS PIPING.
- CONNECT NEW WASTE/GREASE WASTE TO EXISTING WASTE/GREASE WASTE AT LOCATION INDICATED. FIELD VERIFY EXISTING SIZE, LOCATION, ELEVATION AND DIRECTION OF FLOW OF EXISTING WASTE. EXTEND AND OFFSET PIPING AS REQUIRED TO MAKE CONNECTION TO EXISTING WASTE. PATCH FLOOR TO MATCH EXISTING.
- WASTE PIPING FOR FLOOR SINKS SERVING SODA AND BEER WASTE SHALL BE OF CORROSIVE RESISTANT MATERIAL PER LOCAL PLUMBING CODE.
- NEW 1-1/4" GAS PIPE BACK TO EXISTING GAS METER CENTER. FIELD VERIFY EXACT LOCATION OF EXISTING METER CENTER. COORDINATE NEW METER AND SERVICE LOAD WITH LOCAL GAS COMPANY. APPROXIMATE NEW CONNECTED LOAD = 1755 CFH AT 75'-0" OF EQUIVALENT LENGTH.
- BELOW GRADE VENT. SEE WASTE AND VENT RISER DIAGRAM ON SHEET M3.1.
- 3/4" GAS THROUGH WALL TO MAU-1. SEAL WALL PENETRATION WATER TIGHT.
- AUTOMATIC GAS SHUT-OFF VALVE. VALVE SHALL BE INTERLOCKED TO THE KITCHEN HOOD FIRE PROTECTION SYSTEM. VALVE TO CLOSE UPON ACTIVATION OF FIRE SUPPRESSION SYSTEM. PROVIDE ALL REQUIRED WIRING.
- 1" GAS DOWN TO GAS HEADER SERVING COOKLINE. PROVIDE VENTLESS LBS. TO OZ. PRV AT START OF HEADER. ROUTE 2" GAS (AT 7" W.C.) FROM PRV TO KITCHEN EQUIPMENT ALONG COOKLINE. SEE KITCHEN EQUIPMENT SCHEDULE FOR INDIVIDUAL EQUIPMENT GAS CONNECTION REQUIREMENTS.
- CONNECT NEW VENT/GREASE VENT TO EXISTING 4" VENT/GREASE VENT AT LOCATION INDICATED. FIELD VERIFY EXISTING SIZE AND LOCATION OF EXISTING VENT. EXTEND AND OFFSET PIPING AS REQUIRED TO MAKE CONNECTION IF EXISTING LOCATION VARIES FROM WHAT IS INDICATED ON PLAN.
- REMOTE ACCU UNIT FOR COOLER/FREEZER EVAPORATOR. COORDINATE EXACT LOCATION. REFRIGERANT PIPE ROUTING AND ROOF PENETRATION WITH GENERAL CONTRACTOR. SEAL ALL ROOF PENETRATIONS WATER TIGHT. ROUTE AND SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.
- ROUTE REFRIGERANT PIPING FROM HEAT PUMP DOWN THROUGH ROOF TO WALL MOUNTED VRF UNITS. COORDINATE PIPING WITH ALL TRADES. SIZE OF REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. SEAL ROOF PENETRATION WATER TIGHT.
- PROVIDE GAS COOK. PRV. AND DIRT LEG PRIOR TO CONNECTION TO MECHANICAL EQUIPMENT. CONNECT GAS PIPING TO EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE COMPLETE REFRIGERANT PIPING FOR VRF SYSTEM. ROUTING IS INDICATED SCHEMATICALLY. ALL PIPING SHALL BE SIZED, INSTALLED, AND INSULATED PER MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. PIPE ROUTING SHALL BE COORDINATED WITH EXISTING CONDITIONS. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR IN WALL.
- ROUTE PUMPED CONDENSATE FROM VRF UNIT TO INDIRECT CD DISCHARGE AT FLOOR DRAIN.
- 2" VENT IN WALL FROM FLOOR SINK.

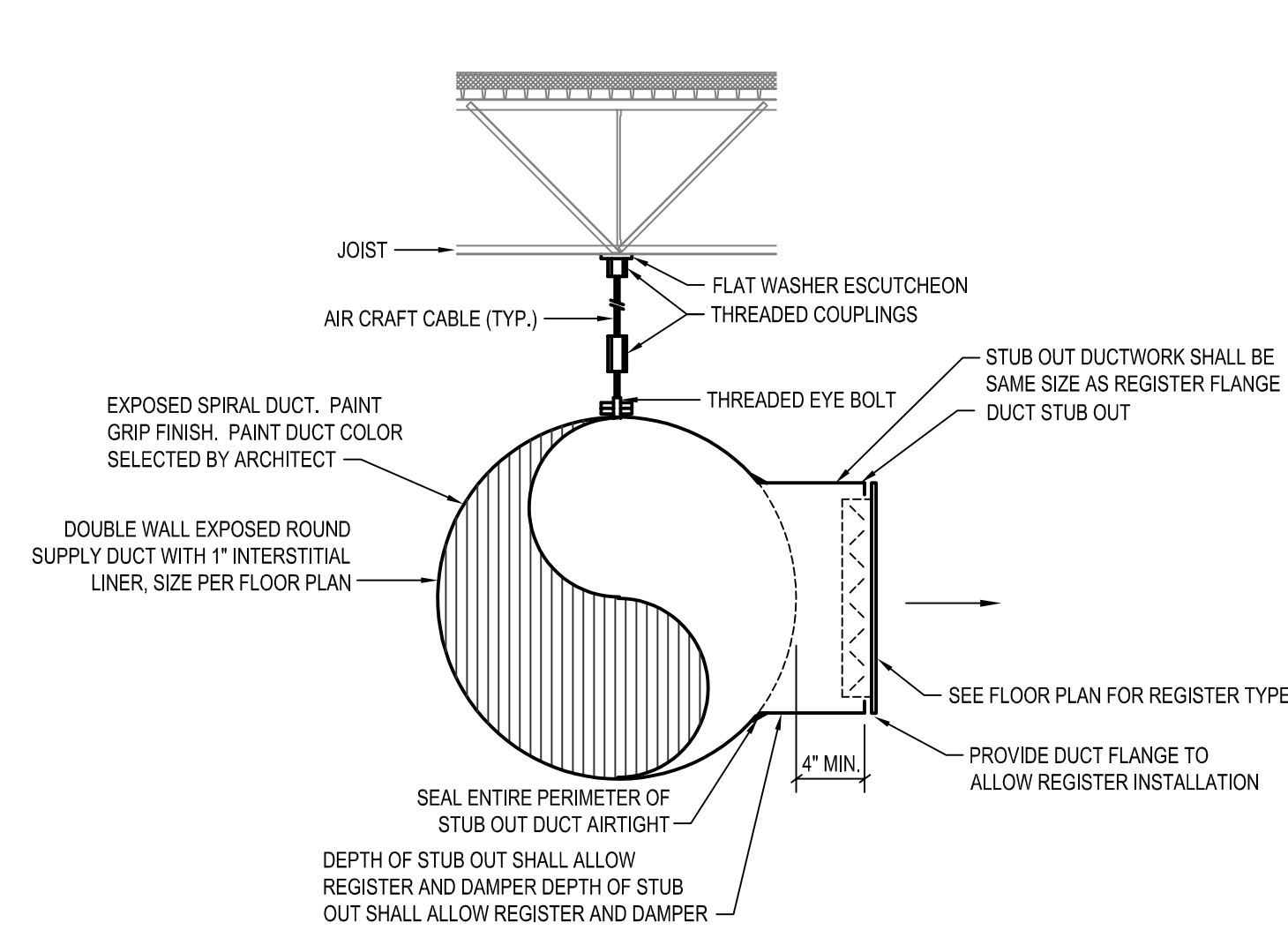
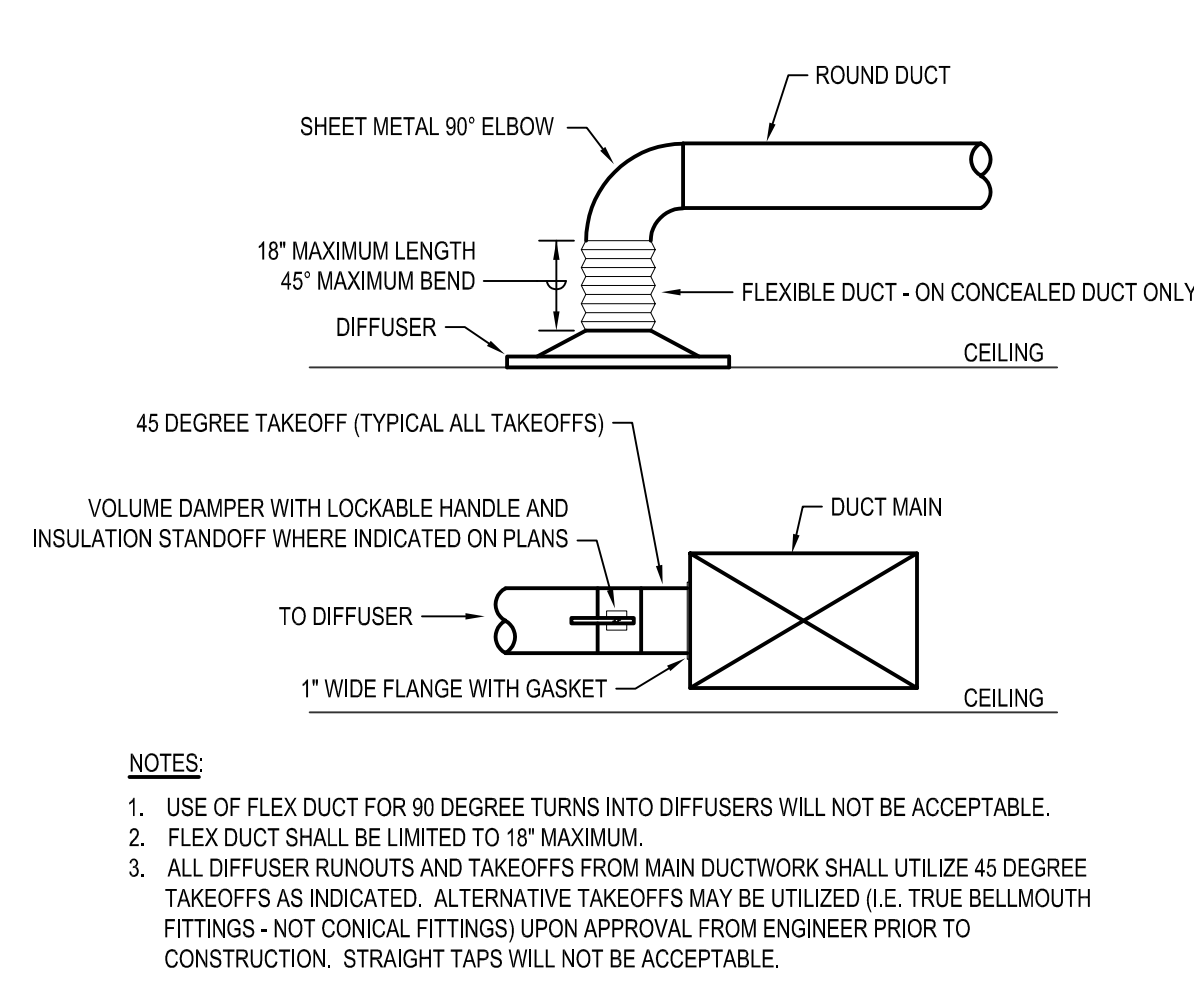
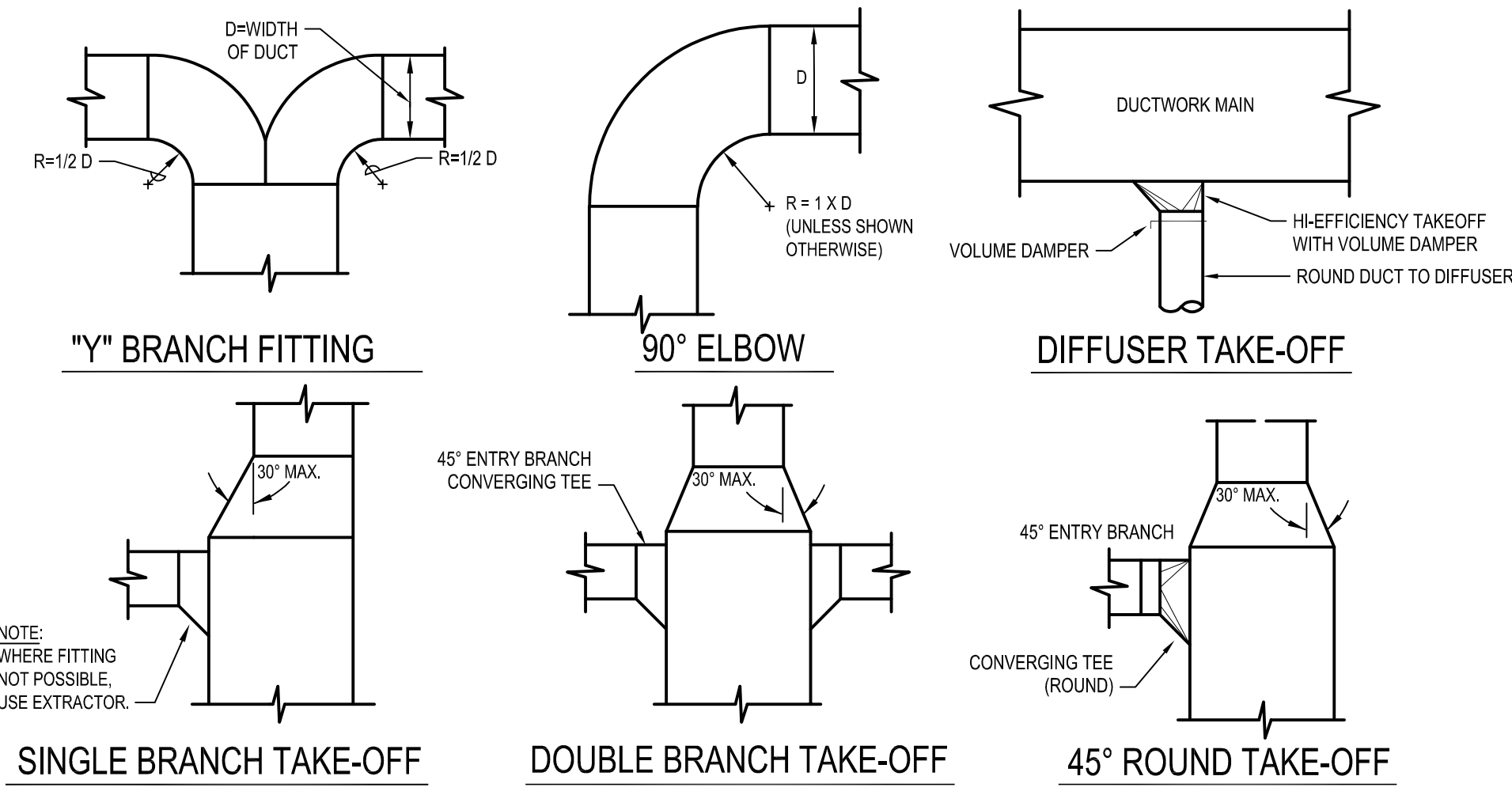


FLOOR PLAN - PIPING
SCALE: 1/4" = 1'-0"
SCALE: 1/4" = 1'-0"

stanley j how
 ARCHITECTS
 HOW | SEIP
 OMAHA, NE 68154
 402.964.9000
 14685 CALIFORNIA ST. OMAHA, NE 68154
 CA-0014
 JOB NO. 2017-25
 DATE 07/24/24
 PROPOSED MEXICAN RESTAURANT
 8601 WEST DODGE ROAD SUITE 101 OMAHA, NEBRASKA
 SHEET M2.1
 07/24/24

MEI NO. 22488

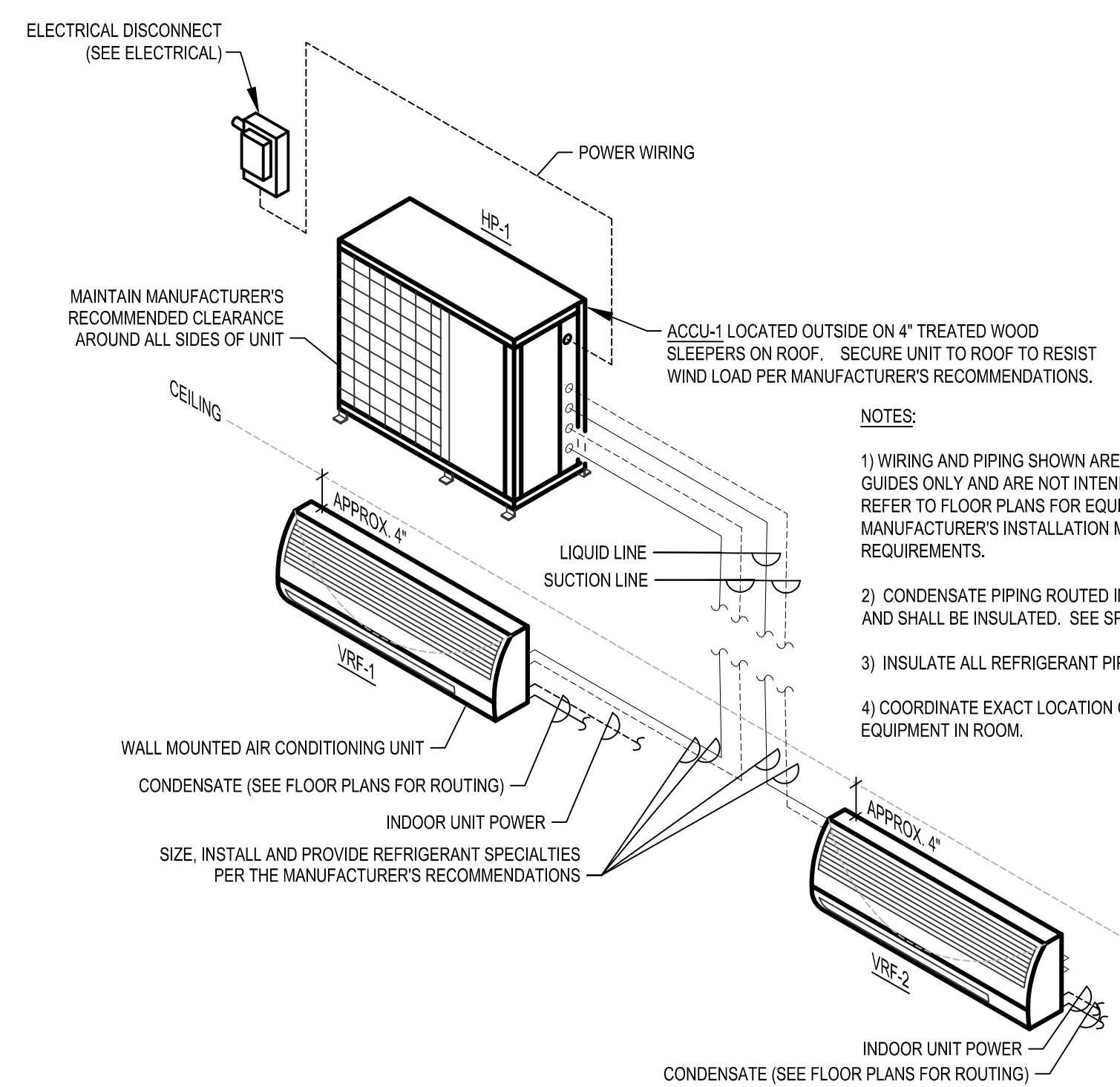
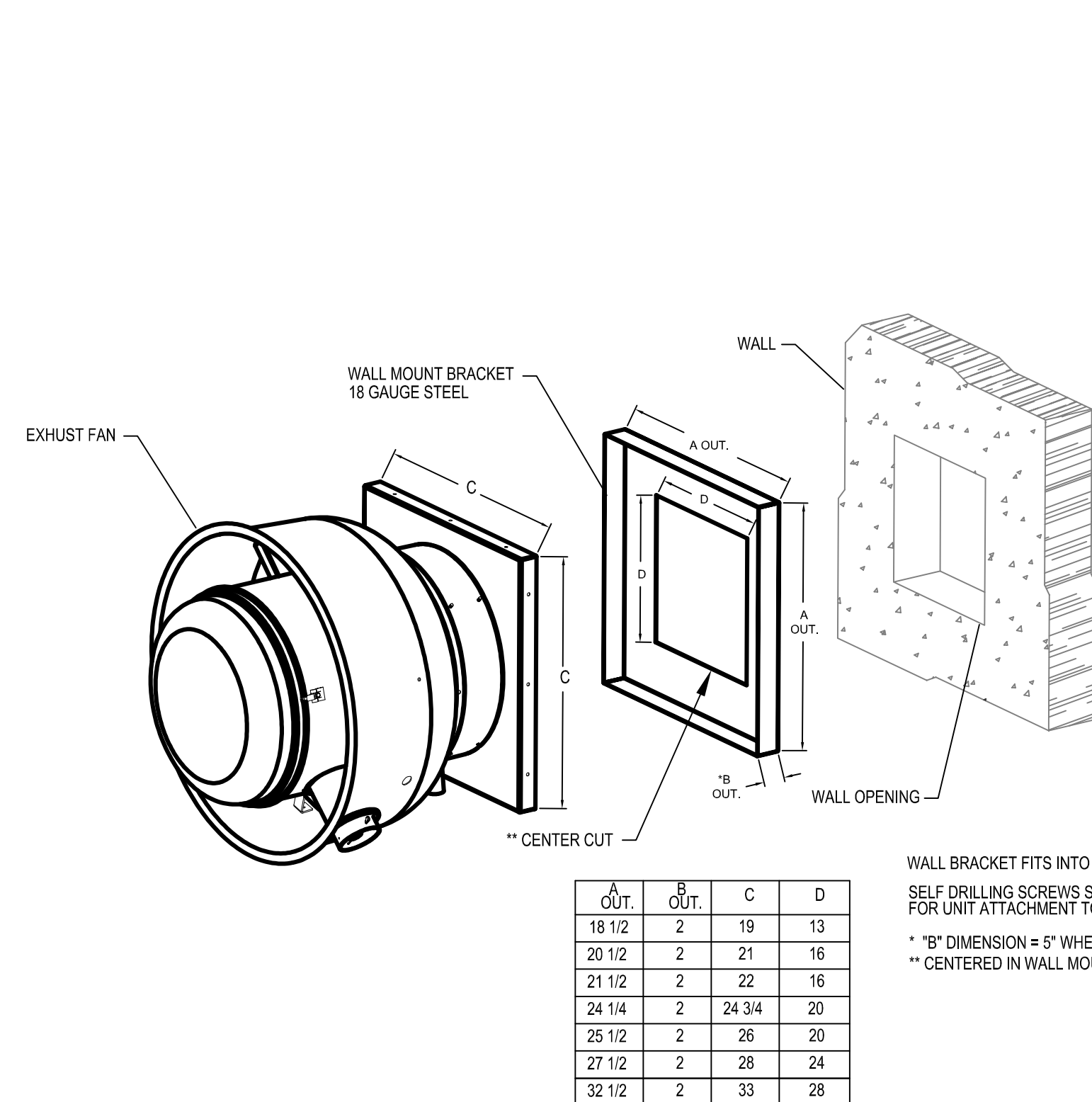
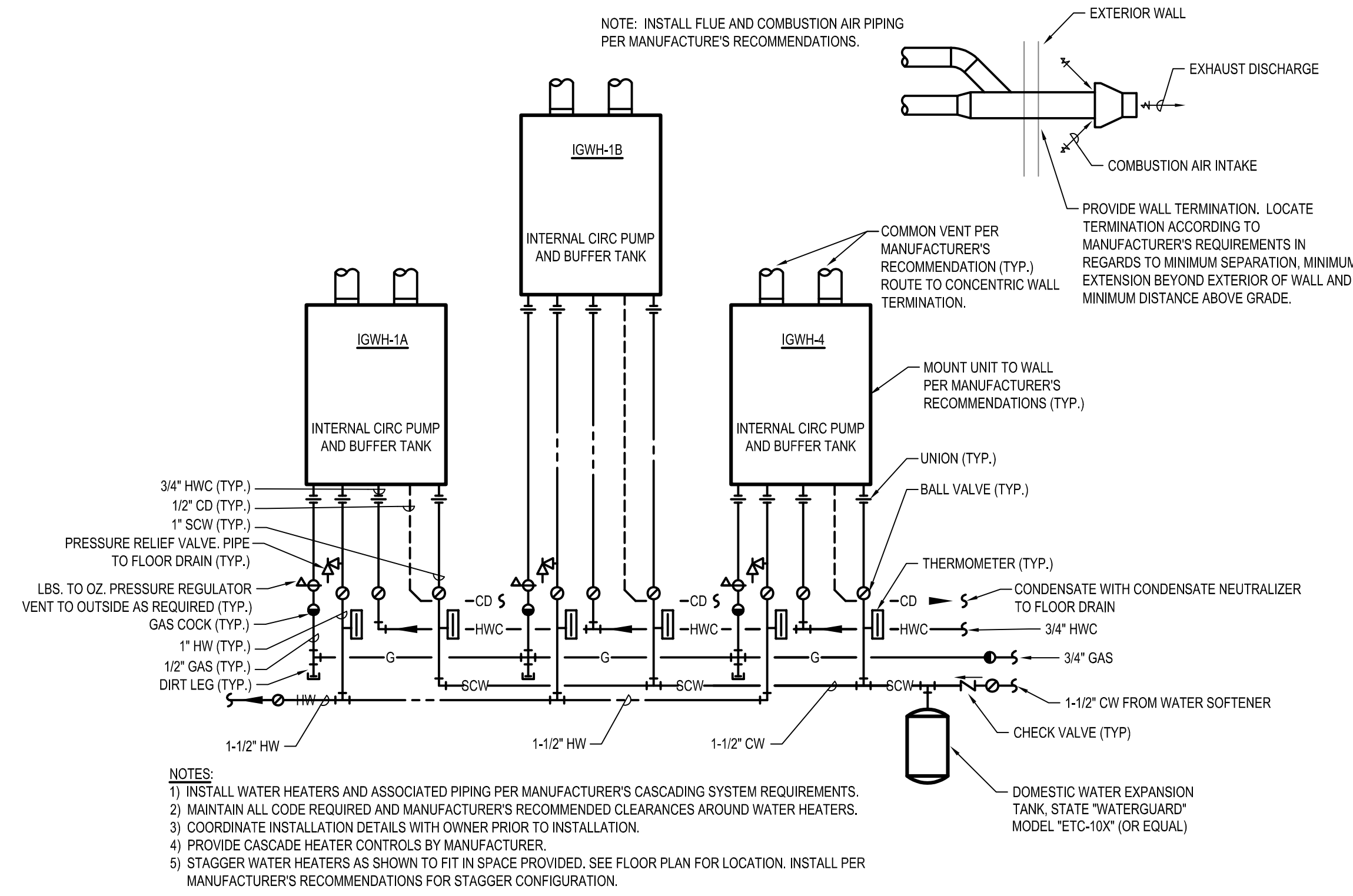
 480 North 18th Street
 Omaha, NE 68114
 P. 402.491.4144
 www.morriseyengineering.com
 I am pleased to provide this design for your project. I warrant that the design complies with applicable codes and standards. I warrant that the design is based on the information provided to me. I warrant that the design is for the use and purpose intended. I warrant that the design is for the use and purpose intended. I warrant that the design is for the use and purpose intended.
 REED
 E-9156
 STATE OF NEBRASKA



1 DUCT FITTING DETAIL
SCALE: NONE

2 DIFFUSER CONNECTION DETAIL
SCALE: NONE

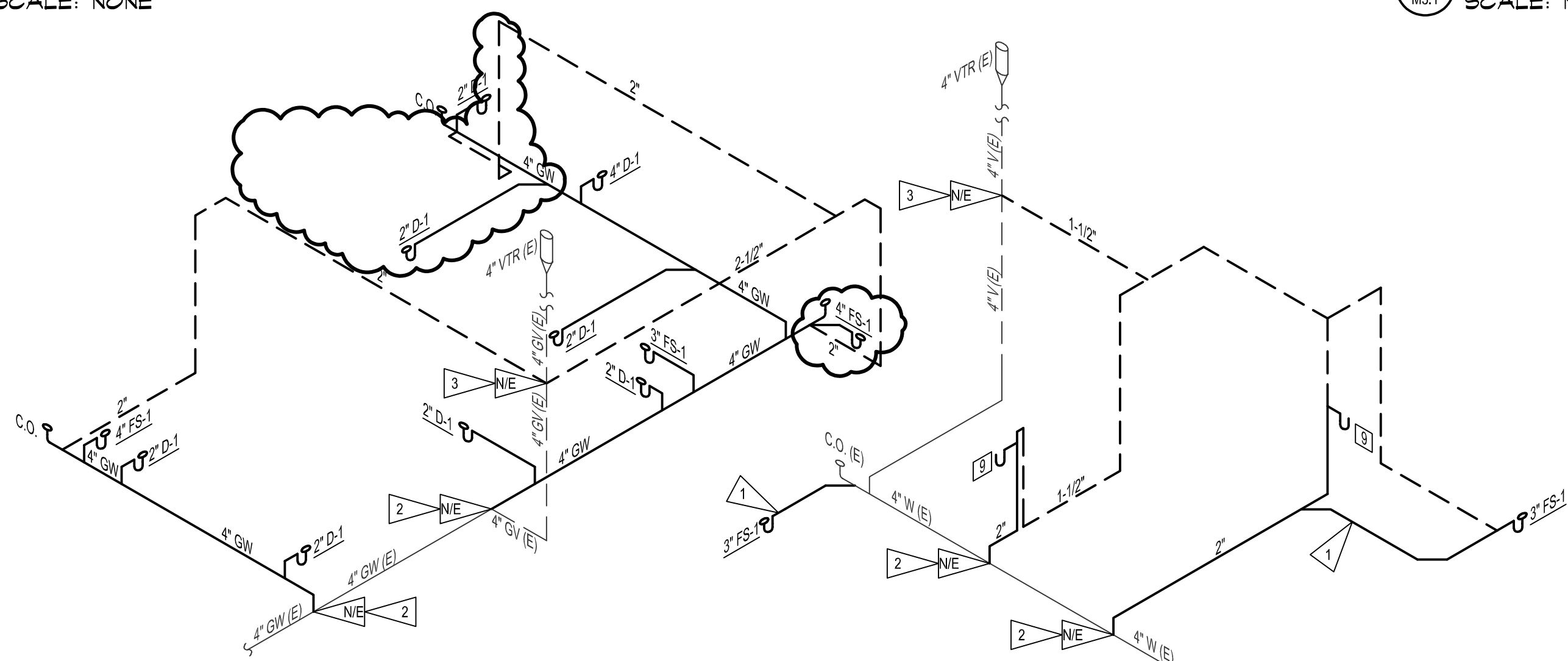
3 EXPOSED DUCT REGISTER DETAIL
SCALE: NONE



4 INSTANTANEOUS GAS WATER HEATER DETAIL
SCALE: NONE

5 SIDEWALL EXHAUST FAN DETAIL
SCALE: NONE

6 DUCTLESS SPLIT SYSTEM DETAIL
SCALE: NONE



- GENERAL NOTES**
- ALL WASTE AND VENT PIPING SHALL BE IN CONFORMANCE WITH OMAHA PLUMBING CODE.
 - PROVIDE CLEANOUTS AS REQUIRED BY OMAHA PLUMBING CODE.
 - PROVIDE MATERIALS AS ALLOWED BY OMAHA PLUMBING CODE.
 - FOR INDIVIDUAL FIXTURE WASTE AND VENT SIZES REFER TO PLUMBING FIXTURE SCHEDULES SHEETS M3.1, 4.
- FLAG NOTES**
- CONNECT NEW TO EXISTING. FIELD VERIFY EXISTING SIZE AND LOCATION PRIOR TO PROVIDING NEW WORK.
 - WASTE PIPING FOR FLOOR SINKS SERVING SODA AND BEER WASTE SHALL BE OF CORROSIVE RESISTANT MATERIAL PER LOCAL PLUMBING CODE.
 - CONNECT NEW WASTE/GREASE WASTE TO EXISTING WASTE/GREASE WASTE AT LOCATION INDICATED. FIELD VERIFY EXACT SIZE, LOCATION, ELEVATION AND DIRECTION OF FLOW OF EXISTING WASTE. EXTEND AND OFFSET PIPING AS REQUIRED TO MAKE CONNECTION IF EXISTING LOCATION VARIES FROM WHAT IS INDICATED ON PLAN. SAW CUT FLOOR AS REQUIRED. PATCH FLOOR TO MATCH EXISTING.
 - CONNECT NEW VENT/GREASE VENT TO EXISTING 4" VENT/GREASE VENT AT LOCATION INDICATED. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING VENT. EXTEND AND OFFSET PIPING AS REQUIRED TO MAKE CONNECTION IF EXISTING LOCATION VARIES FROM WHAT IS INDICATED ON PLAN.

7 WASTE AND VENT RISER DIAGRAM
SCALE: NONE

MEI NO. 22488

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Christopher P. Reed
 REGISTERED PROFESSIONAL ENGINEER
 E-9156
 STATE OF NEBRASKA

MECHANICAL SPECIFICATIONS

SECTION 210100 - GENERAL REQUIREMENTS FOR FIRE SUPPRESSION

A. RELATED DOCUMENTS

- Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.
- Division 21, 22 and 23 Conditions apply to this Section.

B. SUMMARY

- This Section includes general mechanical requirements and shall apply to all phases of the work specified indicated on the drawings or required to provide for complete installation of fire suppression systems.

- Refer to Section 230100 for General Requirements for Mechanical

- Refer to Section 230500 for Basic Mechanical Materials and Methods

- Refer to Section 230550 for Basic Piping Materials and Methods

SECTION 211000 - WATER-BASED FIRE-SUPPRESSION SYSTEMS (RENOVATION)

A. The building is protected by an existing wet pipe NFPA 13 fire sprinkler system. Contractor shall verify existing conditions including pipe sizes and locations, sprinkler head locations, flow switches, zone valves, available pressure and flow, etc. Contractor shall provide all equipment and materials necessary to modify system to meet requirements of NFPA 13 and the Authority Having Jurisdiction.

B. Drawings indicate general layout. Final pipe sizing, pipe routing, and sprinkler head layout shall be by the fire sprinkler contractor.

C. Piping material, fire sprinkler heads, and accessories shall be constructed of materials that meet the requirements of NFPA 13 and the Authority Having Jurisdiction. Steel piping shall be minimum Schedule 10 wall thickness.

- Sprinkler heads shall be as follows:
 - Sprinkler heads in areas without ceilings shall be upright or pendant type.
 - Sprinkler heads in areas with ceiling shall be concealed sprinkler heads with cover plate. Cover plate color shall be selected by the architect from manufacturer's standard colors.
 - Fire sprinkler heads shall be contained in the where installed in lay-in tile ceilings.

E. Space above ceilings is limited. Coordinate location of all sprinkler heads and all existing and new piping with all other trades. If conflicts do occur such that piping, mechanical piping, plumbing or ceiling systems cannot be installed due to sprinkler piping interference, the sprinkler piping shall be relocated at no additional cost to the project.

SECTION 220100 - GENERAL REQUIREMENTS FOR PLUMBING

A. RELATED DOCUMENTS

- Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.
- Division 22 and 23 Conditions apply to this Section.

B. SUMMARY

- This Section includes general mechanical requirements and shall apply to all phases of the work specified indicated on the drawings or required to provide for complete installation of plumbing systems.
- Refer to Section 230100 for General Requirements for Mechanical
- Refer to Section 230500 for Basic Mechanical Materials and Methods

SECTION 220200 - PIPE INSULATION FOR PLUMBING

A. MINERAL-FIBER INSULATION: Glass fibers bonded with a thermosetting resin. Preformed Pipe Insulation: Comply with ASTM C 547, Type 1, with factory-applied, all-purpose, vapor-retarder jacket. Flame-spread rating of 25 or less, and smoke-developed rating of 50 or less. Apply insulation to pipes by securing each layer of preformed pipe insulation to pipe with wire, tape, or bands without deforming insulation materials.

B. FLEXIBLE ELASTOMERIC THERMAL INSULATION: Closed-cell, sponge- or expanded-rubber materials. Comply with ASTM C 554, Type I for tubular materials and Type II for sheet materials. Adhesive as recommended by insulation material manufacturer. Ultraviolet-Protective coating as recommended by insulation manufacturer. Flame-spread rating of 25 or less, and smoke-developed rating of 50 or less. Follow manufacturer's written instructions for applying insulation. Seal longitudinal seams and end joints with manufacturer's recommended adhesive.

C. VAPOR RETARDER: On piping systems operating below ambient space temperature, seal joints and seams with vapor-retarder mastic. Seal penetrations in insulation at hangers, supports, anchors, and other projections with vapor-retarder mastic Mastic.

D. INSULATION APPLICATION SCHEDULE

- Service: Domestic cold water (DW)
Thickness/Material: 1/2" Mineral Fiber
Vapor Retarder Required: Yes

- Service: Domestic hot water and circulating water (HW, HWC)
Thickness/Material: Mineral Fiber. Apply the following insulation thicknesses:
 - Systems without recirculation: 1/2"
 - 1/2" to 2" pipe: 1"
 - 2 1/2" and larger: 1-1/2"Vapor Retarder Required: No

- Service: Domestic hot and cold water, direct buried
Thickness/Material: 3/4" Flexible Elastomeric
Vapor Retarder Required: Yes

- Plumbing vents (V or AV), 2 foot section below roof
Thickness/Material: 1/2" Mineral Fiber
Vapor Retarder Required: Yes

- Service: Sanitary waste and Grease waste piping
Insulation Material: None

SECTION 221100 - WATER DISTRIBUTION PIPING

A. DOMESTIC WATER PIPING: Above ground, hard copper tube, ASTM B 88, Type L; copper, 95-5 solder-joint fittings; and soldered joints. Underground: Soft copper tube, ASTM B 88, Type K; wrought-copper, solder-joint pressure fittings; and soldered joints.

B. VALVES: Provide gate, ball or butterfly isolation valves close to main on each branch and riser serving plumbing fixtures or equipment, and where indicated. Provide globe, ball or butterfly valve for throttling where indicated. Provide supply stops at each plumbing fixture. Provide calibrated or automatic balancing valves as indicated.

C. TESTING: Test water distribution piping according to authority having jurisdiction. Clean and disinfest water distribution piping. Fill water piping. Check components to determine that they are not air bound and that piping is full of water.

SECTION 221300 - DRAINAGE AND VENT PIPING

A. ABOVEGROUND, SANITARY WASTE AND VENT AND STORM PIPING: CIPSI 301, ASTM A888, Hubless, cast-iron soil pipe; hubless, cast-iron, soil-pipe fittings and hubless, cast-iron, Neoprene sleeve coupling with stainless steel clamps.

B. UNDERGROUND, SANITARY WASTE, AND VENT AND STORM PIPING: ASTM A74, Hub-and-spigot, cast-iron soil pipe, Service class: hub-and-spigot, cast-iron, soil-pipe fittings, lead & oakum or compression joints.

C. PIPING INSTALLATION: Make changes in direction for drainages and vent piping using appropriate branches, bends, and long-sweep bends. Do not make change in direction of flow greater than 90 degrees. Lay buried building drain piping beginning at low point of each system. Install true to grades and alignment indicated, with unbroken continuity of invert. Place hub-ends of piping upstream. Install required gaskets according to manufacturer's written instructions.

D. SLOPE: Install drainage and vent piping at the following minimum slopes, unless otherwise indicated:

- Sanitary Piping: 2 percent downward in direction of flow for piping 3-inch NPS and smaller; 1 percent downward in direction of flow for piping 4-inch NPS and larger.
- Vent Piping: 1 percent down toward vertical fixture vent or toward vent stack.

E. TESTING: Test drainage and vent piping according to procedures of authorities having jurisdiction.

SECTION 221310 - PLUMBING SPECIALTIES

A. WATER HAMMER ARRESTERS: ASME A112.28.1M, ASSE 1010, or PDI-WH 201, bellows or piston type with pressurized cushioning chamber. Provide at each battery of fixtures.

B. WATER PRESSURE REGULATORS: Water regulators, rated for initial working pressure of 150 psig minimum, of size, flow rate, and inlet for 80 psig outlet pressure. Install on building service piping.

C. WALL HYDRANTS (WH-1): nonfreeze, automatic draining, anti-backflow type, key operation, with 3/4-inch NPS threaded or solder-joint inlet, and garden-hose threads on outlet. Include operating key for each hydrant. Nickel bronze finish, Woodford Model B65 or equal.

D. WALL CLEANOUTS (WCO): Cast iron body adaptable to pipe with cast bronze, brass cleanout plug; stainless steel cover, vandal proof screws. Install as shown and as required by codes.

E. CLEANOUT PLUGS (CO): Cast iron or brass, threads complying with ANSI B2.1, countersunk head. Engrave heads to identify system.

F. FLOOR CLEANOUTS (FCO): Cast iron body and frame with cleanout plug and adjustable round nickel bronze top. Provide to match floor system:

- Exposed finish type, standard rim finish.
- Exposed flush type, standard non-slip scored or abrasive finish.
- Exposed flush type, standard mat finish and carpet marker.
- Heavy duty for traffic applications.

G. VENT FLASHING (VFR): 24" square minimum. Non-plasticized, chlorinated, polyethylene, concealed, waterproof membrane, 0.40" thick, solvent weldable or lead sheet, 2-1/2" thick, concealed.

224000 PLUMBING FIXTURES

A. Installation: Install handles for accessible water closets and urinals with handle mounted on wide side of compartment. Install individual stop valve in each water supply to fixture. Install water-supply stop valves in accessible locations, install traps on fixture outlets. Drain traps on fixtures having integral traps and on indirect wastes. Vent all fixtures as required by local code. Seal joints between fixtures and walls, floors, and counters using sanitary-type, 1-part, milium-resistor, silicone sealant. Match sealant color to fixture color. Install hot and cold water supply, waste and vent piping of sizes indicated, but not smaller than required by authorities having jurisdiction.

B. DEFINITIONS ABBREVIATIONS - The following shall apply throughout the contract documents:

Furnish	Supply and deliver to site ready for installation
Indicated	Noted, scheduled or specified
Provide	Furnish, install and connect complete and ready for final use
ADA	Americans with Disabilities Act
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
NEC	National Electric Code (NFPA 70)
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
UL	Underwriters Laboratories Inc.

C. CODES AND STANDARDS - All work shall be performed by competent craftsmen skilled in the trade involved and shall be done in a manner consistent with normal industry standards. All work shall conform to the currently adopted edition of the National Electric Code (NEC), Local Building Code, Local Plumbing Code, Local Mechanical Code, Local Fire Code, and all other applicable state and local codes or standards, where there is a conflict between the code and the contract documents, the code shall have precedence only then it is more stringent than the contract documents.

D. PERMITS - Contractor shall become familiar and comply with all requirements regarding permits, fees, licenses, etc. All permits, licenses, inspections and arrangements required for the work shall be obtained by Contractor's effort and expense. All utilities shall be installed in accordance with the local rules and regulations and all charges shall be paid by the Contractor.

E. SUBMITTALS - Shop drawings shall be submitted to Architect/Engineer for all items of mechanical equipment including the following:

- Shop drawings include fabrication and installation drawings, diagrams, schedules and other data specifically prepared for the project. Include dimensions and notations showing compliance with specified standards. Unless otherwise noted, submit a minimum of six (6) copies of shop drawings for review. Electronic copies (pdf format) by e-mail are acceptable in lieu of hard copies.
- Architect/Engineer will review or take appropriate action for submittals. Review is only to determine general conformance with design shown in contract documents. Review of submittals shall not relieve contractor of responsibility for deviation from requirements of the contract documents or from errors or omissions within submittals.

F. MATERIALS - All materials and equipment used in the construction of the project shall be new unused and undamaged unless otherwise specified. Materials and equipment shall be latest dated standards of manufacturer specified. Verify installation details and requirements for materials and equipment furnished by others and installed under this contract.

G. DEMONSTRATION AND TRAINING - Instruct Owner's personnel to adjust, operate, and maintain mechanical systems. Schedule training with Owner with at least seven days' advance notice.

H. STARTING AND ADJUSTING - Start and test all equipment and operating components to confirm proper operation. Test and adjust all systems to achieve designed capacity and performance. All equipment and systems discrepancies shall be corrected prior to final acceptance.

SECTION 230500 - BASIC MECHANICAL MATERIALS AND METHODS

A. PIPING INSTALLATION: Install piping at required slope. Install components with pressure rating equal to or greater than system operating pressure. Install piping in concealed locations, except in equipment rooms and service areas. Install piping free of sags and bends. Install piping at right angles or parallel to building walls. Install piping tight to slabs, beams, joists, columns, walls, and other building elements. Locate groups of pipes parallel to each other, spaced to permit valve servicing. Install fittings for changes in direction and branch connections. Install pipe executions for exposed pipe penetrations walls and ceilings. Install sleeves for pipes passing through concrete and masonry walls, and concrete floor and roof slabs. Provide dielectric fitting where two different types of pipe materials are joined. Comply with MSS-69 for pipe hanger selection and application.

B. EQUIPMENT INSTALLATION: Install equipment per manufacturer's recommendations. Install equipment as high as possible. Install equipment level and plumb, parallel and perpendicular to building. Install mechanical equipment to facilitate service, maintenance, and repair or replacement of components. Connect equipment for ease of disconnecting, with minimum interference to other installations. Install equipment giving right of way to piping installed at required slope.

C. LABELING AND IDENTIFYING

Piping: Provide pipe markers on each system where pipe is exposed to view and above removable ceilings. Include pipe description of system and arrows showing normal direction of flow.

Equipment: Install engraved plastic-laminate sign or equipment marker on or near each major item of mechanical equipment.

D. CUTTING AND PATCHING: Cut, channel, chase, and drill floors, walls, partitions, ceilings, and other surfaces necessary for mechanical installations. Perform cutting by skilled mechanics of trades involved. Repair cut surfaces to match adjacent surfaces.

SECTION 230590 - TESTING, ADJUSTING, AND BALANCING

A. Examine air-handling equipment to ensure clean filters have been installed, bearings are greased, belts are aligned and tight, and equipment with functioning controls is ready for operation. Check dampers for proper position.

B. Perform testing and balancing procedures on each system according to the procedures contained in NEBB's "Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems" and this Section.

C. Adjust fans to deliver total design airflow within the maximum allowable rpm listed by the fan manufacturer. Provide new fan sheaves as required. Measure fan airflow, static pressure, rpm and amp draw.

D. Adjust volume dampers to achieve design airflow within 10% of specified values. Adjust diffusers, registers and grilles. Adjust minimum and maximum outside airflow.

E. Prepare report listing date, project information, equipment data and measured airflow results. Report shall include drawing indicating locations of air outlets and final measured airflow of each outlet. Submit four copies of report to engineer for review.

SECTION 230700 - DUCT INSULATION

A. MINERAL-FIBER BLANKET THERMAL INSULATION: Glass fibers bonded with a thermosetting resin. Comply with ASTM C 653, Type II, with all-sealant jacket manufactured from kraft paper, reinforcing scrim, aluminum foil, and vinyl film. Flame-spread rating of 25 or less, and smoke-developed rating of 50 or less. Apply insulation materials, accessories, and finishes according to the manufacturer's written instructions with the least number of joints practical. Seal joints and seams with vapor-retarder mastic on cold air ducts. Seal penetrations in insulation at hangers, supports, anchors, and other projections with vapor-retarder mastic.

B. ACOUSTICAL DUCT LINER: ASTM C 516 with resin and black mat coated surface exposed to air stream to prevent erosion of glass fibers. Thermal Conductivity (k-Value): 0.28 at 75 deg F mean temperature. Nominal Density 1.5 lbs per cubic foot, minimum noise reduction characteristic shall be 0.55 for 1" thickness; rated for 6000 rpm air velocity; air factor multiplier less than 1.8 at 2000 fpm. Adhesive a duct liner with 100 percent coverage of adhesive. But traverse joints without gaps and seal joint with adhesive. Secure liner with mechanical fasteners. Allow material rousing on leading edge of liner.

C. FIRE RATED DUCT INSULATION: UL Classified glass fiber blanket completely encapsulated in UL Classified aluminum foil facing. Flame spread rating of 25 or less, and smoke-developed rating of 50 or less. Insulation shall meet the requirements of NFPA 96 for zero clearance from the duct to the interior surfaces of enclosures of noncombustible and limited combustible construction. Apply insulation materials, accessories, and finishes according to the manufacturer's written instructions with the least number of joints practical. Seal joints and seams with vapor retarder mastic on cold air ducts. Seal penetrations in insulation at hangers supports, anchors, and other projections with vapor retarder mastic bonded with a thermosetting resin.

D. EXISTING INSULATION: If existing insulation damaged by this contractor shall be replaced with new insulation as specified within.

E. APPLICATION SCHEDULE

- Service: SUPPLY AIR - Rectangular, concealed
Thickness/Material: 2-3/16" Mineral-Fiber Blanket
Minimum Installed R-Value: R6
Vapor Retarder Required: Yes

- Service: SUPPLY AIR - Round, concealed
Thickness/Material: 2-3/16" Mineral-Fiber Blanket
Minimum Installed R-Value: R6
Vapor Retarder Required: Yes

- Service: SUPPLY AIR - Round, exposed
Thickness/Material: Double wall 1" mineral fiber
Minimum Installed R-Value: R6
Vapor Retarder Required: NA

- Service: RETURN AIR - Rectangular, exposed in finished spaces
Thickness/Material: 1-1/2" Duct Liner
Minimum Installed R-Value: R6
Vapor Retarder Required: Yes

- Service: RETURN AIR - Rectangular, concealed
Thickness/Material: 2-3/16" Mineral-Fiber Blanket
Minimum Installed R-Value: R6
Vapor Retarder Required: Yes

- Service: OUTSIDE AIR
Thickness/Material: 2-3/16" Mineral-Fiber Blanket
Minimum Installed R-Value: R6
Vapor Retarder Required: Yes

- Service: OUTSIDE AIR and RETURN AIR exposed outdoors
Thickness/Material: 2" Rigid Styrofoam Board
Minimum Installed R-Value: R6
Vapor Retarder Required: Yes
Provide Aluminum jacket or equivalent, slope top of duct to allow water to drain and seal all duct watertight.

- Service: TYPE I KITCHEN HOOD EXHAUST AIR
Material: Fire Rated Duct Insulation
Thickness as required to maintain zero clearance to combustibles.

SECTION 230720 - PIPE INSULATION FOR HVAC

A. MINERAL-FIBER INSULATION: Glass fibers bonded with a thermosetting resin. Preformed Pipe Insulation: Comply with ASTM C 547, Type 1, with factory-applied, all-purpose, vapor-retarder jacket. Flame-spread rating of 25 or less, and smoke-developed rating of 50 or less. Apply insulation to pipes by securing each layer of preformed pipe insulation to pipe with wire, tape, or bands without deforming insulation materials.

B. FLEXIBLE ELASTOMERIC THERMAL INSULATION: Closed-cell, sponge- or expanded-rubber materials. Comply with ASTM C 554, Type I for tubular materials and Type II for sheet materials. Adhesive as recommended by insulation material manufacturer. Ultraviolet-Protective coating as recommended by insulation manufacturer. Flame-spread rating of 25 or less, and smoke-developed rating of 50 or less. Follow manufacturer's written instructions for applying insulation. Seal longitudinal seams and end joints with manufacturer's recommended adhesive.

C. VAPOR RETARDER: On piping systems operating below ambient space temperature, seal joints and seams with vapor-retarder mastic. Seal penetrations in insulation at hangers, supports, anchors, and other projections with vapor-retarder mastic.

D. INSULATION APPLICATION SCHEDULE

- Service: Condensate drain piping (CD)
Thickness/Material: Mineral Fiber. Apply the following insulation thicknesses:
 - PVC piping: None
 - Copper: 1/2"Vapor Retarder Required: Yes

- Service: Refrigerant suction (RS), refrigerant liquid (RL) and refrigerant hot gas discharge (RD)
Thickness/Material: 1-1/2" Flexible Elastomeric
Vapor Retarder Required: Yes
Finish: Two coats of manufacturer's coating when exposed to outside

SECTION 231203 - NATURAL GAS PIPING

A. STEEL PIPE: Pipe: ASTM A 53; Type E or S; Grade B; Schedule 40; black, Malleable-Iron, Threaded Fittings ASME B16.3, Class 150; standard pattern, with threaded ends according to ASME B1.20.1, Union: ASME B16.39, Class 150, malleable iron with brass-bronze seal, ground pipe, and threaded ends according to ASME B1.20.1, Joint Compound and Tape: Suitable for natural gas.

B. Install and test gas piping according to NFPA 54 "National Fuel Gas Code" and Authority having jurisdiction.

SECTION 232300 - REFRIGERANT PIPING

A. REFRIGERANT PIPING

- Aboveground, ASTM B 280, Type ACR copper tubing with brazed joints (using AWS A5.8 filler material).

B. REFRIGERANT VALVES

- Service Valves:
 - Body: Forged brass with brass cap including key end to remove cone.
 - Core: Removable ball-type check valve with stainless-steel spring.
 - Seat: Polytetrafluoroethylene.
 - End Connections: Copper piping.
 - Working Pressure Rating: 500 psig.

- Solenoid Valves: Comply with API 760 and UL 429; listed and labeled by an NRTL.
 - Body and Bonnet: Plated steel.
 - Solenoid Tube, Flange, Coils Spring, and Seat Office: Stainless steel.
 - Seat: Polytetrafluoroethylene.
 - End Connections: Threaded.
 - Electrical: Molded, watertight coil in NEMA 250 enclosure of type required by location with 1/2-inch conduit adapter, and 24V ac coil.
 - Working Pressure Rating: 400 psig.
 - Maximum Operating Temperature: 240 deg F.
 - Manual operation.

C. INSTALLATION:

- Refrigerant piping to be installed per ASHRAE 15.
- Sizing, pipe arrangement, and refrigerant specialties shall be determined by the equipment manufacturer based on the final layout; routing worked out in the field. Installation shall follow the recommended requirements of the equipment manufacturer.
- Piping shall be free of sags and bends and routed in as direct as possible path between components.
- Pipe shall be insulated per insulation schedule. Use of thermal shields must be used at support points (attaching support/clamps directly to the piping will be unacceptable).

B. TESTING: Purge refrigerant piping systems with dry nitrogen. Prepare and pressure test piping according to ASHRAE 15. Charge system refrigerant.

SECTION 233113 - METAL DUCTS AND ACCESSORIES

A. GENERAL: Drawings indicate general arrangement of ducts, fittings, and accessories. Minor modifications to route, size and shape of duct may be made to meet structural and other interference. Changes which could affect system performance shall be reviewed by Architect/Engineer prior to fabrication or installation of duct. Coordinate layout with suspended ceiling, fire- and smoke-control dampers, lighting layouts, and similar finished work.

B. DUCT FABRICATION: Sizes shown on plans are inside clear dimensions. Ductwork utilizing duct liner shall be increased in size to accommodate the duct liner thickness.

C. MATERIAL: Construct all rectangular and round ducts from galvanized sheet steel. Lock-forming quality; ASTM A 653A 653M, G90 coating designation; mill-phosphatized finish for surfaces of ducts exposed to view.

D. QUALITY ASSURANCE: Fabricate and install duct per SMACNA's HVAC Duct Construction Standards--Metal and Flexible" and applicable codes. Comply with requirements for metal thickness, reinforcing types and intervals, tie-rod applications, and joint types and intervals. Comply with NFPA 90A, "Installation of Air Conditioning and Ventilating Systems," unless otherwise indicated.

E. PRESSURE CLASS: Unless otherwise noted construct all ducts to 2.0" WG positive or 2.0" WG negative pressure class.

F. DUCT SEALING: UL classified, non-combustible, flame spread 25 or less, smoke developed rating of 540 or less, resistant to water, pressure rupture rating of 16" WG minimum, suitable for use alone or with tape, application an operational temperature ranges appropriate for usage. Seal all duct per SMACNA class C' duct seal requirements.

G. TURNING VANES: Fabricate of 1-1/2" wide, curved blades 3/4" on center. Provide turning vanes in all metered elbows and duct turns.

H. DUCT ACCESS DOORS: Install insulated duct access doors with hinges and latches for access to inlet side of coils, equipment, control dampers, fire dampers, and smoke dampers.

I. VOLUME DAMPERS: Fabricate single blade dampers for duct sizes 9 1/2" high x 30" width maximum. Fabricate multi-blade dampers of opposed blade pattern using minimum 16 gauge steel with maximum blade sizes 6" x 48" for larger ducts. Provide end bearings with end seals for pressure class required except in round duct 12" in diameter and smaller. Provide locking indicating quadrant regulators on all volume dampers. Mark ends of damper shanks for open/closed indication. Insulated ducts to have devald dial indicators. Motorized dampers to have 115 volt operators. Provide manual volume dampers at branch take-offs and as shown. Provide motorized dampers as indicated.

J. FIRE DAMPERS: Labeled to UL 555, One and one-half hours fire rating with 165F fusible link unless otherwise indicated. SMACNA Type B Frame with blades out of airstream. Factory- or field-installed galvanized, sheet steel Mounting Sleeve. Includes a blade lock and stainless-steel regulator closing spring for horizontal dampers. Provide fire dampers at locations indicated and where required by applicable codes. Install fire and smoke dampers according to manufacturer's UL-approved written instructions.

K. SMOKE DAMPERS: Labeled to UL 555S. Combination fire and smoke dampers shall be labeled for one-and-one-half-hour rating to UL 555, 165 deg F fusible link, unless otherwise as indicated. Factory-installed mounting sleeve, 0.050-inch-thick, galvanized, sheet steel length to suit wall or floor application, 115 V, single phase, 60 Hz, damper Motors provide for modulating or on-position action per application. Provide fire and smoke dampers at locations indicated and where required by applicable codes. Install fire and smoke dampers according to manufacturer's UL-approved written instructions.

L. FLEXIBLE CONNECTORS: Flame-retarded or noncombustible fabrics, coatings, and adhesives complying with UL 181, Class 1. Neoprene double-coated woven glass fiber fabric in accordance with NFPA 90A, suitable for temperatures and pressures of application, approximately 6" wide, clipped into metal edge slip. Provide flexible connectors to motor driven equipment.

M. FLEXIBLE DUCTS: Factory-fabricated, insulated, round duct, with an outer jacket enclosing 1-1/2-inch-thick, glass-fiber insulation around a continuous inner liner, steel-wire helix encapsulated in polyethylene inner liner. Comply with UL 181, Class 1. Final connections to air outlets and terminal units may be made with flexible duct. Install flexible ducts with metal collars or sleeves with draw bands. Length of flexible duct shall not exceed 36" path shall not exceed 45'.

ME No. 22488



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note:
do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other associated drawings on site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and access and verify non-interference with other work. do not fabricate prior to verification of clearance for all trades.



07/24/24

PROPOSED MEXICAN RESTAURANT

8601 WEST DODGE ROAD SUITE 101 OMAHA, NEBRASKA

MECHANICAL SPECIFICATIONS

stanley j how
ARCHITECTS



14685 CALIFORNIA ST. OMAHA, NE 68154
402.964.9000

JOB NO.: 2017-25
DATE: 07/24/24

OMAHA, NEBRASKA

SHEET

M5.1

LIGHTING CONTROL DEVICE SCHEDULE (NOTE 1)			
SYMBOL	MANUFACTURER	CATALOG NUMBER	DESCRIPTION
E	SENSORSWITCH	nECY MVOLT ENC GFXX	LIGHTING CONTROL NETWORK SYSTEM BACKBONE
I	SENSORSWITCH	nPODM TOUCH	GRAPHICAL INTERFACE
◇	SENSORSWITCH	WXS POT XX	LINE VOLTAGE SINGLE POLE WALL BOX OCCUPANCY SENSOR
PP	SENSORSWITCH	nPP16 DS	LIGHTING CONTROL NETWORK POWER PACK - WITH DIMMING (NOTE 2)
PP	SENSORSWITCH	nPP16 ER	LIGHTING CONTROL NETWORK POWER PACK - NO DIMMING, WITH UL924 EMERGENCY OPERATION

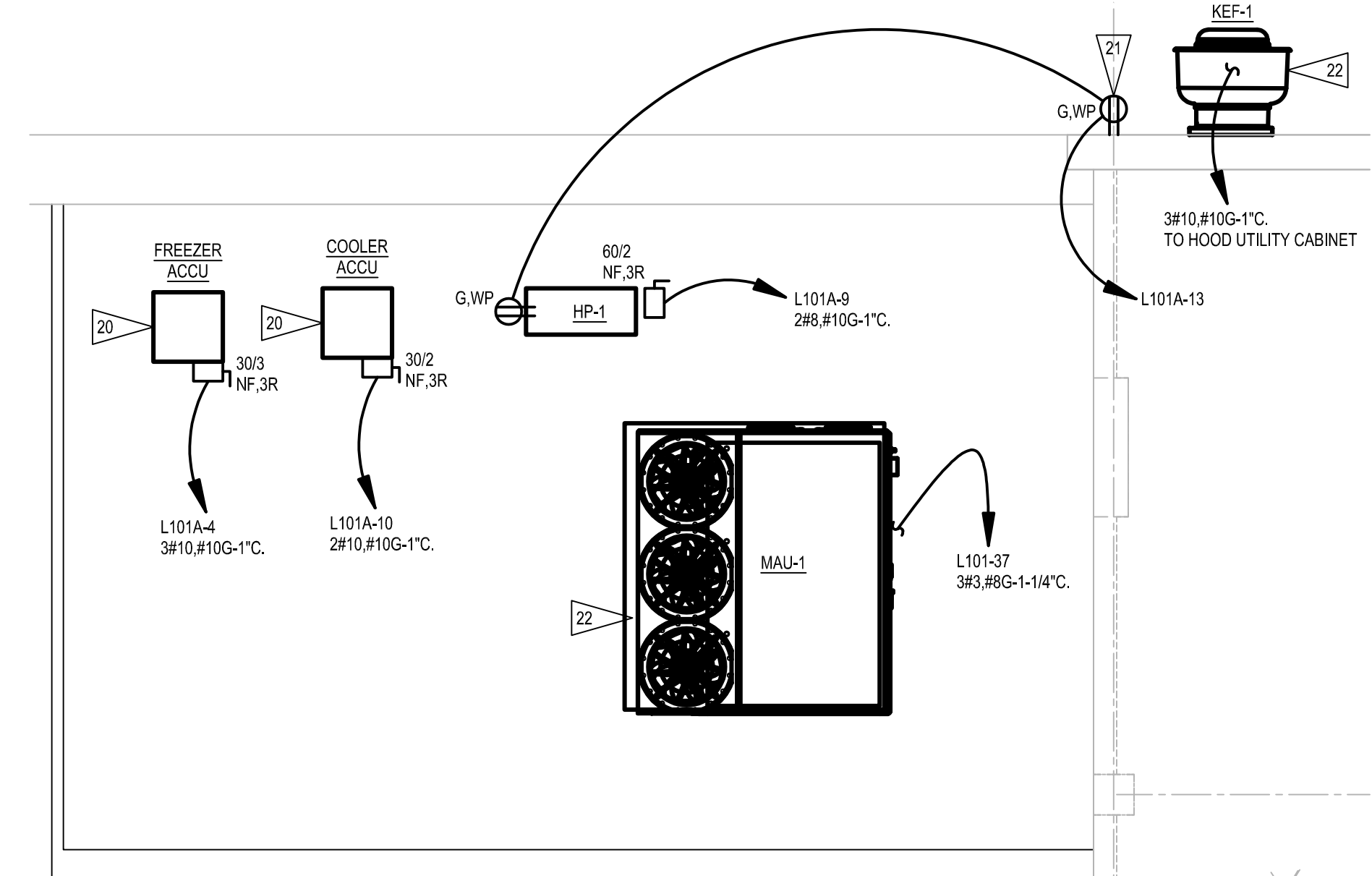
- NOTES:
- PRODUCTS LISTED INDICATE BASIS OF DESIGN PRODUCTS. REFER TO SPECIFICATIONS FOR ACCEPTABLE EQUIVALENT MANUFACTURERS.
 - COORDINATE DIMMING TYPE REQUIRED WITH ASSOCIATED LIGHT FIXTURE TYPE CONTROLLED.

LIGHTING FIXTURE SCHEDULE									
FIXT #	MANUFACTURER	CATALOG NO. (NOTE 2)	LAMP DATA			MOUNTING		DESCRIPTION	REMARKS
			QTY.	SIZE	TYPE (NOTE 3)	VOLTAG. (NOTE 3)	TYPE			HEIGHT
1	LITHONIA, NOTE 1	EPANL 2X4 8000LM BCR1 40K MIN10 ZT MVOLT	N/A	6,000 LM / 4000K	LED	120/277	X X X	-	2X4 FLAT PANEL
1E	LITHONIA, NOTE 1	EPANL 2X4 8000LM BCR1 40K MIN10 ZT MVOLT EL 14L	N/A	6,000 LM / 4000K	LED	120/277	X X X	-	2X4 FLAT PANEL WITH EM BATTERY
2	LITHONIA, NOTE 1	LONACYL 3015 LAMAR LSS MVOLT 5210 FM DBL	N/A	1,500LM / 3000K	LED	120/277	X X X	-	BLACK 4IN CYLINDER
3	LITHONIA	LHOM LED B R HO	N/A	N/A	LED	120/277	X X X	-	EXIT LIGHT WITH EM HEADS
4	LITHONIA	ELM2L B	N/A	N/A	LED	120/277	X X X	-	EM BATTERY LIGHT WITH EM BATTERY
5	LITHONIA, NOTE 1	LDM 3015 LAMAR LSS MVOLT EZ1	N/A	1,500LM / 3500K	LED	120/277	X X X	-	4IN DOWN LIGHT
6	LITHONIA, NOTE 1	EPANL 2X4 8000LM BCR1 40K MIN10 ZT MVOLT 2X4MKSH	N/A	6,000 LM / 4000K	LED	120/277	X X X	-	2X4 FLAT PANEL
6E	LITHONIA, NOTE 1	EPANL 2X4 8000LM BCR1 40K MIN10 ZT MVOLT 2X4MKSH	N/A	6,000 LM / 4000K	LED	120/277	X X X	-	2X4 FLAT PANEL WITH EM BATTERY
7	BL LIGHTING, NOTE 7	BL FLEYFORM O2 30 BL DRIVELINE MG 9610	-	200 LMFT / 3000K	-	120	X	-	TAPE LIGHT NOTE 4
8	LITHONIA	WPX1 LED P1 30K MVOLT DBL10	N/A	2,900 LM / 3000K	LED	120/277	X X X	NOTE 5	WALL PACK
9	ALPHABET	750X 30K VA PC XX XX	N/A	170 LM / 3000K	LED	120/277	X X X	NOTE 6	RAIL LIGHT
10	LITHONIA	VLTE B 1 R EL	N/A	N/A	LED	120/277	X X X	-	EXIT LIGHT WITH EM HEADS
11	NOTE 8	.....	24	NOTE 9	LED	120/277	X X X	-	HOST PENDANT
12	NOTE 8	.....	1	NOTE 10	LED	120/277	X X X	-	DINING PENDANT
13	NOTE 8	.....	1	NOTE 11	LED	120/277	X X X	-	BAR PENDANT

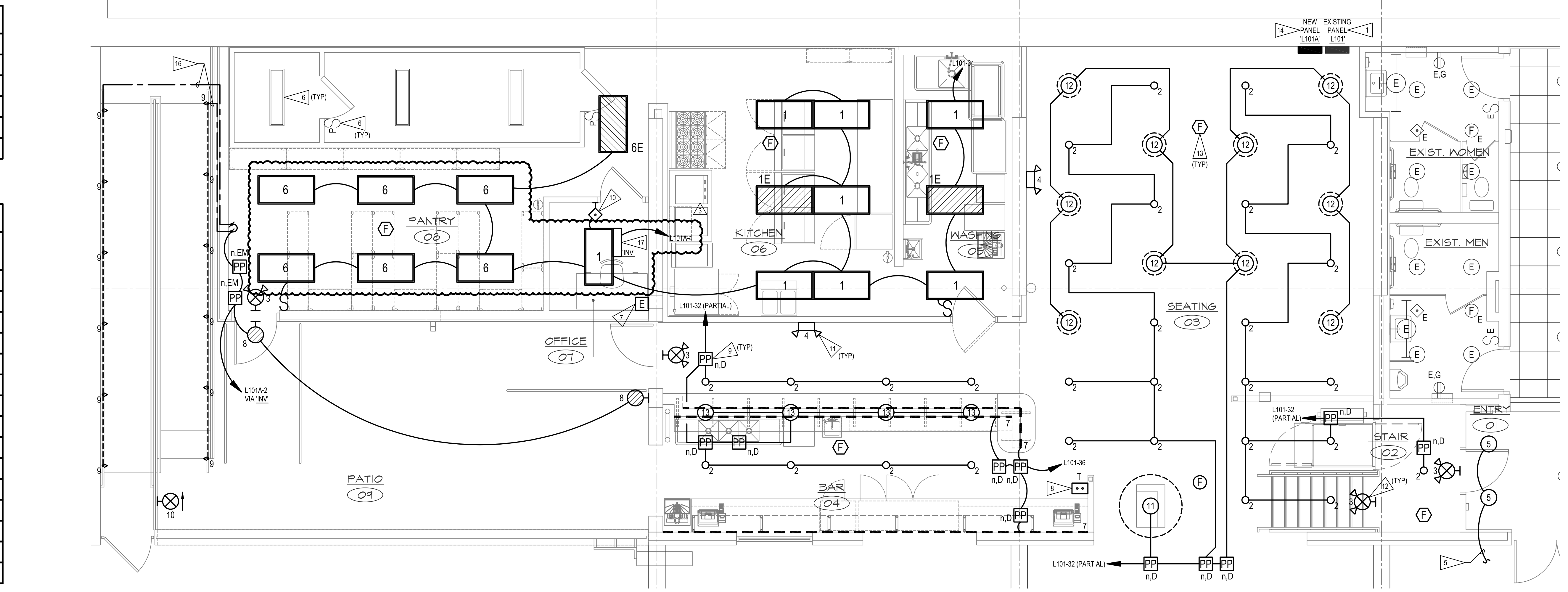
- NOTES:
- FIXTURE SHALL BE CONSIDERED EQUAL AS MANUFACTURED BY COLUMBIA, DAY-BRITE, COOPER, AND H.E. WILLIAMS.
 - CONTRACTOR SHALL VERIFY LIGHT FIXTURE CATALOG NUMBER & INSTALLATION REQUIREMENTS PRIOR TO ORDERING.
 - LAMP TYPE DESCRIPTION: LED=LIGHT EMITTING DIODE
 - REFER TO ARCHITECTURAL PLANS FOR RUN LENGTHS REQUIRED. LUMINAIRE SHALL BE CONTINUOUS FOR ENTIRE LENGTHS. PROVIDE ACCESSORY MOUNTING CABLE AND ALL REQUIRED HARDWARE FOR INSTALLATION PER MANUFACTURER'S INSTRUCTIONS.
 - SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHT.
 - COORDINATE BEZEL, COLOR, FACE TYPE AND INSTALLATION OF LIGHT WITH ARCHITECT, RAILING VENDOR AND GENERAL CONTRACTOR PRIOR TO ROUGH IN.
 - FIXTURE SHALL BE CONSIDERED EQUAL AS MANUFACTURED BY LII LIGHTING.
 - LIGHT FIXTURE FURNISHED BY OWNER AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - PROVIDE LED RETROFIT LAMP - ARCHPELAGO LIGHTING #LTC10V20303CB OR EQUAL.
 - PROVIDE LED RETROFIT LAMP - ARCHPELAGO LIGHTING #LTS121C30303WB OR EQUAL.
 - PROVIDE LED RETROFIT LAMP - ARCHPELAGO LIGHTING #LTG25V350303MBOR EQUAL.

KITCHEN EQUIPMENT CONNECTION SCHEDULE													
MARK	ITEM	VOLTAGE	PH	HP (KW)	AMPS	BREAKER	CONNECTION	RECEPTACLE CONFIGURATION	MOUNTING HEIGHT	WIRE	GROUND WIRE	CONDUIT	CIRCUIT
1	SODA DISPENSER	120	1	3.2	201	X	X	5-20R	48"	#12	#12	3/4"	L101-9
2	CONVECTION OVEN	120	1	8.0	201	X	X	5-20R	48"	#12	#12	3/4"	L101-11
3	GLASS CHILLER	120	1	2.5	201	X	X	5-20R	18"	#12	#12	3/4"	L101-15
4	ICE MACHINE	120	1	5.9	201	X	X	5-20R	48"	#12	#12	3/4"	L101-17
5	PREP TABLE	120	1	4.4	201	X	X	5-20R	NOTE 2	#12	#12	3/4"	L101-19
6	PREP TABLE	120	1	4.4	201	X	X	5-20R	NOTE 2	#12	#12	3/4"	L101-21
7	RANGE	120	1	6.0	201	X	X	5-20R	18"	#12	#12	3/4"	L101-23
8	REACH IN FREEZER	120	1	12.6	201	X	X	5-20R	48"	#12	#12	3/4"	L101-27
9	BACK BAR COOLER	120	1	10.7	201	X	X	5-20R	18"	#12	#12	3/4"	L101-29
10	GLASS WASHER	208	1	32.2	452	X	X		16"	#6	#10	1"	L101-31
11	DISH WASHER	120	1	26.0	352	X	X		16"	#8	#10	1"	L101-35
12	SODA DISPENSER	120	1	3.2	201	X	X	5-20R	48"	#12	#12	3/4"	L101A-15

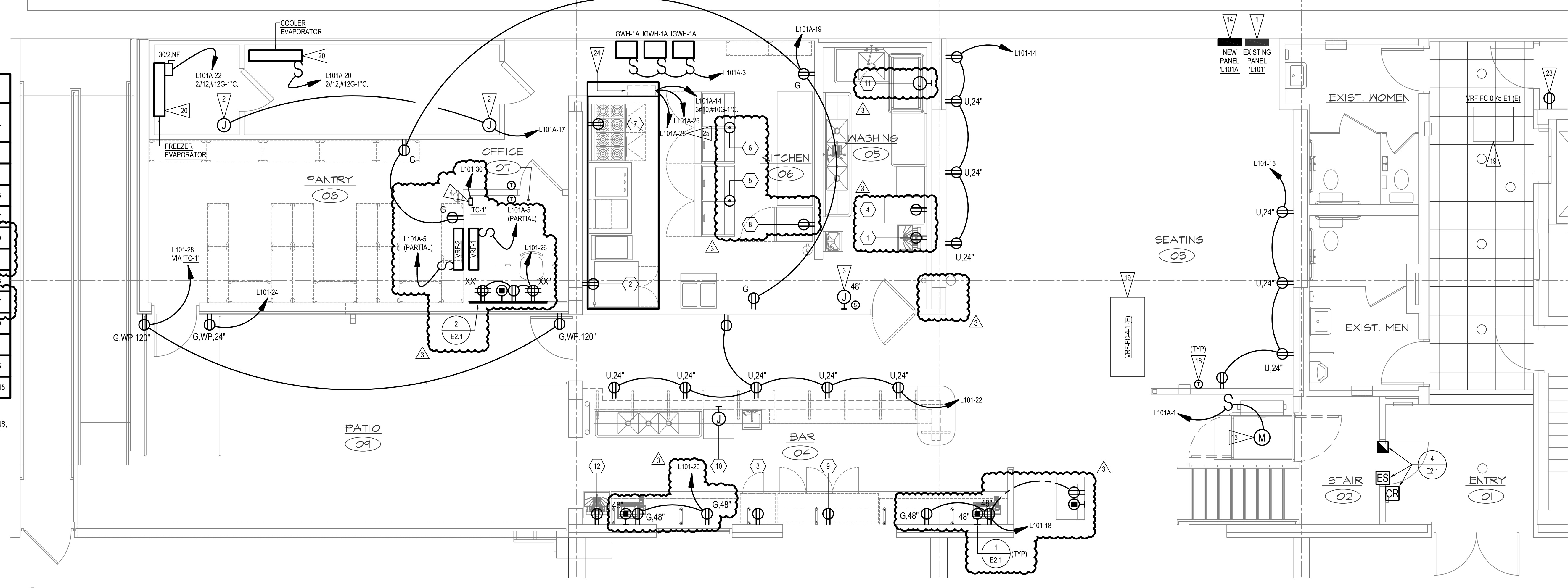
- KITCHEN EQUIPMENT CONNECTION SCHEDULE NOTES:
- INFORMATION INCLUDED IN SCHEDULE HAS BEEN BASED ON LIMITED DESIGN INFORMATION AVAILABLE AT TIME OF CONSTRUCTION DOCUMENTS. COORDINATE EQUIPMENT LOCATIONS, CONDUIT ROUTING, DEVICE MOUNTING HEIGHTS AND POWER CONNECTIONS INCLUDING VOLTAGE, PHASE, BREAKER, CONDUCTOR, CONDUIT AND RECEPTACLE CONFIGURATION WITH OWNER, KITCHEN EQUIPMENT SUPPLIER AND REVIEWED KITCHEN EQUIPMENT SUBMITTALS PRIOR TO ROUGH IN AND PURCHASE OF LONG LEAD TIME EQUIPMENT. COORDINATE ANY CHANGES REQUIRED TO THE INFORMATION ABOVE WITH THE ENGINEER OF RECORD. MAKE ANY CHANGES REQUIRED AT NO ADDITIONAL COST TO OWNER.
 - SEE DETAIL 3E2.1 FOR ADDITIONAL INFORMATION.



PARTIAL ROOF PLAN - POWER
SCALE: 1'-0" = 1'-0" 0 2' 4' 8'
SCALE: 1/4" = 1'-0"



FLOOR PLAN - LIGHTING
SCALE: 1'-0" = 1'-0" 0 2' 4' 8'
SCALE: 1/4" = 1'-0"



FLOOR PLAN - POWER
SCALE: 1'-0" = 1'-0" 0 2' 4' 8'
SCALE: 1/4" = 1'-0"

- FLAG NOTES:
- EXISTING PANEL BOARD SERVING AREA OF REMODEL. REUSE EXISTING CIRCUITS WHERE POSSIBLE. PROVIDE NEW BREAKERS AS REQUIRED TO ACCOMMODATE REMODEL. PROVIDE AN UPDATED TYPED CIRCUIT DIRECTORY AFTER REMODEL IS COMPLETE.
 - PROVIDE FINAL CONNECTION TO WALK IN EQUIPMENT INTERIOR LIGHTING. PRESSURE RELIEF PORTS, DOOR HEATERS, PILOT LIGHT SWITCH, ETC. FIELD COORDINATE EXACT ELECTRICAL REQUIREMENTS (BRANCH CIRCUIT SIZE, OVER CURRENT PROTECTION DEVICES SIZE, LOCAL DISCONNECTING MEANS SIZE, ETC.) WITH EQUIPMENT MANUFACTURER PRIOR TO ROUGH IN.
 - PROVIDE TWO DEAD FRONT REMOTE 'GFCI' DEVICES TO PROVIDE 'GFCI' PROTECTION OF THE TWO BRANCH CIRCUITS SERVING EQUIPMENT UNDER THE HOOD.
 - PROVIDE NEW TWO CHANNEL, SEVEN DAY DIGITAL TIME CLOCK - TORX HDG SERIES OR EQUAL. COORDINATE TIME CLOCK LOCATION WITH OWNER PRIOR TO ROUGH IN. PROVIDE 120V CONNECTION TO TIME CLOCK.
 - CONNECT NEW DOWN LIGHTING IN EXISTING VESTIBULE TO EXISTING VESTIBULE LIGHTING.
 - INSTALL AND CONNECT LIGHT FIXTURES AND SWITCHES FURNISHED WITH WALK IN REFRIGERATION EQUIPMENT. SEE POWER PLAN FOR ADDITIONAL INFORMATION.
 - PROVIDE LIGHTING CONTROL NETWORK SYSTEM BACKBONE WITH REQUIRED QUANTITY OF BRIDGES AND POWER PACK(S) - nLIGHT nECY MVOLT ENC GFXX. PROVIDE 120V CONNECTION WITH LOCKABLE CIRCUIT BREAKER. NEATLY ARRANGE ASSOCIATED DEVICES ADJACENT TO SYSTEM BACKBONE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - PROVIDE LIGHTING CONTROL NETWORK ENTRY STATION - SEE LIGHTING CONTROL DEVICE SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - LIGHTING CONTROL NETWORK POWER PACK - SEE LIGHTING CONTROL DEVICE SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. LOCATE ABOVE NEAREST ACCESSIBLE CEILING. PROVIDE ALL REQUIRED LOW VOLTAGE AND LINE VOLTAGE CONNECTIONS.
 - PROVIDE LINE VOLTAGE WALL BOX OCCUPANCY SENSOR - SEE LIGHTING CONTROL DEVICE SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - CONNECT TO BRANCH CIRCUIT SERVING GENERAL LIGHTING IN SAME ROOM AS EMERGENCY LIGHT. CONNECT BATTERY SENSING LEADS AHEAD OF LOCAL SWITCHING.
 - CONNECT EXT LIGHTS TO EXISTING CIRCUIT SERVING EXT LIGHTS PRIOR TO REMODEL.
 - EXTEND EXISTING FIRE ALARM NOTIFICATION LOOP TO NEW DEVICES AND CONNECT.
 - FEED NEW PANEL FROM NEW (1000) CIRCUIT BREAKER IN EXISTING PANEL L101 WITH 40,285-112C.
 - PROVIDE FINAL CONNECTION TO WHEEL CHAIR LIFT. COORDINATE LOCATION OF ALL COMPONENTS AND REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH IN.
 - PROVIDE 1" CEILING SPACE OF PANTRY RAIL BELOW SLAB AND STUBBED UP INTO BASE OF HAND RAIL POST TO ALLOW FOR ROUTING OF LOW VOLTAGE CABLES SERVING RAIL LIGHTING. COORDINATE WITH ARCHITECTURAL AND GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
 - PROVIDE NEW CENTRAL INVERTER - EVALUATE nPP111 12 CT TB OR EQUAL.
 - PROVIDE ROUGH IN FOR THERMOSTAT / SENSOR. PROVIDE 1/2", WITH PULL STRING FROM ROUGH IN TO MECHANICAL EQUIPMENT SERVED. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH IN.
 - EXISTING MECHANICAL EQUIPMENT TO REMAIN. MAINTAIN BRANCH CIRCUIT AND PROTECT EQUIPMENT DURING REMODEL.
 - EXACT ELECTRICAL REQUIREMENTS NOT KNOWN AT TIME OF DESIGN. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH IN. MAKE REQUIRED CHANGES AT NO ADDITIONAL COST TO THE OWNER.
 - LOCATE SERVICE RECEPTACLE ADJACENT TO EXHAUST FAN. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR AND GENERAL CONTRACTOR PRIOR TO ROUGH IN.
 - EQUIPMENT PROVIDED WITH INTEGRAL DISCONNECT. PROVIDE SPARE 1" WITH PULL STRING FROM EQUIPMENT TO HOOD UTILITY CABINET FOR CABBING BY OTHERS. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH IN.
 - PROVIDE NEW RECEPTACLE FOR WATER SOFTENER. CONNECT TO EXISTING PANEL SERVING SAME ROOM AS WATER SOFTENER. COORDINATE EXACT LOCATION OF RECEPTACLE WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH IN.
 - PRE-WIRED KITCHEN HOOD ELECTRICAL TERMINAL BOX WITH TERMINAL STRIPS, 3-PHASE VFDs AND OVERLOADS FOR EXHAUST AND SUPPLY FANS. CONNECTIONS FOR HOOD LIGHTS, AND HOOD DOWNSWIFT CONTROLS. VERIFY LOCATION WITH KITCHEN EQUIPMENT SUPPLIER. PROVIDE BUILDING POWER CONNECTION TO PANEL FOR EACH HOOD FAN AND HOOD LIGHTS. THEN FINAL CONNECTIONS FROM PANEL TO FAN AND LIGHTS. PROVIDE ALL ADDITIONAL LINE VOLTAGE AND LOW VOLTAGE CONNECTIONS NOT INDICATED ON THIS PLAN REQUIRED TO ENSURE HOOD IS OPERATIONAL. COORDINATE ALL REQUIREMENTS WITH REVIEWED HOOD EQUIPMENT SHOP DRAWINGS AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH IN.
 - PROVIDE 120V ELECTRICAL CONNECTION TO HOOD ANSUL FIRE SUPPRESSION SYSTEM CONTROL PANEL. UPON ALARM FROM HOOD FIRE DETECTION SYSTEM THE ANSUL SYSTEM CONTROL PANEL SHALL DISCONNECT ELECTRICAL POWER TO ALL EQUIPMENT UNDER HOOD THROUGH SHUNT TRIP CONTROLLED BREAKERS IN PANEL SERVING EQUIPMENT UNDER HOOD.
- GENERAL NOTES:
- MINIMUM SIZE FOR BRANCH CIRCUIT CONDUITS SHALL BE 1/2" MINIMUM. DATA COMMUNICATIONS CONDUIT SIZE SHALL BE 1". SEE DRAWINGS FOR AREAS WHERE LARGER CONDUITS ARE REQUIRED.
 - AT CONTRACTOR'S OPTION, THE USE OF MULTI-WIRE BRANCH CIRCUITS IS ALLOWED. PROVIDE MEANS TO SIMULTANEOUSLY DISCONNECT ALL CIRCUIT BRANCHES SHARING A COMMON NEUTRAL.
 - PROVIDE A GREEN INSULATED GROUND WIRE IN ALL LIGHTING AND POWER BRANCH CIRCUITS.
 - ALL EXISTING WIRING DEVICES (LIGHTING, POWER AND DATA AS APPLICABLE) LOCATED WITHIN THE SCOPE OF REMODEL SHALL BE REMOVED AND REPLACED WITH NEW AS REQUIRED TO MATCH DEVICE AND FACEPLATE COLORS AND TYPES INDICATED IN ELECTRICAL SPECIFICATIONS.

ME NO: 22488

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DATE: 07/24/24

STATE OF NEBRASKA
Professional Engineer
George M. Morrissey
No. 0000000000
Exp. 12/31/2024

9/24/24

ELECTRICAL SPECIFICATIONS

SECTION 260100 - GENERAL ELECTRICAL REQUIREMENTS

- WARRANTIES - All materials, workmanship and equipment shall be warranted against defects or against injury from proper and usual wear for a period of one year after the date of substantial completion. Any item that becomes defective within the warranty period shall be repaired or replaced, at no additional cost to the Owner. Warranty shall include repair of faulty workmanship.
DEFINITIONS ABBREVIATIONS - The following shall apply throughout the contract documents.
Furnish Supply and deliver to site ready for installation
Indicated Noted, scheduled or specified
Provide Furnish, install and connect complete and ready for final use
NEC National Electric Code (NFPA 70)
NEMA National Electrical Manufacturers Association
NFPA National Fire Protection Association
UL Underwriters Laboratories Inc.

- CODES AND STANDARDS - All work shall be performed by competent craftsmen skilled in the trade involved and shall be done in a manner consistent with normal industry standards. All work shall conform to the currently adopted edition of the National Electric Code (NEC), Local Building Code, and all other applicable state and local codes or standards. Where there is a conflict between the code and the contract documents, the code shall have precedence only when it is more stringent than the contract documents.
PERMITS - Contractor shall become familiar and comply with all requirements regarding permits, fees, licenses, etc. All permits, licenses, inspections and arrangements required for the work shall be obtained by Contractor's effort and expense. All utilities shall be installed in accordance with the local rules and regulations and all changes shall be paid by the Contractor.

- SUBMITTALS - Shop drawings shall be submitted to Architect/Engineer for the following items of electrical equipment:
Enclosed switches
Panelboards
Lighting fixtures
Lighting control
Fire alarm

- Shop drawings include fabrication and installation drawings, diagrams, schedules and other data specifically prepared for the project. Include dimensions and notations showing compliance with specified standards. Unless otherwise noted, submit a PDF copy of shop drawings for review.
Architect/Engineer will review or take appropriate action for submittals. Review is only to determine general conformance with design shown in contract documents. Review of submittals shall not relieve contractor of responsibility for deviation from requirements of the contract documents or from errors or omissions within submittals.
MATERIALS - All materials and equipment used in the construction of the project shall be new unused and undamaged unless otherwise specified. Materials and equipment shall be of latest design standards of manufacturer specified. Verify installation details and requirements for materials and equipment furnished by others and installed under this contract.
DEMONSTRATION AND TRAINING - Instruct Owner's personnel to adjust, operate, and maintain electrical systems. Schedule training with Owner with at least seven days' advance notice.

- STARTING AND ADJUSTING - Start and test all equipment and operating components to confirm proper operation. Test and adjust all systems to achieve designed capacity and performance. All equipment and systems discrepancies shall be corrected prior to final acceptance.

- TEMPORARY POWER AND LIGHTING - Use electric power from Owner's existing system without metering and without payment of use charges.
Provide receptacle outlets adequate for connection of power tools and construction equipment.
Provide temporary lighting with local switching that provides adequate illumination for construction operations and traffic conditions.

SECTION 260500 - BASIC ELECTRICAL MATERIALS AND METHODS

- QUALITY ASSURANCE - Electrical Components, Devices, and Accessories shall be listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
COORDINATION - Coordinate chases, slots, inlets, sleeves, and openings with general construction work and arrange in building structure during progress of construction to facilitate the electrical installations that follow. Sequence, coordinate, and integrate installing electrical materials and equipment for efficient flow of the work.
CONDUCTORS - All conductors shall be installed in raceways. Conductors for pilot and control circuits shall be #14. All other conductors shall be #12 or larger.
1. Conductors, No. 10 AWG and Smaller: Solid or stranded copper.
2. Conductors, Larger Than No. 10 AWG: Stranded copper.

- Insulation: Thermoplastic, rated at 75 deg C minimum.
Wire Connectors and Splices: Units of size, ampacity, rating, material, type, and class suitable for service indicated.
RACEWAYS - Minimum raceway size shall be 1/2". Raceway types and applications shall be as follows:
1. Electrical metallic tubing (EMT): ANSI C80.3, zinc-coated steel, with set-screw or compression fittings. EMT shall be used for all other applications not listed below.
2. Liquid tight flexible metal conduit (LFMC): Zinc-coated steel with sunlight-resistant and mineral-oil-resistant plastic jacket. LFMC shall be used for connections to vibrating equipment or in wet or damp locations.

- JUNCTION AND DEVICE BOXES - Minimum box size shall be 4" square with extension or plaster ring as required. Box types and applications shall be as follows
1. Sheet metal boxes: NEMA 5E1 galvanneel steel. Sheet metal boxes shall be used for all surface mounted applications and flush mounting in gypsum or plaster walls.
2. Masonry boxes: square cornered suitable for flush mounting in masonry construction.
3. Cast metal boxes: NEMA FB 1, Type FCD, cast box with gasketed cover. Cast metal boxes shall be used for exterior surface mounted applications.

- ELECTRICAL IDENTIFICATION - All conductors shall be color coded throughout the installation. Color coding shall be as prescribed by ANSI A13.1 and NFPA 70.
1. Provide underground warning tape for all buried conductors tape shall be permanent, bright-colored, continuous-printed, vinyl tape not less than 6 inches wide by 4 mils thick with embedded continuous metallic strip and shall be compounded for permanent dielectric insulation.
FIRESTOPPING - Apply firestopping to cable and service penetrations of fire-rated floor and wall assemblies to achieve fire-resistance rating of the assembly.

- WORK IN EXISTING BUILDINGS - Protect existing electrical equipment and installations indicated to remain. If damaged or disturbed in the course of the work, remove damaged portions and install new products of equal capacity, quality, and functionality.
1. Existing utilities shall not be interrupted without prior written approval from the Landlord. All interruptions shall occur during off hours.
CUTTING AND PATCHING - Cut, channel, chase, and drill holes, walls, partitions, ceilings, and other surfaces required to permit electrical installations. Perform cutting by skilled mechanics of trades involved.

- Repair and refresh disturbed finish materials and other surfaces to match adjacent undisturbed surfaces. Install new firestopping where existing firestopping has been disturbed. Repair and refresh materials and other surfaces by skilled mechanics of trades involved.

SECTION 262416 - PANELBOARDS

- GENERAL - Panelboard cabinets shall be NEMA PB 1, type 1 zinc coated steel with manufacturer's standard enamel finish over corrosion-resistant treatment or primer coat. Each panelboard and existing panelboard modified in accordance shall be furnished with a new and typed directory card indicating the load served by each branch circuit.
1. Panelboard bus material shall match existing.
2. Provide each panelboard with an equipment ground bus adequate for feeder and branch-circuit equipment ground conductors. Bus shall be bonded to bus.
3. Where future devices (spaces) are scheduled provide mounting brackets, bus connections, and necessary appurtenances required for future installation of devices.
4. Each panelboard shall be fully rated to interrupt symmetrical short-circuit current available at terminals. See schedules for required interrupting current (A.I.C.).
5. Panelboards shall be mounted with top of rim at 74" above finished floor, unless otherwise indicated.
6. Panelboards shall be mounted plumb and rigid without distortion of box. Mount recessed panelboards with fronts uniformly flush with wall finish.
7. Panelboards shall be manufactured by Cutler-Hammer, General Electric, Siemens, or Square D.

SECTION 262778 - WIRING DEVICES

- GENERAL - Devices shall be installed plumb and secure. Unless otherwise indicated, flush mount wiring devices with long dimension vertical, and grounding terminal of receptacles on bottom.
1. Unless otherwise indicated wiring devices shall be mounted at the following heights, measured from finished floor to centerline of device.
Wall switches and wall box dimmers * 48"
Receptacles * 18"
2. Group adjacent devices under single multi-gang wall plates.
3. Wiring devices shall be manufactured by Pass and Seymour, Leviton, Hubbell, or General Electric.
B. RECEPTACLES - Duplex receptacles shall be specification grade 20 ampere, 120 volt.
1. Ground fault interrupting (GFI) receptacles shall be feed-through type arranged to protect connected downstream receptacles on same circuit.
2. Receptacles serving owner furnished equipment shall have configuration to match that of equipment plug.
C. SWITCHES - Snap switches shall be specification grade, quiet type, single pole, two pole, or three-way to suit connections.
D. DEVICE COLOR - Coordinate color with Owner prior to purchase for devices in areas accessible to public. In back of house areas, color shall be gray.
E. WALL PLATES - Plates in areas accessible to public shall be smooth finish plastic in single and combination types to match corresponding wiring devices. Match color of associated device(s). Plates in back of house areas shall be type 302 stainless steel in single and combination types to match corresponding wiring devices.

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D. DEVICE COLOR - Coordinate color with Owner prior to purchase for devices in areas accessible to public. In back of house areas, color shall be gray.
E. WALL PLATES - Plates in areas accessible to public shall be smooth finish plastic in single and combination types to match corresponding wiring devices. Match color of associated device(s). Plates in back of house areas shall be type 302 stainless steel in single and combination types to match corresponding wiring devices.

- TEMPORARY POWER AND LIGHTING - Use electric power from Owner's existing system without metering and without payment of use charges.
Provide receptacle outlets adequate for connection of power tools and construction equipment.
Provide temporary lighting with local switching that provides adequate illumination for construction operations and traffic conditions.

SECTION 262816 - ENCLOSED SWITCHES

- ENCLOSED SWITCHES - Enclosed switches shall be heavy-duty grade with lockable handles. Switches shall be non-volatile unless otherwise indicated and shall have clips to accommodate fuse sizes indicated on the drawings.
1. Exterior mounted switches shall be NEMA 3R rated and shall be bolted closed.
2. Cartridge fuses shall be class dual-element time delay, Class "RK-1" Busman low peak. Equivalent fuses as manufactured by Gould Shalom, Littelfuse, or GE are acceptable.
3. Enclosed switches shall be manufactured by Cutler-Hammer, General Electric, Siemens, or Square D.

SECTION 265100 - LIGHTING

- LUMINAIRE AND FIXTURE COMPONENTS - All metal parts and components shall be free from burrs, sharp corners, and edges. All fixtures shall be shipped pre-wired and ready for mounting.
1. Doors, frames, and other internal access mechanisms shall be smooth operating, free from light leakage under operating conditions, and arranged to permit relamping without use of tools.
2. EMERGENCY LIGHTING UNITS - Unit shall be a self-contained unit with sealed, maintenance-free, lead-acid type with minimum 5-year nominal life and fully automatic, solid-state type charger with sealed transfer relay.
REC - SODA DISPENSER 201 (G) 1 0 202 (G) EXISTING WATER HEATER
REC - CONNECTION OVEN 201 (G) 11 12 -- -- REC - SEATING
SHUNT TRIP SPACE ONLY 13 14 201 REC - SEATING
REC - GLASS CHILLER 201 (G) 15 14 201 REC - SEATING
REC - ICE MACHINE 201 (G) 17 19 201 REC - POS
REC - PREP TABLE 201 (G) 19 20 201 REC - BAR/BAR
REC - PREP TABLE 201 (G) 21 22 201 REC - BAR SEATING
REC - RANGE 201 (S) 23 24 201 REC - EXTERIOR
SHUNT TRIP SPACE ONLY 25 26 201 REC - MANAGERS OFFICE
REC - REAGIN IN FREEZER 201 (G) 27 29 201 REC - EXTERIOR
REC - BACK BAR COOLER 201 (G) 29 30 201 TIME CLOCK 'T-C'
GLASS WASHER 452 (L) 31 32 201 LTG - SEATING / BAR
REC - REAGIN IN FREEZER 33 34 201 LTG - BACK OF HOUSE
ESH WASHER 351 (L) 35 36 201 LTG - BACK LIGHTING
MAU-1 503 37 38 1003 PANEL 1151A
-- 39 40 -- --
-- 41 42 -- --

- Lighting shall be provided with a test switch and light-emitting diode indicator light which is visible and accessible without opening fixture or entering ceiling space.
Battery shall be a sealed, maintenance-free, nickel-cadmium type with minimum 5-year nominal life with fully automatic, solid-state, constant-current type charger.
3. Relay shall automatically energize lamp or LEDs from unit when normal supply circuit voltage drops to 80 percent of nominal voltage or below. When normal voltage is restored, relay disconnects lamp, and battery is automatically recharged and floated on charger.
D. LED LIGHT SOURCE REQUIREMENTS:
1. Rated life (L70): Minimum 50,000 hours as defined by IES LM80 and TM21.
2. Color Rendering Index (CRI): 80 CRI minimum.
3. Each luminaire type shall be bonded within a three-step MacAdam Ellipse to ensure color consistency among luminaires.
E. LED DRIVER REQUIREMENTS:
1. 0-10V Dimming.
2. Total Harmonic Distortion Rating: Less than 20 percent.
3. Ambient Temperature Rating: -40° to +55° C.
4. Power Factor (100% output): >0.95

- WARRANTY - Includes labor allowance required for replacement on-site at no extra cost to Owner within 1-year construction warranty. Transfer remainder of the manufacturer's warranty, including ballast manufacturer's labor spend to owner after 1-year construction warranty.
1. Ballast and Drivers: 5-year replacement warranty.
2. LED system Warranty: 5-year replacement warranty.

- FINISHES - Luminaire finishes shall be manufacturer's standard, unless otherwise indicated. Painted finishes shall be applied over corrosion-resistant treatment or primer, free of defects. Metallic finishes shall be corrosion resistant.
INSTALLATION - Luminaires shall be set level, plumb, and square with ceiling and walls, and secured according to manufacturer's written instructions and approved submittals.
1. Luminaires in or on grid-type suspended ceilings shall be supported with support clips and a minimum of four ceiling support system rods or wires for each fixture, located not more than 6 inches from fixture corners.

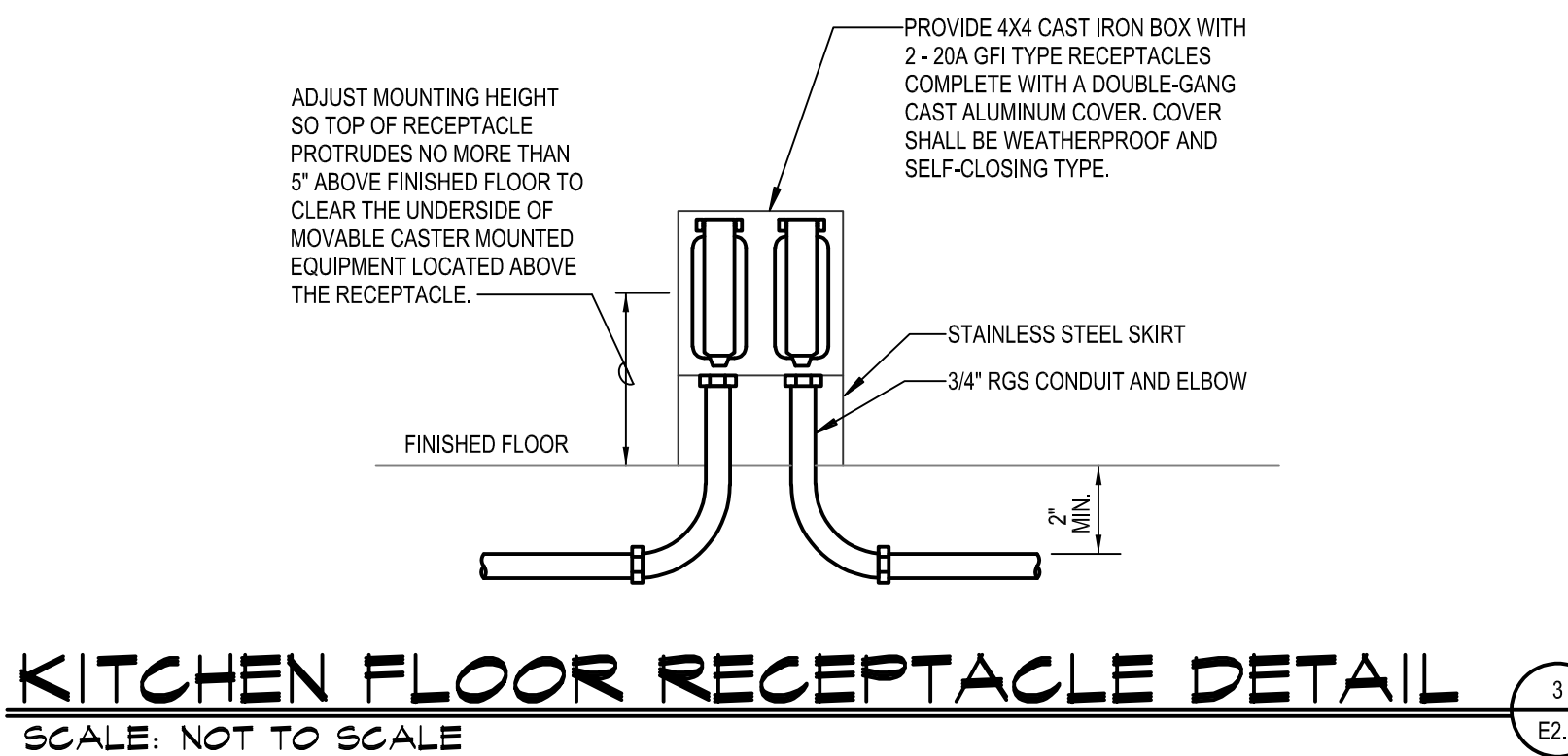
SECTION 265200 - LIGHTING CONTROL

- OCCUPANCY SENSORS - Sensor adapts or "learns" patterns of use specific to controlled space to reduce false switching.
1. Wall Box Sensors: Passive dual technology with 180 degree adjustable field of view capable of sensing small motion m20 when mounted at 4". Positioning on sensor face provides manual on/manual off load control. Load may be manually turned on or off at any time. Mount in wall box with decorative style faceplate. sensor shall have gray finish with 302 stainless steel plate. Integral switch in sensor housing shall be rated for 800W ballast or incandescent load at 120V, 1200W ballast load at 277V, and 14 hp motor load at 120V. Sensor switch WSD PDT or equivalent by Hubbell or Wattsstopper.
2. Adjust occupancy sensors tailored to actual use conditions of controlled space. Make adjustments before and after Owner has occupied space.
B. LIGHTING CONTROL - See plans, schedules, and details for requirements of network type lighting control.
C. WARRANTY - Manufacturer and Installer agree to repair or replace devices that fail in materials or workmanship within two years from date of substantial completion.
D. MANUFACTURERS
1. Lighting control system shall be manufactured by SensorSwitch nLight, Wattsstopper, Ecoclim.

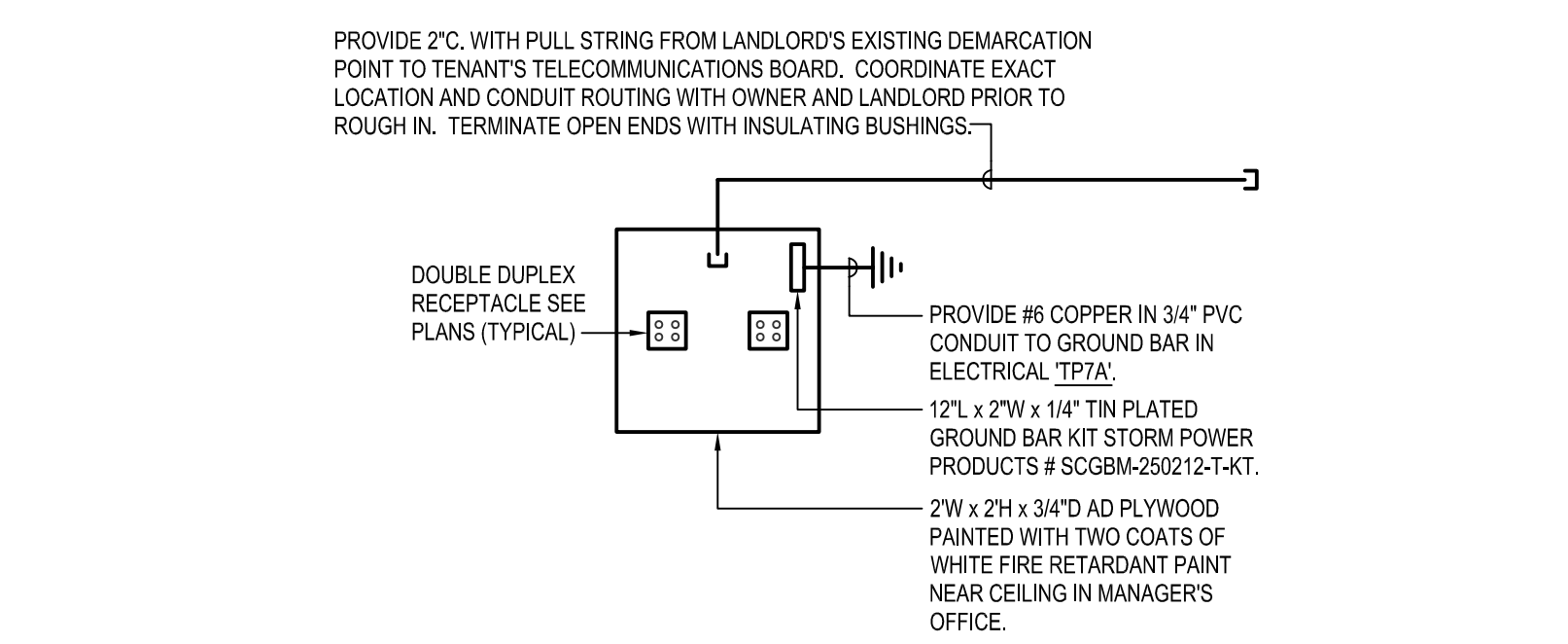
SECTION 268100 - FIRE ALARM

- GENERAL - All new devices shall be connected to the existing addressable fire alarm control panel. All new devices shall be compatible with the existing control equipment. The existing fire alarm system shall remain functional throughout construction. Any required outages shall be coordinated with the fire marshal and owner. Provide panel modifications and programming at the existing fire alarm control panel as required by new work.
B. SUBMISSIONS TO AUTHORITIES HAVING JURISDICTION - Submit to authorities having jurisdiction. Include copies of annotated Contract Drawings as needed to depict component locations to facilitate review. Resubmit if required to make clarifications or revisions to obtain approval. On receipt of comments from authorities having jurisdiction, submit them to Engineer for review.
C. SMOKE DETECTORS - Smoke detectors shall be photoelectric type with integral LED indicating light and adjustable sensitivity settings.
1. Duct smoke detector shall be ionization type with sampling tube sized as recommended by the manufacturer for the specific duct size, air velocity, and installation conditions where applied.
2. Provide fan shutdown relay(s) rated to interrupt fan motor-control circuit where required.
D. NOTIFICATION APPLIANCES - Devices shall be combination type with factory-integrated audible and visible devices in a single-mounting assembly.
1. Audible alarm device shall be electric-vibrating-polarized type horn with provision for housing the operating mechanism behind a grille. Horns produce a sound-pressure level of 90 db, measured 10 feet from the horn.
2. Visible alarm devices shall be xenon strobe lights listed under UL 1971 with clear or nominal white polycarbonate lens. The word "FIRE" shall be engraved in minimum 1-inch high letters on the lens. Unit candelas output shall meet the strobe layout.
3. Notification devices shall be mounted at 82" A.F.F. or 6" below finished ceiling whichever is lower.
E. WIRE - wiring shall be as follows unless otherwise recommended by the manufacturer or required by the authority having jurisdiction:
Non-Power-Limited Circuits: Solid-copper conductors with 600-V-Rated, 75 deg C, color-coded insulation.
Low-Voltage Circuits: No. 16 AWG, minimum.
Line-Voltage Circuits: No. 12 AWG, minimum.
Power-Limited Circuits: NFPA 70, Types FPL, FPLR, or FPLP, as recommended by manufacturer.
1. Fire alarm wiring shall be installed in raceway. Conceal raceway except in unfinshed spaces and as indicated.
2. MANUFACTURERS - Match existing.

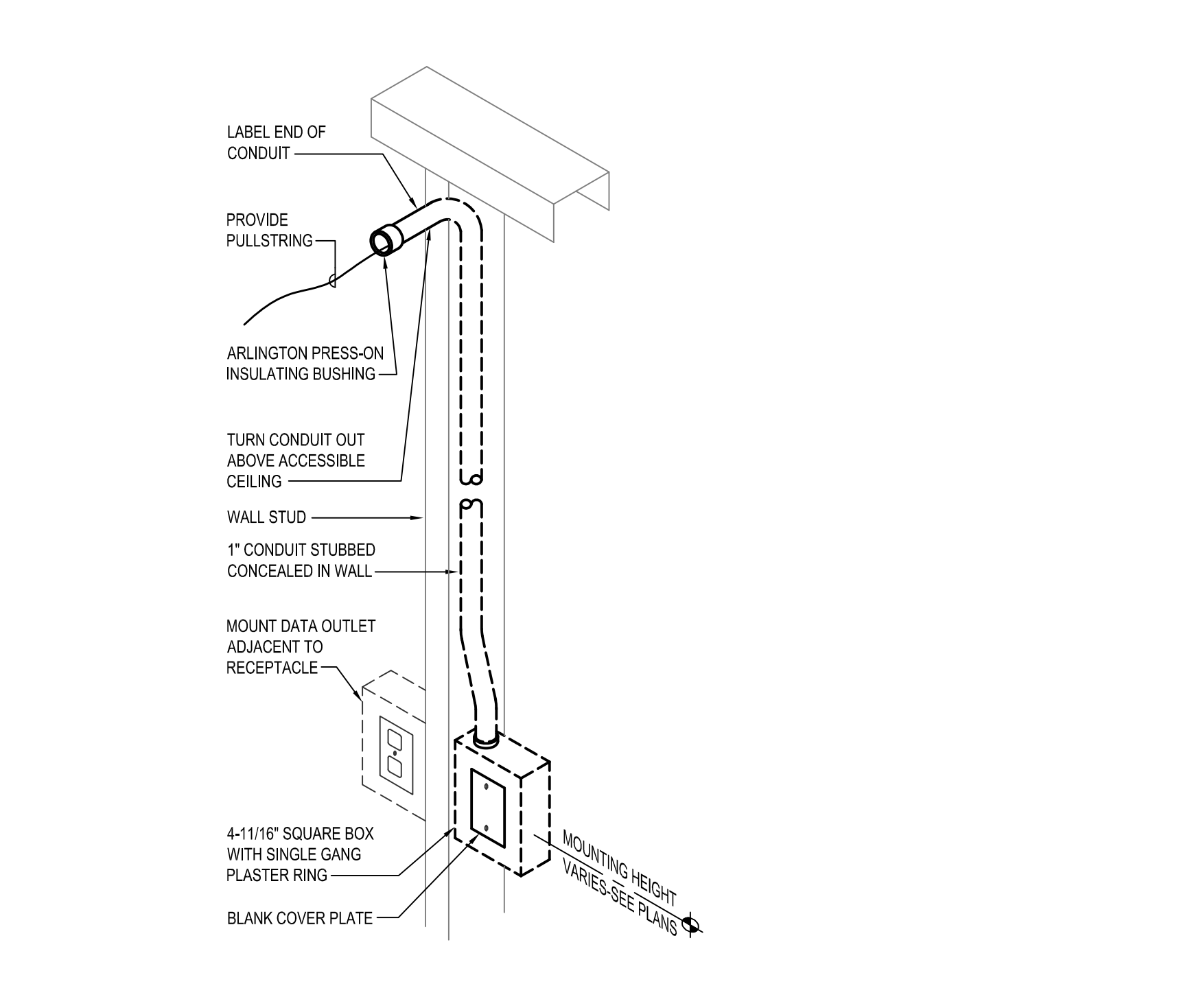
- FIELD SERVICE AND TESTING - Upon completion of work a re-acceptance test shall be performed by a licensed party in accordance with NFPA 72.
1. Occupancy Adjustments: When requested within one year of date of Substantial Completion, provide on-site assistance in adjusting sound levels, controls, and sensitivities to suit actual occupied conditions. Provide up to two requested visits to Project site for this purpose.



KITCHEN FLOOR RECEPTACLE DETAIL SCALE: NOT TO SCALE



COMMUNICATIONS BOARD DETAIL SCALE: NOT TO SCALE



DATA/COMM ROUGH-IN DETAIL SCALE: NOT TO SCALE

ELECTRICAL SYMBOLS

Table with columns for SYMBOL, DESCRIPTION, SYMBOL, and DESCRIPTION. It lists symbols for Lighting (Luminaire, Emergency Lighting, etc.), Fire Alarm (Fire Alarm Panel, Fire Alarm Pull Station, etc.), Power (Duplex Receptacle, Switch, etc.), and Communication (Wall Phone Outlet, etc.).

ACCESS CONTROL ROUGH-IN SCALE: NOT TO SCALE



- NOTES:
1. ROUGH-IN REQUIREMENTS AND LOCATIONS SIMILAR FOR DOUBLE DOORS.
2. SEE POWER PLANS FOR SPECIFIC DOOR/ROUGH-IN REQUIREMENTS.
3. COORDINATE ACCESS CONTROL, ROUGH-IN REQUIREMENTS WITH ARCHITECTURAL DOOR SCHEDULES.
4. COORDINATE ACCESS CONTROL, ROUGH-IN REQUIREMENTS WITH SECURITY EQUIPMENT SUPPLIER.

Interior Lighting Compliance Certificate

COMcheck Software Version 4.1.5.5 Interior Lighting Compliance Certificate. Project Information: 2018 IECC, Proposed Mexican Restaurant, Alteration. Allowed Interior Lighting Power table with columns for Area Category, Floor Area, Allowed Watts, and Allowed Watts (B X C). Proposed Interior Lighting Power table with columns for Fixture ID, Description, Lamp, Wattage Per Lamp, Ballast, Lamp/Fixture, # of Fixtures, and Future Watts (C X D). Interior Lighting Passes section with Compliance Statement and Project Manager/Engineer signatures.

Exterior Lighting Compliance Certificate

COMcheck Software Version 4.1.5.5 Exterior Lighting Compliance Certificate. Project Information: 2018 IECC, Proposed Mexican Restaurant, Alteration. Allowed Exterior Lighting Power table with columns for Area/Space Category, Quantity, Allowed Watts, and Allowed Watts (B X C). Proposed Exterior Lighting Power table with columns for Fixture ID, Description, Lamp, Wattage Per Lamp, Ballast, Lamp/Fixture, # of Fixtures, and Future Watts (C X D). Exterior Lighting Passes section with Compliance Statement and Project Manager/Engineer signatures.

ENERGY CODE COMPLIANCE

Table with columns for CODE, 2018 IECC, COMCHECK, YES, COMMISSIONING, YES, and NOTE 1.

- NOTES:
1. REQUIRED DOCUMENTS (REFER TO CODE) SHALL BE PROVIDED TO THE BUILDING OWNER OR OWNER REPRESENTATIVE WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

PROPOSED MEXICAN RESTAURANT 8601 WEST DODGE ROAD SUITE 101 OMAHA, NEBRASKA 68114

stanley j how ARCHITECTS HOW | SELF 16685 CALIFORNIA ST OMAHA, NE 68154 CA-0014

E2.1 SHEET DATE 07/24/24