

# Heritage Salon Fit-up

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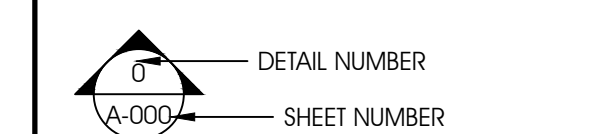
By Fire Alarm Contractor

## abbreviations

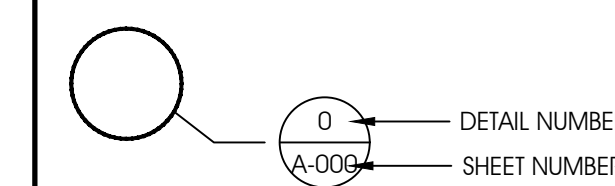
@	AT	EA.	EACH	LAM	LAMINATED	R/W	RIGHT OF WAY	WD	WOOD
∅	DIAMETER	EJ	EXPANSION JOINT	LAV	LAVATORY	SECT	SECTION	WWF	WELDED WIRE FABRIC
4' R	4'-0" RADIUS	ELEV.	ELEVATION	MBL	MARBLE	SD	SOAP DISPENSER		
A/C	AIR CONDITIONING	EW	EACH WAY	MO	MASONRY OPENING	SND	SANITARY NAPKIN DISPENSER		
AFF	ABOVE FINISH FLOOR	EWC	ELECTRIC WATER COOLER	MTD	MOUNTED	SNR	SANITARY NAPKIN RECEPTOR		
C.I.	CAST IRON	EW	ELECTRIC WATER HEATER	MTL	METAL	SQ	SQUARE		
C.J.	CONTROL JOINT	EXT.	EXTERIOR	NIC	NOT IN CONTRACT	TC	TERRA COTTA PIPE		
CMU	CONCRETE MASONRY UNIT	FD	FLOOR DRAIN	NTS	NOT TO SCALE	TOJ	TOP OF JOIST		
C.O.	CLEAN OUT	FF	FINISHED FLOOR	OC	ON CENTER	TOM	TOP OF MASONRY		
CONC.	CONCRETE	FIN.	FINISHED	PSF	POUNDS PER SQUARE FOOT	TOS	TOP OF STEEL		
DF	DRINKING FOUNTAIN	GL.	GLASS	PSI	POUNDS PER SQUARE INCH	TID	TOILET TISSUE DISPENSER		
DISP.	DISPOSAL	HC	HANDICAPPED	PVC	POLYVINYL CHLORIDE PLASTIC	VCT	VINYL COMPOSITION TILE		
DN	DOWN	HTD	HAND TOWEL DISPENSER	RCP	REINFORCED CONCRETE PIPE	VTR	VENT THROUGH ROOF		
DS	DOWNSPOUT	INS.	INSULATION	RD	ROOF DRAIN	W/	WITH		
DW	DISHWASHER	INT.	INTERIOR	REINF	REINFORCED	WC	WATER CLOSET		

## drawing notations

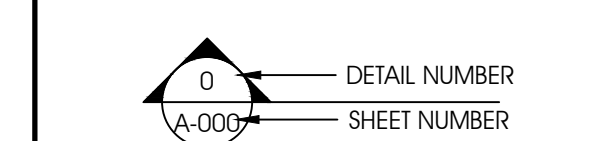
### elevation indicator



### detail indicator

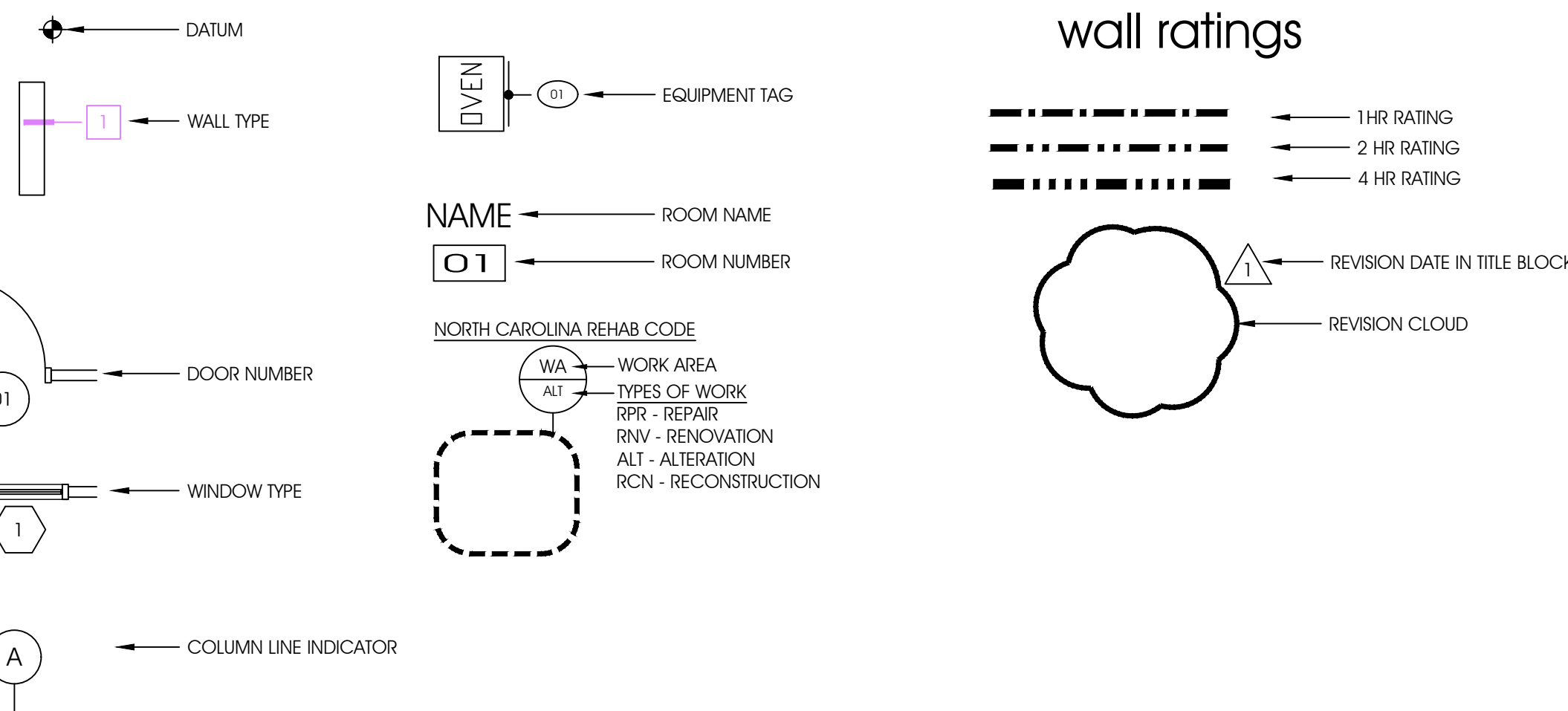


### section indicator



## symbols

	EARTH		STONE		BRICK
	GRAVEL		FINISHED WOOD		PLYWOOD
	CONCRETE		WOOD BLOCKING		BRASS
	CONCRETE MASONRY UNIT		RIGID INSULATION		
	STEEL		BATT INSULATION		



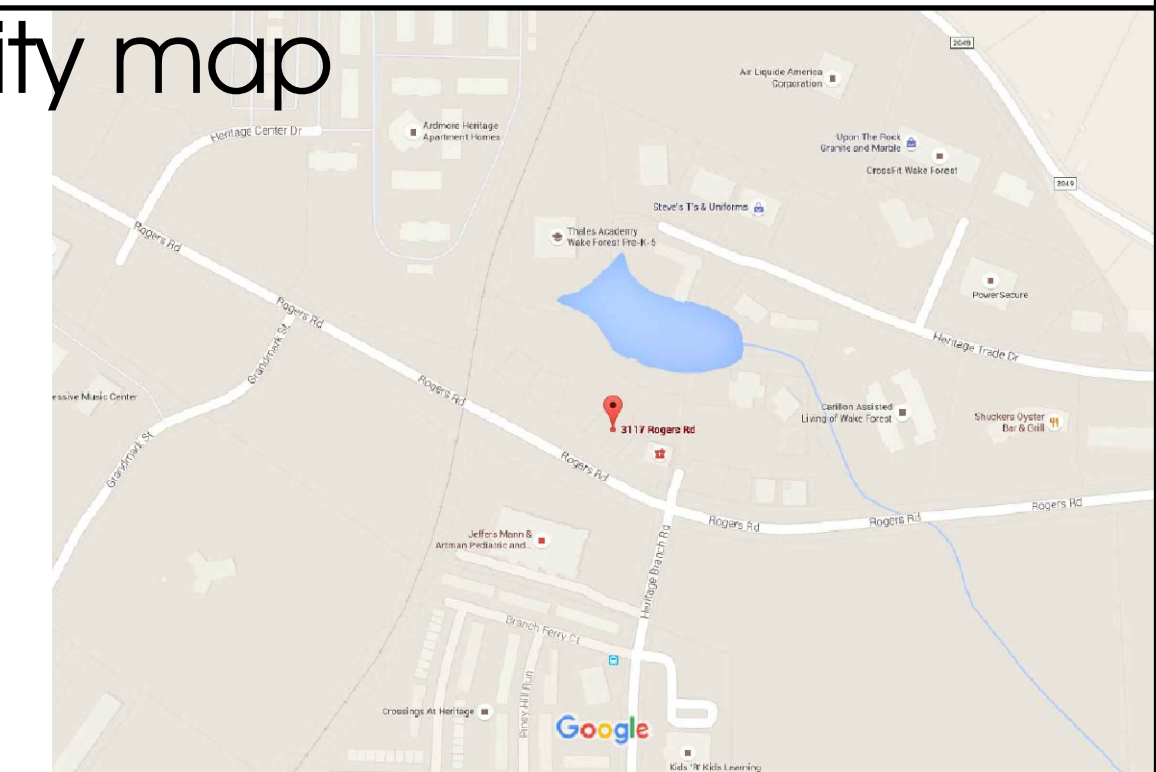
## owner

JMJ Commercial Contractors  
10713 Staghound Trail  
Zebulon, NC

## consultants

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## vicinity map



Heritage Salon  
Fit-Up

3117 Rogers Road  
Wake Forest, NC

OWNER: JMJ Commercial Contractors  
10713 Staghound Trail  
Zebulon, NC

PROJECT NUMBER: 160001

DRAWN BY: DTA

ISSUED / REVIEW:

ISSUED / CONSTRUCTION: 7-1-16

REVISIONS

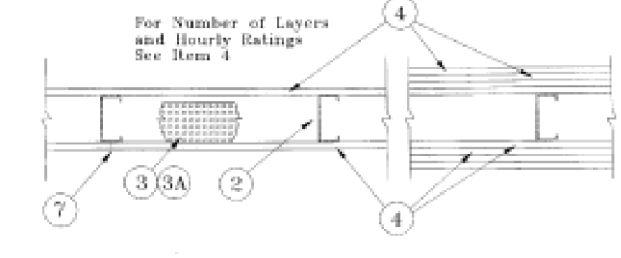
COVER SHEET

CS

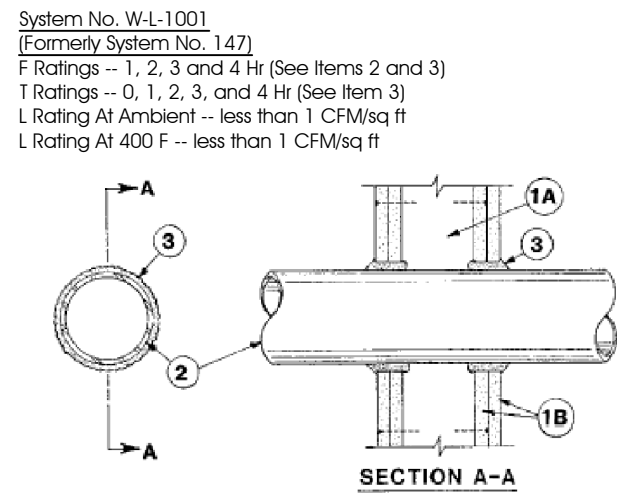




Design No. U419  
Nonbearing Wall Rating - 1, 2, 3 or 4 Hr (See Items 3 & 4)



1. Floor and Ceiling Runs - (Not shown) - Channel shapes, fabricated from min 25 MGS (min 20 MGS when item 4A is used) cold-rolled steel, min width to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.
2. Steel Stud - Channel shape, fabricated from min 25 MGS (min 20 MGS when item 4A is used) cold-rolled steel, min width as indicated under item 4, min 1-1/4 in. flange and 1/2 in. web, spaced a max of 24 in. OC. Studs to be cut 3/8 x 3/4 in. web to assembly height.
3. Bolt and Bracket - (Bracket as indicated under item 4) - Mineral wool batt, section fitted between studs and unbraced. Min nom. thickness as indicated under item 4. See Bolt and Bracket (B&B) or B&B Categories for names of Classified companies.
- 3A. Bolt and Bracket - (Optional) - Placed in stud cavity, dry glass fiber or mineral wool fraction meeting the UL Classification Rating as to Surface Burning Characteristics and/or Fire Resistance. See Bolt and Bracket (B&B) or B&B Categories for names of Classified companies.
4. Gypsum Board - Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite side of stud. Vertical joints in adjacent layers (multi-layer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multi-layer systems) staggered a min of 1/2 in. The thickness and number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows:



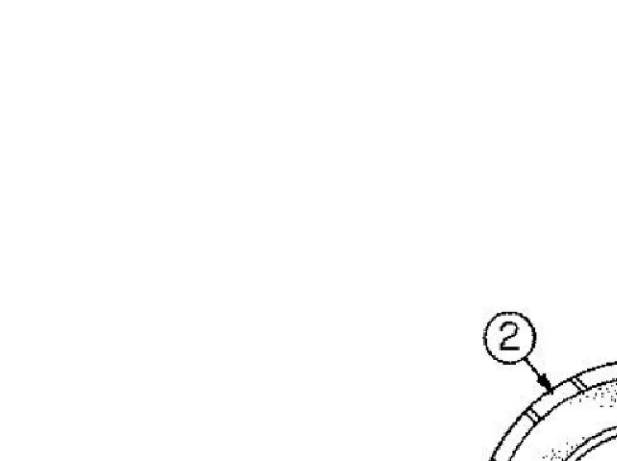
- | Rating | Min Stud Depth | No. of Layers           | Min Thrs  | of Insulation (Item 3) |
|--------|----------------|-------------------------|-----------|------------------------|
| 1      | 3-1/2          | 1 layer, 5/8 in. thick  | 1-1/2 in. | Optional               |
| 2      | 3-1/2          | 1 layer, 1/2 in. thick  | 1-1/2 in. | Optional               |
| 1      | 1-5/8          | 1 layer, 3/4 in. thick  | Optional  | Optional               |
| 1      | 1-5/8          | 2 layers, 1/2 in. thick | Optional  | Optional               |
| 2      | 1-5/8          | 2 layers, 5/8 in. thick | Optional  | Optional               |
| 3      | 3-1/2          | 1 layer, 3/4 in. thick  | 3 in.     | Optional               |
| 3      | 1-5/8          | 3 layers, 1/2 in. thick | Optional  | Optional               |
| 3      | 1-5/8          | 2 layers, 3/4 in. thick | Optional  | Optional               |
| 3      | 1-5/8          | 3 layers, 5/8 in. thick | Optional  | Optional               |
| 4      | 1-5/8          | 4 layers, 5/8 in. thick | Optional  | Optional               |
| 4      | 2-1/2          | 2 layers, 3/4 in. thick | 2 in.     | Optional               |

CANADIAN GYPSUM COMPANY - 1/2 in. thick Type C, IP-X2, IP-C, IP-AE, WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IP-C, IP-AE, SCS, SKX, WSK or WRC, 3/4 in. thick Type IP-X3, ULTRACODE, ULTRACODE 5HC or ULTRACODE WRC.

UNITED STATES GYPSUM CO - 1/2 in. thick Type C, IP-X2, IP-AR or WRC, 5/8 in. thick Type SCS, SKX, WSK, IP-X1, AR, C, WRC, FRX-C, IP-AR, IP-X2, IP-C, AR, 3/4 in. thick Type IP-X3, ULTRACODE, ULTRACODE 5HC or ULTRACODE WRC.

USG MEXICO S A DE CV - 1/2 in. thick Type C, IP-X2, IP-AR or WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IP-AR, SCS, SKX, WSK, WRC or 3/4 in. thick Type IP-X3, ULTRACODE, ULTRACODE 5HC or ULTRACODE WRC.

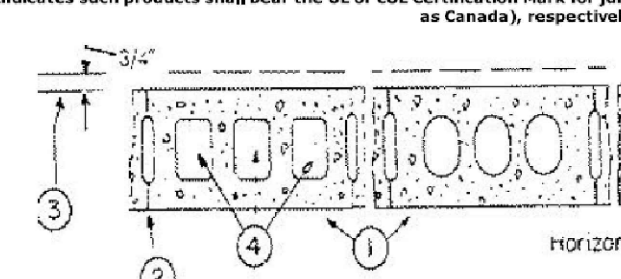
4A. Gypsum Board - (As an alternate to item 4) - 5/8 in. thick gypsum panels, installed as described in item 4 with type 5-1/2 steel screw used to attach panels to each intersecting stud with 1/2 in. long type 5-1/2 steel screws, not to use with item 4A.



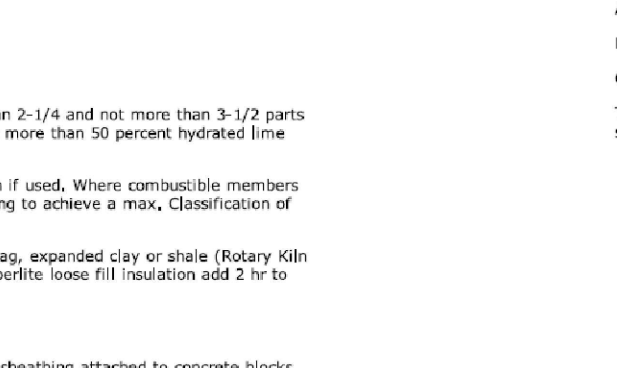
- System No. C-AJ-1020**  
December 02, 2010
- F Rating - 2 and 3 Hr (See Item 3)  
T Rating - 0, 3/4 and 1 Hr (See Item 3)  
L Rating at Ambient - Less than 1 CFM/sq ft  
L Rating at 400 F - Less than 1 CFM/sq ft

Design No. U905  
March 11, 2016  
Nonbearing Wall Rating - 2 Hr

This design was evaluated using a load design method other than the Limit States Design Method (i.e., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load reduction factor shall be used - See Guide BXUV or BXUVZ



1. Concrete Blocks - Various designs, Classification D-2 (2 hr).
2. Mortar - Blocks laid in full bed of mortar, min. 3/8 in. thick, of not less than 2-1/4" and not more than 3-1/2" parts of class II sand, mixed in part and packed (compacted by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.
3. Portland Cement Stucco or Gypsum Plaster - Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. classification of 1-1/2 hr. Attached to concrete blocks (Item 1).
4. Loose Masonry Fill - If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rohm-Kin Pores), water resistant vermiculite, masonry fill insulation, or masonry control panels, loose fill insulation add 1 hr to classification.
5. Framed Plastic - (Optional-Not Shown) - 1-1/2 in. thick, max. 4 ft wide sheathing attached to concrete blocks (Item 1).
6. ATLAS ROOFING CORP - "EnergyShield Pro Wall Insulation" and "EnergyShield Pro 2-Wall Insulation"
7. CARLISLE COATINGS & WATERPROOFING INC - Type R2+ Sheath
8. FIRESTONE BUILDING PRODUCTS CO L L C - "Everguard" CI Exterior Wall Insulation and "Everguard" CI Glass Exterior Wall Insulation
9. HUNTER PANELS - Types XC-Class A, Xd 206
10. RMAX OPERATING L L C - "TSX-8500", "TSX-8510", "Thermashield-XR", "ECOMAX", "Thermashield-S", "Durashield-S"
11. THE DOW CHEMICAL CO - Types Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Backing Board, Thermax White Fibreglass Insulation, Thermax Exterior Insulation, Thermax XAMBOND Exterior Insulation, Thermax 3H Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP) and TUFF-4" C Insulation
12. Building Unks - As an alternate to Items 5, min. 1-in-thick polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 96 in.
13. RMAX OPERATING L L C - "Thermashield-ST", "ECOBASST", "ThermalBase-C"



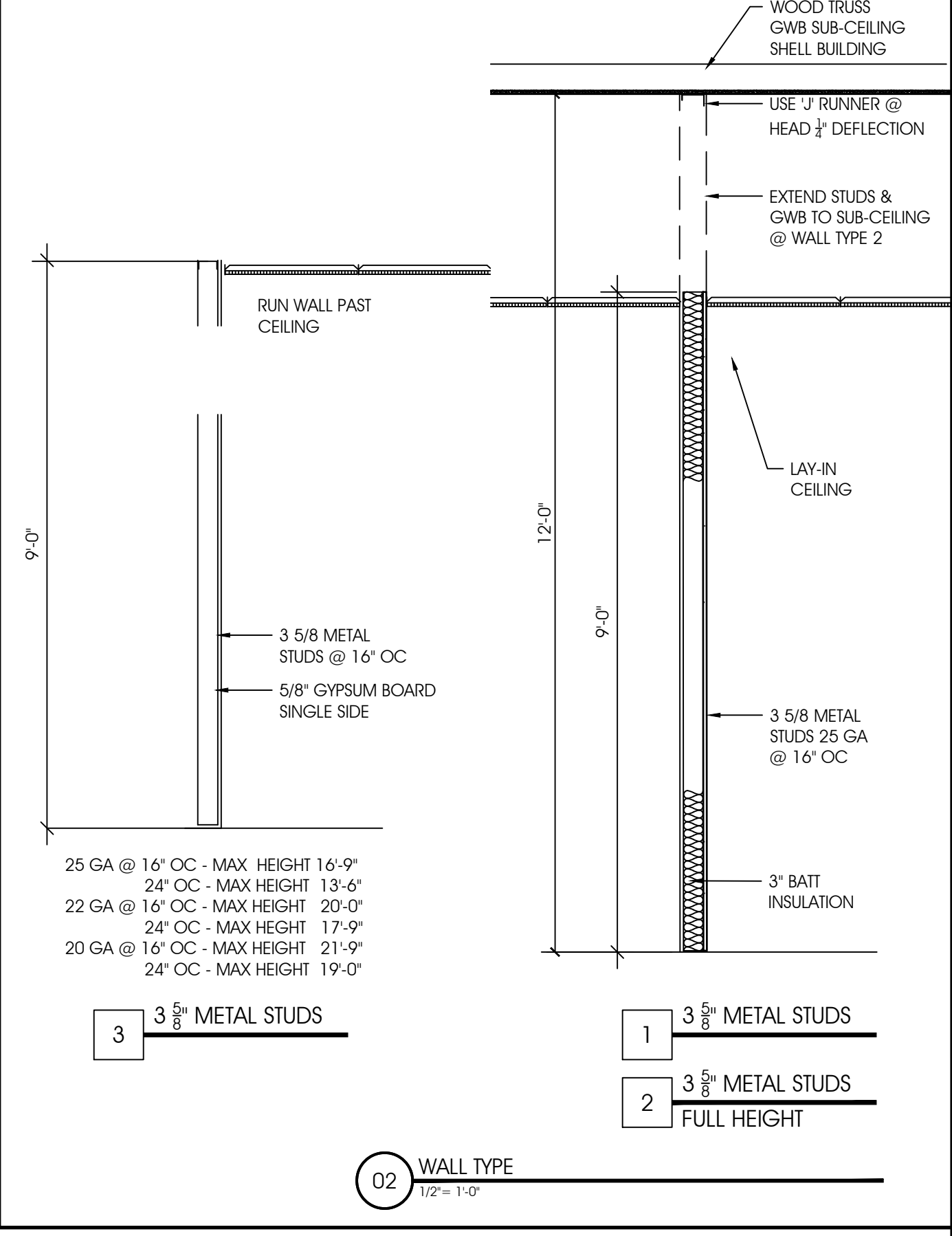
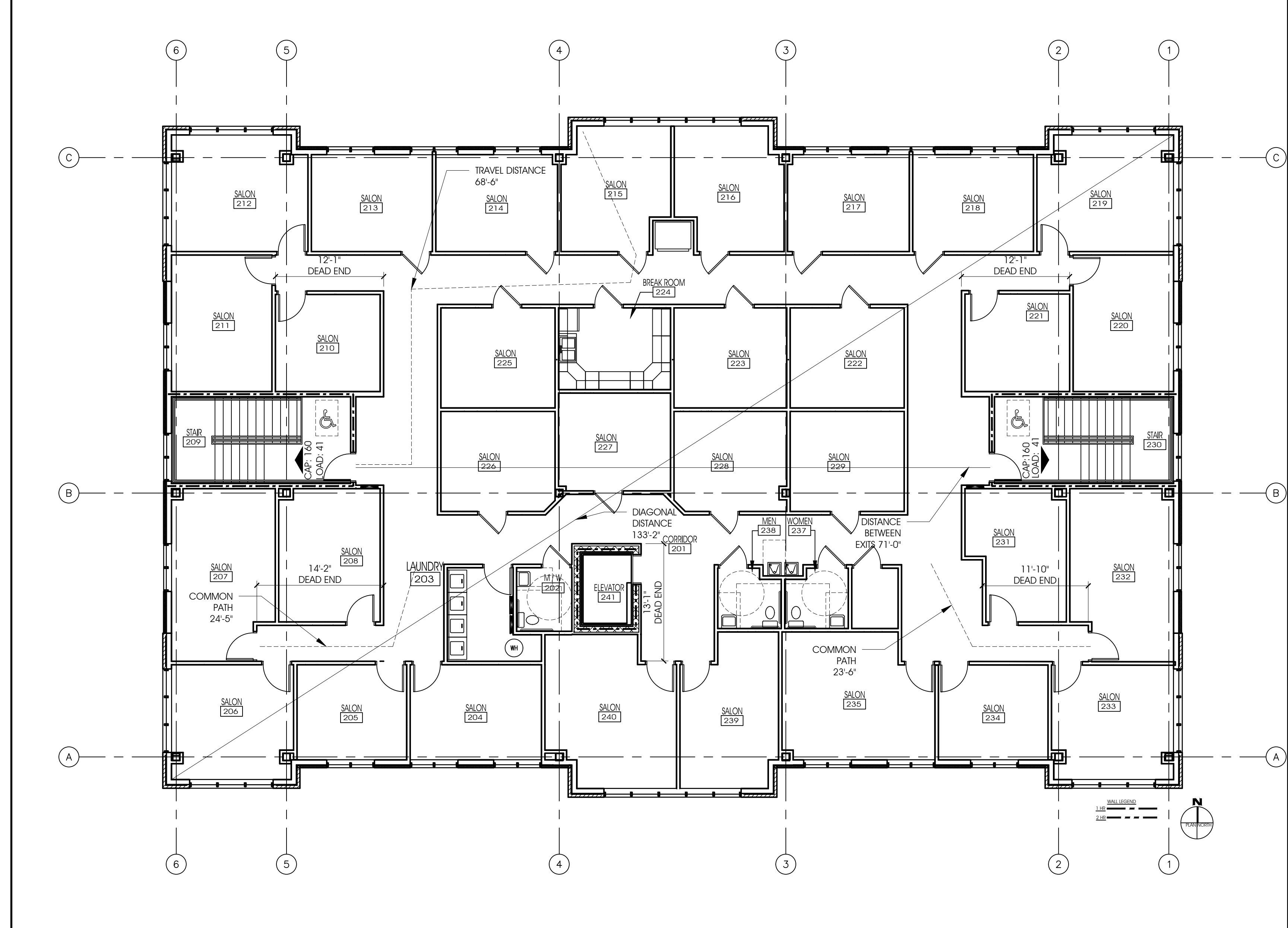
1. Floor or Wall Assembly - Reinforced lightweight or normal weight (100-150 pcf) concrete having a min thickness as specified in the table below (Item 3). Wall may also be constructed of any UL Classified concrete block, max diam of opening is 8 in.
2. Metallic Sleeve - (Optional) - Nom 8 in. diam (or smaller) Schedule 40 (or heavier) steel sleeve cast or grouted into wall or floor assembly. Flush with floor or wall surface.
3. Through Penetrants - One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the freestop system. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The annular space shall be as specified in the table below. The following types and sizes of metallic pipes, conduits or tubing may be used:

Floor or Wall	Min Floor or Wall Thickness In.	Max Diam of Steel Pipe or Conduit In.	Min Annular Space In.	Max Annular Space In.	Min Fill (Min Thrs) In.	Min Forming (Min Thrs) In.	F Rating Hr	T Rating Hr
F	3-3/4	1-1/2	3/8	2-1/8	1	2-3/4	2	0
F	3-3/4	6	3/8	3/4	1	2-3/4	2	0
F	3-3/4	6	3/8	1	2	2-3/4	2	0
F	4-1/2	1-1/2	3/8	2-1/8	1	3-1/2	3	3/4
F	4-1/2	6	3/8	3/4	1	3-1/2	3	0
F	4-1/2	6	3/8	1	2	2-1/2	3	0
W	5-1/2	1-1/2	3/8	2-1/8	1	3-1/2	3	3/4
W	5-1/2	6	3/8	3/4	1	3-1/2	3	0
W	6-1/2	1-1/2	3/8	2-1/8	2	3-1/2	3	1
W	6-1/2	6	3/8	1	2	2-1/2	3	0

4. Forming Material - Min 4 gpd material wool batt insulation firmly packed into opening as a permanent form at the min thickness specified in the above table (Item 3). Forming material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
5. Filling Void or Cavity Material - Caulk - Min thickness of fill material as specified in the above table (Item 3) applied within the annulus, flush with top surface of floor or with both surfaces of wall.

UNITED STATES GYPSUM CO - Type AS

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



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devon@devontolson.com

Heritage Salon Fit-Up  
3117 Rogers Road  
Wake Forest, NC

OWNER: JMJ Structural Contractors  
10713 Staghound Trail  
Zebulon, NC

PROJECT NUMBER: 160001  
DRAWN BY: DTA  
ISSUED / REVIEW:

ISSUED / CONSTRUCTION: 7-1-16

REVISIONS

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LIFE SAFETY PLAN

BD1.1

1 OF 10 SHEETS







HERITAGE SALONS

3117 Rogers Road  
 Wake Forest, NC

OWNER:

PROJECT NUMBER: 160001

DRAWN BY: DTA

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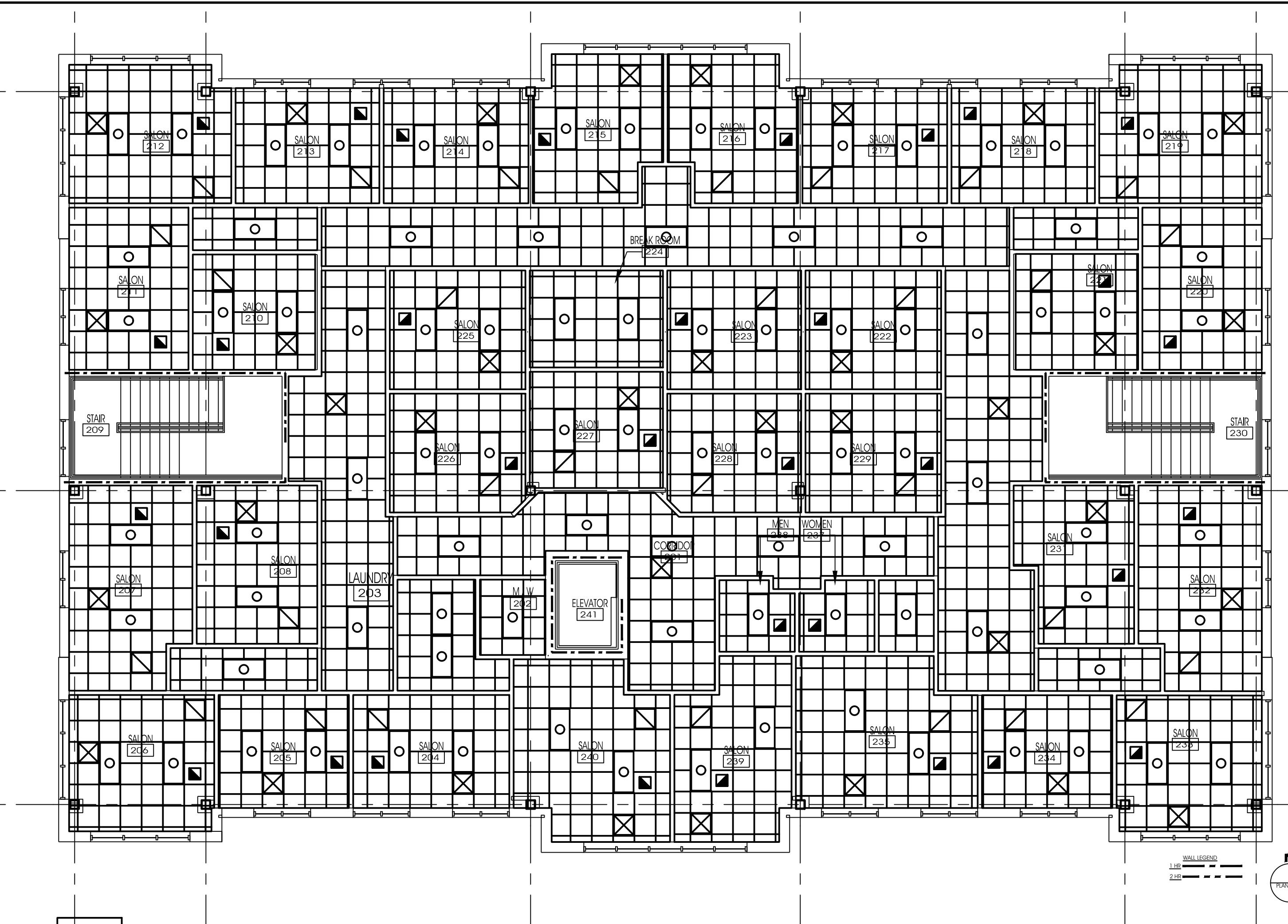
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REFLECTED CEILING PLAN

A2

OF SHEETS



- 2x4 LAY-IN
- SUPPLY AIR
- RETURN AIR
- EXHAUST FAN

01 FLOOR PLAN  
1/8" = 1'-0"



## PLUMBING SPECIFICATIONS

- THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS TO DESCRIBE THE INSTALLATION OF A COMPLETE, FULLY ADJUSTED AND OPERATIONAL SYSTEM.
- THE CONTRACTOR SHALL PROVIDE ALL SUPERVISION, LABOR, MATERIAL, EQUIPMENT, MACHINERY AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE SYSTEMS.
- ALL WORK UNDER THEIR SECTION SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH STATE BUILDING CODES. IN THE EVENT THE LOCAL AUTHORITY HAVING JURISDICTION DETERMINES THERE IS A CODE VIOLATION ASSOCIATED WITH THE CONSTRUCTION DOCUMENTS AND REQUIRES ADDITIONAL WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE VIOLATION. IF THE CONTRACTOR DOES NOT CONTACT THE ENGINEER, ALL EXPENSES ASSOCIATED WITH THE VIOLATION WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING THEIR BID SO AS TO BE THOROUGHLY FAMILIAR WITH THE JOB CONDITIONS AND/OR PECULIARITIES. NO EXTRA PAYMENT WILL BE ALLOWED FOR ANYTHING WHICH COULD HAVE BEEN ANTICIPATED FROM A VISIT TO THE SITE.
- THE CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO SUBMITTING BID AND COMMENCING WORK. ALL DISCREPANCIES AND INTERFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL CONTACT LOCAL UTILITIES TO OBTAIN ALL REQUIREMENTS, APPROVAL AND PERMITS. THE CONTRACTOR SHALL PAY ALL FEES REQUIRED FOR THE INSTALLATION OF THEIR WORK.
- THE DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR MAY NEED TO MAKE FIELD ADJUSTMENTS TO ACCOMMODATE ACTUAL FIELD CONDITIONS. CONTACT ARCHITECT FOR THEIR APPROVAL FOR ANY ADJUSTMENTS THAT WILL CHANGE THE "EXPOSED TO VIEW" APPEARANCE OF ANY GIVEN AREA OR IF THE CHANGE IMPACTS PERFORMANCE.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR THE GENERAL CONSTRUCTION OF THE BUILDING, FOR FLOORS AND CEILING HEIGHTS, FOR LOCATIONS OF WALLS, PARTITIONS, BEAMS, ETC.
- THE CONTRACTOR SHALL REVIEW THE EQUIPMENT REQUIREMENTS PRIOR TO BEGINNING WORK TO VERIFY ALL REQUIRED CONNECTIONS AND CONTACT THE ENGINEER TO CLARIFY ANY DISCREPANCIES.
- CONTRACTOR SHALL VERIFY ALL LISTED MODEL NUMBERS WITH MANUFACTURERS TO INSURE PROPER APPLICATION OF EQUIPMENT.
- EQUIPMENT AND MATERIALS SHALL BE HANDLED, STORED AND PROTECTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL PERFORM ANY AND ALL TRENCHING, EXCAVATION AND BACKFILLING REQUIRED FOR THE INSTALLATION OF THEIR WORK.
- THE PLUMBING CONTRACTOR SHALL FURNISH ALL NECESSARY SCAFFOLDING, STAGING, RIGGING AND HOISTING REQUIRED FOR THE COMPLETION OF THEIR WORK.
- ALL WORK SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND OTHER TRADES INVOLVED IN THE CONSTRUCTION PROJECT. ALL WORK SHALL BE CAREFULLY LAID OUT IN ADVANCE TO COORDINATE ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL FEATURES OF CONSTRUCTION.
- EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.
- ALL FIXTURES AND EQUIPMENT SHALL HAVE CHROME PLATED ANGLE STOP VALVE WITH ESCUTCHEONS. FIXTURES WITH FAST CLOSING VALVES SHALL HAVE ACCESSIBLE WATER HAMMER ARRESTORS.
- PIPE HANGERS: CARBON STEEL, ADJUSTABLE, CLEVIS.
- SHIELD FOR PIPE INSULATION SHALL BE 18 GAUGE GALVANIZED STEEL IN LOWER 180 DEGREE SEGMENT OF THE PIPE, MINIMUM 12 INCH LONG AT PIPE SUPPORT LOCATIONS.
- STEEL HANGER RODS: THREADED BOTH ENDS OR CONTINUOUS THREADED.
- INSTALL HANGERS, SUPPORTS, CLAMPS AND ATTACHMENTS AS REQUIRED TO PROPERLY SUPPORT PIPING FROM BUILDING STRUCTURE.
- IDENTIFY PIPING, CONCEALED OR EXPOSED, IN ACCORDANCE WITH ANSI/ASME A13.1, WITH PLASTIC TAPE PIPE MARKERS. TAGS MAY BE USED ON SMALL DIAMETER PIPING. IDENTIFY SERVICE, FLOW DIRECTION AND PRESSURE. INSTALL IN CLEAR VIEW AND ALIGN WITH AXIS OF PIPING. LOCATE IDENTIFICATION NOT TO EXCEED 20 FEET ON STRAIGHT RUNS INCLUDING RISERS AND DROPS. ADJACENT TO EACH VALVE AND "T", AT EACH SIDE OF PENETRATION OF STRUCTURE OR ENCLOSURE AND AT EACH OBSTRUCTION.
- HOT AND COLD WATER PIPES SHALL BE INSULATED WITH 1 INCH GLASS FIBER INSULATION; ANSI/ASME C547; "K" VALUE OF 0.24 AT 75 DEGREES F; NONCOMBUSTIBLE; KRAFT REINFORCED FOIL VAPOR BARRIER WITH SELF-SEALING ADHESIVE JOINTS.
- SANITARY SEWER AND VENT PIPING SHALL BE PVC, ASTM D2665. FITTINGS: PVC JOINTS: ASTM D2564, SOLVENT WELD.
- WATER PIPING SHALL BE COPPER TUBING: ASTM B88, TYPE L, HARD DRAWN. FITTINGS: ANSI/ASME B16.23, CAST BRASS, OR ANSI/ASME B16.29, WROUGHT COPPER. JOINTS: ANSI/ASTM B32, SOLDER, GRADE 95TA.
- GATE VALVES SHALL BE 150 PSI RATED, BRONZE BODY, RISING STEM AND HAND WHEEL, INSIDE SCREW, DOUBLE WEDGE, OR DISC, SOLDERED ENDS.
- BALL VALVES SHALL BE 150 PSI RATED, BRONZE OR STAINLESS STEEL BODY, STAINLESS STEEL BALL, TEFLON SEATS AND STUFFING BOX RING, LEVER HANDLE AND BALANCING STOPS, THREADED ENDS.
- PIPING SHALL BE INSTALLED IN AN ORDERLY MANNER, PLUMB AND PARALLEL TO BUILDING STRUCTURE. REAM PIPE AND TUBE ENDS. REMOVE BURRS, BEVEL PLAIN AND FERROUS PIPE. REMOVE SCALE AND DIRT, ON INSIDE AND OUTSIDE, BEFORE ASSEMBLY.
- PROVIDE NON-CONDUCTING DIELECTRIC CONNECTIONS WHEREVER JOINTING DISSIMILAR METALS.
- ROUTE PIPING IN ORDERLY MANNER AND MAINTAIN GRADIENT.
- UPON COMPLETION OF INSTALLATION, DISINFECT THE WATER SYSTEM IN ACCORDANCE WITH THE PLUMBING CODE.
- CLEAN ALL PLUMBING FIXTURES AND EQUIPMENT THOROUGHLY BEFORE FINAL INSPECTION, LEAVING ALL READY FOR USE.
- ALL APPLIANCES THAT CONNECT DIRECTLY TO WATER SYSTEM SHALL BE SEPARATED WITH A BACKFLOW PREVENTER DEVICE. PROVIDE BACKFLOW PREVENTER DEVICE IF NOT SUPPLIED WITH EQUIPMENT.
- INTERIOR FINISHED FLOOR CLEANOUTS SHALL BE LAQUERED CAST IRON, TWO PIECE BODY, ROUND WITH SCORATED COVER IN SERVICE AREAS AND ROUND WITH DEPRESSED COVER TO ACCEPT FLOOR FINISH IN FINISHED FLOOR AREAS.
- INTERIOR FINISHED WALL CLEANOUTS IN WALLS MADE OF TILE, BRICK, BLOCK, OR WALLBOARD SHALL CONSIST OF A TAPER-THREAD PLUG AND COVER WITH FACE FLANGE. WALLS MADE OF TERRAZZO OR CONCRETE SHALL BE TAPER-THREAD PLUG AND FLUSH WITH WALL COVER.

## PLUMBING FIXTURE CONNECTION SCHEDULE AND SPECIFICATIONS

MARK	DESCRIPTION	DRAIN (IN)	VENT (IN)	CW (IN)	HW (IN)	GAS (IN)	FIXTURE SPECIFICATIONS
P-1	WATER CLOSET - FLUSH TANK - HC	4	2	1/2	-	-	BOWL SHALL BE ANSI A112.19.2; FLOOR MOUNTED, SIPHON JET, VITREOUS CHINA, CLOSE-COUPLED CLOSET COMBINATION WITH ELONGATED RIM 17" HIGH, INSULATED VITREOUS CHINA CLOSET TANK WITH FITTINGS, LEVER FLUSHING VALVE ON WIDE SIDE OF WATER CLOSET AND BOLT CAPS. SEAT SHALL BE SOLID WHITE PLASTIC, OPEN FRONT, EXTENDED BACK, LESS COVER, COMPLETE WITH SELF-SUSTAINING HINGE.
P-2	LAVATORY - WALL HUNG - VC - HC - 1/R SENSOR	1 1/4	1 1/4	1/2	1/2	-	LAVATORY SHALL BE ANSI A112.19.2; VITREOUS CHINA, WALL HUNG LAVATORY, 19 X 17 INCH MINIMUM, WITH 4 INCH HIGH BACK, DRILLINGS ON 4 INCH CENTERS, RECTANGULAR BASIN WITH SPLASH LIP, FRONT OVERFLOW, AND SOAP DEPRESSION. TRIM SHALL BE ANSI A112.18-2000; INFRARED SELF-ADJUSTING SENSOR, SINGLE HOLE MOUNTING, ONE SIX VOLT LITHIUM BATTERY POWER SOURCE, MOUNT WITHIN SPOUT CAVITY WITH MINIMUM 200,000 CYCLES LIFE. LOW BATTERY INDICATOR WITH SENSOR ARRAY, REMOVABLE SHROUD WITH INTERNAL TEMPERATURE CONTROL, FLOW CONTROL 0.5 GPM, VANDAL RESISTANT AERATOR, STAINLESS SUPPLIES, POLISHED CHROME PLATED FINISH, ALL METAL CONSTRUCTION, 6-1/8" DIE-CAST SPOUT, METAL TRIM, OPEN GRID STRAINER, CAST BRASS P-TRAP AND ARM WITH ESCUTCHEON. P-TRAP AND ARM WITH RISERS SHALL BE INSULATED WITH TRUEBRO LAV GUARD PIPE COVER.
P-3	DBL SINK - COUNTER - STAINLESS - 6" BLADE	2	1 1/2	1/2	1/2	-	SINK SHALL BE ANSI A112.19.3; DOUBLE COMPARTMENT 33 X 22 INCH OUTSIDE DIMENSIONS, 13-1/2 X 16 X 7-1/2 INCH INSIDE BOWL DIMENSIONS, 18 GAGE THICK, TYPE 302 STAINLESS STEEL, SELF-RIMMING WITH UNDERCOATING, 3-1/2 INCH CRUMB CUP AND CHROMED BRASS DRAIN, LEDGEBACK DRILLED FOR TRIM. TRIM SHALL BE ANSI A112.19.3; TWO HANDLE CAST BRASS DECKMOUNT FAUCET WITH POLISHED CHROMED PLATED FINISH, SWIVEL GOOSENECK SPOUT, WATER ECONOMY AERATOR, COLOR INDEXED VANDAL RESISTANT SIX INCH BLADE HANDLES, CAST BRASS P-TRAP AND ARM WITH ESCUTCHEON.
P-4	WASHER BOX	2 *(3)	1 1/2	1/2	1/2	-	WASHER VALVE BOX SHALL BE RECESSED WALL BOX FABRICATED OF REINFORCED PLASTIC WITH DRAIN OUTLET, BRASS FITTINGS FOR CONNECTING EACH SUPPLY PIPE TO VALVE, AND HOT WATER AND COLD WATER SUPPLY VALVE, 3/4" MALE HOSE THREAD WITH WATER HAMMER ARRESTORS. WASHER VALVE BOX SHALL BE SIOUX CHIEF MODEL 696-2313MF OR EQUAL. *(HORIZONTAL PIPE SHALL BE 3")
P-5	REFRIGERATOR BOX	-	-	1/2	-	-	REFRIGERATOR BOX SHALL BE RECESSED WALL BOX FABRICATED OF REINFORCED PLASTIC, BRASS FITTINGS FOR CONNECTING THE SUPPLY PIPE TO VALVE, VALVE SHALL HAVE WATER HAMMER ARRESTOR, AND 1/2" INLET X 1/4" OD OUTLET COMPRESSION ANGLE VALVE. VALVE BOX SHALL BE SIOUX CHIEF MODEL 696-1010MF OR EQUAL.
EW-1	ELECTRIC WATER COOLER - INTERIOR - HC - LOW	1 1/4	1 1/4	1/2	-	-	ELECTRIC WATER COOLER SHALL BE HANDICAPPED MOUNTED ELECTRIC WATER COOLER WITH STAINLESS STEEL TOP, VINYL ON ON STEEL BODY, ELEVATED MOUNT WITH STREAM GUARD, AUTOMATIC STREAM REGULATOR, MOUNTING BRACKET, REFRIGERATED WITH INTEGRAL AIR COOLED CONDENSER, CAPACITY OF 5 GAL/MIN OF 50° F WATER WITH INLET AT 80° F AND ROOM TEMPERATURE OF 90° F.
EW-2	ELECTRIC WATER COOLER - INTERIOR - HIGH	1 1/4	1 1/4	1/2	-	-	ELECTRIC WATER COOLER SHALL BE ELECTRIC WATER COOLER WITH STAINLESS STEEL TOP, VINYL ON ON STEEL BODY, ELEVATED MOUNT WITH STREAM GUARD, AUTOMATIC STREAM REGULATOR, MOUNTING BRACKET, REFRIGERATED WITH INTEGRAL AIR COOLED CONDENSER, CAPACITY OF 5 GPM OF 50° F WATER WITH INLET AT 80° F AND ROOM TEMPERATURE OF 90° F.
①	SALON SINK	2	2	1/2	1/2	-	SINK PROVIDED BY OWNER. PLUMBING CONTRACTOR SHALL PROVIDE ROUGH-IN, HAIR INTERCEPTOR AND MAKE FINAL CONNECTION. COORDINATE REQUIREMENTS WITH GENERAL CONTRACTOR.
WH-1	WATER HEATER - GAS - HIGH EFFICIENCY	-	-	1 1/4	1 1/4	3/4	GAS WATER HEATER SHALL BE ANSI Z21.10.1 94% THERMAL EFFICIENCY GAS-FIRED WATER HEATERS, GLASS LINED STEEL TANK, GLASS LINED CONDENSING FLUE, FOAM INSULATION PROTECTED WITH HEAVY GAUGE STEEL JACKET, FACTORY INSTALLED COMBINATION PRESSURE AND TEMPERATURE RELIEF VALVE, MICROPROCESSOR CONTROLS WITH ADJUSTABLE THERMOSTAT FROM 90° F TO 180° F. COORDINATE LOCATION OF ELECTRIC JUNCTION BOX WITH ELECTRICAL CONTRACTOR.

NOTE: ALL APPLIANCES THAT CONNECT DIRECTLY TO WATER SYSTEM SHALL BE SEPARATED WITH A BACKFLOW PREVENTER DEVICE. PROVIDE BACKFLOW PREVENTER DEVICE IF NOT SUPPLIED WITH EQUIPMENT.

## PUMP SCHEDULE

MARK	TYPE	SYSTEM	FLOW (GPM)	HEAD (FT H2O)	POWER				REMARKS
					MAX HP	RPM	VOLTS	PHASE	
RCP-1	RECIRCULATING	HW	37	10	1/4	-	120	1	INLINE

## GAS WATER HEATER SCHEDULE

MARK	TANK VOLUME (GAL)	INPUT (BTUH)	RECOVERY (GPH @ 100°F RISE)	H2O TEMP (°F)	REMARKS
WH-1	100	199,900	235	140	BASIS OF DESIGN AO SMITH

## GENERAL COORDINATION NOTES (APPLY TO WORKING NOTES, ALL SHEETS)

- ① COORDINATE EXACT LOCATION AND REQUIREMENTS PRIOR TO BEGINNING ANY WORK.

## LEGEND

### LEGEND NOTES:

1. ALL DARK AND SOLID SYMBOLS INDICATE DEVICES AND EQUIPMENT AS NEW WORK.

—SS—	SANITARY SEWER OR WASTE PIPE
---SV---	SANITARY VENT PIPING
—H—	DOMESTIC HOT WATER PIPING (HW)
—C—	DOMESTIC COLD WATER PIPING (CW)
—HWR—	DOMESTIC HOT WATER RETURN
—D—	WATER HEATER PAN DRAIN PIPING
⊕	PUMP
⊖	FLOOR DRAIN (FD)
⊙	CLEAN OUT (FLOOR TYPE) (COFF)
—	CLEAN OUT (WALL TYPE) (WCO)
— —	PIPING TURN UP
— —	PIPING TURN DOWN
— —	BOX IN WALL
— —	GATE VALVE (GV)
~	CONTINUATION
⊞	NEW WORK NOTE
⊞	GENERAL NOTE
⊞	EQUIPMENT NUMBER - PROVIDED BY OTHERS. FINAL CONNECTIONS BY PLUMBING CONTRACTOR.
P-#	PLUMBING FIXTURE NUMBER - PLUMBING CONTRACTOR TO PROVIDE AND INSTALL.
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
BTUH	BRITISH THERMAL UNITS PER HOUR
DIA	DIAMETER
EXIST	EXISTING TO REMAIN
FIXT	FIXTURE
FU	FIXTURE UNIT
GAL	GALLON(S)
GPH	GALLON PER HOUR
GPM	GALLON PER MINUTE
IN	INCH(ES)
IND	INDIRECT WASTE
LAV	LAVATORY
MAX	MAXIMUM
MIN	MINIMUM
OC	ON CENTER
PSI	POUND PER SQUARE INCH
TEMP	TEMPERATURE
TMV	THERMOSTATIC MIXING VALVE
TYP	TYPICAL
VTR	VENT THROUGH ROOF
WC	WATER CLOSET
WH	WATER HEATER
— — —	1 HOUR FIRE RATED BARRIER

## WASTE PIPE SIZE CALCULATIONS

MARK	DESCRIPTION	FU'S	# FIXT	SUBTOTAL
P-1	WATER CLOSET-HC	4.0	3	12.0
P-2	LAVATORY	1.0	3	3.0
P-3	DBL SINK	2.0	1	2.0
P-4	WASHER BOX	3.0	4	12.0
EW-1	ELEC WATER COOLER	0.5	1	0.5
EW-2	ELEC WATER COOLER	0.5	1	0.5
①	SALON SINK	1.0	31	31.0
TOTAL WASTE FIXTURE UNITS				61
REQUIRED PIPE SIZE		4"		
PROVIDED PIPE SIZE		4"		

## WATER PIPE SIZE CALCULATIONS

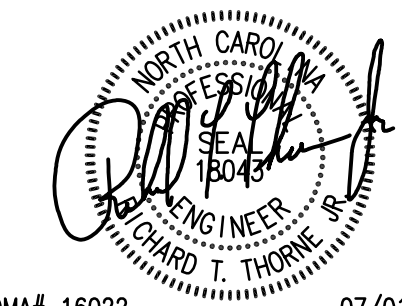
MARK	DESCRIPTION	FU'S	# FIXT	SUBTOTAL
P-1	WATER CLOSET-HC	2.2	3	6.6
P-2	LAVATORY	0.7	3	2.1
P-3	DBL SINK	1.4	1	1.4
P-4	WASHER BOX	3.0	4	12.4
P-5	REFRIGERATOR BOX	0.25	1	0.25
EW-1	ELEC WATER COOLER	0.25	1	0.25
EW-2	ELEC WATER COOLER	0.25	1	0.25
①	SALON SINK	0.7	31	21.7
TOTAL WATER FIXTURE UNITS				44.95
REQUIRED PIPE SIZE		1 1/4"		
PROVIDED PIPE SIZE		1 1/4"		

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HDM# 16022

07/01/16

HERITAGE SALON  
FIT-UP

3117 RODGERS ROAD  
WAKE FOREST, NC

OWNER: JMJ Commercial Contractors

10713 Staghound Trail

Zebulon, NC

PROJECT NUMBER: 160001

DRAWN BY: JAO

ISSUED / REVIEW: RTT

ISSUED / CONSTRUCTION:

REVISIONS

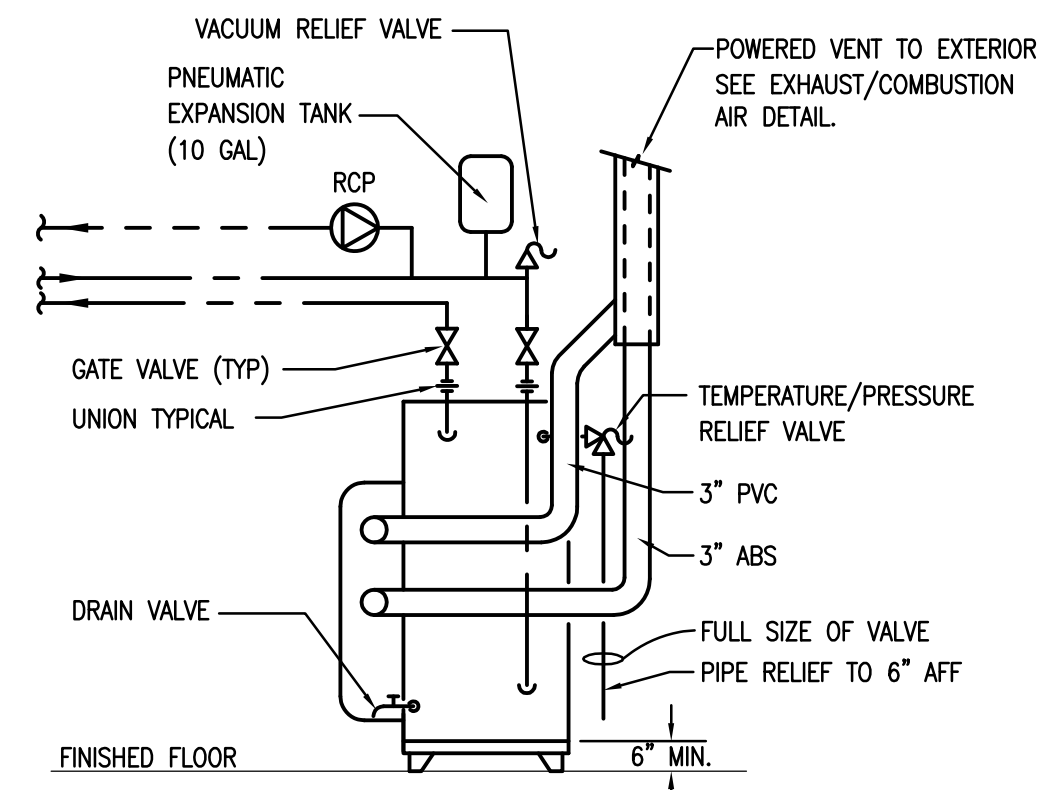
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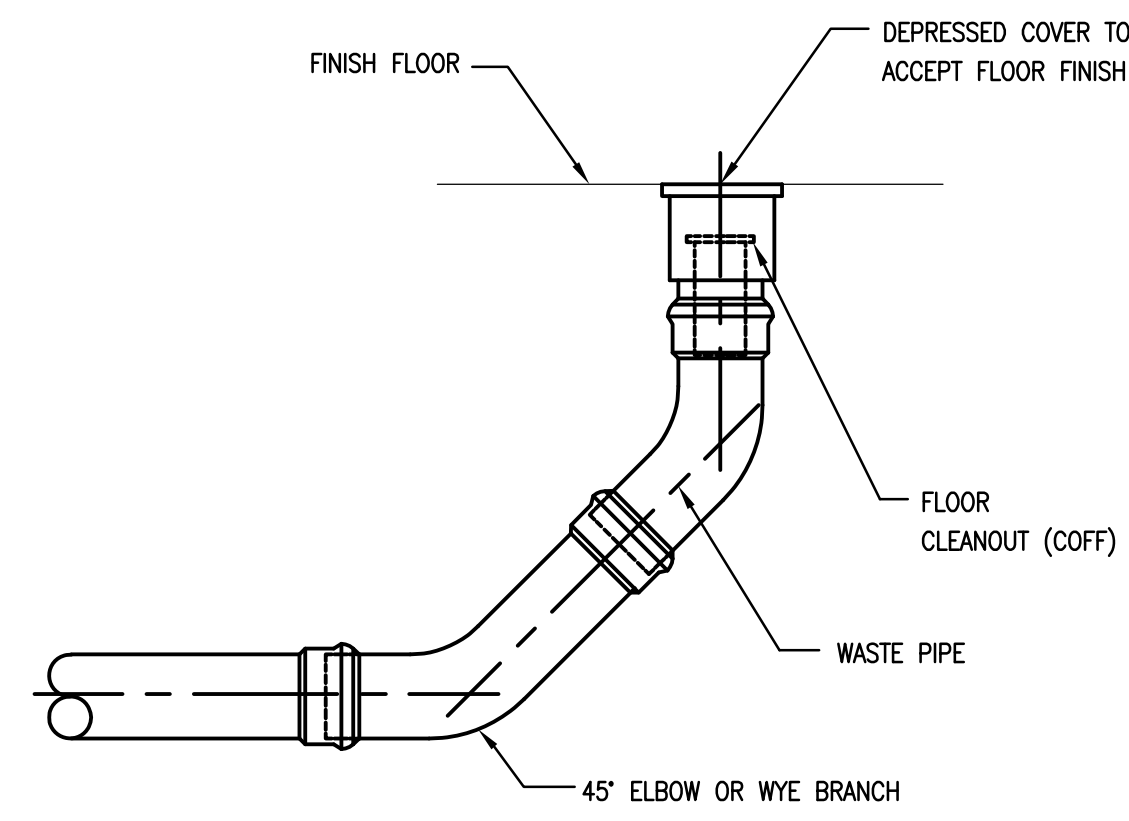
PLUMBING SPECS,  
LEGEND, & SCHEDULES

P1.0

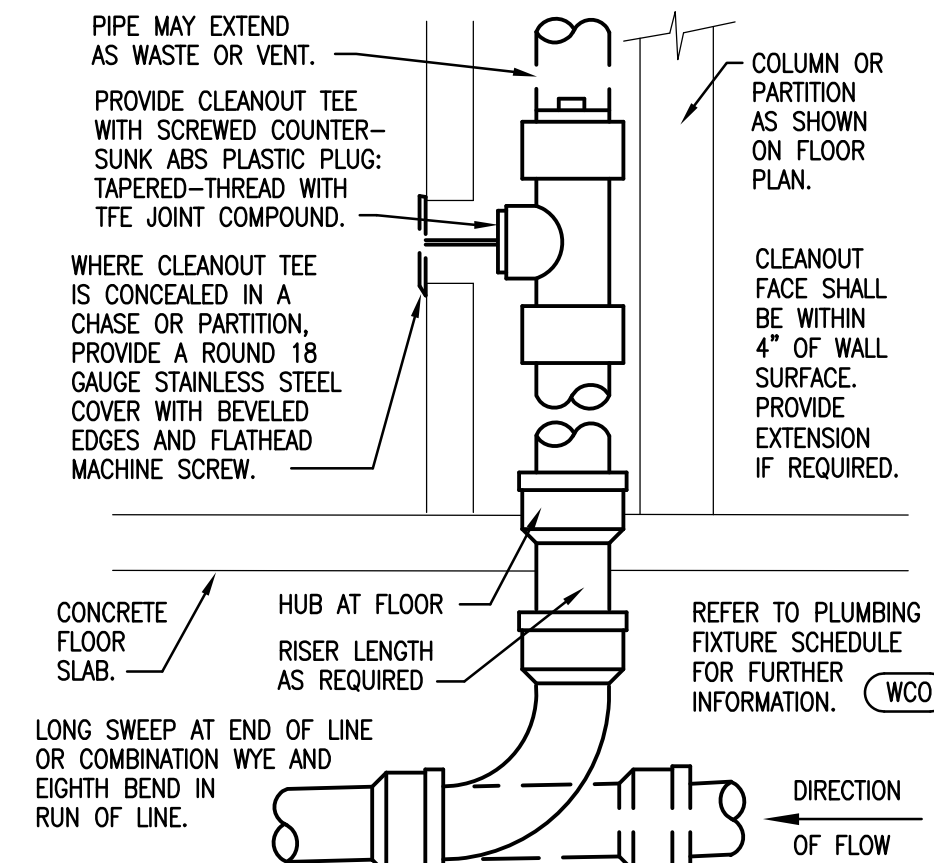
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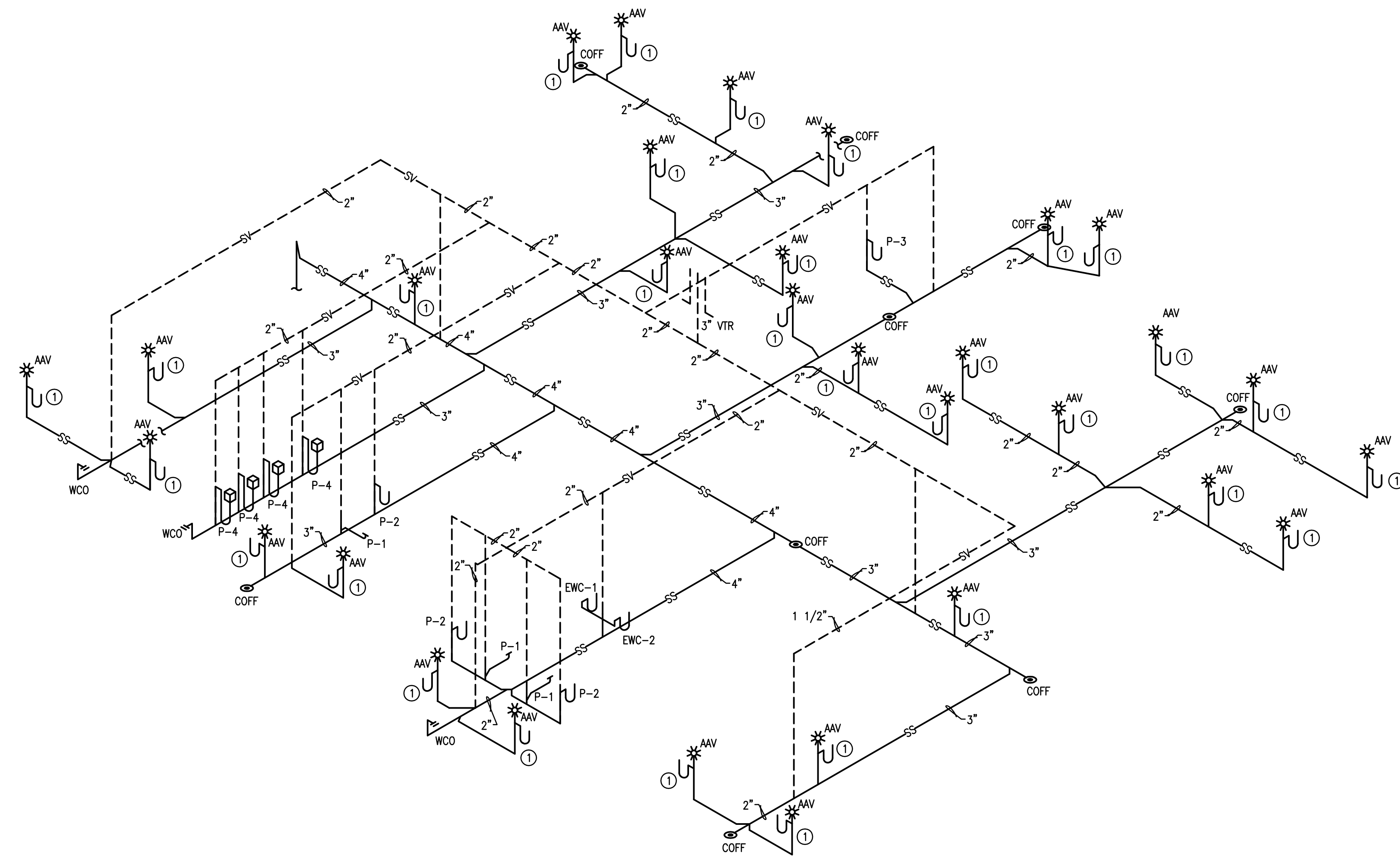
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**CLEAN-OUT (FLOOR TYPE) DETAIL**  
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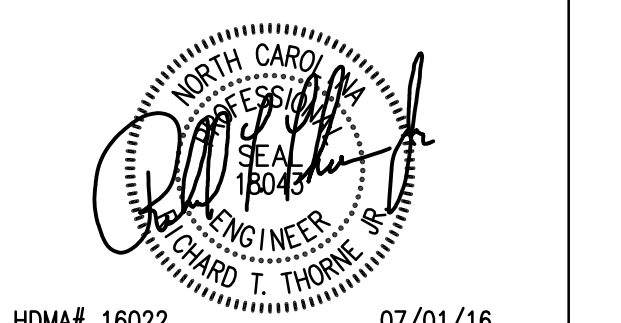
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**PLUMBING RISER DIAGRAM - WASTE**  
NO SCALE

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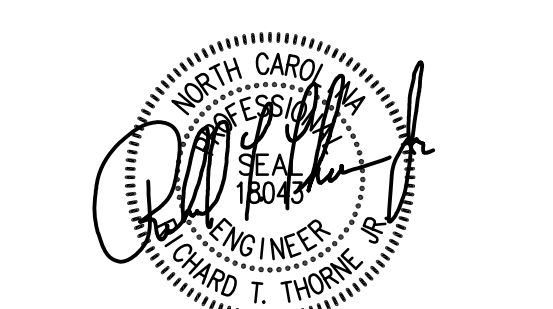
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PLUMBING  
DETAILS

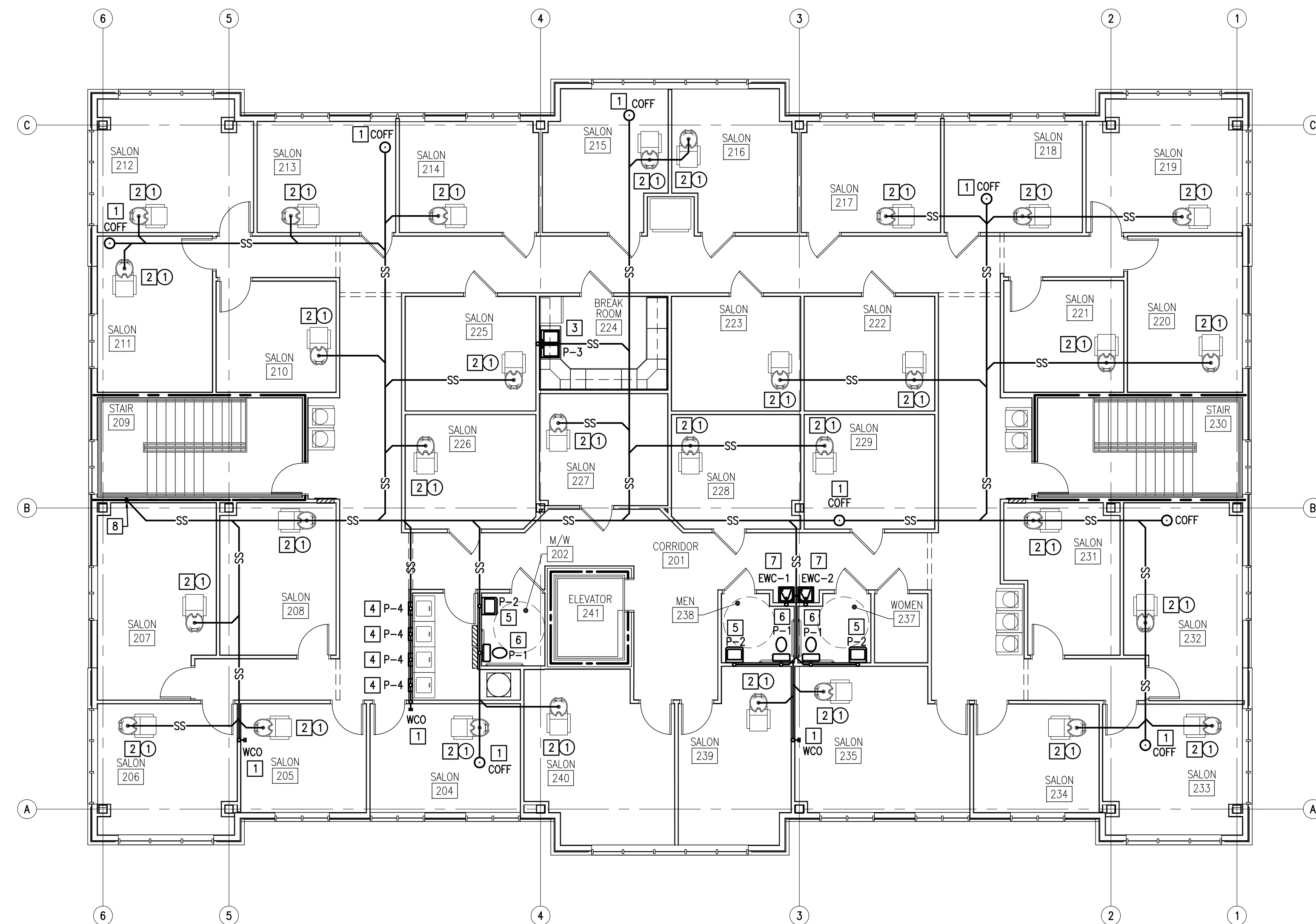
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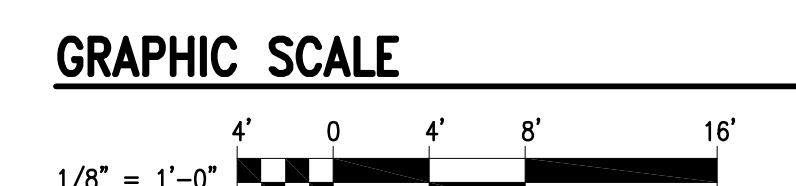
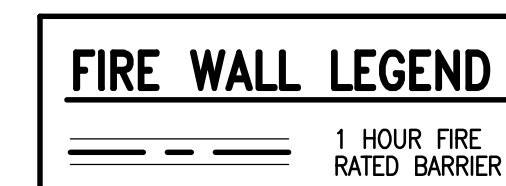
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**PLUMBING SECOND FLOOR PLAN – WASTE**  
SCALE: 1/8" = 1'-0"

**WORK NOTES**

- 1 PROVIDE CLEANOUT. PROVIDE SANITARY SEWER PIPING AS INDICATED.
- 2 PROVIDE SANITARY SEWER AND SANITARY VENT PIPING FOR OWNER PROVIDED SALON SINK AS INDICATED. PROVIDE ALL REQUIRED MATERIALS FOR A COMPLETE AND OPERABLE SYSTEM. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIER.
- 3 PROVIDE SINK. PROVIDE SANITARY SEWER AND SANITARY VENT PIPING AS INDICATED.
- 4 PROVIDE WASHER BOX. PROVIDE SANITARY SEWER AND SANITARY VENT PIPING AS INDICATED.
- 5 PROVIDE LAVATORY. PROVIDE SANITARY SEWER AND SANITARY VENT PIPING AS INDICATED.
- 6 PROVIDE WATER CLOSET. PROVIDE SANITARY SEWER AND SANITARY VENT PIPING AS INDICATED.
- 7 PROVIDE ELECTRIC WATER COOLER. PROVIDE SANITARY SEWER AND VENT PIPING AS INDICATED. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- 8 PROVIDE SANITARY SEWER AND VENT PIPING BACK TO POINT(S) INDICATED.



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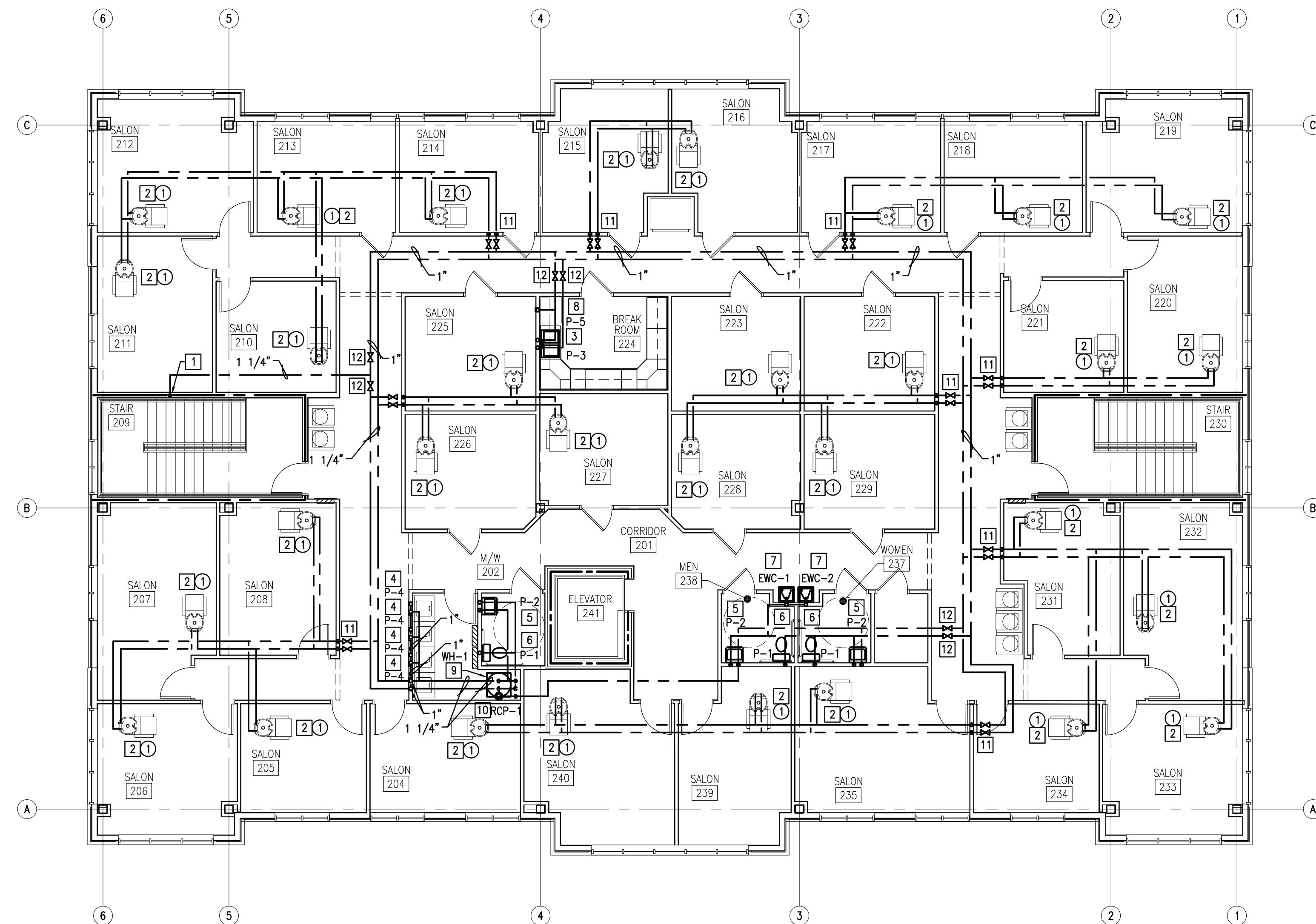
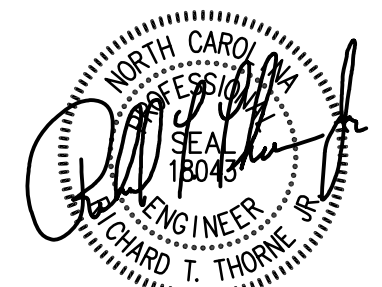
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PLUMBING SECOND  
FLOOR PLAN - WASTE

**P2.0**

OF SHEETS





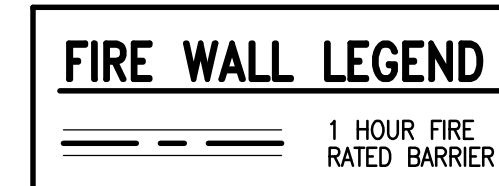
**PLUMBING SECOND FLOOR PLAN - WATER** 1 2  
SCALE: 1/8" = 1'-0"

**WORK NOTES**

- 1 PROVIDE COLD WATER PIPING ROUTED FROM SHUT OFF VALVE (LOCATED ON RISER ON FIRST FLOOR) TO ABOVE SECOND FLOOR CEILING AS INDICATED.
- 2 PROVIDE HOT AND COLD WATER PIPING FOR SALON SINK PROVIDED BY OWNER AS INDICATED. ROUTE PIPING ABOVE FIRST FLOOR CEILING. PROVIDE ALL REQUIRED MATERIALS FOR A COMPLETE AND OPERABLE SYSTEM. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIER.
- 3 PROVIDE HOT AND COLD WATER PIPING TO SINK AS INDICATED. ROUTE PIPING ABOVE SECOND FLOOR CEILING.
- 4 PROVIDE HOT AND COLD WATER PIPING TO WASHER BOX AS INDICATED. ROUTE PIPING ABOVE SECOND FLOOR CEILING.
- 5 PROVIDE HOT AND COLD WATER PIPING TO LAVATORY AS INDICATED. ROUTE PIPING ABOVE SECOND FLOOR CEILING.
- 6 PROVIDE COLD WATER PIPING TO WATER CLOSET AS INDICATED. ROUTE PIPING ABOVE SECOND FLOOR CEILING.
- 7 PROVIDE COLD WATER PIPING TO ELECTRIC WATER COOLER AS INDICATED. ROUTE PIPING ABOVE SECOND FLOOR CEILING.
- 8 PROVIDE REFRIGERATOR BOX. PROVIDE COLD WATER PIPING TO REFRIGERATOR BOX AS INDICATED. ROUTE PIPING ABOVE SECOND FLOOR CEILING.
- 9 PROVIDE GAS WATER HEATER, DRAIN PAN AND ASSOCIATED PIPING COMPLETE. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR. COORDINATE GAS REQUIREMENTS WITH MECHANICAL CONTRACTOR. ROUTE PIPING ABOVE FIRST FLOOR CEILING.
- 10 PROVIDE RECIRCULATION PUMP AND ASSOCIATED PIPING COMPLETE. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR. ROUTE PIPING ABOVE FIRST FLOOR CEILING.
- 11 PROVIDE SHUT OFF VALVES ABOVE SECOND FLOOR CEILING AS INDICATED. PROVIDE COLD AND HOT WATER PIPES DOWN IN WALL TO ABOVE FIRST FLOOR CEILING. CONNECT TO SALON SINK AS INDICATED.
- 12 PROVIDE COLD AND/OR HOT WATER SHUT OFF VALVE ABOVE SECOND FLOOR CEILING AS INDICATED.

**GENERAL NOTES**

- 1 ALL COLD AND HOT WATER LINES ARE 3/4" UNLESS NOTED OTHERWISE.
- 2 ALL COLD AND HOT WATER LINES ARE ROUTED TO ABOVE CEILING ON SECOND FLOOR. EXCEPT PIPE DOWN STREAM OF WORK NOTE 11 WHICH TURN DOWN IN WALL TO BELOW SECOND FLOOR CEILING AND RUN TO THE DEVICES INDICATED ABOVE THE CEILING OF FIRST FLOOR.



HERITAGE SALON  
FIT-UP

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PLUMBING SECOND  
FLOOR PLAN - WATER

**P3.0**

**MECHANICAL SPECIFICATIONS**

- THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS TO DESCRIBE THE INSTALLATION OF A COMPLETE, FULLY ADJUSTED AND OPERATIONAL SYSTEM.
- THE CONTRACTOR SHALL PROVIDE ALL SUPERVISION, LABOR, MATERIAL EQUIPMENT, MACHINERY AND ANY AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE SYSTEMS.
- ALL WORK UNDER THIS SECTION SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH STATE BUILDING CODES. IN THE EVENT THE LOCAL JURISDICTION DETERMINES THERE IS A CODE VIOLATION ASSOCIATED WITH THE CONSTRUCTION DOCUMENTS AND REQUIRES ADDITIONAL WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE VIOLATION. IF THE CONTRACTOR DOES NOT CONTACT THE ENGINEER, ALL EXPENSES ASSOCIATED WITH THE VIOLATION WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- ALL CONTRACTORS SHALL OBTAIN ALL NECESSARY APPROVAL, OBTAIN ALL PERMITS AND PAY FEES REQUIRED FOR THE INSTALLATION OF THEIR WORK.
- THE DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR MAY NEED TO MAKE FIELD ADJUSTMENTS TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR THE GENERAL CONSTRUCTION OF THE BUILDING, FOR FLOORS AND CEILING HEIGHTS, FOR LOCATIONS OF WALLS, PARTITIONS, BEAMS, ETC.
- MANUFACTURER'S LISTS ARE TO ESTABLISH A STANDARD OF QUALITY AND NOT INTENDED TO LIMIT THE SELECTION TO THESE MANUFACTURERS.
- CONTRACTOR SHALL VERIFY ALL LISTED MODEL NUMBERS WITH MANUFACTURERS TO ENSURE PROPER APPLICATION OF EQUIPMENT.
- EQUIPMENT AND MATERIALS SHALL BE HANDLED, STORED AND PROTECTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- THE MECHANICAL CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING HIS BID SO AS TO BE THOROUGHLY FAMILIAR WITH THE JOB CONDITIONS AND/OR PECULIARITIES. NO EXTRA PAYMENT WILL BE ALLOWED FOR ANYTHING WHICH COULD HAVE BEEN ANTICIPATED FROM A VISIT TO THE SITE.
- THE CONTRACTOR SHALL PERFORM ANY AND ALL TRENCHING, EXCAVATION AND BACKFILLING REQUIRED FOR THE INSTALLATION OF HIS WORK.
- THE MECHANICAL CONTRACTOR SHALL FURNISH ALL NECESSARY SCAFFOLDING, STAGING, RIGGING AND HOISTING REQUIRED FOR THE COMPLETION OF HIS WORK.
- ALL WORK SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND OTHER TRADES INVOLVED IN THE CONSTRUCTION PROJECT. ALL WORK SHALL BE CAREFULLY LAID OUT IN ADVANCE TO COORDINATE ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL FEATURES OF CONSTRUCTION.
- EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.
- FURNISH AND INSTALL ALL POWER WIRING FROM HVAC EQUIPMENT TO SERVICE DISCONNECT SWITCHES AND/OR STARTERS. SERVICE DISCONNECT SWITCHES AND STARTER SHALL BE FURNISHED AND INSTALLED UNDER DIVISION 16: ELECTRICAL.
- VERIFY THE CORRECT POWER SUPPLY HAS BEEN PROVIDED AT LOAD SIDE OF SERVICE DISCONNECT SWITCH BEFORE OPERATING EQUIPMENT.
- MECHANICAL CONTRACTOR SHALL PROVIDE THE FOLLOWING SUBMITTALS TO THE ENGINEER ON ALL MAJOR EQUIPMENT: PRODUCT SELECTION, SHOP DRAWINGS, WARRANTY AND OPERATION & MAINTENANCE MANUALS.
- DUCTWORK SHALL BE ASTM A525 OR ASTM A527 GALVANIZED STEEL SHEETLOCK-FORMING QUALITY, HAVING A COATING OF G-60. DUCTWORK SHALL BE FABRICATED, INSTALLED AND SUPPORTED IN ACCORDANCE WITH THE ASHRAE GUIDE AND SMACNA. ALL DUCTWORK SHALL BE SEALED WITH NON-HARDENING, WATER RESISTANT, FIRE RESISTIVE HEAVY MASTIC.
- INSULATED FLEXIBLE DUCTS: SHALL BE UL 181, CLASS 1, 2-PLY VINYL FILM SUPPORTED BY HELICALLY WOUND, SPRING-STEEL WIRE; FIBROUS-GLASS INSULATION MINIMUM R-6 VALUE; ALUMINIZED VAPOR BARRIER FILM. PRESSURE RATING: 10 INCH WG (2500 PA) POSITIVE AND 1.0 INCH WG (250 PA) NEGATIVE. MAXIMUM AIR VELOCITY: 4000 FPM (20.3 M/S). TEMPERATURE RANGE: MINUS 10 TO PLUS 160 DEGREES F (MINUS 23 TO PLUS 71 DEGREES C). MAXIMUM LENGTH SHALL BE 14 FEET. FLEXIBLE DUCT CLAMPS: STAINLESS-STEEL B AND WITH CADMIUM-PLATED HEX SCREW TO TIGHTEN BAND WITH A WORM-GEAR ACTION, IN SIZES 3 THROUGH 18 INCHES (75 TO 450 MM) TO SUIT DUCT SIZE.
- DUCT INSULATION SHALL BE A MINIMUM OF R-5 WHEN LOCATED INSIDE THE BUILDING ENVELOPE AND R-8 WHEN LOCATED OUTSIDE THE BUILDING ENVELOPE. FIBERGLASS BLANKET TYPE WITH ALL-PURPOSE FACTORY APPLIED, LAMINATED GLASS FIBER REINFORCED, FLAME RETARDANT KRAFT PAPER AND ALUMINUM FOIL JACKET. ALL JOINTS SHALL BE SEALED WITH WATER-BASED, FIRE RESISTIVE VAPOR BARRIER COMPOUND. DUCT DIMENSIONS INDICATED ARE NET INSIDE DIMENSIONS.
- EQUIPMENT DRAINS SHALL BE COPPER TUBING: ASTM B88, TYPE L, HARD DRAWN. FITTINGS: ANS/ASME B16.23, CAST BRASS, OR ANS/ASME B16.29, WROUGHT COPPER. JOINTS: ANS/ASTM B32, SOLDER, GRADE 951A. INSTALL WITH A 2% SLOPE MINIMUM.
- INSTALL HANGERS, SUPPORTS, CLAMPS AND ATTACHMENTS AS REQUIRED TO PROPERLY SUPPORT PIPING FROM BUILDING STRUCTURE. PIPE HANGERS SHALL BE CARBON STEEL, ADJUSTABLE, CLEVIS. STEEL HANGER RODS SHALL BE THREADED BOTH ENDS CONTINUOUS THREADED.
- GAS PIPING SHALL BE ASTM A53, SCHEDULE 40 BLACK. FITTINGS SHALL BE ANS/ASME B16.3, MALLEABLE IRON. JOINTS SHALL BE SOLDERED. GAS COCK SHALL BE ASME B16.33, 150 PSI WOG, BRONZE BODY, BRONZE TAPERED PLUG, SQUARE HEAD WITH THREADED ENDS. INSPECT, TEST AND PURGE ACCORDING TO NFPA 54 AND NORTH CAROLINA STATE GAS CODE.
- REFRIGERANT PIPING AND CONDENSATE DRAINS SHALL BE INSULATED WITH 1 INCH FLEXIBLE ELASTOMERIC CELLULAR TYPE INSULATION WITH EXPANDED CLOSED-CELL STRUCTURE WITH SMOOTH SKIN ON BOTH SIDES. MATERIALS SHALL CONFORM TO ASTM C 534, TYPE I. THERMAL CONDUCTIVITY SHALL BE 0.30 AVERAGE MAXIMUM AT 75 DEGREES F. FLEXIBLE ELASTOMERIC CELLULAR INSULATION ADHESIVE SHALL BE SOLVENT-BASED, CONTACT ADHESIVE RECOMMENDED BY INSULATION MANUFACTURER.
- IDENTIFY PIPING, CONCEALED OR EXPOSED, WITH PLASTIC TAPE PIPE MARKERS. TAGS MAY BE USED ON SMALL DIAMETER PIPING. IDENTIFY SERVICE, FLOW DIRECTION AND PRESSURE. INSTALL IN CLEAR VIEW AND ALIGN WITH AXIS OF PIPING. LOCATE IDENTIFICATION NOT TO EXCEED 20 FEET ON STRAIGHT RUNS INCLUDING RISERS AND DROPS, ADJACENT TO EACH VALVE AND "T", AT EACH SIDE OF PENETRATION OF STRUCTURE OR ENCLOSURE AND AT EACH OBSTRUCTION.
- CEILING SUPPLY DIFFUSERS SHALL BE SQUARE LOUVERED FACE, EXTRUDED ALUMINUM, MULTI-CORE TYPE DIFFUSER TO DISCHARGE AIR IN FOUR WAY PATTERN WITH BAKED ENAMEL OFF-WHITE FINISH. PROVIDE INVERTED T-BAR TYPE FRAME. IN PLASTER OR GYPBOARD CEILINGS, PROVIDE SURFACE MOUNTED FRAME. PROVIDE OPPOSED BLADE DAMPER WITH DAMPER ADJUSTABLE FROM DIFFUSER FACE.
- CEILING RETURN GRILLE SHALL BE 1 X 1 X 1/2 INCH EGG GRATE WITH FILTER. GRILLE SHALL BE FABRICATED FROM ALUMINUM WITH BAKED ENAMEL OFF-WHITE FINISH. PROVIDE INTEGRAL, GANG-OPERATED OPPOSED BLADE DAMPERS WITH REMOVABLE KEY OPERATOR, OPERABLE FROM FACE. PROVIDE INVERTED T-BAR TYPE FRAME. IN PLASTER OR GYPBOARD CEILINGS, PROVIDE SURFACE MOUNTED FRAME.
- VOLUME CONTROL DAMPER SHALL BE FABRICATED IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS. PROVIDE DAMPERS AT EACH SUPPLY, RETURN AND EXHAUST SYSTEMS WHERE BRANCHES ARE TAKEN FROM LARGER DUCTS AS REQUIRED FOR AIR BALANCING.
- ROOF HOODS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS. HOODS SHALL BE FABRICATED OF ALUMINUM, MINIMUM 16 GAGE AND 18 GAGE HOOD; SUITABLY REINFORCED, WITH REMOVABLE HOOD, BIRDSCREEN WITH 1/2 INCH SQUARE MESH AND FACTORY PRIME COAT BAKED ENAMEL FINISH. MOUNT UNIT ON MINIMUM 12 INCH HIGH CURB BASE WITH INSULATION BETWEEN DUCT AND CURB. MAKE HOOD OUTLET AREA MINIMUM OF TWICE THROAT AREA.
- CEILING EXHAUST FAN (QUIET TYPE) SHALL BE A CENTRIFUGAL-TYPE BLOWER, V-BELT OR DIRECT DRIVE AND PERMANENTLY LUBRICATED MOTOR WITH A GALVANIZED STEEL HOUSING, FACTORY WIRE, NON-FUSIBLE DISCONNECT SWITCH, GRAVITY BACKDRAFT DAMPER AND MOLDED WHITE PLASTIC OR ALUMINUM GRILLE. AIR DELIVERY SHALL BE NO LESS THAN 75 (100) [150] CFM AND SOUND LEVEL NO GREATER THAN < 0.3 (0.7) [1.4] SONES. AIR AND SOUND RATINGS SHALL BE CERTIFIED BY HVL.
- CEILING EXHAUST FANS SHALL BE A CENTRIFUGAL FAN, V-BELT OR DIRECT DRIVE WITH GALVANIZED STEEL HOUSING, FACTORY WIRE, NON-FUSIBLE DISCONNECT SWITCH, GRAVITY BACKDRAFT DAMPER AND MOLDED WHITE PLASTIC OR ALUMINUM GRILLE.
- PROVIDE FLEXIBLE CONNECTIONS IMMEDIATELY ADJACENT TO EQUIPMENT IN DUCTS ASSOCIATED WITH FANS AND MOTORIZED EQUIPMENT.

- FURNACES SHALL BE LOW PRESSURE SINGLE ZONE BLOW THROUGH HORIZONTAL OR VERTICAL TYPE AS INDICATED. UNIT SHALL BE SELF CONTAINED, PACKAGED, FACTORY ASSEMBLED, PREWIRED UNIT CONSISTING OF CABINET SUPPLY AIR FAN, PRIMARY HEAT EXCHANGER, SECONDARY HEAT EXCHANGER, INDUCED COMBUSTION SYSTEM, CONTROLS, AIR FILTER, REFRIGERANT COOLING COIL AND OUTDOOR PACKAGE CONTAINING COMPRESSOR, CONDENSER COIL AND CONDENSER FAN. EACH FURNACE SHALL HAVE PHYSICAL DIMENSIONS SUITABLE TO FIT SPACE ALLOTTED TO THE UNIT AND SHALL HAVE THE CAPACITY INDICATED. FURNACE SHALL HAVE PUBLISHED RATINGS BASED ON TEST PERFORMED IN ACCORDANCE WITH AIA AND ARI 210 AND 270. PROVIDE EXTENDED WARRANTY ON HEAT EXCHANGER. THE ENERGY EFFICIENCY RATIO (EER) SHALL BE A MINIMUM EER OF 12 WHEN RATED IN ACCORDANCE WITH ARI 210. THE AFUE SHALL BE A MINIMUM AFUE OF 90%. BOTH INDOOR AND OUTDOOR UNIT SHALL BE BY THE SAME MANUFACTURER. INDOOR AIR HANDLER CABINET SHALL BE BAKED ENAMEL FINISH AND INTERNALLY INSULATED. FAN SHALL BE MULTISPEED FORWARD CURVED AND DYNAMICALLY AND STATICALLY BALANCED AT THE FACTORY. FAN AND MOTOR BEARINGS SHALL BE PERMANENTLY LUBRICATED TYPE. COIL SHALL BE PROVIDED WITH PRESSURE TYPE BRASS DISTRIBUTORS AND SOLDER CONNECTIONS. THE CONDENSING UNIT SHALL BE FACTORY ASSEMBLED AND TESTED. UNIT SHALL PROVIDE LIQUID LIFT AS REQUIRED TO SUIT INSTALLATION. UNITS SHALL BE CERTIFIED PER ARI 240 AND 270. COIL SHALL BE ALUMINUM PLATE FINNS, MECHANICALLY BONDED TO 1/2 INCH ALUMINUM TUBES. COIL SHALL BE CIRCUITED FOR SUBCOOLING. UNIT SHALL BE FURNISHED WITH DIRECT DRIVEN, PROPELLER TYPE FANS ARRANGED FOR VERTICAL DISCHARGE. CONDENSER FAN MOTORS SHALL BE INVERTER DUTY, CLASS B MOTOR INSULATION, BUILT IN CURRENT AND THERMAL OVERLOAD PROTECTION AND SHALL BE OF THE PERMANENTLY LUBRICATED TYPE, RESILIENTLY MOUNTED. FAN SHALL HAVE A SAFETY GUARD. CONTROLS SHALL BE FACTORY WIRE AND LOCATED IN A SEPARATE ENCLOSURE. SAFETY DEVICES SHALL CONSIST OF HIGH AND LOW PRESSURE STATS AND COMPRESSOR OVERLOAD DEVICES. UNIT WIRING SHALL INCORPORATE A TIME DELAY RELAY TO PREVENT SHORT CYCLING OF THE COMPRESSOR. CASING SHALL MAKE UNIT FULLY WEATHERPROOF FOR OUTDOOR INSTALLATION. CASING SHALL BE OF GALVANIZED STEEL, ZINC PHOSPHATIZED AND FINISHED WITH BAKED ENAMEL. OPENINGS SHALL BE PROVIDED FOR POWER AND R-410A REFRIGERANT CONNECTIONS. PANEL SHALL BE REMOVABLE TO PROVIDE ACCESS FOR SERVICING. REFRIGERANT PIPING SHALL BE SIZED BY THE MANUFACTURER. PROVIDE A FILTER RACK AND 1 INCH REPLACEABLE THROWAWAY FILTER. FILTER RACK SIZE SHALL BE AS REQUIRED BY MANUFACTURER. THE UNIT SHALL BE CONTROLLED BY A WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT. INDOOR UNIT SHALL HAVE A UL APPROVED SMOKE DETECTOR WIRED INTO THE CONTROL CIRCUIT. UNIT SHALL SHUT DOWN ON DETECTION OF SMOKE.
- TEST, ADJUST AND BALANCE THE AIR SYSTEM TO PROVIDE THE DESIGN QUANTITIES. PERFORM TESTING AND BALANCING PROCEDURES ON EACH SYSTEM IDENTIFIED, IN ACCORDANCE WITH THE DETAILED PROCEDURES OUTLINED BY ASHRAE, SMACNA, AABC OR NEBB. PROVIDE A WRITTEN BALANCE REPORT TO THE OWNER. THE REPORT SHALL INCLUDE ALL AIR FLOWS AND SUPPLY AIR TEMPERATURE, RETURN AIR TEMPERATURE AND OUTSIDE AIR TEMPERATURE.

OUTDOOR AIR CALCULATION SCHEDULE						
ROOM TYPE	NET SQUARE FOOTAGE (SQ FT)	EST MAX OCCUPANCY (PEOPLE/1,000 SQ FT)	NUMBER OF PEOPLE	OUTSIDE AIR PER MECH CODE		TOTAL OA REQUIRED (CFM)
				(CFM/PERSON)	(CFM/SQ FT)	
BEAUTY SALON	4,834	25	62	20	0.12	1820
CORRIDOR	1,549	-	-	-	0.06	93
STORAGE	35	-	-	-	0.12	4
MIN OUTDOOR AIR REQUIRED						677
TOTAL OUTSIDE AIR REQUIRED						1,917
TOTAL OUTSIDE AIR PROVIDED						3,595
OUTDOOR AIR SUMMARY						
EQUIPMENT	SA (CFM)	RA (CFM)	MAX OA (CFM)	MIN OA (CFM)	EA (CFM)	
FU-1	1,400	1,120	280	150	-	
FU-2	1,225	980	245	125	-	
FU-3	1,750	1,400	350	150	-	
FU-4	1,225	980	245	125	-	
FU-5	1,750	1,400	350	150	-	
TOILET EXHAUST FANS	-	-	-	-	150	
SALON EXHAUST FANS	-	-	-	-	3,445	
TOTALS:	7,350	5,880	1,470	700	3,595	

NOTE: 1. TOILET AND SALON EXHAUST FANS ARE INTERMITTENT USE FANS.

AIR DISTRIBUTION SCHEDULE					
MARK	SERVICE	MAX AIR FLOW (CFM)	GRILLE SIZE (IN)	RUN OUT (IN)	REMARKS/NOTES
A	SUPPLY AIR	100	6 x 6	6 #	CEILING DIFFUSER
B	SUPPLY AIR	200	9 x 9	8 #	CEILING DIFFUSER
C	SUPPLY AIR	300	12 x 12	10 #	CEILING DIFFUSER
D	SUPPLY AIR	400	12 x 12	12 #	CEILING DIFFUSER
RA	RETURN AIR	100	6 x 6	6 #	FILTERED CEILING RETURN
RB	RETURN AIR	200	8 x 8	8 #	FILTERED CEILING RETURN
RC	RETURN AIR	300	10 x 10	10 #	FILTERED CEILING RETURN
RD	RETURN AIR	400	12 x 12	10 #	FILTERED CEILING RETURN

**GENERAL COORDINATION NOTES** (APPLY TO WORKING NOTES, ALL SHEETS)

- COORDINATE EXACT LOCATION AND REQUIREMENTS PRIOR TO BEGINNING ANY WORK.

**LEGEND**

- LEGEND NOTES:
- ALL DARK AND SOLID SYMBOLS INDICATE DEVICES AND EQUIPMENT AS NEW WORK.
- 12 x 12 RECTANGULAR DUCT, INSIDE CLEAR DIMENSIONS (HORIZONTAL X VERTICAL) INDICATED
  - 6# ROUND SINGLE LINE DUCT, DIAMETER INDICATED (SEE AIR DISTRIBUTION SCHEDULE FOR DUCT SIZE).
  - CEILING MOUNTED SUPPLY AIR DIFFUSER (CFM AS INDICATED)
  - CEILING MOUNTED RETURN AIR GRILLE
  - GRILLE, REGISTER OR DIFFUSER MARK
  - BALANCING DAMPER
  - REVISION DESIGNATION
  - NEW WORK NOTE DESIGNATION
  - GENERAL NOTE
  - THERMOSTAT W/ UNIT DESIGNATION MOUNT 48" AFF MAX
  - ROOF INTAKE HOOD
  - CEILING EXHAUST FAN
  - ROOF EXHAUST
  - FLUE
  - SMOKE DETECTOR
  - GAS COCK
  - UNION
  - CONDENSATE DRAIN PIPING
  - NATURAL GAS PIPING
  - REFRIGERANT LIQUID PIPING
  - PIPE TURNING DOWN
  - TRANSITION
  - AFF ABOVE FINISHED FLOOR
  - AFG ABOVE FINISHED GRADE
  - BTU BRITISH THERMAL UNIT
  - BTUH BRITISH THERMAL UNIT PER HOUR
  - CFM CUBIC FEET PER MINUTE
  - CU FT CUBIC FEET
  - CU IN CUBIC INCHES
  - dB DECIBEL
  - DB DRY BULB
  - DBT DRY BULB TEMPERATURE
  - EA EXHAUST AIR
  - EAT ENTERING AIR TEMPERATURE
  - ESP EXTERNAL STATIC PRESSURE
  - EWT ENTERING WATER TEMPERATURE
  - F DEGREES FAHRENHEIT
  - FLA FULL LOAD AMPS
  - FPM FEET PER MINUTE
  - FT FOOT OR FEET
  - HG HEAT GAIN
  - HT OR H HEIGHT
  - HOR HORIZONTAL
  - HP HORSE POWER
  - HZ FREQUENCY
  - IN INCH(-ES)
  - KW KILOWATT
  - LAT LEAVING AIR TEMPERATURE
  - LB(S) POUND(S)
  - LWT LEAVING WATER TEMPERATURE
  - MAX MAXIMUM
  - MBH THOUSAND BRITISH THERMAL UNITS PER HOUR
  - MCA MINIMUM CIRCUIT AMPACITY
  - MIN MINIMUM
  - MOCOP MAXIMUM OVERCURRENT PROTECTION
  - OA OUTDOOR AIR
  - PD PRESSURE DROP
  - PRESS PRESSURE
  - PSI POUND PER INCH
  - RA RETURN AIR
  - RPM REVOLUTIONS PER MINUTE
  - SA SUPPLY AIR
  - SH SENSIBLE HEAT
  - SHC SENSIBLE HEAT CAPACITY
  - SHG SENSIBLE HEAT GAIN
  - SQ SQUARE
  - SP STATIC PRESSURE
  - TC TOTAL CAPACITY
  - TONS TONS OF REFRIGERATION
  - VEL VELOCITY
  - VOL VOLUME
  - WB WET BULB
  - WC WATER COLUMN
  - WT WEIGHT
  - 1 HOUR FIRE RATED BARRIER

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE:**

Prescriptive X	Energy Cost Budget	
Thermal Zone	3	
Exterior design conditions		
winter dry bulb:	16 Deg. F.	
summer dry bulb:	97 Deg. F.	
Interior design conditions		
winter dry bulb:	70 Deg. F.	
summer dry bulb:	75 Deg. F.	
relative humidity:	50%	
Building heating load	172,500 BTU/Hr	
Building cooling load	25.5 Tons	
Mechanical Spacing Conditioning System		
Unitary		
description of unit:	SPLIT SYSTEM FURNACE	
heating efficiency:	3 C.O.P.	
cooling efficiency:	13 SEER	
heat output of unit:	382,500 BTU/Hr	
cooling output of unit:	26 Tons	
boiler	NA	
total boiler output, if oversized, state reason.	NA	
chiller	NA	
total chiller capacity, if oversized, state reason.	NA	
List equipment efficiencies	NA	
Equipment schedules with motors (mechanical systems)	NA	
motor horsepower:	NA	
number of phases:	NA	
minimum efficiency:	NA	
motor type:	NA	
# of poles:	NA	

DESIGNER STATEMENT: 1  
To the best of my knowledge and belief, the design of this building complies with the mechanical, electrical, plumbing, and equipment requirements of the North Carolina Building Code, Volume X-Energy.

SIGNED: *Richard T. Thorne, Jr.*

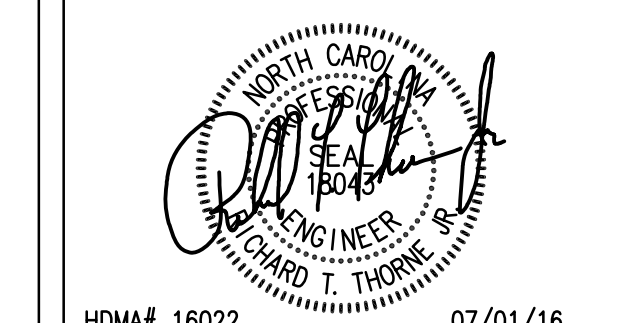
NAME: Richard T. Thorne, Jr., P.E.

TITLE: President

DESIGN CONDITIONS						
SPACE	INDOOR DESIGN		OUTDOOR DESIGN		INDOOR DESIGN	OUTDOOR DESIGN
	SUMMER		SUMMER		WINTER	WINTER
	DB (°F)	WB (°F)	DB (°F)	WB (°F)	DB (°F)	WB (°F)
BEAUTY SALON	75	62.5	97	78	70	17

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HDM# 16022 07/01/16

HERITAGE SALON  
FIT-UP  
3117 RODGERS ROAD  
WAKE FOREST, NC

OWNER: JMJ Commercial Contractors  
10713 Staghound Trail  
Zebulon, NC  
PROJECT NUMBER: 160001  
DRAWN BY: JAO  
ISSUED / REVIEW: RTT

ISSUED / CONSTRUCTION:

REVISIONS

MECHANICAL SPECS,  
LEGEND, & SCHEDULES

M1.0

SPLIT SYSTEM GAS FURNACE EQUIPMENT SCHEDULE																				
FURNACE					CONDENSING															
MARK	SA (CFM)	OA (CFM)	MAX FAN (HP)	ESP (IN H2O)	POWER		GAS HEATING		COOLING			POWER					MIN ENERGY			REMARKS
					VOLTS	PHASE	TC INPUT (MBH)	OUTPUT (MBH)	TC (MBH)	SHC (MBH)	VOLTS	PHASE	FLA	MCA	MOCP	SEER	EER	HEAT	WEIGHT (LBS)	
FU-1/CU-1	1,400	280	1/3	0.5	120	1	75.0	67.5	41.5	29.7	208	1	26	32	50	13				
FU-2/CU-2	1,225	245	1/3	0.5	120	1	75.0	67.5	36.5	26.8	208	1	21	26	45	13				
FU-3/CU-3	1,750	350	1/2	0.5	120	1	100.0	90.0	52.8	39.4	208	1	31	38	60	13				
FU-4/CU-4	1,225	245	1/2	0.5	120	1	75.0	67.5	36.5	26.8	208	1	21	26	45	13				
FU-5/CU-5	1,750	350	1/3	0.5	120	1	100.0	90.0	52.8	39.4	208	1	31	38	60	13				

COOLING: INDOOR COIL ENTERING AIR: 80° DB/ 67° WB  
 OUTDOOR AIR: 95° DB \* ESP IS FOR DUCTWORK ONLY

HEATING: INDOOR COIL ENTERING AIR: 70°  
 OUTDOOR AIR: 17° DB

GAS REGULATOR SCHEDULE				
MARK	CAPACITY (BTUH)	INLET PRESSURE (PSI)	OUTLET PRESSURE (PSI)	REMARKS
R-1	75,000	2	0.5	VENT LIMITER
R-2	75,000	2	0.5	VENT LIMITER
R-3	100,000	2	0.5	VENT LIMITER
R-4	75,000	2	0.5	VENT LIMITER
R-5	100,000	2	0.5	VENT LIMITER
R-6	199,900	2	0.5	VENT LIMITER

GAS CONNECTION SCHEDULE				
MARK	DESCRIPTION	QUANTITY	APPLIANCE INPUT (BTUH)	TOTAL INPUT (BTUH)
FU-1	FURNACE UNIT	1	75,000	75,000
FU-2	FURNACE UNIT	1	75,000	75,000
FU-3	FURNACE UNIT	1	100,000	100,000
FU-4	FURNACE UNIT	1	75,000	75,000
FU-5	FURNACE UNIT	1	100,000	100,000
WH-1	WATER HEATER	1	199,900	199,900
TOTAL INPUT (BTUH)				624,900

GAS PIPE SIZE IS BASED ON SECTION 402.4(3) OF THE FUEL GAS CODE WITH MAXIMUM DEVELOPED PIPE LENGTH OF 250'-0" NATURAL GAS PRESSURE OF 2.0 PSIG. DELIVERY PRESSURE SHALL BE (0.5 PSIG).

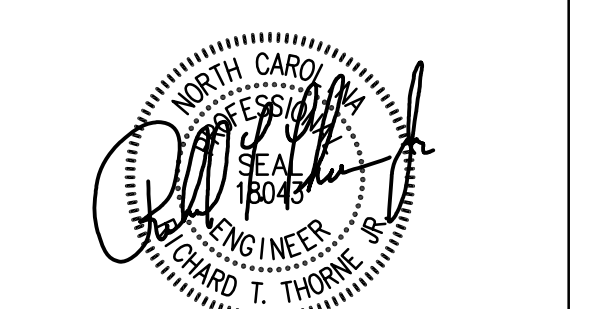
FAN SCHEDULE								
MARK	TYPE	AIR FLOW (CFM)	ESP (IN H2O)	MAX (RPM)	POWER			REMARKS
					MAX HP	VOLTS	PHASE	
EF-202	CEILING EXHAUSTER	75	0.25	1,050	1/8	115	1	TOILET EXHAUST FAN
EF-204	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-205	CEILING EXHAUSTER	80	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-206	CEILING EXHAUSTER	125	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-207	CEILING EXHAUSTER	150	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-208	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-210	CEILING EXHAUSTER	80	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-211	CEILING EXHAUSTER	125	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-212	CEILING EXHAUSTER	125	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-213	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-214	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-215	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-216	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-217	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-218	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-219	CEILING EXHAUSTER	125	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-220	CEILING EXHAUSTER	125	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-221	CEILING EXHAUSTER	80	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-222	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-223	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-225	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-226	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-227	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-228	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-229	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-231	CEILING EXHAUSTER	100	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-232	CEILING EXHAUSTER	150	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-233	CEILING EXHAUSTER	125	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-234	CEILING EXHAUSTER	80	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-235	CEILING EXHAUSTER	150	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-237	CEILING EXHAUSTER	75	0.25	1,050	1/8	115	1	TOILET EXHAUST FAN
EF-238	CEILING EXHAUSTER	75	0.25	1,050	1/8	115	1	TOILET EXHAUST FAN
EF-239	CEILING EXHAUSTER	125	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN
EF-240	CEILING EXHAUSTER	150	0.25	1,050	1/8	115	1	SALON ROOM EXHAUST FAN

NOTES:  
 THE ESP NOTED IS FOR DUCTWORK, LOUVER OR ROOF HOOD ONLY. ADD ALL INTERNAL ACCESSORIES (SUCH AS: BACKDRAFT DAMPERS & SOUND ATTENUATORS) TO THE STATIC PRESSURE OF THE FAN.

ROOF HOOD SCHEDULE							
MARK	SERVICE	MAX AIR FLOW (CFM)	PD (IN H2O)	THROAT SIZE (IN)	THROAT AREA (SQ FT)	HOOD SIZE (IN)	REMARKS
RH-1	INTAKE	1,500	0.10	16 x 16	1.77	30 x 30	15 LBS, FU-4, FU-5
RH-2	INTAKE	1,500	0.10	16 x 16	1.77	30 x 30	15 LBS, FU-1, FU-2, FU-3
RH-3	EXHAUST	2,100	0.10	20 x 20	2.77	36 x 36	22 LBS
RH-4	EXHAUST	2,100	0.10	20 x 20	2.77	36 x 36	22 LBS

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HDM# 16022 07/01/16

HERITAGE SALON  
 FIT-UP

3117 RODGERS ROAD  
 WAKE FOREST, NC

OWNER: JMJ Commercial Contractors  
 10713 Staghound Trail  
 Zebulon, NC

PROJECT NUMBER: 160001  
 DRAWN BY: JAO  
 ISSUED / REVIEW: RTT

ISSUED / CONSTRUCTION:

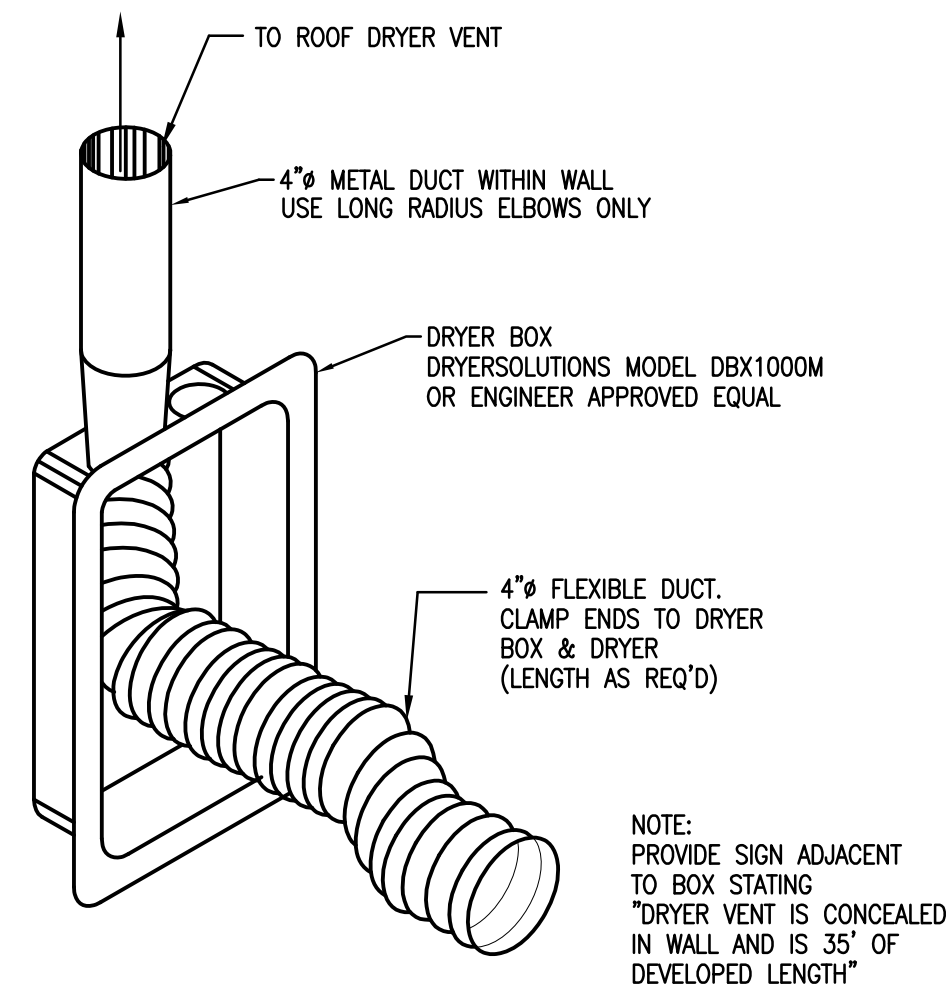
REVISIONS

MECHANICAL  
 SCHEDULES

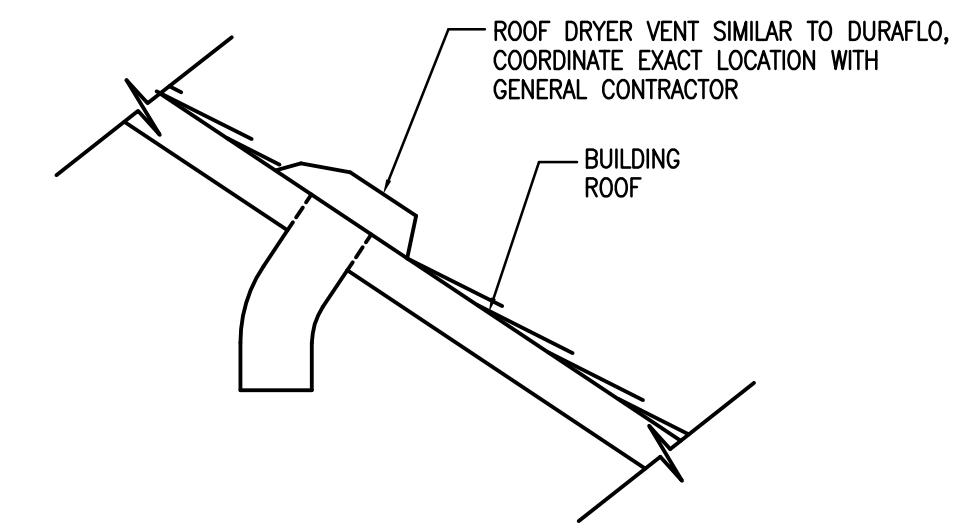
M1.1

OF SHEETS

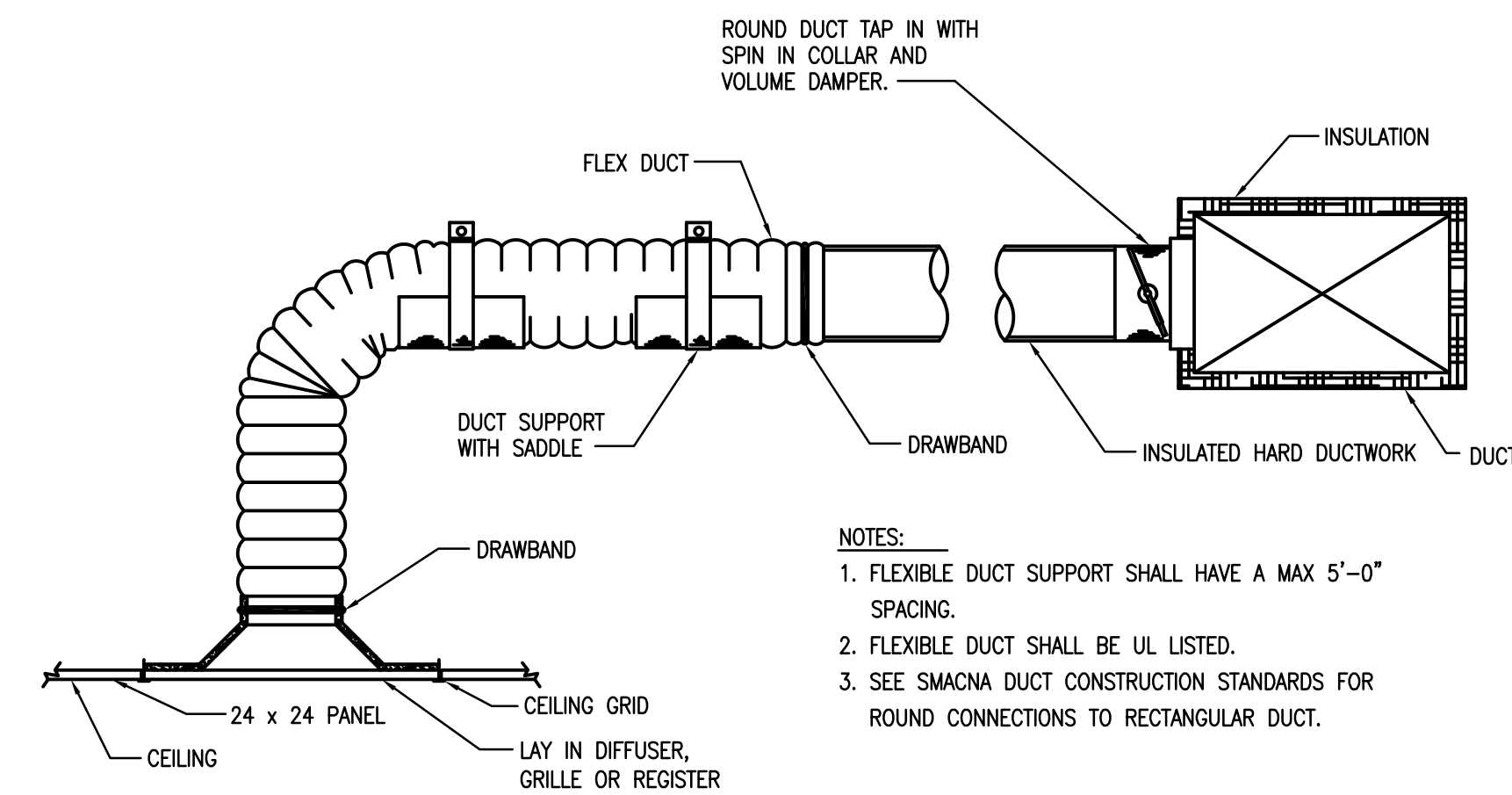




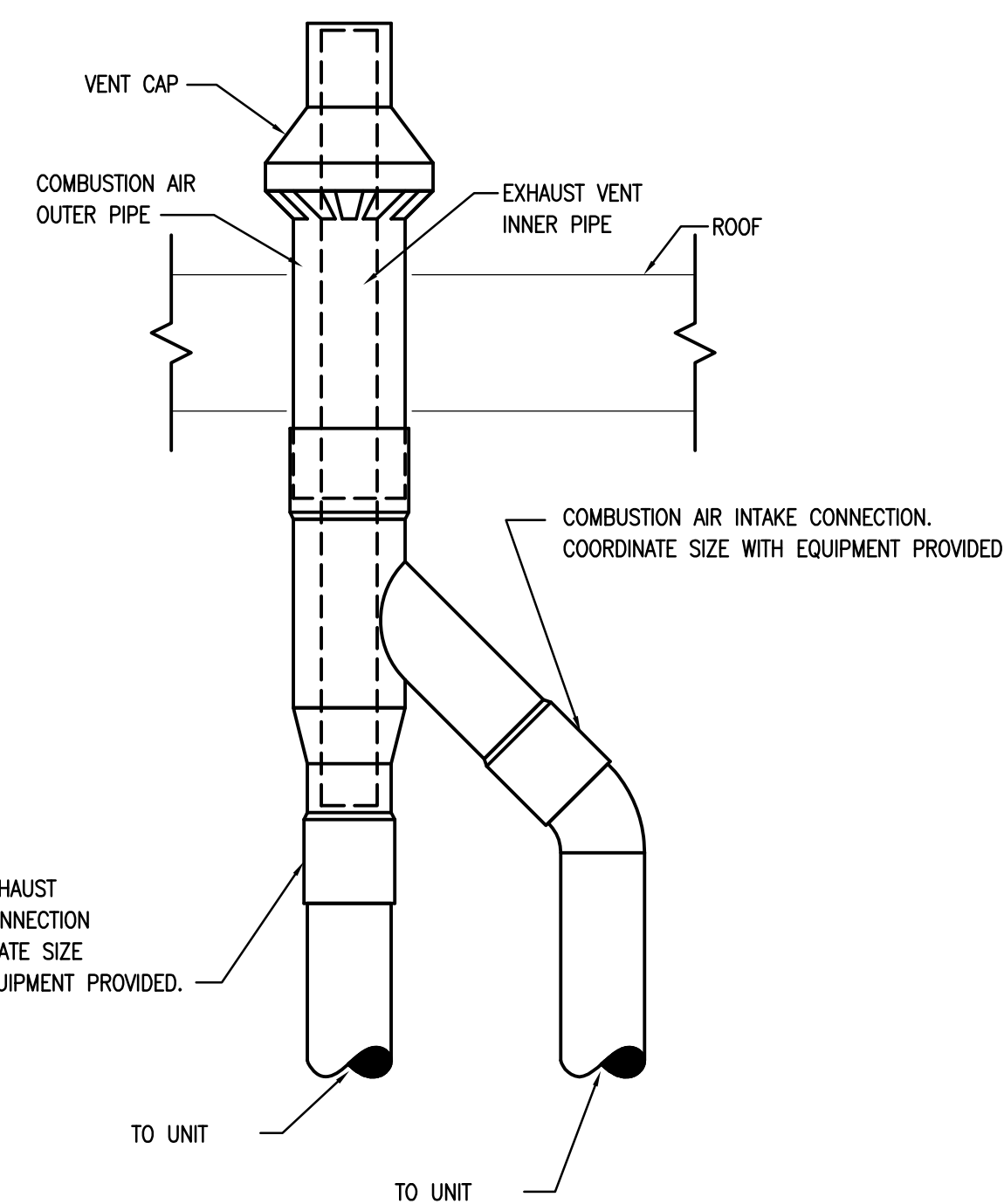
**DRYER VENT HOOKUP DETAIL** MD-029  
NO SCALE



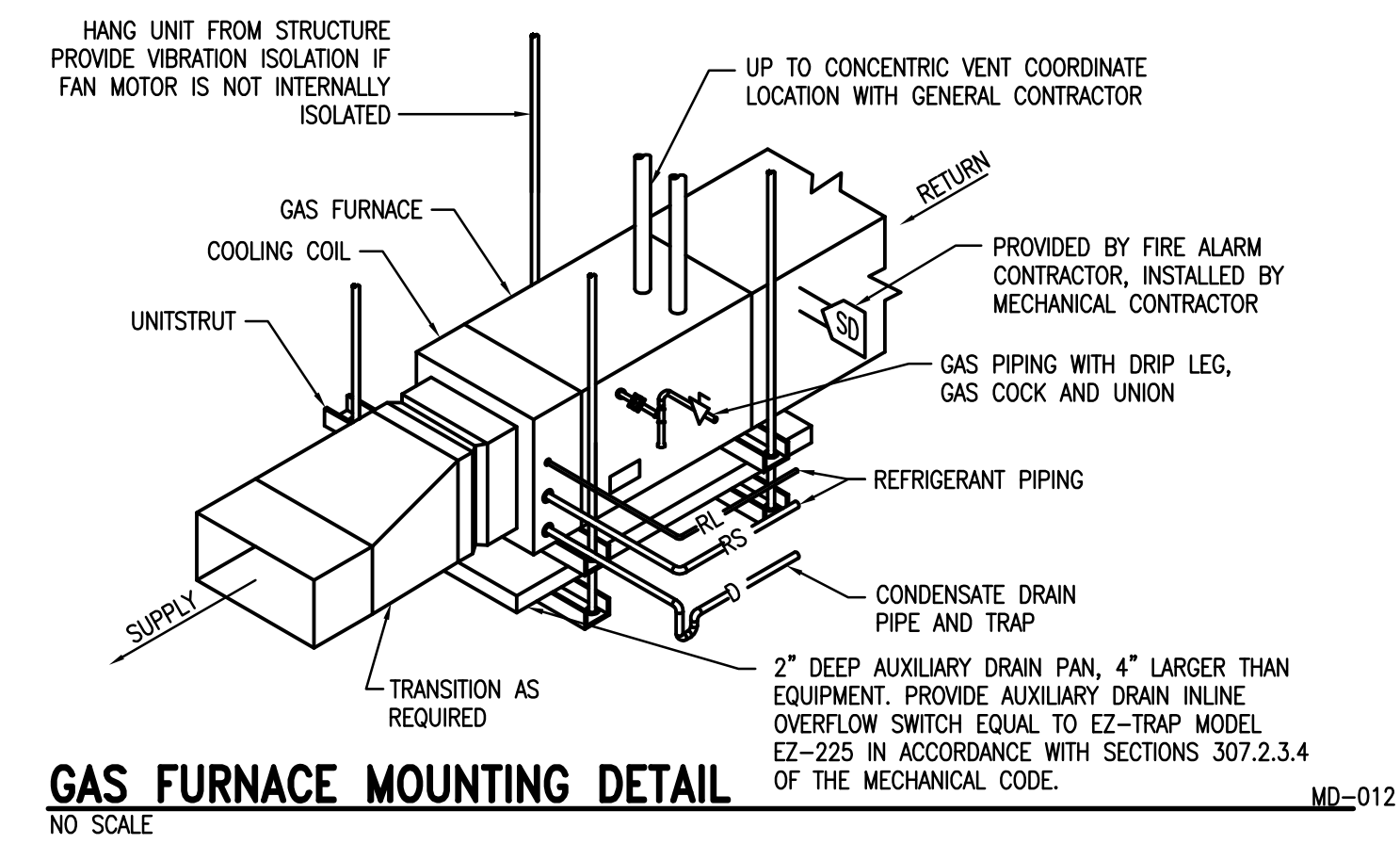
**ROOF DRYER VENT DETAIL** MD-029  
NO SCALE



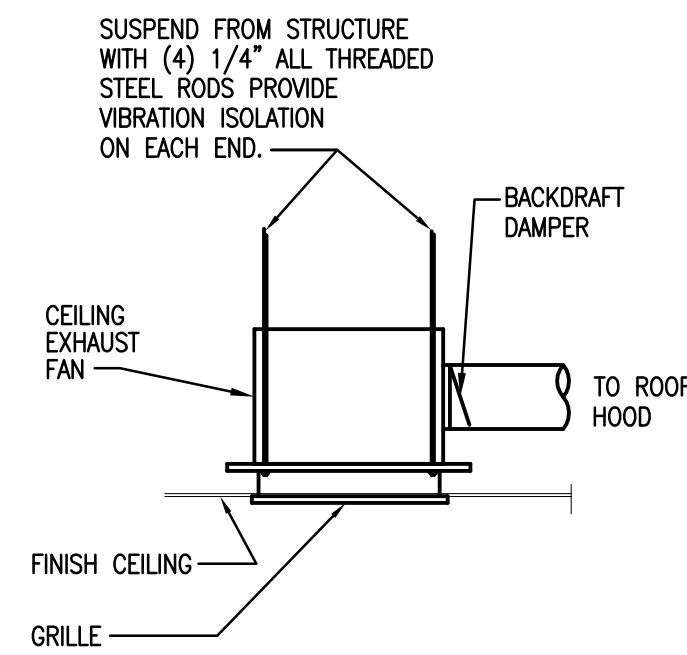
**FLEXIBLE DUCT INSTALLATION DETAIL** MD-005  
NO SCALE



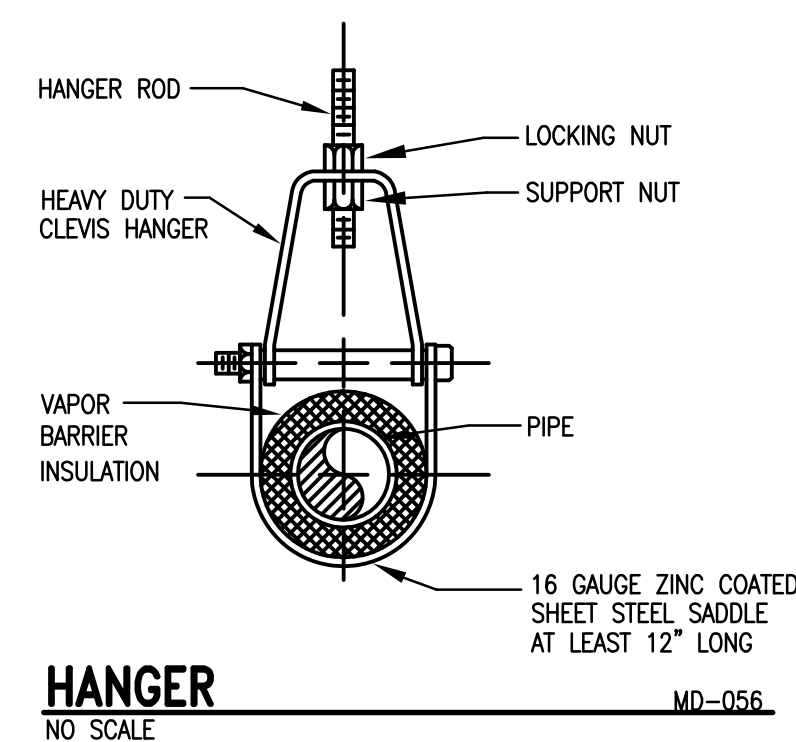
**CONCENTRIC VENT DETAIL** MD-025  
SCALE: NONE



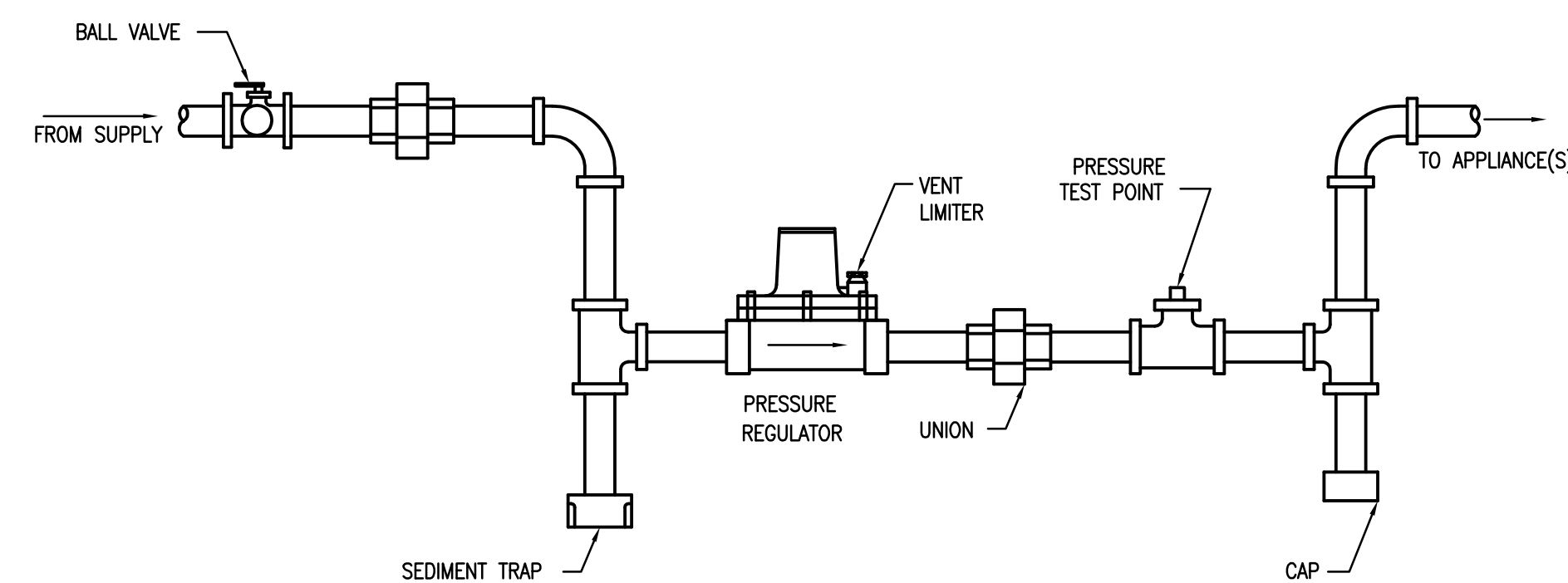
**GAS FURNACE MOUNTING DETAIL** MD-012  
NO SCALE



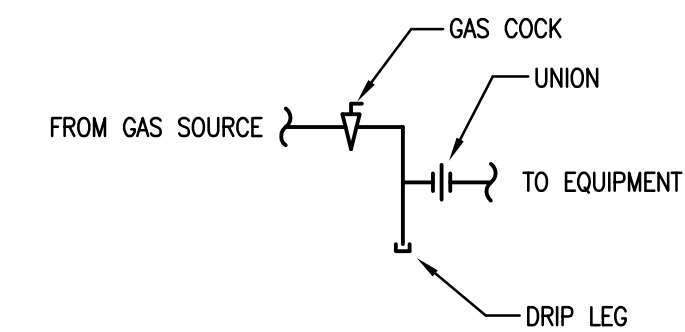
**CEILING FAN DETAIL** MD-003  
NO SCALE



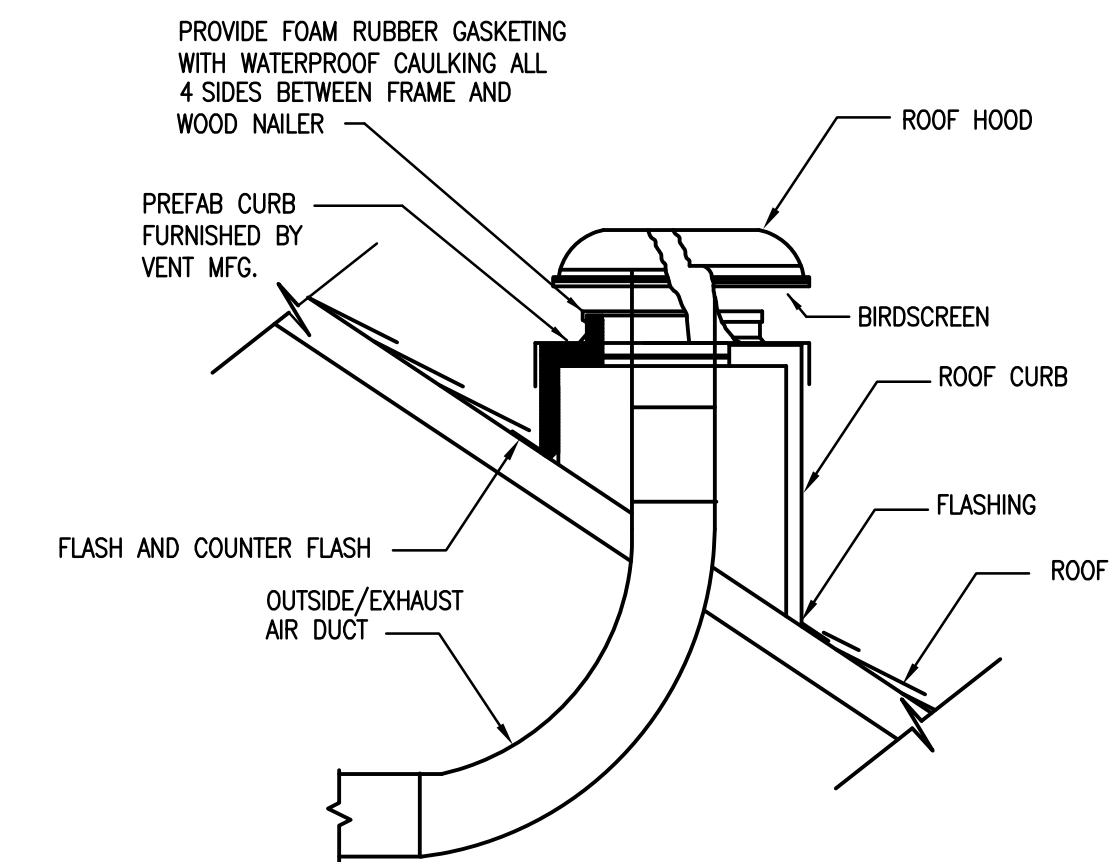
**HANGER** MD-056  
NO SCALE



**GAS REGULATOR ASSEMBLY DETAIL** MD-052  
NO SCALE



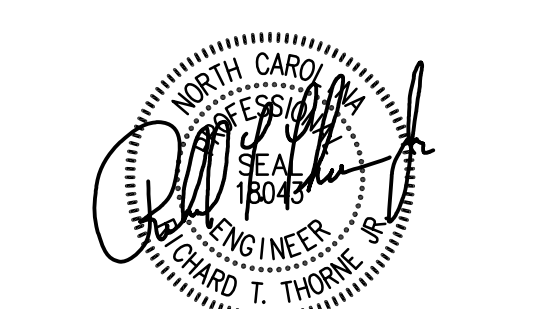
**GAS CONNECTION DETAIL** MD-011  
NO SCALE



**OUTSIDE AIR INTAKE/  
EXHAUST AIR ROOF HOOD (PITCH ROOF)**  
NO SCALE

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HDM# 16022 07/01/16

HERITAGE SALON  
FIT-UP

3117 RODGERS ROAD  
WAKE FOREST, NC

OWNER: JMJ Commercial Contractors  
10713 Staghound Trail  
Zebulon, NC  
PROJECT NUMBER: 160001  
DRAWN BY: JAO  
ISSUED / REVIEW: RTT

ISSUED / CONSTRUCTION:

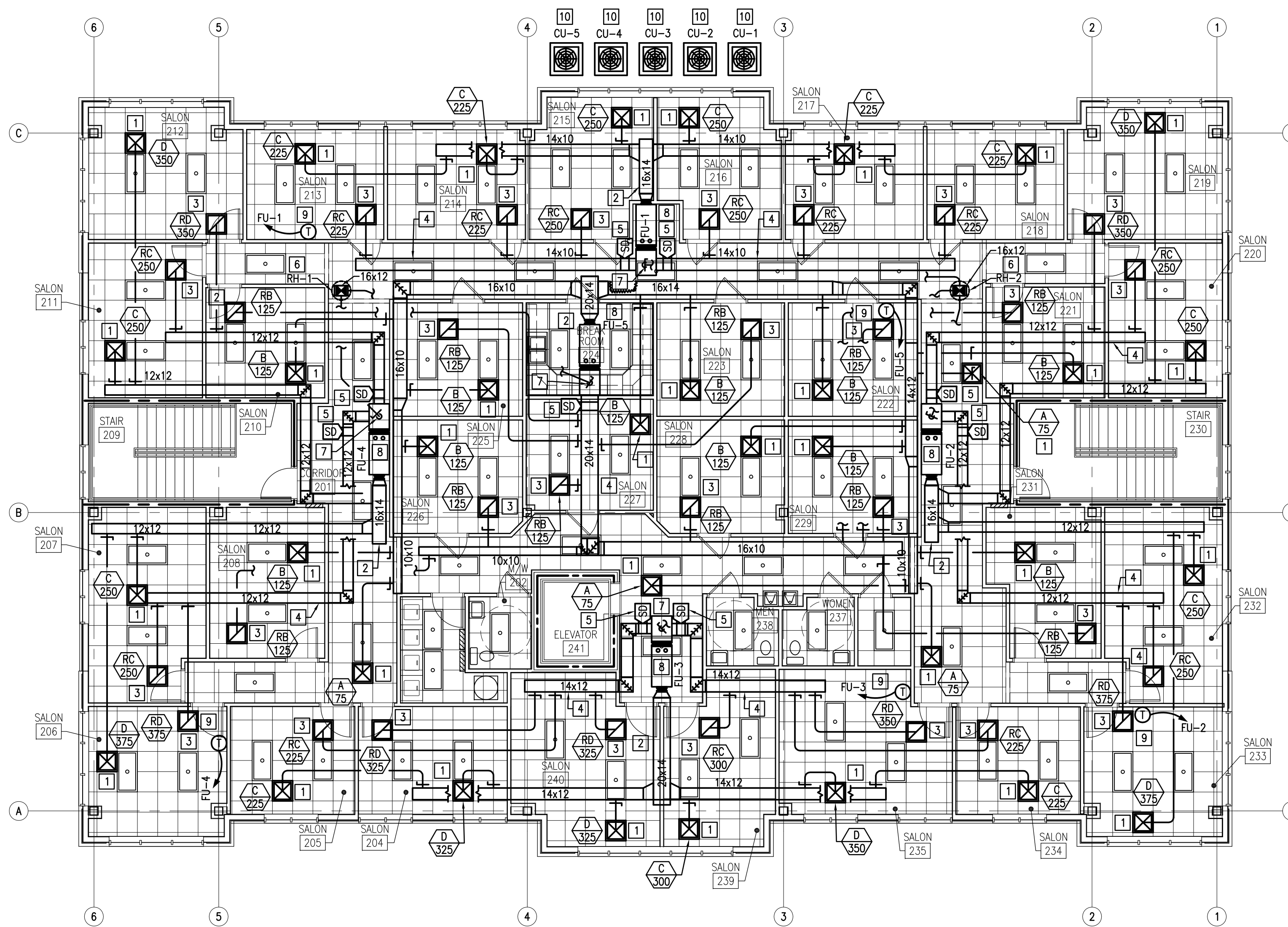
REVISIONS

THE OCCURANCE IS THE PROPERTY OF DEVON TOLSON ARCHITECTURE, INC.  
USE ONLY FOR THE TITLED PROJECT. ALL RIGHTS RESERVED.

MECHANICAL  
DETAILS

M1.2

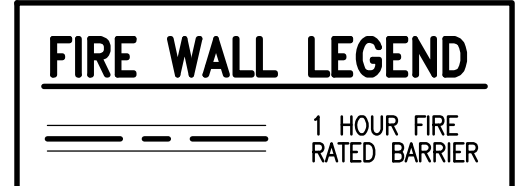
OF SHEETS



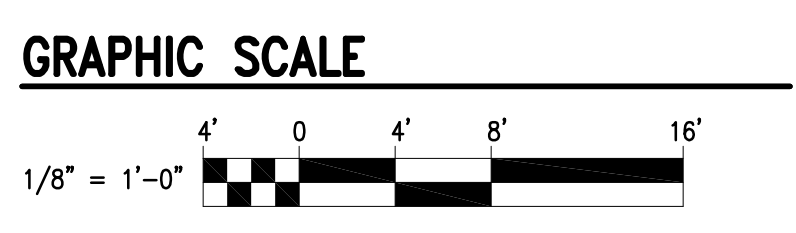
**MECHANICAL SECOND FLOOR PLAN - DUCTWORK**  
SCALE: 1/8" = 1'-0"

**WORK NOTES**

- 1 PROVIDE SUPPLY AIR DIFFUSER AS SCHEDULED. PROVIDE RUN-OUT DUCT, BALANCING DAMPER, HANGERS AND SUPPORT AND CONNECT TO MAIN SUPPLY DUCT. BALANCE AIR QUANTITY AS INDICATED.
- 2 PROVIDE SUPPLY AIR DUCTWORK WITH HANGERS, SUPPORTS AND ALL REQUIRED MATERIALS TO ROUTE AS INDICATED.
- 3 PROVIDE RETURN AIR GRILLE AS SCHEDULED. PROVIDE RUN-OUT DUCT, BALANCING DAMPER, HANGERS AND SUPPORT AND CONNECT TO MAIN RETURN DUCT. BALANCE AIR QUANTITY AS INDICATED.
- 4 PROVIDE RETURN AIR DUCTWORK WITH HANGERS, SUPPORTS AND ALL REQUIRED MATERIALS TO ROUTE AS INDICATED.
- 5 INSTALL DUCT SMOKE DETECTOR PROVIDED BY FIRE ALARM CONTRACTOR.
- 6 PROVIDE OUTSIDE AIR INTAKE ROOF HOOD WITH MAIN DUCT ON ROOF CURB PER MANUFACTURER'S RECOMMENDATIONS. SEAL ROOF PENETRATION IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. MAINTAIN A MINIMUM OF 10'-0" DISTANCE AWAY FROM EXHAUST AND VENT TERMINATIONS. SEE OUTSIDE AIR INTAKE DETAIL.
- 7 PROVIDE 106 OUTSIDE AIR INTAKE DUCTWORK WITH BALANCING DAMPER, HANGERS AND SUPPORTS AND CONNECT TO MAIN OUTSIDE AIR DUCT.
- 8 PROVIDE SPLIT SYSTEM GAS FURNACE UNIT AS SCHEDULED. PROVIDE FULL SIZE OPEN PLENUM CONCENTRIC FLUE VENT, HANGERS AND SUPPORTS. MOUNT ABOVE CEILING. SEE GAS FURNACE MOUNTING DETAIL.
- 9 PROVIDE THERMOSTAT FOR GAS FURNACE UNIT WITH WIRING AS INDICATED.
- 10 PROVIDE CONDENSING UNIT AS SCHEDULED. PROVIDE 4" THICK CONCRETE EQUIPMENT PAD 6" LARGER THAN EQUIPMENT. COORDINATE ELECTRICAL CONNECTION WITH ELECTRICAL CONTRACTOR.

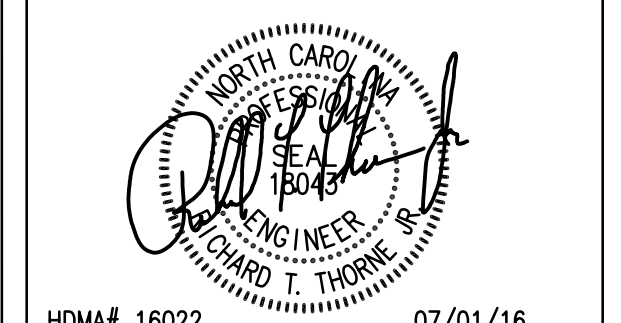


**NOTE:**  
\* CONTRACTOR SHALL FIELD LAYOUT ALL DUCTWORK PRIOR TO FABRICATING ANY DUCTWORK.



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HDM# 16022 07/01/16

HERITAGE SALON  
FIT-UP

3117 RODGERS ROAD  
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OWNER: JMJ Commercial Contractors  
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PROJECT NUMBER: 160001  
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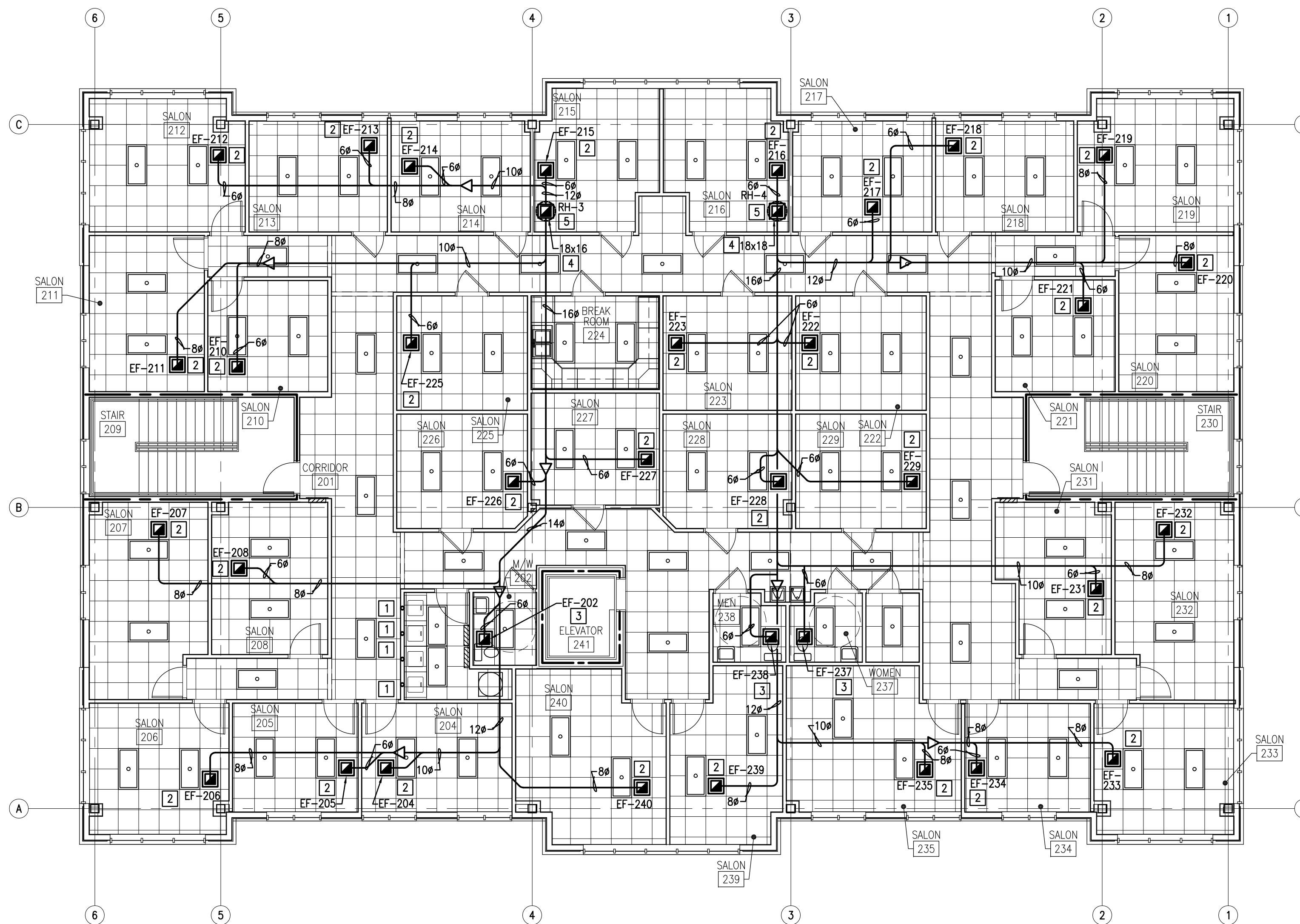
ISSUED / CONSTRUCTION:

REVISIONS

MECHANICAL SECOND  
FLOOR PLAN -  
DUCTWORK

**M2.0**

H:\2016\16022\_PME\16022-07M2.0.dwg, 7/5/2016, 7:21:25 AM, Barry

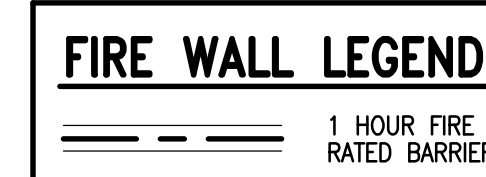


**MECHANICAL SECOND FLOOR PLAN – EXHAUST DUCTWORK**

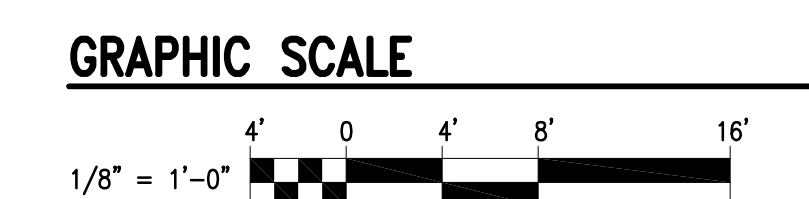
SCALE: 1/8" = 1'-0"

**WORK NOTES**

- 1 PROVIDE 4" RIGID DRYER DUCT CONCEALED UP IN WALL TO ROOF DRYER VENT. SEE DRYER VENT HOOKUP DETAIL AND ROOF DRYER VENT DETAIL. COORDINATE ROOF PENETRATION WITH GENERAL CONTRACTOR. ROOF SHALL BE PENETRATED IN ACCORDANCE WITH ROOF MANUFACTURER'S REQUIREMENTS. MAINTAIN A MINIMUM OF 10'-0" DISTANCE AWAY FROM OUTSIDE AIR INTAKES.
- 2 PROVIDE CEILING EXHAUST FAN AS SCHEDULED. PROVIDE EXHAUST DUCT, HANGERS AND SUPPORT AND CONNECT TO EXHAUST ROOF HOOD. EXHAUST FAN SHALL BE SWITCHED INDEPENDENTLY. COORDINATE SWITCHING AND POWER WITH ELECTRICAL CONTRACTOR. SEE CEILING FAN DETAIL.
- 3 PROVIDE CEILING EXHAUST FAN AS SCHEDULED. PROVIDE EXHAUST DUCT, HANGERS AND SUPPORT AND CONNECT TO EXHAUST ROOF HOOD. EXHAUST FAN SHALL BE SWITCHED WITH LIGHTS. COORDINATE SWITCHING AND POWER WITH ELECTRICAL CONTRACTOR. SEE CEILING FAN DETAIL.
- 4 PROVIDE EXHAUST AIR DUCTWORK WITH HANGERS, SUPPORTS AND ALL REQUIRED MATERIALS TO ROUTE AS INDICATED.
- 5 PROVIDE EXHAUST AIR ROOF HOOD ON ROOF CURB PER MANUFACTURER'S RECOMMENDATIONS. SEAL ROOF PENETRATION IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. MAINTAIN A MINIMUM OF 10'-0" DISTANCE AWAY FROM OUTSIDE AIR INTAKES. SEE EXHAUST AIR DETAIL.



**NOTE:**  
 \* CONTRACTOR SHALL FIELD LAYOUT ALL DUCTWORK PRIOR TO FABRICATING ANY DUCTWORK.

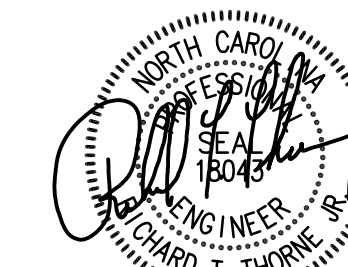


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HERITAGE SALON  
 FIT-UP

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OWNER: JMJ Commercial Contractors

10713 Staghound Trail

Zebulon, NC

PROJECT NUMBER: 160001

DRAWN BY: JAO

ISSUED / REVIEW: RTT

ISSUED / CONSTRUCTION:

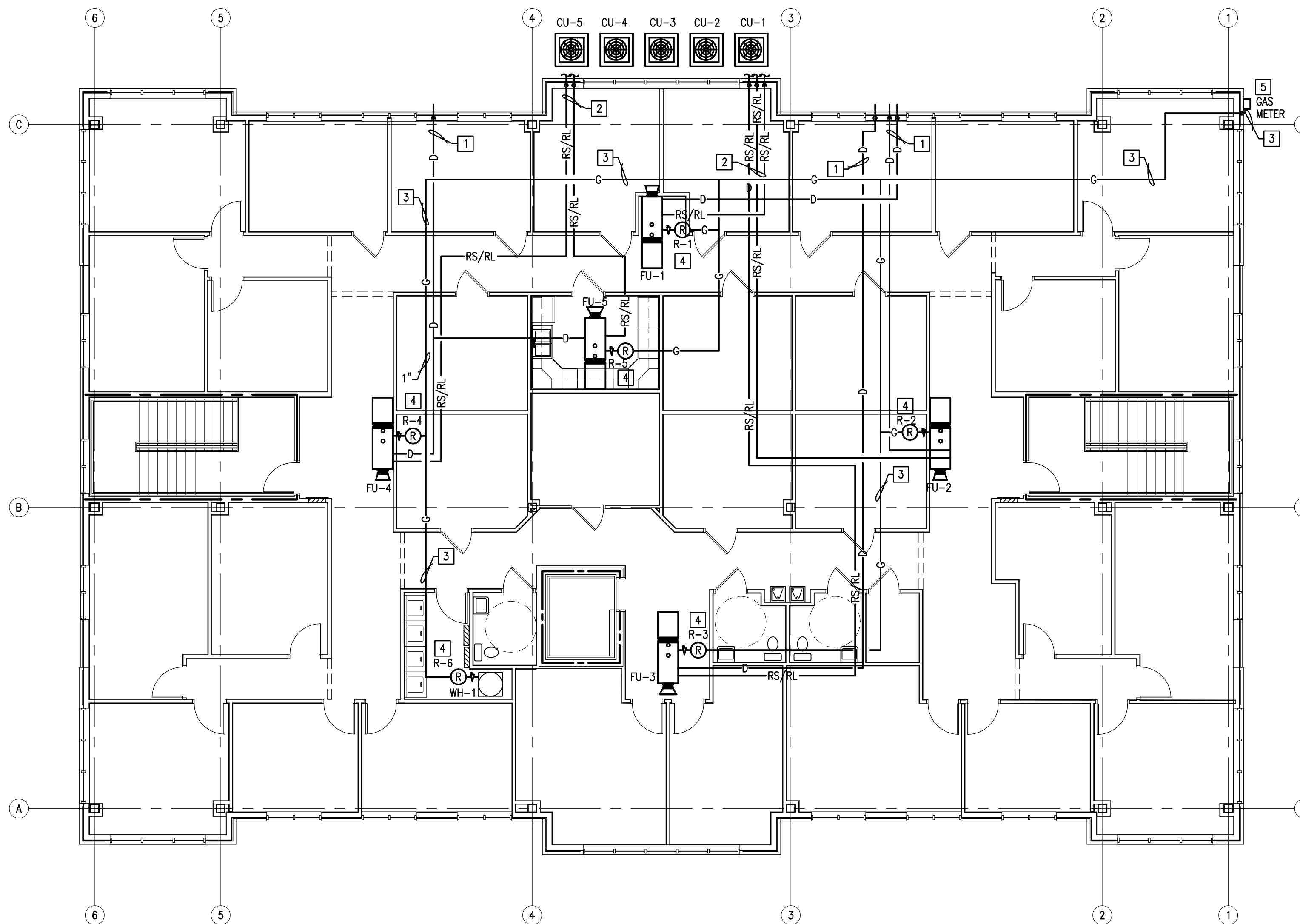
REVISIONS

MECHANICAL SECOND  
 FLOOR PLAN -  
 EXHAUST DUCTWORK

**M3.0**

OF SHEETS



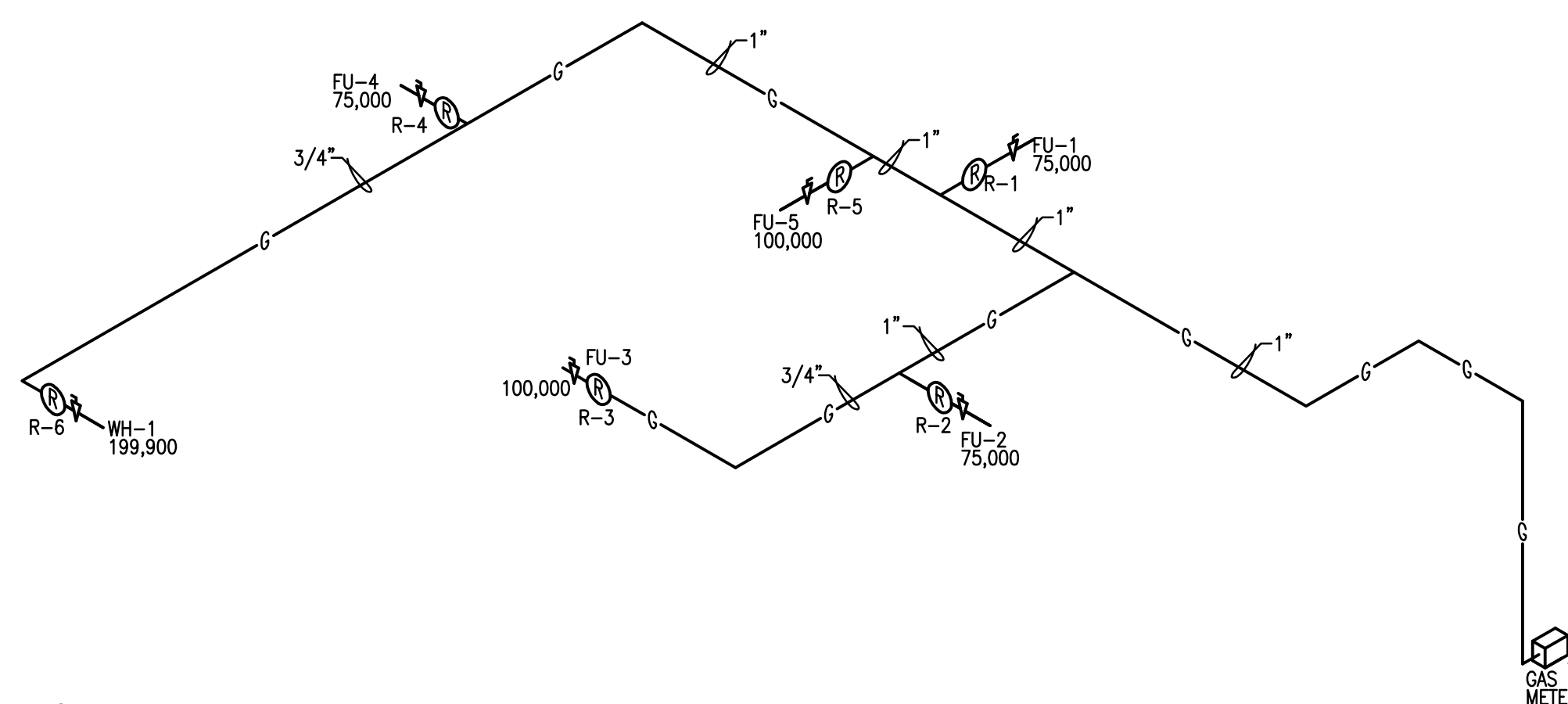


**MECHANICAL SECOND FLOOR PLAN - PIPING**

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

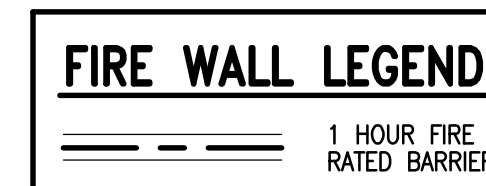
**WORK NOTES**

- 1 PROVIDE 1" CONDENSATE DRAIN PIPE. ROUTE CONCEALED DOWN IN WALL TO 6" ABOVE FINISHED GRADE, STUB OUT AND TURN DOWN. SEAL WALL PENETRATION WEATHER TIGHT.
- 2 PROVIDE REFRIGERANT PIPING FROM GAS FURNACE UNIT TO CONDENSING UNIT. ROUTE CONCEALED DOWN IN WALL TO 6" ABOVE FINISHED GRADE. SEAL WALL PENETRATION WEATHER TIGHT. PROVIDE LONG LINE SET PER MANUFACTURER'S RECOMMENDATIONS AS REQUIRED.
- 3 PROVIDE GAS PIPING WITH HANGERS AND SUPPORTS FROM GAS METER TO EQUIPMENT AS INDICATED. ROUTE UP IN WALL TO ABOVE SECOND FLOOR CEILING. SEAL WALL PENETRATION WEATHER TIGHT.
- 4 PROVIDE GAS REGULATOR ON WITH ASSOCIATED PIPING COMPLETE.
- 5 PROVIDE GAS METER ON FIRST FLOOR WITH ASSOCIATED PIPING COMPLETE. COORDINATE SIZING AND LOCATION WITH LOCAL GAS UTILITY.

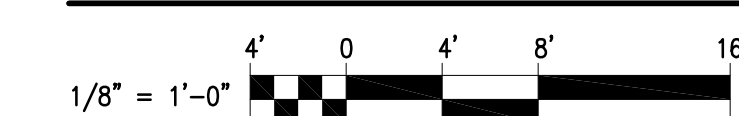


**MECHANICAL RISER DIAGRAM - GAS**

NO SCALE



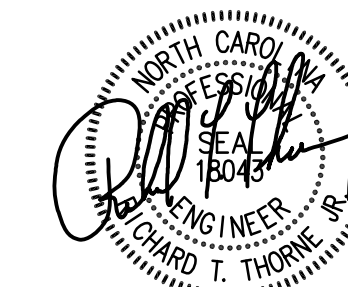
**GRAPHIC SCALE**



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HDM# 16022 07/01/16

HERITAGE SALON  
FIT-UP

3117 RODGERS ROAD  
WAKE FOREST, NC

OWNER: JMJ Commercial Contractors  
10713 Staghound Trail  
Zebulon, NC

PROJECT NUMBER: 160001

DRAWN BY: JAO

ISSUED / REVIEW: RTT

ISSUED / CONSTRUCTION:

REVISIONS

MECHANICAL SECOND  
FLOOR PLAN -  
PIPING

**M4.0**

OF SHEETS





PANELBOARD 2A SCHEDULE														
400 A MLO, 120/208 V, 3 PHASE, 4 WIRE 22 KAIC MINIMUM SURFACE MOUNT														
LOAD SERVED	LOAD(AMPS)			BKR TRIP	CKT NO	PHASE			CKT NO	BKR TRIP	LOAD(AMPS)			LOAD SERVED
	A	B	C			A	B	C			A	B	C	
LTS CORRIDOR, RESTROOMS	13			20	1				2	50	26		CU-1	
LTS 204-208, 231-235, 239, 240		13		20	3				4	2P	26		2#8, 1#10G, 3/4" C	
LTS 222-229			9	20	5				6	45		21	CU-2	
LTS 210-221	13			20	7				8	2P	21		2#8, 1#10G, 3/4" C	
SIGN		10		20	9				10	60	31		CU-3	
SIGN			10	20	11				12	2P	31		2#8, 1#10G, 3/4" C	
SPARE				20	13				14	45	21		CU-4	
SPARE				20	15				16	2P	21		2#8, 1#10G, 3/4" C	
SPARE				20	17				18	60	31		CU-5	
SPACE				20	19				20	2P	31		2#8, 1#10G, 3/4" C	
SPACE				20	21				22	2P			SPACE	
SPACE				20	23				24				SPACE	
SPACE				20	25				26				SPACE	
SPACE				20	27				28				SPACE	
SPACE				20	29				30				SPACE	
PANEL 2B	77			150	31				32				SPACE	
		88		3P	33				34				SPACE	
			85	35					36				SPACE	
PANEL 2C	74			150	37				38		63		PANEL 2D	
		60		3P	39				40	3P	50			
			53	41					42					
TOTAL	177	171	157						162	128	140		TOTAL	
TOTAL CONNECTED AMPS A:338 B:299 C:297														

PANELBOARD 2B SCHEDULE														
225 A MLO, 120/208 V, 3 PHASE, 4 WIRE 22 KAIC MINIMUM SURFACE MOUNT														
LOAD SERVED	LOAD(AMPS)			BKR TRIP	CKT NO	PHASE			CKT NO	BKR TRIP	LOAD(AMPS)			LOAD SERVED
	A	B	C			A	B	C			A	B	C	
REC 237, 238		6		20	1				2	20	5		WASHER	
REC 235, 239			6	20	3				4	20	5		WASHER	
REC 239				20	5				6	20		5	WASHER	
REC 240		3		20	7				8	20	5		WASHER	
REC 240, 204			6	20	9				10	30		21	DRYER	
REC 204				20	11				12	2P		21	DRYER	
EF-204, 240		6		20	13				14	30	21		3#10, 1#10G, 3/4" C	
EF-235, 239			6	20	15				16	2P		21	DRYER	
REC 202				20	17				18	30		21	DRYER	
REC EWC		10		20	19				20	2P	21		DRYER	
REC OUTDOOR			2	20	21				22	30		21	DRYER	
WH-1, RCP-1				20	23				24	2P		21	DRYER	
SPARE				20	25				26				SPACE	
SPARE				20	27				28				SPACE	
SPARE				20	29				30				SPACE	
SPARE				20	31				32				SPACE	
SPARE				20	33				34				SPACE	
SPARE				20	35				36				SPACE	
SPARE				20	37				38				SPACE	
SPARE				20	39				40				SPACE	
SPARE				20	41				42				SPACE	
TOTAL	25	20	17						52	68	68		TOTAL	
TOTAL CONNECTED AMPS A:77 B:88 C:85														

\* PROVIDE GFCI BREAKER.

PANELBOARD 2C SCHEDULE														
225 A MLO, 120/208 V, 3 PHASE, 4 WIRE 22 KAIC MINIMUM FLUSH MOUNT														
LOAD SERVED	LOAD(AMPS)			BKR TRIP	CKT NO	PHASE			CKT NO	BKR TRIP	LOAD(AMPS)			LOAD SERVED
	A	B	C			A	B	C			A	B	C	
REC 216	3			20	1				2	20	3		REC 231	
REC 217		3		20	3				4	20	3		REC 232	
REC 218			3	20	5				6	20		3	REC 233	
REC 218, 219	6			20	7				8	20	6		REC 232, 233	
REC 219		3		20	9				10	20		6	REC 231, 234	
REC 220			3	20	11				12	20		3	REC 234	
REC 220, 221	6			20	13				14	20	3		REC 235	
REC 221		3		20	15				16	20	6		EF-216, 217	
REC 222			3	20	17				18	20		6	EF-218, 219	
REC 222, 217	6			20	19				20	20	6		EF-220, 221	
REC 223		3		20	21				22	20	6		EF-222, 223	
REC 228			3	20	23				24	20	6		EF-228, 229	
REC 223, 229	6			20	25				26	20	6		EF-231, 232	
REC 229		3		20	27				28	20	6		EF-233, 234	
FU-1			7	20	29				30	20		8	REC HOODED DRYER	
FU-2	7			20	31				32	20	8		REC HOODED DRYER	
FU-3		10		20	33				34	20	8		REC HOODED DRYER	
SPARE				20	35				36	20		8	REC HOODED DRYER	
SPARE				20	37				38	20	8		REC HOODED DRYER	
SPARE				20	39				40	20			SPARE	
SPARE				20	41				42	20			SPARE	
TOTAL	34	25	19						40	35	34		TOTAL	
TOTAL CONNECTED AMPS A:74 B:60 C:53														

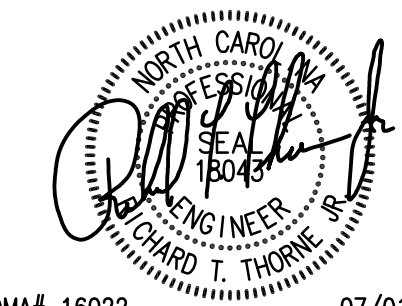
PANELBOARD 2D SCHEDULE														
225 A MLO, 120/208 V, 3 PHASE, 4 WIRE 22 KAIC MINIMUM FLUSH MOUNT														
LOAD SERVED	LOAD(AMPS)			BKR TRIP	CKT NO	PHASE			CKT NO	BKR TRIP	LOAD(AMPS)			LOAD SERVED
	A	B	C			A	B	C			A	B	C	
REC 210	3			20	1				2	20	3		REC 224	
REC 211		3		20	3				4	20	3		REC 224	
REC 211, 212			3	20	5				6	20		3	REC 224	
REC 212	3			20	7				8	20	3		REC 225	
REC 213		3		20	9				10	20		6	REC 226, EF-225	
REC 210, 213			3	20	11				12	20		3	REC 226	
REC 214	3			20	13				14	20	3		REC 227	
REC 214, 225		6		20	15				16	20		6	REC 227, 228	
REC 215			3	20	17				18	20		6	EF-210, 211	
REC 215, 216	6			20	19				20	20	6		EF-212, 213	
REC VENDING		5		20	21				22	20		6	EF-214, 215	
REC HOODED DRYER			8	20	23				24	20		6	EF-207, 208	
REC HOODED DRYER	8			20	25				26	20	6		EF-205, 206	
REC 207		3		20	27				28	20		6	EF-226, 227	
REC 208			3	20	29				30	20		10	FU-4	
REC 207, 208	6			20	31				32	20	7		FU-5	
REC 205		3		20	33				34	20			SPARE	
REC 206			3	20	35				36	20			SPARE	
REC 205, 206	6			20	37				38	20			SPARE	
SPARE				20	39				40	20			SPARE	
SPARE				20	41				42	20			SPARE	
TOTAL	35	23	29						28	27	28		TOTAL	
TOTAL CONNECTED AMPS A:63 B:50 C:57														

\* PROVIDE GFCI BREAKER.

LOAD SUMMARY			
LOAD	CONN LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
LIGHTING	22.3	125% ****	27.9
RECEPTACLES	25.1	FIRST 10 KVA AT 100% REMAINDER OVER 10 KVA AT 50% **	17.6
HVAC	42.8	100%	42.8
EQUIPMENT	28.0	100%	28.0
SIGN	2.4	100%	2.4
TOTAL (KVA)	121		119
			AMPS: 330
* BASED ON NEC TABLE 220.12.			
** BASED ON NEC TABLE 220.44.			
*** THIS IS FLA PLUS 25% OF LARGEST MOTOR LOAD.			
**** CONTINUOUS LOAD PER NEC.			
***** BASED ON NEC TABLE 220.56			
***** BASED ON NEC 680.6(A),(B)			
* (7,427 SQFT X 3 VA/SQFT = 22,281 VA)			

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HDM# 16022 07/01/16

HERITAGE SALON  
FIT-UP

3117 RODGERS ROAD  
WAKE FOREST, NC

OWNER: JMJ Commercial Contractors

10713 Stagbound Trail  
Zebulon, NC

PROJECT NUMBER: 160001

DRAWN BY: JAO

ISSUED / REVIEW: RTT

ISSUED / CONSTRUCTION:

REVISIONS

ELECTRICAL SCHEDULES

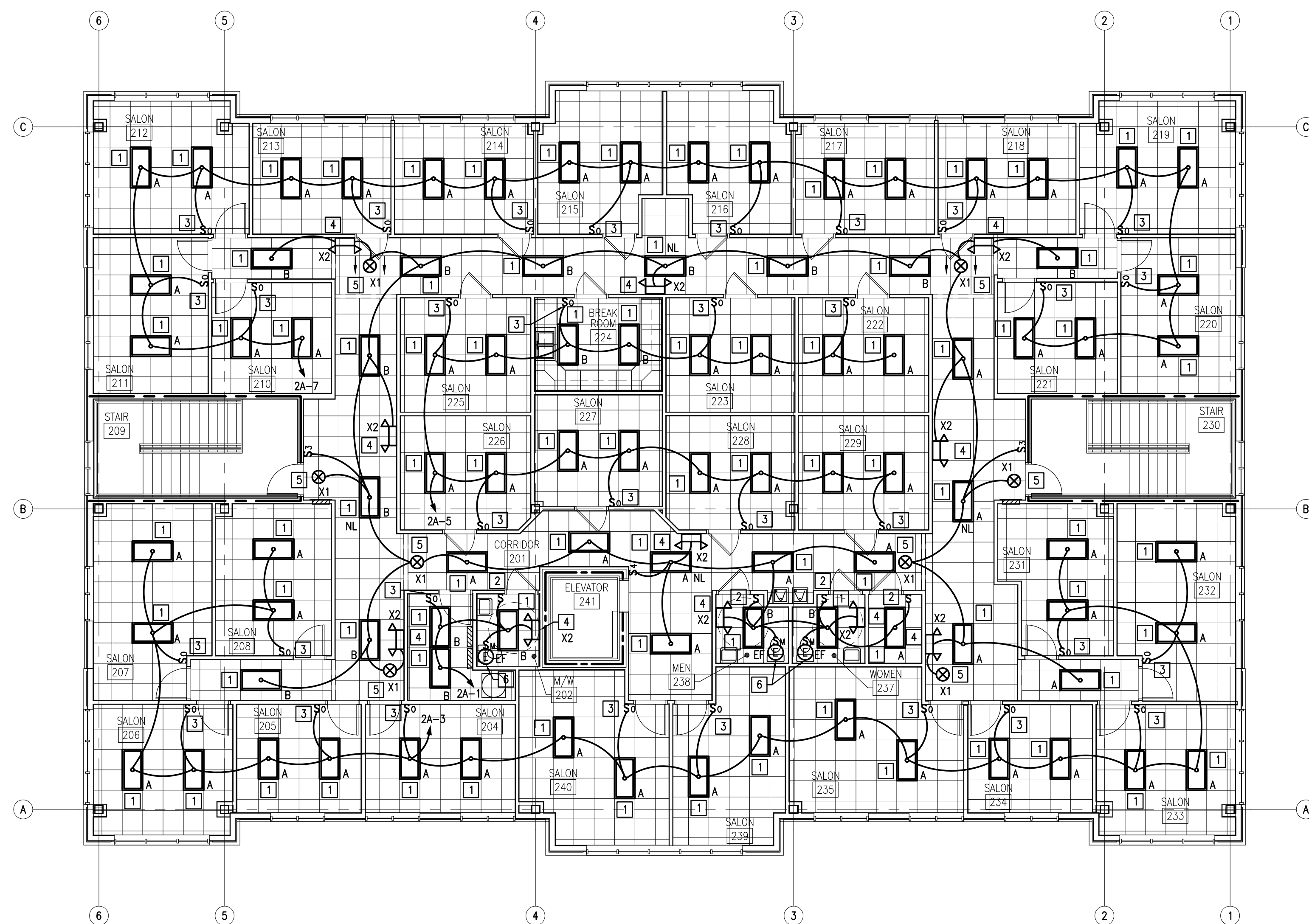
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LIGHT FIXTURE SCHEDULE											
TYPE	MANUFACTURER	CATALOG NO	LAMPS		VOLTAGE	WATTS FIXTURE	BALLAST		MOUNTING	DESCRIPTION	NOTES
			NO	TYPE			NO	TYPE			
A	LITHONIA	2TL72LFWAEZ1LP840	-	LED	120	67	-	-	RECESSED	2'x4' LENS LED	
B	LITHONIA	2TL48LFWAEZ1LP840	-	LED	120	40	-	-	RECESSED	2'x4' LENS LED	
X1	LITHONIA	LQMSW3R120/277ELN	-	LED	120	3	-	-	UNIVERSAL	LED EXIT SIGN	
X2	LITHONIA	ELM2LEDHOSD	-	LED	120	1.4	-	-	WALL	LED EMERGENCY LIGHT	

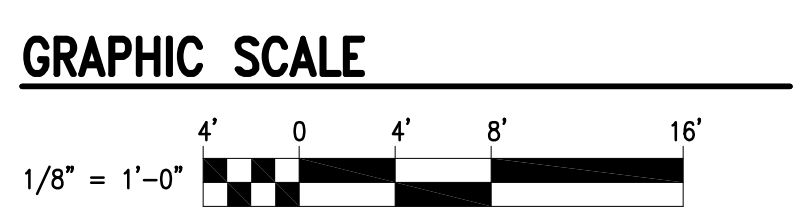
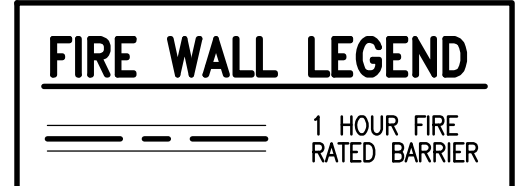
NOTES:



**ELECTRICAL SECOND FLOOR PLAN – LIGHTING**  
SCALE: 1/8" = 1'-0"

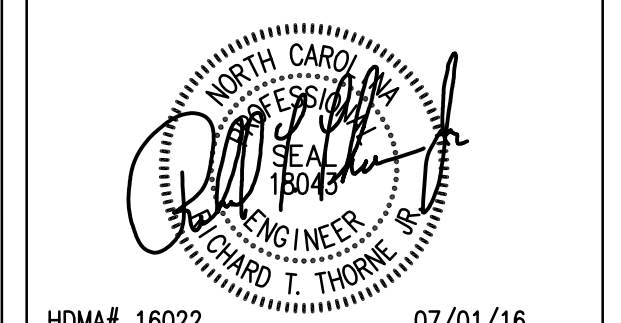
**WORK NOTES**

- 1 PROVIDE LIGHT FIXTURE WITH CONDUIT AND WIRING AS SHOWN. CONNECT TO CIRCUIT INDICATED.
- 2 PROVIDE SWITCH WITH DEVICE BOX, CONDUIT AND WIRING AS SHOWN. CONNECT TO FIXTURES INDICATED.
- 3 PROVIDE WALL MOUNTED OCCUPANCY SENSOR WITH DEVICE BOX, CONDUIT AND WIRING AS SHOWN. CONNECT TO CIRCUIT INDICATED.
- 4 PROVIDE EMERGENCY BATTERY LIGHTING UNIT. CONNECT TO CIRCUIT INDICATED AHEAD OF LOCAL SWITCH.
- 5 PROVIDE ILLUMINATED EXIT SIGN. CONNECT TO CIRCUIT INDICATED AHEAD OF LOCAL SWITCH.
- 6 PROVIDE ELECTRICAL CONNECTION TO EXHAUST FAN WITH DISCONNECTING MEANS AS SHOWN. CONNECT TO CIRCUIT INDICATED. EXHAUST FAN SHALL BE SWITCHED WITH LIGHT.



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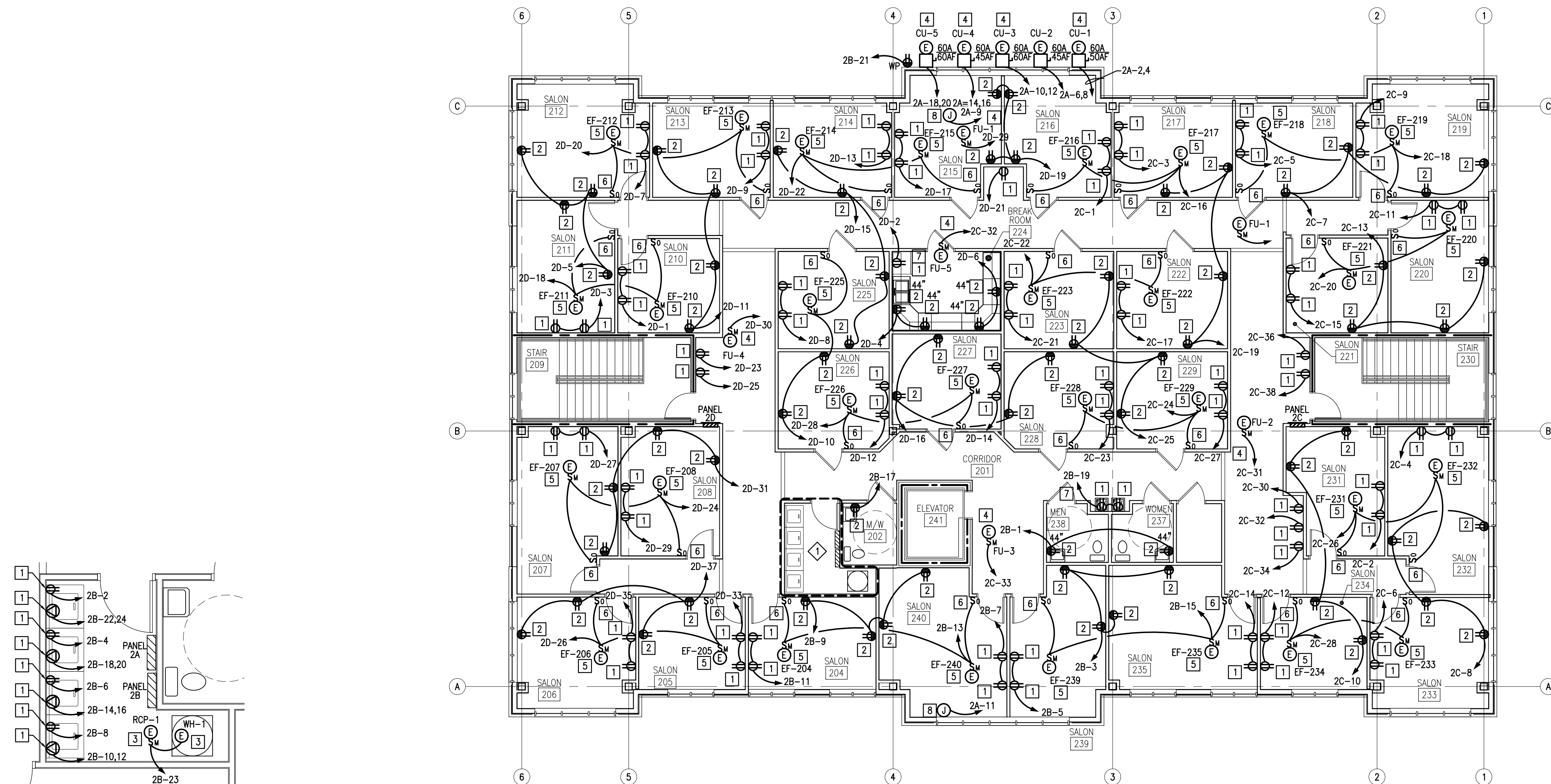
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ELECTRICAL PLANS

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OF SHEETS

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**ELECTRICAL ENLARGED SECOND FLOOR PLAN - POWER**  
SCALE: 1/4" = 1'-0"

**ELECTRICAL SECOND FLOOR PLAN - POWER**  
SCALE: 1/8" = 1'-0"

**WORK NOTES**

- 1 PROVIDE RECEPTACLE WITH DEVICE BOX, CONDUIT AND WIRING AS SHOWN. CONNECT TO CIRCUIT INDICATED.
- 2 PROVIDE GFCI RECEPTACLE WITH DEVICE BOX, CONDUIT AND WIRING AS SHOWN. CONNECT TO CIRCUIT INDICATED. LOCATE RECEPTACLE SO GFCI TRIP INDICATOR IS READILY VISIBLE AND ACCESSIBLE.
- 3 PROVIDE ELECTRICAL CONNECTION TO WATER HEATER AND RECIRCULATING PUMP WITH DISCONNECTING MEANS AS SHOWN. CONNECT TO CIRCUIT INDICATED.
- 4 PROVIDE ELECTRICAL CONNECTION TO HVAC UNIT WITH DISCONNECTING MEANS AS SHOWN. CONNECT TO CIRCUIT INDICATED.
- 5 PROVIDE ELECTRICAL CONNECTION TO EXHAUST FAN. CONNECT TO CIRCUIT INDICATED.
- 6 PROVIDE WALL MOUNTED OCCUPANCY SENSOR WITH DEVICE BOX, CONDUIT AND WIRING AS SHOWN. CONNECT TO EXHAUST FAN INDICATED.
- 7 PROVIDE GFCI BREAKER. SEE PANEL SCHEDULE.
- 8 PROVIDE 4" X 4" X 2" JUNCTION BOX FOR SIGN ABOVE ACCESSIBLE CEILING. CONNECT TO CIRCUIT INDICATED. COORDINATE EXACT LOCATION AND REQUIREMENTS PRIOR TO BEGINNING ANY WORK.

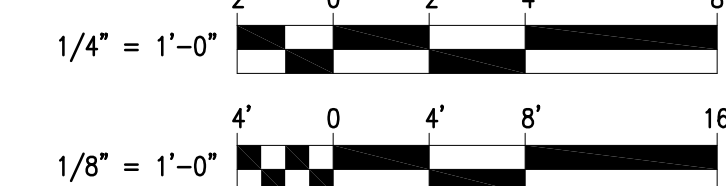
**GENERAL NOTES**

- 1 SEE ELECTRICAL ENLARGED SECOND FLOOR PLAN - POWER FOR WORK THIS AREA.

**FIRE WALL LEGEND**

1 HOUR FIRE RATED BARRIER

**GRAPHIC SCALE**



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ELECTRICAL SECOND  
FLOOR PLAN - POWER

**E3.0**