

MAIN STREET BUILDING IMPROVEMENTS

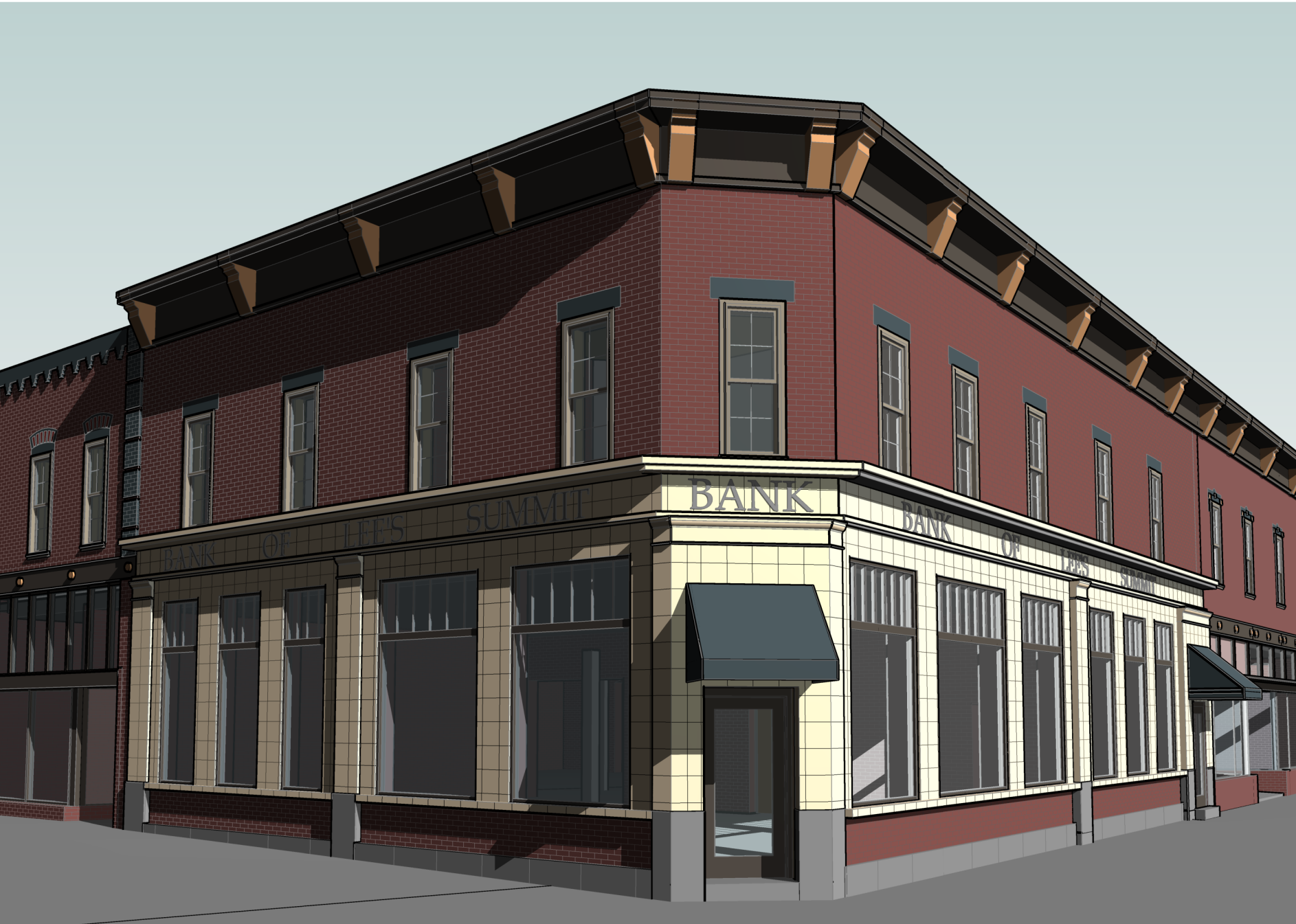
230 SW MAIN ST.
LEE'S SUMMIT, MO 64063

PERMIT DOCUMENTS

21 APRIL, 2022

COLLINS WEBB #: 21121

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OWNER

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STRUCTURAL ENGINEER

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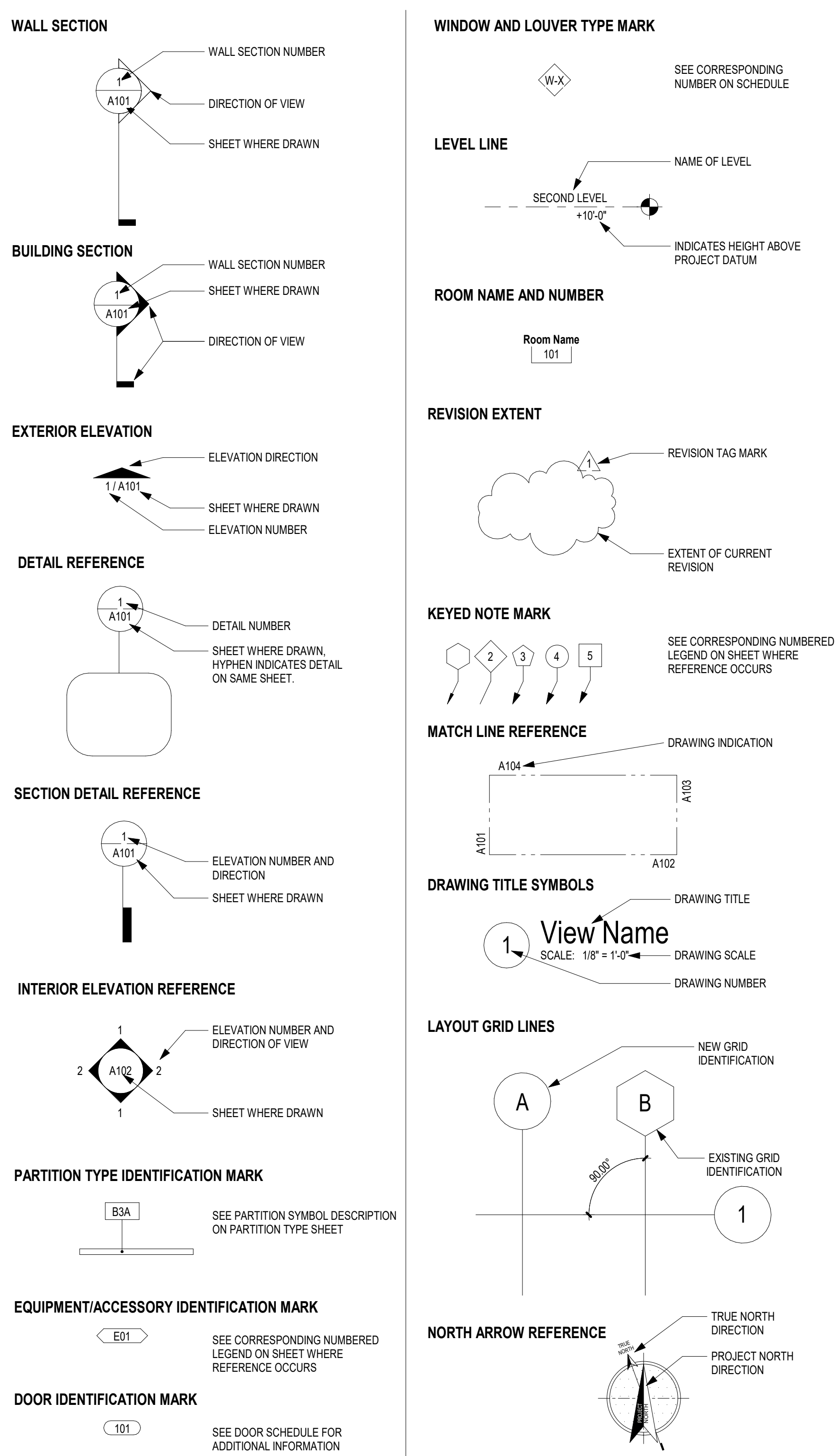
MEP ENGINEER

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ARCHITECTURAL ABBREVIATIONS

[illegible]

TYPICAL ARCHITECTURAL REFERENCE SYMBOLS



ARCHITECTURAL DIMENSIONING CONVENTIONS

- EXCEPT WHERE DIRECTED TO PLACE ITEMS OF THE WORK ON THE "APPROXIMATE LOCATION SHOWN," DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION.

2. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THIS DRAWING OR NOTED ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, SCHEDULES, CONFIGURATION DETAILS, AND SPECIFICATIONS. SEE THE NOTES AND NOTES FOR DIMENSIONING CONVENTIONS USED ON THIS PROJECT.

3. WHERE SPECIFICALLY NOTED TO THE CONTRARY, ALL DIMENSIONS SHOWN ON THE ARCHITECTURAL DRAWINGS CONFORM TO THE FOLLOWING CONVENTIONS:

 - DIMENSIONS UTILIZING THE "CENTERLINE" SYMBOL ARE MEASURED TO:
 - STRUCTURAL OR DIMENSIONAL GRID LINES.
 - CENTERLINE OF CONCRETE OR CONC. MASONRY UNIT WALLS EXCLUSIVE OF FURRING OR APPLIED FINISHES HAVING THICKNESS, REFER TO THE ARCH. PLANS AND SECTIONS, THE STRUCT DRAWINGS, OR PARTITION SCHEDULE TO DETERMINE THE THICKNESS OF CONCRETE OR CONC. MASONRY UNIT WALLS.
 - CENTERLINE OF PARTITION ASSEMBLY HAVING THICKNESS WHICH MAY BE ADDED TO SUCH WALLS AT PARTITIONS FRAMED WITH METAL STUDS, REFER TO "PARTITION SCHEDULE" TO DETERMINE THE THICKNESS OF EACH PARTITION TYPE.
 - CENTERLINE OF DOOR, WINDOW, OR LOUVER OPENING.
 - CENTERLINE OF EQUIPMENT OR
 - CENTERLINE OF OTHER FEATURES AS INDICATED.
 - REFER TO ABBREVIATIONS LEGEND FOR SYMBOL USED TO LOCATE CENTERLINE SYMBOL.
 - DIMENSIONS UTILIZING THE "FACE OF" SYMBOL ARE MEASURED TO:
 - FACE OF CONCRETE OR CONC. MASONRY UNIT WALL EXCLUSIVE OF APPLIED FINISHES HAVING THICKNESS OR FURRING WHICH MAY BE ADDED TO THE FACE OF SUCH WALLS.
 - FACE OF PARTITION ASSEMBLY EXCLUSIVE OF ANY APPLIED FINISHES HAVING THICKNESS WHICH MAY BE ADDED TO SUCH WALLS AS INDICATED BY THE PARTITION SCHEDULE. UNLESS NOTED AS A "FACE OF FINISH" OR "CLEAR" DIMENSION (SEE NOTE 7 BELOW), DIMENSIONS ARE NOT MEASURED TO THE FACE OF APPLIED FINISH. REFER TO THE "PARTITION SCHEDULE" TO DETERMINE THE THICKNESS OF EACH PARTITION TYPE.
 - INSIDE EDGE OF FINISHED DOOR OPENINGS. REFER TO THE DOOR SCHEDULE FOR ADDITIONAL DIMENSIONAL INFORMATION.
 - DIMENSION OR WORK POINT AS INDICATED ON RELATED ARCH. DETAIL PLAN, SECTION, ELEVATION, LAYOUT OR CONFIGURATION DETAIL, OR CONSTRUCTION DETAIL.

D. REFER TO ABBREVIATIONS LEGEND FOR SYMBOL USED TO INDICATE "FACE OF" DIMENSIONS.

E. WHERE "FACE OF FINISH" OR "CLEAR" DIMENSIONS ARE SPECIFICALLY NOTED, THE DIM IS MEASURED TO:

 - FINISH FACES AT THE MOST NARROW OR CONSTRICTED PORTIONS OF SECTION WHERE DIMENSION IS SHOWN, WHEN THE DIMENSION OCCURS ACROSS AN OPEN SPACE. THIS CASE, A "FACE OF FINISH" DIMENSION IS EQUIVALENT TO A "CLEAR" DIMENSION.
 - FINISH FACES AT THE WIDEST OR MOST EXPANSIVE POINTS OF THE SECTION THE DIMENSION IS SHOWN WHEN THE DIMENSION OCCURS ACROSS AN OBJECT OR GROUP OF OBJECTS.

F. WHERE "EQUAL" DIMENSIONS ARE USED ON REFLECTED CEILING PLANS TO LOCATE CEILING GRID WORK POINTS, MEASURE DIMENSIONS TO:

 - EDGE OF THE INDICATED CEILING AT THE FACE OF THE ADJACENT APPLIED FINISH MEASURED AT THE PLANE OF THE CEILING.

NOTE 1: CAUTION DUE TO THE POSSIBLE APPLICATION OF APPLIED FINISHES - THICKNESS OF WHICH MAY VARY BETWEEN FLOOR AND CEILING AND IS NOT ACCOUNTED FOR EXCEPT AS INDICATED BY "TOP" OR "CLEAN" DIMENSIONS SHOWN ON THE FLOOR PLANS - THE CONTRACTOR MUST ADJUST, AS NECESSARY, THE FLOOR PLAN DIMENSIONS TO REFLECT THE ACTUAL DIMENSIONS FOUND AT PLANE OF THE CEILING.

4. WHERE DIMENSIONS ARE NOT PROVIDED ON FLOOR PLANS TO LOCATE DOOR OPENINGS, APPLY THE FOLLOWING RULES. IN ORDER, TO DETERMINE THE LOCATION OF DOOR OPENINGS:

 - DOOR OPENINGS MAY BE DIMENSIONED ON DRAWINGS OTHER THAN THE FLOOR PLANS. REFER TO THE SECTIONS, ELEVATIONS, DETAILS, AND DOOR SCHEDULE NOTES FOR ADDITIONAL DIMENSIONAL INFORMATION.
 - WHERE THE HINGE-SIDE OF A DOOR IS SHOWN ADJACENT TO A WALL OR WALLS - PERPENDICULAR TO THE WALL IN WHICH THE DOOR OPENING OCCURS:
 - AT DOORS OCCURRING IN METAL FRAMED GYPSUM BOARD PARTITIONS, LOCATE THE HINGE-SIDE OF THE DOOR FINISHED OPENING 4" INCHES FROM THE FACE EXCLUSIVE OF APPLIED FINISHES OF THE CLOSEST PERPENDICULAR WALL OR PARTITION ASSEMBLY.
 - AT DOORS OCCURRING IN WALLS OF CONC. MASONRY UNIT CONSTRUCTION, LOCATE THE HINGE-SIDE OF THE DOOR FINISHED OPENING 10" INCHES FROM THE FACE EXCLUSIVE OF APPLIED FINISHES OF THE CLOSEST PERPENDICULAR WALL OR PARTITION ASSEMBLY.

5. WHERE WALLS AND/OR PARTITIONS OF UNEQUAL THICKNESS ABUT, AN EXPOSED FACED, UNLESS OTHERWISE NOTED:

ALIGN

↑

DIMENSION, WHEN OCCURS

NOTE 2: 3.0 CONTINUED

NOTE 3: 4.0 CONTINUED

6. WHERE DOOR OCCURS NOT ADJACENT TO PERPENDICULAR WALL AND EITHER "DM" E OR "DM" F IN DIAGRAM BELOW IS 16" 0" OR LESS, LOCATE DOOR UTILIZING THE FOLLOWING MINIMUM DIMENSIONS:

 - DIMENSION A = 18 INCHES MIN.
 - DIMENSION B = 12 INCHES MIN.
 - DIMENSION C = DOOR WIDTH + 2 INCHES MINIMUM.
 - DIMENSION D = 4 INCHES MIN AT METAL FRAMED GYP BD PARTITIONS OR 10" MIN MULTIPLE OF 12" CMU MODULE PLUS 2 INCHES AT CONC. MASONRY UNIT WALLS.
 - DIMENSIONS E AND F AS SHOWN ON PLANS.
 - DIMENSION G = 36 INCHES MIN.
 - DIMENSION H = 60 INCHES MIN.

IF SPACE ALLOWS, CENTER DOOR IN WALL SHOWN ON THE DRAWINGS SO THAT EITHER "DM" A' EQUALS "DM" C" OR "DM" B' EQUALS "DM" D'.

7. IF "DM" IN DIAGRAMS BELOW IS LESS THAN THE SUM OF 2 TIMES THE DOOR WIDTH PLUS 20 INCHES, LOCATE DOOR SO THAT MINIMUMS STATED BY NOTE NO. 6 ABOVE FOR "DM" A', "DM" B', AND "DM" D' ARE MET - MAXIMIZING "DM" A' AND MINIMIZING "DM" D' TO THE EXTENT POSSIBLE.

8. WHERE DOOR IS SHOWN LOCATED IN LARGE EXPANSION OF OPEN WALL, "DM" E AND "DM" F IN DIAGRAM BELOW BOTH EXCEED 16" 0" PLACE DOOR AT APPROXIMATE LOCATION SHOWN ON THE PLANS. WHERE DOOR OCCURS IN SMALL WALL, PLACE DOOR AT APPROXIMATE LOCATION SHOWN WHILE MINIMIZING "CUT" OR PARTIAL CMU MODULES ADJACENT TO THE JAMBS.

9. WHERE WALLS AND/OR PARTITIONS OF UNEQUAL THICKNESS ABUT, AN EXPOSED FACED, UNLESS OTHERWISE NOTED:

ALIGN

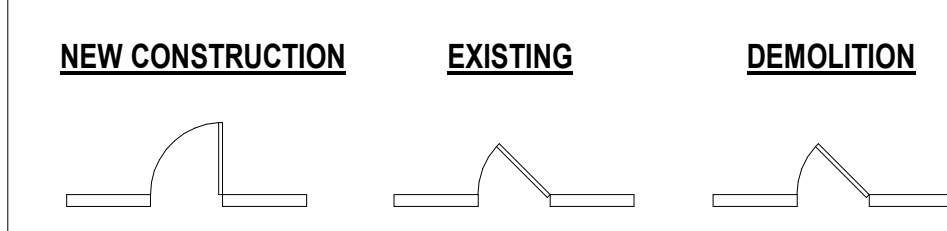
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DIMENSION, WHEN OCCURS

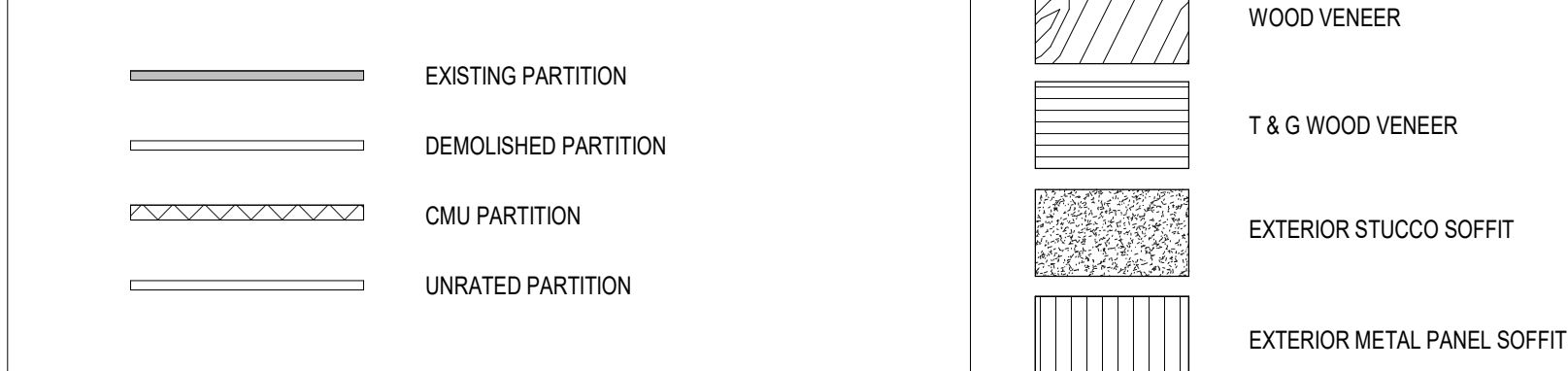
GENERAL
INFORMATION NOTES:

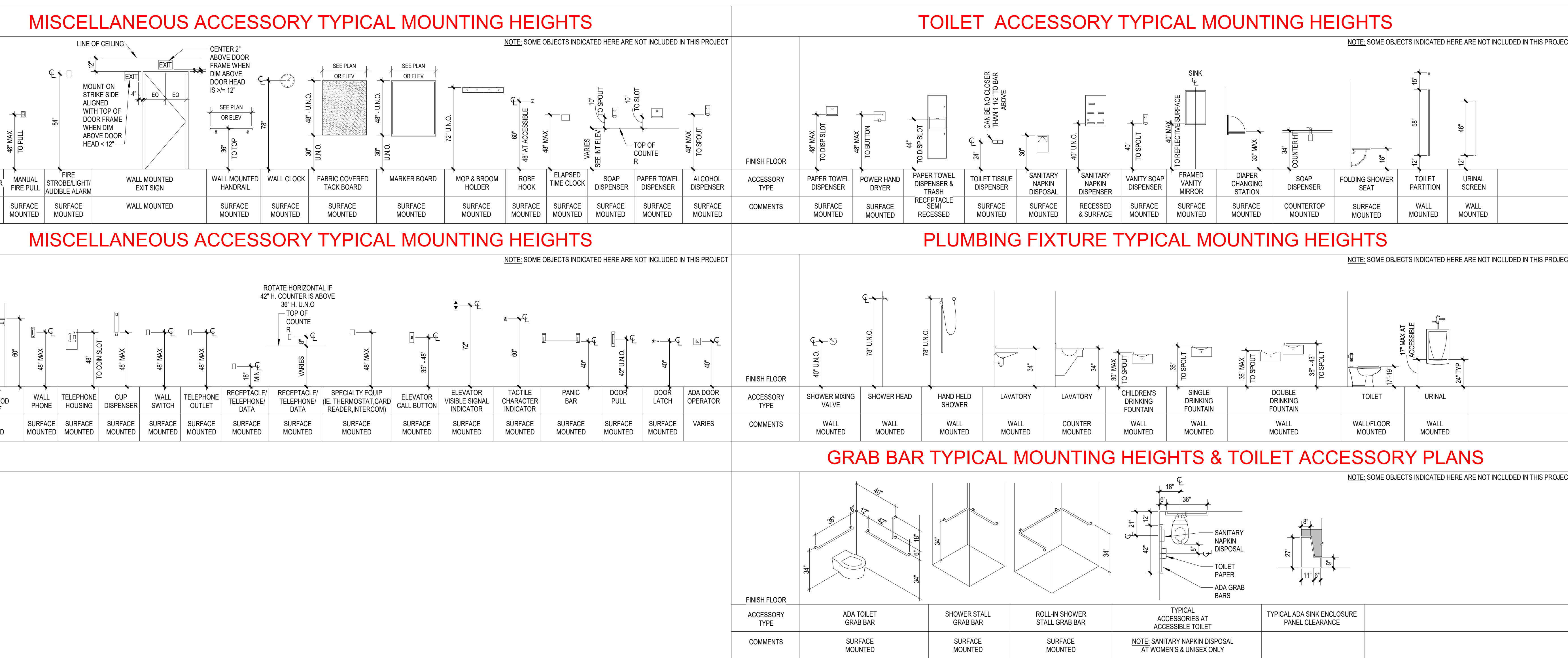
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TYP DOOR LEGEND



WALL TYPE LEGEND





WALL PRIORITY LEGEND

NOTE: THIS LEGEND IS FOR GRAPHIC REPRESENTATION ONLY.

FOUR HOUR FIRE WALL (4FW)
THREE HOUR FIRE WALL (3FW)
TWO HOUR FIRE WALL (2FW)
FOUR HOUR FIRE BARRIER (4FB)
THREE HOUR FIRE BARRIER (3FB)

TWO HOUR FIRE BARRIER (2FB) (INCLUDES THE FOLLOWING):
• TWO HOUR SHAFT ENCLOSURE (2SE)
• TWO HOUR FIRE PARTITION (2FP)

ONE HOUR FIRE BARRIER (1FB) (INCLUDES THE FOLLOWING):
• ONE HOUR SHAFT ENCLOSURE (1SE)
• ONE HOUR FIRE PARTITION (1FP)

SMOKE TIGHT PARTITION (N) (INCLUDES THE FOLLOWING):
• SMOKE TIGHT PARTITION TO SMOKE TIGHT CEILING (XC)
• SMOKE TIGHT PARTITION WITHIN PLENUM ABOVE CEILING (XP)
• SMOKE TIGHT PARTITION SEPARATION OF INTERSTITIAL SPACES (XI)

DETAIL ABUTMENT OF DISSIMILAR WALL

LOWER PRIORITY WALL
HIGHER PRIORITY WALLS SHALL PASS THROUGH A LOWER PRIORITY WALL

INTERSECTION OF RATED WALLS

TAPE & JOINT COMPOUND (TYP)
LOWER PRIORITY WALL
HIGHER PRIORITY WALL
HIGHER PRIORITY WALL
TAPE & JOINT COMPOUND (TYP)

A

B

C

D

E

NOTES:
1. REFER TO WALL TYPES ON SHEET G121-T1 FOR WALL COMPONENTS, NUMBER OF GYPSUM BOARD LAYERS, TYPE OF GYPSUM BOARD, AND OTHER SIMILAR INFO.
2. THE HIGHER PRIORITY WALL SHALL PASS THROUGH THE LOWER PRIORITY WALL.
3. TAPING AND SEALING OF HIGHER PRIORITY WALLS SHALL BE CONTINUOUS.
4. ALTERNATE LAYERS OF GYPSUM BOARD SHALL OVERLAP AT CORNER INTERSECTIONS OF MULTI-LAYERED RATED GYPSUM BOARD PARTITIONS.

FIRE & SMOKE RESISTIVE LEGEND DEFINITIONS

FIRE WALLS (FW)

DEFINITION:
A FIRE RATED WALL THAT IS CONTINUOUS VERTICALLY FROM FOUNDATION TO ROOF TO SEPARATE CONSTRUCTION INTO SEPARATE BUILDINGS.

USE:
FIRE WALLS SERVE TO CREATE SEPARATE BUILDINGS FOR THE FOLLOWING REASONS:
• CONSTRUCTION TYPE VARIES FROM ONE BUILDING TO ANOTHER.
• COMPLIANCE WITH MAXIMUM ALLOWABLE AREA REQUIREMENTS.
• TO SEPARATE BUILDINGS WITH DIFFERENT LEVELS OF FIRE PROTECTION.
• TO ADDRESS A PROPERTY LINE DEFINING DIFFERENT OWNERSHIP.

SPECIAL CONSIDERATIONS:
• THE FIRE WALL REQUIRES SUFFICIENT STRUCTURAL STABILITY UNDER FIRE CONDITIONS TO ALLOW THE COLLAPSE OF CONSTRUCTION ON EITHER SIDE WITHOUT COLLAPSE OF THE WALL.
• OPENINGS ARE REQUIRED TO BE PROTECTED.
• OPENINGS ARE LIMITED BASED ON A PERCENTAGE OF WALL LENGTH.
• EXTENDING THE FIRE WALL THROUGH THE ROOF WITH A PARAPET IS REQUIRED FOR SOME CONSTRUCTION CLASSIFICATIONS.
• THE REQUIRED FIRE RATING OF A FIRE WALL IS BASED ON OCCUPANCY GROUPS AND CLASS OF CONSTRUCTION.
• HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH AND CLOSER.

FIRE BARRIERS (FB)

DEFINITION:
A FIRE RATED WALL CONSTRUCTED TO RESTRICT THE SPREAD OF FIRE CONTINUITY SHALL BE MAINTAINED FROM TOP OF FLOOR TO UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE.

USE:
FIRE BARRIERS HAVE THE FOLLOWING APPLICATIONS:
• TO SEPARATE EXIT PASSAGEWAYS.
• OCCUPANCY SEPARATIONS.
• TO SEPARATE INCIDENTAL USE AREAS.
• ISOLATION OF HAZARDOUS.
• TO SEPARATE ROOMS WITH DIFFERENT LEVELS OF FIRE PROTECTION.
• SMOKE BARRIERS AND SHAFT ENCLOSURES ARE FIRE BARRIERS. SEE ADDITIONAL REQUIREMENTS.

SPECIAL CONSIDERATIONS:
• WITHIN SOME CONSTRUCTION CLASSIFICATIONS, CONSTRUCTION THAT PROVIDES STRUCTURAL SUPPORT OF A FIRE BARRIER IS REQUIRED TO BE OF THE SAME HOURLY FIRE RATING AS THE FIRE BARRIER, OR BETTER.
• OPENINGS ARE REQUIRED TO BE PROTECTED.
• HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH AND CLOSER.

SHAFT ENCLOSURES (SE)

DEFINITION:
A SHAFT ENCLOSURE IS A FIRE BARRIER FORMING THE BOUNDARY OF A VERTICAL SHAFT.

USE:
PROTECT OPENINGS IN FIRE RATED FLOOR/CEILING ASSEMBLIES.

SPECIAL CONSIDERATIONS:
• PENETRATIONS IN SHAFT ENCLOSURES ARE PROHIBITED UNLESS NECESSARY FOR THE FUNCTION OF THE SHAFT. WHERE ALLOWED, OPENINGS ARE REQUIRED TO BE PROTECTED.
• DUCT PENETRATIONS REQUIRE COMBINATION SMOKE AND FIRE DAMPERS EXCEPT FOR EXISTING CONDITIONS THAT ARE GRANDFATHERED.
• HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH, CLOSER, AND PERIMETER SMOKE SEALS.

WALL TYPE NOTES:

- RE: LIFE SAFETY PLAN(S) FOR RATED WALL LOCATIONS.
- WHERE "FIRE-RATED SEALANT" IS INDICATED ON WALL TYPES: PROVIDE FIRE-RATED SEALANT ABOVE TOP TRACK, UNDER BOTTOM TRACK, AT ALL PENETRATIONS (BOTH SIDES), AND AS REQUIRED BY FIRE RATING UL NUMBER.
- EXTEND FIRE-RATED WALL CONSTRUCTION BEHIND NECESSARY BUILT-IN EQUIPMENT, SUCH AS FIRE EXTINGUISHER CABINETS (FEC), ELECTRICAL, WATER COOLERS (EWC), ELECTRICAL PANELS, ETC. UNLESS NOTED OTHERWISE.
- PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BACK-UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK AND OF ALL FLOOR MOUNTED OR SUSPENDED MECHANICAL, ELECTRICAL OR LABORATORY EQUIPMENT.
- WHERE HVAC OR OTHER MECHANICAL, ELECTRICAL, AND PLUMBING ITEMS PENETRATE PARTITIONS: STUDS SHALL BE BRACED AND FRAMED TO STRUCTURE AS REQUIRED TO PROVIDE ADEQUATE SUPPORT. ALL PENETRATIONS THROUGH ACoustICAL AND FIRE RATED WALLS SHALL BE SEALED TO PROVIDE FIRE, SMOKE, AND/OR ACoustICAL ISOLATION OF SPACES WITH APPROPRIATE ACoustICAL/FIRESTOP MATERIAL.
- THERE SHALL BE NO BACK-TO-BACK ELECTRICAL, TELEPHONE, OR OTHER OUTLETS, EXCEPT WHERE SPECIFICALLY SHOWN.
- WALL BASE IS NOT SHOWN ON ALL WALL TYPES FOR CLARITY. REFER TO FINISH SCHEDULE.
- PROVIDE GLASS-MAT, WATER RESISTANT BACKING BOARD AT ALL WET LOCATIONS.
- EXCEPT AT FIRE-RATED PARTITIONS, ALL WALL AND COLUMN GYPSUM BOARD FACING SHALL BE HELD AT 5/8 INCH BELOW STRUCTURE, UNLESS NOTED OR SHOWN OTHERWISE.
- PROVIDE AND INSTALL BLOCKING REQUIRED FOR ALL A.V. EQUIPMENT. G.G. TO COORDINATE WITH TI CONSULTANT FOR FINAL LOCATIONS AND SIZE REQUIREMENTS.
- COMPRESSIBLE FILLER - ACCEPTABLE MATERIALS WOULD BE FIBERGLASS INSULATION OR FIRESTOPPING VOIDS TO BE COMPLETELY FILLED AND A FIRESTOP SEALANT OVER ANY ENDS. THIS IS TYPICAL FOR ALL ACoustICAL WALL ASSEMBLIES WHERE "COMPRESSIBLE FILLER" IS CALLED FOR. THERE CAN BE NO VOIDS IN THE INSTALLATION.
- PROVIDE A MIN. MSG-12 STUD FOR ALL VERTICAL LONG SPAN WALL TYPES.

ACTIVE FIRE PROTECTION SYSTEMS:

- AUTOMATIC SPRINKLER SYSTEM - PROVIDED THROUGHOUT (803.2.1)
- STANDPIPE SYSTEM - PROVIDED IN STAIRS THROUGHOUT (805)
- ESCALATOR OPNG PROTECTED IN ACCORDANCE WITH IBC 712.13.1, DRAFT CURTAIN AND CLOSELY SPACED SPRINKLERS.

GENERAL NOTES

- THE FOLLOWING INFORMATION SERVES TO PROVIDE BUILDING OWNERS WITH CONCISE DEFINITIONS OF WALL TYPES RELATED TO LIFE SAFETY ISSUES. THIS INFORMATION IS NOT MEANT TO BE A SUBSTITUTE FOR APPLICABLE BUILDING CODES.
- WHEN A WALL HAS MORE THAN ONE CLASSIFICATION, THE MOST RESTRICTIVE REQUIREMENTS FOR EACH CLASSIFICATION SHALL APPLY.
- FOR NEW CONSTRUCTION, PERIMETER SMOKE-SEALS MAY BE REQUIRED AT FIRE-RATED DOORS IN CERTAIN OCCUPANCIES.

WALL TYPE A

INSTALL FIRESAFING INSULATION TO SEAL TOP OF WALL (RATED WALLS ONLY)

BOTTOM OF DECK
RE: STRUCTURAL

DEEP LEG DEFLECTION/SLIP TRACK

CEILING HT.
RE: RCP (WHERE REQ'D)

5/8" GYP. BD. EACH SIDE

3 5/8" METAL STUD @ 16" O.C. WITH HORIZ. BRACING, AS REQUIRED.

3 1/2" SOUND BATT INSULATION (WHERE REQ'D)

METAL RUNNERS TOP AND BOTTOM

FLOOR

TYPE	WALL DESCRIPTION
A	• 3 5/8" METAL STUD @ 16" O.C. TO DECK ABOVE • 5/8" TYPE "X" GYP. BD. EACH SIDE TO DECK ABOVE • NO SOUND BATT INSUL. • NON RATED
A1	• 3 5/8" METAL STUD @ 16" O.C. TO DECK ABOVE • 5/8" TYPE "X" GYP. BD. EACH SIDE TO DECK ABOVE • 3 1/2" SOUND BATT INSUL. TO FULL HEIGHT OF WALL • ACoustICAL SEALANT AT FLOOR, DECK, & ALL PENETRATIONS • NON RATED
A2	• 3 5/8" METAL STUD @ 16" O.C. TO DECK ABOVE • 2 LAYERS - 5/8" TYPE "X" GYP. BD. EACH SIDE TO DECK ABOVE • 3 1/2" THICK GLASS FIBER BATT INSUL. TO FULL HEIGHT OF WALL • FIRE-RATED SEALANT AT FLOOR, DECK, & ALL PENETRATIONS • 2-HR RATED RE: UL # U419

WALL TYPE E

INSTALL FIRESAFING INSULATION TO SEAL TOP OF WALL (RATED WALLS ONLY)

BOTTOM OF DECK
RE: STRUCTURAL

AS REQUIRED PER WALL TYPE EXISTING WALL

CEILING HT.
RE: RCP (WHERE REQ'D)

5/8" GYP. BD. ON ROOM SIDE

METAL STUD / HAT CHANNEL @ 16" O.C.
SOUND BATT INSULATION (WHERE REQ'D)

METAL RUNNERS TOP AND BOTTOM

ROOM SIDE

FLOOR

TYPE	WALL DESCRIPTION
E2	• 3 5/8" METAL STUD @ 16" O.C. TO DECK ABOVE • 5/8" TYPE "X" GYP. BD. ONE SIDE TO DECK ABOVE • NO SOUND BATT INSUL. • NON RATED
E5	• 6" METAL STUD @ 16" O.C. TO DECK ABOVE • 5/8" TYPE "X" GYP. BD. ONE SIDE • NO SOUND BATT INSUL. • NON RATED

WALL TYPE Y

INSTALL FIRESAFING INSULATION TO SEAL TOP OF WALL (RATED WALLS ONLY)

BOTTOM OF DECK
RE: STRUCTURAL

CEILING HT.
RE: RCP (WHERE REQ'D)

LAYERS 5/8" GYP. BD. PER WALL TYPE
CH STUD @ 16" O.C.

1" SHAFT LINER

SOUND BATT INSULATION (SEE TYPE FOR SIZE)

METAL J TRACK TOP AND BOTTOM

FLOOR

TYPE	WALL DESCRIPTION
Y	• 4" C-H METAL STUDS @ 24" O.C. TO DECK ABOVE • 2 LAYER 5/8" TYPE "X" GYP. BD. ONE SIDE TO DECK ABOVE • 1" SHAFT LINER ON SHAFT SIDE TO DECK ABOVE • 3" SOUND BATT INSUL. - FULL HEIGHT OF WALL • FIRE-RATED SEALANT AT FLOOR, DECK, & ALL PENETRATIONS • 2-HR RATED RE: UL DESIGN # U415 (WHERE REQ'D)

FIRE RESISTIVE LEGEND

FIRE WALLS
3FW 3FW 3FW 3FW 3 HOUR FIRE WALL
2FW 2FW 2FW 2FW 2 HOUR FIRE WALL

FIRE BARRIERS
2FB 2FB 2FB 2FB 2 HOUR FIRE BARRIER
1FB 1FB 1FB 1FB 1 HOUR FIRE BARRIER

SHAFT ENCLOSURES
2S 2S 2S 2S 2 HOUR SHAFT ENCLOSURE
1SE 1SE 1SE 1SE 1 HOUR SHAFT ENCLOSURE

FIRE PARTITIONS
1FP 1FP 1FP 1FP 1 HOUR FIRE PARTITION
0.5FP 0.5FP 0.5FP 0.5FP 0.5 HOUR FIRE PARTITION
0.5X 0.5X 0.5X 0.5X 0.5 HOUR CORRIDOR PARTITION

SMOKE BARRIER
SB SB SB SB 1 HOUR SMOKE BARRIER

BEARING WALLS
2BW 2BW 1BW 1BW 2 HOUR BEARING WALL
1BW 1BW 1BW 1BW 1 HOUR BEARING WALL

DESCRIPT:
NUMBER OF OCCUPANTS EXITING
EXIT WIDTH PROVIDED (IN.)
CALCULATED EXIT WIDTH REQ'D (IN.)
MIN. WIDTH OF MEANS OF EGRESS COMPONENT (IN.)

LEGEND:
F.E.C. FIRE RISER CABINET
F.A.C.P. FIRE ALARM CONTROL PANEL
F.D.C. FIRE DEPARTMENT CONNECTION
K.B. KNOX BOX
AR AREA OF RESCUE ASSISTANCE
ACCESSIBLE EGRESS COMPONENT
EGRESS PATH
FE-1 INDICATES FIRE EXTINGUISHER CABINET(FEC) LOCATION WITH 75'-0" RADIUS COVERAGE AREA. SEE SPECIFICATIONS FOR FE TYPE.
FE-2K INDICATES KITCHEN BAR FIRE EXTINGUISHER (FE) LOCATION WITH 75'-0" RADIUS COVERAGE AREA. SEE SPECIFICATIONS FOR FE TYPE.
FE-3 INDICATES TEMPORARY WALL HUNG FIRE EXTINGUISHER (FE) LOCATION WITH 75'-0" RADIUS COVERAGE AREA. SEE SPECIFICATIONS FOR FE TYPE.
DOOR RATING LEGEND (REFER TO DOOR SCHEDULE)
20 MIN. DOOR
45 MIN. DOOR
90 MIN. DOOR

GENERAL DESCRIPTION

PROJECT NAME: MAIN STREET LANDLORD IMPROVEMENTS
PROJECT LOCATION: 230 SW MAIN ST., LEE'S SUMMIT, MO 64063
COUNTY: JACKSON

COLLINS WEBB ARCHITECTURE
307B SW MARKET STREET
LEES SUMMIT, MISSOURI 64063

APPLICABLE CODES:
INTERNATIONAL BUILDING CODE - 2018 ED.
INTERNATIONAL PLUMBING CODE - 2018 ED.
INTERNATIONAL MECHANICAL CODE - 2018 ED.
INTERNATIONAL FUEL GAS CODE - 2018 ED.
NATIONAL ELECTRICAL CODE - 2017 ED.
INTERNATIONAL FIRE CODE - 2015 ED.
ADA STANDARDS FOR ACCESSIBLE DESIGN - 2010 ED.
ICC/ANSI A117.1: ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - 2009 ED.

CODE INFORMATION

TABLE/SECTION/REFERENCE	TABLE/SECTION/REFERENCE
BUILDING/PROJECT USE: CONSTRUCTION TYPE OCCUPANCY CLASSIFICATION SEPARATED MIXED-USE APPROACH	SECTION 309 TABLE 601 SECTION 309
BASE ALLOWABLE AREA	TABLE 506.2
FIRST LEVEL	B: 2,440 SQ. FT. A-2: 4,000 SQ. FT.
SECOND LEVEL	B: 5,720 SQ. FT.
ALLOWABLE STORIES ACTUAL NUMBER OF STORIES	TABLE 504.4 2 STORIES - EXISTING 2 STORIES
ALLOWABLE HEIGHT ACTUAL HEIGHT IN FEET	TABLE 504.3 40'-0" - EXISTING 29'-10"
FIRE RESISTIVE REQUIREMENTS	TABLE/SECTION/REFERENCE
PRIMARY FRAME NON-BEARING WALLS BEARING WALLS INT./ EXT. FLOOR CONSTRUCTION (SEPARATING OCCUPANCIES) CEILING/ROOF CORRIDORS SEPARATION BETWEEN 1ST FLOOR "A-2" AND 2ND FLOOR "B"	TABLE 601 TABLE 601 TABLE 601 TABLE 601 TABLE 601 TABLE 1015.1
FIRE EXTINGUISHERS	TABLE/SECTION/REFERENCE
1. PROVIDE PORTABLE FIRE EXTINGUISHERS IN OCCUPANCIES AND LOCATIONS AS REQUIRED BY THE WISCONSIN FIRE PREVENTION CODE. SEE PLANS FOR SUGGESTED LOCATIONS. NOTIFY ARCHITECT OF ANY PROPOSED RELOCATION OR IF A CONFLICT IS ENCOUNTERED. 2. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH NFPA 10, STANDARD FOR PORTABLE FIRE EXTINGUISHERS.	
CEILING HEIGHT NOTES: (IBC 1208)	
1. ALL MEANS OF EGRESS TO HAVE A MINIMUM CEILING HEIGHT OF 7'-6" A.F.F., NOR SHALL HAVE ANY PROJECTION FROM THE CEILING BE LESS THAN 6'-8" A.F.F. 2. OCCUPIED SPACES, HABITABLE SPACES AND CORRIDORS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-6" A.F.F. 3. BATHROOMS, TOILET ROOMS, KITCHENS, STORAGE ROOMS AND LAUNDRY ROOMS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0" A.F.F.	
INTERIOR FINISHES	
GROUP A EXIT ENCLOSURES LOBBIES & CORRIDORS ALL OTHER SPACES TEXTILES SMOKE DEVELOPED	MAX. FLAME SPREAD CLASS A (0-25) CLASS B (26-75) CLASS C (76-200) CLASS A (0-25) 0-450
NOTE: Decorative Materials and Trim (including plastics) must comply with IBC Section 906.	TABLE/SECTION/REFERENCE

GENERAL EXITING REQUIREMENTS

EXIT TRAVEL DISTANCE	200 FEET
DEAD END CORRIDOR	20 FEET
COMMON PATH OF TRAVEL	75' FEET, OR 100' IF OCC. < 50
MIN. CORRIDOR WIDTH	44", OR 36" IF OCC. < 50

POSTING OF OCCUPANT LOAD

EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT.

EXIT REQUIREMENTS

TABLE/SECTION/REFERENCE	TABLE/SECTION/REFERENCE
A. REQUIRED CAPACITY	
1. STAIRS - 0.3" / PERSON	1005.1
2. OTHER COMPONENTS - 0.2" / PERSON	1005.1
B. MINIMUM NUMBER	
1. OCCUPANT LOAD OF 1-500 PERSONS - 2 EXITS PER STORY	1006.3.1
2. OCCUPANT LOAD OF 501-1000 PERSONS - 3 EXITS PER STORY	
3. OCCUPANT LOAD OF MORE THAN 1000 PERSONS - 4 EXITS PER STORY	

SIGNAGE

1. PROVIDE SIGNAGE "IN FIRE EMERGENCY DO NOT USE ELEVATOR, USE EXIT STAIRS" IN ACCORDANCE WITH IBC (3002.3)

OCCUPANT LOAD PER LEVEL

TABLE/SECTION/REFERENCE	TABLE/SECTION/REFERENCE
OCCUPANT LOAD : FIRST LEVEL	
B: OFFICE SQUARE FOOTAGE (2205 SF) A-2: FUTURE RESTAURANT	16 OCC FUTURE T.I. 15 OCCUPANTS
EXITS REQUIRED THIS LEVEL: B EXITS PROVIDED THIS LEVEL: A-2 EXITS PROVIDED THIS LEVEL: B EXITS PROVIDED THIS LEVEL: A-2	2 EXITS FUTURE T.I. 2 EXITS 1 EXIT - EXISTING
OCCUPANT LOAD : SECOND LEVEL	
B: OFFICE SQUARE FOOTAGE (4032 SF)	27 OCCUPANTS
EXITS PROVIDED THIS LEVEL:	2 EXIT - EXISTING

TOTAL OCCUPANT LOAD

TOTAL OCCUPANT LOAD FOR BUILDING (BUSINESS ONLY): 42 OCCUPANTS

PLUMBING FIXTURE REQUIREMENTS

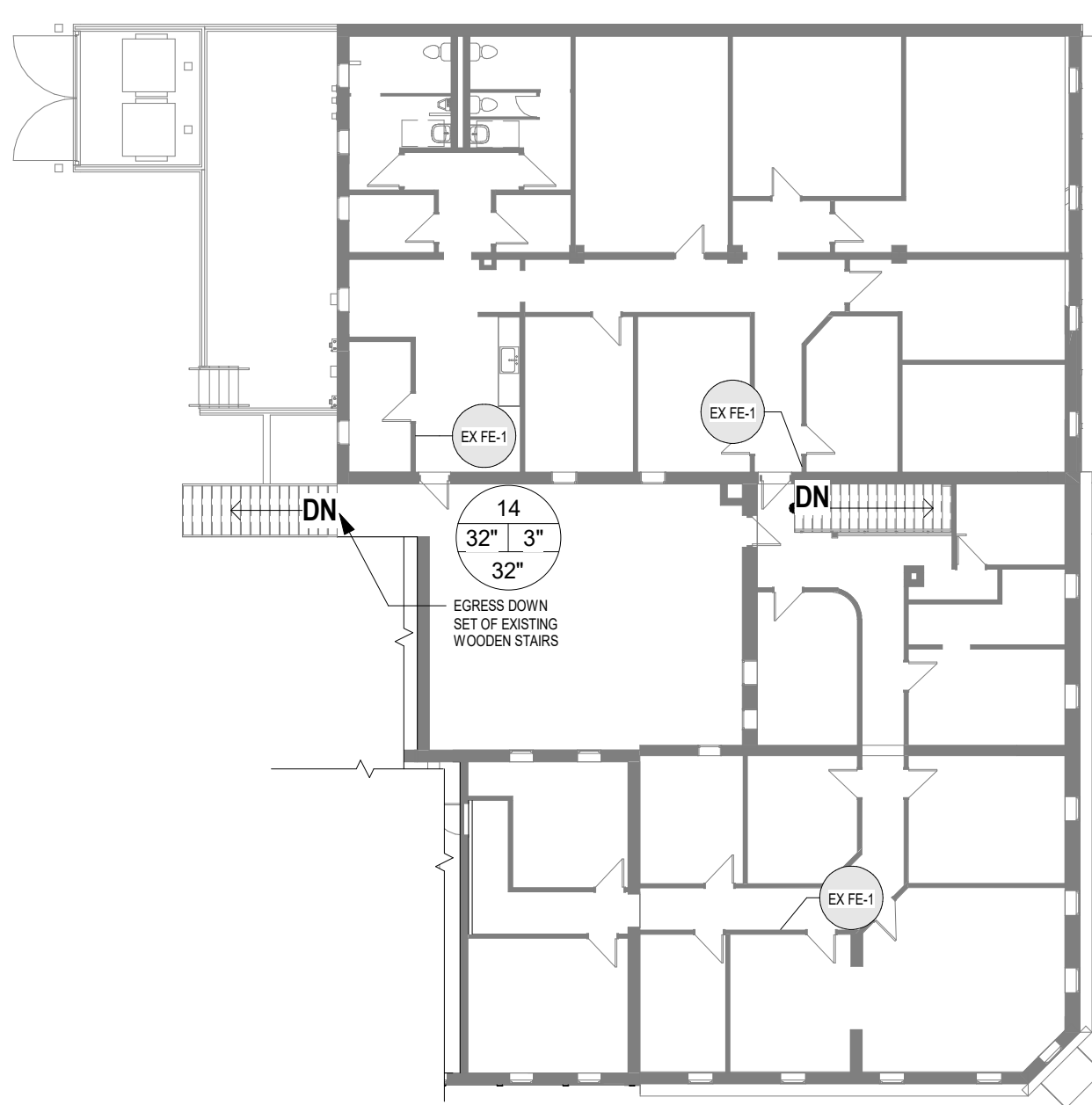
8 OCC WATER CLOSETS
 8 OCC LAVATORIES
 8 OCC DRINKING FOUNTAIN
 8 OCC SERVICE SINK

= 1/25 PER FIRST 50, 1/50 FOR 50+ BOTH MALE/ FEMALE
 = 1/40 FOR FIRST 80, 1/80 FOR 80+ BOTH MALE/FEMALE
 = 1/100
 = 1

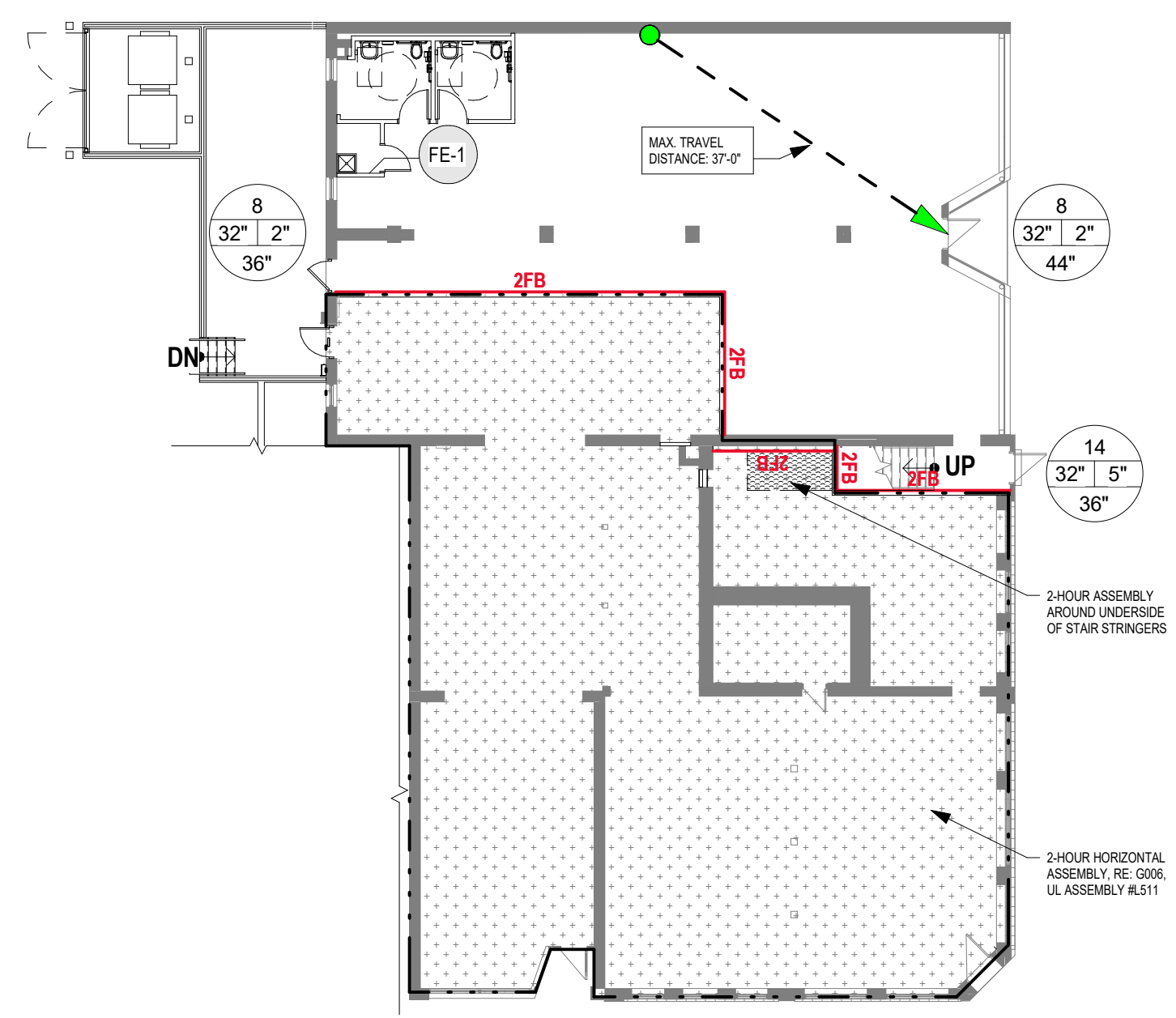
REQUIRED:					
LEVEL	OCCUPANCY	WATER CLOSETS	LAVATORIES	DRINKING FOUNTAINS	SERVICE SINKS
1ST FLOOR	BUSINESS	M 8/25 = 32 F 8/25 = 32	M 8/40 = 2 F 8/40 = 2	15/100 = 15	1 REQ
	ASSEMBLY (A-2)	FUTURE	FUTURE	FUTURE	FUTURE
	TOTAL:	1	1	1	1
	2ND FLOOR	BUSINESS	M 14/25 = 56 F 14/25 = 56	M 14/40 = 35 F 14/40 = 35	27/100 = 27
TOTAL:		2	1	1	1

PROVIDED:
 LEVEL

	WATER CLOSETS	LAVATORIES	DRINKING FOUNTAINS	SERVICE SINKS
1ST FLOOR	2	2	BOTTLED WATER PROVIDED	1
2ND FLOOR	4	2	BOTTLED WATER PROVIDED	



A5 2ND FLOOR PLAN - LIFE SAFETY
1/16" = 1'-0"



A3 1ST FLOOR PLAN - LIFE SAFETY
1/16" = 1'-0"



3078 SW Market Street, Lee's Summit, MO 64083 P 816.249.2270
(www.collinswebb.com)

MAIN STREET BUILDING IMPROVEMENTS

230 SW MAIN ST.
LEE'S SUMMIT, MO 64063

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REVISION DATES:



04/21/22

PROFESSIONAL SEAL

G005

ISSUE DATE: 21 APRIL, 2022
COLLINS WEBB #: 21121

UL LISTINGS - #U419

UL Product iQ™

BXUVU419

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer for the design. Users of Fire Resistance Assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire Resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variations

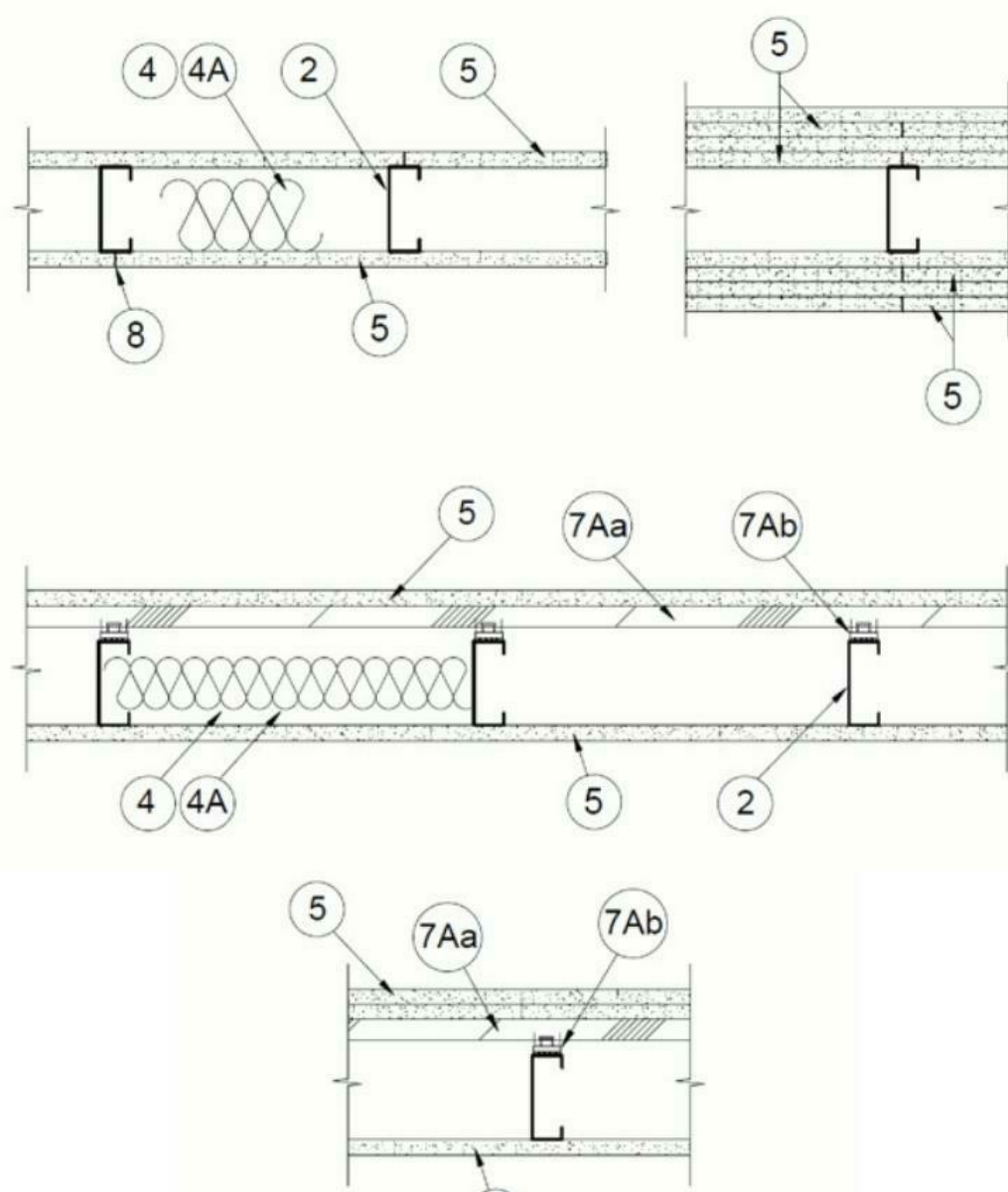
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variations

Design No. U419

July 31, 2021

Nonbearing Wall Ratings - 1, 2, 3 or 4 Hr (See Items 4 & 5 through 5J)

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



1. Floor and Ceiling Runners - (Not Shown) - For use with Item 2 - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.

1A. Framing Members* - Floor and Ceiling Runner - (Not Shown) - In lieu of Item 1 - For use with Item 2B, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max.
CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper25™ Track

CRACO MFG INC - SmartTrack25™

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20™ Track

FUSION BUILDING PRODUCTS - Viper25™ Track

IMPERIAL MANUFACTURING GROUP INC - Viper25™ Track

1B. Framing Members* - Floor and Ceiling Runner - (Not Shown) - In lieu of Item 1 - For use with Item 2C, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20™ Track

FUSION BUILDING PRODUCTS - Viper20™ Track

IMPERIAL MANUFACTURING GROUP INC - Viper20™ Track

1C. Framing Members* - Floor and Ceiling Runners - (Not Shown) - In lieu of Item 1 - Channel shaped, attached to floor and ceiling with fasteners 24 in. OC max.
ALSTEL & GYPSUM PRODUCTS INC - Type SUPREME D24/36QDQ and Type SUPREME D20

CONSOLIDATED FABRICATORS CORP BUILDING PRODUCTS DIV - Type SUPREME D24/36QDQ and Type SUPREME D20

QUAIL RUN BUILDING MATERIALS INC - Type SUPREME D24/36QDQ and Type SUPREME D20

SCAFCO STEEL STUD MANUFACTURING CO - Type SUPREME D24/36QDQ and Type SUPREME D20

STEEL CONSTRUCTION SYSTEMS INC - Type SUPREME D24/36QDQ and Type SUPREME D20

TELLING INDUSTRIES L L C - Type SUPREME D24/36QDQ and Type SUPREME D20

UNITED METAL PRODUCTS INC - Type SUPREME D24/36QDQ and Type SUPREME D20

1D. Floor and Ceiling Runners - (Not Shown) - For use with Item 2A - Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced 24 in. OC.

1E. Framing Members* - Floor and Ceiling Runners - (Not Shown, As an alternate to Item 1) - For use with Items 2E, 5F or 5G or 5I only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC max.
CLARKDIERICH BUILDING SYSTEMS - CD ProTRAK

DMFCWB5 L L C - ProTRAK

MBA METAL FRAMING - ProTRAK

RAM SALES L L C - Ram ProTRAK

STEEL STRUCTURAL PRODUCTS L L C - Tri-S ProTRAK

1F. Framing Members* - Floor and Ceiling Runner - (Not Shown) - In lieu of Item 1 - For use with Item 2F, proprietary channel shaped runners, minimum width to accommodate stud size, with 1-1/8 in. long legs fabricated from min 0.015 in. (min bare metal thickness) galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
SUPER STUD BUILDING PRODUCTS - The Edge

1G. Framing Members* - Floor and Ceiling Runner - For use with Item 2G, proprietary channel shaped runners, minimum width to accommodate stud size attached to floor and ceiling with fasteners 24 in. OC max.
STUCCO BUILDING SYSTEMS - CROCS1UD Track

1H. Floor and Ceiling Runners - (Not Shown) - Channel shaped, fabricated from min 0.02 in. galv steel, min width to accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.018 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC.
MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20™ Track V100

FUSION BUILDING PRODUCTS - Viper20™ Track V100

IMPERIAL MANUFACTURING GROUP INC - Viper20™ Track V100

1I. Framing Members* - Floor and Ceiling Runners - (Not Shown, As an alternate to Item 1) - For use with Item 2H, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC max.
TELLING INDUSTRIES L L C - TRUE-TRAC™

1J. Framing Members* - Floor and Ceiling Runner - (Not Shown) - In lieu of Item 1 - For use with Item 2J, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

1K. Framing Members* - Floor and Ceiling Runner - (Not Shown) - In lieu of Item 1 - For use with Item 2J, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
RESCUE METAL FRAMING, L L C - AlphaSTAK

1M. Framing Members* - Floor and Ceiling Runners - (Not Shown) - As an alternate to Item 1 - For use with Item 2D, proprietary channel shaped runners, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
RESCUE METAL FRAMING, L L C - AlphaSTAK

1N. Framing Members* - Floor and Ceiling Runners - (Not Shown) - As an alternate to Item 1 - For use with Item 2P, proprietary channel shaped runners, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
RONDQ BUILDING SERVICES PTY LTD - Rondq Wall Track

1O. Framing Members* - Floor and Ceiling Runners - (Not Shown) - As an alternate to Item 1 - For use with Item 2P, proprietary channel shaped runners, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
OEG BUILDING MATERIALS - OEG Track

1P. Framing Members* - Floor and Ceiling Runner - (Not Shown) - In lieu of Item 1 - For use with Item 2Q, proprietary channel shaped runners, min width to accommodate stud size, fabricated from min. 25 MSG 0.018 in. (min. bare metal thickness), attached to floor and ceiling with fasteners spaced 24 in. OC max.
CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper X Track

2. Steel Studs - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

2A. Steel Studs - (As an alternate to Item 2, for use with Items 5B, 5E, 5I, 5J or Type ULXU) - Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height.

2B. Framing Members* - Steel Studs - (As an alternate to Item 2, for use with Items SC, SI or Type ULXU) - Proprietary channel shaped studs, 3-5/8 in. deep spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than the assembly height and installed with a 1/2 in. gap between the end of the stud and track at the bottom of the wall. For direct attachment to gypsum board only.

CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper25™

CRACO MFG INC - SmartTrack25™

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper25™

FUSION BUILDING PRODUCTS - Viper25™

IMPERIAL MANUFACTURING GROUP INC - Viper25™

2C. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max of 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights.
CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20™

FUSION BUILDING PRODUCTS - Viper20™

IMPERIAL MANUFACTURING GROUP INC - Viper20™

2D. Framing Members* - Steel Studs - In lieu of Item 2 - Channel shaped studs, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.
ALSTEL & GYPSUM PRODUCTS INC - Type SUPREME D24/36QDQ and Type SUPREME D20

CONSOLIDATED FABRICATORS CORP BUILDING PRODUCTS DIV - Type SUPREME D24/36QDQ and Type SUPREME D20

QUAIL RUN BUILDING MATERIALS INC - Type SUPREME D24/36QDQ and Type SUPREME D20

SCAFCO STEEL STUD MANUFACTURING CO - Type SUPREME D24/36QDQ and Type SUPREME D20

STEEL CONSTRUCTION SYSTEMS INC - Type SUPREME D24/36QDQ and Type SUPREME D20

TELLING INDUSTRIES L L C - Type SUPREME D24/36QDQ and Type SUPREME D20

UNITED METAL PRODUCTS INC - Type SUPREME D24/36QDQ and Type SUPREME D20

2E. Framing Members* - Steel Studs - (Not Shown, As an alternate to Item 2) - For use with Items 5F or 5G or 5I or Type ULXU only, channel shaped studs, min depth as indicated under Item 5F, 5G or 5I, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights.
CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20™

FUSION BUILDING PRODUCTS - Viper20™

IMPERIAL MANUFACTURING GROUP INC - Viper20™

2F. Framing Members* - Floor and Ceiling Runners - (Not Shown) - In lieu of Item 1 - For use with Item 2C, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20™ Track

FUSION BUILDING PRODUCTS - Viper20™ Track

IMPERIAL MANUFACTURING GROUP INC - Viper20™ Track

2G. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max of 24 in. OC, fabricated from min 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly heights.
SUPER STUD BUILDING PRODUCTS - The Edge

STUCCO BUILDING SYSTEMS - CROCS1UD

2H. Framing Members* - Steel Studs - (Not Shown, As an alternate to Item 2) - Fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

TELLING INDUSTRIES L L C - TRUE-TRAC™

2I. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max of 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights.

2J. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max of 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights.

2K. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

2L. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

2M. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

2N. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min depth 3-1/2 in. as indicated under Item 5, spaced a max of 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights.

2O. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2P. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2Q. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2R. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2S. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2T. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2U. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2V. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2W. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2X. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2Y. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2Z. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AA. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AB. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AC. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AD. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AE. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AF. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AG. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AH. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AI. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

2AJ. Framing Members* - Steel Studs - (Not Shown) - In lieu of Item 2 - Proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height.

3. Wood Structural Panel Sheathing - (Optional, For use with Item 5 Only) - (Not Shown) - 4 ft wide, 7/16 in. thick oriented strand board (OSB) or 15/32 in. thick structural 1 sheathing (plywood) complying with DOC P51 or P52, or AIA Standard PWP-108, manufactured with exterior grade, applied horizontally or vertically to the steel studs. Vertical joints centered on studs, and staggered one stud space from wallboard joints. Attached to studs with flat-head self-drilling tapping screws with a min. head diam. of 0.232 in. at maximum 6 in. OC in the perimeter and 12 in. OC in the field. When used, gypsum panels attached over OSB or plywood panels and fastener lengths for gypsum panels increased by min. 1/2 in.

4. Batts and Blankets* - (Required as indicated under Item 5) - Mineral wool batts, friction fitted between studs and runners. Min min thickness as indicated under Item 5.

See Batts and Blankets (BIBV or B22) Categories for names of Classified materials.

4A. Batts and Blankets* - (Optional) - Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance.

See Batts and Blankets (BIBV or B22) Categories for names of Classified materials.

4B. Fiber, Sprayed* - (Optional, for use with Type ULXU Where Information is required - Spray applied granulated mineral fiber material. The fiber is applied with adhesive at a minimum density of 4.0 pcf to completely fill the wall cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCA2).

AMERICAN ROCKWOOL MANUFACTURING, LLC - Type Rockwool Premium Plus

4C. Foamed Plastic* - (Where Batts and Blankets) Item 4, are optional for use with Item 5D) - Spray applied foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity, for 1 hour rated assemblies only. When foamed plastic is used, minimum stud depth shall be 3-1/2 in.

CARLESPRIM FOAM INSULATION - TypeS SealPro Pro Closed Cell (CC), SealPro Pro Open Cell (OC), SealPro Pro OC, SealPro Pro No Trim (NT), SealPro Pro One Zone (OZ), SealPro Pro Two Zone (TZ), SealPro Pro Three Zone (TZ3), SealPro Pro Four Zone (TZ4), SealPro Pro Five Zone (TZ5), SealPro Pro Six Zone (TZ6), SealPro Pro Seven Zone (TZ7), SealPro Pro Eight Zone (TZ8), SealPro Pro Nine Zone (TZ9), SealPro Pro Ten Zone (TZ10), SealPro Pro Eleven Zone (TZ11), SealPro Pro Twelve Zone (TZ12), SealPro Pro Thirteen Zone (TZ13), SealPro Pro Fourteen Zone (TZ14), SealPro Pro Fifteen Zone (TZ15), SealPro Pro Sixteen Zone (TZ16), SealPro Pro Seventeen Zone (TZ17), SealPro Pro Eighteen Zone (TZ18), SealPro Pro Nineteen Zone (TZ19), SealPro Pro Twenty Zone (TZ20), SealPro Pro Twenty One Zone (TZ21), SealPro Pro Twenty Two Zone (TZ22), SealPro Pro Twenty Three Zone (TZ23), SealPro Pro Twenty Four Zone (TZ24), SealPro Pro Twenty Five Zone (TZ25), SealPro Pro Twenty Six Zone (TZ26), SealPro Pro Twenty Seven Zone (TZ27), SealPro Pro Twenty Eight Zone (TZ28), SealPro Pro Twenty Nine Zone (TZ29), SealPro Pro Thirty Zone (TZ30), SealPro Pro Thirty One Zone (TZ31), SealPro Pro Thirty Two Zone (TZ32), SealPro Pro Thirty Three Zone (TZ33), SealPro Pro Thirty Four Zone (TZ34), SealPro Pro Thirty Five Zone (TZ35), SealPro Pro Thirty Six Zone (TZ36), SealPro Pro Thirty Seven Zone (TZ37), SealPro Pro Thirty Eight Zone (TZ38), SealPro Pro Thirty Nine Zone (TZ39), SealPro Pro Forty Zone (TZ40), SealPro Pro Forty One Zone (TZ41), SealPro Pro Forty Two Zone (TZ42), SealPro Pro Forty Three Zone (TZ43), SealPro Pro Forty Four Zone (TZ44), SealPro Pro Forty Five Zone (TZ45), SealPro Pro Forty Six Zone (TZ46), SealPro Pro Forty Seven Zone (TZ47), SealPro Pro Forty Eight Zone (TZ48), SealPro Pro Forty Nine Zone (TZ49), SealPro Pro Fifty Zone (TZ50), SealPro Pro Fifty One Zone (TZ51), SealPro Pro Fifty Two Zone (TZ52), SealPro Pro Fifty Three Zone (TZ53), SealPro Pro Fifty Four Zone (TZ54), SealPro Pro Fifty Five Zone (TZ55), SealPro Pro Fifty Six Zone (TZ56), SealPro Pro Fifty Seven Zone (TZ57), SealPro Pro Fifty Eight Zone (TZ58), SealPro Pro Fifty Nine Zone (TZ59), SealPro Pro Sixty Zone (TZ60), SealPro Pro Sixty One Zone (TZ61), SealPro Pro Sixty Two Zone (TZ62), SealPro Pro Sixty Three Zone (TZ63), SealPro Pro Sixty Four Zone (TZ64), SealPro Pro Sixty Five Zone (TZ65), SealPro Pro Sixty Six Zone (TZ66), SealPro Pro Sixty Seven Zone (TZ67), SealPro Pro Sixty Eight Zone (TZ68), SealPro Pro Sixty Nine Zone (TZ69), SealPro Pro Seventy Zone (TZ70), SealPro Pro Seventy One Zone (TZ71), SealPro Pro Seventy Two Zone (TZ72), SealPro Pro Seventy Three Zone (TZ73), SealPro Pro Seventy Four Zone (TZ74), SealPro Pro Seventy Five Zone (TZ75), SealPro Pro Seventy Six Zone (TZ76), SealPro Pro Seventy Seven Zone (TZ77), SealPro Pro Seventy Eight Zone (TZ78), SealPro Pro Seventy Nine Zone (TZ79), SealPro Pro Eighty Zone (TZ80), SealPro Pro Eighty One Zone (TZ81), SealPro Pro Eighty Two Zone (TZ82), SealPro Pro Eighty Three Zone (TZ83), SealPro Pro Eighty Four Zone (TZ84), SealPro Pro Eighty Five Zone (TZ85), SealPro Pro Eighty Six Zone (TZ86), SealPro Pro Eighty Seven Zone (TZ87), SealPro Pro Eighty Eight Zone (TZ88), SealPro Pro Eighty Nine Zone (TZ89), SealPro Pro Ninety Zone (TZ90), SealPro Pro Ninety One Zone (TZ91), SealPro Pro Ninety Two Zone (TZ92), SealPro Pro Ninety Three Zone (TZ93), SealPro Pro Ninety Four Zone (TZ94), SealPro Pro Ninety Five Zone (TZ95), SealPro Pro Ninety Six Zone (TZ96), SealPro Pro Ninety Seven Zone (TZ97), SealPro Pro Ninety Eight Zone (TZ98), SealPro Pro Ninety Nine Zone (TZ99), SealPro Pro One Hundred Zone (TZ100), SealPro Pro One Hundred One Zone (TZ101), SealPro Pro One Hundred Two Zone (TZ102), SealPro Pro One Hundred Three Zone (TZ103), SealPro Pro One Hundred Four Zone (TZ104), SealPro Pro One Hundred Five Zone (TZ105), SealPro Pro One Hundred Six Zone (TZ106), SealPro Pro One Hundred Seven Zone (TZ107), SealPro Pro One Hundred Eight Zone (TZ108), SealPro Pro One Hundred Nine Zone (TZ109), SealPro Pro One Hundred Ten Zone (TZ110), SealPro Pro One Hundred Eleven Zone (TZ111), SealPro Pro One Hundred Twelve Zone (TZ1

UL Product iQ™

BXUV.L511 - Fire-resistance Ratings - ANSI/UL 263

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

Fire-resistance Ratings - ANSI/UL 263

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States

Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

Design Criteria and Allowable Variances

Design No. L511

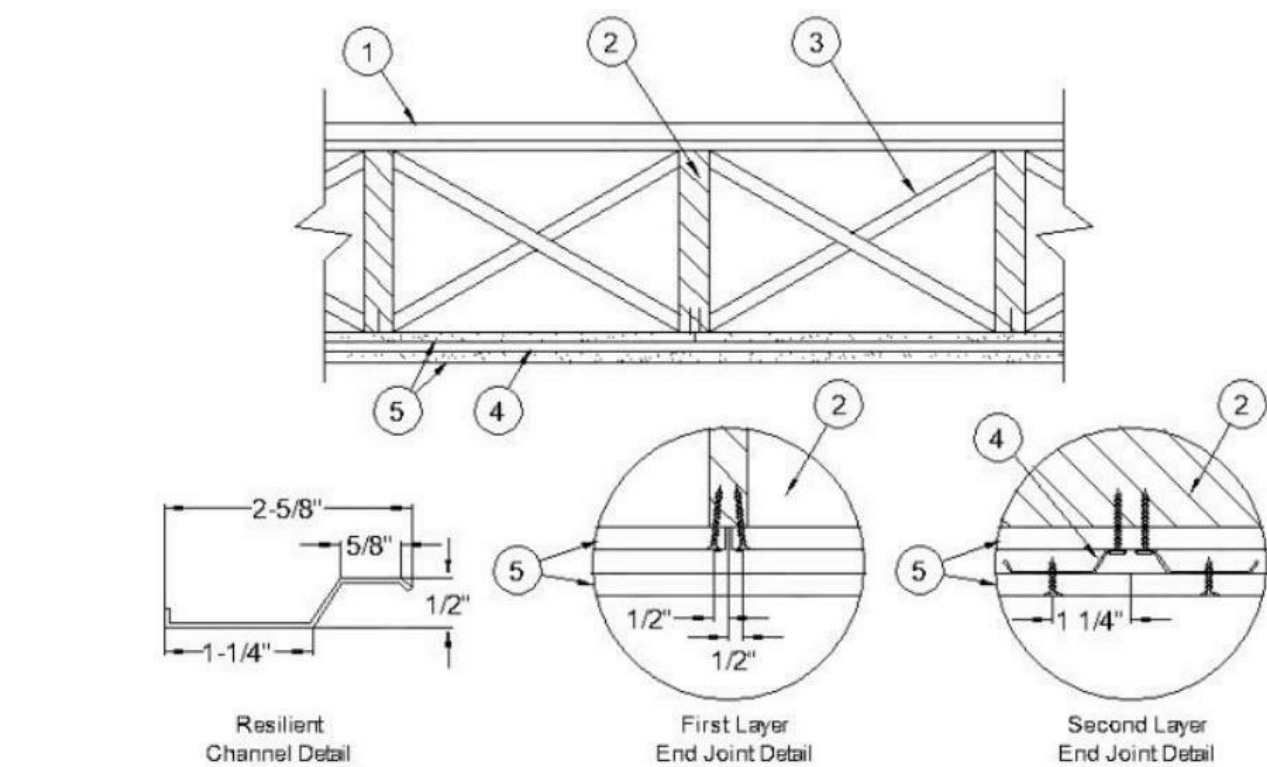
February 14, 2022

Unrestrained Assembly Rating - 2 Hr.

Finish Rating - 71 Min.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used - See Guide BXUV or BXUV7.

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



1. Flooring Systems - The flooring system shall consist of one of the following:

Subflooring - Min 1 by 6 in. T & G lumber fastened diagonally to joists.

Vapor Barrier - Nom 0.010 in. thick commercial resin-sized building paper.

Finish Flooring - Min 1 by 3 in. T & G and end matched, laid perpendicular to joists.

System No. 2

Subflooring - Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier - (Optional) - Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture - Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO - Type LRC, HSLRC, CSD

USG MEXICO S A DE C V - Types LRC, HSLRC, CSD

USG MEXICO S A DE C V - Types LRC, HSLRC, CSD

USG MEXICO S A DE C V - Types LRC, HSLRC, CSD

USG MEXICO S A DE C V - Types LRC, HSLRC, CSD

USG MEXICO S A DE C V - Types LRC, HSLRC, CSD

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USG MEXICO S A DE C V - Types LRC, HSLRC, CSD

USG MEXICO S A DE C V - Types LRC, HSLRC, CSD

Finish Flooring - Floor Topping Mixture - Min 3/4 or 1 in. thickness of floor topping mixture for min 19/32 or min 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

ULTRA QUIET FLOORS - Types UQF-A, UQF-Super Blend, UQF-P&B 200

System No. 8

Subflooring - Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier - (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture - Min 3/4 thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

MAXXON CORP - Type Maxxon Standard and Maxxon High Strength

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MAXXON CORP - Type Maxxon Standard and Maxxon High Strength

PLITEG INC - Type GenieMat FF10

Floor Mat Materials - (Optional) - Nom 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

PLITEG INC - Type GenieMat FF17

Floor Mat Materials - (Optional) - Nom 1 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

PLITEG INC - Type GenieMat FF25

System No. 18

Subflooring - Structural Cement-Fiber Units - Nominal 19 mm (3/4 in.) thick tongue and groove structural cement-fiber units. Long dimension of panels to be perpendicular to joists with end joints staggered. Panels fastened to the joists with #10 self-drilling, self-tapping cement board screws 1-1/4 in. long. Screws shall be spaced 6 in. OC along the perimeter of each sheet and 12 in. OC in the field of each sheet. Screws shall be spaced 1/2 in. from end joints and 1 in. from side joints.

ECTEK INTERNATIONAL INC - Type Megaboard

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3078 SW Market Street, Lee's Summit, Mo, 64063 P 816 249 2270
(www.collinswebb.com)

MAIN STREET BUILDING IMPROVEMENTS

230 SW MAIN ST.
LEE'S SUMMIT, MO 64063

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ARCHITECTURE, LLC

REVISION DATES:



PROFESSIONAL SEAL

G501

ISSUE DATE: 21 APRIL, 2022
COLLINS WEBB #: 21121

GENERAL PROJECT SPECIFICATIONS

SPECIFICATIONS - PRODUCT & INSTALLATION GENERAL REQUIREMENTS

07 5423 - EPDM MEMBRANE ROOFING & ACCESSORIES

- A. SUBMITTALS:** PRODUCT DATA AND SHOP DRAWINGS. INDICATE JOINT OR TERMINATION DETAIL CONDITIONS, CONDITIONS OF INTERFACE WITH OTHER MATERIALS AND PAVES OR WALKWAY PAD LAYOUT.
- 1. MANUFACTURER'S FIELD REPORTS:** INDICATE PROCEDURES FOLLOWED, AMBIENT TEMPERATURES, HUMIDITY, WIND VELOCITY DURING APPLICATION, AND SUPPLEMENTARY INSTRUCTIONS GIVEN SUBMIT FINAL MANUFACTURER'S PUNCH LIST FIELD REPORT WHEN COMPLETE SYSTEM IS INSTALLED.
- 2. MANUFACTURER'S INSTALLATION INSTRUCTIONS:** INDICATE MEMBRANE SEAMING PRECAUTIONS AND PERMITTER CONDITIONS REQUIRING SPECIAL ATTENTION.

B. WARRANTY:

- 1. MATERIAL WARRANTY:** PROVIDE MEMBRANE MANUFACTURER'S WARRANTY AGREEING TO REPLACE MATERIAL THAT SHOWS MANUFACTURE DEFECTS WITHIN 10 YEARS AFTER INSTALLATION.
- 2. SYSTEM WARRANTY:** PROVIDE MANUFACTURER'S SYSTEM WARRANTY AGREEING TO REPAIR OR REPLACE ROOFING THAT LEAKS OR IS DAMAGED DUE TO WIND OR OTHER NATURAL CAUSES. WARRANTY TERM: 20 YEARS.
- A. FOR REPAIR AND REPLACEMENT:** INDICATE COSTS OF BOTH MATERIAL AND LABOR IN WARRANTY.
- B. INCLUDE ADJACENT PUNCTURES:** ACCORDING TO THE MANUFACTURER'S STANDARD WARRANTY TERMS.
- C. INCLUDE HAIL DAMAGE:** ACCORDING TO THE MANUFACTURER'S STANDARD WARRANTY TERMS.
- D. EXCEPTIONS NOT PERMITTED:** DAMAGE DUE TO ROOF TRAFFIC, DAMAGE DUE TO WIND OF SPEED GREATER THAN 56 MPH BUT LESS THAN 90 MPH.

C. BASIS OF DESIGN: FIRESTONE RUBBERGARD® EPDM MEMBRANE - WWW.FIRESTONEBPO.COM

- 1. WIND UPLIFT:** DESIGNED TO WITHSTAND WIND UPLIFT FORCES CALCULATED WITH ASCE 7.
- 2. INSULATION THERMAL RESISTANCE (R-VALUE):** 3 PER INCH, MINIMUM, PROVIDE INSULATION OF THICKNESS REQUIRED, MINIMUM R-20.

D. ROOFING MEMBRANE MATERIALS:

- 1. MATERIAL:** RUBBERGARD EPDM
- A. B. THICKNESS:** 60 MILS (0.060 INCH), MINIMUM.
- B. C. SHEET WIDTH:** FACTORY FABRICATED INTO LARGEST SHEETS POSSIBLE.
- C. D. PRODUCT:** FULLY ADHERED.
- 2. SEAMING MATERIALS:** AS RECOMMENDED BY MEMBRANE MANUFACTURER.
- 3. VAPOR RETARDER:** MATERIAL APPROVED BY ROOF MANUFACTURER COMPLYING WITH REQUIREMENTS OF FIRE RATING CLASSIFICATION COMPATIBLE WITH ROOFING AND INSULATION MATERIALS. INSTALL WITH FIRE-RETARDANT ADHESIVE.
- 4. FLEXIBLE FLASHING MATERIAL:** SAME MATERIAL AS MEMBRANE.
- 5. BASE FLASHING:** PROVIDE WATERPROOF, FULLY ADHERED BASE FLASHING SYSTEM AT ALL PENETRATIONS, PLANE TRANSITIONS, AND TERMINATIONS.

E. DECK SHEETING AND COVER BOARDS:

- IF SHEETING OR COVER BOARD IS REFERENCED IN THE DRAWINGS,** PROVIDE PRODUCTS COMPLYING WITH BELOW REQUIREMENTS.
- 1. DECK SHEETING:** 1/2" PSRUM SHEETING, ASTM C1395C1399M, TYPE V SPECIAL FIRE RESISTANT TYPE.
- 2. COVERBOARD:** CEMENT ROOF BOARD, COMPLYING WITH ASTM C1325.

F. INSULATION:

- 1. INSULATION COMPLYING WITH MANUFACTURER'S RECOMMENDATIONS.**
- 2. CELLULOSE FIBER BOARD INSULATION:** ASTM C208, TYPE II, NATURAL FINISH.
- 3. EXPANDED POLYSTYRENE (EPS) BOARD INSULATION:** COMPLES WITH ASTM C578 WITH DRAINAGE CHANNELS ON ONE FACE.
- 4. TAPERED BOARD:** POLYSTYRENE (XPS) BOARD INSULATION: COMPLES WITH ASTM C578 WITH NATURAL SKIN SURFACE, DRAINAGE CHANNELS ON ONE FACE.
- 5. EXTRUDED POLYSTYRENE (XPS) BOARD INSULATION:** COMPLES WITH ASTM C578 WITH NATURAL SKIN SURFACE, DRAINAGE CHANNELS ON ONE FACE.

G. ACCESSORIES:

- 1. PROVIDE AND INSTALL ONLY ACCESSORIES WHICH COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.**
- 2. PROVIDE FIRESTONE PREFINISHED FLASHINGS AND CORNERS FOR ITEMS NOTED IN DRAWING DETAILS.**

H. INSTALLATION:

- 1. VERIFY THAT SURFACES AND SITE CONDITIONS ARE READY TO RECEIVE WORK.**
- 2. INCHES DECK IS SUPPORTED AND SECURE.**
- 3. VERIFY DECK IS CLEAN AND SMOOTH. FLAT, FREE OF DEBRIS, WAVES, OR PROJECTIONS, PROPERLY SLOPED AND SUITABLE FOR INSTALLATION OF ROOF SYSTEM.**
- 4. VERIFY DECK SURFACES ARE DRY AND FREE OF RAIN, SNOW OR ICE.**
- 5. VERIFY THAT ROOF OPENINGS, CURBS, AND PENETRATIONS THROUGH ROOF ARE SOLIDLY SET, AND CANT STRIPS ARE IN PLACE.**
- 6. CLEAN SUBSTRATE THOROUGHLY PRIOR TO ROOF APPLICATION.**
- 7. DO NOT BEGIN WORK UNTIL OTHER WORK THAT REQUIRES ROOF OR EQUIPMENT TRAFFIC ON ROOF IS COMPLETE.**
- 8. APPLY MANUFACTURER'S RECOMMENDED VAPOR RETARDER OR TEMPORARY ROOF BEFORE ROOF INSTALLATION.**
- 9. PERFORM WORK IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND NRCA (RM) APPLICABLE REQUIREMENTS.**
- 10. REMOVE WRAPPINGS, EMPTY CONTAINERS, PAPER, AND OTHER DEBRIS FROM THE ROOF DAILY. DISPOSE OF DEBRIS IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.**
- 11. REMOVE ITUMINOUS MARKINGS FROM FINISHED SURFACES.**
- 12. IN AREAS WHERE FINISHED SURFACES ARE SOLED BY WORK OF THIS SECTION, CONSULT MANUFACTURER OF SURFACES FOR CLEANING ADVICE AND CONFORM TO THEIR DOCUMENTED INSTRUCTIONS.**
- 13. REPAIR OR REPLACE DEFACED OR DAMAGED FINISHES CAUSED BY WORK OF THIS SECTION.**

I. PROTECTION:

- 1. PROTECT INSTALLED ROOFING AND FLASHINGS FROM CONSTRUCTION OPERATIONS.**
- 2. WHERE TRAFFIC MUST CONTINUE OVER FINISHED ROOF MEMBRANE, PROTECT SURFACES USING DURABLE MATERIALS.**

07 6200 - SHEET METAL FLASHING AND TRIM

- A. STANDARDS:**
- FABRICATED SHEET METAL ITEMS, INCLUDING FLASHINGS, COUNTERFLASHINGS, AND OTHER ITEMS INDICATED IN SCHEDULE.
- AAMA 811 - VOLUNTARY SPECIFICATION FOR ANODIZED ARCHITECTURAL ALUMINUM 2014 (2015 ERRATA).**
- ASTM C920 - STANDARD SPECIFICATION FOR ELASTOMERIC JOINT SEALANTS 2016.**
- CDA A4050 - COPPER IN ARCHITECTURE - HANDBOOK CURRENT EDITION.**
- SMOACNA (ASMA) - ARCHITECTURAL SHEET METAL MANUAL 2012.**

B. SUBMITTALS:

- 1. SHOP DRAWINGS:** INDICATE MATERIAL PROFILE, JOINTING PATTERN, JOINTING DETAILS, FASTENING METHODS, FLASHINGS, TERMINATIONS, AND INSTALLATION DETAILS.
- C. QUALITY ASSURANCE:**
- 1. PERFORM WORK IN ACCORDANCE WITH SMOACNA (ASMA) AND CDA A4050 REQUIREMENTS AND STANDARD DETAILS, EXCEPT AS OTHERWISE INDICATED.**

D. DELIVERY, STORAGE, AND HANDLING:

- 1. STACK MATERIAL TO PREVENT TWISTING, BENDING, AND ABRASION, AND TO PREVENT VENTILATION. SLOPE METAL SHEETS TO ENSURE DRAINAGE.**
- 2. PREVENT CONTACT WITH MATERIALS THAT COULD CAUSE DISCOLORATION OR STAINING.**

E. PRODUCTS:

- PRE-FINISHED ALUMINUM:** ASTM B209 (ASTM B209M), 20 GAUGE, (0.032 INCH) THICK, PLAIN FINISH, SHOP PRE-COATED WITH MODIFIED SILICONE COATINGS.
- 1. FLUOROPOLYMER COATING:** HIGH PERFORMANCE ORGANIC FINISH, AAMA 2604, MULTIPLE COAT, THERMALLY CURED FLUOROPOLYMER FINISH SYSTEM.
- 2. COLOR:** AS SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.

F. FABRICATION:

- 1. FORM SECTIONS TRUE TO SHAPE, ACCURATE IN SIZE, SQUARE, AND FREE FROM DISTORTION OR DEFECTS.**
- 2. FORM PIECES IN LONGEST POSSIBLE LENGTHS.**
- 3. HEN EXPOSED EDGES ON UNDERSIDE: 10 INCH MATERIAL AND SEAM CORNERS.**
- 4. FORM MATERIAL WITH FLAT LOCK SEAMS, EXCEPT WHERE OTHERWISE INDICATED; AT MOVING JOINTS, USE SEALED LAPPED, BAYONET-TYPE OR INTERLOCKING HOOKED SEAMS.**
- 5. FABRICATE FLASHINGS TO ALLOW TCE TO EXTEND 2 INCHES OVER ROOFING GRAVEL, RETURN AND BRAKE EDGES.**

G. ACCESSORIES:

- 1. FASTENERS:** GALVANIZED STEEL, WITH SOFT NEOPRENE WASHERS.
- 2. PRIMER:** ZINC CHROMATE TYPE.
- 3. CONCEALED SEALANTS:** NON-CURING BUTYL SEALANT.
- 4. EXPOSED SEALANTS:** ASTM C920, ELASTOMERIC SEALANT, WITH MINIMUM MOVEMENT CAPABILITY AS RECOMMENDED BY MANUFACTURER FOR SUBSTRATES TO BE SEALED, COLOR TO MATCH ADJACENT MATERIAL.

H. INSTALLATION:

- 1. SECURE FLASHINGS IN PLACE USING CONCEALED FASTENERS, AND USE EXPOSED FASTENERS ONLY WHERE PERMITTED.**
- 2. APPLY PLASTIC CEMENT COMPOUND BETWEEN METAL FLASHINGS AND FELT FLASHINGS.**
- 3. FIT FLASHINGS TIGHT IN PLACE, MAKE CORNERS SQUARE, FLASHINGS TRUE AND STRAIGHT IN PLANES, AND LINES ACCURATE TO PROFILES.**
- 4. SEAL METAL JOINTS WATERTIGHT.**

07 8100 - APPLIED FIREPROOFING

- A. SUBMITTALS:** PRODUCT DATA, PROVIDE DATA INDICATING PRODUCT CHARACTERISTICS.
- 1. TEST REPORTS:** REPORTS FROM REPUTABLE, INDEPENDENT TESTING AGENCIES FOR PROPOSED PRODUCTS, INDICATING COMPLIANCE WITH SPECIFIED CRITERIA, CONDUCTED UNDER CONDITIONS SIMILAR TO THOSE ON PROJECT, AS FOLLOWS:
- A. BOND STRENGTH.**
- B. BOND IMPACT.**
- C. COMPRESSIVE STRENGTH.**
- D. FIRE TESTS:** USING SUBSTRATE MATERIALS SIMILAR THOSE ON PROJECT.
- 2. MANUFACTURER'S INSTALLATION INSTRUCTIONS:** INDICATE SPECIAL PROCEDURES.
- 3. MANUFACTURER'S QUALIFICATION STATEMENT.**
- 4. FIELD CONDITIONS:**
- 1. DO NOT APPLY FIREPROOFING WHEN TEMPERATURE OF SUBSTRATE MATERIAL AND SURROUNDING AIR IS BELOW -40 DEGREES F OR WHEN TEMPERATURE IS PRECIPITATED TO BE BELOW 34 TEMPERATURE FOR 24 HOURS AFTER APPLICATION.**
- 2. PREVENT VENTILATION IN AREAS TO RECEIVE FIREPROOFING DURING APPLICATION AND 24 HOURS AFTERWARD, TO DRY APPLIED MATERIAL.**
- 3. PROVIDE TEMPORARY ENCLOSURE TO PREVENT SPRAY FROM CONTAMINATING AIR.**

C. WARRANTY:

- 1. CORRECT DEFECTIVE WORK WITHIN A TWO YEAR PERIOD AFTER DATE OF SUBSTANTIAL COMPLETION.**
- A. INCLUDE COVERAGE FOR FIREPROOFING TO REMAIN FREE FROM CRACKING, CHECKING, DUSTING, FLAKING, SPALLING, SEPARATION, AND BULSTERING.**
- B. REINSTATE OR REPAIR FAILURES THAT OCCUR WITHIN WARRANTY PERIOD.**

D. MANUFACTURERS:

- 1. GOVT APPLIED TECHNOLOGIES: WWW.GOPAT.COM/FIREPROOFING**
- 2. ISOLATEK INTERNATIONAL CORP.: WWW.ISOLATEK.COM**
- 3. SOUTHWEST FIREPROOFING PRODUCTS COMPANY: WWW.SW.FI**

E. MATERIALS:

- 1. PROVIDE ASSEMBLIES AS INDICATED ON DRAWING.**
- 2. PROVIDE FIRE RESISTANCE RATINGS FOR FULL CODE.**
- A. PRIMARY STRUCTURAL FRAME, INCL: [] -S, AND TRUSSES [] HOUR.**
- B. BEARING WALLS, INTERIOR: [] -S AND JOISTS [] HOUR.**
- C. FLOOR CONSTRUCTION, INCL: [] -S AND JOISTS [] HOUR.**
- D. ROOF CONSTRUCTION, INCL: [] -S AND JOISTS [] HOUR.**

F. MATERIALS: APPLIED FIREPROOFING

- FOR INTERIOR APPLICATIONS, CONCEALED, MANUFACTURER'S STANDARD FACTORY MIXED MAT, WHICH WHEN COMBINED WITH WATER IS CAPABLE OF PROVIDING INCREASED FIRE RESISTANCE AND PROTECTS SUBSTRATE FROM FIRE AND WEAR REQUIREMENTS.**
- 1. COMPOSITION:** GYPSUM-BASED, NOT MINERAL-FIBER-BASED.
- 2. BOND STRENGTH:** 150 POUNDS PER SQUARE FOOT, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM E709/20M WHEN SET AND DRY.
- 3. DRY DENSITY:** AS REQUIRED BY FIRE RESISTANCE DESIGN.
- 4. COMPRESSIVE STRENGTH:** 8.3 POUNDS PER SQUARE INCH, MINIMUM.
- 5. EFFECT OF IMPACT ON FINISHED SURFACES:** NO CRACKING, SPALLING OR DELAMINATION, WHEN TESTED IN ACCORDANCE WITH ASTM E760/26M.
- 6. CORROSION:** NO EVIDENCE OF CORROSION, WHEN TESTED IN ACCORDANCE WITH ASTM E837/2937M.
- 7. SURFACE BURNING CHARACTERISTICS:** MAXIMUM FLAME SPREAD INDEX OF 0 (ZERO) AND MAXIMUM SMOKE DEVELOPED INDEX OF 0 (ZERO), WHEN TESTED IN ACCORDANCE WITH ASTM E84.

G. ACCESSORIES:

- 1. PRIMER:** ADHESIVE, OF TYPE RECOMMENDED BY APPLIED FIREPROOFING MANUFACTURER.
- 2. OVERCOAT:** AS RECOMMENDED BY MANUFACTURER OF APPLIED FIREPROOFING MATERIAL.
- 3. METAL LATH:** EXPANDED METAL LATH, MINIMUM WEIGHT OF 1.7 PSF, GALVANIZED FINISH.
- 4. WATER:** CLEAN, POTABLE.

H. INSTALLATION:

- 1. VERIFY THAT SURFACES ARE READY TO RECEIVE FIREPROOFING.**
- 2. VERIFY THAT DUCTS, PIPING, EQUIPMENT, OR OTHER ITEMS THAT WOULD INTERFERE WITH APPLICATION OF FIREPROOFING HAVE NOT BEEN INSTALLED.**
- 3. VERIFY THAT VOIDS AND CRACKS IN SUBSTRATE HAVE BEEN FILLED.**
- 4. VERIFY THAT PROJECTIONS HAVE BEEN REMOVED WHERE FIREPROOFING WILL BE EXPOSED TO VIEW AS A FINISH MATERIAL.**
- 5. PERFORM TESTS AS RECOMMENDED BY FIREPROOFING MANUFACTURER IN APPLICATIONS WHERE ADHESION OF FIREPROOFING TO SUBSTRATE IS IN QUESTION.**
- 6. REMOVE INCOMPATIBLE MATERIALS THAT COULD EFFECT BOND BY SCRAPING, BRUSHING, SCRUBBING, OR SANDBLASTING.**
- 7. PREPARE SUBSTRATES TO RECEIVE FIREPROOFING IN STRICT ACCORDANCE WITH INSTRUCTIONS OF FIREPROOFING MANUFACTURER.**
- 8. APPLY FIREPROOFING MANUFACTURER'S RECOMMENDED BONDING AGENT ON PRIMED STEEL.**
- 9. INSTALL METAL LATH OVER STRUCTURAL MEMBERS AS INDICATED OR AS REQUIRED BY UL ASSEMBLY DESIGN NUMBERS.**
- 10. APPLY FIREPROOFING IN UNIFORM THICKNESS AND DENSITY AS NECESSARY TO ACHIEVE REQUIRED RATINGS.**
- 11. INSPECT INSTALLED FIREPROOFING AFTER APPLICATION AND CURING FOR INTEGRITY, PRIOR TO ITS CONCEALMENT.**
- 12. ENSURE THAT ACTUAL THICKNESSES, DENSITIES, AND BOND STRENGTHS MEET REQUIREMENTS FOR SPECIFIED RATINGS AND REQUIREMENTS OF AUTOMATICALLY RATED AND LISTED ASSEMBLIES.**
- 13. REMOVE EXCESS MATERIAL, OVERSPRAY, DROPPINGS, AND DEBRIS.**
- 14. REMOVE FIREPROOFING FROM MATERIALS AND SURFACES NOT REQUIRED TO BE FIREPROOFED.**

07 8400 - FIRESTOPPING

- A. SUBMITTALS:** PRODUCT DATA, PROVIDE DATA ON PRODUCT CHARACTERISTICS, PERFORMANCE RATINGS, AND LIMITATIONS.
- B. MANUFACTURERS:**
- 1. 3M FIRE PROTECTION PRODUCTS: WWW.3M.COM/FIRESTOP.COM**
- 2. HILT, INC.: WWW.US.HILT.COM**

C. MATERIALS:

- 1. FIRESTOPPING MATERIALS:** ANY MATERIALS MEETING REQUIREMENTS.
- 2. PRIMERS, SLEEVES, FORMS, INSULATION, PACKING, STUFFING, AND ACCESSORIES:** PROVIDE TYPE OF MATERIALS AS REQUIRED FOR TESTED FIRESTOPPING ASSEMBLY.
- 3. FIRE RATINGS:** REFER TO DRAWINGS FOR REQUIRED SYSTEMS AND RATINGS.

D. ASSEMBLY REQUIREMENTS:

- 1. HEAD-OF-WALL, JOINT SYSTEM FIRESTOPPING AT JOINTS BETWEEN FIRE-RATED WALL ASSEMBLIES AND NON-RATED HORIZONTAL ASSEMBLIES:** USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E837 TO HAVE FIRE RESISTANCE F RATING EQUAL TO REQUIRED FIRE RATING OF FLOOR OR WALL, WHICHEVER IS GREATER.
- 2. FLOOR-TO-FLOOR, WALL-TO-WALL, AND WALL-TO-FLOOR JOINTS, EXCEPT PERIMETER, WHERE BOTH ARE FIRE-RATED:** USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E1966 OR UL 2079 TO HAVE FIRE RESISTANCE.
- F RATING:** EQUAL TO REQUIRED FIRE RATING OF THE ASSEMBLY IN WHICH THE JOINT OCCURS.
- 3. THROUGH PENETRATION FIRESTOPPING:** USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E814 TO HAVE FIRE RESISTANCE F-RATING EQUAL TO REQUIRED FIRE RATING OF PENETRATED ASSEMBLY.

E. INSTALLATION:

- 1. INSTALLATIONS SHALL CONFORM TO UL REQUIREMENTS OF THE ASSEMBLY WHICH FIRESTOPPING IS TO BECOME PART OF THE BUILT ASSEMBLY.**

07 9200 - JOINT SEALANTS

- A. SUBMITTALS:** PRODUCT DATA, AND SCHEDULE OF LOCATIONS FOR EACH TYPE OF SEALANT SUBMITTED.

- B. JOINT-SEALANT SCHEDULE:** INCLUDE THE FOLLOWING INFORMATION:
- 1. JOINT-SEALANT APPLICATION, JOINT LOCATION, AND DESIGNATION.**
- 2. JOINT-SEALANT MANUFACTURER AND PRODUCT NAME.**
- 3. JOINT-SEALANT FORMULATION.**
- 4. JOINT-SEALANT COLOR.**

- C. ENVIRONMENTAL LIMITATIONS:** DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT SEALANT MANUFACTURER OR ARE BELOW 40 deg F (4 deg C).

- D. COMPATIBILITY:** PROVIDE JOINT SEALANTS, JOINT FILLERS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER SERVICE AND APPLICATION CONDITIONS.

E. JOINT SEALANTS:

- 1. COLORS OF EXPOSED JOINT SEALANTS:** AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
- 2. INTERIOR JOINTS IN CERAMIC TILE AND OTHER HARD SURFACES IN KITCHENS, TOILET ROOMS, AND AROUND PLUMBING FIXTURES:** SINGLE COMPONENT, MILDEW-RESISTANT SILICONE SEALANT, ASTM C 920, TYPE S; GRADE NS, CLASS 25; USES AT, A, AND O, FORMULATED WITH FUNGICIDE.
- 3. INTERIOR JOINTS AROUND PERIMETERS OF DOORS AND FRAMES:** LATEX SEALANT, SINGLE COMPONENT, NONSAG, MILDEW-RESISTANT, PAINTABLE, ACRYLIC EMULSION SEALANT COMPLYING WITH ASTM C 834.
- 4. ACUSTICAL SEALANT FOR EXPOSED INTERIOR JOINTS:** NONSAG, PAINTABLE, NONSTAINING, LATEX SEALANT COMPLYING WITH ASTM C 834.
- 5. ACUSTICAL SEALANT FOR CONCEALED JOINTS:** NONDRYING, NONHARDENING, NONSKINNING, NONSTAINING, QUINNABLE, SYNTHETIC-RUBBER SEALANT RECOMMENDED FOR SEALING INTERIOR CONCEALED JOINTS TO REDUCE TRANSMISSION OF AERIOBIC SOUND.
- 6. EXTERIOR CONCRETE PANELS, NATURAL STONES, MASONRY, ALUMINUM CURTAINWALLS, METAL PANELS AND WINDOW PERIMETERS:**
- BASIS OF DESIGN PRODUCTS:**
- A. TREMCO INCORPORATED: SPECTREM 1.**
- B. DOW CORNING CORPORATION: 790.**
- C. PECORA CORPORATION: BRONST.**
- 7. EXTERIOR JOINTS IN HORIZONTAL TRAFFIC SURFACES:**
- ISOLATION AND CONTRACTION JOINTS IN CAST-IN-PLACE CONCRETE SLABS:**
- URETHANE JOINT SEALANT: MULTICOMPONENT, NONSAG, GRADE, CLASS 25.**

F. JOINT SEALANT BACKING:

- 1. GENERAL:** PROVIDE SEALANT BACKINGS OF MATERIAL THAT ARE NONSTAINING, ARE COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS, AND OTHER JOINT FILLERS, AND ARE APPROVED FOR APPLICATIONS INDICATED BY SEALANT MANUFACTURER BASED ON FIELD EXPERIENCE AND LABORATORY TESTING.
- 2. CYLINDRICAL SEALANT BACKINGS:** ASTM C 1330, TYPE C (CLOSED-CELL MATERIAL WITH A SURFACE SKIN), AND OF SIZE AND DENSITY TO CONTROL SEALANT DEPTH AND OTHERWISE CONTRIBUTE TO PRODUCING OPTIMUM SEALANT PERFORMANCE.
- 3. BOND-BREAKER TAPE:** POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT MANUFACTURER FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT. PROVIDE SELF-ADHESIVE TAPE WHERE APPLICABLE.

F. MISCELLANEOUS MATERIALS:

- 1. PRIMER:** MATERIAL RECOMMENDED BY JOINT-SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION OF SEALANT TO JOINT SUBSTRATES INDICATED, AS DETERMINED FROM PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS AND FIELD TESTS.
- 2. CLEANERS FOR NONPOROUS SURFACES:** CHEMICAL CLEANERS ACCEPTABLE TO MANUFACTURERS OF SEALANTS AND SEALANT BACKING MATERIALS, FREE OF OILY RESIDUES OR OTHER SUBSTANCES CAPABLE OF STAINING OR HARMING JOINT SUBSTRATES AND ADJACENT NONPOROUS SURFACES IN ANY WAY, AND FORMULATED TO PROMOTE OPTIMUM ADHESION OF SEALANTS TO JOINT SUBSTRATES.
- 3. BOND-BREAKER TAPE:** POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT MFR FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT.
- 4. MASKING TAPE:** NONSTAINING, NONABSORBENT MATERIAL COMPATIBLE WITH JOINT SEALANTS AND SURFACES ADJACENT TO JOINTS.
- 6. INSTALLATION:** COMPLY WITH ASTM C 1193, ASTM C 919 FOR ACUSTICAL JOINTS, AND AS FOLLOWS:
- 1. REMOVE ALL LOOSE MATERIAL, CLEAN AND PRIME JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, AND PROTECT ADJACENT SURFACES.**
- 2. INSTALL BOND-BREAKER TAPE WHERE JOINT BACKINGS ARE NOT USED.**
- 3. INSTALL SEALANT TOOLED CONCAVE, FREE OF AIR POCKETS, FOREIGN EMBEDDED MATTER, RIDGES, AND SAGS, AND PROTECT UNTIL FULLY CURED. SEALANT WITH DUST AND DEBRIS EMBEDDED IN SURFACE SHALL BE CAUSE FOR REJECTION.**

08 1000 - DOORS

08 0671 - DOOR HARDWARE

- A. SUBMITTALS:** PRODUCT DATA AND HARDWARE SCHEDULE INDICATING HARDWARE ITEM, FINISH, AND QUANTITY LOCATED ON EACH DOOR WITH DOOR AND HARDWARE SET NUMBERING CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS. REFER TO ARCHITECTURAL PLANS AND HARDWARE SCHEDULES PROVIDED.
- 1. HARDWARE SUPPLIER SHALL SUBMIT FOUR COPIES OF FINAL HARDWARE SCHEDULE AT EARLIEST POSSIBLE DATE PARTICULARLY WHERE ACCEPTANCE OF HARDWARE SCHEDULE MUST PRECEDE FABRICATION OF OTHER WORK WHICH IS CRITICAL IN THE PROJECT CONSTRUCTION SCHEDULE. INCLUDE WITH SCHEDULE SHOP DRAWINGS OF OTHER WORK SUBMITTED BY BUILDERS HARDWARE, AND OTHER INFORMATION ESSENTIAL TO THE COORDINATE REVIEW OF HARDWARE SCHEDULE.**
- 2. KEYING SCHEDULE:** SUBMIT SEPARATE DETAILED SCHEDULE INDICATING CLEARLY HOW THE OWNER'S FINAL INSTRUCTIONS ON KEYING OF LOCKS HAS BEEN FULFILLED. ALL KEYING SHALL BE COORDINATED WITH THE OWNER.

B. PRODUCTS:

- 1. STRIKES:** PROVIDE MANUFACTURER'S STANDARD WROUGHT BOX STRIKE FOR EACH LATCH OR LOCK BOLT, WITH CURVED UP EXTENDED TO PROTECT FRAME. FINISH TO MATCH HARDWARE SET. PROVIDE STANDARD (OPEN) STRIKE PLATES FOR INTERIOR DOORS WHERE WOOD DOOR FRAMES ARE USED.
- 2. IN GENERAL, HARDWARE FINISH SHALL BE U15 (SATIN NICKEL) UNLESS SPECIFIED DIFFERENTLY ON HARDWARE SCHEDULE.**
- 3. SUPPLY CAL ROVAL ROSS FLEXIBLE DOOR STOPS IN THE APARTMENT DWELLING UNITS. USE 2 1/8"X-23 HINGE STOPS WHERE FLEXIBLE STOPS CANNOT BE USED.**
- 4. SUPPLY OUT SWINGING EXTERIOR DOORS WITH NON REMOVABLE PINS.**

C. INSTALLATION:

- 1. MOUNT HARDWARE UNITS AT HEIGHTS INDICATED IN 'RECOMMENDED LOCATIONS FOR BUILDERS HARDWARE FOR STANDARD STEEL DOORS AND FRAMES' BY THE DOOR AND HARDWARE INSTITUTE, EXCEPT AS SPECIFICALLY INDICATED OR REQUIRED TO COMPLY WITH GOVERNING REGULATIONS, AND EXCEPT AS MAY BE OTHERWISE DIRECTED BY ARCHITECT. MOUNT HARDWARE IN UNITS DESIGNATED FOR USE BY THE HANDICAPPED AT HEIGHTS RECOMMENDED FOR USE BY THE HANDICAPPED.**
- 2. INSTALL EACH HARDWARE ITEM IN COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS, WHEREVER CUTTING AND FITTING IS REQUIRED TO INSTALL HARDWARE ONTO OR INTO SURFACES WHICH ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY, COORDINATE REMOVAL, STORAGE AND REINSTALLATION OR APPLICATION OF SURFACE PROTECTIONS WITH FINISHING WORK SPECIFIED IN THE DIVISION 9 SECTIONS. DO NOT INSTALL SURFACE MOUNTED UNITS UNTIL FINISHES HAVE BEEN COMPLETED ON THE SUBSTRATE.**
- 3. SET UNITS LEVEL, PLUMB AND TRUE TO LINE AND LOCATION. ADJUST AND REINFORCE THE ATTACHMENT SUBSTRATE AS NECESSARY FOR PROPER INSTALLATION AND OPERATION.**
- 4. DRILL AND COUNTERBANK UNITS WHICH ARE NOT FACTORY PREPARED FOR ANCHORAGE FASTENERS. SPACE FASTENERS AND ANCHORS IN ACCORDANCE WITH INDUSTRY STANDARDS.**
- 5. METAL THRESHOLDS SHALL BE SET IN A SOLID BED OF NON STAINING THICK, BASE CAULKING.**
- 6. ADJUST CHIEF OPERATING ITEM OF HARDWARE AND EACH DOOR, TO ENSURE PROPER OPERATION OR FUNCTION OF EVERY UNIT. REPAIR UNITS WHICH CANNOT BE ADJUSTED TO OPERATE FREELY AND SMOOTHLY AS INTENDED FOR THE APPLICATION MADE.**
- 7. FINAL ADJUSTMENT, WHEREVER HARDWARE INSTALLATION IS MADE MORE THAN ONE MONTH PRIOR TO ACCEPTANCE OR OCCUPANCY OF A SPACE OR AREA, RETURN TO THE WORK DURING THE WEEK PRIOR TO ACCEPTANCE OR OCCUPANCY, AND MAKE FINAL CHECK AND ADJUSTMENT OF ALL HARDWARE ITEMS IN SUCH SPACE OR AREA. CLEAN OPERATING ITEMS AS NECESSARY TO RESTORE PROPER FUNCTION OF EACH HARDWARE AND DOORS. ADJUST DOOR CONTROL DEVICES TO COMPENSATE FOR FINAL OPERATION OF HEATING AND VENTILATING EQUIPMENT.**

HARDWARE SET: 1.0

FOR USE ON DOOR (S):

N-101, N-102

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3 EA	HINGE	5881 4.5 X 4.5	BRUSHED NICKEL	IVE
1 EA	PRIVACY WDR B AND	L3498P9 6GA L583-303	BRUSHED NICKEL	SCH
1 EA	SURFACE CLOSER	4040P REG	BRUSHED NICKEL	LCN
1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	BRUSHED NICKEL	IVE
1 EA	WALL STOP	WS4640G7CVX	BRUSHED NICKEL	IVE
3 EA	SLENCER	S864	GRY	NE

HARDWARE SET: 2.0

FOR USE ON DOOR (S):

N-103

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3 EA	HINGE	5881 4.5 X 4.5	BRUSHED NICKEL	IVE
1 EA	STOREROOM LOCK	L908P9 6GA	BRUSHED NICKEL	SCH
1 EA	HO STOP	905	BRUSHED NICKEL	GLY
3 EA	SLENCER	S864	GRY	IVE

HARDWARE SET: 3.0

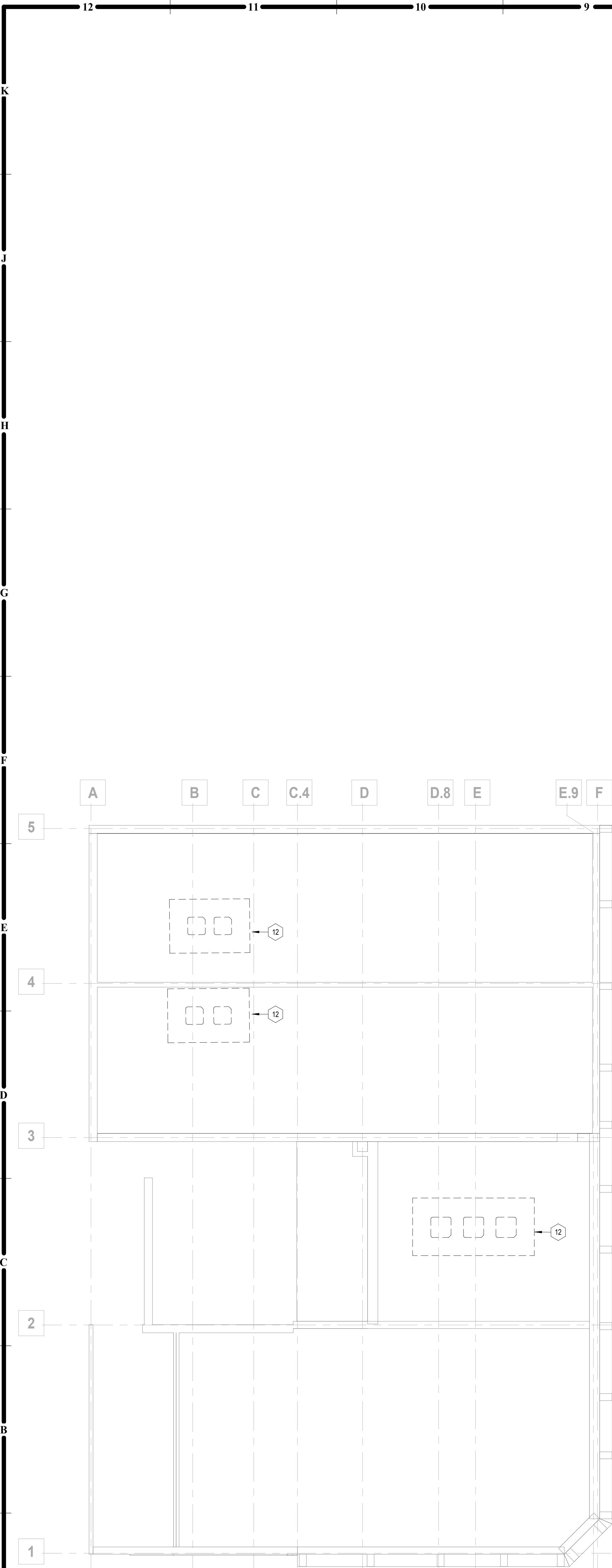
FOR USE ON DOOR (S):

S-100C

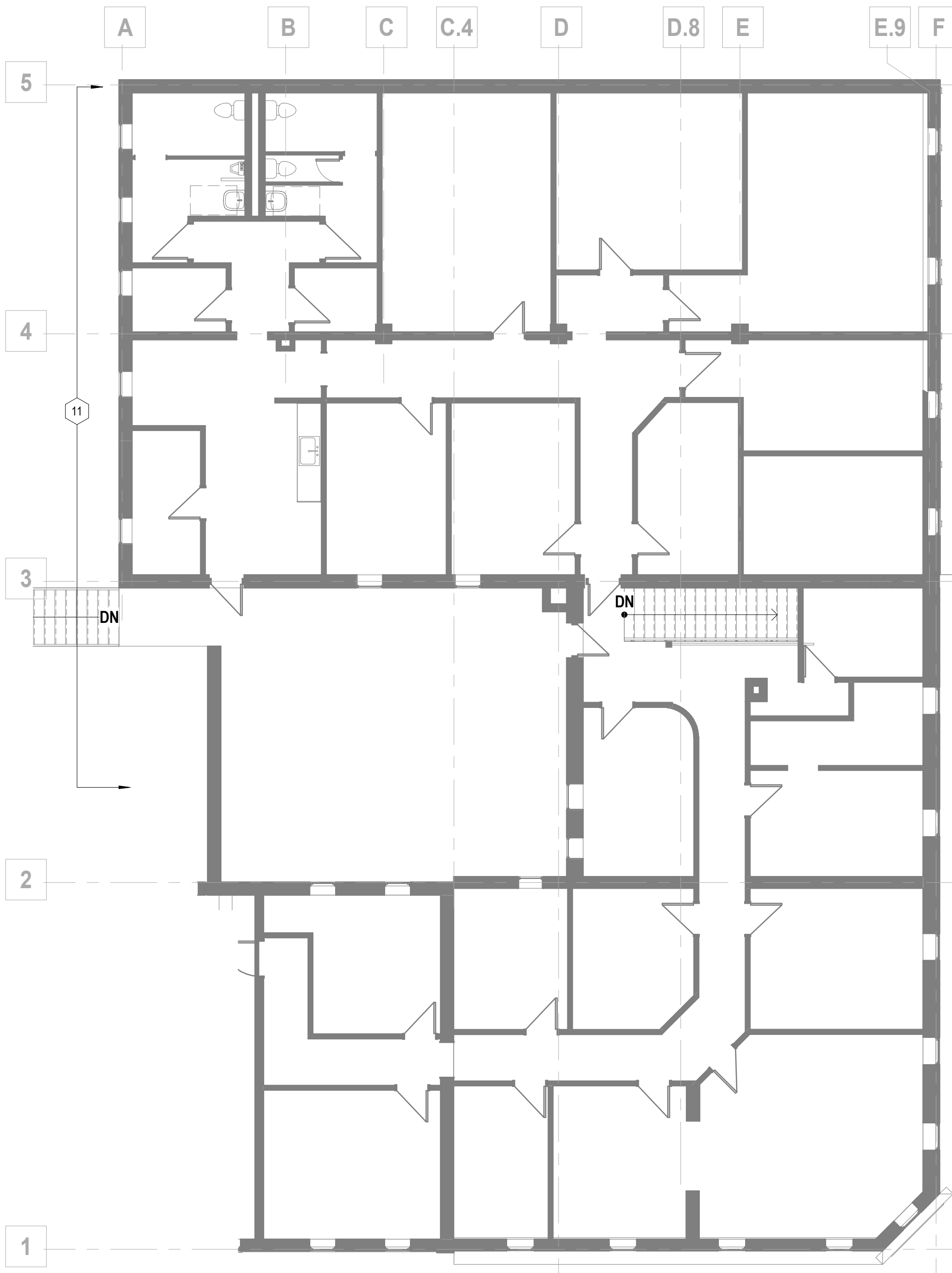
PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY	DESCRIPTION
3 EA	HINGE
1 EA	STOREROOM
1 EA	FSIC CORE
1 EA	FSIC CORE
1 EA	SURFACE CLO
1 EA	RAIN DRIP
1 EA	GASKETING
1 EA	DOOR SWEEP
1 EA	THRESHOLD
1 EA	DOOR CONTA

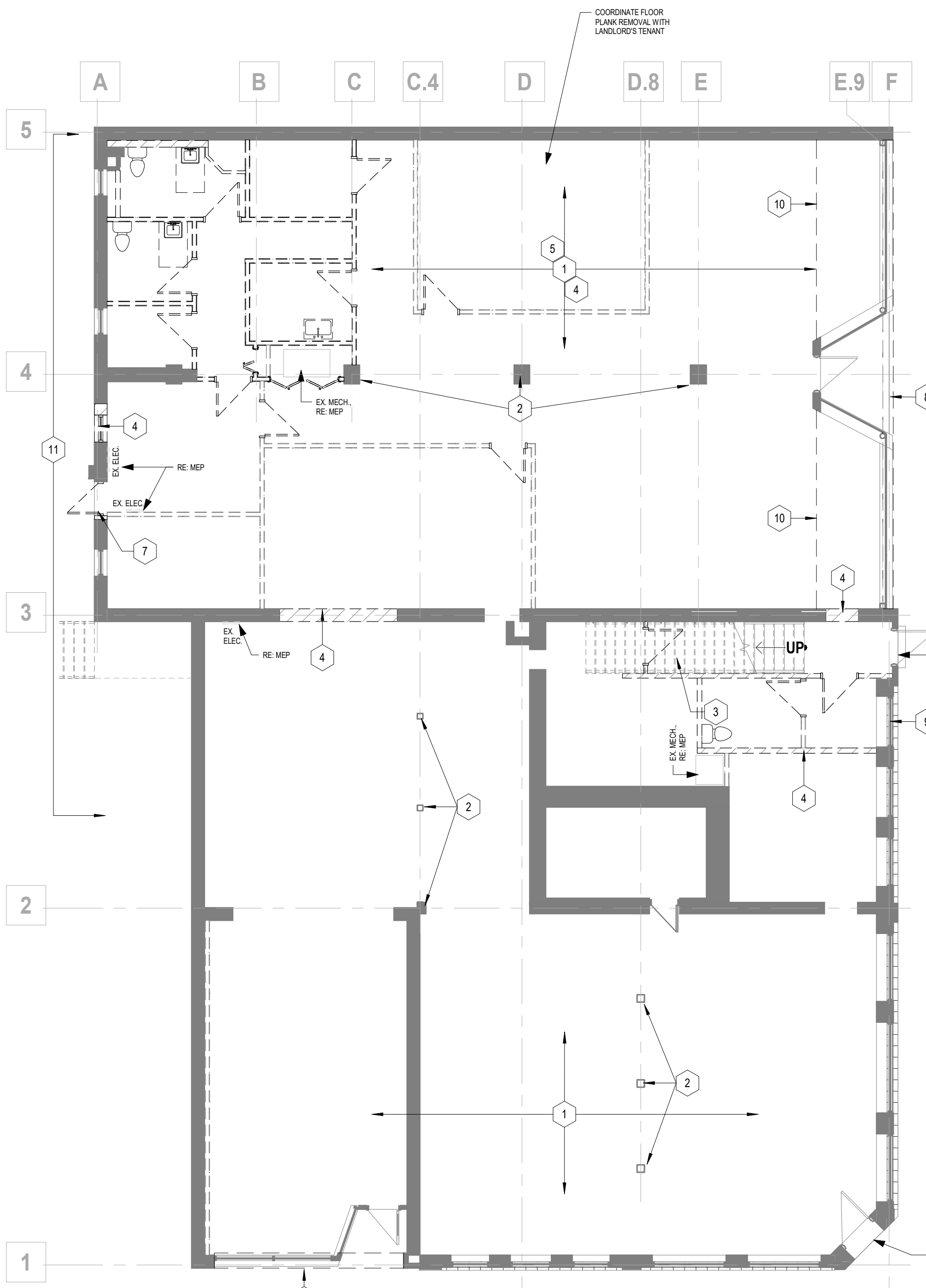
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A12 ROOF DEMO PLAN
1/8" = 1'-0"



A8 2ND FLOOR DEMO PLAN
1/8" = 1'-0"



A4 1ST FLOOR DEMO PLAN
1/8" = 1'-0"

GEN. DEMO NOTES

1. CONTRACTOR TO VISIT PROJECT SITE AND BUILDING, PRIOR TO BID.
2. BUILDING AND SITE TO REMAIN SECURE DURING DEMOLITION AND CONSTRUCTION.
3. PROTECT ALL ITEMS TO REMAIN (WALLS, PLUMBING FIXTURES, PIPING, HVAC UNITS, COLUMNS, ETC.).
4. CARE IS TO BE EXERCISED IN THE DEMOLITION OPERATIONS. EXISTING SURFACES TO REMAIN SHALL BE PROTECTED. ANY DAMAGE INCURRED AS A RESULT OF DEMOLITION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL BEAR THE COST OF REPAIRING SUCH DAMAGE.
5. ALL OPENINGS IN WALLS AND ROOFS RESULTING FROM EQUIPMENT AND/OR PIPE REMOVAL SHALL BE SEALED WEATHERTIGHT. ALL CONDITIONS SHALL BE LEFT SAFE AND HAZARD FREE.
6. CONTRACTOR TO REPAIR ANY AREAS DAMAGED DURING DEMOLITION.
7. CONTRACTOR TO COORDINATE DEMOLITION OPENINGS WITH NEW PLANS AND ELEVATIONS.
8. ALL MEP SYSTEMS TO BE REMOVED TO BE FULLY COORDINATED WITH EXISTING CONDITIONS. ALL SYSTEMS TO BE REMOVED COMPLETELY THAT ARE NOT BEING RE-UTILIZED.
9. PROTECT EXISTING CONDITIONS AND MAINTAIN WEATHER TIGHTNESS FOR ALL OCCUPIED UNOCCUPIED SPACES, BOTH VERTICALLY AND HORIZONTALLY FOR THE ENTIRE DURATION THAT THE BUILDING IS EXPOSED TO THE ELEMENTS. PATCH/REPAIR/REPLACE AS REQUIRED.

DEMO FLOOR PLAN KEYED NOTES

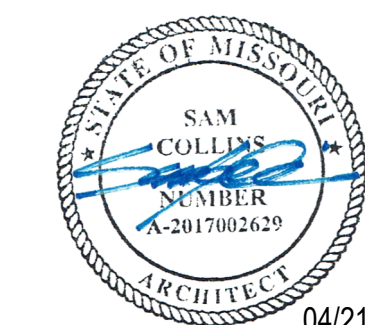
MARK	DESCRIPTION
1	REMOVE EXISTING FLOOR AND ALL ASSOCIATED CONSTRUCTION. PREPARE ENTIRE SUB-FLOOR FOR NEW DRAIN TILE AND CLEAN GRAVEL. EXTERIOR WALLS AND FOUNDATIONS TO BE PREPARED FOR NEW WATERPROOFING BELOW GRADE.
2	PROTECT COLUMNS AND BRACE AS NECESSARY TO PROVIDE FULL STABILITY DURING REWORK OF SUB-FLOOR AREA.
3	EXISTING MAIN STAIR TO 2ND LEVEL TO REMAIN. PROTECT STAIR AND BRACE AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY WHILE SUB-FLOOR IS REMOVED. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.
4	REMOVE EXISTING DOORS/FRAMES/WALLS AND ROUGH-INS FOR MEP SYSTEMS. REFER TO MEP FOR ADDITIONAL NOTES.
5	REMOVE EXISTING RESTROOM CORE AND ALL ASSOCIATED MEP SYSTEMS. REFER TO MEP FOR ADDITIONAL INFORMATION.
6	REMOVE WINDOW AND PREPARE OPENING FOR NEW EGRESS DOOR. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.
7	REMOVE EXISTING WEATHERHOOD AND LOUVER ABOVE EXTERIOR DOOR. REMOVE DOOR AND ENLARGE OPENING FOR NEW EGRESS DOOR. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.
8	REMOVE WINDOW SYSTEM AND ALL FAILED COMPONENTS. PREPARE OPENING FOR NEW WINDOW SYSTEM, FRAMING AND FLASHINGS.
9	REMOVE BROKEN GLASS. PREPARE FOR NEW GLASS INSTALL.
10	REMOVE PLATFORM AND ALL NON-STRUCTURAL FRAMING.
11	REMOVE ALL COMPONENTS THAT NO LONGER ARE ACTIVE, IN GOOD WORKING ORDER, OR ABANDONED. COORDINATE WITH MEP FOR ADDITIONAL ITEMS TO BE REMOVED.
12	PREPARE ROOF FOR NEW RTU CURBS AND OPENINGS. COORDINATE EXACT LOCATIONS WITH MEP/STRUCTURAL DOCUMENTS.

MAIN STREET BUILDING IMPROVEMENTS

230 SW MAIN ST.
LEE'S SUMMIT, MO 64063

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REVISION DATES:



PROFESSIONAL SEAL

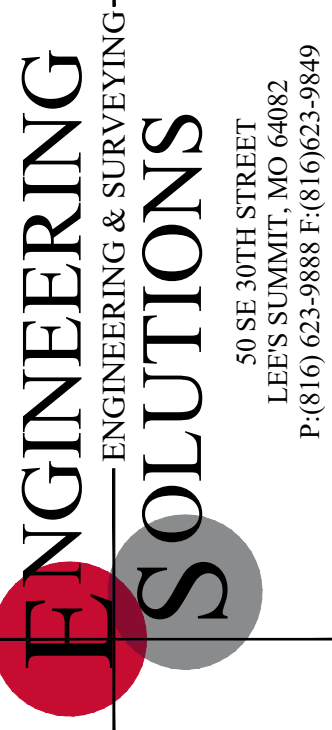
D101

ISSUE DATE: 21 APRIL, 2022
COLLINS WEBB #: 21121

DEMO PLANS



PERMIT DOCUMENTS



Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005000319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Preliminary Development Plans
230 SW Main Street
Lee's Summit, Jackson County, Missouri

Project: 228 SW MAIN, L&MO
Issue Date: April 21, 2022

Demolition Plan
Preliminary Development Plans
230 SW Main Street
Lee's Summit, Jackson County, Missouri

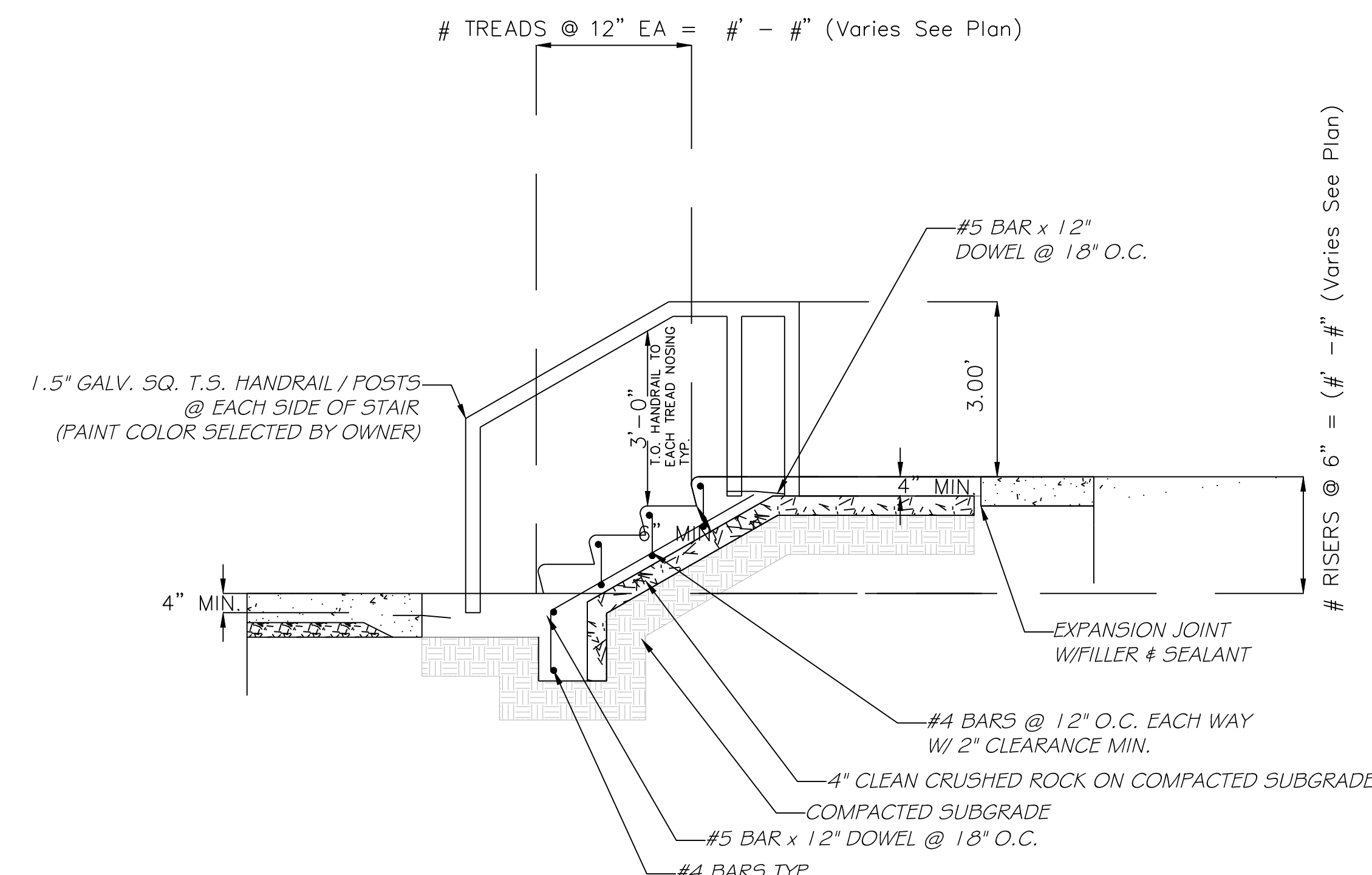
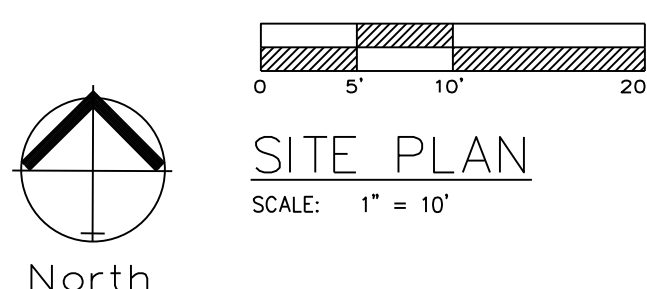


Matthew J. Schlicht
MO PE 2006018708
KS PE 19071
OK PE 23225
NE PE E-14335

REVISIONS
City Comments 5/17/2022
Patio Revision 9/23/2022

C.010





6" PORTLAND CEMENT CONCRETE
With 6x6 W.W.F. REINFORCING

4" AGGREGATE - ASTM C33 SIZE NO. 57 or equivalent

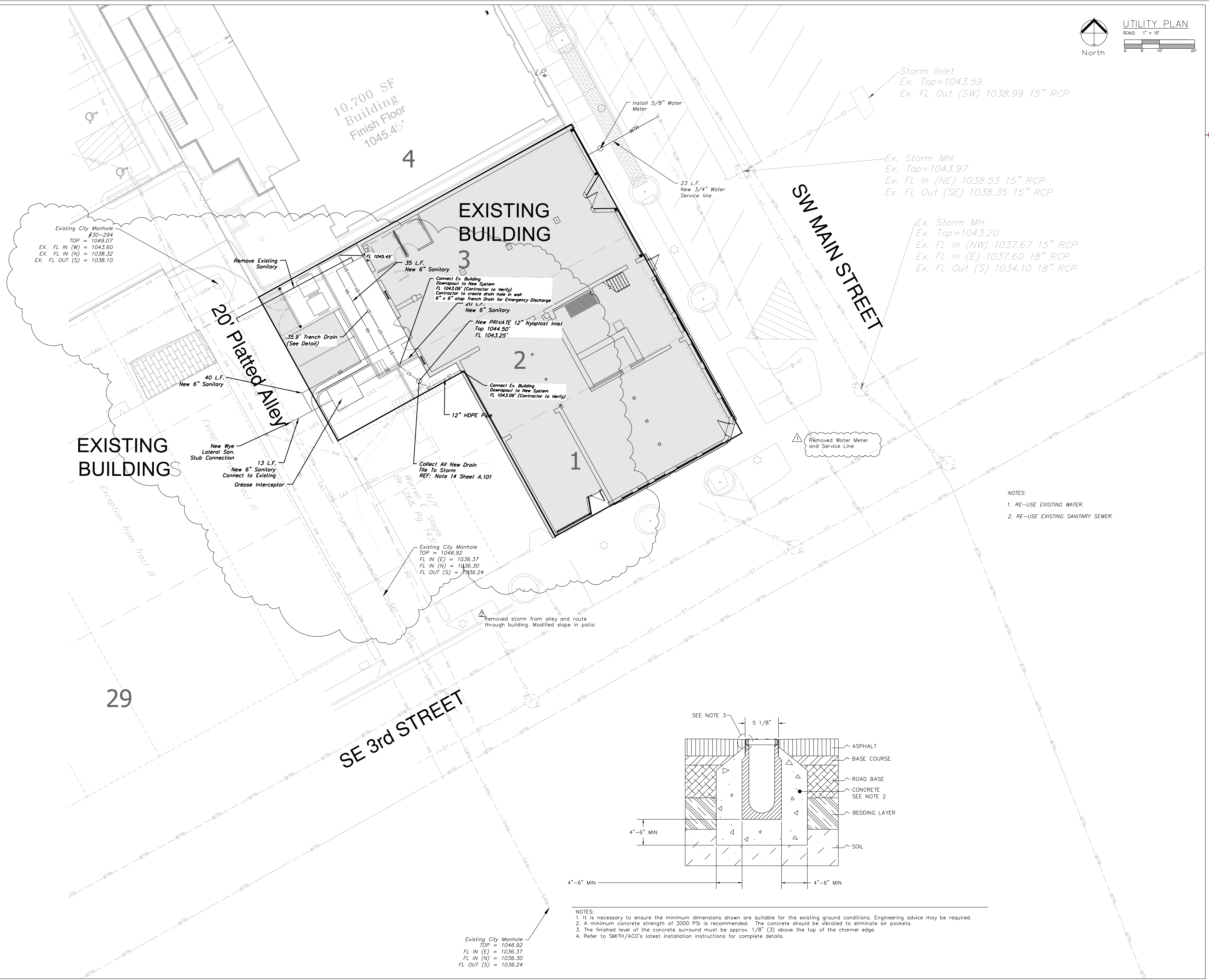
CONCRETE PAVEMENT

NOT TO SCALE





- Notes
1. Contractor is responsible for verifying all existing utility locations prior to excavation
 2. There are no known natural or artificial water storage detention areas, or wetlands in the area designated for construction
 3. No part of the project lies within the 100 year flood plain
 4. All erosion and sediment control measures need to be implemented prior to construction
 5. Additional erosion control may be required by the City Engineer, Design Engineer or Owner at any time problematic areas are noted in the field or existing measures are found to be ineffective
 6. Soil Stabilization of disturbed areas shall be completed within 14 days of construction activity
 7. Contractor responsible for all density testing of roadway subgrade and granular base.



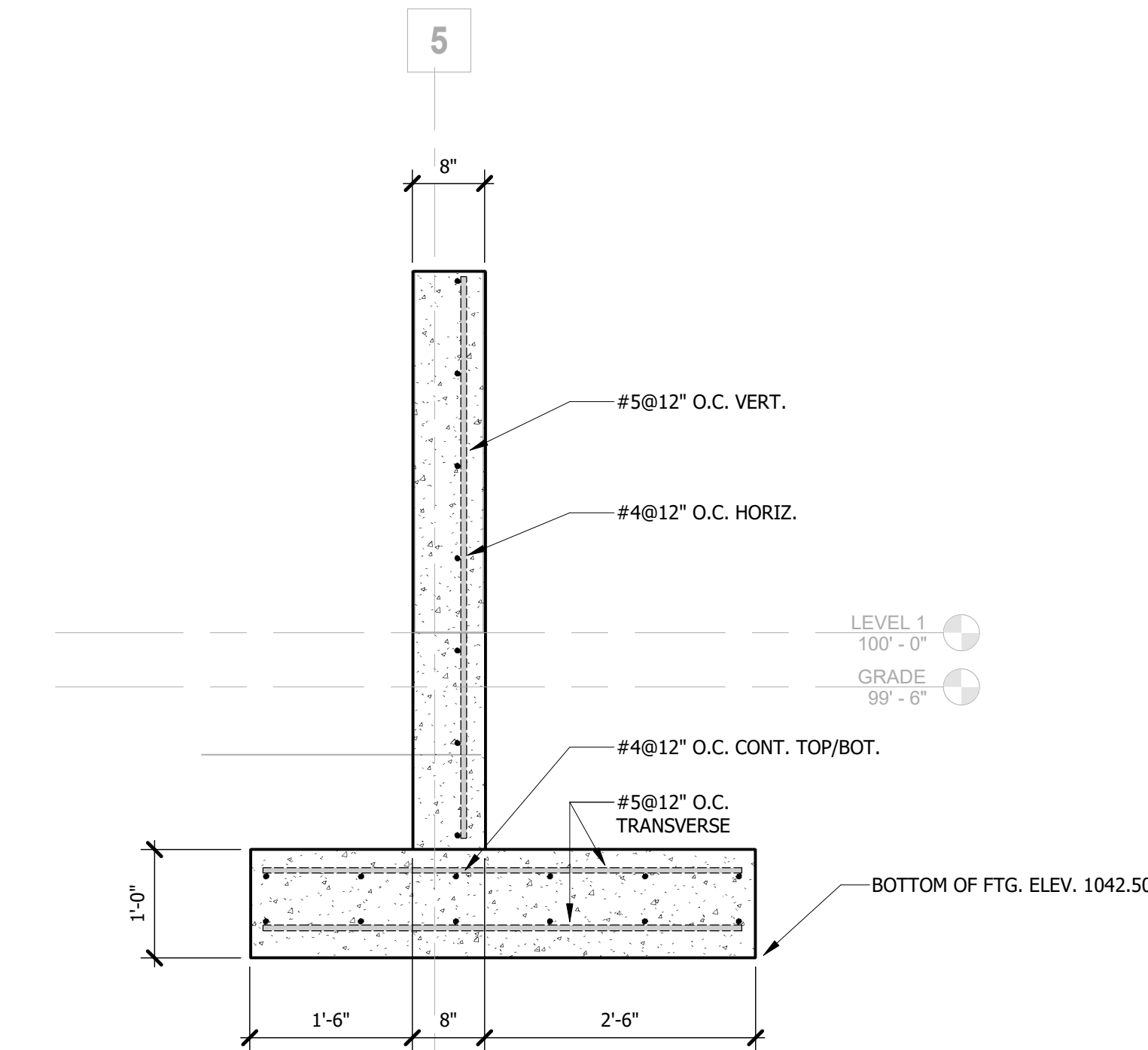
1. ALL WORK SHALL CONFORM TO 2018 INTERNATIONAL BUILDING CODE AS ADOPTED AND AMENDED BY THE CITY OF LEE'S SUMMIT, MISSOURI.
2. DESIGN LOADS
- A. OVERALL BUILDING CLASSIFICATIONS
- | | |
|--|------|
| 1. RISK CATEGORY | II |
| 2. SNOW IMPORTANCE FACTOR, I_s | 1.00 |
| 3. ICE IMPORTANCE FACTOR - WIND, I_w | 1.00 |
| 4. SEISMIC IMPORTANCE FACTOR, I_e | 1.00 |
- B. SLAB ON GRADE FLOOR LOADS
- | | |
|----------------------|--|
| 1. LIVE LOAD | 100 PSF |
| 2. CONCENTRATED LOAD | 3000 LB ACTING ON AN AREA 4.5 IN. BY 4.5 IN. |
- C. ROOF DEAD AND LIVE LOADS
- | | |
|-------------------------|----------------|
| 1. DEAD LOAD TOP CHORD | 20 PSF |
| 2. DEAD LOAD BOT. CHORD | 5 PSF |
| 3. LIVE LOAD TOP CHORD | 20 PSF |
| 4. LIVE LOAD BOT. CHORD | 0 PSF (U.N.O.) |
- D. ROOF SNOW LOADS
- | | |
|--------------------------------|-----------|
| 1. GROUND SNOW LOAD, P_g | 15 PSF |
| 2. FLAT ROOF SNOW LOAD, P_f | 11.34 PSF |
| 3. SNOW EXPOSURE FACTOR, C_e | 0.9 |
| 4. THERMAL FACTOR, C_t | 1.2 |
| 5. SLOPE FACTOR, C_s | 0.6 |
| 6. DRIFTING | PER CODE |
- E. WIND LOADS
- | | |
|---|----------|
| 1. BASIC WIND SPEED (3 SECOND GUST) | 107 MPH |
| 2. EXPOSURE CATEGORY | C |
| 3. INTERNAL PRESSURE COEFFICIENT, GC_{pi} | +/- 0.18 |
| 4. COMPONENTS AND CLADDING PER ASCE 7-16, REFER TO XX/XXXX. | |
- F. SEISMIC LOADS
- | | |
|-----------------------------------|---|
| 1. S_s | 0.189 |
| 2. S_1 | 0.105 |
| 3. SITE CLASS | C |
| 4. S_{ps} | 0.164 |
| 5. S_{ol} | 0.105 |
| 6. SEISMIC DESIGN CATEGORY | B |
| 7. SEISMIC FORCE RESISTING SYSTEM | WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR |
- G. ROOF RAIN LOADS
- | | |
|---|---------|
| 1. 60-MIN DURATION/100 YEAR RAIN INTENSITY, I | 3.20 IN |
| 2. 15-MIN DURATION/100 YEAR RAIN INTENSITY, I | 1.61 IN |
8. DESIGN BASE SHEAR
- | | |
|--|--|
| 9. DESIGN RESPONSE COEFFICIENT, C_s | 0.025 |
| 10. RESPONSE MODIFICATION COEFFICIENT, R | 6.5 |
| 11. ANALYSIS PROCEDURE USED | EQUIVALENT LATERAL FORCE (ELF) PROCEDURE |

3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS PRIOR TO FABRICATION. IF DISCREPANCIES EXIST BETWEEN CONTRACT DRAWINGS, AND/OR SHOP DRAWINGS NOTIFY THE ENGINEER OF RECORD.
4. THE CONTRACTOR SHALL REVIEW DRAWINGS FROM ALL OTHER DISCIPLINES FOR PERTINENT MISC. ITEMS OR INFORMATION RELATED TO THE STRUCTURAL WORK AND COORDINATE AS REQUIRED.
5. THE BUILDING IS NOT STRUCTURALLY STABLE UNTIL ALL CONNECTIONS, FRAMING, SHEAR WALLS, PERMANENT BRACING, AND EXTERIOR LOAD-BEARING WALLS ARE COMPLETE AND HAVE ACHIEVED THEIR RESPECTIVE DESIGN STRENGTHS. CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING STRUCTURAL STABILITY DURING ERECTION AND CONSTRUCTION. TEMPORARY BRACING SYSTEMS ARE NOT TO BE REMOVED UNTIL STRUCTURAL WORK IS COMPLETE.
6. PROVIDE ADEQUATE SHORING DURING CONSTRUCTION TO RESIST FORCES SUCH AS WIND AND UNBALANCED LOADS DUE TO CONSTRUCTION. DO NOT BACKFILL UNTIL CONCRETE HAS CURED 14 DAYS.

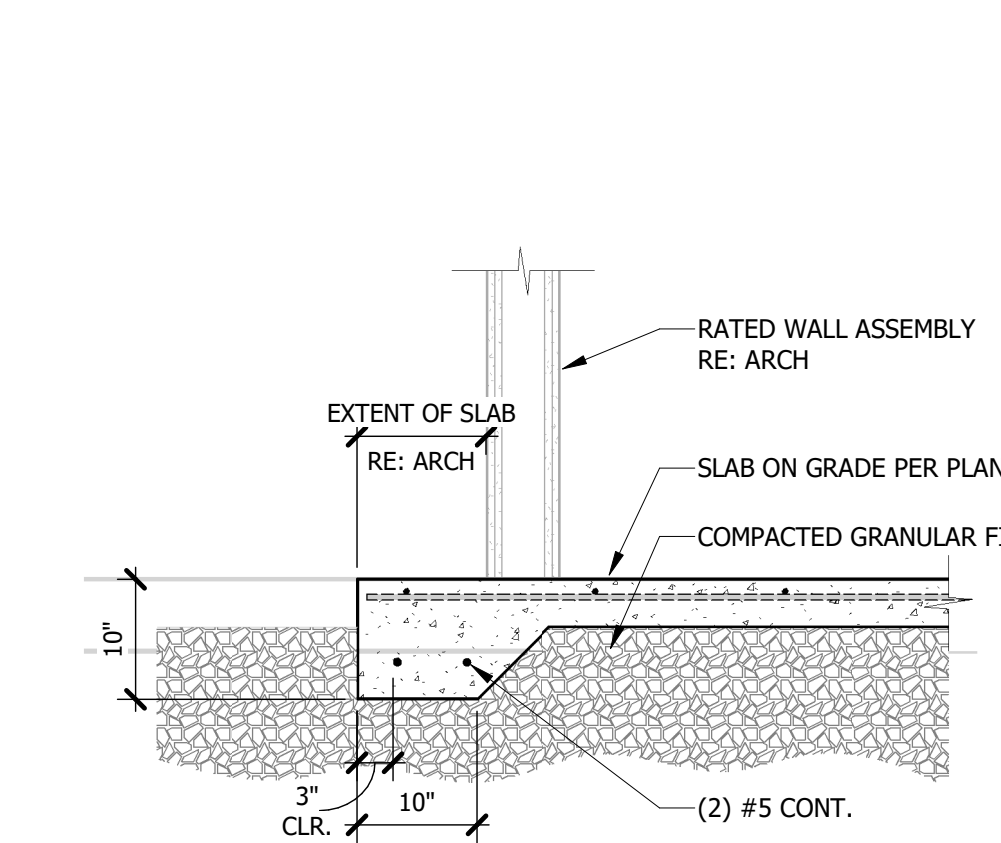
9. CONCRETE
- A. CAST-IN-PLACE CONCRETE CONSTRUCTION SHALL CONFORM TO LATEST APPLICABLE AMERICAN CONCRETE INSTITUTE DOCUMENTS, ACI-301, 305, 306, 315, 318, AND 347 UNLESS NOTED OTHERWISE IN THESE CONTRACT DOCUMENTS.
- B. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL DEVELOP A 28 DAY COMPRESSIVE STRENGTH AND HAVE MAXIMUM WATER/CEMENT RATIOS AS FOLLOWS:
- | | |
|---|-------------------------|
| 1. FOOTINGS, GRADE BEAMS, WALLS, BEAMS, COLUMNS: | 4000 PSI (w/c MAX 0.45) |
| 2. SLAB ON GRADE: | 4000 PSI (w/c MAX 0.42) |
| 3. REFER TO THE SPECIFICATION FOR AIR-ENTRAINED CONCRETE. | |
- C. SLABS-ON-GRADE SHALL DEVELOP A 90 DAY COMPRESSIVE STRENGTH. IT IS THE INTENT OF THESE CONCRETE SPECIFICATIONS THAT THE CONTRACTOR SUPPLY CONCRETE MIXES WITH A MINIMUM AMOUNT OF WATER IN ORDER TO LIMIT PLASTIC SHRINKAGE CRACKING IN FRESHLY PLACED CONCRETE. IT IS EXPECTED THAT PRODUCING WORKABILITY FOR CONCRETE MIXES WILL REQUIRE THE ADDITION OF WATER-REDUCING CHEMICAL ADMIXTURES.
- D. CONCRETE MIX DESIGNS SHALL INCLUDE ALL APPLICABLE ADMIXTURES.
- E. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- 1" (ASTM C-145) AS DELIVERED IN THE FIELD. CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8" FOR WORKABILITY IF ADMIXTURE IS TO BE ADDED IN THE FIELD IS SHALL BE ADDED THROUGH THE USE OF AN EXTERNAL MEASURING DEVICE (I.E. 5 GALLON BUCKET).
- F. CONCRETE EXPOSED TO WEATHER, PARKED VEHICLES, AND/OR DEICING CHEMICAL SHALL CONTAIN 6% (+/- 1%) ENTRAINED AIR BY VOLUME.
- G. CHAMFER ALL EXPOSED CORNERS OF CONCRETE WALLS, 3/4" UNLESS NOTED OTHERWISE.
- H. ALL CONTROL JOINTS IN CONCRETE SLABS-ON-GRADE SHALL BE CUT TO 1/3 OF DEPTH WHEN USING WET-CUTTING PROCESS AND 1/4 OF DEPTH WHEN USING EARLY-ENTRY DRY-CUT PROCESS. CUT JOINTS AS SOON AS APPLICABLE PER PROCESS USED AFTER CONCRETE HAS BEEN PLACED WITHOUT DISLORING AGGREGATE, OR USE A KEYED COLD JOINT.
- I. CUT SLABS-ON-GRADE INTO AREAS OF APPROXIMATELY 225 SQUARE FEET MAINTAINING AS CLOSE TO SQUARE AREAS AS POSSIBLE. LENGTH TO WIDTH RATIOS OF JOINTED PANELS SHALL NOT EXCEED 1.5:1. COORDINATE LOCATIONS OF CONTROL JOINTS WITH ARCHITECT.
- J. CONTROL JOINTS IN WALLS SHALL BE PLACED AT 20'-0" O.C. MAXIMUM UNLESS NOTED OTHERWISE. LOCATE JOINTS BESIDE PIERS INTEGRAL WITH WALLS, NEAR CORNERS, AND IN CONCEALED LOCATIONS WHERE POSSIBLE. CONSTRUCTION JOINTS MAY BE PLACED IN LIEU OF CONTROL JOINTS AT CONTRACTOR'S DISCRETION. COORDINATE LOCATION OF CONTROL JOINTS WITH ARCHITECT.
- K. PRIOR TO PLACING CONCRETE IN ANY LOCATION, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO HAVE THOROUGHLY CHECKED AND COORDINATED ALL DIMENSIONS, ELEVATIONS, OPENINGS, RECESS, AND BLOCKOUTS AS SHOWN ON ANY CONTRACT DRAWINGS. IN THE EVENT ERRORS, CONFLICTS, OR OMISSIONS EXIST, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE ARCHITECT OR ENGINEER FOR NECESSARY CORRECTIVE ACTION.
- L. EMBEDDED ITEMS ARE TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR PRIOR TO PLACING CONCRETE.
- M. ANCHOR RODS AND ANCHOR BOLTS SHALL BE HELD IN PLACE WITH A RIGID TEMPLATE.
- N. HORIZONTAL JOINTS BEYOND THOSE SHOWN IN THE CONTRACT DOCUMENTS SHALL NOT BE CONSTRUCTED WITHOUT THE APPROVAL OF THE ARCHITECT AND ENGINEER.

12. MASONRY
- A. MASONRY UNIT COMPRESSIVE STRENGTH (f'_m) = 1500 PSI. MORTAR - TYPE S.
- B. LINTELS SHALL BE STEEL BEAMS OR MASONRY BOND BEAMS AS SHOWN ON THE PLANS. OPENINGS LESS THAN 4'-0" WIDE SHALL BE A BOND BEAM WITH (2) #5 CONTINUOUS EXTENDING PAST OPENINGS A MIN. OF 2'-0".
- C. GROUT ALL REINFORCED CELLS AND CELLS BELOW GRADE SOLID.
- D. PLACE A BOND BEAM WITH (2) #5 CONTINUOUS AT THE TOP OF WALLS & 8'-0" O.C. VERTICALLY.
- E. REINFORCE 8" CMU WALLS WITH #5 @ 32" O.C. VERT. AND 12" CMU WALLS WITH #5 @ 24" O.C. VERT. UNLESS NOTED OTHERWISE. IN ADDITION, REINFORCE WALL CORNERS AND JAMBS OF WINDOWS AND DOORS WITH (2) #5 EXTENDING PAST OPENINGS A MIN. OF 2'-0".
- F. BRACE THE TOPS OF PARTITION WALLS TO THE UNDERSIDE OF DECK.
13. ROUGH CARPENTRY
- A. HEADERS, JOISTS, AND RAFTERS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REQUIREMENTS. (EXAMPLE SPECIES: #2 SPRUCE-PINE-FIR)
- | | |
|----------|----------|
| 1. F_b | 875 PSI |
| 2. F_v | 135 PSI |
| 3. F_c | 1150 PSI |
| 4. E | 1400 KSI |
- B. TIMBER FRAMING MEMBERS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REQUIREMENTS. (EXAMPLE SPECIES: #2 SPRUCE-PINE-FIR)
- | | |
|----------|----------|
| 1. F_b | 875 PSI |
| 2. F_v | 135 PSI |
| 3. F_c | 1150 PSI |
| 4. E | 1400 KSI |
- C. ALL LVL MEMBERS SHALL BE 2.0E MICROLAM OR APPROVED EQUAL.
- D. ALL WOOD FRAMING MEMBERS INDICATED ARE NOMINAL SIZES. PROVIDE ACTUAL DRESSED SIZES, KILN-DRIED, WITH MAXIMUM IN-PLACE MOISTURE CONTENT OF 19%.
- E. ALL BOLTS ARE A36 OR A307, GRADE 1, AND ALL NAILS ARE COMMON WIRE NAILS UNLESS NOTED OTHERWISE.
- F. LAY ALL STRUCTURAL PANELS WITH FACE GRAIN PERPENDICULAR TO SUPPORTING MEMBERS AND OFFSET END JOINTS 4'-0". PANELS TO BE APA RATED AND STAMPED FOR THE LOADING SHOWN IN SECTION 2 "DESIGN" AND SHOULD MATCH THE SUPPORT SPACING SHOWN ON THE PLANS.
- G. ROOF DECKING SHALL BE 3/4" THICK APA RATED EXTERIOR GRADE SHEATHING FASTENED WITH 10d NAILS AT 6" O.C. ON EDGES AND 12" O.C. IN FIELD UNLESS NOTED OTHERWISE. FASTENER QUALITY, QUANTITY, SIZE, AND SPACING SHALL COMPLY WITH IBC FASTENING SCHEDULE (TABLE 2304.9) UNLESS NOTED OTHERWISE.
- H. ALL WOOD IN CONTACT WITH CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESERVATIVE TREATED.

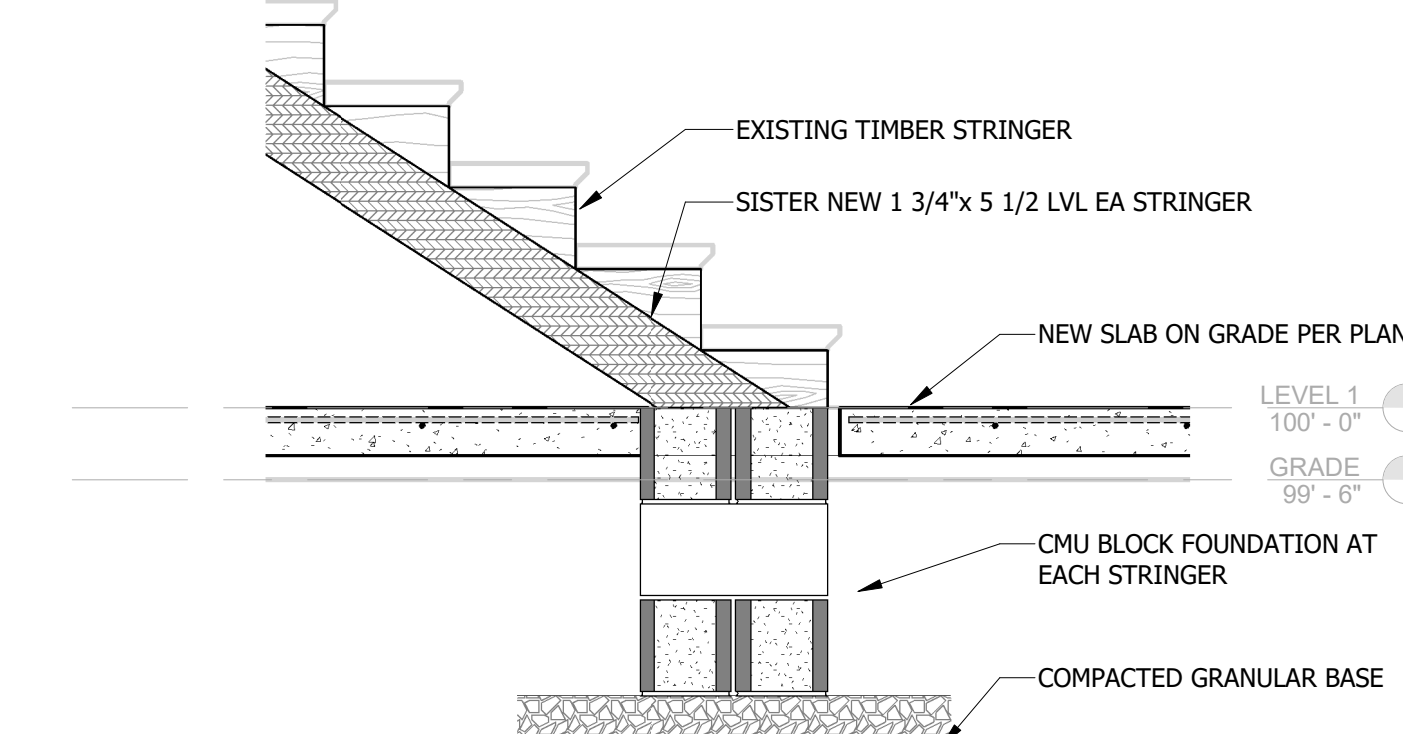
14. STRUCTURAL STEEL
- A. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, LATEST APPLICABLE EDITION AND AISC CODE OF STANDARD PRACTICE.
- B. ALL STRUCTURAL STEEL FOR WIDE FLANGE SHALL BE A992 GRADE 50 UNLESS NOTED OTHERWISE. ALL ANGLES, PLATES AND CHANNELS SHALL BE ASTM A36 UNLESS NOTED OTHERWISE. ALL RECTANGULAR AND ROUND HSS SHAPES SHALL BE ASTM A500, GRADE B.
- C. ALL BOLTS SHALL BE 3/4" Ø A-325 BOLTS WITH HEAVY HEX HEADS UNLESS NOTED OTHERWISE. ALL CONNECTIONS SHALL HAVE A MINIMUM OF (2) 3/4" Ø BOLTS, BEARING TYPE CONNECTIONS ONLY.
- D. ALL STRUCTURAL STEEL WELDS IN THE SHOP OR IN THE FIELD SHALL BE PERFORMED BY A QUALIFIED WELDER AND SHALL CONFORM TO THE CURRENT REQUIREMENTS OF A.W.S.
- E. SHOP WELDED AND FIELD BOLTED CONNECTIONS ARE PREFERRED UNLESS NOTED OTHERWISE.
- F. THE CONTRACTOR SHALL PROVIDE SHELF ANGLES, GLASS SUPPORTS, LINTELS, AND OTHER MISC. STEEL AS SHOWN ON THESE DRAWINGS AS REQUIRED TO PROVIDE SUPPORT (STABILIZATION) AROUND AND THROUGHOUT THE BUILDING. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL MISC. STEEL DETAILS.



8 RETAINING WALL
3/4" = 1'-0"



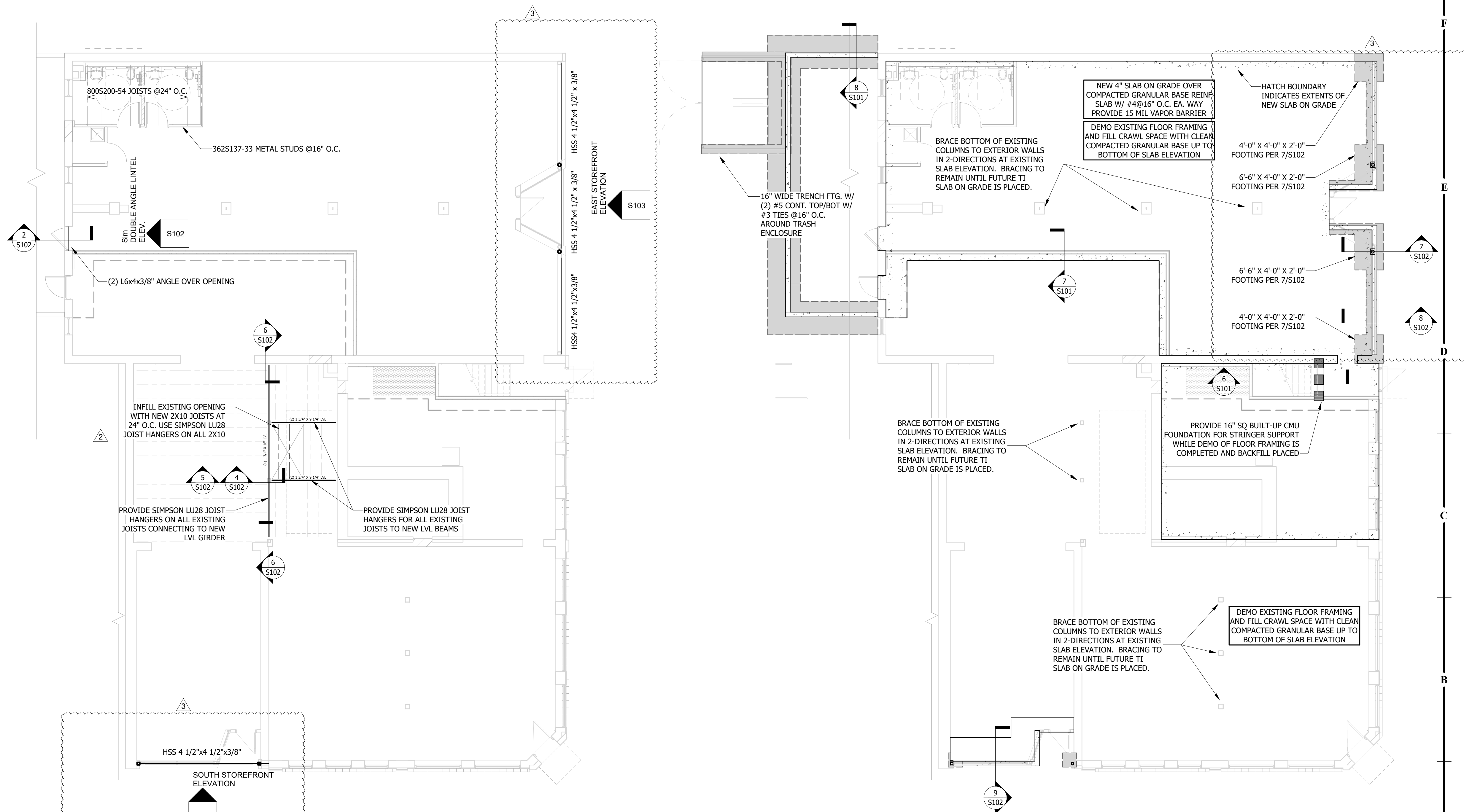
7 SLAB EDGE
3/4" = 1'-0"



6 EGRESS STAIR FRAMING
3/4" = 1'-0"

FOUNDATION PLAN NOTES:

- TOP OF CONCRETE SLAB ELEVATION = 99'-0".
- 4" SLAB ON GRADE REINFORCED WITH 6x6 W2.9xW2.9 OVER 4" GRANULAR FILL AND 10 MIL VAPOR BARRIER, UNLESS NOTED OTHERWISE.
- SLAB CONTROL AND CONSTRUCTION JOINTS PER DETAIL A5/S301. CONSTRUCTION JOINTS MAY BE SUBSTITUTED FOR CONTROL JOINTS AT THE CONTRACTOR'S DISCRETION.
- ISOLATION JOINTS PER DETAIL A12/S301.
- FOOTING STEPS PER DETAIL E1/S301.
- #4x5'-0" LONG AT ALL RE-ENTRY CORNERS.
- CONTRACTOR TO COORDINATE ALL FLOOR AND SLAB PENETRATIONS WITH ALL OTHER DISCIPLINES.
- DURING INSTALLATION OF ALL POST CONSTRUCTION ANCHORS, CARE MUST BE TAKEN TO AVOID ALL REINFORCING.
- REFER TO ARCHITECTURAL FOR NON-LOAD BEARING WALL LOCATIONS.
- REFER TO ARCHITECTURAL FOR ALL DIMENSIONS NOT SHOWN ON THESE DRAWINGS.
- ALL JACK STUDS TO BE CARRIED DOWN TO FOUNDATION LEVEL.
- SHEAR WALL HOLDOWN PER DETAIL K16/S201.
- REFER TO SHEET S201 FOR SHEAR WALL INFORMATION.
- ALL SILL ANCHORS TO BE 1/2" DIA. SIMPSON TITEN HD @32" WITH 3 1/2" EMBEDMENT.



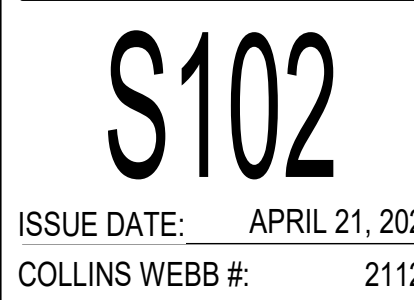
9 2ND FLOOR PLAN
1/8" = 1'-0"

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

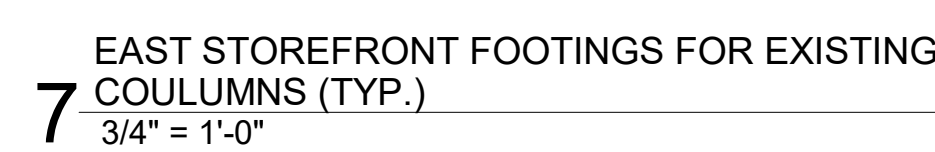
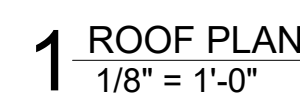
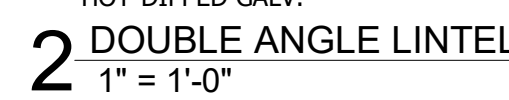
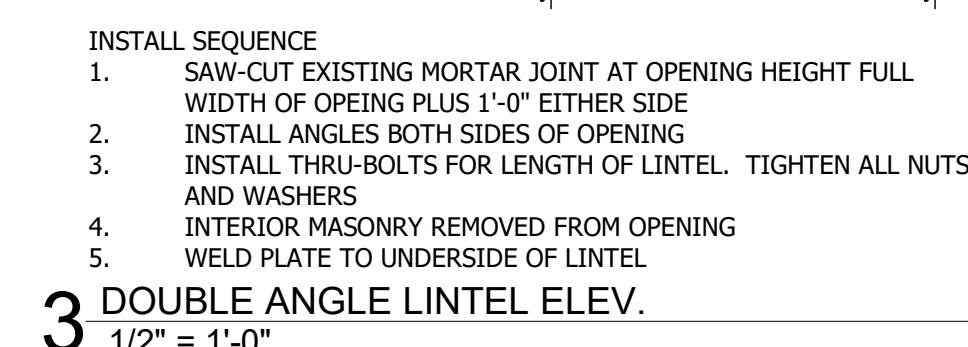
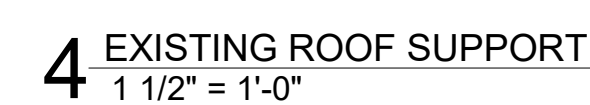
230 SW MAIN ST.
LEE'S SUMMIT, MO 64063

REVISION DATES:

1	City Comments
2	Revision 2
3	Owner Revisions



PERMIT SET



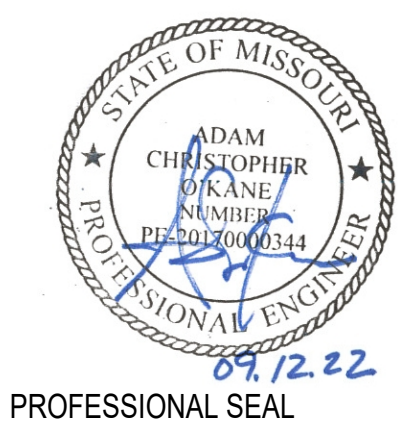
MAIN STREET LANDLORD IMPROVEMENTS

230 SW MAIN ST.
LEE'S SUMMIT, MO 64063

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REVISION DATES:

3	Owner	Revisions	9/12/22
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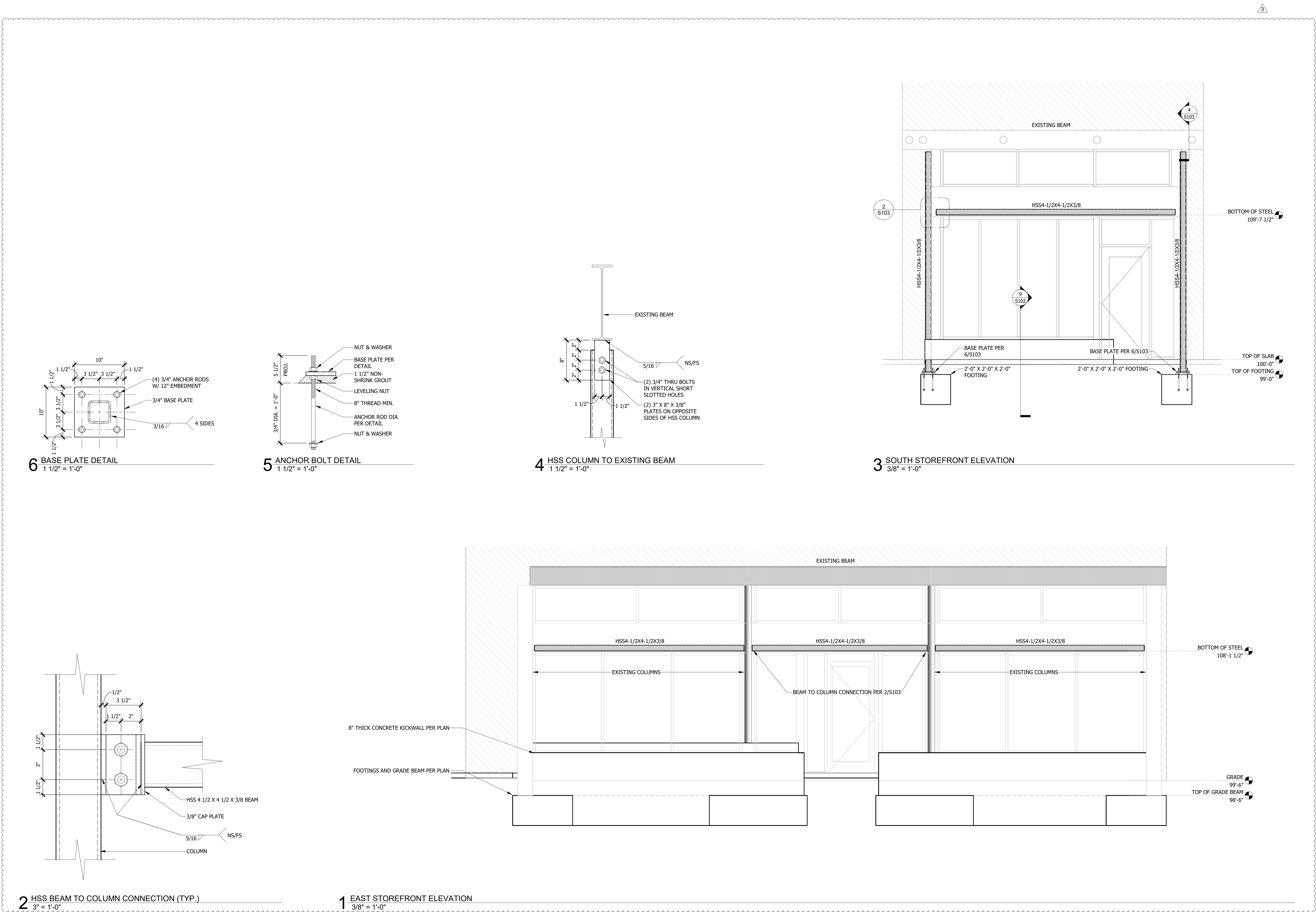
PROFESSIONAL SEAL

S103

ISSUE DATE: APRIL 21, 2022
COLLINS WEBB #: 21121

PERMIT SET

STRUCTURAL ELEVATIONS AND
SECTIONS



GENERAL NOTES: FLOOR PLANS

1. RE: GENERAL ARCHITECTURAL SHEETS FOR ADDITIONAL NOTES AND DETAILS THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0".
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD/WALL (FOG), FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS AND PER WALL TYPES SEE GENERAL SHEETS.
5. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO HINGE SIDE OF THE DOOR, ALWAYS ALLOWING A MINIMUM OF 1" FROM THE WALL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL OR OTHER PROTRUDING OBJECTS.
6. ALL ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS THE ADJOINING SPACES.
7. PROVIDE FINISH LEVELS AS DESCRIBED:
LEVEL 4:
- ALL WALLS TO BE BROUGHT UP TO LEVEL 4 FINISH.
- AREAS FOR BACK OF HOUSE EMPLOYEE OPERATIONS WHERE ROOM SIDE WALLS AND/OR CEILING HAVE PAINTED SURFACES.
CONCESSION AND CIRCULATION CORRIDORS WHERE ROOM SIDE WALLS AND/OR CEILING HAVE PAINTED SURFACES.
8. RE: FINISH LEGEND, FINISH SCHEDULE AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
9. STAIR ENCLOSURES, SHAFT WALLS, EXIT PASSAGEWAYS AND EXTERIOR WALLS TO BE COORDINATED FOR PHASE OF WORK PER MATRIX AND PROJECT SCOPING.
10. MAINTAIN AND PROTECT EXISTING EXPANSION JOINTS DURING CONSTRUCTION. PATCH/REPAIR TO MATCH EXISTING RATINGS AS REQUIRED ON THE SHELL PORTION OF PROJECT.
11. CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH ALL APPLICABLE BUILDING CODES, LOCAL RULES, AND REGULATIONS, AND ALL OTHER CODES, REGULATIONS AND GOVERNING AGENCIES HAVING JURISDICTION WITH ALL APPLICABLE AMENDMENTS UNLESS ALTERED OR CHANGED THROUGH VARIANCES OF OTHER LEGAL PROCEDURES.
12. DRAIN TILE DETAIL, PER IRC 2018, PERFORATED POLYETHYLENE (PE) PLASTIC PIPE, SMOOTH WALL, WRAPPED IN FILTER FABRIC.
13. FLUID APPLIED BARRIER AT FOUNDATION:
BASIS OF DESIGN: W.R. MENDOTA, SEALTIGHT - HYDRASTIC 935 SL #709-A.
SUBMITTAL REQUIRED - SUBMIT TO ARCHITECT.
14. GUARDRAILS - GUARDRAILS SHALL BE DESIGNED TO RESIST A LINEAR LOAD OF 50 POUNDS PER LINEAR FOOT IN ACCORDANCE WITH SECTION 4.5.1.1 OF ASCE 7. GUARDRAILS SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 200 POUNDS IN ACCORDANCE WITH SECTION 4.5.1.1 OF ASCE 7.

FLOOR PLAN KEYED NOTES

MARK	DESCRIPTION
1	EXTENTS OF NEW CONCRETE SLAB. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.
2	UNDERSIDE OF STAIR TO RECEIVE 2-HR RATING ON UNDERSIDE OF STRINGER TO MAINTAIN CONTINUOUS RATING OF FLOOR/CEILING/WALL ASSEMBLY. MUST MAINTAIN THE 2-HOUR HORIZONTAL RATING OF THE CEILING PLANE.
3	FUTURE LOCATION OF RESTROOM CORE. REFER TO MEP DOCUMENTS FOR ADDITIONAL INFORMATION.
4	ENTIRE CEILING TO RECEIVE A 2-HOUR RATING TO SEPARATE FROM FLOOR ABOVE. REFER TO UL ASSEMBLY #L511 (G506).
5	CEILING TO REMAIN. PATCH REPAIR AS REQUIRED.
6	ALL PLASTER OR GYPSUM BOARD WALLS TO BE PREPARED TO A LEVEL 4 FINISH.
7	REMOVE WINDOW AND PREPARE OPENING FOR NEW EGRESS DOOR. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.
8	ANY ROOF MODIFICATIONS TO BE COMPLETED BY JR & CO. COORDINATE WITH BUILDING OWNER. ALL DEBRIS TO BE REMOVED AND ROOFING SYSTEM TO HAVE POSITIVE SLOPE AWAY FROM BUILDING TO GUTTER SYSTEM. ENTIRE ROOF TO BE REVIEWED FOR REPAIRS. PROVIDE COMPLETE ANALYSIS TO OWNER FOR REVIEW.
9	RECONNECT SANITARY AND WATER AS REQUIRED FOR FUNCTIONAL PLUMBING. REFER TO MEP DOCUMENTS FOR ADDITIONAL INFORMATION.
10	REMOVE ALL DEBRIS FROM EXISTING ROOF. REPAIR ROOF TO ELIMINATE ANY PONDING AND PROVIDE POSITIVE DRAINAGE.
11	REPAIR ALL GUTTER SYSTEMS AND CONFIRM TO BE IN GOOD WORKING ORDER AND FREE OF DEBRIS. CONFIRM ALL SEAMS ARE WATERTIGHT AND ALL FLASHINGS TO AND AROUND GUTTER SYSTEM ARE IN GOOD WORKING ORDER. ALL GUTTERS AND DOWNSPOUTS TO BE SECURE TO THE BUILDING AND HAVE POSITIVE SLOPE FOR PROPER DRAINAGE.
12	PATCH/REPAIR STUCCO SYSTEM AND MAKE READY FOR NEW EXTERIOR PAINT.
13	INFILL EXISTING OPENING. PATCH/REPAIR AS REQUIRED. PAINT TO MATCH ADJACENT FINISH.
14	DRAIN TILE - PROVIDE 6" PERFORATED, SLEEVED DRAIN TILE AROUND ENTIRE PERIMETER AND ALONG ALL FOUNDATION WALLS. COLLECT AND CONNECT INTO STORM SEWER. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
15	INFILL OPEN STUD CAVITY WITH SIMILAR MATERIALS. PROVIDE SCRATCH AND FINISH COATS TO MATCH EXISTING. PREPARE FOR NEW PAINT FINISH.
16	INFILL OPENING IN MASONRY. MATCH EXISTING.
17	EXISTING OVERHANG TO REMAIN. PAINT SOFFIT SW 7007 CEILING BRIGHT WHITE.
18	STUCCO TO MATCH PRIMARY PAINT COLOR.
19	NEW RTU CURBS AND OPENINGS. COORDINATE EXACT LOCATIONS WITH MEP/STRUCTURAL DOCUMENTS.

FLOOR PLANS, ENLARGED PLANS, AND DETAILS

TYPE MARK	MANUFACTURER	DESCRIPTION	MODEL	WxHxD	FINISH	COMMENTS
1	BOBRICK WASHROOM EQUIPMENT, INC.	GRAB BAR, 1-1/4" DIA., SS, 42"	B-5806-42	1-1/4" DIA x 42"	SATIN W/ PEENED GRIP	1
2	BOBRICK WASHROOM EQUIPMENT, INC.	GRAB BAR, 1-1/4" DIA., SS, 36"	B-5806-36	1-1/4" DIA x 36"	SATIN W/ PEENED GRIP	1
3	BOBRICK WASHROOM EQUIPMENT, INC.	VERTICAL GRAB BAR, 1-1/4" DIA., SS, 18"	B-5806-18	1-1/4" DIA x 18"	SATIN W/ PEENED GRIP	1
4	BOBRICK WASHROOM EQUIPMENT, INC.	CLASSIC SERIES MULTI-ROLL TOILET TISSUE DISPENSER	B-2888		SATIN	1
5	BOBRICK WASHROOM EQUIPMENT, INC.	TRIMLINE SERIES SANITARY NAPKIN DISPOSAL	B-35139		SATIN	1
6	BOBRICK WASHROOM EQUIPMENT, INC.	CONTURA SERIES PAPER TOWEL DISPENSER/WASTE RECEPTACLE	B-43949		SATIN	1
7	BOBRICK WASHROOM EQUIPMENT, INC.	AUTOMATIC SOAP DISPENSER	B-2013	4 1/4" x 10 17/32" x 4 7/32"	SATIN	1
8	MIRROR - COORD. W/ OWNER			2' W x 4' H		2

GENERAL NOTES:
A. ALL TOILET ACCESSORIES LOCATIONS BASED ON PLAN LAYOUT.
B. REFER TO G002 AND MANUFACTURERS SPECIFICATIONS FOR MOUNTING HEIGHTS.
C. COORDINATE ALL MOUNTING HEIGHTS W/ PLUMBING FIXTURES TO ALLOW PROPER OPERATION & INFORM ARCHITECT IN WRITING OF ANY CONFLICTS.
D. FOR ANY ITEM NOTED AS FF&E, G.C. TO COORDINATE DIRECTLY W/ OWNER FOR PREFERRED MOUNTING HEIGHTS, U.N.O.

REMARKS:
1. SURFACE-MOUNTED.
2. MIRRORS TO BE CENTERED AT SINKS, TYP.

PLAN DETAIL - NEW STOREFRONT J4 COLUMN - EAST 1" = 1'-0"

J3 PRIVACY SCREEN ATTACHMENT 1" = 1'-0"

H12 ENLARGED PLAN - 1ST FLOOR 1/4" = 1'-0"

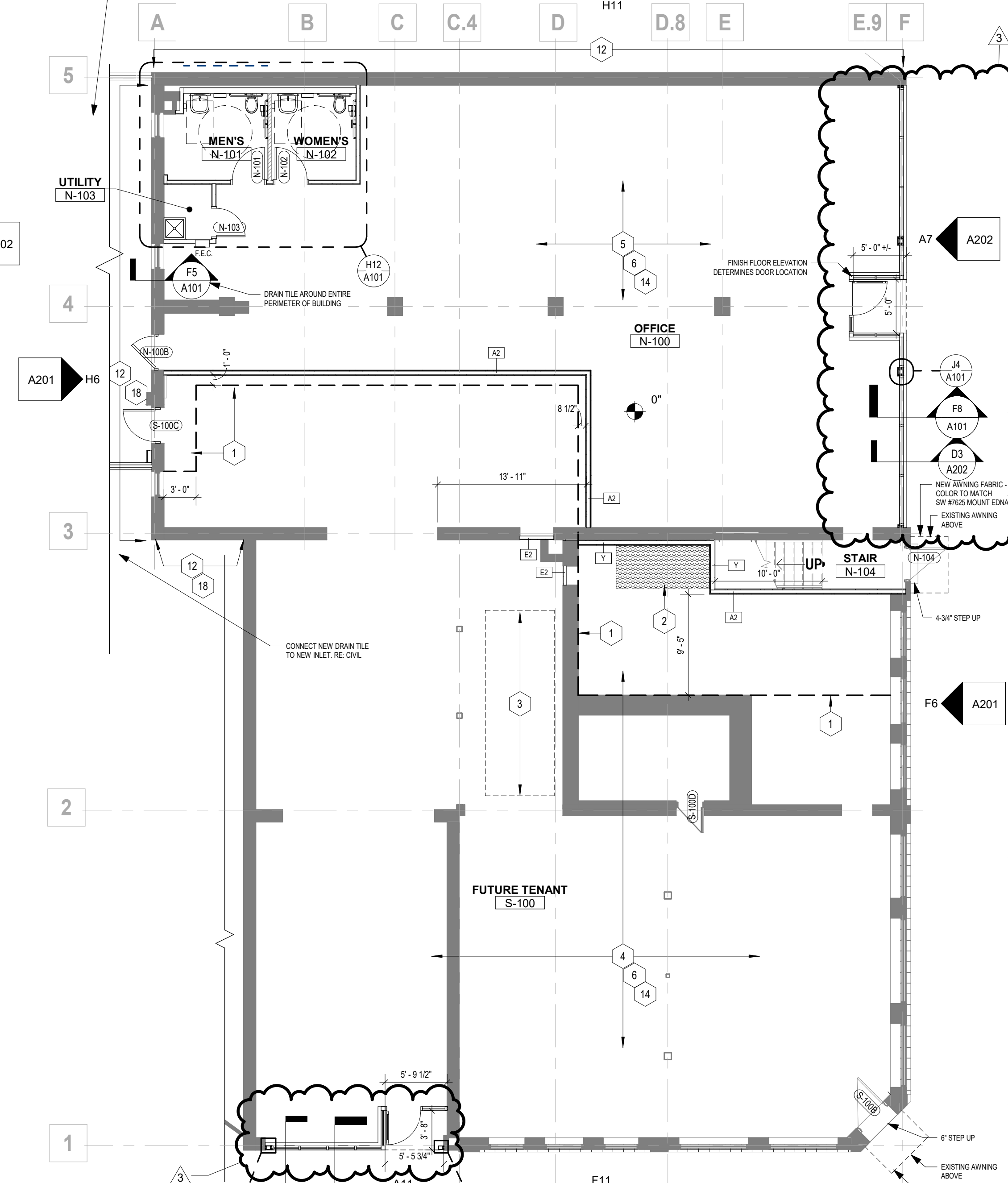
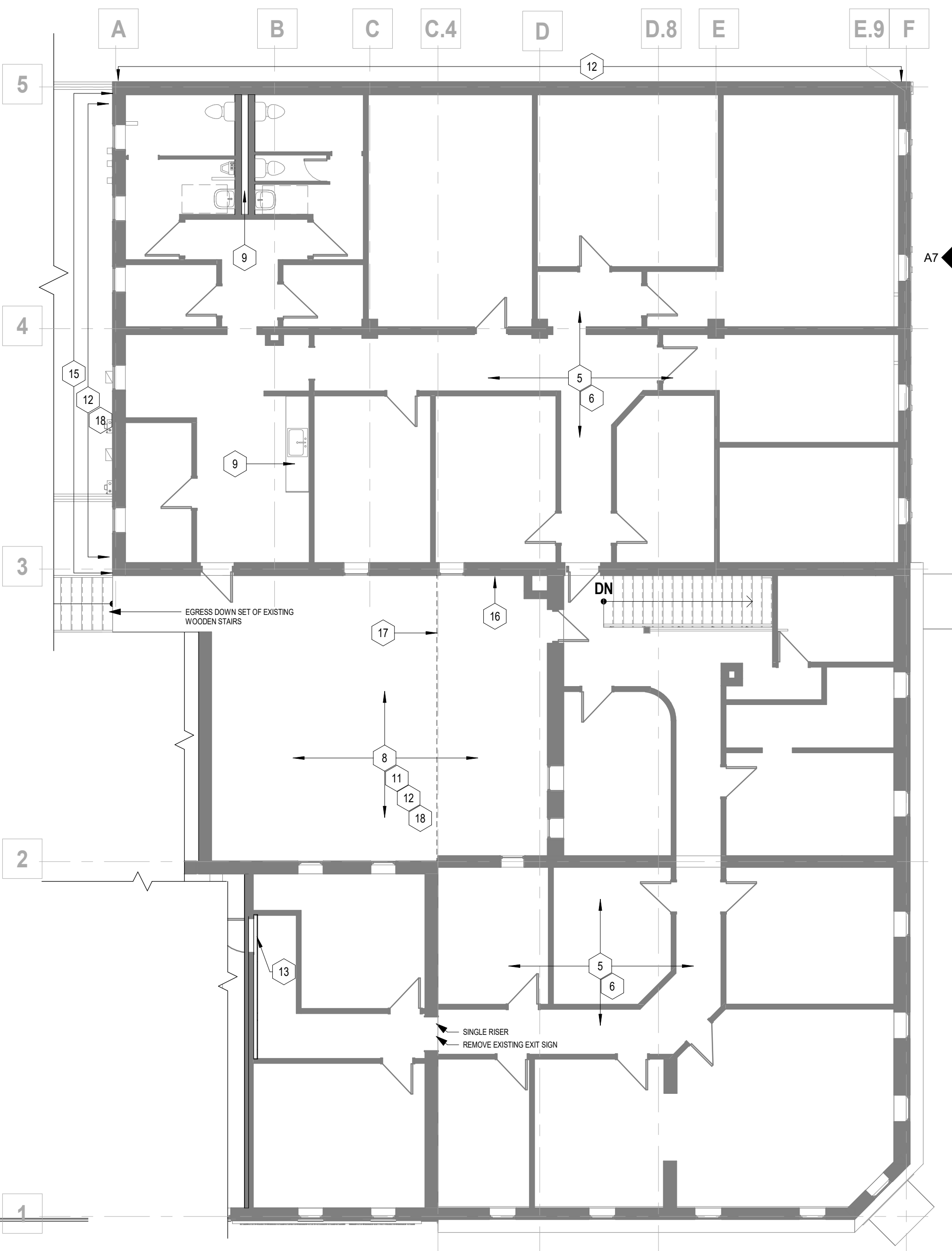
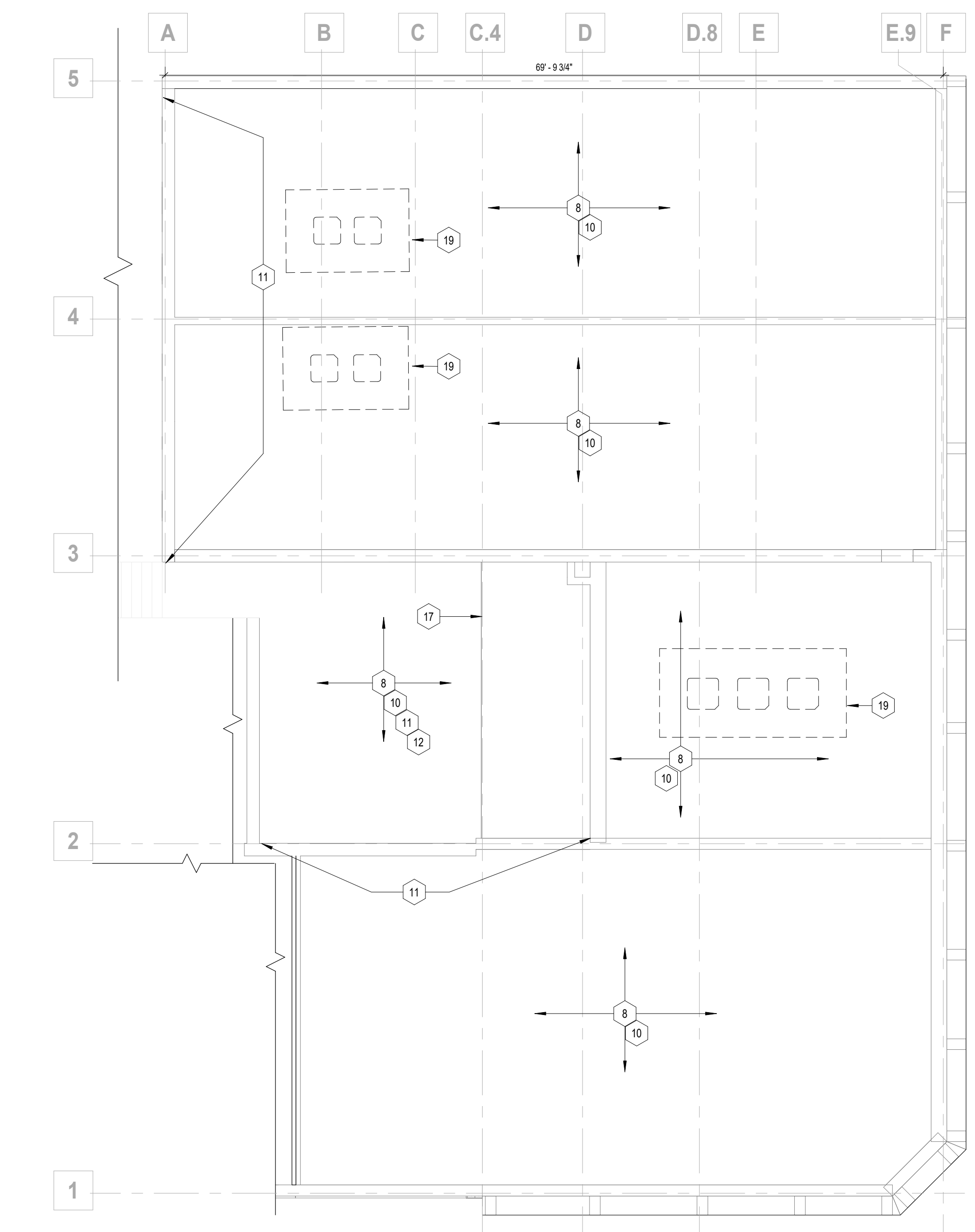
F12 RCP - 1ST FLOOR 1/4" = 1'-0"

SECTION DETAIL - NEW STOREFRONT - SOUTH F10 1" = 1'-0"

SECTION DETAIL - NEW STOREFRONT - EAST F8 1" = 1'-0"

F5 SECTION DETAIL - DRAIN TILE SYSTEM 1" = 1'-0"

F3 ENLARGED PLAN - TRASH ENCLOSURE 1/8" = 1'-0"



A12 ROOF PLAN 1/8" = 1'-0"

A8 2ND FLOOR PLAN 1/8" = 1'-0"

A4 1ST FLOOR PLAN 1/8" = 1'-0"

GENERAL NOTES EXTERIOR ELEVATIONS:

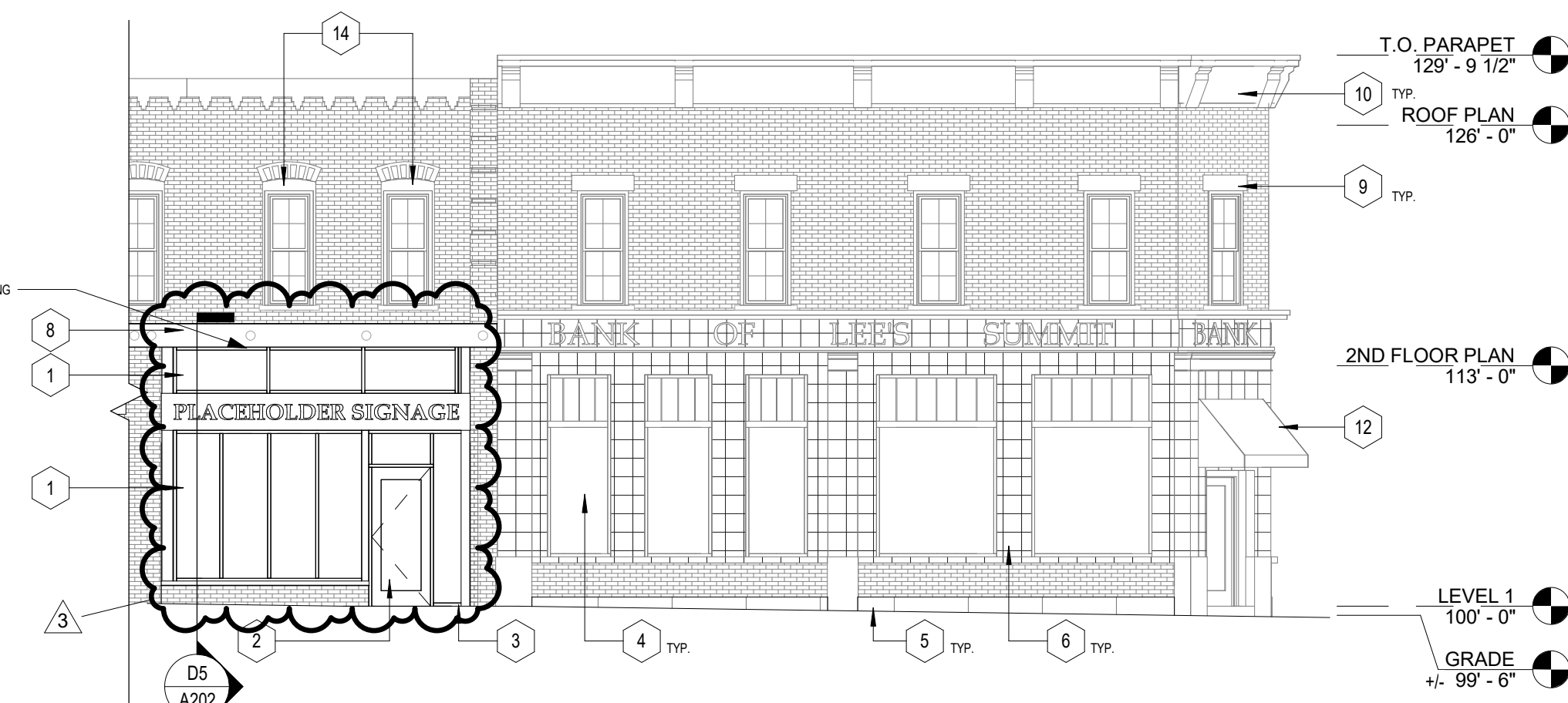
1. RE. SHEET G0.01 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
 2. DIMENSIONS SHOWN ON THE EXTERIOR ELEVATIONS ARE TO THE FACE OF MTL. STUD WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FCO), AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
 3. RE. THE WINDOW TYPES SHEET FOR ALL EXTERIOR WINDOW TYPES AND GLASS TYPES.
 4. **BRICK REPAIR** - REFER TO SPECIFICATIONS FOR BRICK REPAIR. ALL MASONRY CONTRACTOR TO REVIEW ALL ELEVATIONS FOR REPAIR/REPLACEMENT AS REQUIRED.
 5. **JOINT SEALANTS** - REFER TO SPECIFICATIONS FOR JOINT SEALANT REPAIR. REMOVE/REPLACE REPAIR ALL JOINT SEALANTS ON THE BUILDING. PROVIDE 1/2" BACK ROD BEHIND SEALANTS BETWEEN ALL DISSIMILAR MATERIALS. COLOR TO MATCH ADJACENT MATERIALS.
 6. CONTRACTOR SHALL FOLLOW STUCCO REPAIR AS OUTLINED WITHIN STO RESTORATION DETAIL SERIES. DETAIL MANUAL, IF CONTRACTOR USES ALTERNATE OR SUBSTITUTED MANUFACTURER, A SUBMITTAL SHALL BE PROVIDED CONTAINING SIMILAR DETAIL INFORMATION FOR ARCHITECT'S APPROVAL.
 7. **EXTERIOR BRICK, STEEL, AND WOOD PAINT** - BASIS OF DESIGN: SHERWIN WILLIAMS - PRO INDUSTRIAL - PRE-CATALYZED WATERBASED URETHANE 865-1100 SERIES.
 8. ALL OPENINGS TO BE FIELD VERIFIED PRIOR TO SHOP DRAWINGS BEING SUBMITTED FOR REVIEW AND APPROVAL.
- NOTE FOR CONTRACTOR TO FOLLOW MANUFACTURER RECOMMENDATIONS AND PDS: PRODUCT DATA SHEET. PRIOR TO THE EXTERIOR URETHANE COATING APPLICATION ON BRICK, APPLY CONCRETE AND MASONRY PRIMER-SEALER (BASIS OF DESIGN: LONOX) PRODUCT AND COATS AS RECOMMENDED BY MANUFACTURER.**
- ## EXTERIOR ELEVATION KEYED NOTES

MARK	DESCRIPTION
1	STOREFRONT SYSTEM - BASIS OF DESIGN IS KAWNEER 450T FRAMING SYSTEM. GLAZING TO BE FRONT GLAZED.
2	SILL FLASHINGS - COLOR TO BE DARK ALUMINUM TO MATCH STOREFRONT.
3	BRICK - REPLACE ALL MISSING BRICK AND DAMAGED BRICK. COLOR TO MATCH EXISTING. TUCK POINT AS REQUIRED. PROVIDE BACKER ROD & SEALANT BETWEEN DISSIMILAR MATERIALS. TYP. RE: SPECIFICATIONS.
4	WOOD WINDOWS - REMOVE ALL LOOSE PAINT. PATCH/REPAIR/CAULK AS REQUIRED. PREPARE FOR NEW PAINT.
5	CAST STONE - TO BE RE-SET AND LEVELED. RE-GROUT AS REQUIRED.
6	GLAZED TILE - CLEAN AND TUCK-POINT.
7	WOOD DOOR - SAND AND REPAINT ENTRY DOOR AND FRAME. COLOR DARK BRONZE TO MATCH NEW WINDOW SYSTEM.
8	STEEL LINTEL - REMOVE ALL LOOSE MATERIAL AND REPAINT.
9	ALUMINUM WINDOWS / WINDOW HEAD DETAIL - ALUMINUM WINDOWS AT SECOND LEVEL EXISTING TO REMAIN. REMOVE ALL LOOSE MATERIAL. REPAIR CAST STONE HEADER AS REQUIRED AND REPAINT.
10	TOP OF WALL DETAIL - REMOVE ALL LOOSE MATERIAL AND REPAINT. REPAIR AS REQUIRED AND REFLASH TOP OF WALL AS NEEDED TO MAKE A WATER TIGHT SYSTEM. PREPARE FOR NEW FINISH.
11	REMOVE EXISTING WEATHERHOOD ABOVE EXTERIOR DOOR. 14"x14" OF EXISTING OPENING ABOVE DOOR TO REMAIN FOR NEW INTAKE LOUVER. INFILL REMAINDER OF EXISTING OPENING WITH SUB-FRAMING, SHEATHING, AND FINISH MATERIAL TO MATCH EXISTING. RE-MEP. REPLACE EXISTING DOOR WITH NEW HOLLOW METAL DOOR.
12	EXISTING AWNINGS - RE-ATTACH EXISTING AWNINGS TO BUILDING. NEW FABRIC ON AWNINGS TO MATCH SW #7625 MOUNT ETNA.
13	INSTALL NEW TEMPERED GLAZING AS REQUIRED.
14	REPLACE WOOD TRIM AT PERIMETER OF WINDOW WITH EXTERIOR/PAINT-GRADE LUMBER. MATCH EXISTING LUMBER SIZES. PAINT.
15	EXHAUST WALL CAPS. RE: MECH. PAINT TO MATCH WALL.
16	LOUVERS, RE: MECH. PAINT TO MATCH WALL.
17	ELEC. METER. RE: ELEC.
18	WALL PACK. RE: ELEC.

EXTERIOR ELEVATION COLOR LEGEND

	PRIMARY COLOR: SW #7594 CARRIAGE DOOR
	ACCENT COLOR 1: SW #7625 MOUNT ETNA
	ACCENT COLOR 2: SW #7675 SEALSKIN
	ACCENT COLOR 3: SW #0009 EASTLAKE GOLD
	EXISTING GLAZED TILE TO REMAIN. RE: KEYNOTE #6

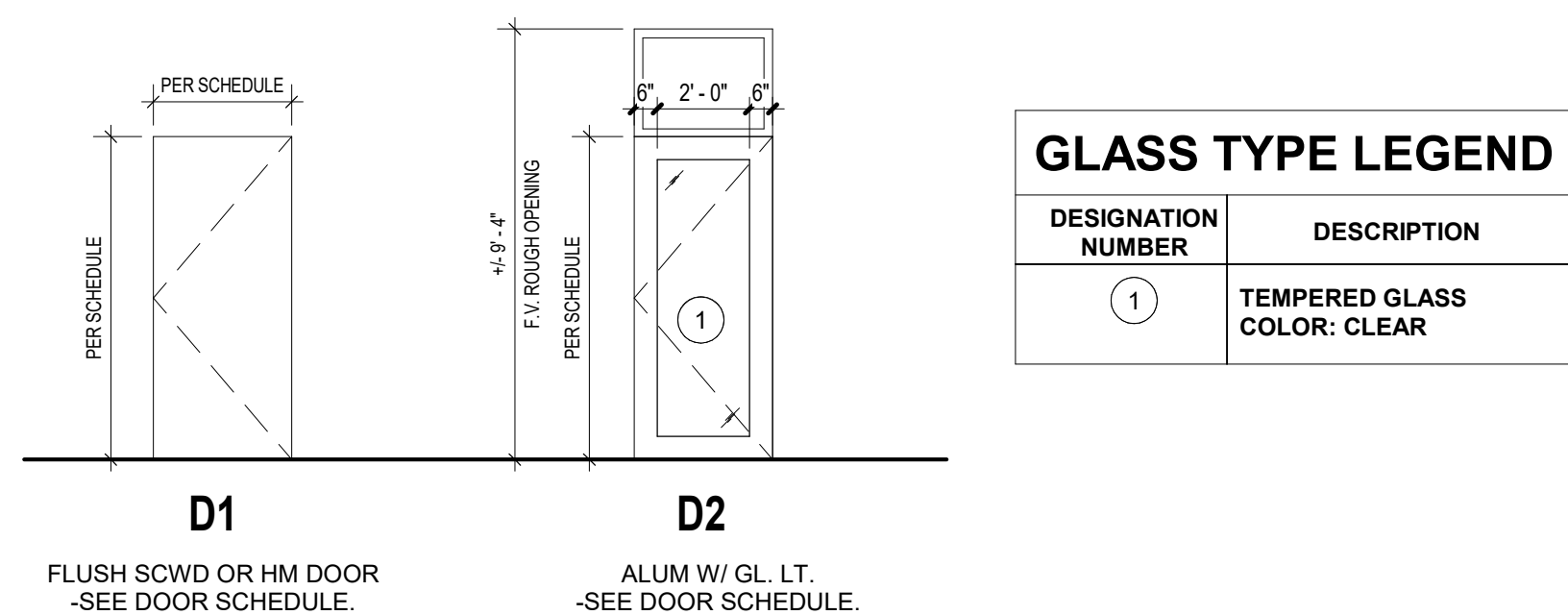
H11 NORTH ELEVATION
1/8" = 1'-0"



H6 WEST ELEVATION
1/8" = 1'-0"



F11 SOUTH ELEVATION
1/8" = 1'-0"



F6 EAST ELEVATION
1/8" = 1'-0"



C6 SOUTH ELEVATION - COLOR
3/16" = 1'-0"



A8 EAST ELEVATION - COLOR
3/16" = 1'-0"

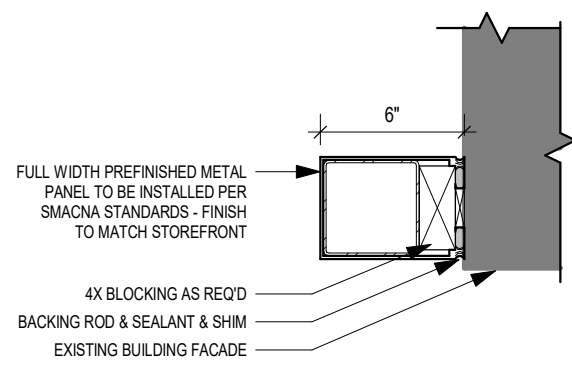
DOOR SCHEDULE									
DOOR #	WIDTH	HEIGHT	ROOM NAME	DOOR		FRAME		RTG	REMARKS
				TYPE	MATERIAL	FINISH	MATERIAL	FINISH	
N-100B	3'-0"	7'-0"	OFFICE	D2	ALUM/GLASS		ALUM		1, 3, 4, 5, 6, 7
N-101	3'-0"	7'-0"	MEN'S	D1	SCWD	PAINT	HM	PAINT	1, 3, 4, 6
N-102	3'-0"	7'-0"	WOMEN'S	D1	SCWD	PAINT	HM	PAINT	1, 3, 4, 6
N-103	2'-8"	7'-0"	UTILITY	D1	SCWD	PAINT	HM	PAINT	3, 4
N-104	EXIST	EXIST	STAIR	EXIST	EXIST	PAINT	EXIST	PAINT	1, 2, 3
S-100B	EXIST	EXIST	FUTURE TENANT	EXIST	EXIST	PAINT	EXIST	PAINT	1, 2, 3
S-100C	3'-0"	7'-0"	FUTURE TENANT	D1	HM	PAINT	HM	PAINT	1, 3, 4, 6
S-100D	EXIST	EXIST	FUTURE TENANT	EXIST	EXIST	EXIST	EXIST	EXIST	2, 3

DOOR SCHEDULE REMARKS:

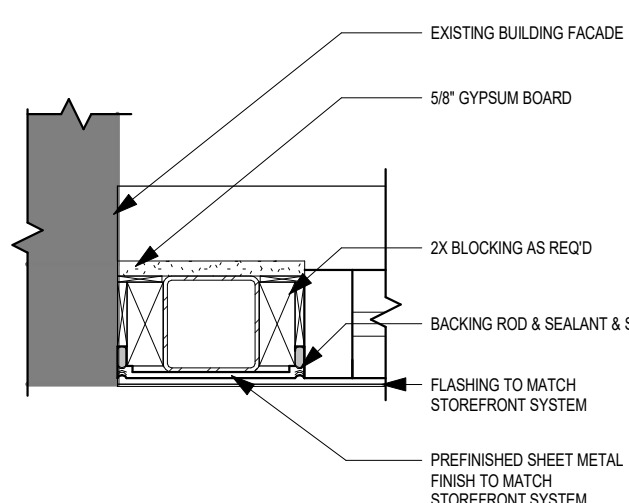
1. MATCH EXISTING MASTER KEYING SYSTEM. COORDINATE WITH BUILDING OWNER.
2. MAINTAIN EXISTING HARDWARE.
3. PROTECT DOOR AND FRAME FROM DAMAGE THROUGHOUT CONSTRUCTION. ANY DAMAGE TO BE REPAIRED/REPLACED PER OWNER DISCRETION.
4. DOOR FRAME 2" OFF FINISHED FACE ON HINGE SIDE, U.N.O.
5. PROVIDE PANIC HARDWARE.
6. MANUALLY LOCKABLE FROM INSIDE OF ROOM. MASTER KEY LOCK ON OUTSIDE OF ROOM.
7. COORDINATE HARDWARE WITH MANUFACTURER.

GENERAL NOTES
EXTERIOR ELEVATIONS:

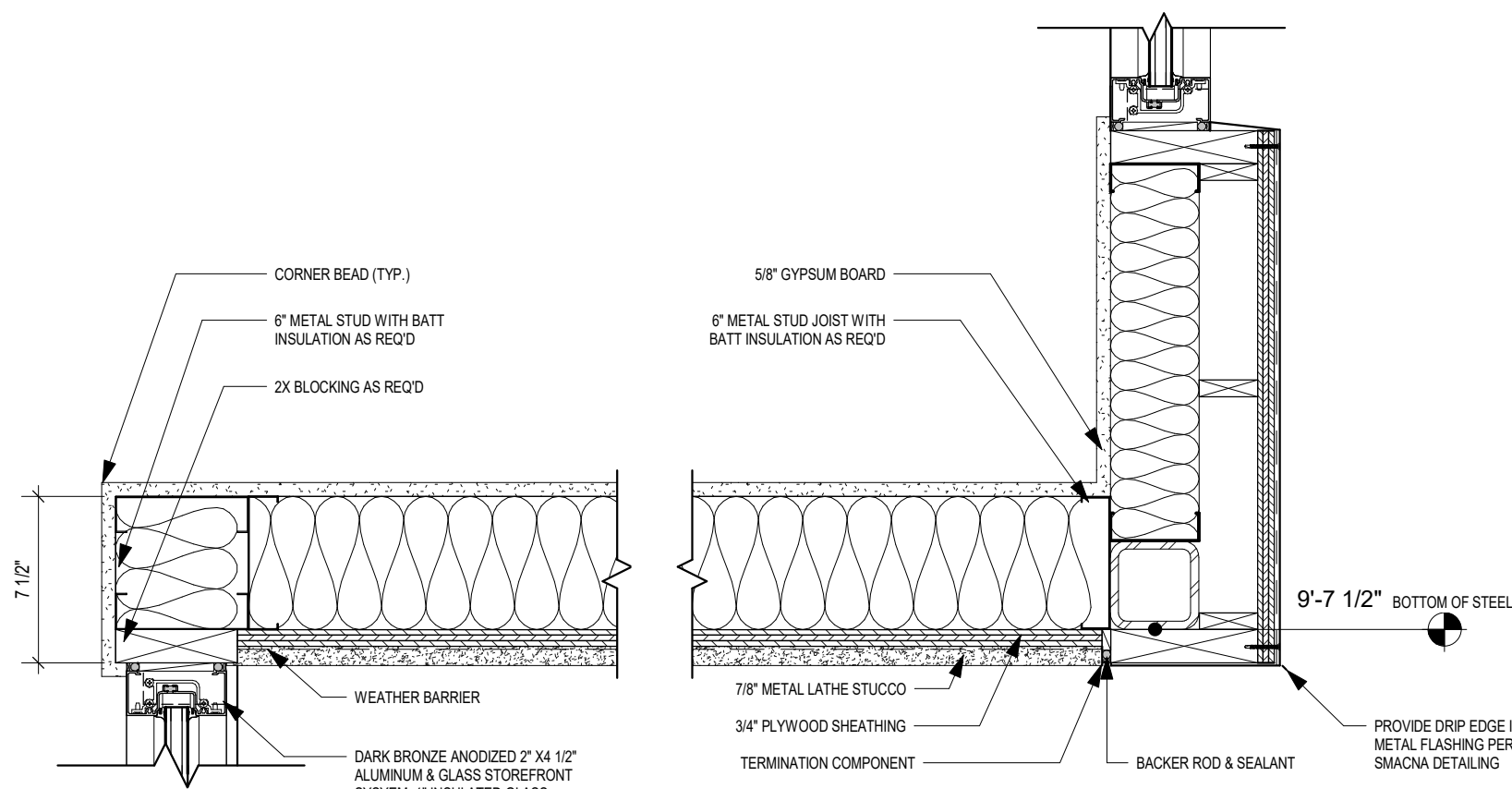
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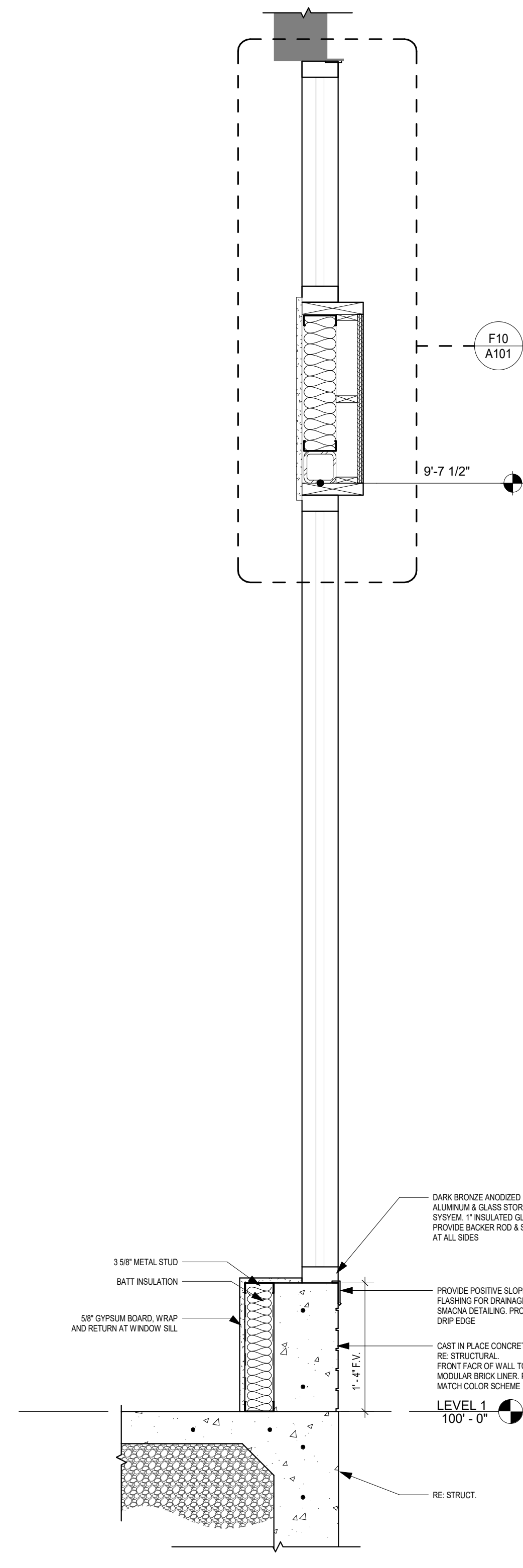
F11 PLAN DETAIL - NEW STOREFRONT - COLUMN - SOUTH 2
1 1/2" = 1'-0"



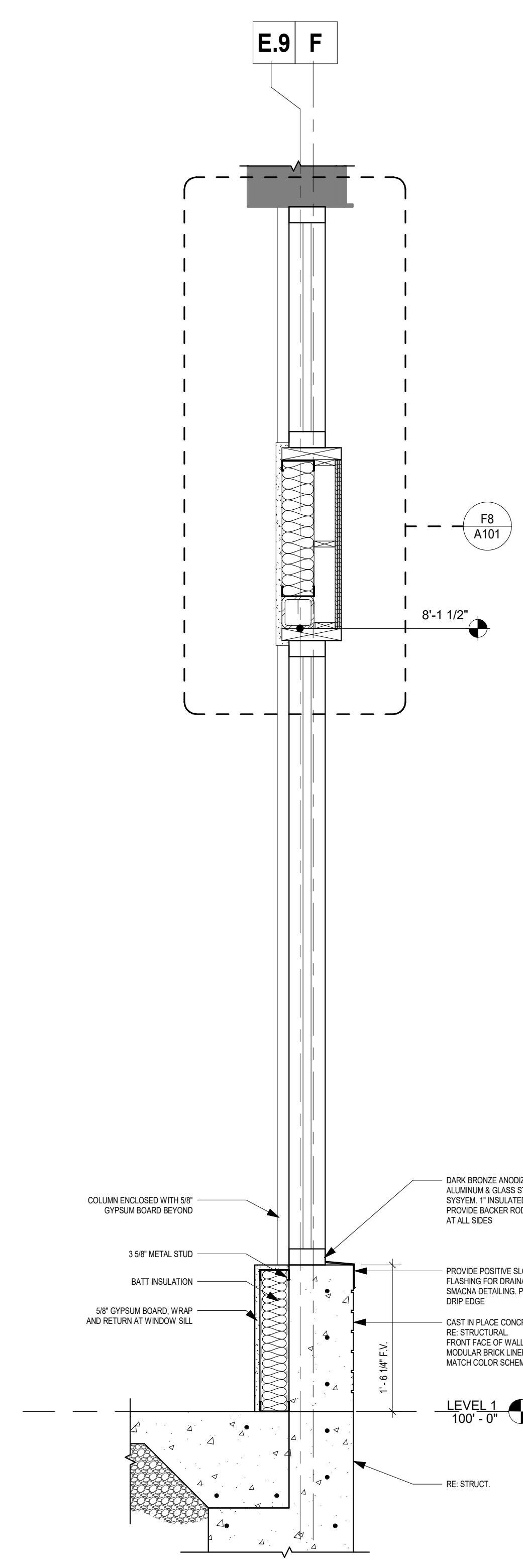
D11 PLAN DETAIL - NEW STOREFRONT - COLUMN - SOUTH 1
1 1/2" = 1'-0"



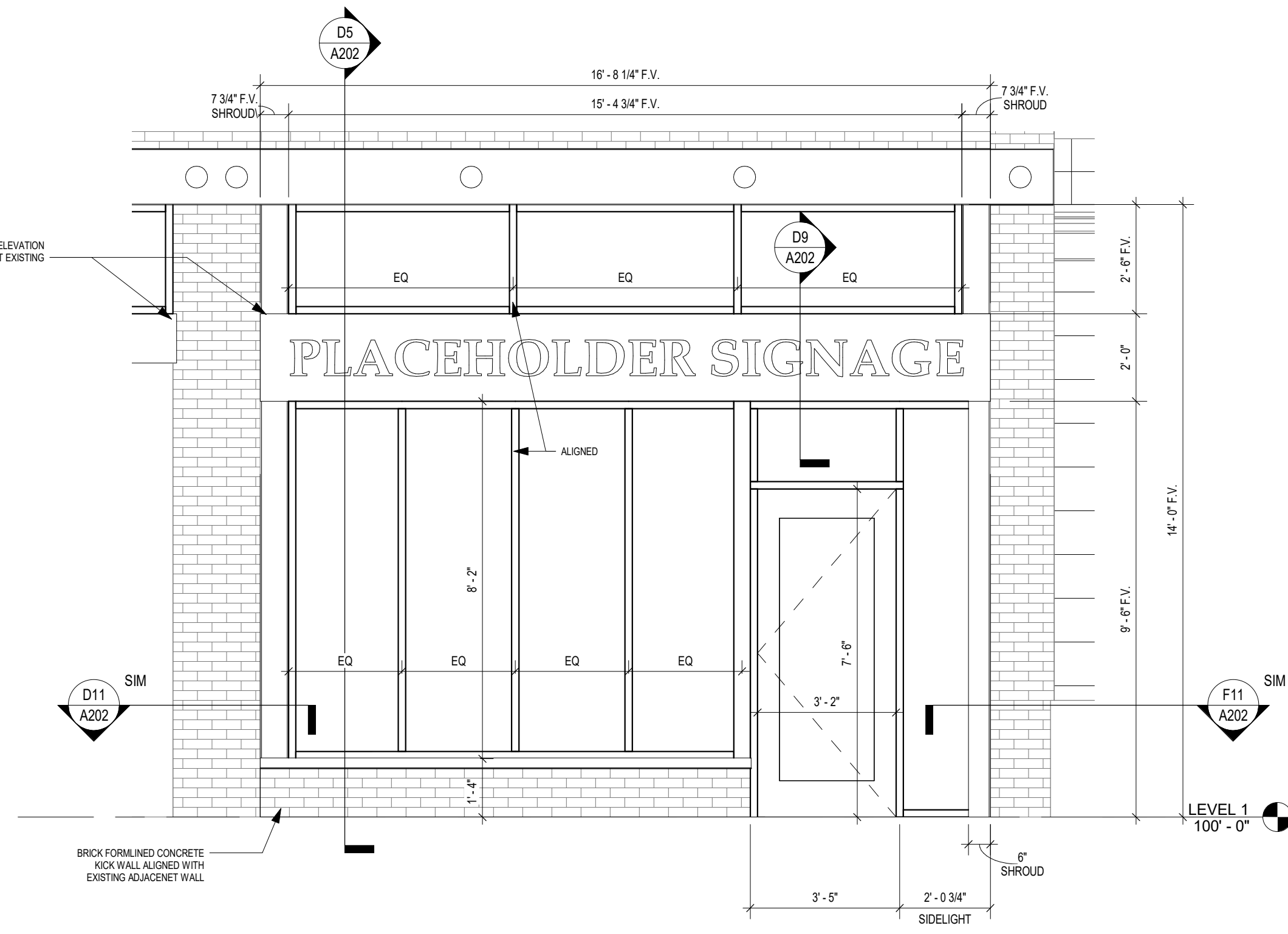
D9 DETAIL - NEW STOREFRONT - SOFFIT
1 1/2" = 1'-0"



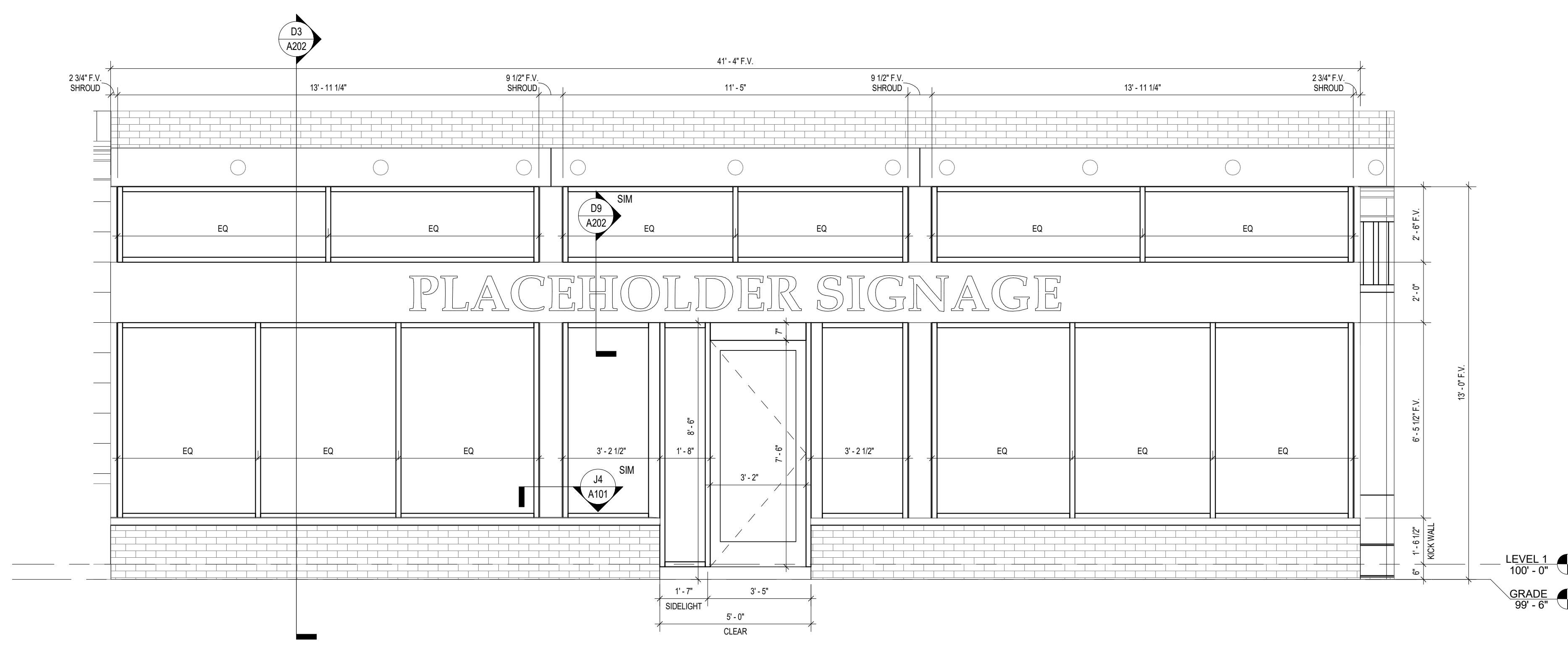
D5 SECTION - STOREFRONT SOUTH
1" = 1'-0"



D3 SECTION - STOREFRONT EAST
1" = 1'-0"



A11 SOUTH ELEVATION - NEW STOREFRONT
3/8" = 1'-0"



A7 EAST ELEVATION - NEW STOREFRONT
3/8" = 1'-0"

ENLARGED ELEVATIONS AND DETAILS

SHEET INDEX

MEP001	COVER SHEET
MEP002	THROUGH PENETRATION DETAILS
MEP101	ROOF PLAN
M011	DEMOLITION - FLOOR PLANS
M111	MECHANICAL - FLOOR PLANS
M201	MECHANICAL - SCHED./DETAILS
P011	DEMOLITION - FLOOR PLANS
P111	PLUMBING - FLOOR PLANS
P201	PLUMBING - RISER DIAGRAMS
P301	PLUMBING - SCHED./DETAILS
E011	DEMOLITION - FLOOR PLANS
E111	ELECTRICAL - FLOOR PLANS
E301	ELECTRICAL - RISER DIAGRAMS
E302	ELECTRICAL - PANELBOARD SCHEDULES
E401	ELECTRICAL - SCHED./DETAILS

MECHANICAL AND PLUMBING SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

SHEET METAL

	HIGH EFFICIENCY ROUND DUCT TAKEOFF (WITH & WITHOUT MANUAL DAMPER)
	SPW-IN ROUND DUCT TAKEOFF (WITH & WITHOUT MANUAL DAMPER)
	CONICAL BELLMOUTH ROUND TAKEOFF
	ROUND DUCT RUNOUT WITH FLEX DUCT
	DUCTWORK ELBOW (WITH & WITHOUT TURNING VANES)
	FD-FIRE DAMPER
	FS-FIRE/SMOKE DAMPER
	SD-SMOKE DAMPER
	RS-BACKDRAFT DAMPER (GRAVITY)
	AUTOMATIC MOTORIZED DAMPER
	SUPPLY DIFFUSER AND DIFFUSER CALLOUT (NECK SIZE, TYPE AND CFM)
	LINEAR/SLOT DIFFUSER
	RETURN GRILLE OR EXHAUST REGISTER
	SUPPLY AIR FLOW INDICATOR
	RETURN AND EXHAUST AIR FLOW INDICATOR
	THERMOSTAT
	TEMPERATURE SENSOR
	HUMIDISTAT
	CONTROL WIRING

MEDICAL GAS

	MEDICAL VACUUM PIPING
	OXYGEN PIPING
	NITROUS OXIDE PIPING
	MEDICAL COMPRESSED AIR PIPING
	NITROGEN PIPING
	CARBON DIOXIDE PIPING
	VACUUM PIPING
	WASTE ANESTHETIC GAS DISPOSAL PIPING
	MEDICAL GAS VENT PIPING
	MEDICAL GAS OUTLET w/ DESIGNATION (SEE BELOW)
	O OXYGEN
	N NITROGEN
	NO NITROUS OXIDE
	WAG WASTE ANESTHETIC GAS DISPOSAL
	CO CARBON DIOXIDE
	MV MEDICAL VACUUM
	S SURGICAL AIR
	M MEDICAL SLUICE

GENERAL SYMBOLS

	INDICATES CONNECT TO EXISTING
	INDICATES ELEVATION
	EQUIPMENT TAG. REFER TO CONNECTIONS SCHEDULE FOR MECHANICAL CONNECTIONS AND LOAD INFO FOR KITCHEN, SHOP, ETC. EQUIPMENT

MECHANICAL PIPING

	RL REFRIGERANT LIQUID
	RS REFRIGERANT SUCTION
	D DRAIN (CONDENSATE)
	CA COMPRESSED AIR
	CWS CHILLED WATER SUPPLY
	CWR CHILLED WATER RETURN
	C/HWS CHILLED/HOT WATER SUPPLY
	C/HWR CHILLED/HOT WATER RETURN
	HWS HOT WATER SUPPLY
	HWR HOT WATER RETURN
	CWS COOLING TOWER SUPPLY
	CWR COOLING TOWER RETURN
	STM STEAM (ANY P'S DENOTE PRESSURE)
	CR CONDENSATE RETURN (P'S DENOTE PRESSURE)
	RV REFRIGERANT VENT
	RD RUPTURE DISK

PLUMBING PIPING

	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	RECIRCULATING DOMESTIC HOT WATER
	SAN WASTE ABOVE GRADE OR FLOOR
	SAN WASTE BELOW GRADE OR FLOOR
	ST STORM ABOVE GRADE OR FLOOR
	ST STORM BELOW GRADE OR FLOOR
	ST/O STORM OVERFLOW ABOVE GRADE OR FLOOR
	ST/O STORM OVERFLOW BELOW GRADE OR FLOOR
	PLUMBING VENT
	W WATER SERVICE
	G GAS (NATURAL)
	PD FROM SUMP PUMP DISCHARGE
	CA COMPRESSED AIR
	PROP PROPANE
	SCW SOFT DOMESTIC COLD WATER
	SHW SOFT DOMESTIC HOT WATER
	SOW SOFT RECIRCULATING HOT WATER
	ACID ACID WASTE
	WASTE WASTE VENT
	NON-POSSIBLE
	DW DEIONIZED WATER
	RO REVERSE OSMOSIS WATER

PLUMBING RISER CALLOUT (REFERS TO RISER DIAGRAM)

	PLUMBING RISER CALLOUT (REFERS TO RISER DIAGRAM)
	FIRE SPRINKLER
	FIRE PROTECTION PIPING
	SPRINKLER HEAD
	SIDELINE SPRINKLER HEAD
	FIRE PROTECTION SMESH CONNECTION
	POST INDICATOR VALVE

PIPING SYMBOLS

	SHUTOFF VALVE
	SHUTOFF VALVE IN RISER
	BALANCING VALVE
	PLUG VALVE
	AUTO FLOW CONTROL VALVE
	PIPING ELBOW UP
	PIPING ELBOW DOWN
	PIPING TEE
	PIPING ELBOW
	PIPING TEE UP
	PIPING TEE DOWN
	INCREASER / REDUCER
	UNION
	CAP
	PIPE FLEX STRAINER
	CHECK VALVE
	INLINE STRAINER
	TEST PLUG
	GUIDE
	ANCHOR
	TRIPLE VALVE
	AUTOMATIC 2-WAY CONTROL VALVE
	AUTOMATIC 3-WAY CONTROL VALVE
	SOLENOID VALVE

PIPING SPECIALTIES

	PRESS/TEMP GAUGE WITH COCK
	THERMOMETER
	PRESSURE REDUCING VALVE
	RELIEF VALVE
	WATER HAMMER ARRESTER

PLUMBING FIXTURES/EQUIPMENT

	HD HOSE BIBB
	W WALL HYDRANT
	CLEAN OUT
	REDUCED PRESSURE BACKFLOW PREVENTER
	DOUBLE CHECK BACKFLOW PREVENTER
	PLUMBING FIXTURE AND CALLOUT
	FD: FLOOR DRAIN, AD: AREA DRAIN, FS: FLOOR SINK
	RD: ROOF DRAIN
	ORD: OVERFLOW ROOF DRAIN

ELECTRICAL SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

CIRCUITING

	HOME RUN (2/12 1/12 UNO)
	INDICATES 2 PHASE, 1 N, & 1 GND CONDUCTOR
	HOME RUN: INDICATES SHARED CIRCUIT
	HOME RUN: INDICATES #10 CONDUCTORS ENTIRELY

UTILITIES

	UNDERGROUND ELECTRICAL
	OVERHEAD ELECTRICAL
	TELECOMMUNICATIONS CONDUIT
	UNDERGROUND TELECOMMUNICATIONS CONDUIT

LIGHTING

	GRID-MOUNTED TROFFER LIGHT FIXTURE
	STRIP LIGHT FIXTURE
	SURFACE/RECESSED LIGHT FIXTURE
	WALL-MOUNTED LIGHT FIXTURE
	POLE-MOUNTED LIGHT FIXTURE
	EXIT LIGHT
	BATTERY-OPERATED EMERGENCY LIGHT (WALL MTD)
	BATTERY-OPERATED EMERGENCY LIGHT (CEILING MTD)
	WALL-MOUNTED COMBINATION EXIT LIGHT/BATTERY-OPERATED EMERGENCY LIGHT
	LIGHT SWITCH - SINGLE POLE
	LIGHT SWITCH - 3-WAY
	LIGHT SWITCH - 4-WAY
	LIGHT SWITCH - KEY
	LIGHT SWITCH - DIMMER
	LIGHT SWITCH - PILOT LIGHT
	LIGHT SWITCH - 2 POLE
	LIGHT SWITCH - 3-WAY DIMMER
	WALL-MOUNTED MOTION SWITCH
	CEILING-MOUNTED MOTION SWITCH
	SWITCHBANK - REFER TO DETAILS
	DIMMER BOARD
	REMOTE CONTROL SWITCH AS SCHEDULED
	TIMECLOCK - REFER TO PLANS / DETAILS

EQUIPMENT

	DISCONNECT SWITCH - RES. PLANS FOR INFORMATION
	MAGNETIC MOTOR STARTER
	COMBINATION DISCONNECT SWITCH / MOTOR STARTER
	TOGGLE-TYPE DISCONNECT, FURNISH WITH THERMAL MOTOR PROTECTION WHERE SERVING FANS/PUMPS
	SURFACE PANELBOARD
	RECESSED PANELBOARD
	DISTRIBUTION PANELBOARD
	SWITCHBOARD, FEEDER/MAIN CIRCUIT BREAKER SECTION AND DISTRIBUTION SECTION

GENERAL SYMBOLS

	INDICATES CONNECT TO EXISTING
	INDICATES ELEVATION
	EQUIPMENT TAG. REFER TO CONNECTIONS SCHEDULE FOR ELECTRICAL CONNECTIONS AND LOAD INFO FOR KITCHEN, SHOP, ETC. EQUIPMENT

POWER DEVICES

	DUPLEX RECEPTACLE
	LINE THRU DEVICE INDICATES ABOVE COUNTER
	SPECIAL DUPLEX RECEPTACLE (GFCI, ISOLATED GROUND, ETC.)
	QUADPLEX RECEPTACLE
	SIMPLEX RECEPTACLE w/ NEMA CONFIG AS NOTED
	MULTI-POLE RECEPTACLE w/ NEMA CONFIG AS NOTED
	CEILING MOUNTED RECEPTACLE
	RECEPTACLE/DEVICE MOUNTED IN 'TOMBSTONE'
	POKE-THRU WITH POWER
	POKE-THRU WITH TELECOMMUNICATIONS
	FLOOR BOX
	DIVIDED POWER POLE
	CLOCK RECEPTACLE
	PLUG MOLD / WIRE MOLD AS SPECIFIED
	JUNCTION BOX
	PUSH BUTTON
	MOTOR

TELEPHONE/DATA

	TELEPHONE OUTLET (SINGLE-GANG BOX WITH (1) 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING)
	LINE THRU DEVICE INDICATES ABOVE COUNTER
	DATA OUTLET (DOUBLE-GANG BOX WITH (2) 3/4" CONDUITS TO ABOVE ACCESSIBLE CEILING)
	TELEPHONE/DATA OUTLET (DOUBLE-GANG BOX WITH (2) 3/4" CONDUITS TO ABOVE ACCESSIBLE CLG.)
	PHONE OUTLET WITH NUMBER OF PHONE JACKS AS INDICATED - SEE DETAILS FOR ADD'L INFO
	DATA OUTLET WITH NUMBER OF PHONE JACKS AS INDICATED - SEE DETAILS FOR ADD'L INFO
	PHONE/DATA OUTLET WITH NUMBER OF PHONE/DATA JACKS AS INDICATED - SEE DETAILS FOR ADD'L INFO
	WALL-MOUNTED WIRELESS INTERNET TRANSMITTER
	CEILING-MOUNTED WIRELESS INTERNET TRANSMITTER

AUDIO/VISUAL

	TELEVISION OUTLET (SINGLE GANG BOX WITH (1) 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING)
	REVERSE TELEVISION OUTLET - CABLE TO HEAD END
	RECESSED COMBINATION AV AND POWER OUTLET COORD LOCATION OF DEVICE WITH TV MOUNT
	TEACHER'S DESK CONNECTIONS - RES. DETAILS
	WALL SPEAKER
	CEILING SPEAKER
	CEILING SPEAKER - SUBWOOFER
	CEILING SPEAKER - SOUND SYSTEM
	VOLUME CONTROL
	SOUND SYSTEM AUDIO JACK
	REMOTE MICROPHONE CONTROL

COMMUNICATIONS SYMBOLS

	INTERCOM CALL STATION
	INTERCOM HANDSET
	PUBLIC ADDRESS SYSTEM AMPLIFIER
	INTERCOM MASTER STATION
	WALL SPEAKER - HORN TYPE
	CEILING SPEAKER - HORN TYPE
	ELEVATOR 2-WAY COMMUNICATION MASTER STATION
	ELEVATOR 2-WAY COMMUNICATION POWER SUPPLY

FIRE ALARM

	MANUAL PULL STATION
	CEILING SMOKE DETECTOR
	DUCT SMOKE DETECTOR
	HEAT DETECTOR
	WATERFLOW SWITCH
	TAMPER SWITCH
	WALL-MOUNTED FA STROBE WITH CANELLA RATING, 15cd UNLESS OTHERWISE NOTED ON PLANS, 15cd RATING UNLESS OTHERWISE NOTED ON PLANS
	WALL-MOUNTED FA HORN
	WALL-MOUNTED FA SPEAKER
	WALL-MOUNTED FA HORN/STROBE WITH CANELLA RATING, 15cd UNLESS OTHERWISE NOTED ON PLANS, 15cd RATING UNLESS OTHERWISE NOTED ON PLANS
	WALL-MOUNTED FA SPEAKER/STROBE WITH CANELLA RATING, 15cd UNLESS OTHERWISE NOTED ON PLANS, 15cd RATING UNLESS OTHERWISE NOTED ON PLANS
	CEILING-MOUNTED FA STROBE WITH CANELLA RATING, MINIMUM OF 15cd RATING
	CEILING-MOUNTED FA SPEAKER
	CEILING-MOUNTED FA HORN/STROBE WITH CANELLA RATING, MINIMUM OF 15cd RATING
	CEILING-MOUNTED FA SPEAKER/STROBE WITH CANELLA RATING, MINIMUM OF 15cd RATING
	PLUG MOLD / WIRE MOLD AS SPECIFIED
	JUNCTION BOX
	PUSH BUTTON
	MOTOR

RELAY

	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	REMOTE ANNUNCIATOR PANEL
	FIRE ALARM EXTENDER CABINET
	DOOR HOLDER
	SINGLE / MULTI-STATION 120V SMOKE ALARM
	ZONE ADDRESSABLE MODULE
	INDIVIDUAL ADDRESSABLE MODULE
	KITCHEN HOOD FIRE SUPPRESSION SYSTEM PANEL
	KITCHEN HOOD REMOTE PULL STATION
	AREA OF RESCUE ASSISTANCE STATION
	AREA OF RESCUE ASSISTANCE MASTER STATION

NURSE CALL

	NURSE CALL STATION
	NURSE CALL EMERGENCY PULL CORD
	CODE BLUE STATION
	NURSE CALL STAFF STATION
	NURSE CALL DUAL PUSHBUTTON STATION (CODE BLUE / STAFF ASSIST)
	PATIENT MONITOR STATION
	NURSE CALL DUTY STATION
	NURSE CALL DOME LIGHT
	NURSE CALL ZONE LIGHT
	NURSE CALL MASTER STATION
	RESIDENT CALL MASTER STATION
	RESIDENT CALL EMERGENCY PULL CORD

SECURITY

	FIXED CAMERA
	PAN/TILT/ZOOM CAMERA
	PROXIMITY TYPE CARD READER
	SWIPE CARD READER
	KEYPAD / MAG LOCK
	BUTTON / MAG LOCK

FIRE SEALING NOTES

- COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT THROUGH-PENETRATION FIRESTOP SYSTEMS ARE INSTALLED ACCORDING TO SPECIFIED AND APPLICABLE UL REQUIREMENTS.
- COORDINATE SIZING OF SLEEVES, OPENINGS, CORE-DRAINED HOLES, OR CUT OPENINGS TO ACCOMMODATE THROUGH-PENETRATION FIRESTOP SYSTEMS.
- DO NOT COVER UP THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLATIONS UNTIL EXAMINED BY INSPECTOR, IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
- COMPATIBILITY: PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS THAT ARE COMPATIBLE WITH ONE ANOTHER, WITH THE SUBSTRATES FORMING OPENINGS, AND WITH THE ITEMS, IF ANY, PENETRATING THROUGH-PENETRATION FIRESTOP SYSTEMS UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
- PROVIDE COMPONENTS FOR EACH THROUGH-PENETRATION FIRESTOP SYSTEM THAT ARE NEEDED TO INSTALL, FILL MATERIALS, USE ONLY COMPONENTS SPECIFIED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND INSPECTING AGENCY FOR FIRESTOP SYSTEMS INDICATED.
- PROVIDE SLEEVES THROUGH ALL FIRE-RATED WALLS AND FILL VOIDS SURROUNDING SLEEVES AND INTERIOR TO SLEEVES AROUND PIPING WITH FIRE STOP PUTTY WITH UL LISTED 2 HOUR RATINGS INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.
- FIRE SEAL ALL PIPING, CONDUIT, CABLE, ETC. PENETRATIONS ROUTED THROUGH FIRE RATED WALLS.
- PROVIDE FIRE RATED ENCLOSURES OR WRAPS ON LIGHT FIXTURES AND OTHER ITEMS PENETRATING FIRE RATED CEILINGS, FLOOR/CEILING/CEILING/ROOF ASSEMBLIES TO MAINTAIN UL LISTING FOR CONSTRUCTION.

GENERAL PLUMBING NOTES

- COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE INTERNATIONAL PLUMBING CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
- NO PIPING SHALL BE INSTALLED WHERE IT WILL SUBJECT TO FREEZING TEMPERATURES. PIPING IN EXTERIOR WALLS SHALL BE INSTALLED ON THE ARCHITECT/ENGINEER'S FIELD VENT EXACT LOCATIONS DURING CONSTRUCTION AND PROVIDE ALL NECESSARY MODIFICATIONS BEFORE SUCH ALTERATIONS ARE MADE. ALL SUCH MODIFICATIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND REPAIR OF SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES.
- ADJUST LOCATION OF PIPING, DUCTWORK, ETC. TO PREVENT INTERFERENCE, BOTH ANTICIPATED AND ENCOUNTERED, DETERMINE THE EXACT ROUTE AND LOCATION OF EACH ITEM PRI

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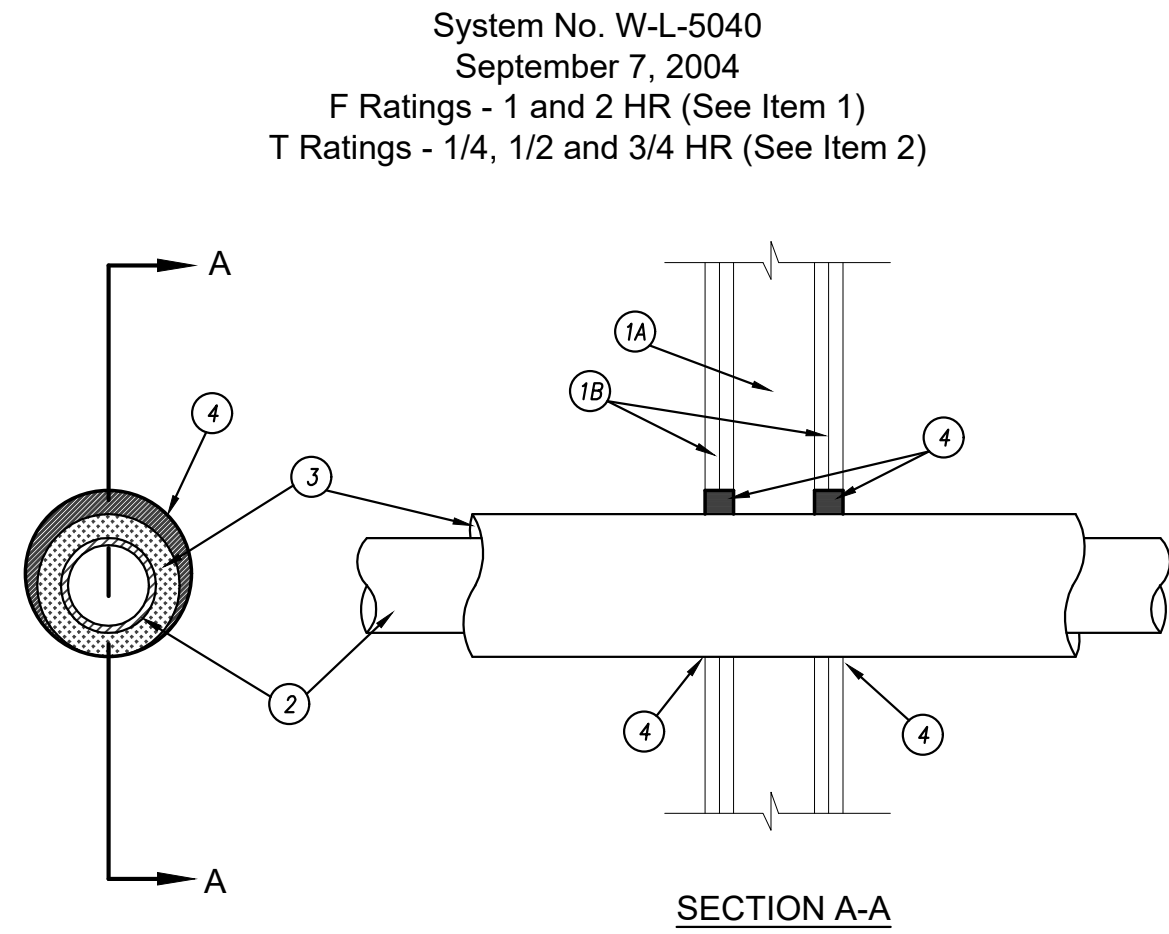
REVISION DATES:

David Lee - Engineer
MOS E-20808

PROFESSIONAL SEAL

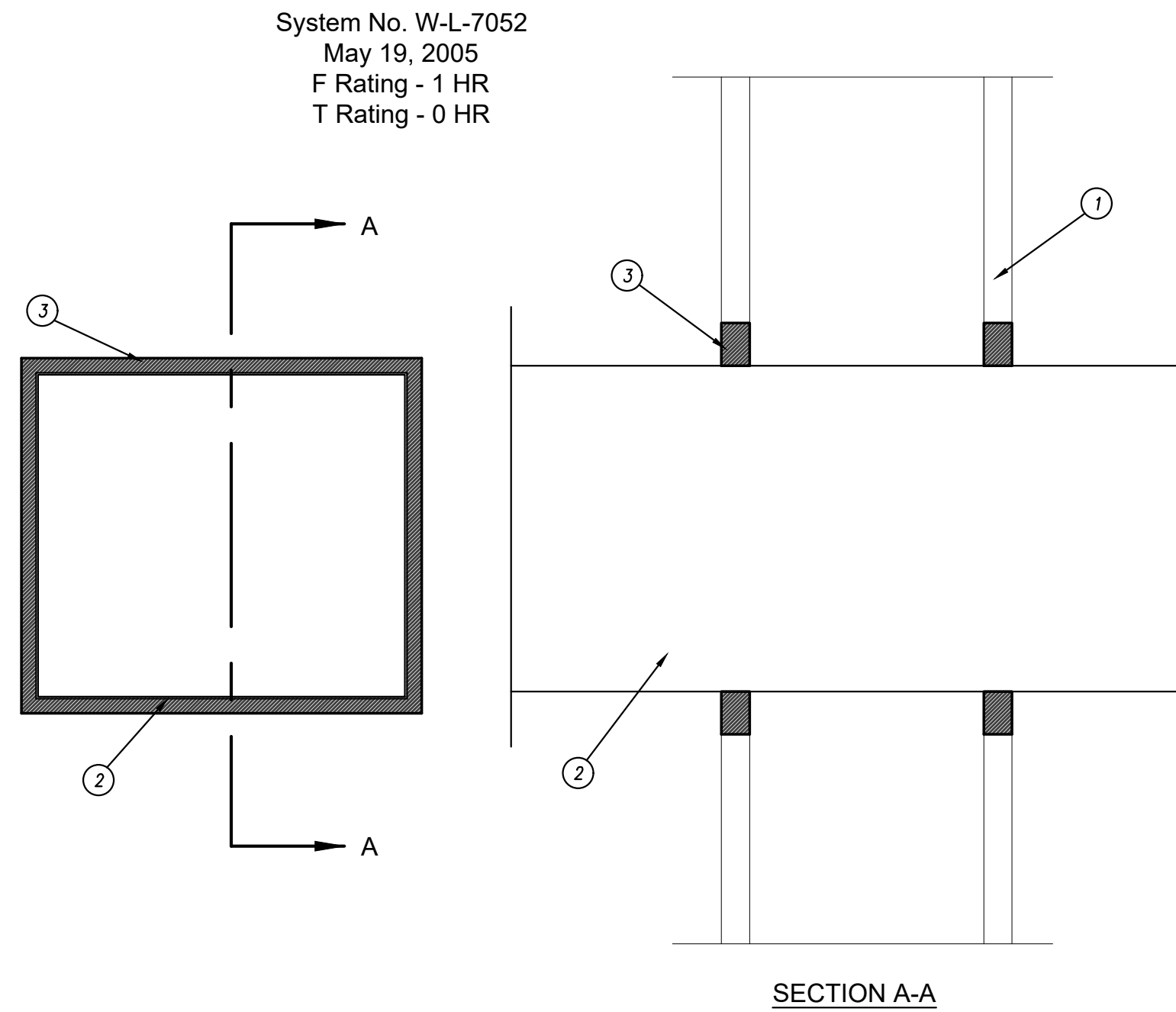
MEP002
ISSUE DATE: APRIL 21, 2022
COLLINS WEBB #: 21121

THROUGH PENETRATION DETAILS



1. WALL ASSEMBLY - THE 1 OR 2 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300, U400 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACED 16 IN. OC. STEEL STUDS TO BE MIN 3-5/8 IN. WIDE AND SPACED MAX 24 IN. OC.
B. GYPSUM BOARD - NOM 5/8 IN. THICK, 4 FT WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. MAX DIM OF OPENING IN WALLBOARD LAYERS IS 7 IN. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS 1 HR WHEN INSTALLED IN A 1 HR FIRE RATED WALL AND 2 HR WHEN INSTALLED IN A 2 HR FIRE RATED WALL.
2. THROUGH PENETRANTS - ONE METALLIC PIPE OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. PIPE OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR TUBING MAY BE USED:
A. STEEL PIPE - NOM 4 IN. DIA (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE. WHEN STEEL PIPE IS USED, T RATING IS 3/4 HR.
B. COPPER TUBING - NOM 4 IN. DIA (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING. T RATING IS 3/4 HR FOR COPPER TUBING OF NOM 2 IN. DIA AND SMALLER. FOR COPPER TUBING GREATER THAN NOM 2 IN. DIA, T RATING IS 1/4 AND 1/2 HR WHEN INSTALLED IN 1 AND 2 HR RATED WALLS, RESPECTIVELY.
C. COPPER PIPE - NOM 4 IN. DIA (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE. T RATING IS 3/4 HR FOR COPPER PIPE OF NOM 2 IN. DIA AND SMALLER. FOR COPPER PIPE GREATER THAN NOM 2 IN. DIA, T RATING IS 1/4 AND 1/2 HR WHEN INSTALLED IN 1 AND 2 HR RATED WALLS, RESPECTIVELY.
3. PIPE INSULATION - PLASTICS+ - NOM 3/4 IN. THICK ACRYLONITRILE BUTADIENE/POLYVINYL CHLORIDE (AB/PVC) FLEXIBLE FOAM FURNISHED IN THE FORM OF TUBING. THE ANNULAR SPACE BETWEEN THE INSULATED PIPE AND THE EDGE OF THE THROUGH OPENING SHALL BE MIN ZERO IN. (POINT CONTACT) TO MAX 1-1/4 IN. SEE PLASTICS+ (0MF22) CATEGORY IN THE RECOGNIZED COMPONENT DIRECTORY FOR NAMES OF MANUFACTURERS. ANY RECOGNIZED COMPONENT TUBE INSULATION MATERIAL MEETING THE ABOVE SPECIFICATIONS AND HAVING A UL94 FLAMMABILITY CLASSIFICATION OF 94-SHA MAY BE USED.
4. FILL VOID OR CAVITY MATERIALS - CAULK OR SEALANT - MIN 5/8 IN. THICKNESS OF CAULK APPLIED WITHIN THE ANNULAR SPACE, FLUSH WITH EACH SURFACE OF WALL. A MIN 1/2 IN. DIA BEAD OF CAULK SHALL BE APPLIED TO THE PIPE INSULATION/ WALLBOARD INTERFACE AT THE POINT CONTACT LOCATION ON BOTH SIDES OF WALL.
3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT

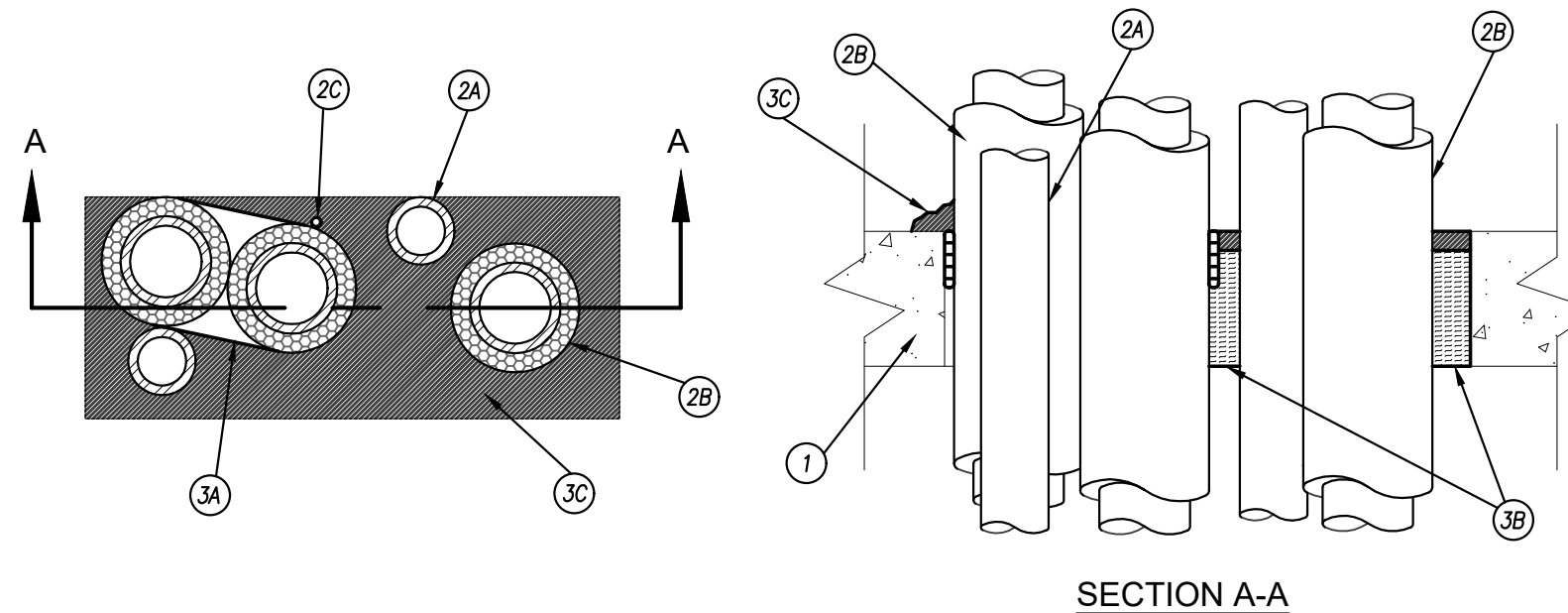
*BEARING THE UL CLASSIFICATION MARKING



1. WALL ASSEMBLY - THE 1 HR FIRE RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300, U400 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 MM BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC. STEEL STUDS TO BE MIN 3-1/2 IN. (89 MM) WIDE AND SPACED MAX 24 IN. (610 MM) OC.
B. GYPSUM BOARD - THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS AS REQUIRED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. MAX SIZE OF OPENING IS 14 BY 14 IN. (356 MM BY 356 MM) SQUARE.
2. STEEL DUCT - NOM 12 BY 12 IN. (305 MM BY 305 MM) (OR SMALLER) NO. 24 GAUGE (OR HEAVIER) GALV STEEL DUCT TO BE CENTERED WITHIN OPENING WITH A NOM ANNULAR SPACE OF 1 IN. (25 MM). DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF OPENING.
3. FILL VOID OR CAVITY MATERIALS - CAULK OR SEALANT - MIN 5/8 IN. (16 MM) THICKNESS OF CAULK APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL ASSEMBLY.
3M COMPANY - CP 25WB+ IC 15WB+ CAULK OR FB-3000 WT SEALANT

*BEARING THE UL CLASSIFICATION MARK

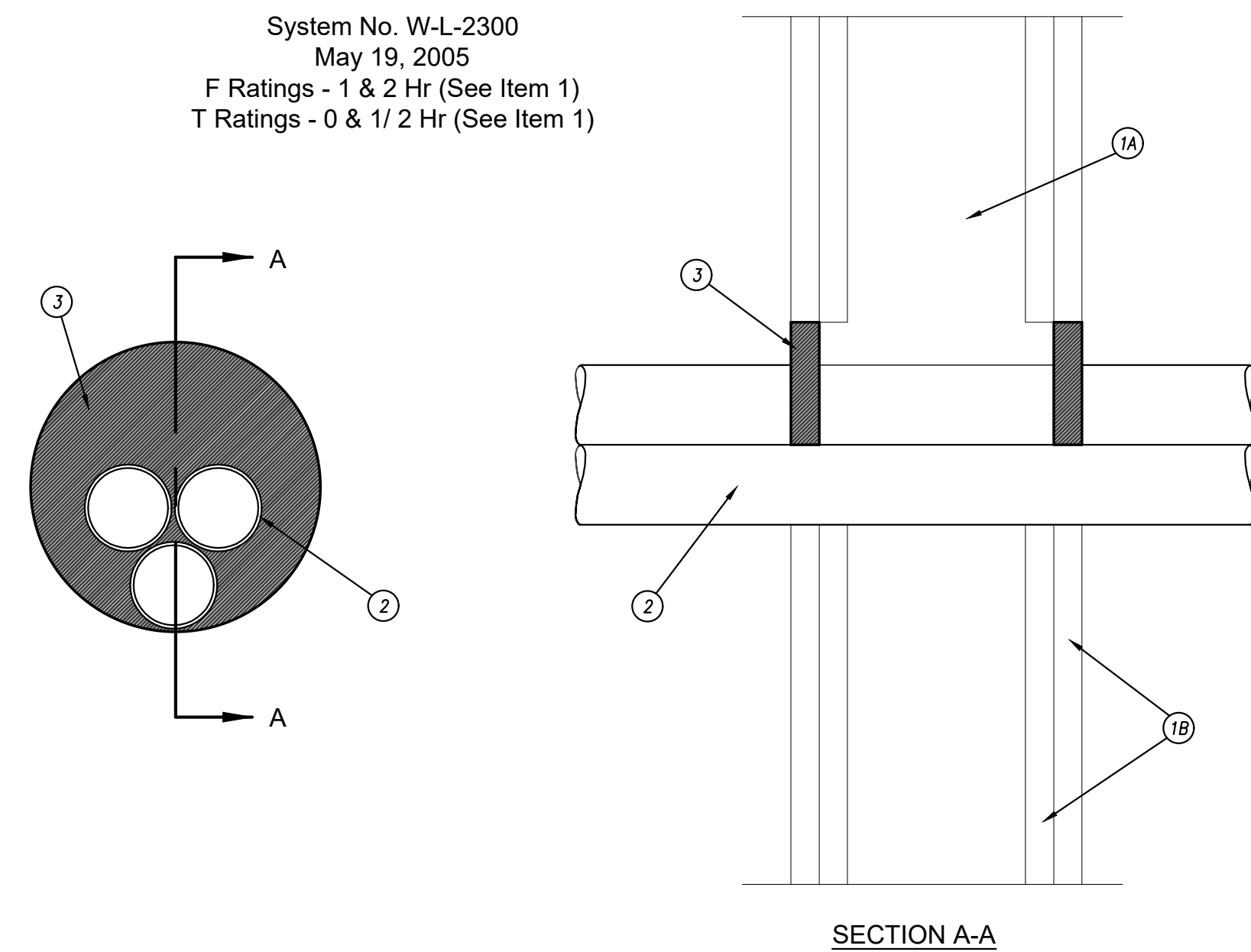
System No. C-AJ-8088
September 07, 2004
F Ratings - 2 Hr
T Rating - 0 Hr



1. FLOOR OR WALL ASSEMBLY - MIN 4-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX AREA OF OPENING IS 144 SQ IN. WITH A MAX DIMENSION OF 18 IN. SEE CONCRETE BLOCKS (CA2T) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. THROUGH PENETRANTS - METALLIC PIPES, TUBING OR CABLE TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. PENETRANTS TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF PENETRANTS MAY BE USED:
A. METALLIC PIPES - MAX FIVE METALLIC PIPES OR TUBING. THE ANNULAR SPACE BETWEEN UNINSULATED PENETRANT AND PERIPHERY OF OPENING SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 2-3/4 IN. IN THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR TUBING MAY BE USED:
A1. COPPER TUBING - NOM 3 IN. DIA (OR SMALLER) TYPE M (OR HEAVIER) COPPER TUBE.
A2. COPPER PIPE - NOM 3 IN. DIA (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
B. TUBE INSULATION - PLASTICS+ - NOM 1 IN. THICK ACRYLONITRILE BUTADIENE/POLYVINYL CHLORIDE (AB/PVC) FLEXIBLE FOAM FURNISHED IN THE FORM OF TUBING. THE TUBE INSULATION SHALL BE INSTALLED ON ALL TUBING GREATER THAN NOM 2 IN. DIA. THE ANNULAR SPACE BETWEEN THE INSULATED PENETRATING ITEM AND UNINSULATED METALLIC PIPES, CONDUIT OR TUBING SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 1-1/4 IN. THE ANNULAR SPACE BETWEEN THE INSULATED PENETRATING ITEM AND THE PERIPHERY OF THE OPENING SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 2-3/4 IN. SEE PLASTICS+ (0MF22) CATEGORY IN THE RECOGNIZED COMPONENT DIRECTORY FOR NAMES OF MANUFACTURERS. ANY RECOGNIZED COMPONENT TUBE INSULATION MATERIAL MEETING THE ABOVE SPECIFICATIONS AND HAVING A UL 94 FLAMMABILITY CLASSIFICATION OF 94-SHA MAY BE USED.
C. CABLES - MAX ONE 2/C NO. 18 AWG (OR SMALLER) THERMOSTAT WIRE SPACED MIN 0 IN. (POINT CONTACT) FROM TUBE INSULATION OR MIN 1/2 IN. FROM OTHER PENETRANTS. THE ANNULAR SPACE BETWEEN CABLE AND PERIPHERY OF OPENING IS MIN 0 IN. (POINT CONTACT) TO MAX 2-3/4 IN. CABLE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
3. FIRESTOP SYSTEM - THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:
A. FILL/VOID OR CAVITY MATERIALS* - WRAP STRIP - NOM 1/8 IN. THICK INTUMESCENT MATERIAL SUPPLIED IN 2 IN. WIDE STRIPS. MIN ONE LAYER OF WRAP STRIP WRAPPED AROUND PENETRANTS AND PIPE INSULATION AND SECURED IN PLACE WITH STEEL WIRE OR ALUMINUM FOIL TAPE AND RECESSED WITHIN THE OPENING NOT MORE THAN 2 IN. ABOVE THE BOTTOM OF THE FLOOR. WRAP STRIP REQUIRED AROUND INSULATED PENETRANTS WHICH MAY BE TIGHTLY BUNDLED TOGETHER. WRAP STRIP ALSO REQUIRED TO BE INSTALLED AROUND INSULATED PENETRANTS WHEN INSTALLED LESS THAN 1/2 IN. FROM UNINSULATED TUBES OR CABLES. IN SUCH CASES WHERE INSULATED PENETRANT IS AT POINT CONTACT WITH UNINSULATED TUBES OR CABLES, WRAP STRIP TO BE RECESSED BETWEEN INSULATION AND UNINSULATED TUBE OR CABLE BY COMPRESSING INSULATION. WRAP STRIP NOT REQUIRED AROUND INSULATED TUBES INSTALLED 1/2 IN. OR GREATER FROM OTHER PENETRANTS.
3M COMPANY - ULTRA GS
B. PACKING MATERIAL - MIN 3 IN. THICKNESS OF MIN 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
C. FILL/VOID OR CAVITY MATERIALS* - CAULK, SEALANT OR PUTTY - MIN 1/2 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR. MIN 1/2 IN. DIA BEAD OF FILL MATERIAL APPLIED TO THE PENETRANT/CONCRETE INTERFACE AT THE POINT CONTACT LOCATION ON THE TOP SURFACE OF FLOOR.
3M COMPANY - MP+ STX PUTTY, CP 25WB+ CAULK OR FB-3000 WT SEALANT.

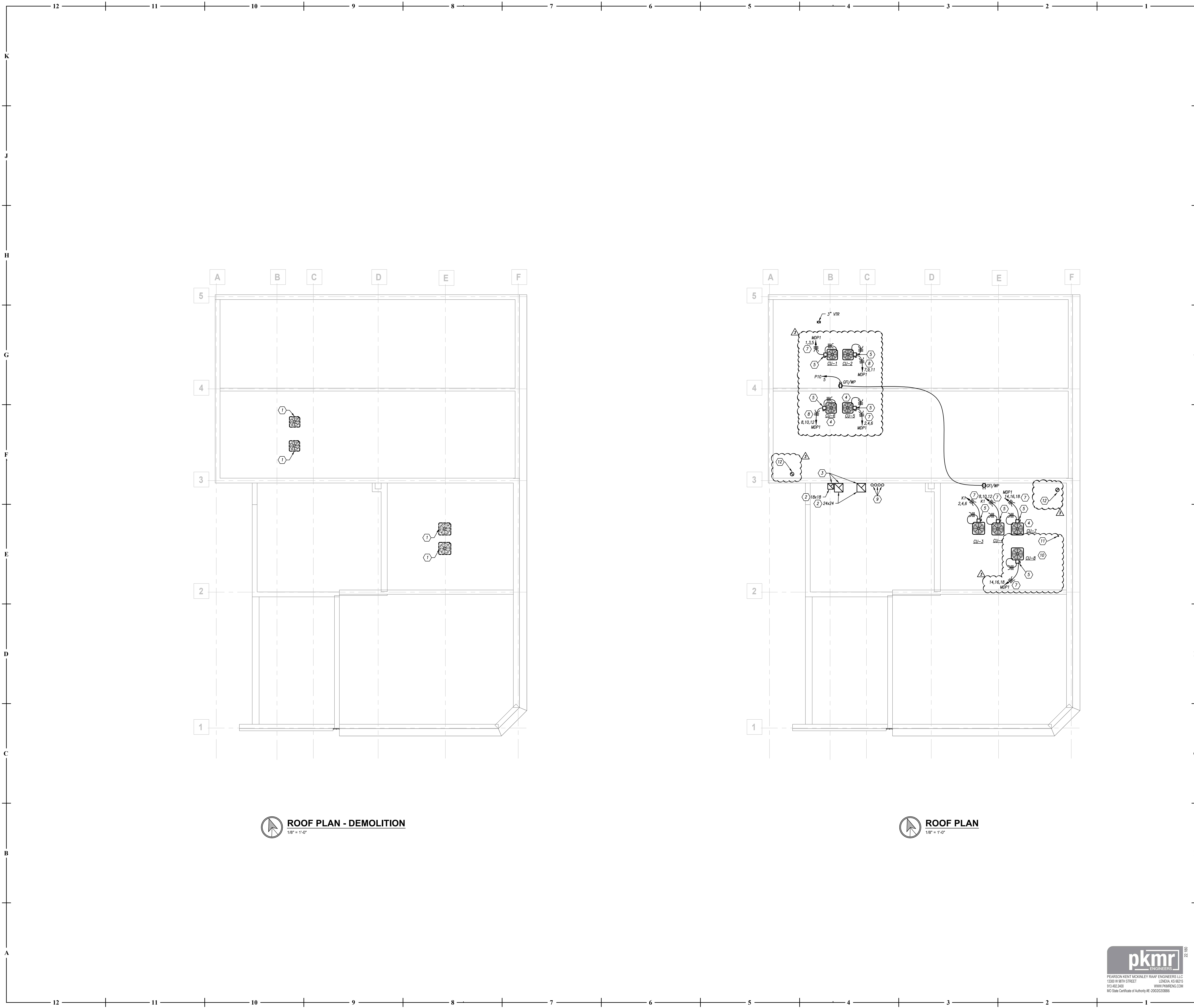
*BEARING THE UL CLASSIFICATION MARKING
*BEARING THE UL RECOGNIZED COMPONENT MARKING

System No. W-L-2300
May 19, 2005
F Ratings - 1 & 2 Hr (See Item 1)
T Ratings - 0 & 1/2 Hr (See Item 1)



1. WALL ASSEMBLY - THE 1 OR 2 HR FIRE RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300, U400 OR U400 SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 IN. BY 4 IN. (51 MM BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC. STEEL STUDS TO BE MIN 3-1/2 IN. (89 MM) WIDE SPACED MAX 24 IN. (610 MM) OC.
B. GYPSUM BOARD - THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIM OF OPENING IS 4 IN. (102 MM). THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. THE HOURLY F RATING IS 0 AND 1/2 HR FOR 1 AND 2 HR RATED ASSEMBLIES, RESPECTIVELY.
2. THROUGH PENETRANTS - ONE OR MORE NONMETALLIC PIPES, CONDUITS OR TUBES INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN OPENING. ANNULAR SPACE BETWEEN PENETRANTS AND PERIPHERY OF OPENING TO BE MIN 0 IN. (POINT CONTACT) TO MAX 1 IN. (0 MM TO MAX 25 MM). SPACE BETWEEN PENETRANTS SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 1 IN. (0 MM TO MAX 25 MM). PENETRANTS TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL. THE FOLLOWING TYPES AND SIZES OF PENETRANTS MAY BE USED:
A. POLYETHYLENE GLYCOL (PEGL) PIPE - NOM 1-1/2 IN. (38 MM) DIA (OR SMALLER) SCHEDULE 40 SOLID OR CELLULAR CORE PVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.
B. RIGID NONMETALLIC CONDUIT+ - NOM 1-1/2 IN. (38 MM) DIA (OR SMALLER) SCHEDULE 40 PVC CONDUIT INSTALLED IN ACCORDANCE WITH ARTICLE 347 OF THE NATIONAL ELECTRICAL CODE (NECA NO. 70).
C. CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE - NOM 1-1/2 IN. (38 MM) DIA (OR SMALLER) SDR13.5 CPVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) PIPING SYSTEMS.
D. CROSSLINKED POLYETHYLENE (PEX) TUBING - NOM 1 IN. (25 MM) DIA (OR SMALLER) SDR 9 PEX TUBING FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.
3. FILL VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - MIN 5/8 IN. (16 MM) THICKNESS OF CAULK APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIA BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL.
3M COMPANY - IC 15WB+ CP 25WB+ CAULK OR FB-3000 WT SEALANT
(NOTE: CP 25WB+ NOT SUITABLE FOR USE WITH CPVC PIPES.)

*BEARING THE UL CLASSIFICATION MARKING



GENERAL ROOF PLAN

NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. MAINTAIN CODE-REQUIRED DISTANCES FOR ALL VENTS, EXHAUSTS, ETC. FROM MECHANICAL EQUIPMENT OUTSIDE AIR INTAKES.
3. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE MOUNTED A MINIMUM OF 36" ABOVE THE ROOF ON SUITABLE STEEL SUPPORTS UNLESS OTHERWISE NOTED.

ROOF PLAN KEYED NOTES

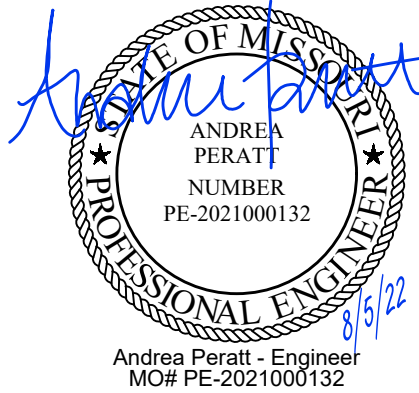
- (1) CONTRACTOR TO FIELD VERIFY LOCATION AND REMOVE EXISTING CONDENSING UNITS. REUSE EXISTING LOCATIONS. REFRIGERANT PIPE PENETRATIONS AND ACCESSORIES OF CONDENSING UNITS SERVING SECOND FLOOR. REFER TO NEW WORK PLAN.
- (2) DISHWASHER, GREASE AND MAKE-UP AIR DUCT FROM/ TO FIRST FLOOR TO/ FROM 2ND FLOOR ROOF.
- (3) CAP DUCTWORK ON ROOF FOR FUTURE USE.
- (4) CONDENSING UNIT SERVING 2ND FLOOR TO BE INSTALLED IN EXISTING LOCATION.
- (5) 60AMP, 3-POLE, NON-FUSED HEAVY-DUTY DISCONNECT SWITCH IN NEMA 3R ENCLOSURE.
- (6) 30AMP, 3-POLE, NON-FUSED HEAVY DUTY DISCONNECT SWITCH IN NEMA 3R ENCLOSURE.
- (7) (3) #6 WIRE AND (1) #10 GROUND IN 3/4" CONDUIT.
- (8) (3) #8 WIRE AND (1) #10 GROUND IN 3/4" CONDUIT.
- (9) CONDUIT PENETRATIONS FOR FUTURE MECHANICAL EQUIPMENT. REFER TO SHEET E111 FOR ADDITIONAL INFORMATION.
- (10) NEW CONDENSING UNIT SHALL BE INSTALLED ON A NEW EQUIPMENT CURB ON ROOF SUPPORT.
- (11) NEW CONCENTRIC VENT THROUGH ROOF. VENT TERMINATION SHALL NOT BE WITHIN 10' OF FRESH AIR INTAKE.
- (12) FRESH AIR INTAKE VENT.

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City Comments	05/17/22
ASI-01	08/05/22



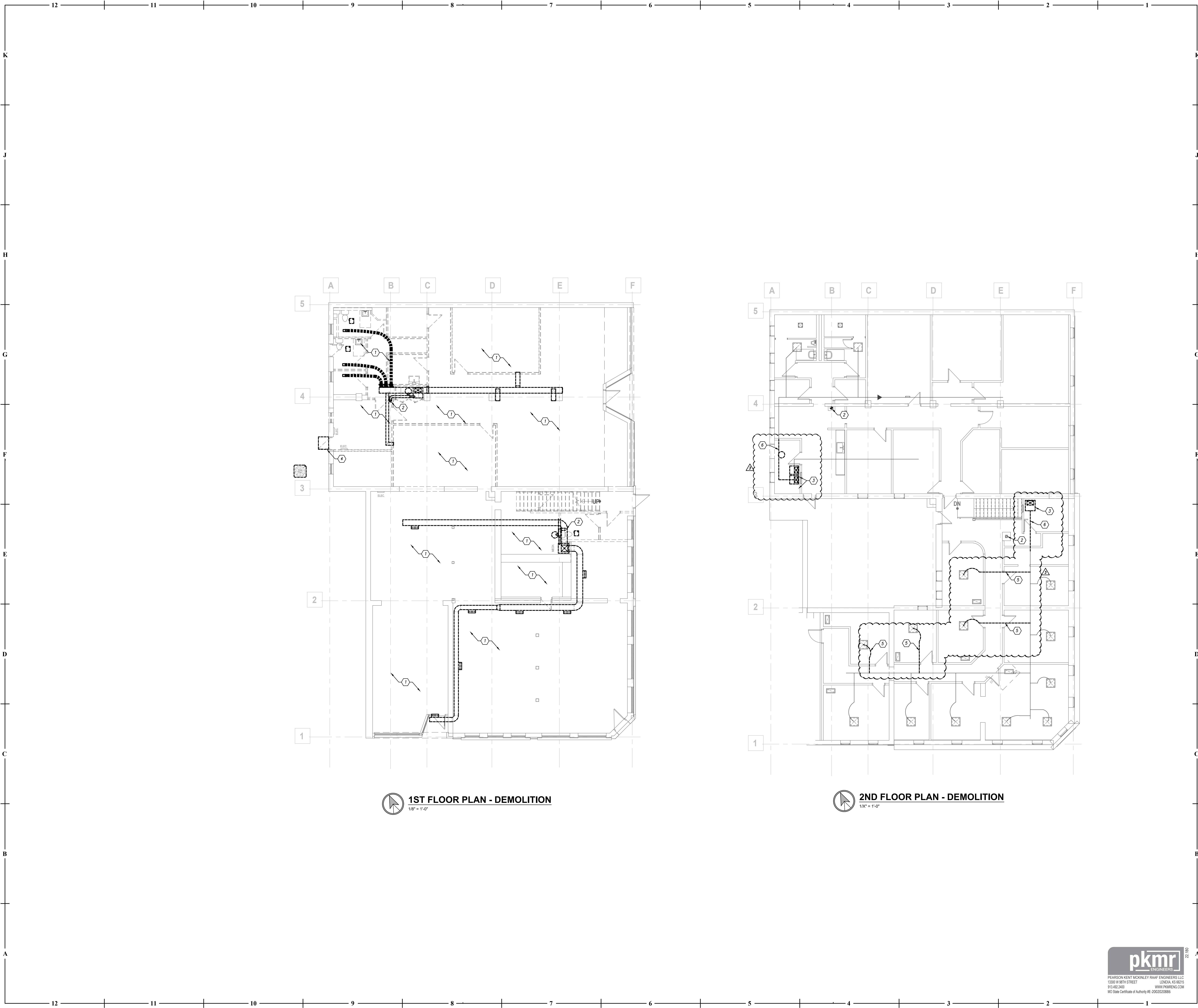
MEP101
ISSUE DATE: APRIL 21, 2022
COLLINS WEBB #: 21121

ROOF PLAN



Permit Set





GENERAL DEMOLITION NOTES

1. REFER TO GENERAL DEMOLITION NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.

DEMOLITION PLAN KEYED NOTES

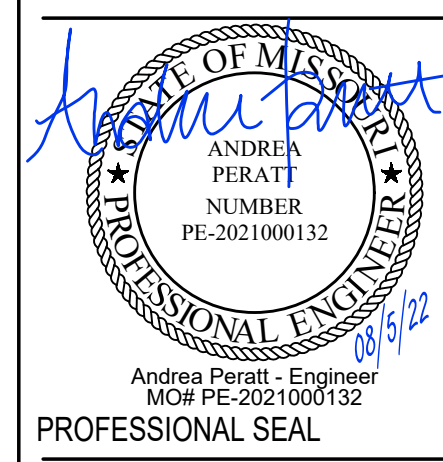
- 1 REMOVE ALL DUCTWORK, DIFFUSERS AND EQUIPMENT IN THIS AREA. PATCH/REPAIR WALL/CEILING IF REQUIRED. REFER TO NEW WORK PLAN.
- 2 REMOVE VERTICAL FLUE DUCT GOING THROUGH SECOND FLOOR TO ROOF. REFER TO NEW WORK PLAN.
- 3 REMOVE EXISTING FURNACE. KEEP ALL DUCTWORK, FLUE AND ACCESSORIES. CLEAN RETURN PLENUM, GRILLE AND PROVIDE NEW FILTERS. PREPARE DUCTWORK FOR NEW FURNACE INSTALLATION. REFER TO NEW WORK PLAN.
- 4 REMOVE EXISTING WEATHER HOOD AND INTAKE OPENING. PATCH AND REPAIR OPENING WITH CONSTRUCTION MATERIALS TO MATCH EXISTING CONDITIONS. REFER TO ARCHITECT.
- 5 REMOVE EXISTING DUCTWORK AND CAP BACK AT MAIN.
- 6 REMOVE SUPPLY DUCT AND CONNECTION AT FURNACE TO PREPARE FOR A NEW SUPPLY CONNECTION.

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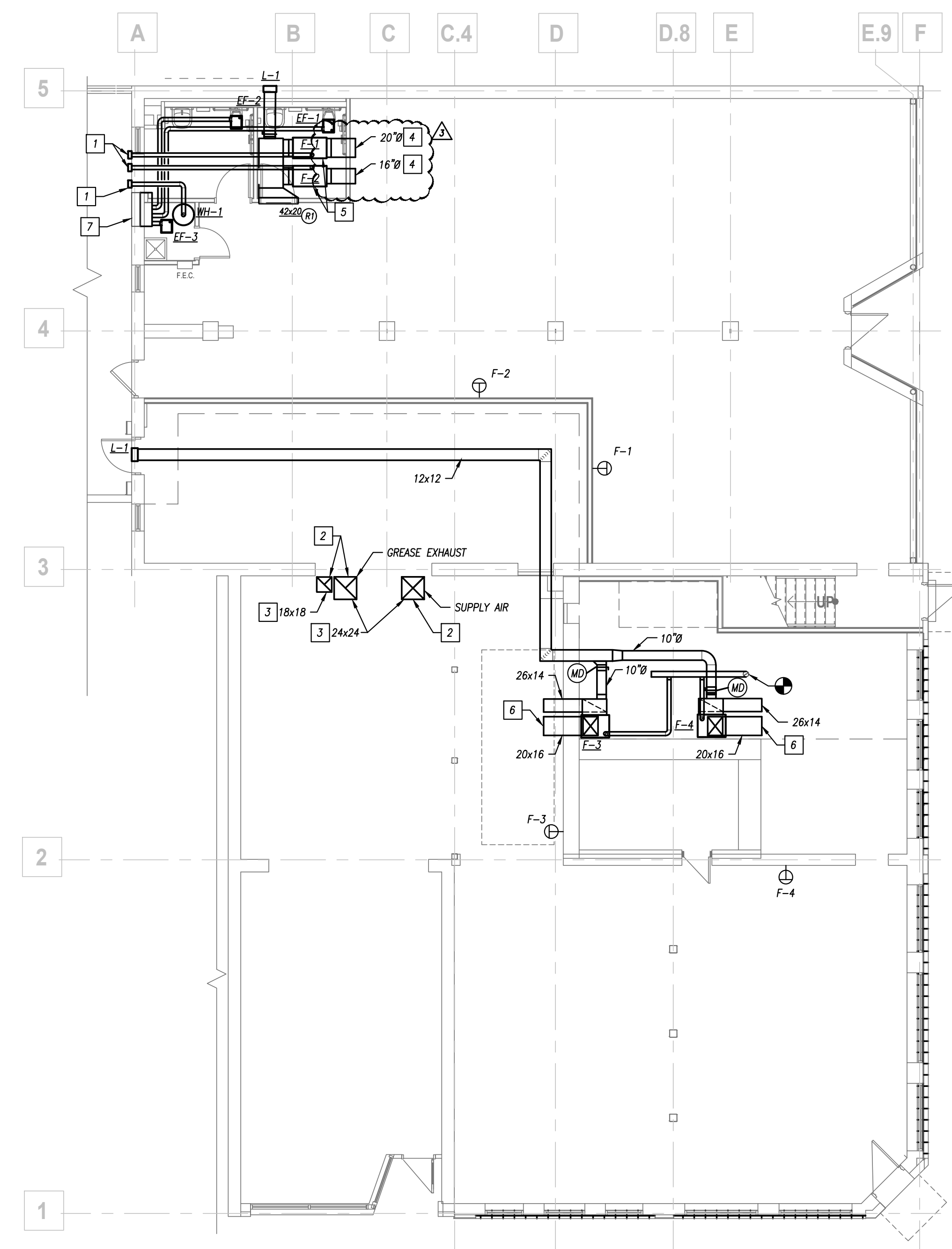
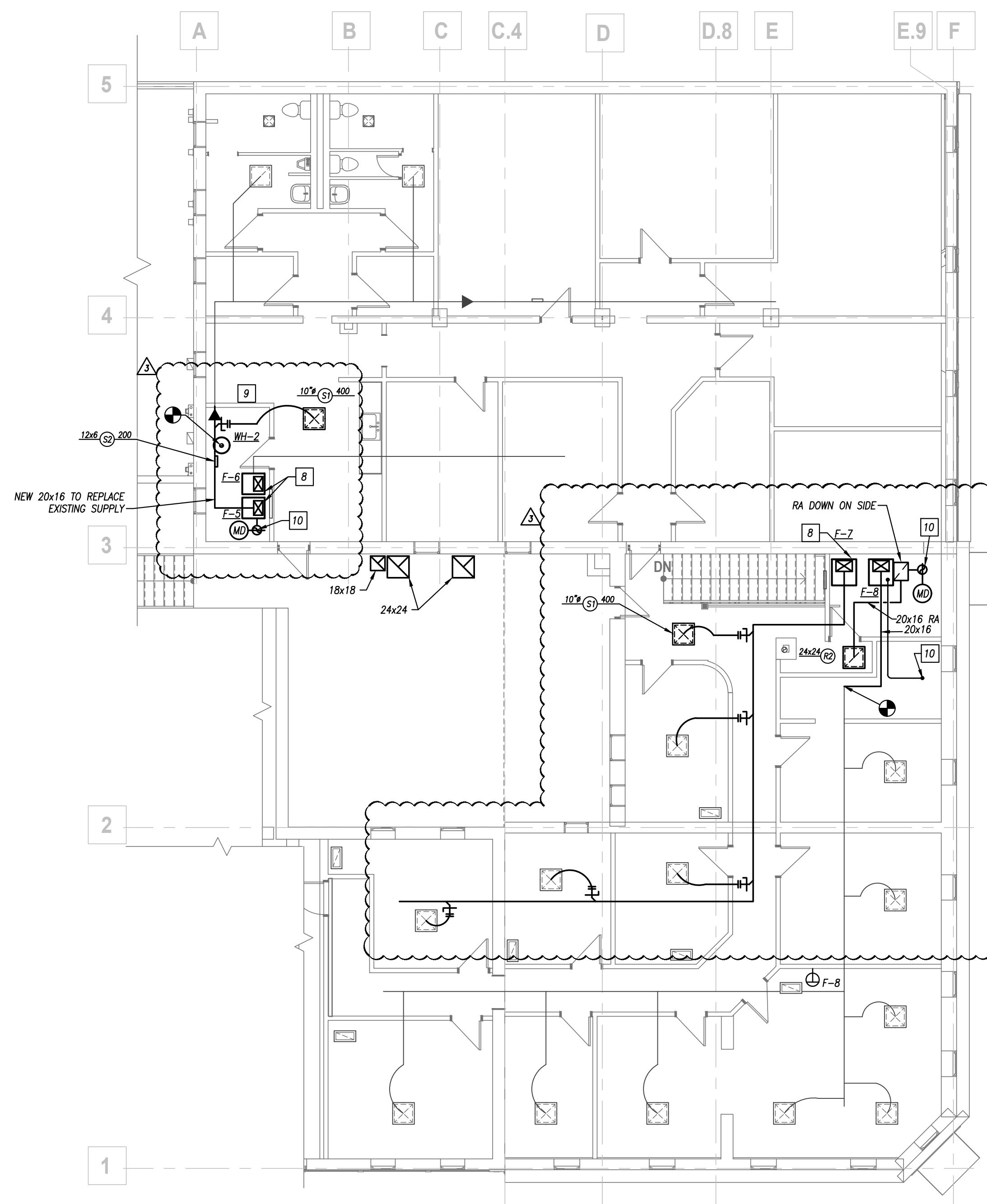


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DEMOLITION - FLOOR PLANS



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GENERAL HVAC NOTES

1. REFERENCE TO GENERAL NOTICES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. ROUND BRANCH DUCT RUNOUTS AND FLEXIBLE DUCT SHALL BE THE SAME SIZE AS THE DIFFUSER NECK UNLESS NOTED OTHERWISE.
3. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0".
4. ALL RUNOUTS TO TERMINAL BOXES SHALL BE ONE SIZE LARGER THAN THE MAINLINE UNLESS NOTED OTHERWISE.
5. ALL AIR DISTRIBUTION DEVICES SHALL HAVE LOCKABLE VOLUME CONTROL TURNING.
6. ALL 90 DEGREE TURNING ELBOWS SHALL BE SMOOTH ROUND OR SQUARE WITH TURNING VANES.
7. DUCT SIZES SHOWN ON PLANS ARE INSIDE FREE AREA.
8. PROVIDE ACCESS DOORS IN DUCTS AHEAD OF ALL AUTOMATIC, FIRE, AND SMOKE DAMPERS.
9. FOR BALANCING THE OUTSIDE AIRFLOW QUANTITIES, REFER TO HVAC SCHEDULES.

HVAC PLAN KEYED NOTES

- 1 TERMINATE 4" FLUE/VENT WITH PRINTABLE WALL CAP. REFER TO DETAIL.
- 2 DISMASHER, GREASE AND MAKE-UP AIR DUCT CAPPED IN SPACE FOR FUTURE USE.
- 3 DISMASHER AND GREASE DUCT FROM FIRST FLOOR TO SECOND FLOOR TO BE ROUTED ON EXTERIOR WALL AND CAPPED OVER 2ND FLOOR ROOF. REFER TO ROOF PLAN.
- 4 CAP SPIRAL DUCTWORK IN SPACE. ROUTE DUCTWORK ROOF TO STRUCTURE.
- 5 FURNACES TO BE INSTALLED ABOVE TOILET. REFER TO DETAIL FOR INSTALLATION.
- 6 SUPPLY AND RETURN AIR DUCTWORK ROUTED THROUGH STRUCTURAL WALL BOTTOM OF DUCT TO BE ROUTED AT 10'-0" A.F.F. COORDINATE PENETRATIONS WITH STRUCTURE.
- 7 ROUTE GENERAL DUCTWORK TO PLENUM ON BACKSIDE OF EXISTING LOWER PLENUM TO MATCH EXISTING SIZE OF LOWER. REFER TO DETAIL.
- 8 REPLACE EXISTING FURNACES. CONNECT TO EXISTING DUCTWORK, FLUES, ELECTRIC AND CONDENSATE.
- 9 REPLACE EXISTING WATER HEATER TO CONNECT INTO EXISTING DUCTWORK.
- 10 1" OUTDOOR AIR DUCT UP TO ROOF INTAKE. PROVIDE MOTORIZED AND BALANCING DAMPER IN RSSR. INTAKE ON ROOF SHALL BE COOK PR-12 OR EQUIVALENT.
- 11 TERMINATE FLUE AND INTAKE UP TO CONCENTRIC VENT. TERMINATION SHALL NOT BE WITHIN 10' OF FRESH AIR INTAKE.

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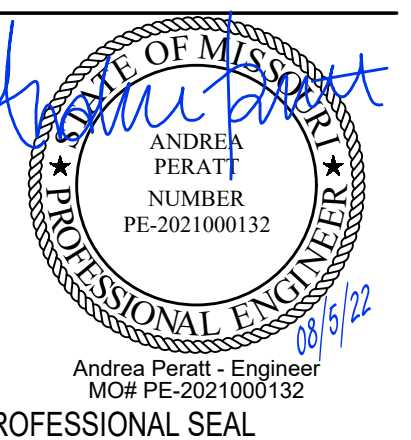
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MECHANICAL - FLOOR PLANS

EXHAUST FAN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	TYPE	SERVICE	CFM	E.S.P. (IN)	BHP	FAN DATA	DRIVE	SONES	RPM	ELECTRICAL	CONTROL	REMARKS
EF-1	COOK	GC-146	CEILING CABINET	BATHROOM	90	0.250	----	3W	DIRECT	1.3	900	120V / 1PH	SWITCH	ALL
EF-2	COOK	GC-146	CEILING CABINET	BATHROOM	90	0.250	----	3W	DIRECT	1.3	900	120V / 1PH	SWITCH	ALL
EF-3	COOK	GC-146	CEILING CABINET	BATHROOM	90	0.250	----	3W	DIRECT	1.3	900	120V / 1PH	SWITCH	ALL

REMARKS:
1. UNIT SHALL BE PROVIDED WITH SOLID STATE SPEED CONTROL MOUNTED AT FAN.
2. PROVIDE WITH STARTER AND WIRE TO START SWITCH.

HVAC PIPING MATERIAL SCHEDULE

SYSTEM	SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION
CONDENSATE DRAIN INTERIOR	3/4" - 2"	SCH. 40	CPVC	SOLVENT JOINED	10 FT - 1/2HR	YES	FIBERGLASS W/ ASJ 1/2" (PLENUM ONLY)
CONDENSATE DRAIN INTERIOR	1/2" - 2"	L	COPPER	SOLDER, PRO-PRESS	10 FT - 1/2HR	YES	FIBERGLASS W/ ASJ 1/2" (PLENUM ONLY)
REFRIGERANT LINES	1/2" - 2"	ACP	COPPER	BRAZED		YES	ELASTOMERIC 3/4"

NOTES:
1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
2. ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 - 2007 REQUIREMENTS AT A MINIMUM.
3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

FURNACE SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	CFM	O.A. CFM	FAN DATA	HEATING	ELECTRICAL	REMARKS
F-1	LENNOX	SL297UH090608	1,900	210	0.5" 1/2	60.0 100.0 96.0% 120V / 1PH 14.0 20	2	
F-2	LENNOX	SL297UH090488	1,400	210	0.5" 1/2	45.0 110.0 97.0% 120V / 1PH 12.0 20	2	
F-3	LENNOX	SL280UH135W00	1,990	299	0.5" 1	60.0 165.0 132.0 80.0% 120V / 1PH 12.0 20	1	
F-4	LENNOX	SL280UH135W00	1,990	299	0.5" 1	60.0 165.0 132.0 80.0% 120V / 1PH 12.0 20	1	
F-5	LENNOX	SL280UH090488	1,400	180	0.5" 1/2	45.0 110.0 88.0 80.0% 120V / 1PH 12 15	1	
F-6	LENNOX	SL280UH090488	1,400	180	0.5" 1	60.0 110.0 88.0 80.0% 120V / 1PH 12 15	1	
F-7	LENNOX	SL280UH135W00	1,990	299	0.5" 1	60.0 165.0 132.0 80.0% 120V / 1PH 12 20	1	
F-8	LENNOX	SL297UH090608	1,900	210	0.5" 1	60.0 100.0 96.0 80.0% 120V / 1PH 14.0 20	2	

REMARKS:
1. STANDARD EFFICIENCY FURNACE.
2. HIGH EFFICIENCY FURNACE, PROVIDE WITH MANUFACTURERS VERTICAL DISCHARGE KIT, REFER TO DETAIL.

CONDENSING UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	CAPACITY (MBH)	MINIMUM SEER	AMBIENT TEMP. (°F)	ELECTRICAL	REMARKS
CU-1	LENNOX	16ACX-060-230	60.0	15.5	105°	208V / 3PH 36.0 50	ALL
CU-2	LENNOX	16ACX-048-230	45.0	15.0	105°	208V / 3PH 28.0 40	ALL
CU-3	LENNOX	16ACX-060-230	60.0	15.5	105°	208V / 3PH 36.0 50	ALL
CU-4	LENNOX	16ACX-060-230	60.0	15.5	105°	208V / 3PH 36.0 50	ALL
CU-5	LENNOX	16ACX-060-230	60.0	15.5	105°	208V / 3PH 36.0 50	ALL
CU-6	LENNOX	16ACX-048-230	45.0	15.0	105°	208V / 3PH 28.0 40	ALL
CU-7	LENNOX	16ACX-060-230	60.0	15.5	105°	208V / 3PH 36.0 50	ALL
CU-8	LENNOX	16ACX-060-230	60.0	15.5	105°	208V / 3PH 36.0 50	ALL

REMARKS:
1. COOLING CAPACITY BASED ON A SUCTION TEMPERATURE OF 49°F.
2. ENERGY-STAR COMPLIANT.
3. PROVIDE WITH 3-1/2" CONCRETE PAD.

LOUVER SCHEDULE

PLAN MARK	QTY.	MANUFACTURER	MODEL NUMBER	STYLE	SERVICE	WIDTH (IN)	HEIGHT (IN)	APD (IN)	FREE AREA (SF)	VELOCITY (FPM)	REMARKS
L-1	2	GREENHECK	EDJ-401	STATIONARY	INTAKE	14	14	0.006	0.3	200	ALL

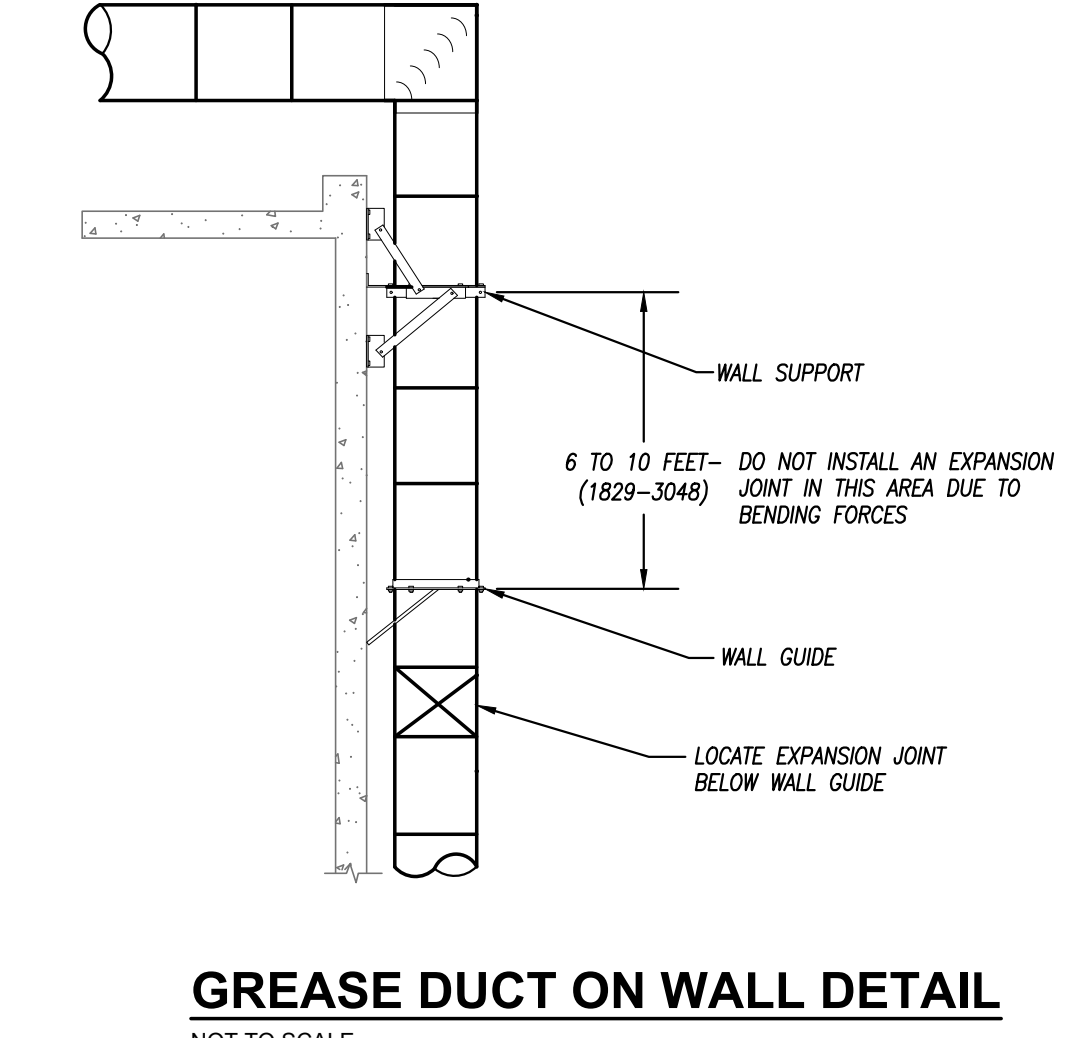
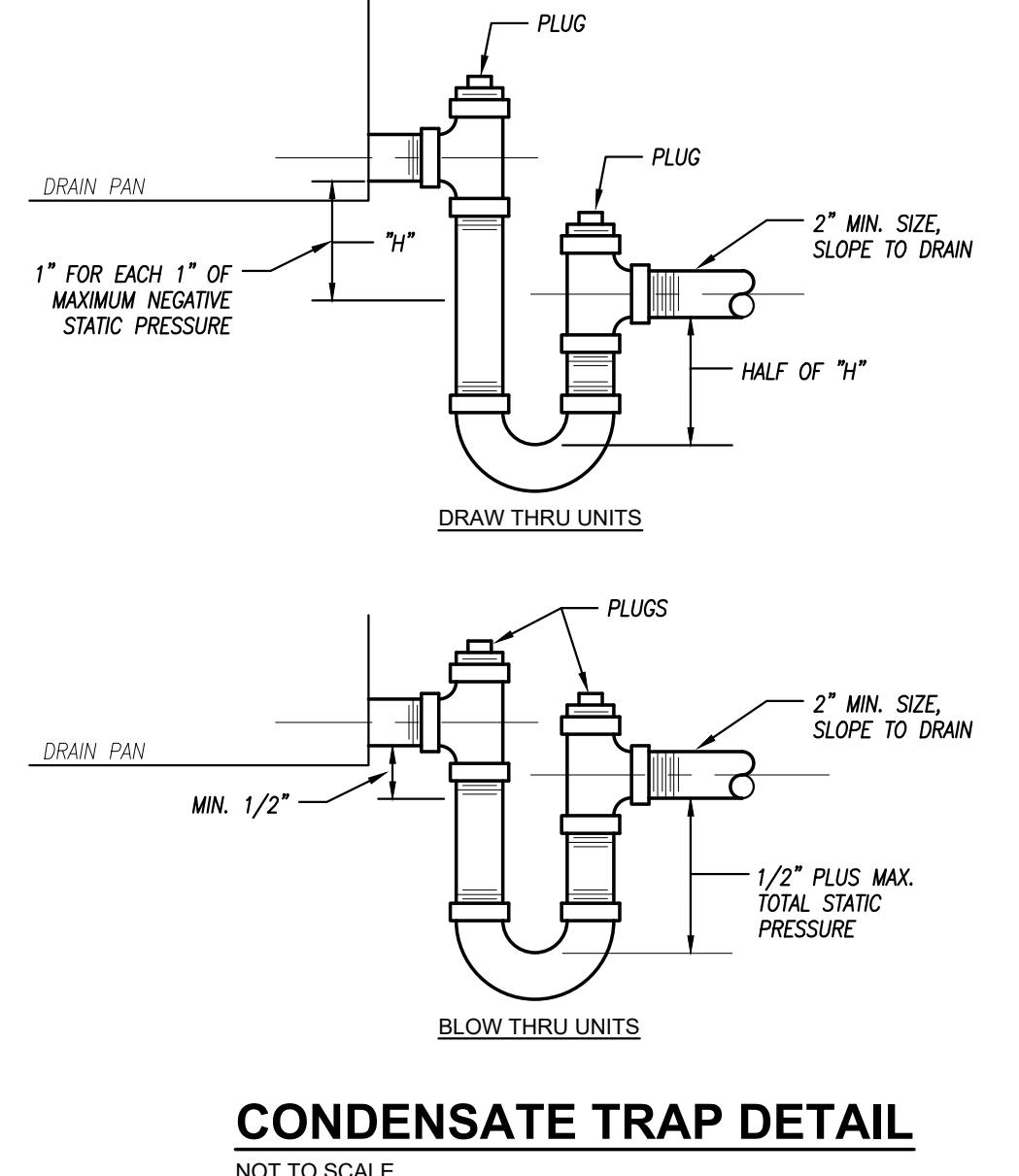
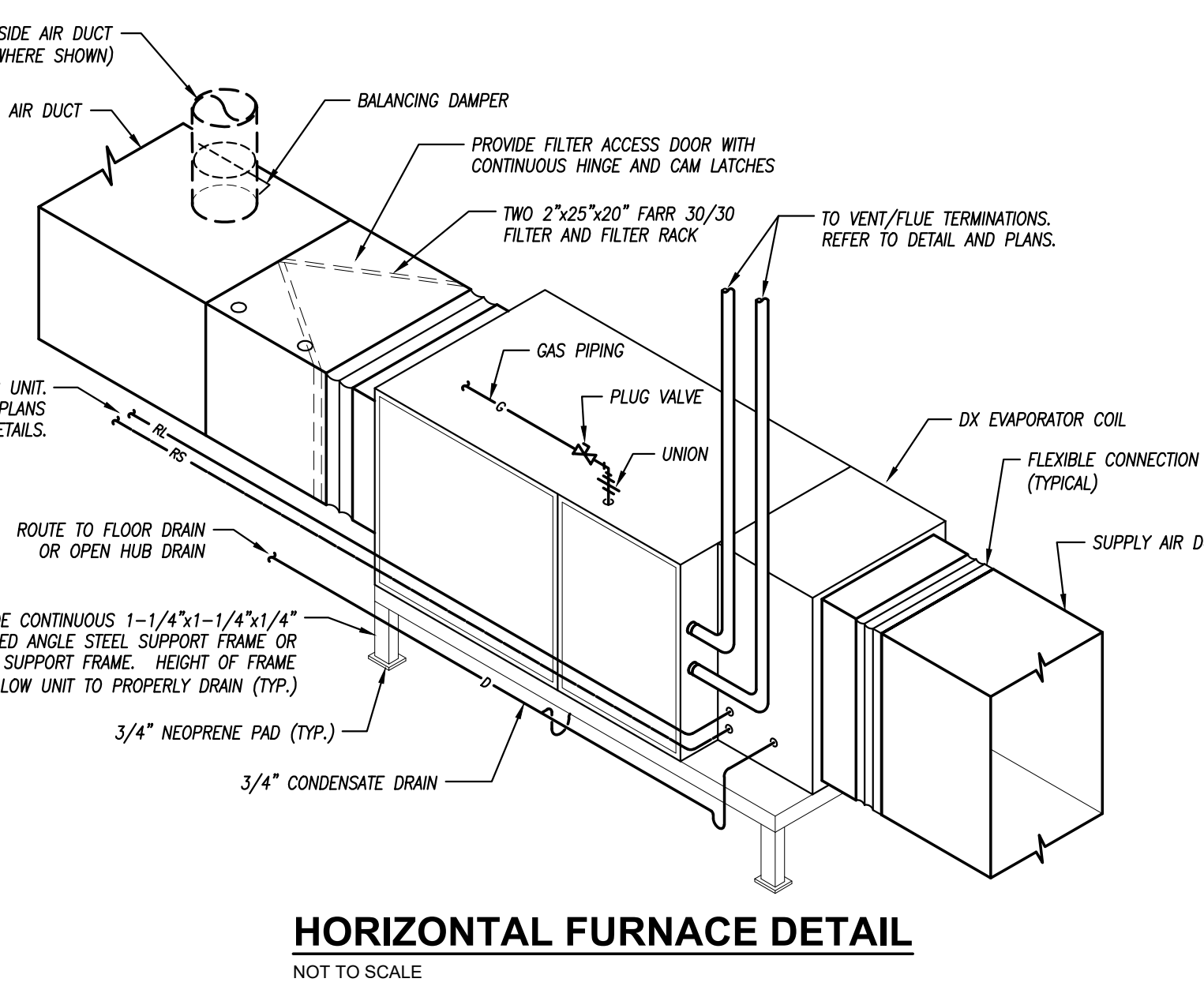
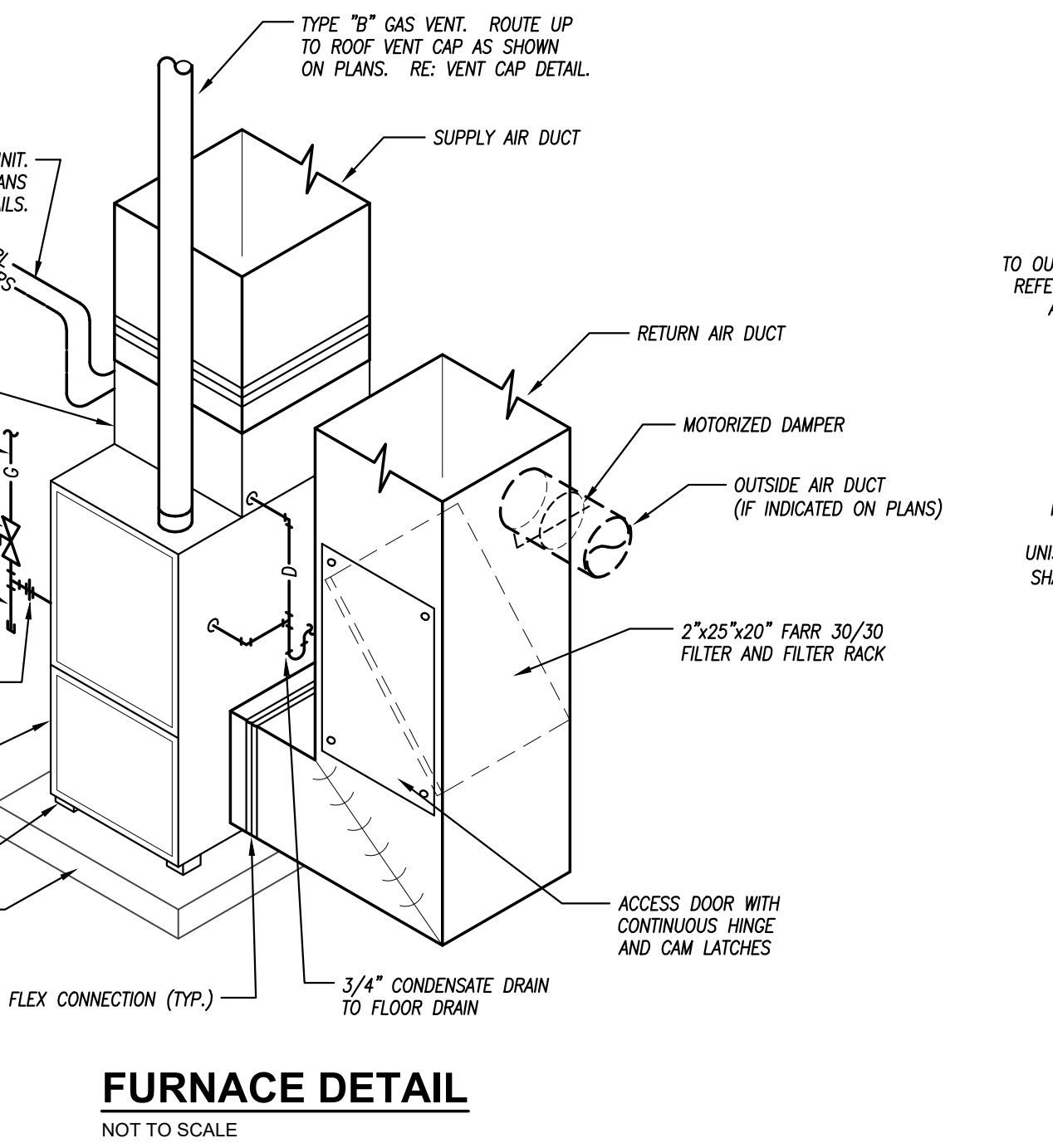
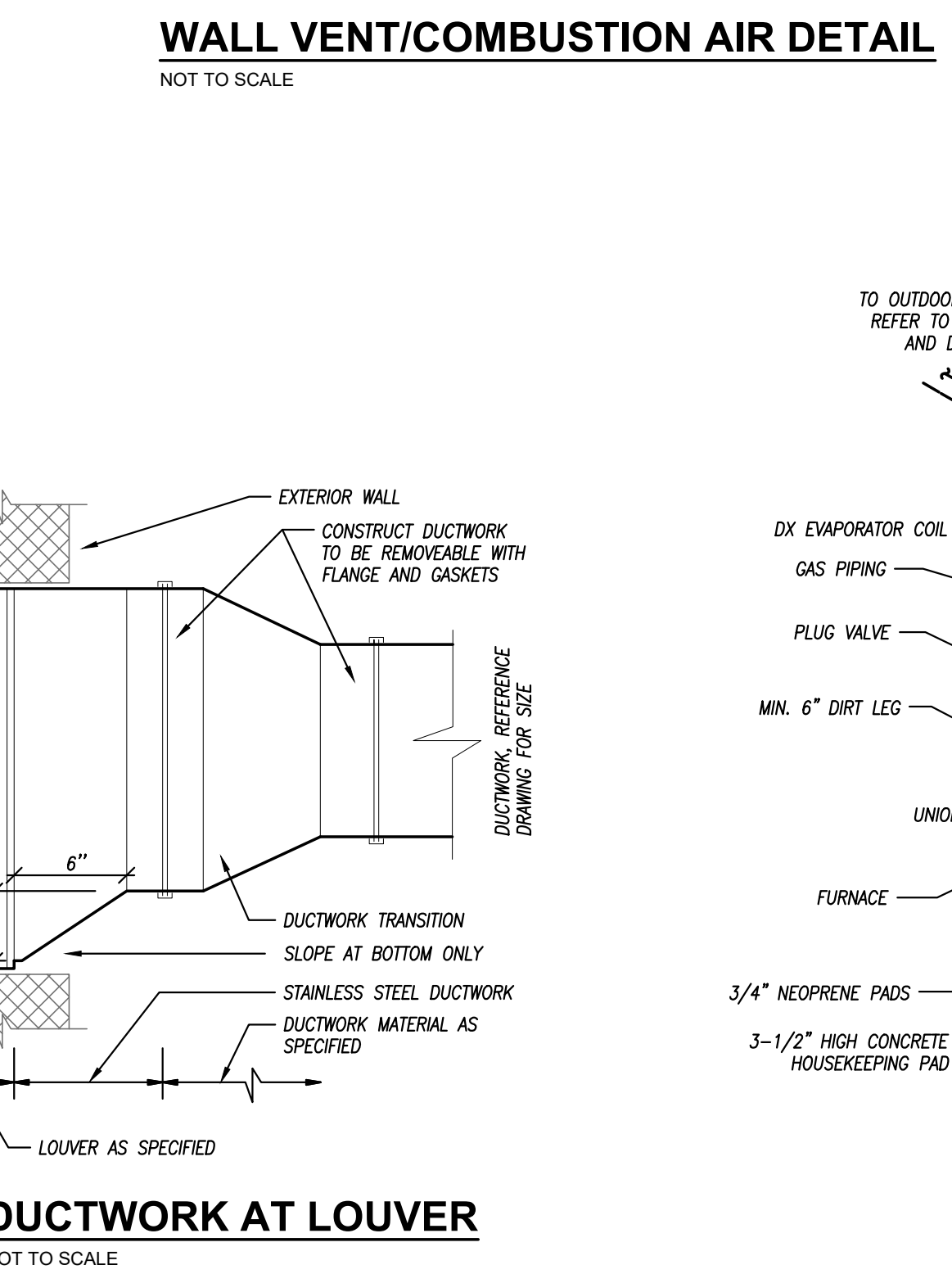
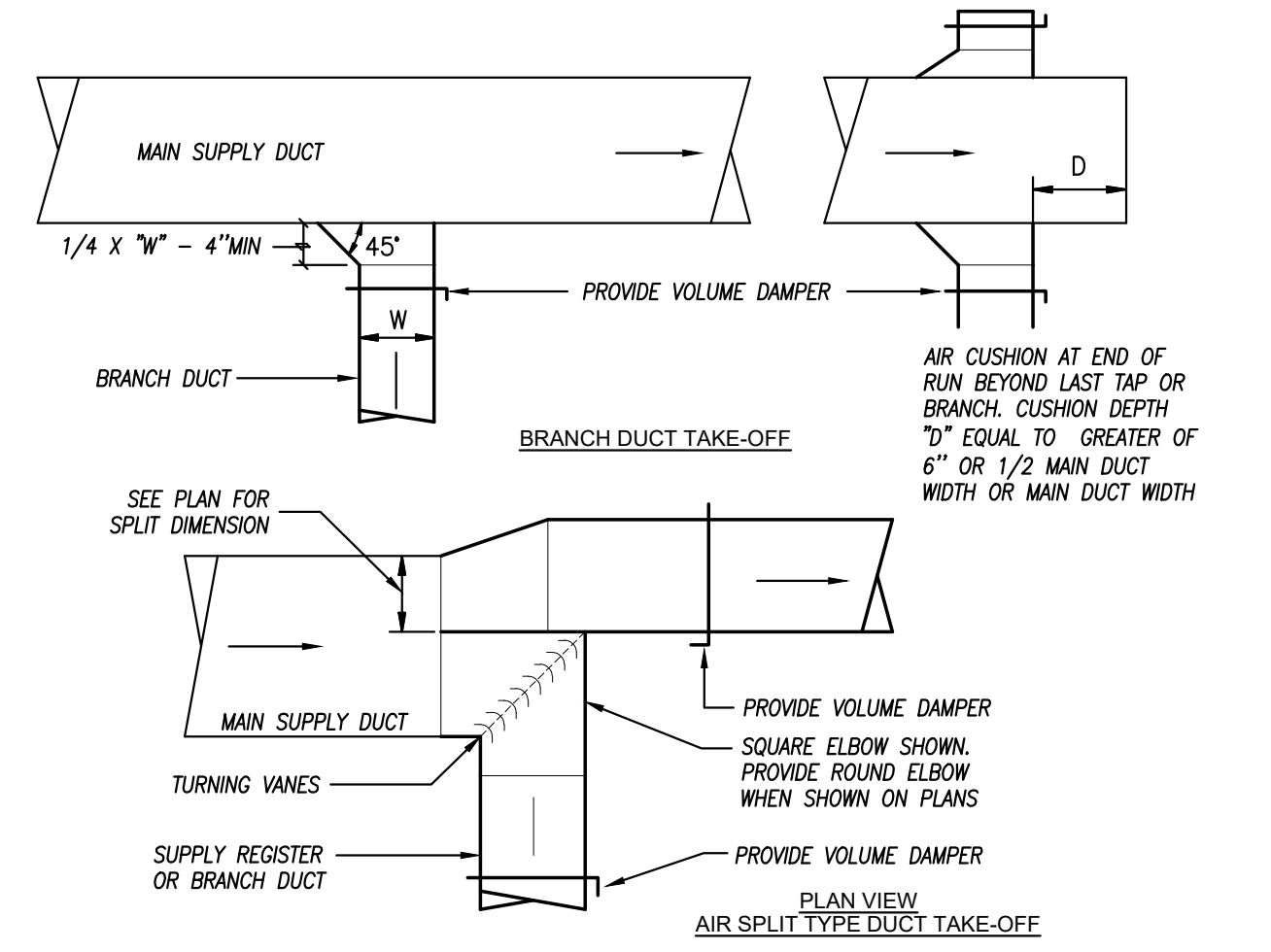
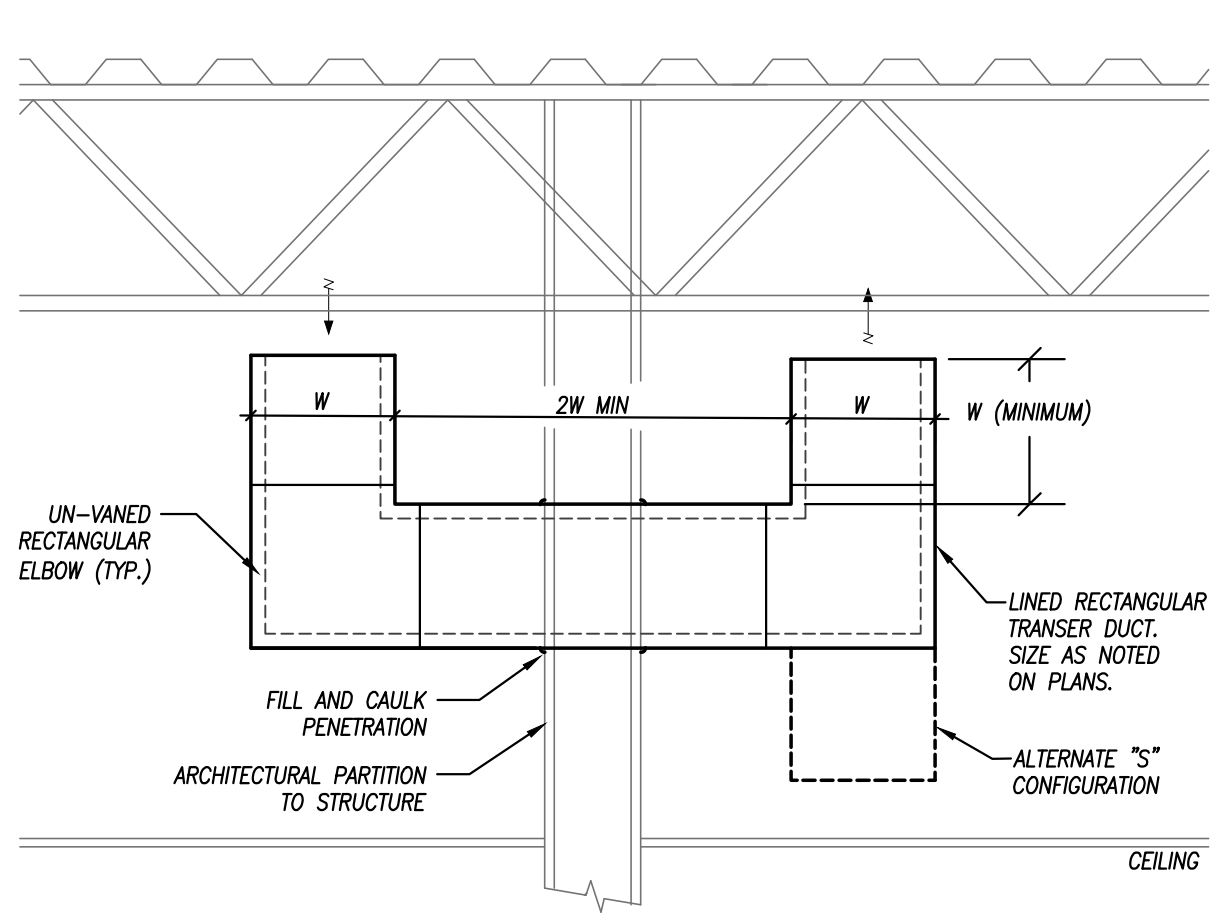
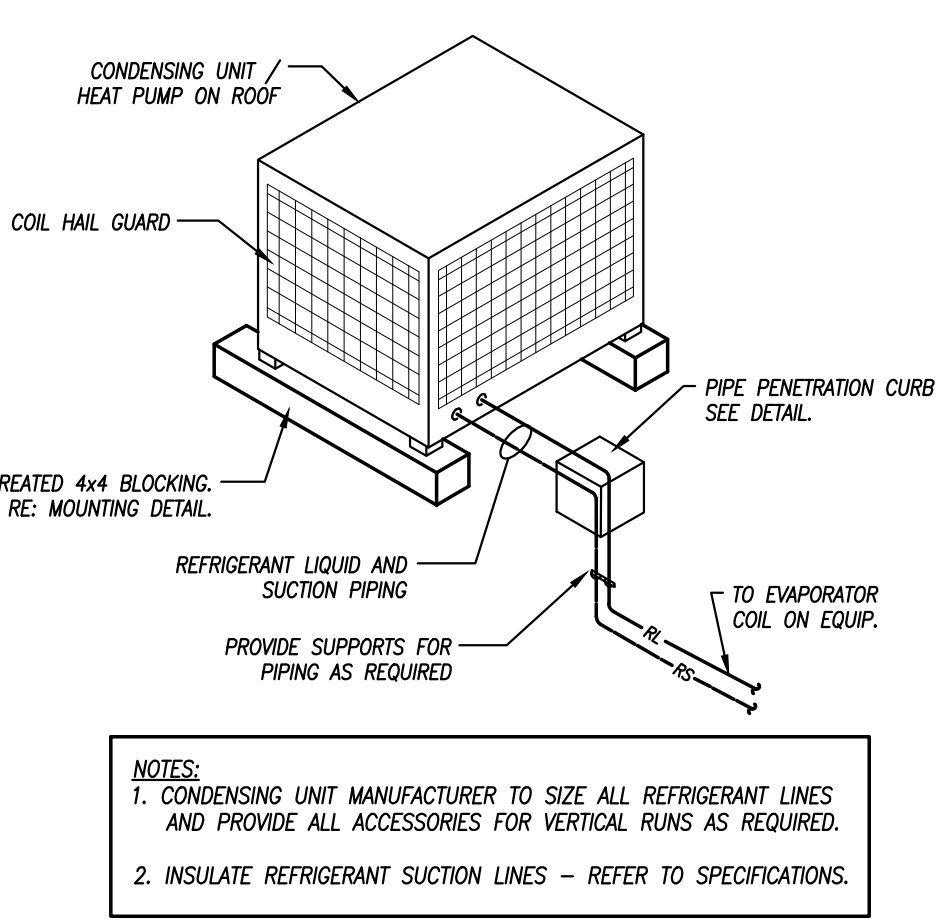
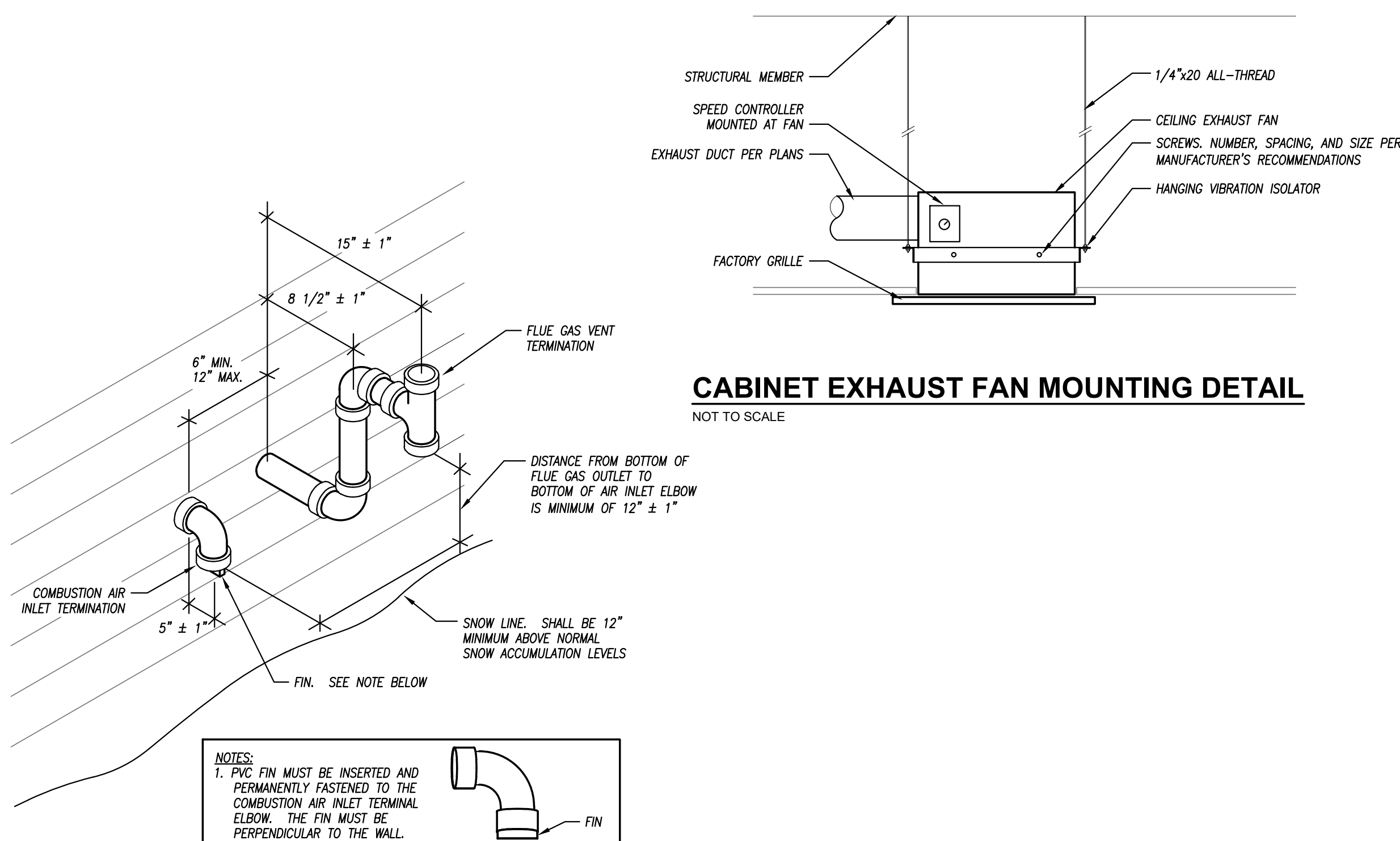
REMARKS:
1. PROVIDE EXTENDED SILL AND MOUNTING FRAME TO MATCH CONSTRUCTION. COORDINATE EXACT LOUVER SIZE TO INSTALL WITHIN MASONRY DIMENSIONS.
2. PROVIDE COLOR AS SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.

GRILLE, REGISTER & DIFFUSER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	MATERIAL	STYLE	DESCRIPTION	MOUNT TYPE	FACE SIZE (IN)	NECK SIZE (IN)	VOLUME DAMPER	MAX. APD (IN. WG.)	MAX. NC	FINISH COLOR	REMARKS
S1	TITUS	PAS	STEEL	CEILING DIFFUSER	PERFORATED FACE	LAY - IN	24x24	AS INDICATED	NO	0.08	25	WHITE	
S2	TITUS	300RS	STEEL	SIDEWALL DIFFUSER	RECTANGULAR DOUBLE DEFLECTION AEROBLADE	DUCT	AS INDICATED	AS INDICATED	YES - O.B.	0.07	30	PAINTABLE	2
R1	TITUS	350FL2	STEEL	SQUARE WALL	35 DEG SINGLE DEFLECTION AEROBLADE 3/4" SPACING	WALL	AS INDICATED	AS INDICATED	NO	0.08	25	WHITE	1
R2	TITUS	PAR	STEEL	CEILING DIFFUSER	PERFORATED FACE	LAY - IN	AS INDICATED	AS INDICATED	NO	0.08	25	WHITE	

GENERAL NOTES:
1. PROVIDE ALL GRD WITH ALL NECESSARY MOUNTING HARDWARE.
2. PROVIDE GRD WITHOUT SCREWHOLE WHEN INSTALLED IN LAY-IN CEILING.
3. VERIFY CEILING CONFIGURATION, COLOR AND SPECIFICS WITH ARCHITECTURAL CEILING PLANS.

REMARKS:
1. PROVIDE WITH FILTERED GRILLE. PROVIDE WITH MERV 8 2" FILTER TO FIT WITHIN GRILLE ASSEMBLY.
2. PROVIDE WALL FINISH, AND PAINT AS DIRECTED BY OWNER/ARCHITECT.



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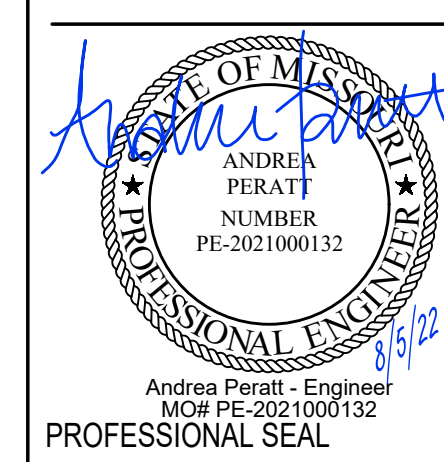


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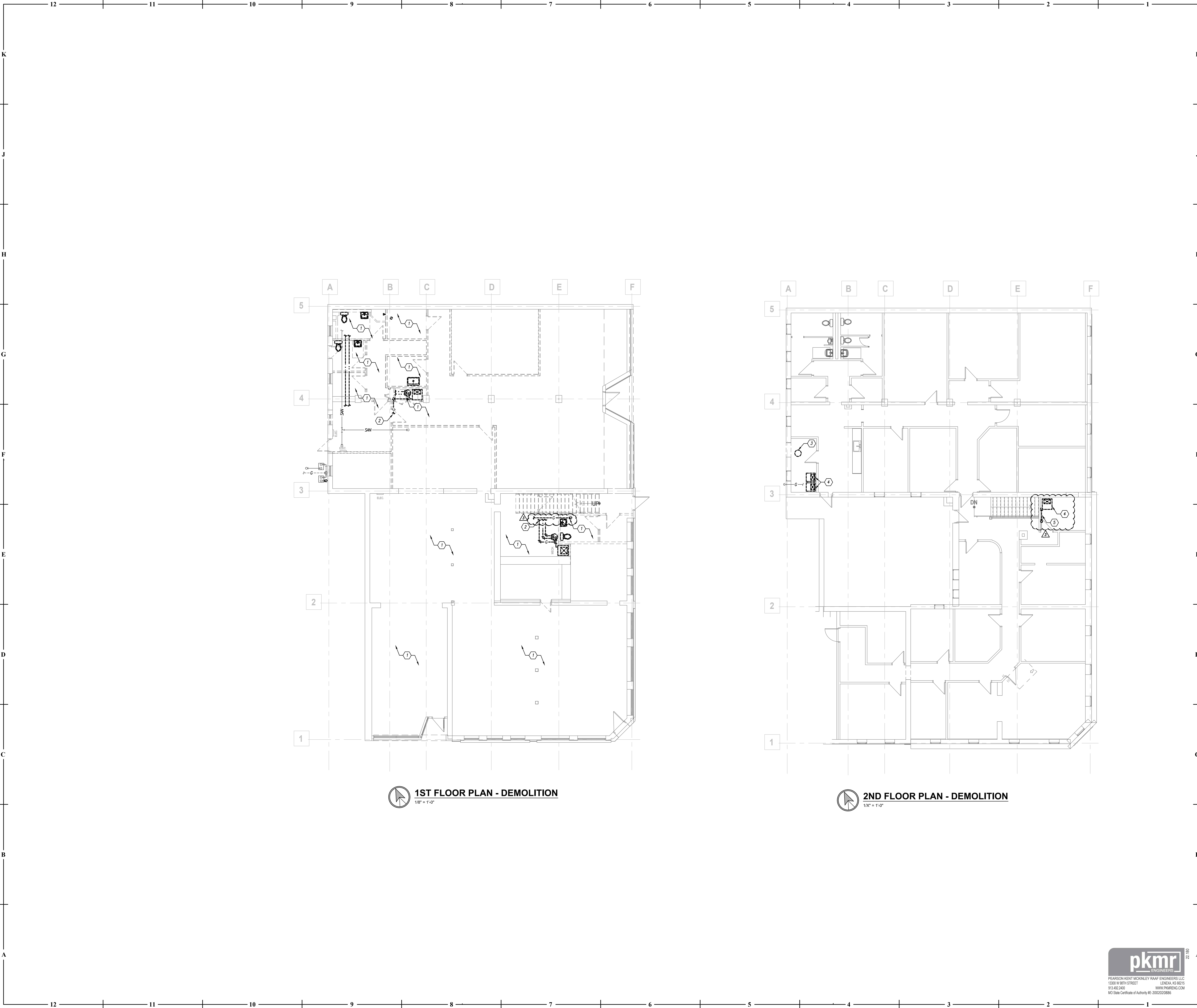
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MECHANICAL - SCHED. /DETAILS

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GENERAL DEMOLITION NOTES

1. REFER TO GENERAL DEMOLITION NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.

DEMOLITION PLAN KEYED NOTES

1. REMOVE ALL DOMESTIC COLD WATER, HOT WATER, SANITARY & VENT PIPE SERVING FIRST FLOOR FIXTURES AND EQUIPMENT. DO NOT DEMOLISH SANITARY PIPES FROM SECOND FLOOR. REFER TO NEW WORK PLAN.
2. GAS PIPE SERVING FIRST FLOOR TO BE REMOVED.
3. EXISTING WATER HEATER TO BE REPLACED ON SAME LOCATION. REUSE ALL EXISTING PIPES AND ACCESSORIES. REFER TO NEW WORK PLAN.
4. EXISTING FURNACE TO BE REPLACED ON SAME LOCATION. REMOVE EXISTING GAS CONNECTION AND PROVIDE NEW CONDENSATE DRAIN PIPE.
5. REMOVE EXISTING GAS PIPING BACK TO MAIN. CONTRACTOR SHALL FIELD VERIFY EXISTING ROUTING.



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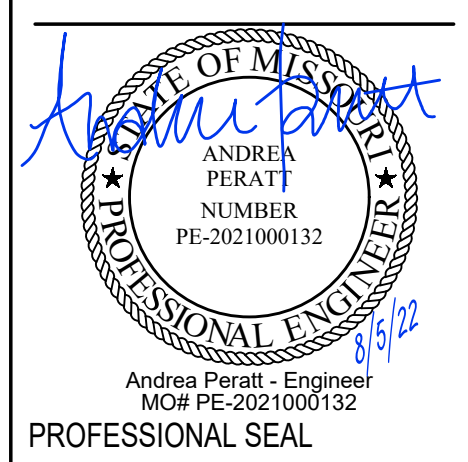
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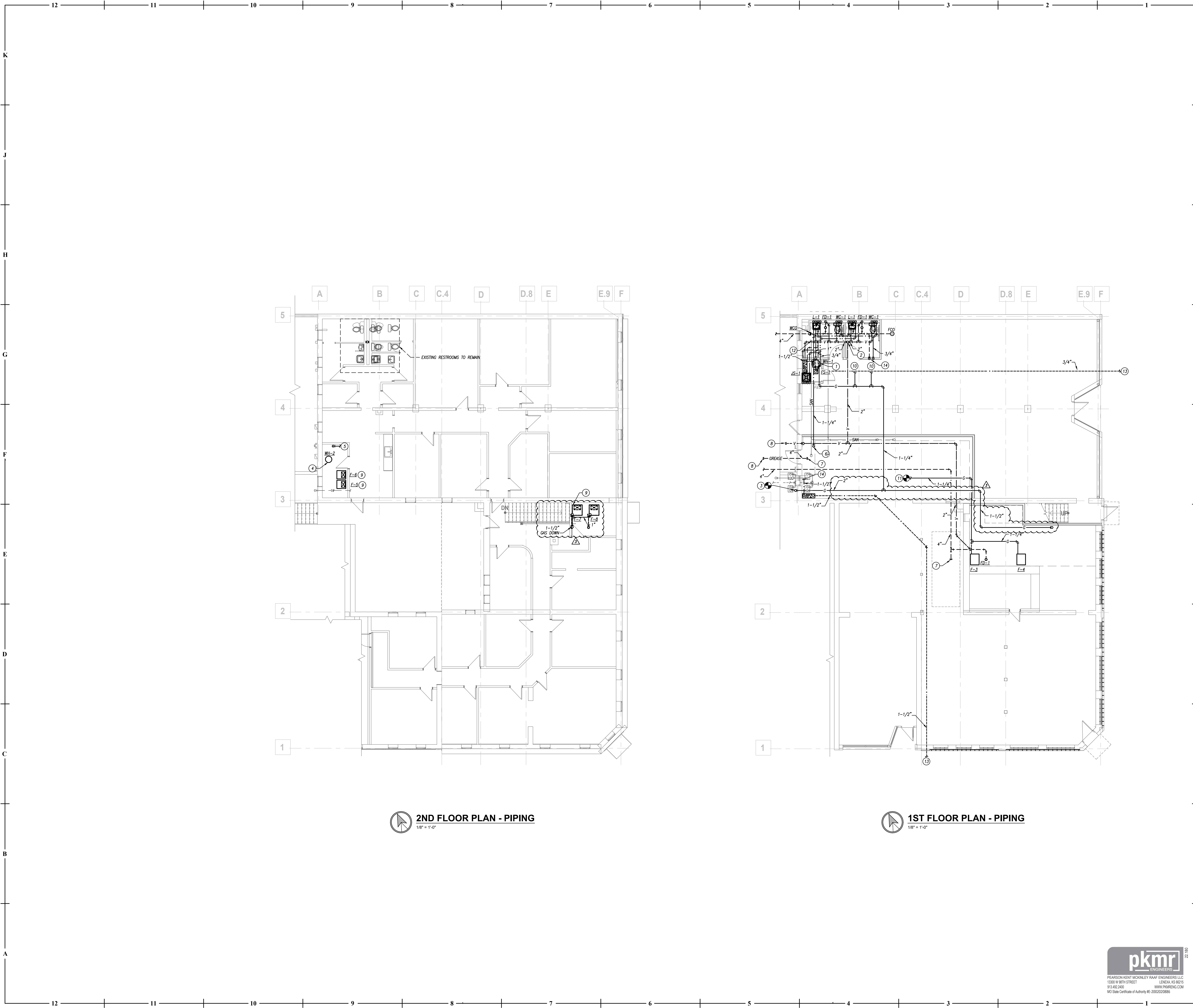
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DEMOLITION - FLOOR PLANS



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- GENERAL PLUMBING NOTES**
1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
 2. REFER TO PLUMBING FIXTURE / DRAIN SCHEDULES FOR PIPING SIZES FOR INDIVIDUAL CONNECTIONS TO FIXTURES AND RISERS NOT SHOWN ON PLANS.
 3. NO SANITARY OR VENT PIPING BELOW GRADE SHALL BE LESS THAN 2'.
 4. NO DOMESTIC WATER PIPING SHALL BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.
 5. ALL VENT PIPING SHOWN IS DIAGRAMMATIC. USE APPROPRIATE FITTINGS FOR VENT PIPING BELOW FLOOD SIM OF FIXTURE.
 6. NOT ALL INTERIOR CLEANOUTS ARE SHOWN FOR DRAWING CLARITY. CONTRACTOR SHALL INSTALL ALL CODE-REQUIRED CLEANOUTS (RE: GENERAL NOTES ON COVER SHEET). COORDINATE EXACT LOCATIONS OF CLEANOUTS WITH ARCHITECT.
 7. ALL FLOOR DRAIN TRAPS SHALL BE PROTECTED BY ONE OF THE FOLLOWING METHODS, TO BE INSTALLED AT CONTRACTOR'S DISCRETION AND IN COMPLIANCE WITH ADOPTED VERSION OF PLUMBING CODE AND/OR ANI.
7.1. PROVIDE TRAP SEALS LISTED FOR PROPOSED USE.
7.2. PROVIDE TRAP PRIMERS. 1/2" TRAP PRIMER PIPING TO NEAREST TRAP PRIMER VALVE. PIPING SHALL BE TYPE "K" SOFT COPPER SEAMLESS WITH NO JOINTS FROM VALVE TO DRAIN.

- PLUMBING PLAN KEYED NOTES**
1. INSTALL WATER HEATER NEXT TO JANITOR'S SINK.
 2. 3" VENT THROUGH CHASE ON 2ND FLOOR TO ROOF. TERMINATE VENT 10" CLEAR FROM ANY OUTSIDE AIR INTAKE.
 3. CONNECT 2-1/2" GAS LINE TO EXISTING GAS MAIN FOR NORTH/CHINA-ROOM TENANT. CONTRACTOR SHALL FIELD VERIFY GAS PIPE ROUTING AND SIZING PRIOR TO NEW SCOPE OF WORK.
 4. NEW WATER HEATER. RECONNECT WATER HEATER TO EXISTING PLUMBING. PROVIDE NEW PIPE/PIPE FITTING IF REQUIRED.
 5. 3/4" DOMESTIC WATER PIPE UP FROM FLOOR BELOW. CONNECT TO EXISTING COLD WATER MAIN TO SERVE ALL 2ND FLOOR PLUMBING FIXTURES AND EQUIPMENT. CONTRACTOR TO VERIFY LOCATION OF EXISTING PIPE.
 6. 3/4" COLD WATER PIPE TO 2ND FLOOR.
 7. PIPE TO BE CAPPED FOR FUTURE TENANT USE. PIPING TO BE 36" BELOW FINISH GRADE FOR FUTURE TENANT USE.
 8. UNDERGROUND GREASE AND VENT TO BE CAPPED OUTSIDE FOR FUTURE GREASE INTERCEPTOR.
 9. RECONNECT EXISTING GAS TO FURNACES. PROVIDE NEW CONDENSATE DRAIN AND TERMINATE TO NEAREST FLOOR DRAIN.
 10. GAS PIPE FOR FURNACE F-1 AND F-2 RESPECTIVELY. REFER TO DETAIL FOR CONNECTION.
 11. CONNECT TO EXISTING GAS MAIN FOR SOUTH TENANT. CONTRACTOR SHALL FIELD VERIFY GAS PIPE ROUTING AND SIZING PRIOR TO NEW SCOPE OF WORK.
 12. CONNECT EXISTING SANITARY LINE FROM SECOND FLOOR EXISTING PIPING TO REMAIN. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK.
 13. REFER TO CIVIL FOR CONTINUATION.
 14. CAP PLUMBING PIPING FOR FUTURE TENANT BUILD OUT.

2ND FLOOR PLAN - PIPING
1/8" = 1'-0"

1ST FLOOR PLAN - PIPING
1/8" = 1'-0"



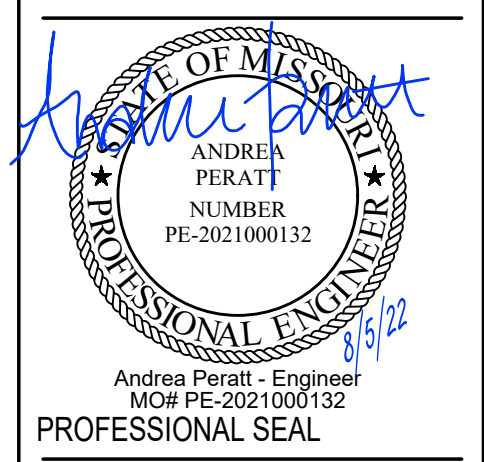
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Andrew Peratt - Engineer
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PROFESSIONAL SEAL

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PLUMBING - SCHED./DETAILS

PIPING MATERIAL & INSULATION SCHEDULE

PIPING SYSTEM	SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION TYPE	THICKNESS
DOMESTIC COLD WATER	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2"
DOMESTIC HOT WATER & HW RETURN	1/2"-1-1/4"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1"
DOMESTIC HOT WATER & HW RETURN	1-1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1-1/2"
NATURAL GAS - ABOVE GRADE	1/2"-2"	SCH. 40	STEEL - SEAMLESS	THREADED IRON OR WELDED	75 PSI - 1HR	YES	----	----
SOIL & WASTE ABOVE GRADE	1-1/2"-6"	NO HUB / SERVICE WT.	CAST IRON	NO HUB	10 FT - 1/2HR	YES	----	----
SOIL & WASTE ABOVE GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----
SOIL & WASTE BELOW GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----
RPTZ AND SIMILAR EXPOSED DRAIN LINES	ALL	SCH. 40	COPPER	SOLDER, PRO-PRESS	10 FT - 1/2HR	YES	----	----
CONDENSATE DRAIN ON ROOF	3/4"-3"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----
CONDENSATE DRAIN INTERIOR	3/4"-2"	SCH. 40	CPVC	SOLVENT JOINED	10 FT - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2" (PLENUM ONLY)
CONDENSATE DRAIN INTERIOR	1/2"-2"	L	COPPER	SOLDER, PRO-PRESS	10 FT - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2" (PLENUM ONLY)

- NOTES:
1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
2. ALL INSULATION THICKNESSES SHALL MEET ADOPTED EEC AND ASHRAE 90.1 - 2016 REQUIREMENTS AT A MINIMUM.
3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.
4. WELDED PIPING IS REQUIRED FOR GAS PIPING WHEN: A) PIPING IS AT OR OVER 2PSI; B) WHEN PIPING OF ANY PRESSURE IS ROUTED THROUGH CONCEALED SPACES.

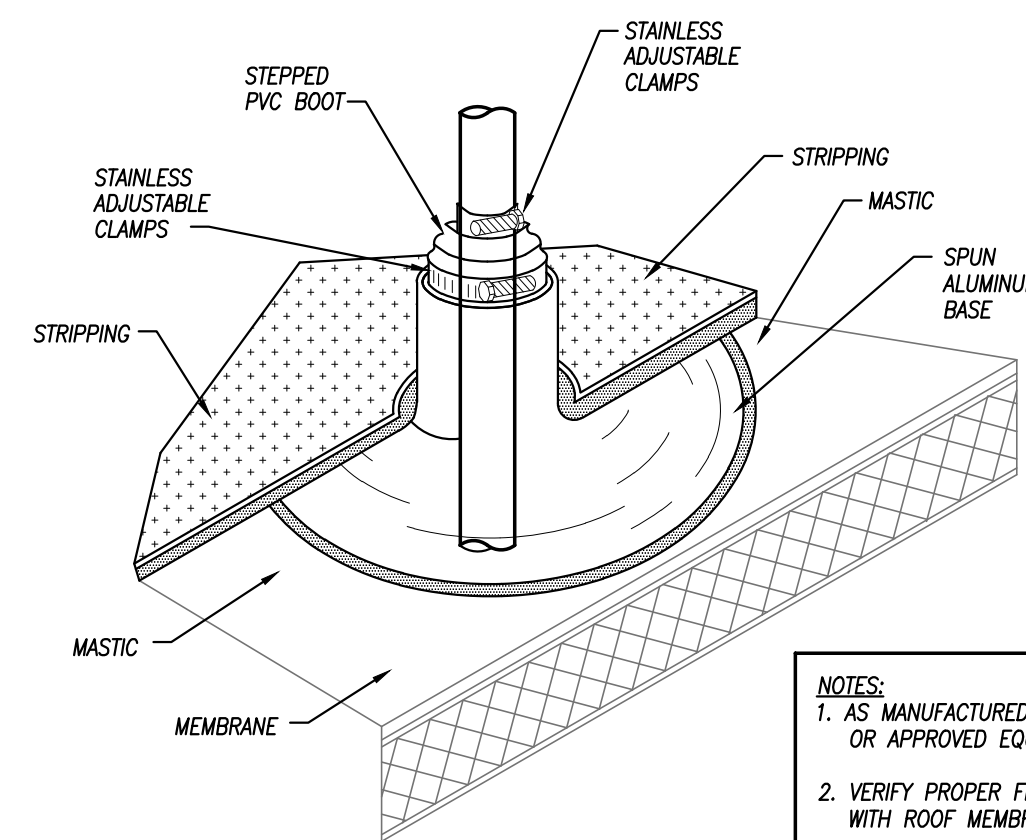
PLUMBING FIXTURE BRANCH CONNECTION SCHEDULE

FIXTURE TYPE	TRAP	WASTE	VENT	DCW	DHW
WATER CLOSET (FLUSH VALVE)	INTEGRAL	4"	2"	1"	----
URINAL (FLUSH VALVE)	INTEGRAL	2"	2"	3/4"	----
FLUSH TANK WATER CLOSET	INTEGRAL	4"	2"	1/2"	----
LAVATORY	PROVIDE TRAP	2"	1-1/2"	1/2"	1/2"
SINK	PROVIDE TRAP	2"	2"	1/2"	1/2"
MOP SINK	PROVIDE DEEP SEAL TRAP	3"	2"	1/2"	1/2"
FLOOR DRAIN	PROVIDE DEEP SEAL TRAP	AS SCHEDULED	1-1/2"	----	----
FLOOR SINK	PROVIDE TRAP	AS SCHEDULED	1-1/2"	----	----
DRINKING FOUNTAINS/FWC'S	PROVIDE TRAP	1-1/2"	1-1/2"	1/2"	----
SHOWERS/TUBS	PROVIDE TRAP	2"	1-1/2"	1/2"	1/2"
SHOWERS	PROVIDE TRAP	2"	1-1/2"	1/2"	1/2"
ICE MACHINE HOOKUP BOX	----	----	----	1/2"	----
WASHER HOOKUP BOXES	PROVIDE TRAP	2"	1-1/2"	1/2"	1/2"

FLOOR / ROOF DRAIN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	TOP/GRADE SIZE	WASTE SIZE	REMARKS
FD-1	WADE	1100	FLOOR DRAIN	6"	2"	1
FS-1	WADE	9100	FLOOR SINK	12"x12"	4"	2

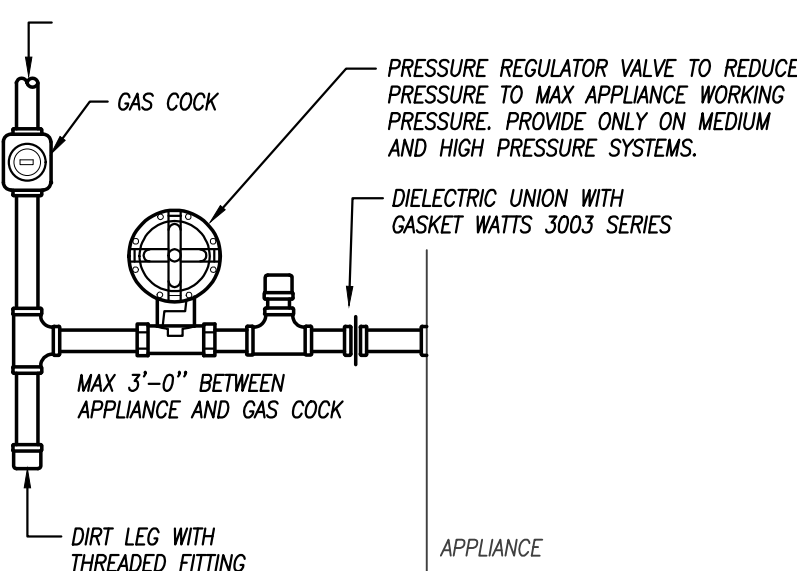
- REMARKS:
1. PROVIDE WITH NICKEL BRONZE TOP.
2. PROVIDE WITH 3/4" GRATE.



ROOF PLUMBING VENT

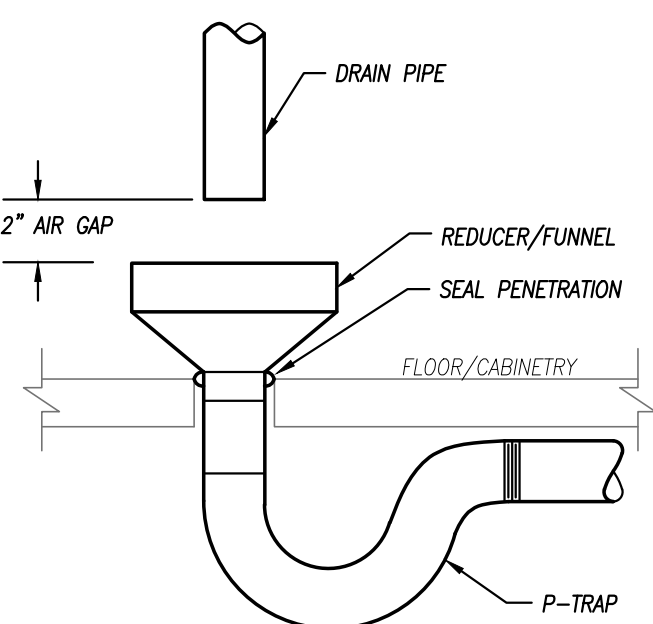
NOT TO SCALE

- NOTES:
1. AS MANUFACTURED BY PATE COMPANY OR APPROVED EQUAL.
2. VERIFY PROPER FLASHING PROCEDURE WITH ROOF MEMBRANE MANUFACTURER.



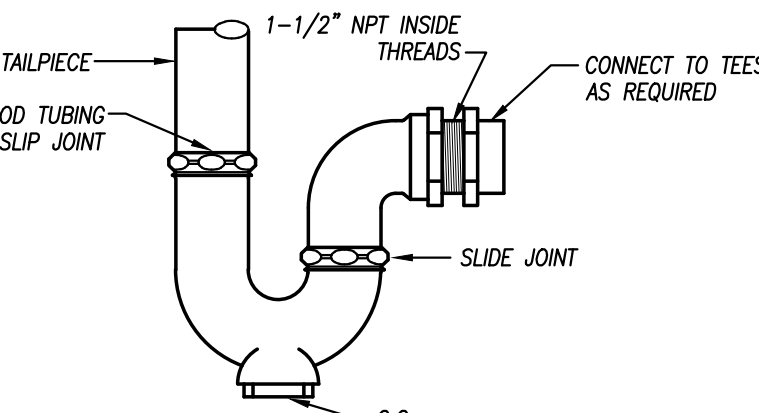
TYPICAL GAS CONNECTION

NOT TO SCALE



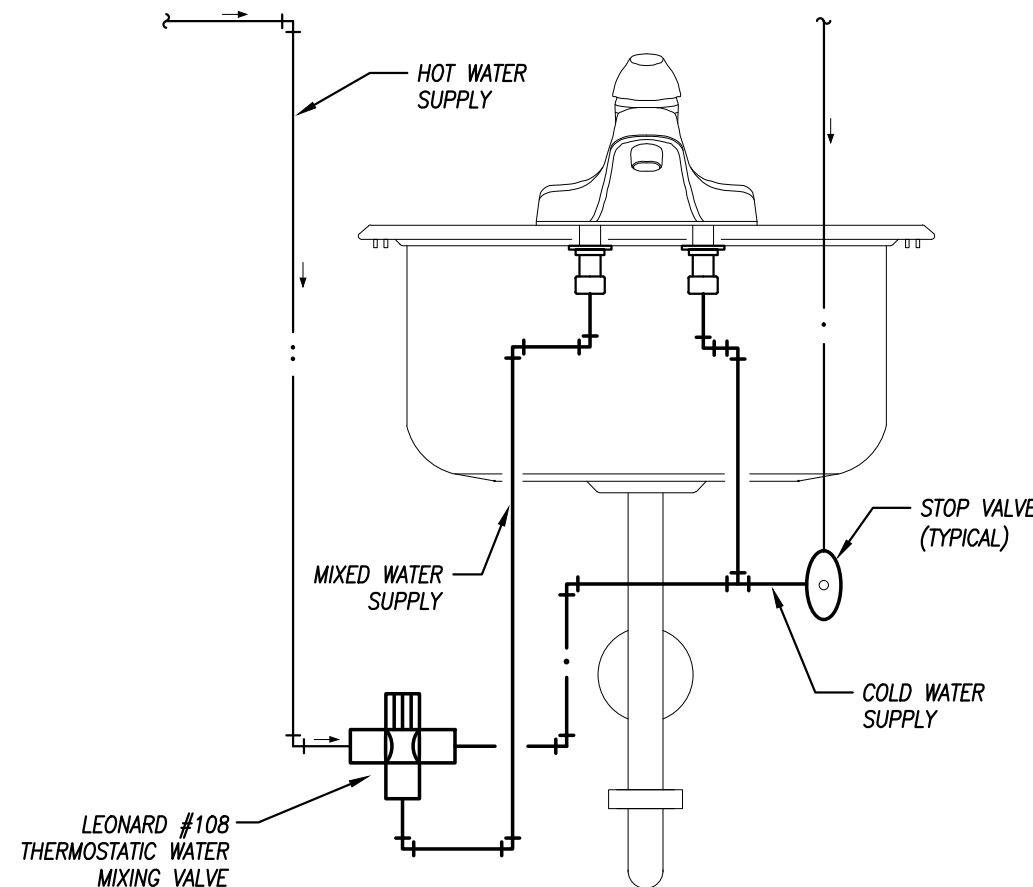
AIR GAP DETAIL

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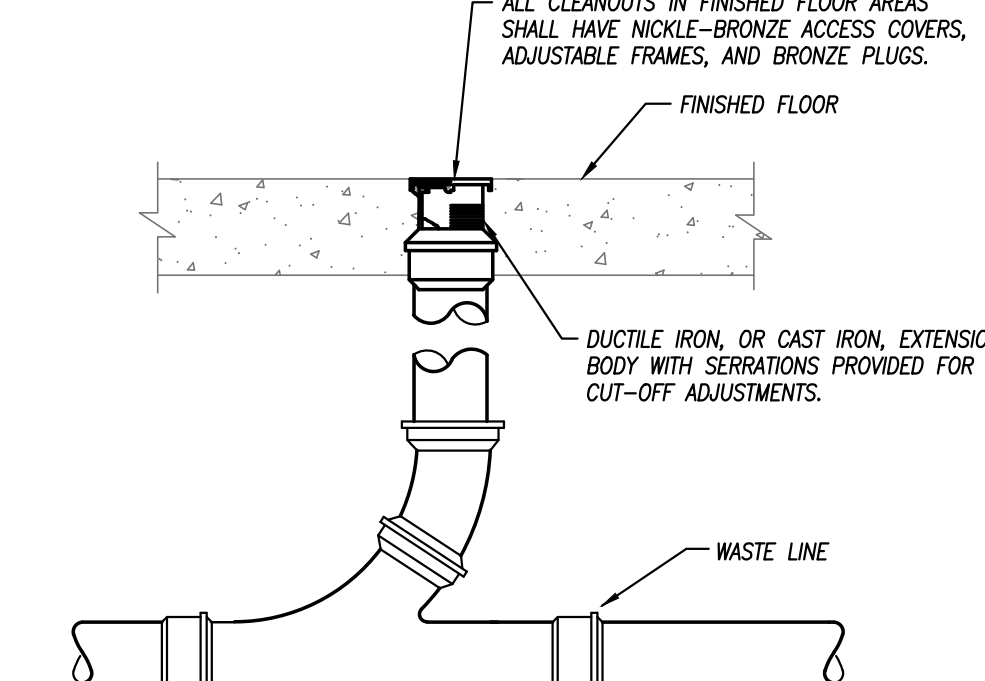
P-TRAP DETAIL

NOT TO SCALE



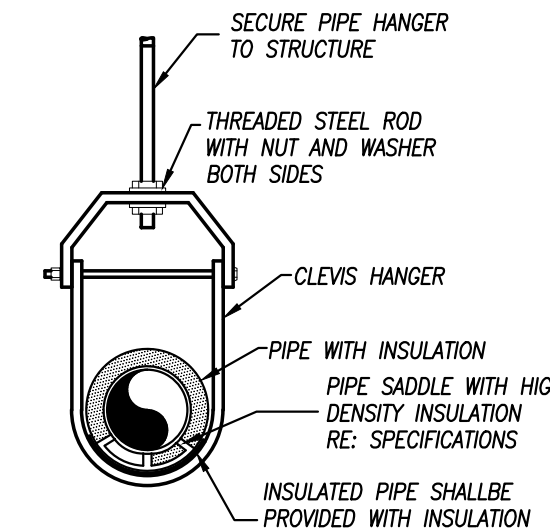
HAND WASHING SINK/LAVATORY TEMPERED WATER SCHEMATIC

NOT TO SCALE



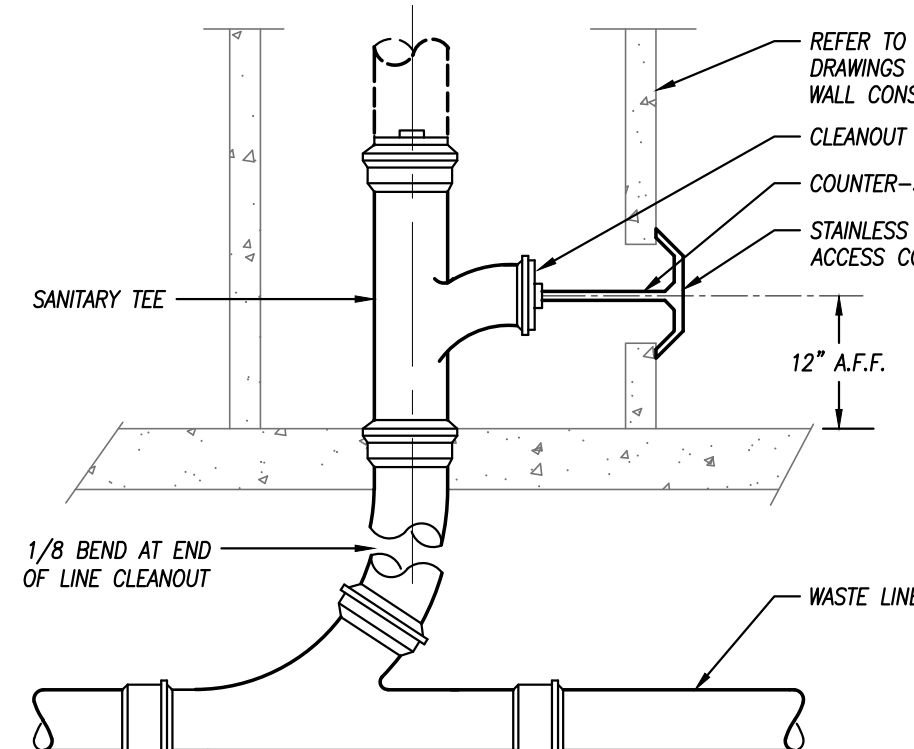
FLOOR CLEANOUT DETAIL

NOT TO SCALE



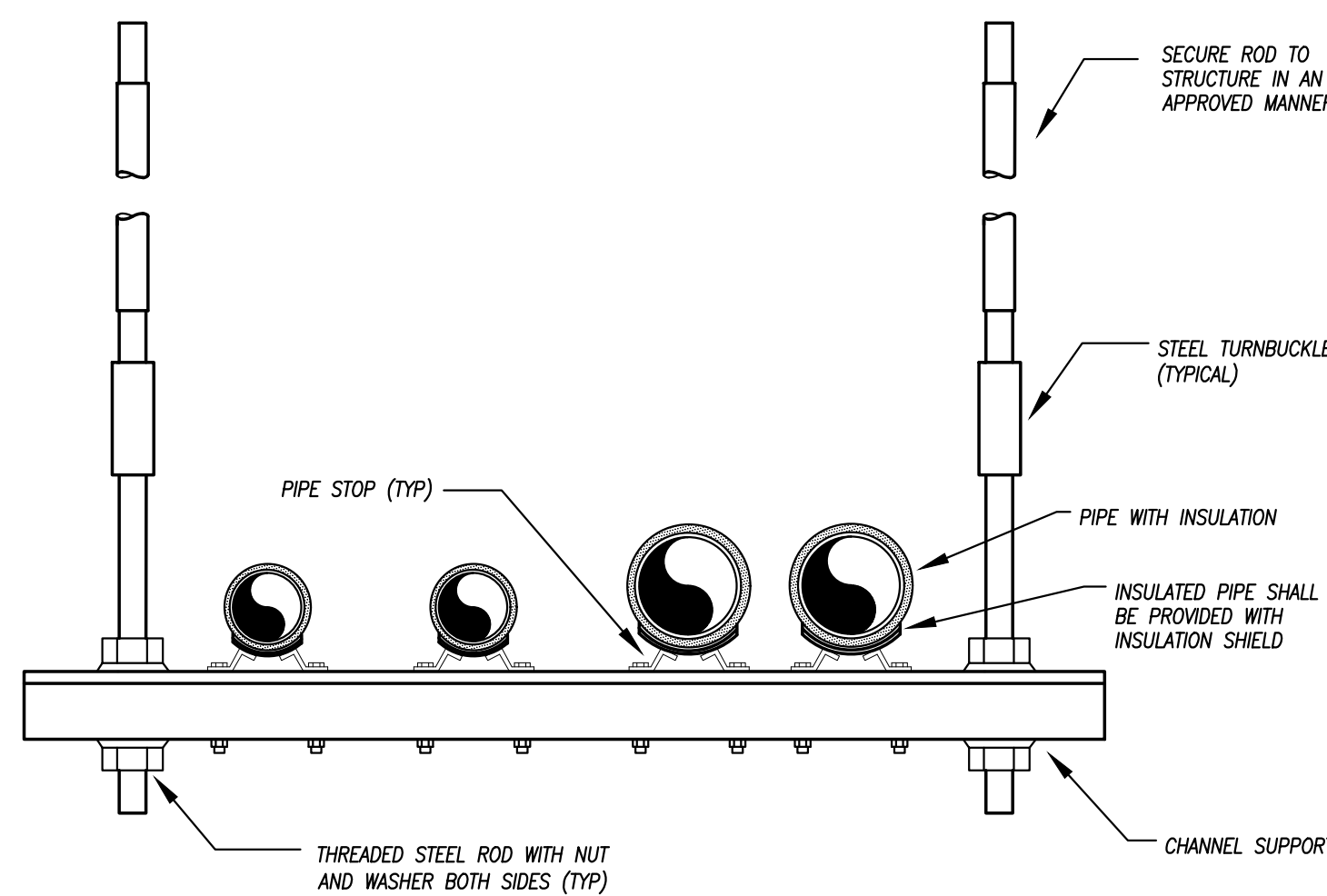
PIPE HANGER DETAIL

NOT TO SCALE



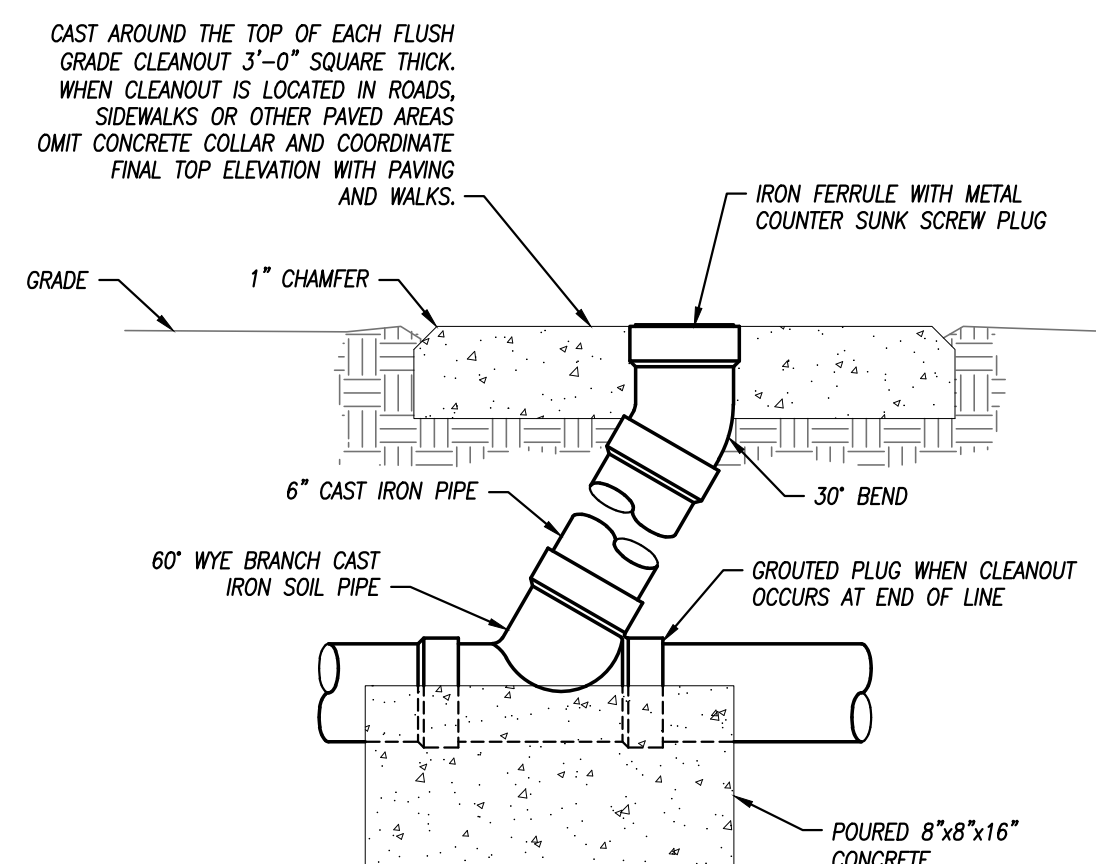
WALL CLEANOUT DETAIL

NOT TO SCALE



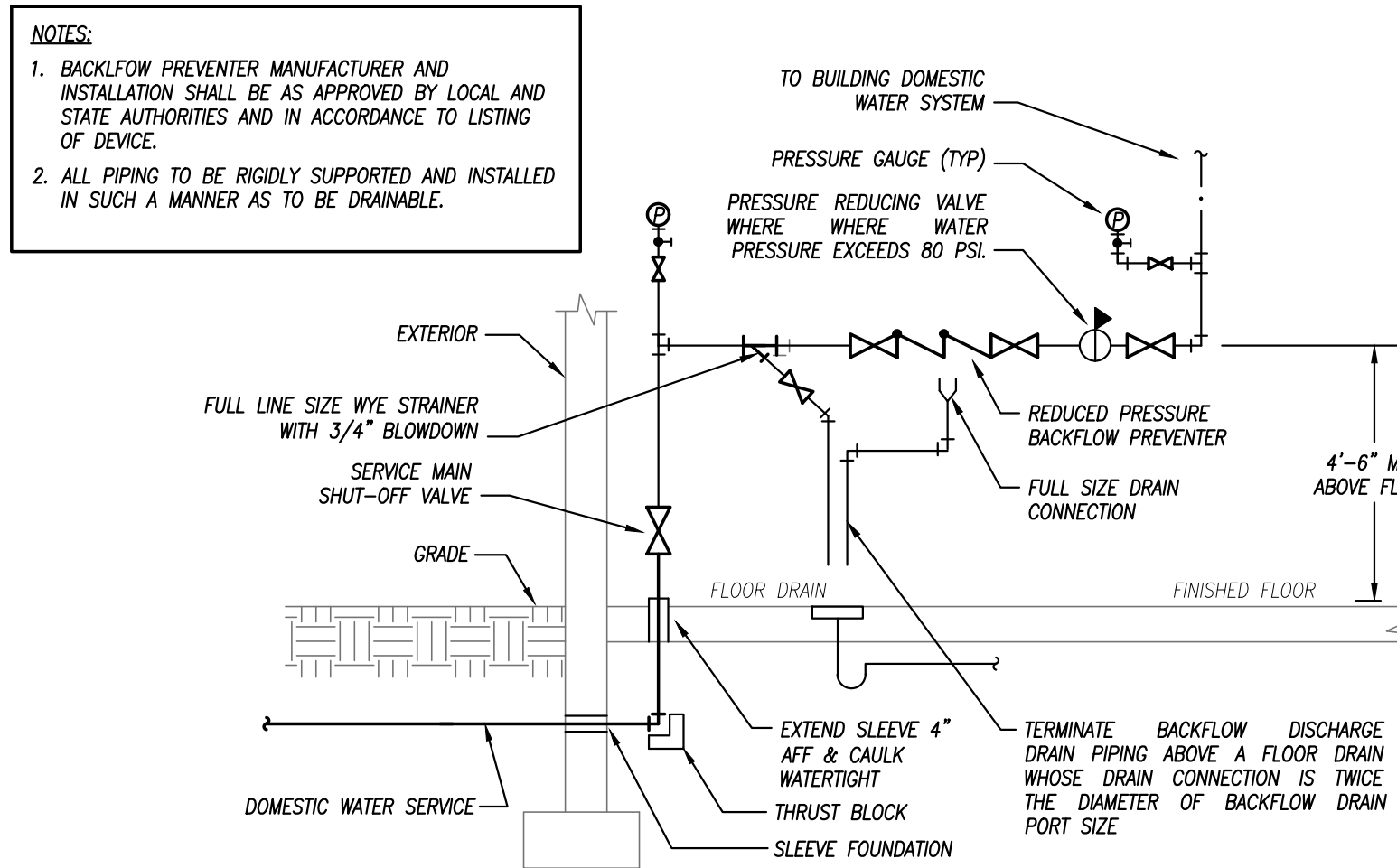
MULTIPLE PIPE TRAPEZE HANGER DETAIL

NOT TO SCALE



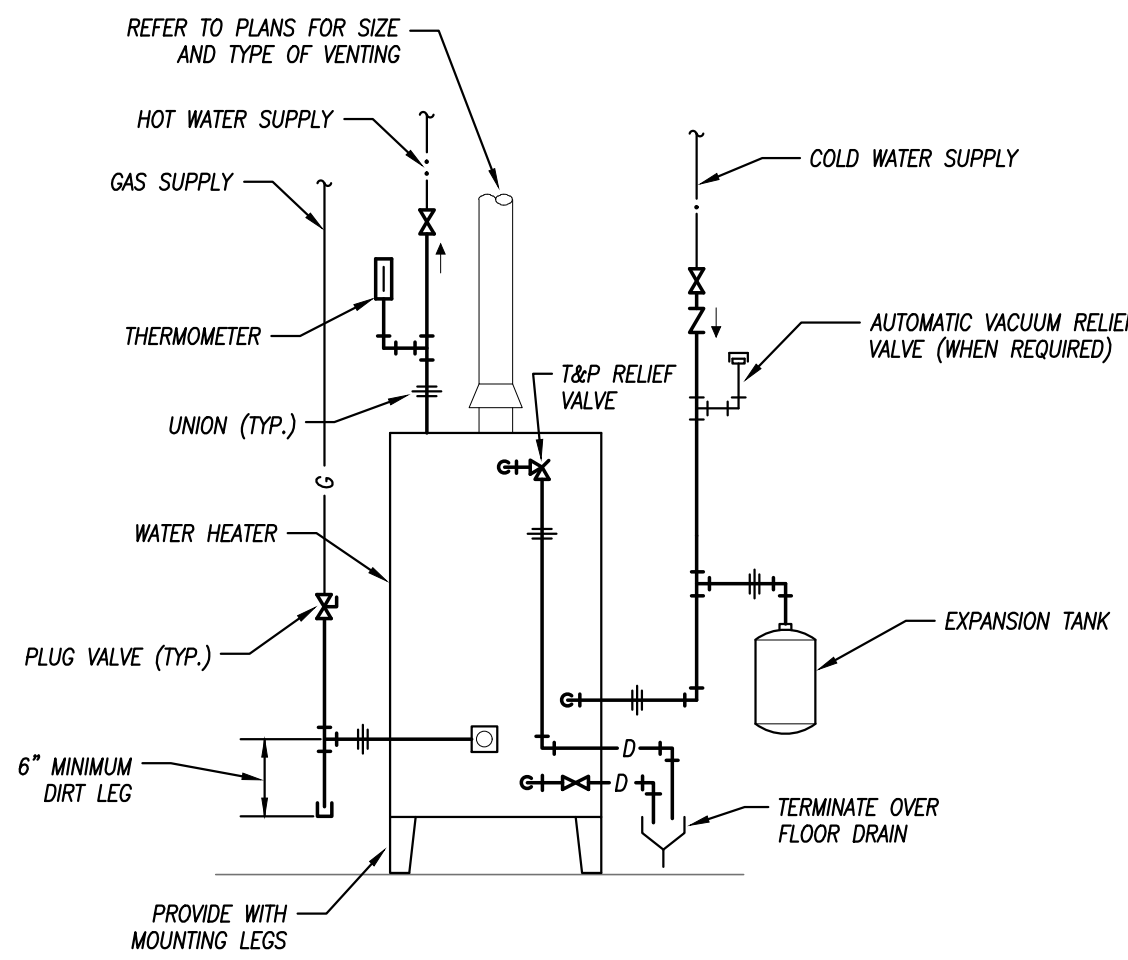
FLUSH GRADE CLEANOUT DETAIL

NOT TO SCALE



WATER SERVICE REDUCED PRESSURE BACKFLOW PREVENTER DETAIL

NOT TO SCALE



GAS WATER HEATER DETAIL

NOT TO SCALE

pkmr ENGINEERS

PLANS/DESIGN KENT MCKINLEY RAAP ENGINEERS, LLC
1300 W 96TH STREET
913 482 2400
WWW.PKMRNG.COM
MO State Certificate of Authority #E-0000020886



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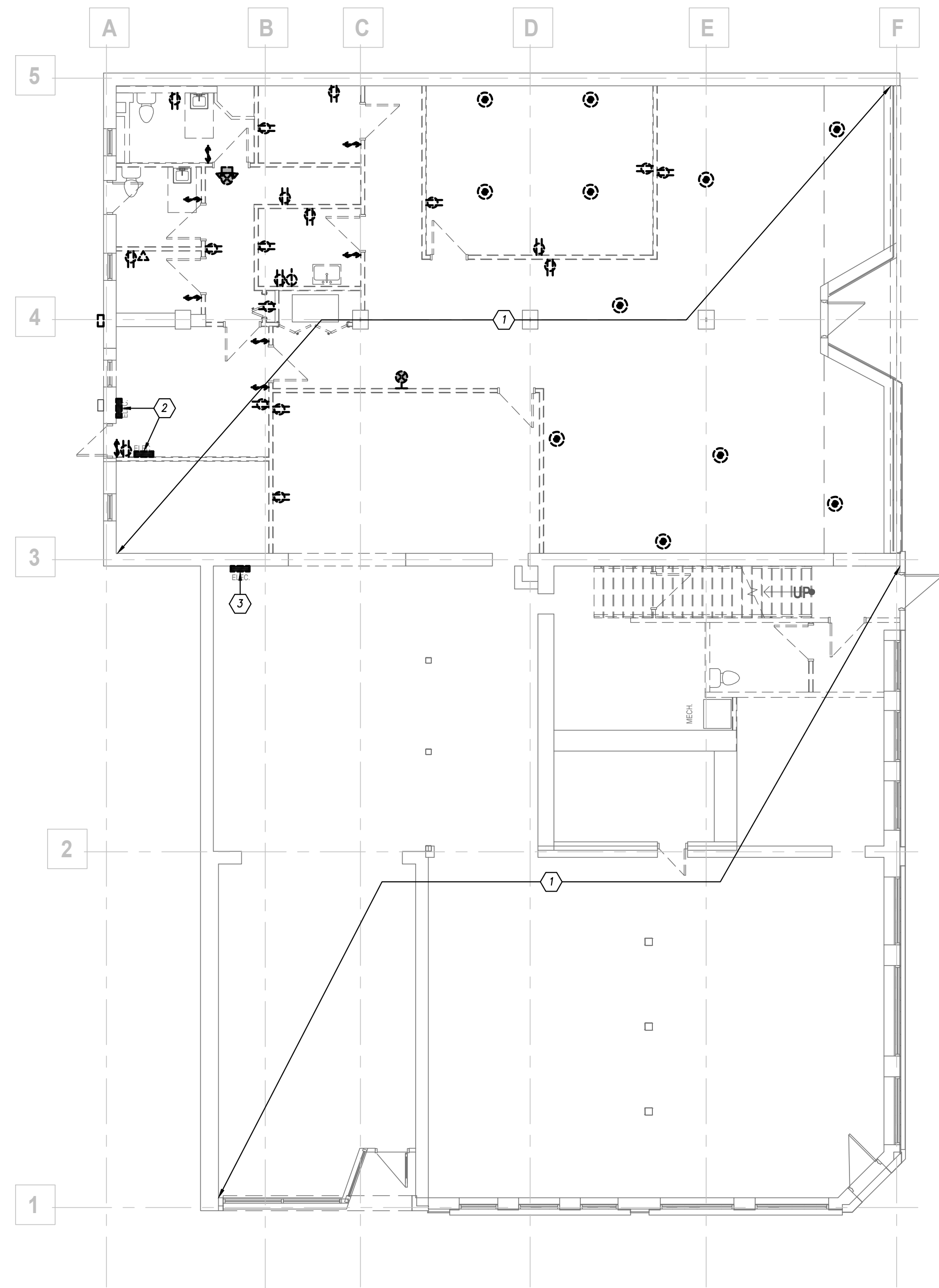
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GENERAL DEMOLITION NOTES

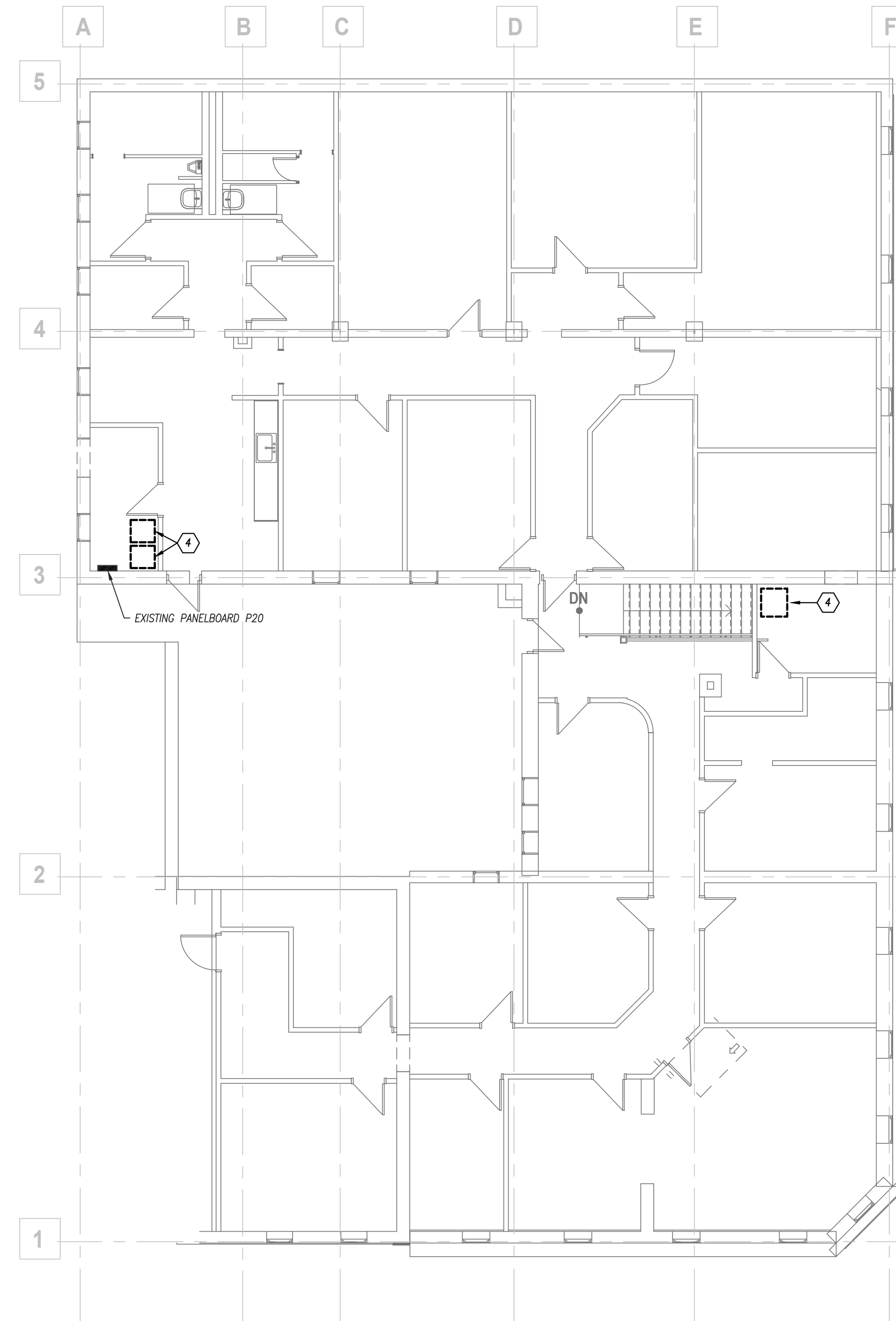
1. REFER TO GENERAL DEMOLITION NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.

DEMOLITION PLAN KEYED NOTES

- 1 REMOVE ALL FIXTURES, EQUIPMENT, AND DEVICES THIS AREA. REMOVE ALL WIRING/CONDUIT AND PIPING TO SAME NOT REQUIRED TO REMAIN.
- 2 REMOVE PANELBOARD AND MAINTAIN EXISTING CIRCUITS TO REMAIN. INCEPT AND EXTEND EXISTING BRANCH CIRCUITS NEW PANELBOARD IN NEW LOCATION. REFER TO NEW WORK DRAWINGS FOR MORE INFORMATION.
- 3 REMOVE EXISTING PANELBOARD. REMOVE FEEDERS AND BRANCH CIRCUITS TO SAME.
- 4 EXISTING FURNACE TO BE REPLACED. MAINTAIN EXISTING WIRING/CONDUIT TO RECONNECT TO NEW FURNACE.



 **1ST FLOOR PLAN - ELECTRICAL DEMOLITION**
1/8" = 1'-0"

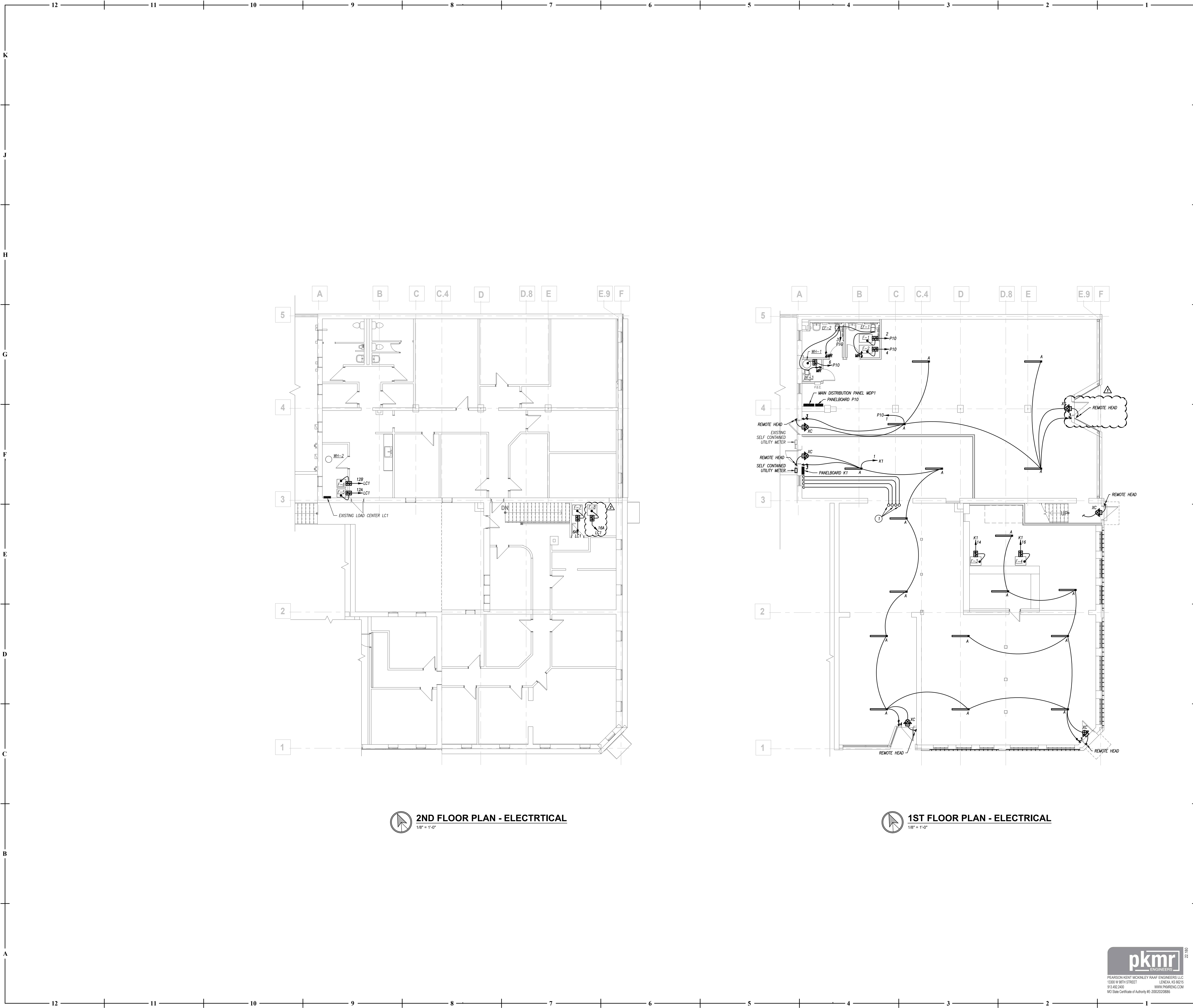


 **2ND FLOOR PLAN - ELECTRICAL DEMOLITION**
1/8" = 1'-0"



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**ELECTRICAL DEMOLITION -
FLOOR PLANS**



GENERAL LIGHTING NOTES

- 1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
- 2. LIGHT FIXTURES INDICATED AS EMERGENCY FIXTURES ARE TO FUNCTION AS NIGHT LIGHTS UNLESS SPECIFICALLY SHOWN SWITCHED.
- 3. ALL CIRCUITING SHOWN ON THIS PLAN IS DIAGRAMMATIC.
 - 3.1. ALL FIXTURES SHALL BE FED FROM JUNCTION BOXES WITH LIGHT FIXTURE WIRING (<4'). DASH-DRAWING OF FIXTURES IS NOT ALLOWED.
 - 3.2. SWITCH BOX LOCATIONS SHALL BE WIRED SO THAT A NEUTRAL WIRE IS AVAILABLE AT THE SWITCH BOX LOCATION, EITHER IN THE BOX OR AVAILABLE TO BE ADDED VIA RACEWAY OR AN ACCESSIBLE WALL CAVITY.
 - 3.3. WALL SWITCHES FOR SEPARATE LOAD TYPES (CM/NORMAL, 120/277V, ETC.) SHALL NOT BE IN A SINGLE BOX.
 - 3.4. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ELECTRICAL PLAN KEYED NOTES

- 1. PROVIDE (3) 2" CONDUIT AND (1) 1" CONDUIT WITH PULL STINGS FOR FUTURE MECHANICAL EQUIPMENT. ROUTE CONDUIT TIGHT TO CEILING AND TURN UP THROUGH CEILING PATCH ALL PENETRATIONS WATERTIGHT. CAP CONDUIT AT BOTH ENDS FOR FUTURE USE.

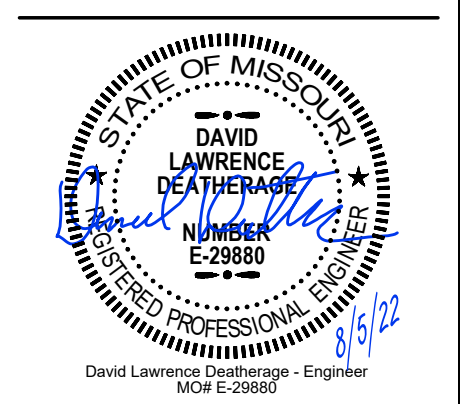


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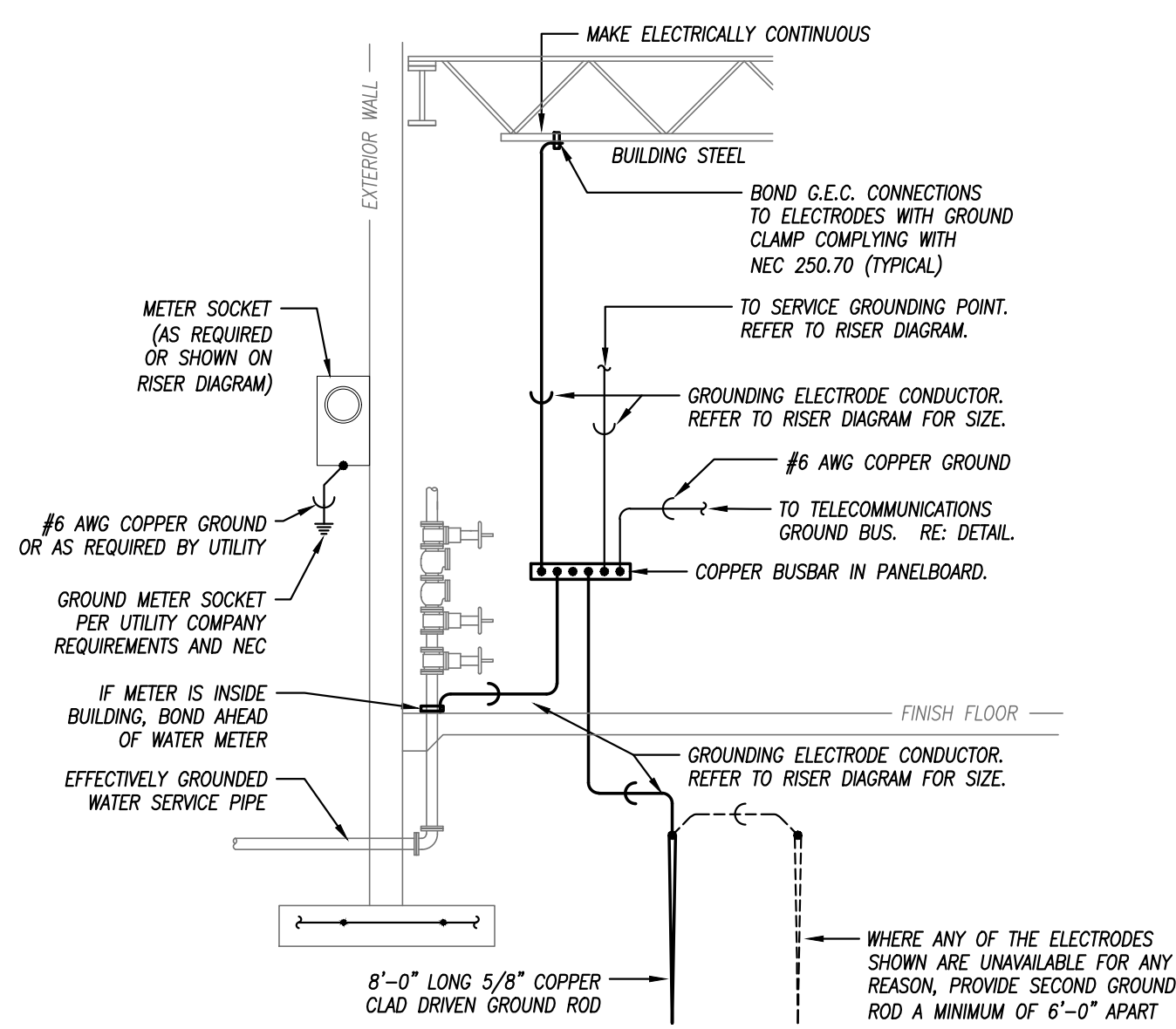


ELECTRICAL - FLOOR PLANS

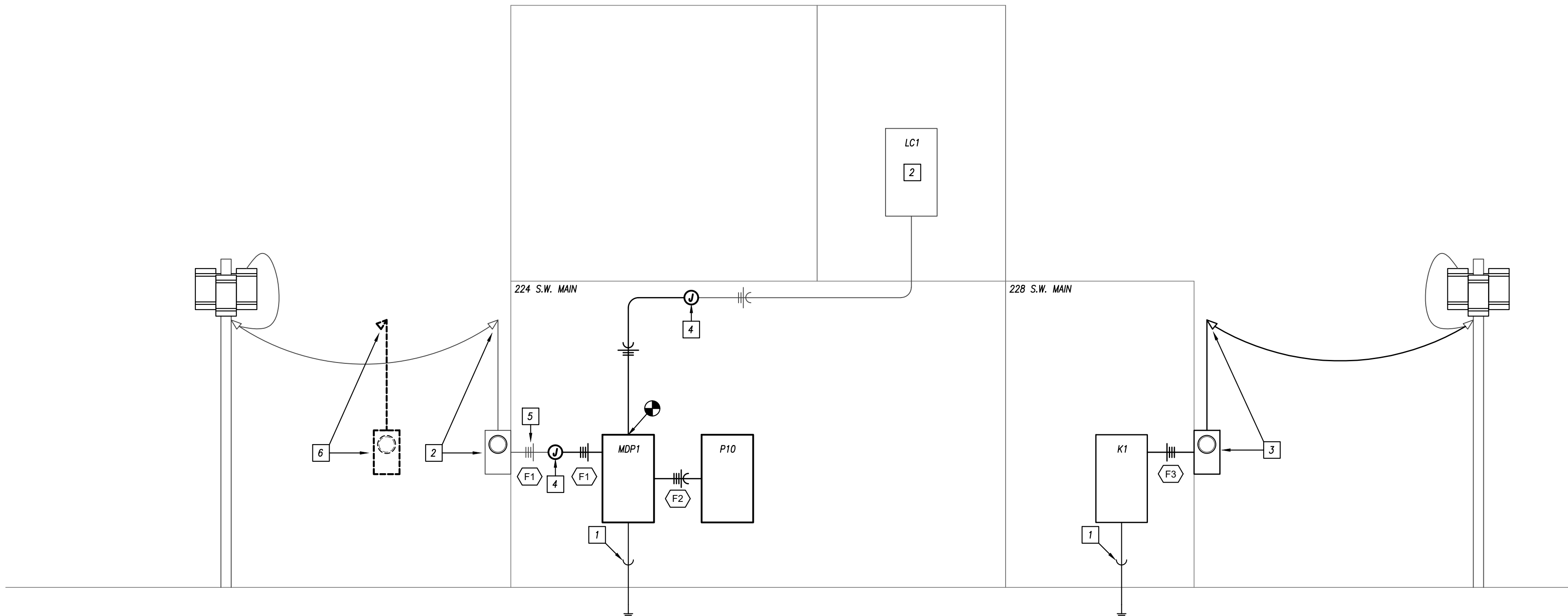
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ELECTRICAL SERVICE GROUNDING DETAIL
NOT TO SCALE



ELECTRICAL RISER DIAGRAM
NOT TO SCALE

- RISER DIAGRAM KEYED NOTES**
- 1 #1/0 GROUNDING ELECTRODE IN 1" CONDUIT.
 - 2 EXISTING TO REMAIN.
 - 3 PROVIDE METER AND WEATHERHEAD PER EVERY STANDARD.
 - 4 INTERCEPT AND EXTEND FEEDER TO NEW MDP LOCATION.
 - 5 FIELD VERIFY FEEDER SIZE.
 - 6 REMOVE EXISTING ELECTRICAL SERVICE.

SINGLE-SECTION PANELBOARD SCHEDULE															
PANEL DESIGNATION: K1						MAIN LUG AMPS: 400 MAIN BREAKER: 400 VOLTAGE: 208/120 PHASE WIRE: 3Ø, 4W				SCCR RATING (AIC): 22,000					
MOUNTING: SURFACE LOCATION: FUTURE TENANT S-100															
DESCRIPTION	PHASE			C/B		CIRCUIT #	PHASE			DESCRIPTION					
	A	B	C	TRIP	POLE		C/B	PHASE	C						
LTS: FUTURE TENANT S-100	546	--	--	20	1	2	1	4	3	50	3459	3459	3459	CONDENSING UNIT CU-3	
SPARE	--	--	--	20	1	6	6								
SPARE	--	--	--	20	1	5	8				3459				
SPARE	--	--	--	20	1	9	10	3	50		3459			CONDENSING UNIT CU-4	
SPARE	--	--	--	20	1	11	12					3459			
SPARE	--	--	--	20	1	13	14	20	1920						
SPARE	--	--	--	20	1	15	16	1	20		1920			FURNACE F-3	
SPARE	--	--	--	20	1	17	18	1	20	--	--	--	--	FURNACE F-4	
SPARE	--	--	--	20	1	19	20	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	21	22	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	23	24	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	25	26	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	27	28	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	29	30	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	31	32	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	33	34	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	35	36	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	37	38	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	39	40	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	41	42	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	43	44	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	45	46	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	47	48	1	20	--	--	--	--	SPARE	
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SPARE	--	--	--	20	1	51	52	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	53	54	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	55	56	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	57	58	1	20	--	--	--	--	SPARE	
SPARE	--	--	--	20	1	59	60	1	20	--	--	--	--	SPARE	
LARGE SUB-FED BREAKER						64	3	--	--	--	--	--	--	--	
TOTALS						546	0	0			8838	8838	6918	TOTALS	--

PANELBOARD SIZING LOAD				
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)	
LIGHTS	546	1.25	683	
RECEPTACLES	0	10KVA + 50% REST	0	
MOTORS	3,640	1.25 x LARGEST + 50% OF REST	4,320	
AIR CONDITIONING	20,754	1.00	20,754	
SPACE HEATING	0	0.00	0	
HEAT PUMP	0	1.00	0	
CONTINUOUS	0	1.25	0	
NON-CONTINUOUS	0	1.00	0	
MISC. LOADS 1	0	1.00	0	
SIZING LOAD			25,757	
SIZING LOAD (AMPS)			71	

CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	9,394	78.1
B	8,630	73.6
C	6,918	57.6
TOTALS	25,140	69.8

REMARKS:

1. EATON POW-R-LINE 1X OR EQUIV.
2. SERVICE ENTRANCE RATED.



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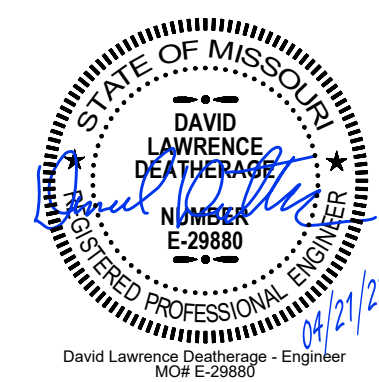
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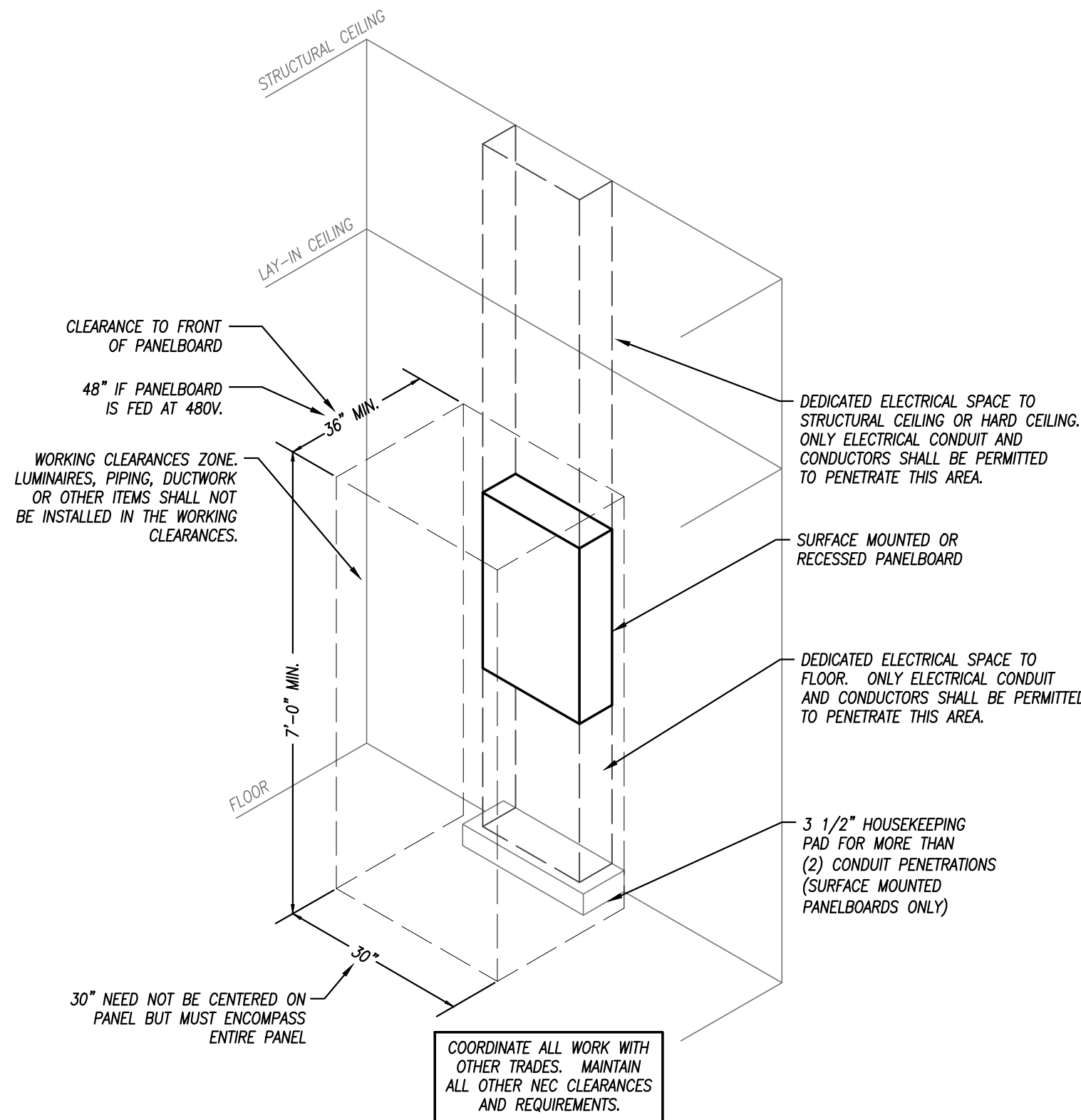
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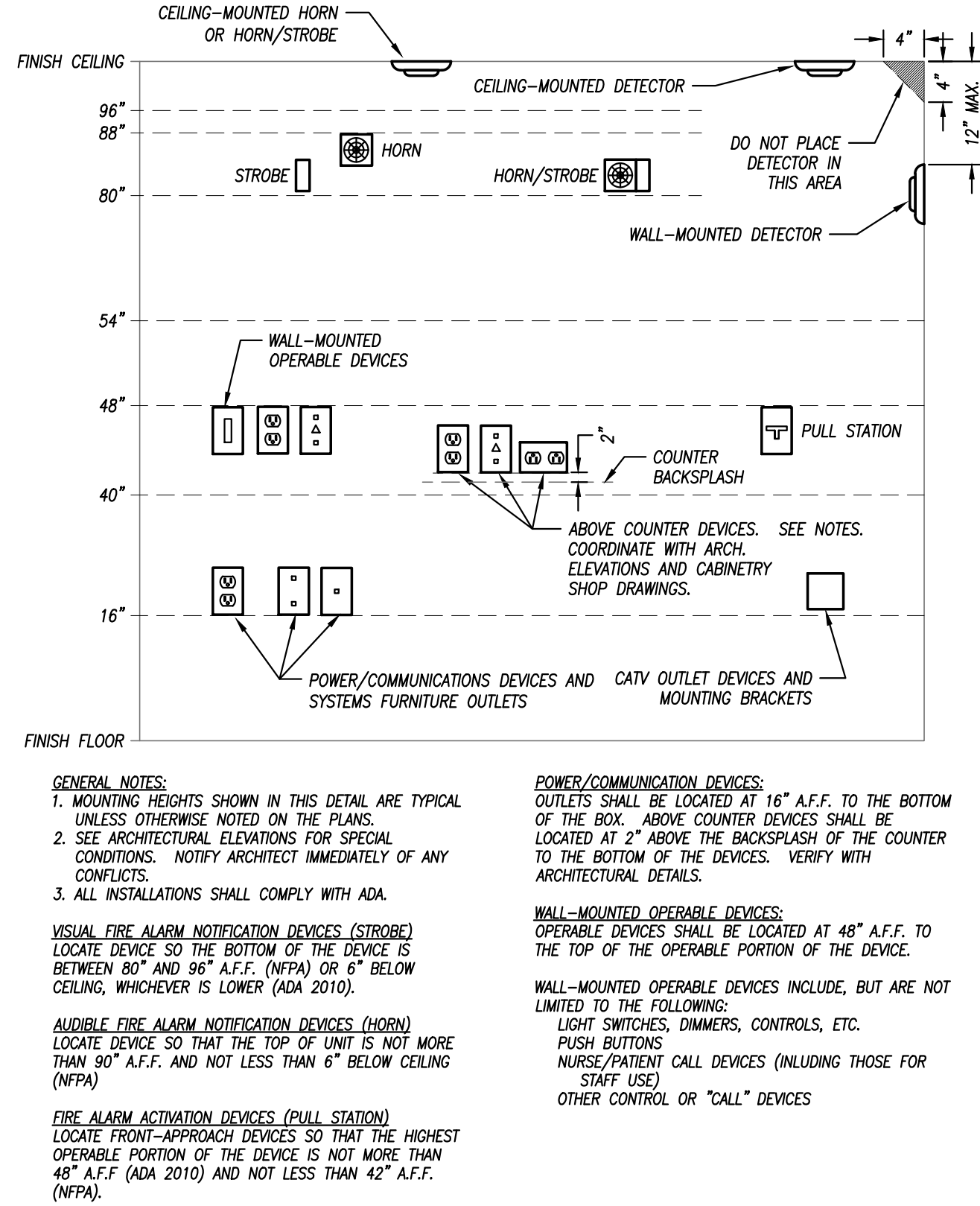
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TYPICAL PANELBOARD INSTALLATION DETAIL
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MOUNTING HEIGHTS FOR WALL-MOUNTED DEVICES
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LIGHT FIXTURE SCHEDULE

FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LED MODULE / DRIVER							REMARKS
				ID	WATTS	LUMENS	CRI	CCT	DIMMING	VOLTAGE	
A	WILLIAMS	SERIES 75S	4'-0" LONG COMMERCIAL-GRADE STRIP FIXTURE WITH SQUARE LENS. SURFACE MOUNT. WHITE FINISH.	L85	42	6500	80	3500K	NO	277/120	1
XC	DUAL-LITE	EVO SERIES	COMBINATION EMERGENCY LIGHTING UNIT / EXIT LIGHT. UV-STABLE THERMOPLASTIC HOUSING, FINISH WHITE. ADJUSTABLE EYEBALL STYLE LIGHTING HEADS WITH GLASS LENS FOR EMERGENCY LIGHT. EXIT SIGN TO HAVE RED LETTERS WITH DIRECTIONAL ARROWS AS INDICATED ON THE PLANS. MAINTENANCE-FREE LITHIUM ION PHOSPHATE BATTERY FOR 90 MINUTE OPERATION OF LAMPS AND EXIT SIGN. FURNISH WITH CAPACITY FOR REMOTE HEAD. FULLY AUTOMATIC, SOLID-STATE CHARGER WITH TEST SWITCH AND AC-ON LIGHT.	TOTAL POWER CONSUMPTION =							1
				EMERGENCY FOUR (4) HIGH-OUTPUT							
				EXIT: FOUR (4) HIGH-OUTPUT LEADS.							
		EVO	OUTDOOR REMOTE WITH 2 HEADS. BLACK FINISH.								

REMARKS:
1. FURNISH WITH AND INSTALL ALL NECESSARY HARDWARE AND MOUNTING BRACKETS.

GENERAL NOTES (APPLICABLE TO ALL FIXTURES):

- EQUALS ARE ACCEPTABLE ON ALL LIGHT FIXTURES UNLESS SPECIFICALLY NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR APPROVED EQUAL FIXTURE MANUFACTURERS.
- ALL DRIVERS ARE INTEGRAL TO FIXTURE UNLESS NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR ADDITIONAL FIXTURE/DRIVER/BALLAST REQUIREMENTS.
- ALL FIXTURES WITH PAINTED METAL PARTS SHALL BE PAINTED AFTER FABRICATION.
- LUMENS LISTED FOR LED FIXTURES ARE GENERALLY DELIVERED LUMENS UNLESS NOTED OTHERWISE.