

**CARTEE
APARTMENTS**

406 S 4TH ST.
BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



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ADDENDUM 4 SET

Issue:	date:
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GARAGE EXHAUST CALCULATIONS:

Zone #0 – Basement

3,294 sq ft x 0.05 cfm/sq ft = 165 CFM
3,294 sq ft x 0.75 cfm/sq ft = 2,470 CFM

28x18 EXH DUCT
ONE FAN (2500 CFM) CONSTANT VOLUME

Zone #1 – LEVEL 1

6,500 sq ft x 0.05 cfm/sq ft = 550 CFM
6,500 sq ft x 0.75 cfm/sq ft = 4,875 CFM

44x18 EXH DUCT
ONE FAN (4900 CFM) 2-SPEED VFD

Zone #2A – 2ND FLOOR NW

3,350 sq ft x 0.05 cfm/sq ft = 675 CFM
3,350 sq ft x 0.75 cfm/sq ft = 2,512 CFM

34X12 EXH DUCT
ONE FAN (2,525 CFM) 2-SPEED VFD

Zone #2B – 2ND FLOOR NE

1,670 sq ft x 0.05 cfm/sq ft = 84 CFM
1,670 sq ft x 0.75 cfm/sq ft = 1,253 CFM

18X12 EXH DUCT
ONE FAN (1,255 CFM) CONSTANT VOLUME

Zone #3 – 3RD FLOOR NE

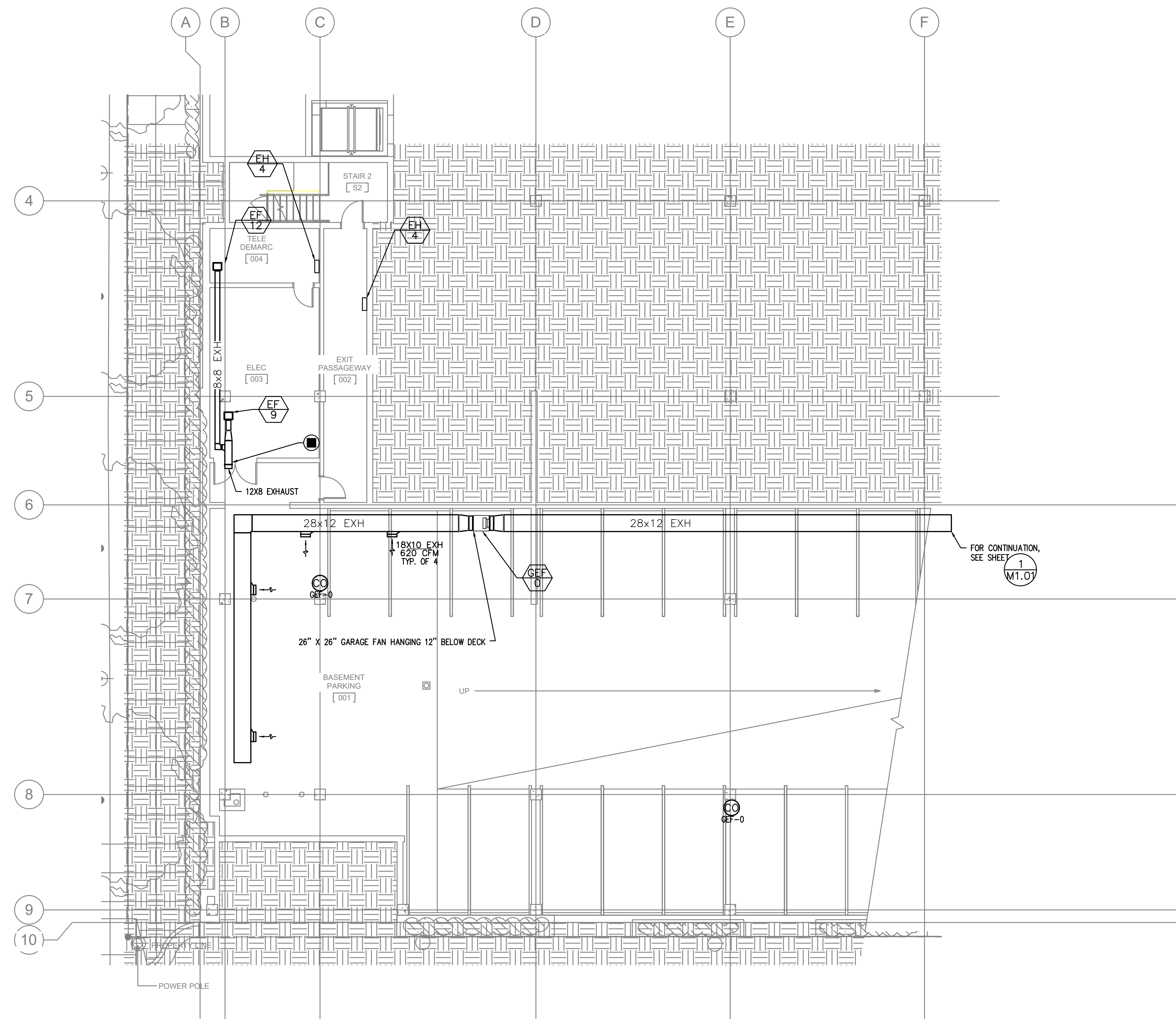
1,670 sq ft x 0.05 cfm/sq ft = 84 CFM
1,670 sq ft x 0.75 cfm/sq ft = 1,253 CFM

24X8 EXH DUCT
ONE FAN (1,255 CFM) 2-SPEED VFD

**SEQUENCE OF OPERATIONS
CO & NO2 SENSORS:**

PROVIDE A COMBINATION ELECTROCHEMICAL CARBON MONOXIDE & NITROGEN DIOXIDE SENSOR (SYSTEM) TO OPERATE GEF-X (VFD HIGH SPEED SETTING) WHENEVER SPACE CO & NO2 LEVELS RISE ABOVE SET POINT.
SYSTEM TO BE SET TO FAIL WITH THE FAN IN THE "HIGH SPEED" SETTING. SET SENSORS AT 60" AFF.
PROVIDE X SENSOR(S) AS SHOWN ON THE PLAN, AND WIRE TO A CENTRAL CONTROLLER TO OPERATE GEF-X ON HIGH SPEED WHENEVER ANY SENSOR(S) CALLS FOR OPERATION.
SENSORS TO BE RATED FOR MIN 50' RADIUS
SDQ:

- GEF-X TO OPERATE CONTINUOUSLY AT LOW SPEED VFD SET POINT
- RISING TRIP POINT – ENGAGE VFD HIGH SPEED WHEN CO LEVELS RISE ABOVE 35 PPM AND NO2 LEVELS RISE ABOVE 2.0 PPM.
- FALLING TRIP POINT – DISENGAGE VFD HIGH SPEED WHEN CO LEVELS DROP TO 15 PPM AND NO2 LEVELS DROP TO 1.0 PPM.
- PROVIDE WITH AUDIBLE ALARM WHEN CO LEVELS RISE ABOVE 50 PPM AND NO2 LEVELS RISE ABOVE 2.8 PPM. INCLUDES GEF-D & 2B.



SEE SHEET M6.00 FOR SHEET NOTES

1 LEVEL B FLOOR PLAN-HVAC
M1.0B SCALE: 1/8"=1'-0"

MECHANICAL FLOOR PLAN LEVEL B

M1.0B

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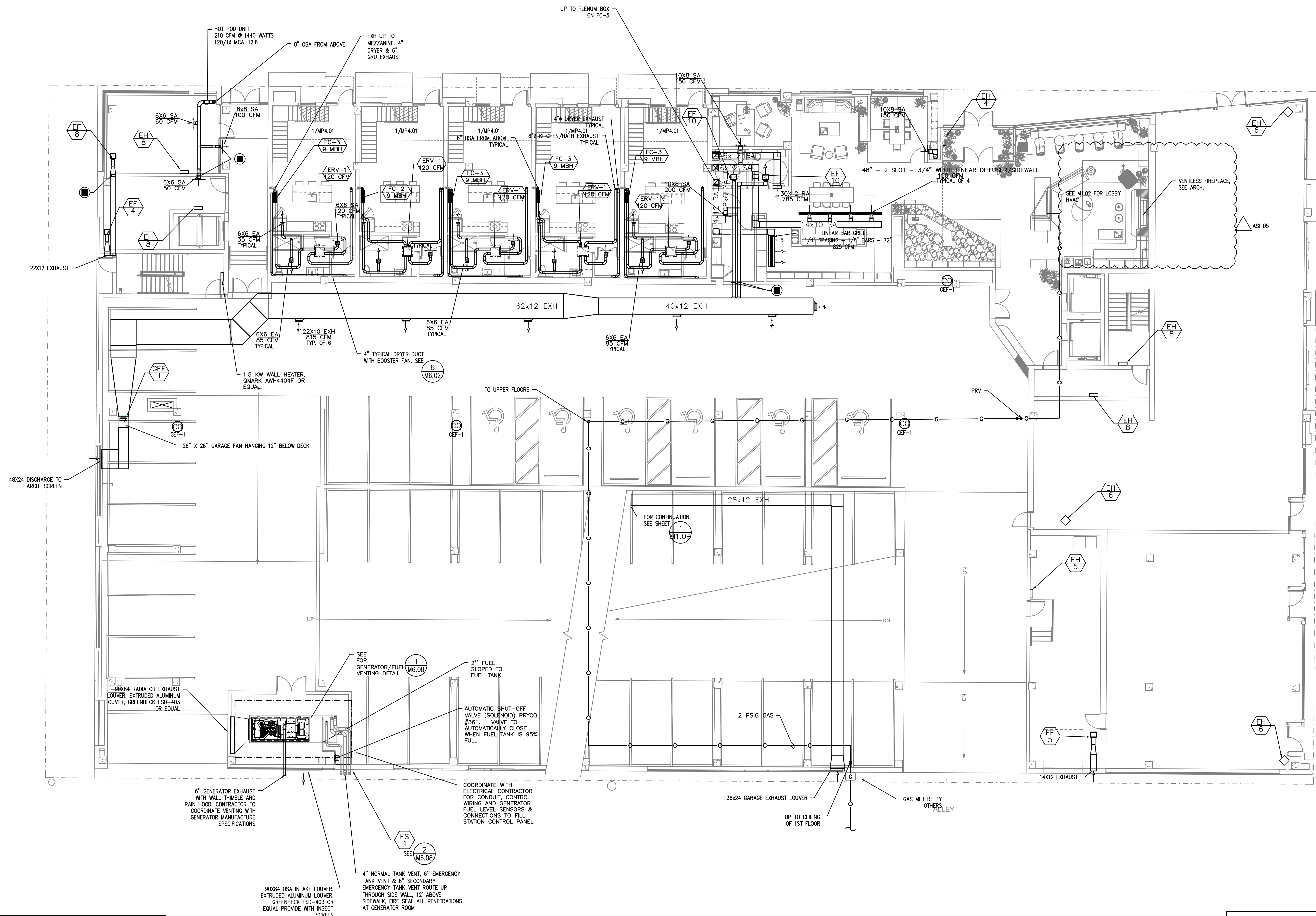


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S. 4TH STREET

W. MYRTLE STREET

W. BROAD STREET



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SEE SHEET M6.00 FOR
SHEET NOTES

1 LEVEL 1 FLOOR PLAN-HVAC
SCALE: 1/8"=1'-0"

MECHANICAL
FLOOR PLAN
LEVEL 1

sheet:
M1.01

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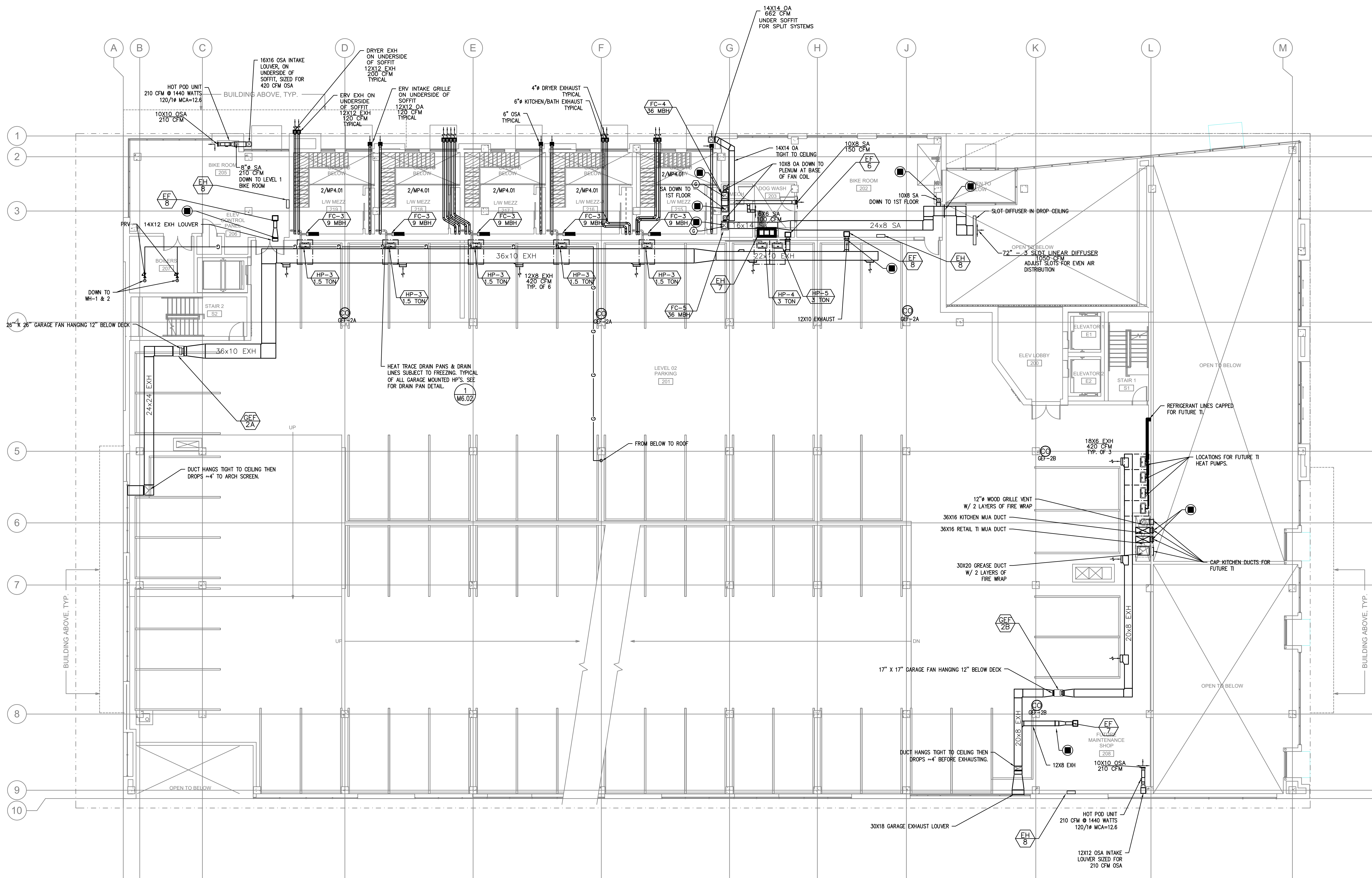
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MECHANICAL
FLOOR PLAN
LEVEL 2

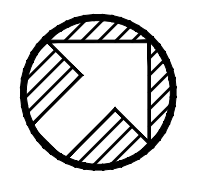
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M1.02

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1
M1.02 LEVEL 2 FLOOR PLAN-HVAC
SCALE: 1/8"=1'-0"

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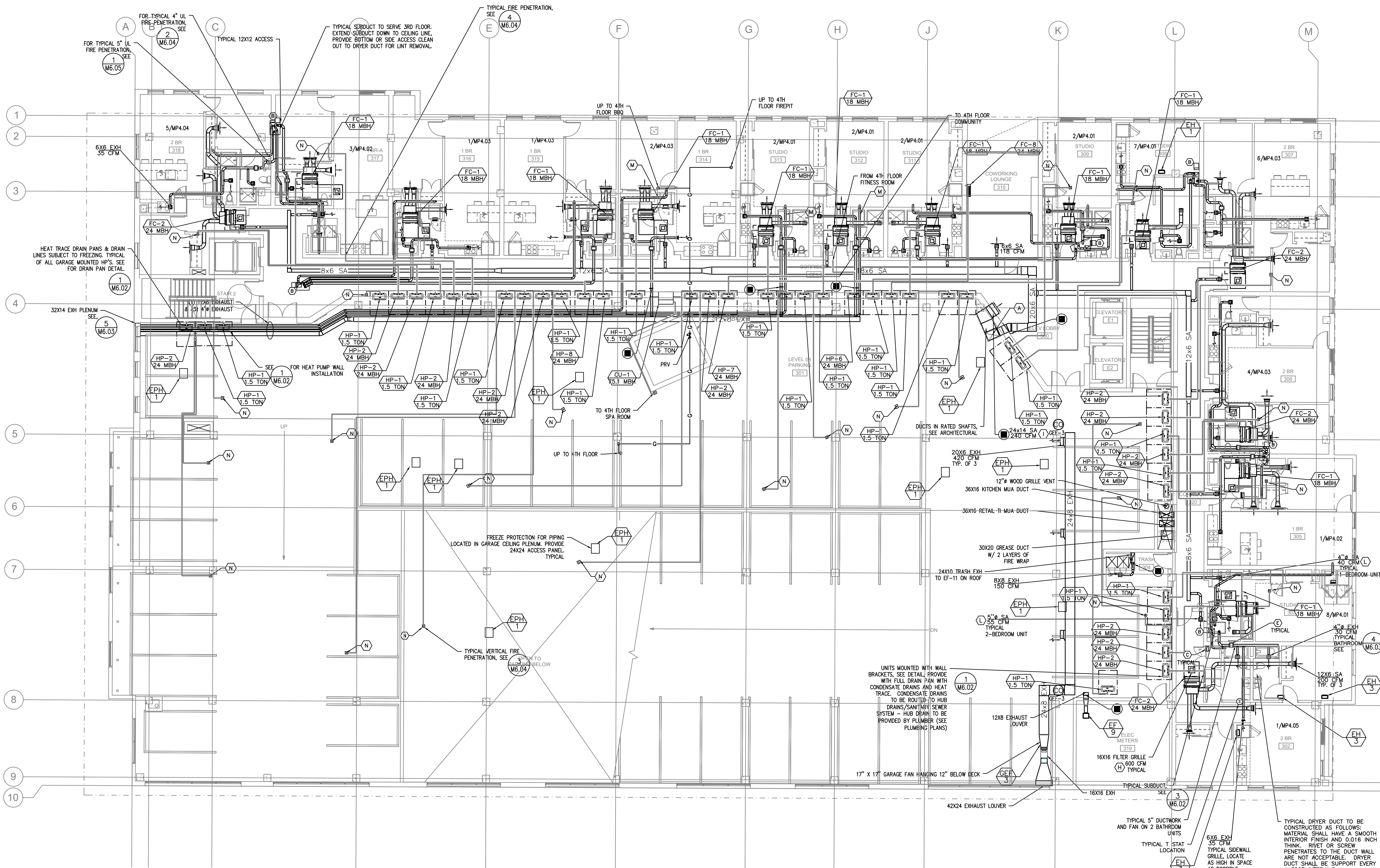
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MECHANICAL
FLOOR PLAN
LEVEL 3

sheet:

M1.03

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1 LEVEL 3 FLOOR PLAN-HVAC
M1.03 SCALE: 1/8"=1'-0"

6/17/2019 11:26:30 AM

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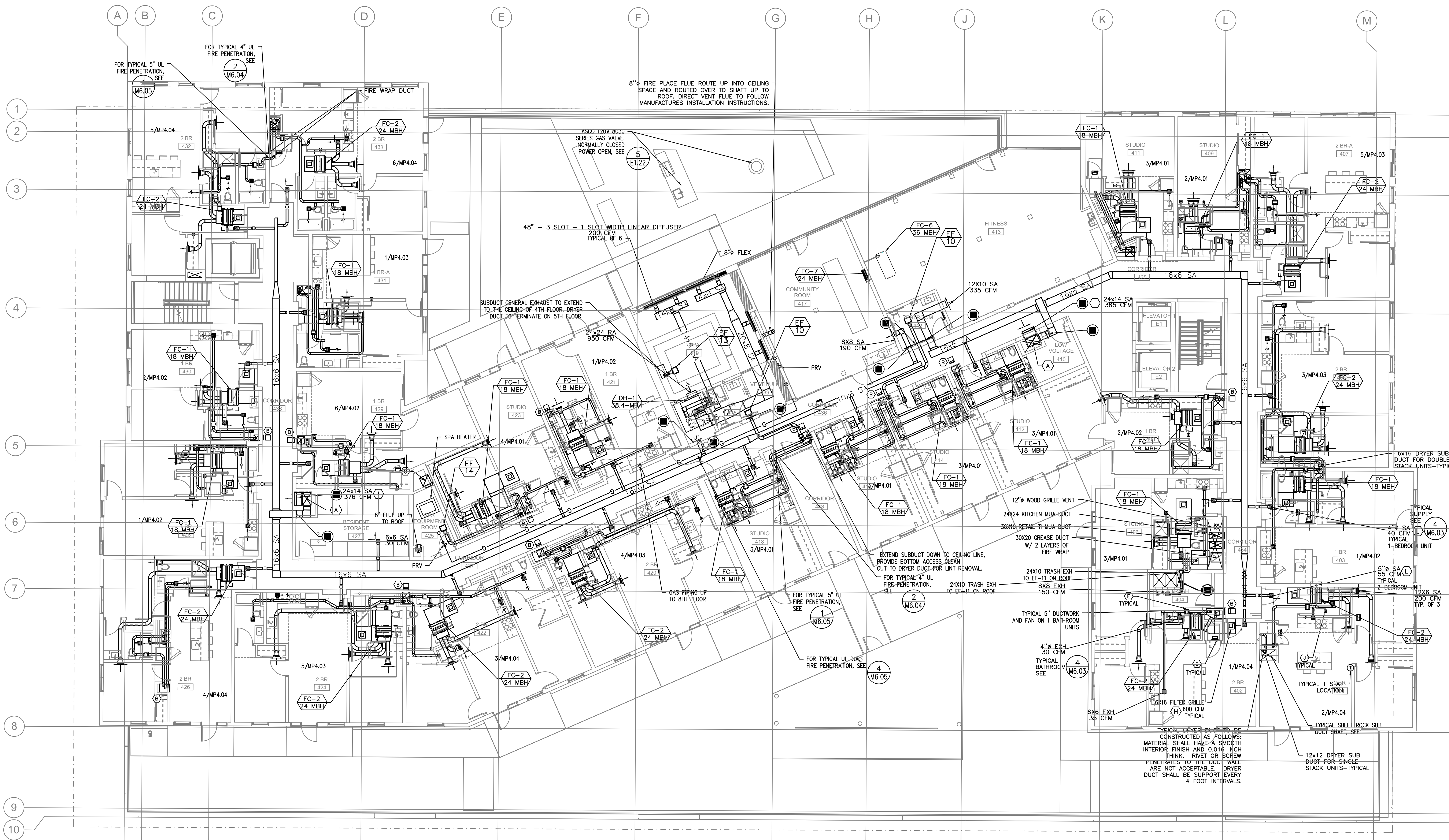
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MECHANICAL
FLOOR PLAN
LEVEL 4

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M1.04

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SEE SHEET M6.00 FOR
SHEET NOTES

1 LEVEL 4 FLOOR PLAN-HVAC
M1.04 SCALE: 1/8"=1'-0"

ALL FAN COILS ON
4TH FLOOR ROUTED
TO HPs IN GARAGE

SUB DUCTS TO HAVE
CLEAN OUTS ON
LOWEST FLOOR THEY
SERVE(3RD OR 4TH)

TYPICAL DRYER DUCT TO BE
CONSTRUCTED AS FOLLOWS:
MATERIAL SHALL HAVE A SMOOTH
INTERIOR FINISH AND 0.016 INCH
THICK. RIVET OR SCREW
PENETRATES TO THE DUCT WALL
ARE NOT ACCEPTABLE. DRYER
DUCT SHALL BE SUPPORT EVERY
4 FOOT INTERVALS

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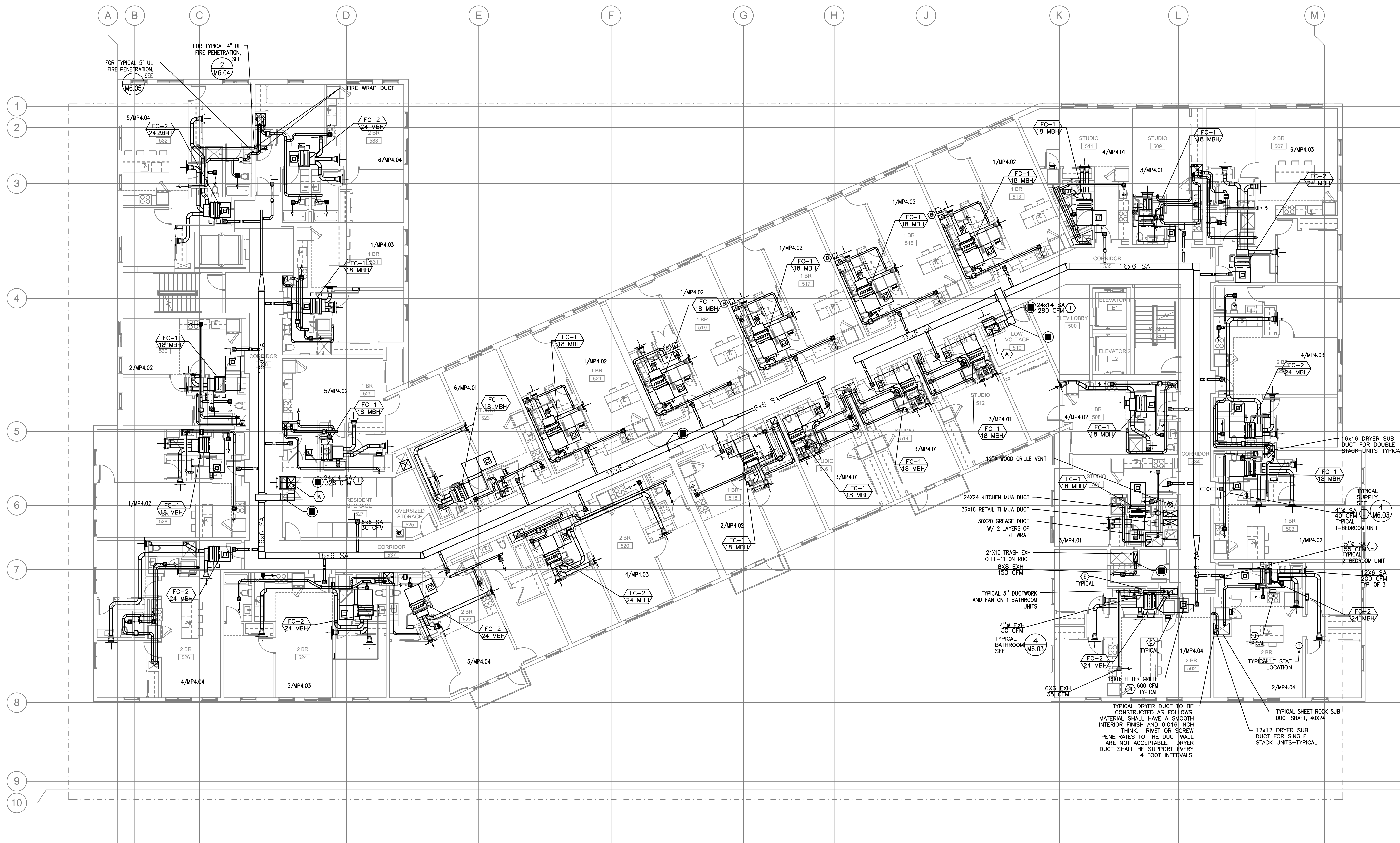
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ALL FAN COILS ON
5TH THRU 8TH FLOOR
ROUTED TO HPs ON
ROOF

SEE SHEET M6.00 FOR
SHEET NOTES

1 LEVEL 5 FLOOR PLAN-HVAC
M1.05 SCALE: 1/8"=1'-0"

MECHANICAL
FLOOR PLAN
LEVEL 5

M1.05

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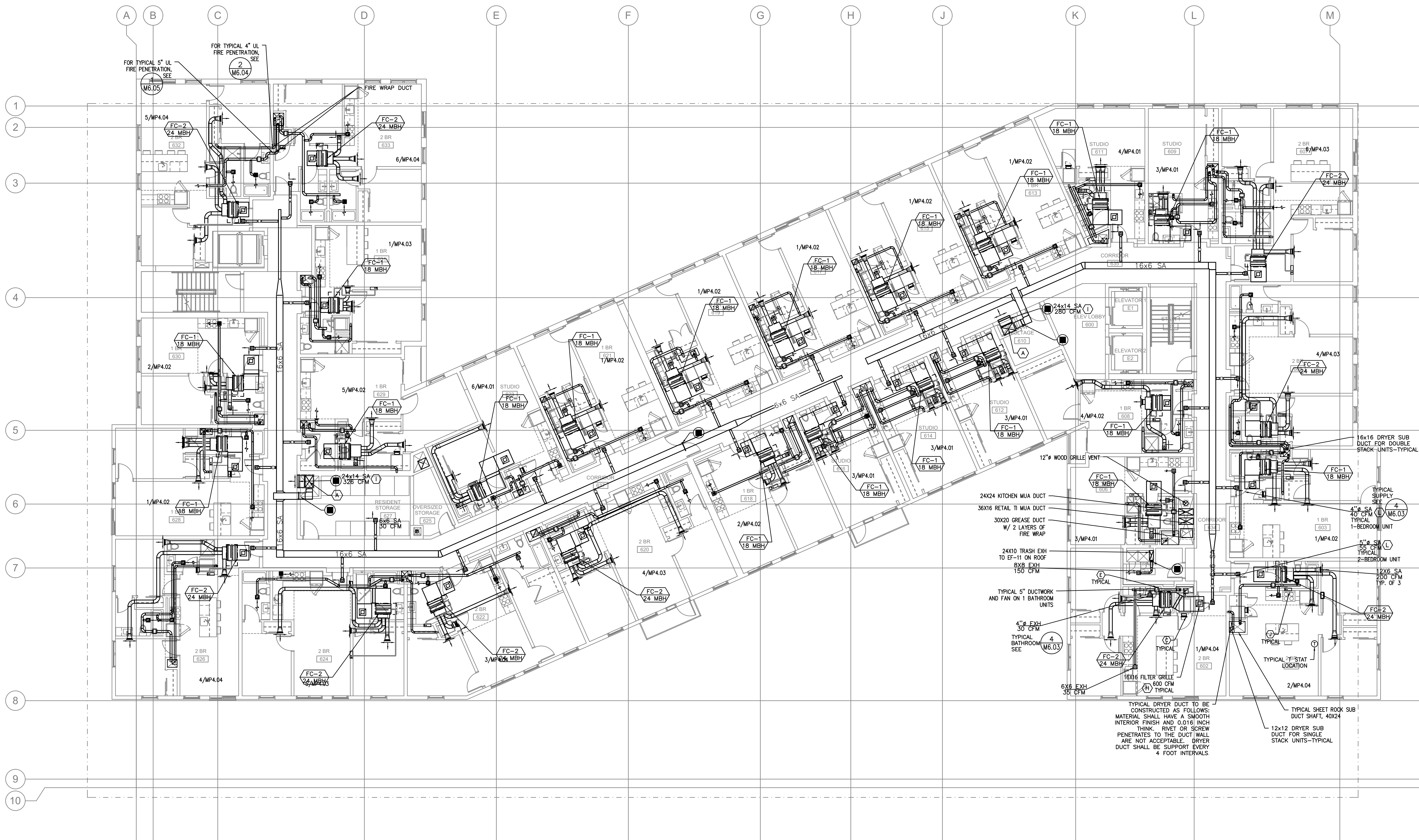
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MECHANICAL
FLOOR PLAN
LEVEL 6

sheet:

M1.06

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SHEET NOTES

1 LEVEL 6 FLOOR PLAN-HVAC
M1.06 SCALE: 1/8"=1'-0"

ALL FAN COILS ON
5TH THRU 8TH FLOOR
ROUTED TO HPs ON
ROOF

TYPICAL DRYER DUCT TO BE
CONSTRUCTED AS FOLLOWS:
MATERIAL SHALL HAVE A SMOOTH
INTERIOR FINISH AND 0.016 INCH
THICK. RIVET OR SCREW
PENETRATES TO THE DUCT WALL
ARE NOT ACCEPTABLE. DRYER
DUCT SHALL BE SUPPORT EVERY
4 FOOT INTERVALS.

TYPICAL SHEET ROCK SUB
DUCT SHAFT, 40X24
12x12 DRYER SUB
DUCT FOR SINGLE
STACK UNITS-TYPICAL

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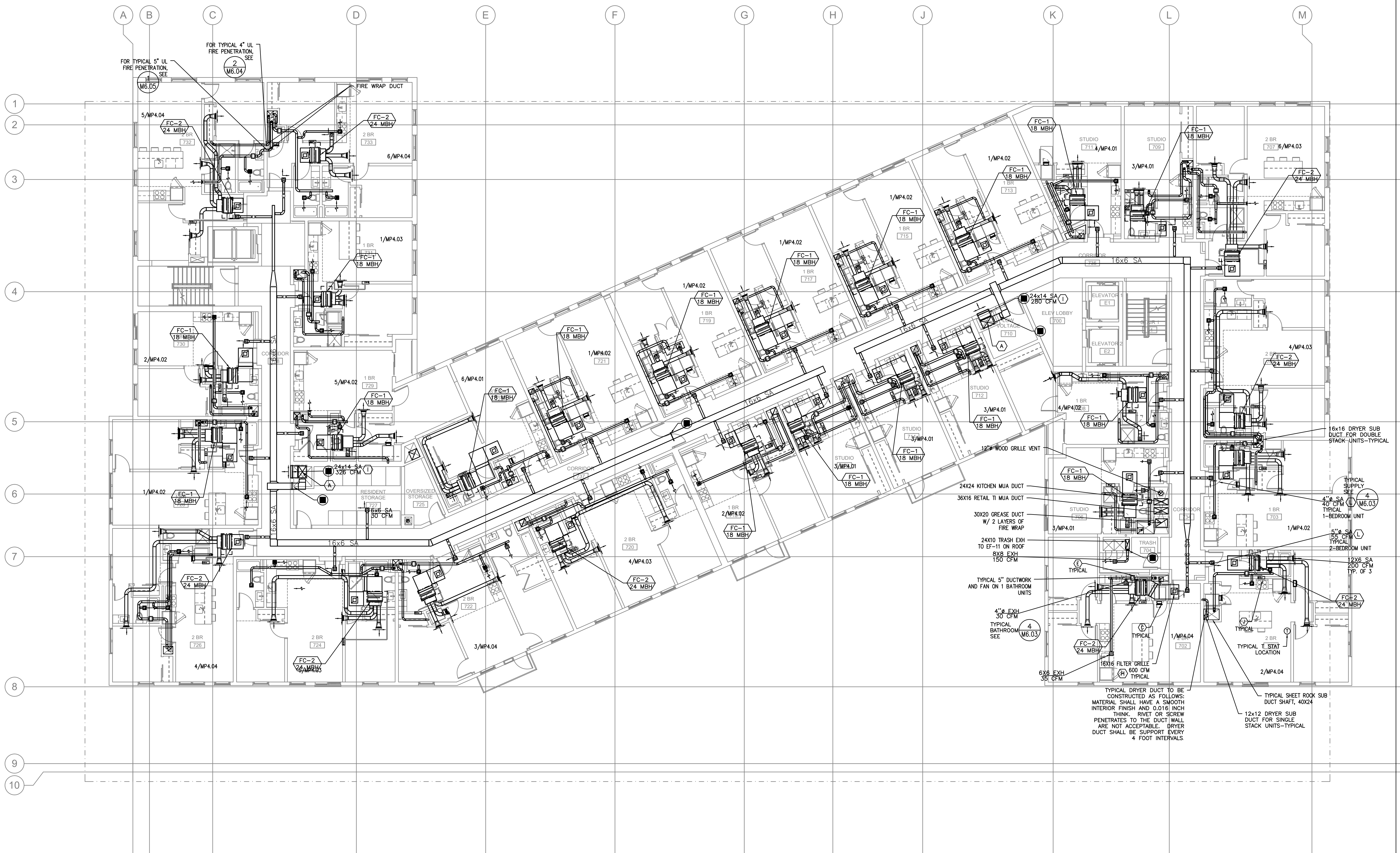
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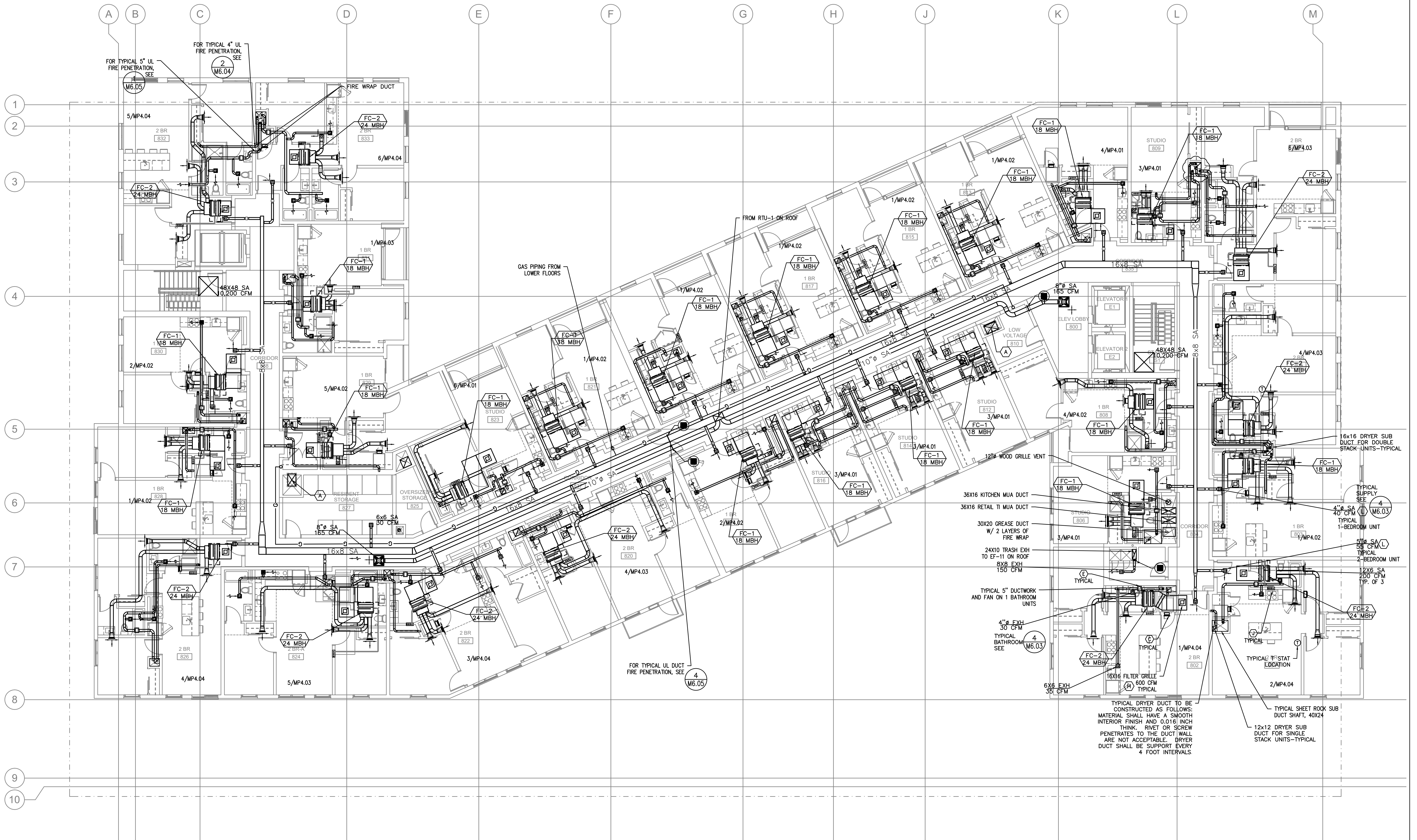
SEE SHEET M6.00 FOR
SHEET NOTES

1 LEVEL 7 FLOOR PLAN-HVAC
M1.07 SCALE: 1/8"=1'-0"

ALL FAN COILS ON
5TH THRU 8TH FLOOR
ROUTED TO HPs ON
ROOF

MECHANICAL
FLOOR PLAN
LEVEL 7

M1.07

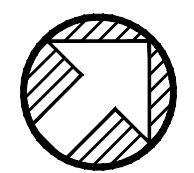


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1 LEVEL 8 FLOOR PLAN-HVAC
M1.08 SCALE: 1/8"=1'-0"

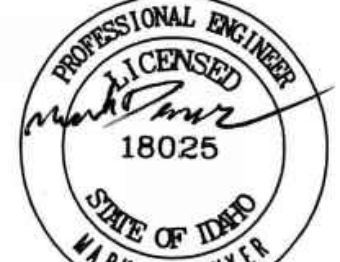
ALL FAN COILS ON
5TH THRU 8TH FLOOR
ROUTED TO HPs ON
ROOF

CARTEE
APARTMENTS

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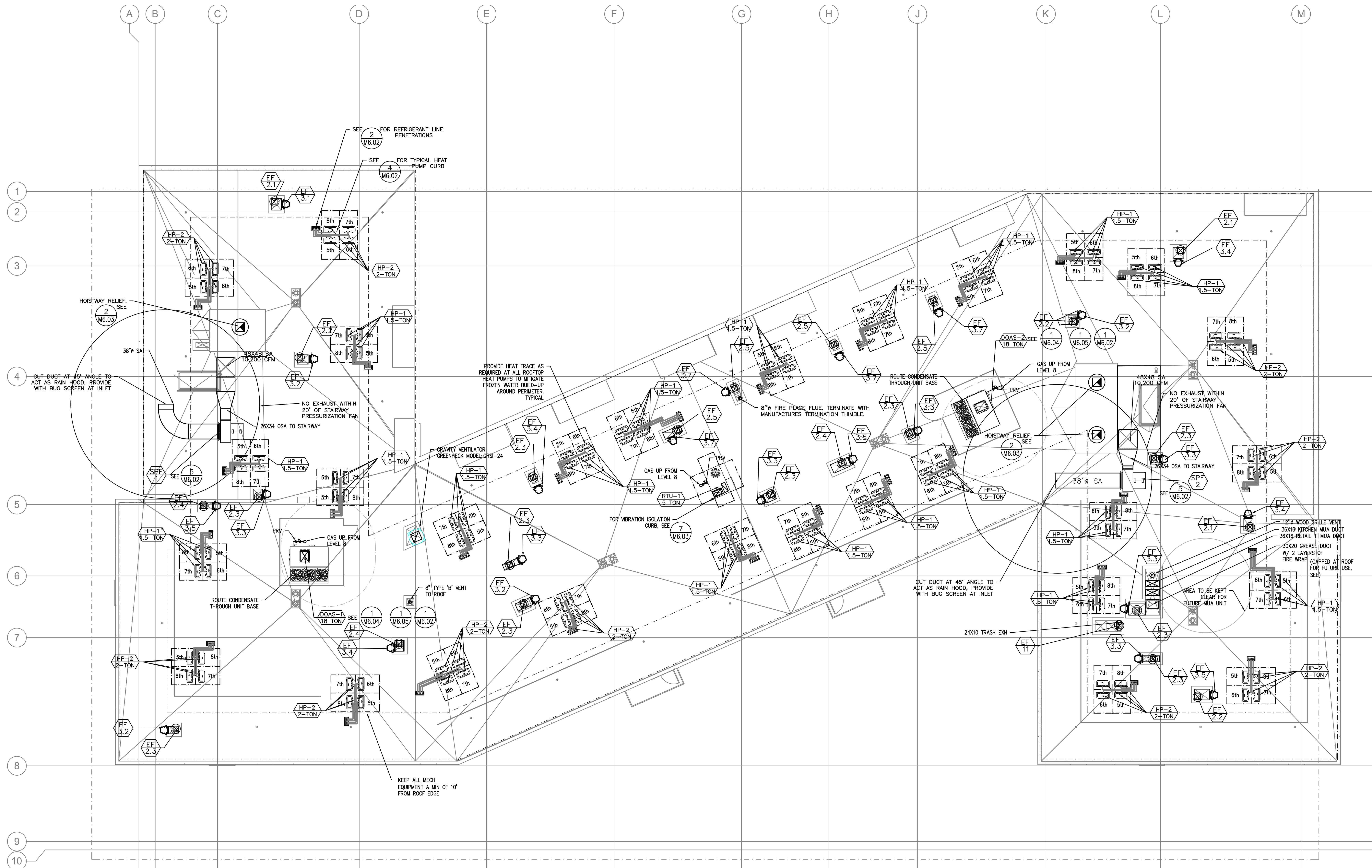
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title:

MECHANICAL
ROOF PLAN

sheet:

M1.09

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1 ROOF PLAN-HVAC
M1.09 SCALE: 1/8"=1'-0"

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MECHANICAL LEGEND

Legend table listing symbols for various mechanical components like diffusers, grilles, valves, pumps, and ductwork, along with their abbreviations and descriptions.

INDOOR UNITS - *

Table of indoor unit specifications including Mark Number, System, Type, Efficiency, Capacity, and Basis of Design for various units like FC-1 through FC-8.

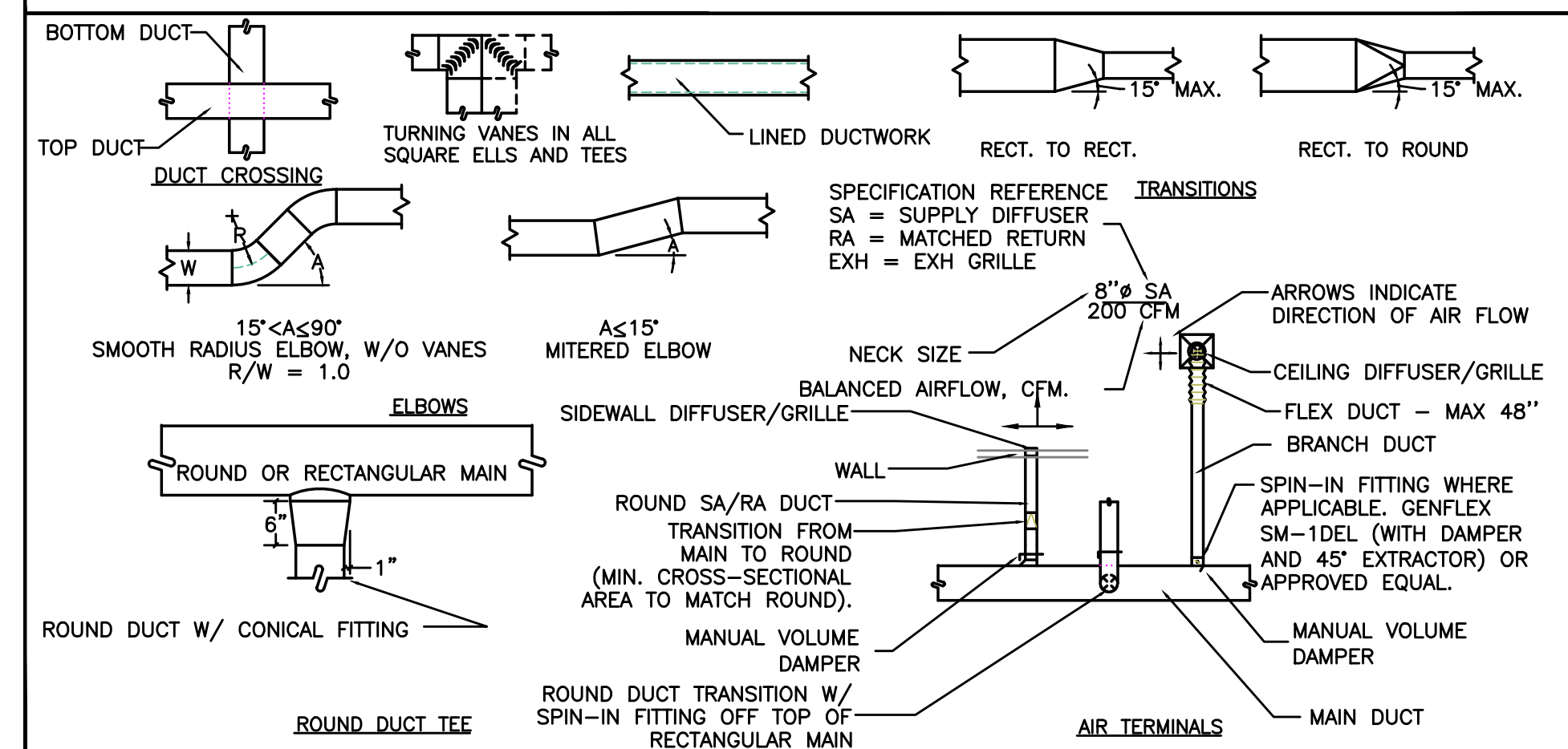
* - PROVIDE ALL UNITS THAT CANNOT BE DRAINED BY GRAVITY WITH CONDENSATE PUMP. ROUTE ALL CONDENSATE LINES WITHIN STRUCTURE TO AN APPROVED LOCATION PROVIDED BY THE PLUMBER.

OUTDOOR UNITS - SPLIT SYSTEM HEAT PUMP

Table of outdoor unit specifications including Mark Number, System, Type, Capacity, Efficiency, and Basis of Design for various heat pump units like HP-1 through HP-8.

** - ELECTRICAL DATA LISTED FOR REFERENCE ONLY. COORDINATE WITH ELECTRICAL DESIGN BUILD CONTRACTOR FOR VOLTAGE AND PHASE REQUIREMENTS. ELECTRICAL CONTRACTOR RESPONSIBLE FOR SIZING ALL CONDUCTORS & OVERCURRENT PROTECTION. VERIFY WITH EQUIPMENT SUBMITTALS FOR EQUIPMENT ELECTRICAL REQUIREMENTS. *** - PROVIDE BASE PAN HEATERS FOR ALL CONDENSING UNITS. FOR CARRIER MODEL CONDENSERS, USE HEAT TRACE POWERED FROM CONDENSING UNITS.

AIR DISTRIBUTION DETAILS



GARAGE EXHAUST FANS

Table of garage exhaust fan specifications including Mark Number, Type, System, CFM, RPM, and Basis of Design for various fan models like GEF-0 through GEF-3.

*** - ELECTRICAL DATA LISTED FOR REFERENCE ONLY. COORDINATE WITH ELECTRICAL DESIGN BUILD CONTRACTOR FOR VOLTAGE AND PHASE REQUIREMENTS

DEHUMIDIFIER - INDOOR

Table of indoor dehumidifier specifications including Mark Number, System, Type, Capacity, and Basis of Design for the DH-1 model.

DEHUMIDIFIER - OUTDOOR

Table of outdoor dehumidifier specifications including Mark Number, System, Type, Capacity, and Basis of Design for the CU-1 model.

ENERGY RECOVERY VENTILATOR

Table of energy recovery ventilator specifications including Mark Number, System, Type, Capacity, and Basis of Design for the ERV-1 model.

** 2-SPEED CONTROL REQUIRES 998C02 CONTROLLER ** DUCT HEATER TO BE PROVIDED BY MECHANICAL CONTRACTOR

ROOFTOP HVAC UNITS

Table of rooftop HVAC unit specifications including Mark Number, System, Type, Capacity, and Basis of Design for various models like RTU-1 and RTU-2.

ELEC PLENUM HEATERS

Table of electrical plenum heater specifications including Mark Number, Description, Location, and Basis of Design for the EPH-1 model.

ELEC HEATERS

Table of electrical heater specifications including Mark Number, Location, Style, and Basis of Design for various heater models like EH-1 through EH-8.

* - RADIANT CEILING PANEL. PROVIDE WITH WALL MOUNTED T-STAT. ** - QMARK MUH05-XX OR EQUAL. *** - QMARK AWH4404F OR EQUAL.

GENERAL NOTES:

- List of general notes (A through O) detailing installation requirements, ductwork specifications, and equipment placement for the mechanical system.

SHAFT DUCT SIZES

Table showing shaft duct sizes for supply and return air for various floor levels (Attic, 8th, 7th, 6th, 5th, 4th).

SHAFT DUCT SIZES

Table showing shaft duct sizes for supply and return air for various floor levels (Attic, 8th, 7th, 6th, 5th, 4th, 3rd).

VENTILATION CALCULATIONS:

ALL DWELLING UNITS ARE VENTILATED BY MECHANICAL VENTILATION, BATHROOM EXHAUST FANS RUN CONTINUOUSLY (SIZED PER ASHRAE 62.2) AND MAKE UP AIR/VENTILATION IS PROVIDED BY THE RTUS (DUCTED DIRECTLY TO EACH UNIT) SEE DRAWINGS.

COMMON SPACES AND HALLWAYS ARE VENTILATED BY PACKAGED ROOF TOP UNITS SIZED TO EXCEED THE MINIMUM 0.06 CFM/SQ FT REQUIREMENT

SEE VENTILATION SCHEDULES FOR OTHER UNITS

ADDENDUM 4 SET

Table of addendum 4 set details including revision numbers, dates, and descriptions of changes.

title:

MECHANICAL DETAILS

sheet:

M6.00

CARTEE
APARTMENTS

406 S 4TH ST.
BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



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CONTACT: Mark Denyer

EXHAUST FANS

Table with columns for Mark Number, Type, System, CFM, Total Sp. (in H2O), RPM, Tip Speed (FPM), Motor Watts or HP, Controlled By, Interlock With, Fan Speed Controller, Wheel Type, Back Draft Damper, Isolation, Design Weight (lbs), Max. Sones, Max Amps, Power (Volts/Phase/Hz), and Basis of Design. Includes 24 columns of equipment specifications.

* - FAN TO RUN AT LOW SPEED CONTINUOUSLY, AND INCREASE TO HIGH SPEED UPON ACTIVATION OF THE MOTION SENSOR.
** - FANS TO INCLUDE LIGHTS, MOTION SENSOR AND MULTI SPEED CONTROL WITH TIME DELAY. - COORDINATE LIGHT OPTION WITH ARCH AND ELECTRICAL CONTRACTOR
*** - ELECTRICAL DATA LISTED FOR REFERENCE ONLY. COORDINATE WITH ELECTRICAL DESIGN BUILD CONTRACTOR FOR VOLTAGE AND PHASE REQUIREMENTS
**** - PROVIDE WITH SPEED CONTROLLER FOR ROUGH ADJUSTMENT OF FAN SPEED - FINAL BALANCING TO BE ACCOMPLISHED WITH CAR DAMPERS.
***** - FAN RUNS 24-7. - FAN AND DAMPER TO BE SUPPLIED WITH EMERGENCY POWER SOURCE

VENTILATION AIR SCHEDULE - FC-4. Table with columns for Room Number and Name, Area, Occupant Load, Number of Occupants, Outside Air Requirement, Outside Air Required (CFM), Zone OSA, Supply Air, Primary OSA, Return Air, Exhaust Air, Zone Ventilation Efficiency, Corrected OSA, and Air Systems.

CORRECTED TOTAL OUTDOOR AIR FLOW RATE 418 CFM Corrected OSA Fraction Zs = 0.35

VENTILATION AIR SCHEDULE - FC-5. Table with columns for Room Number and Name, Area, Occupant Load, Number of Occupants, Outside Air Requirement, Outside Air Required (CFM), Zone OSA, Supply Air, Primary OSA, Return Air, Exhaust Air, Zone Ventilation Efficiency, Corrected OSA, and Air Systems.

CORRECTED TOTAL OUTDOOR AIR FLOW RATE 377 CFM Corrected OSA Fraction Zs = 0.31

VENTILATION AIR SCHEDULE - FITNESS. Table with columns for Room Number and Name, Area, Occupant Load, Number of Occupants, Outside Air Requirement, Outside Air Required (CFM), Zone OSA, Supply Air, Primary OSA, Return Air, Exhaust Air, Zone Ventilation Efficiency, Corrected OSA, and Air Systems.

CORRECTED TOTAL OUTDOOR AIR FLOW RATE 335 CFM Corrected OSA Fraction Zs = 0.80

VENTILATION AIR SCHEDULE - COMMUNITY ROOM. Table with columns for Room Number and Name, Area, Occupant Load, Number of Occupants, Outside Air Requirement, Outside Air Required (CFM), Zone OSA, Supply Air, Primary OSA, Return Air, Exhaust Air, Zone Ventilation Efficiency, Corrected OSA, and Air Systems.

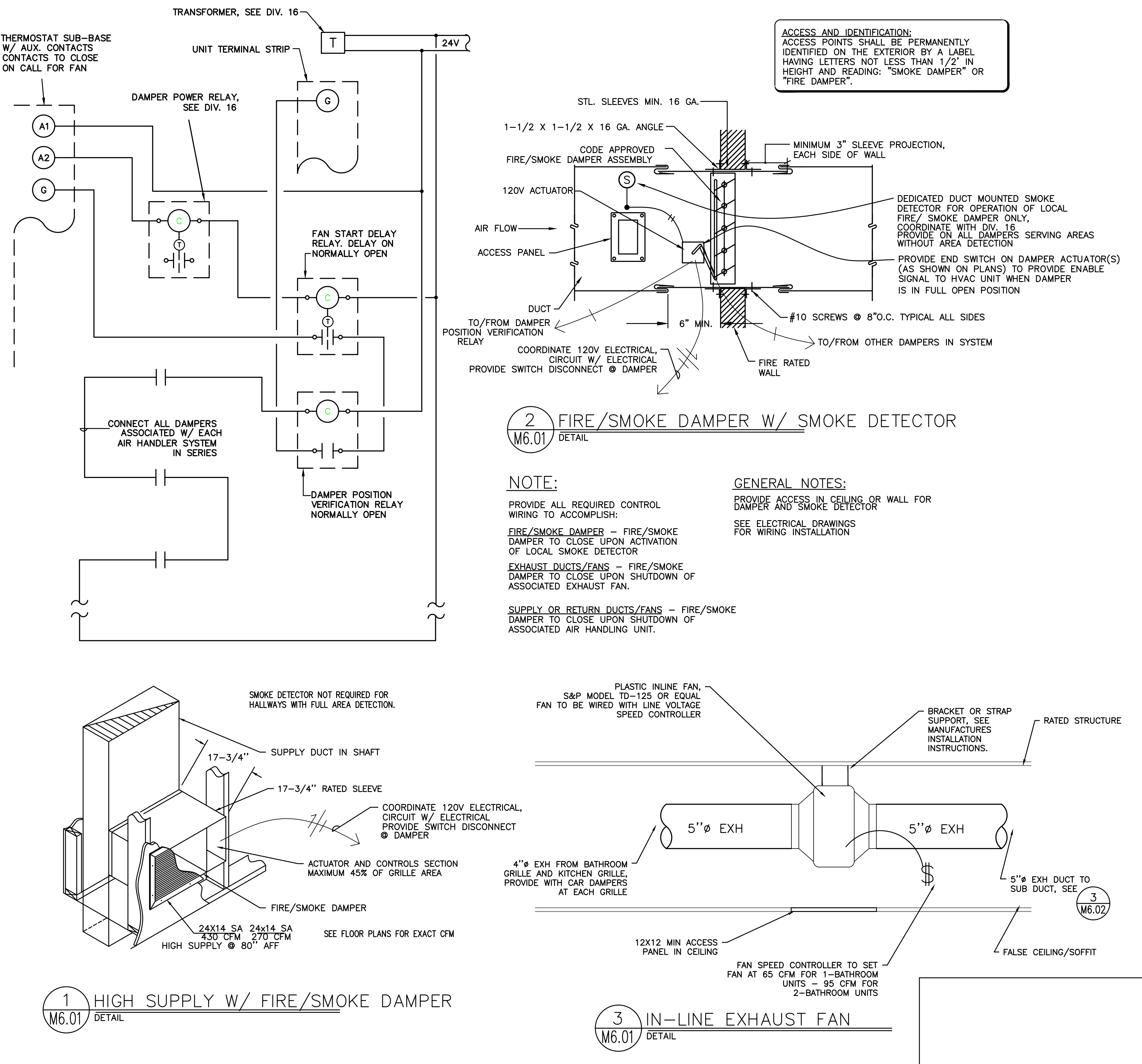
CORRECTED TOTAL OUTDOOR AIR FLOW RATE 188 CFM Corrected OSA Fraction Zs = 1.00

VENTILATION AIR SCHEDULE - COWORKING LOUNGE. Table with columns for Room Number and Name, Area, Occupant Load, Number of Occupants, Outside Air Requirement, Outside Air Required (CFM), Zone OSA, Supply Air, Primary OSA, Return Air, Exhaust Air, Zone Ventilation Efficiency, Corrected OSA, and Air Systems.

CORRECTED TOTAL OUTDOOR AIR FLOW RATE 95 CFM Corrected OSA Fraction Zs = 0.50

VENTILATION AIR SCHEDULE - DH-1. Table with columns for Room Number and Name, Area, Occupant Load, Number of Occupants, Outside Air Requirement, Outside Air Required (CFM), Zone OSA, Supply Air, Primary OSA, Return Air, Exhaust Air, Zone Ventilation Efficiency, Corrected OSA, and Air Systems.

CORRECTED TOTAL OUTDOOR AIR FLOW RATE 209 CFM Corrected OSA Fraction Zs = 0.26



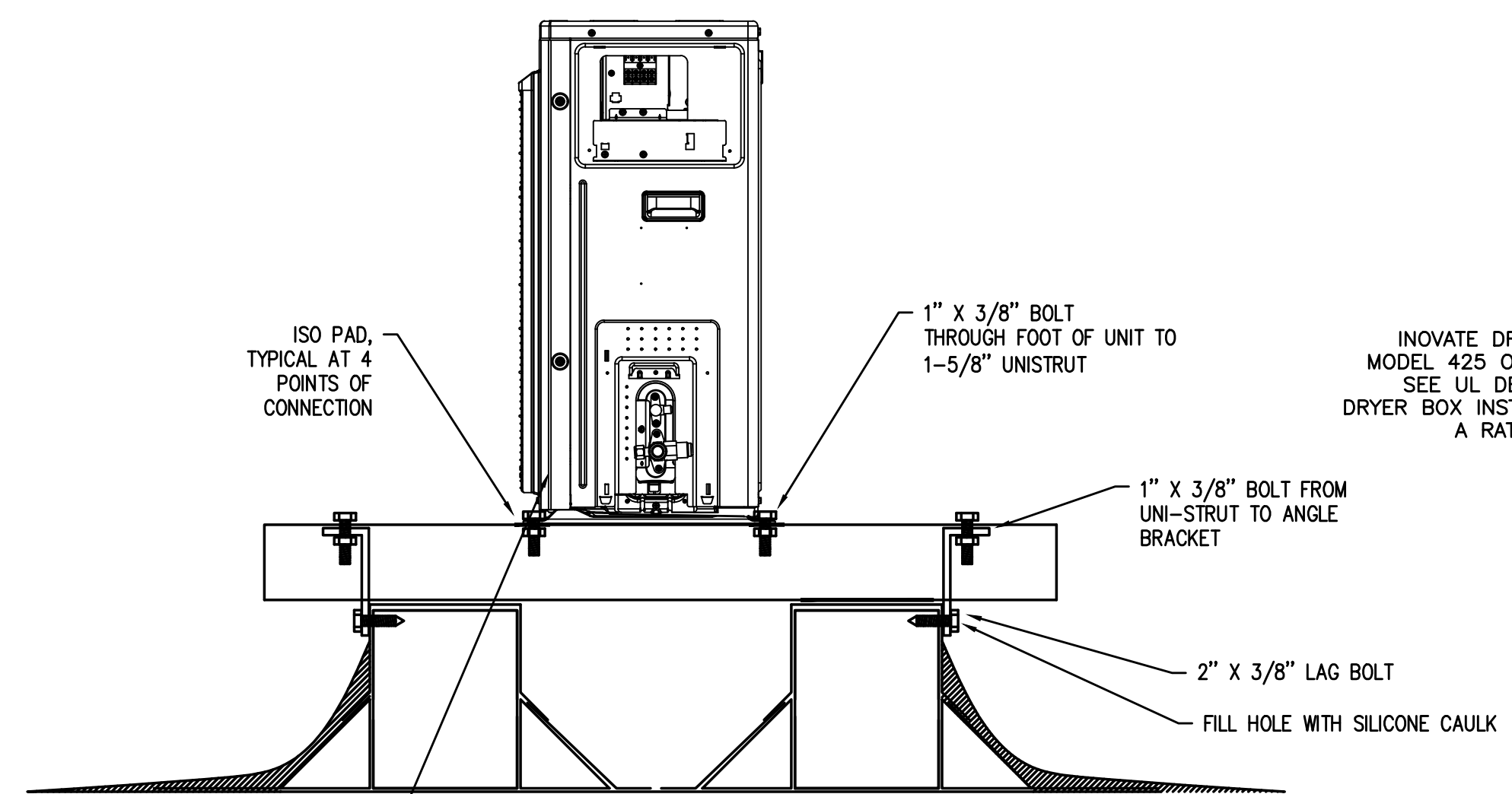
ADDENDUM 4 SET

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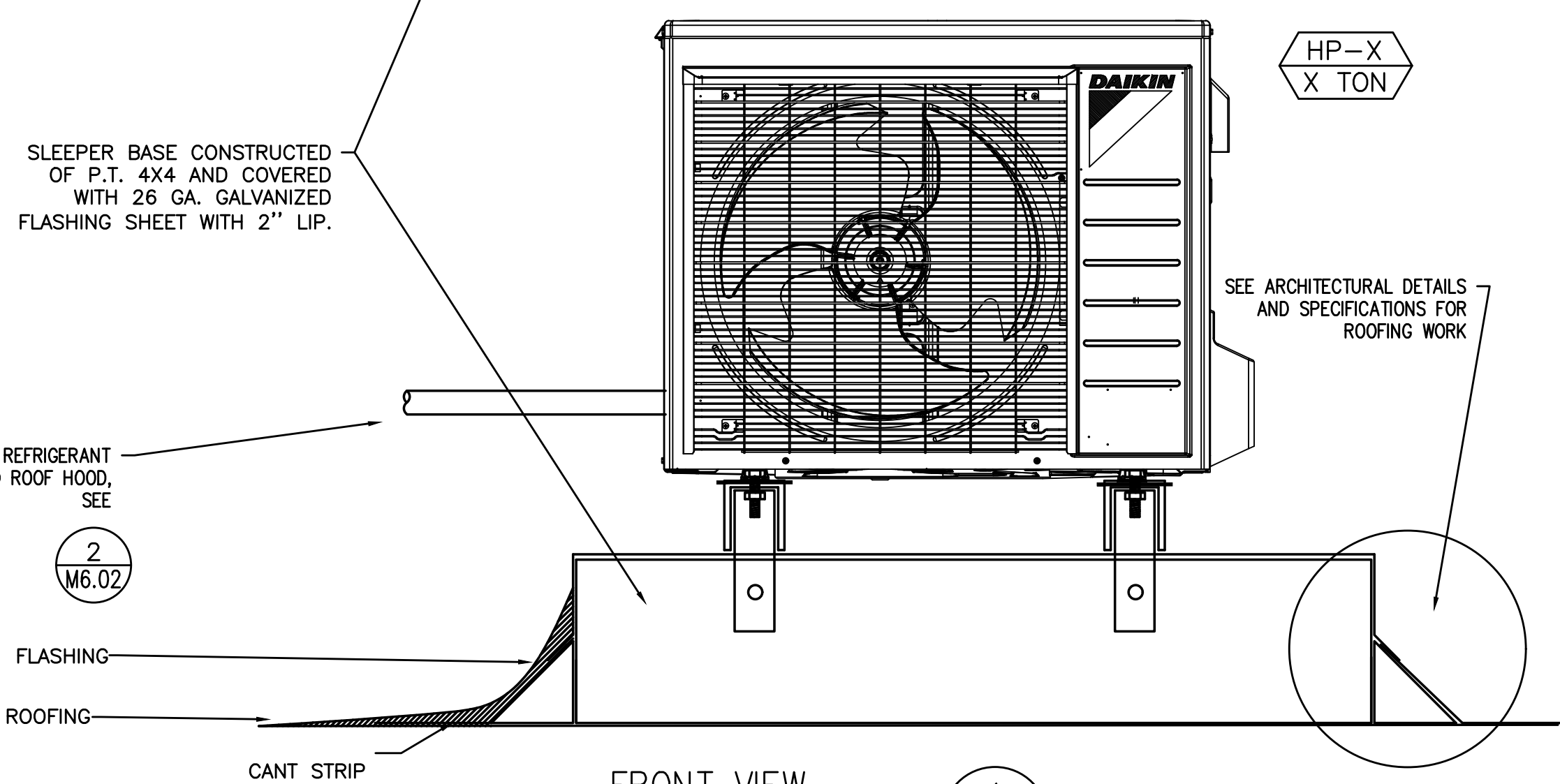
Table with columns for Revision, Date, and Description. Lists revisions for City Response, Addendum, and ASI.

MECHANICAL
DETAILS

M6.01

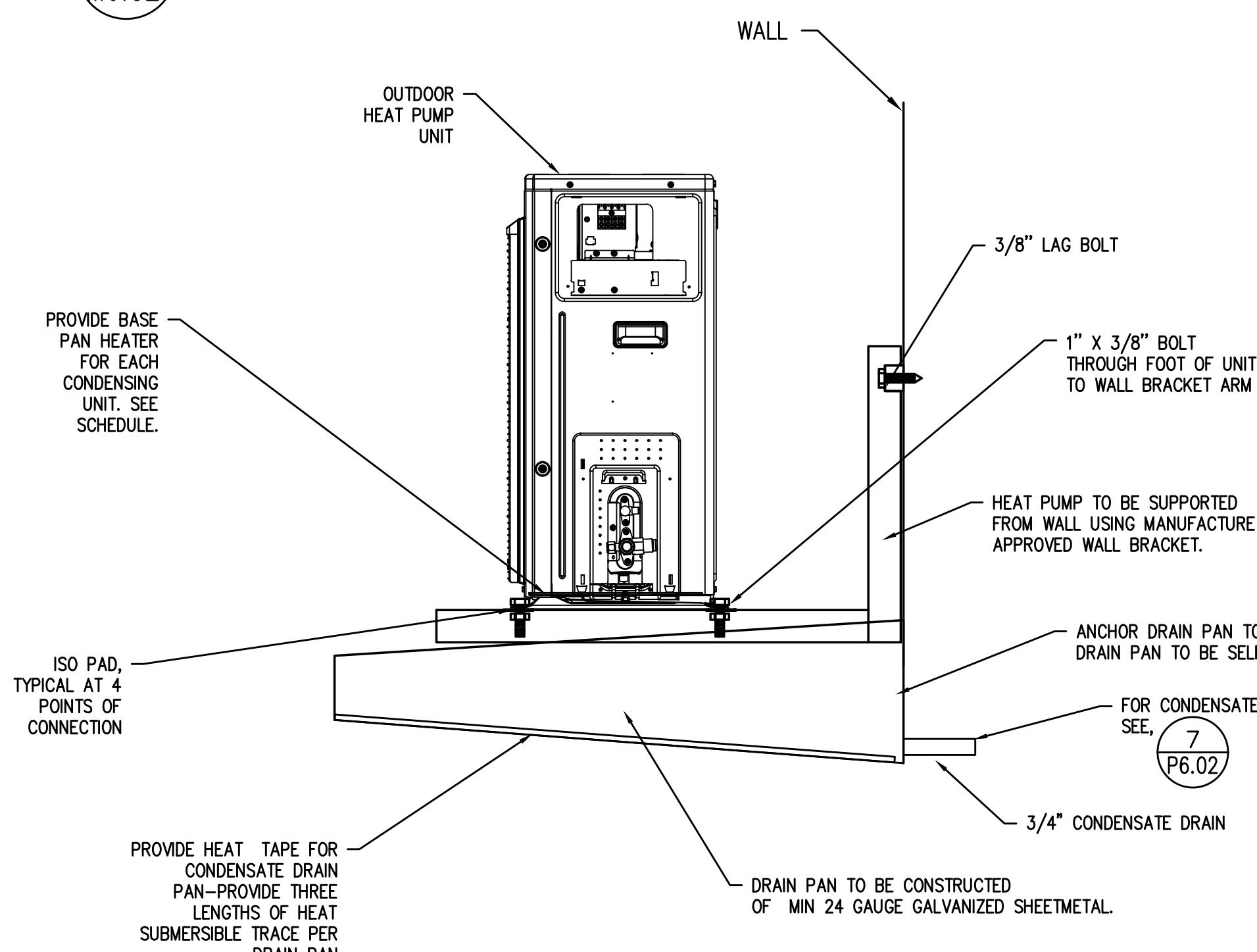


END VIEW

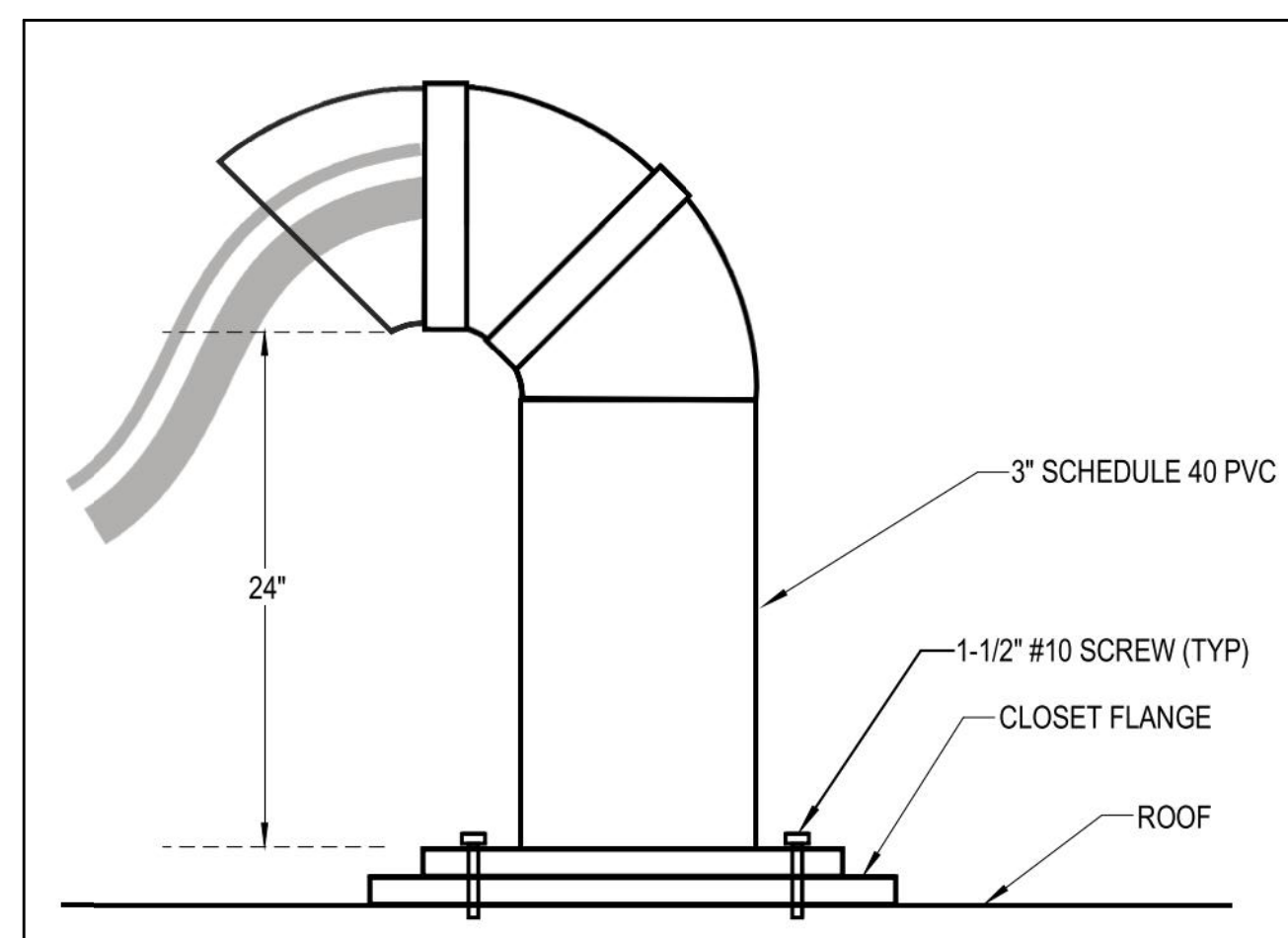


FRONT VIEW

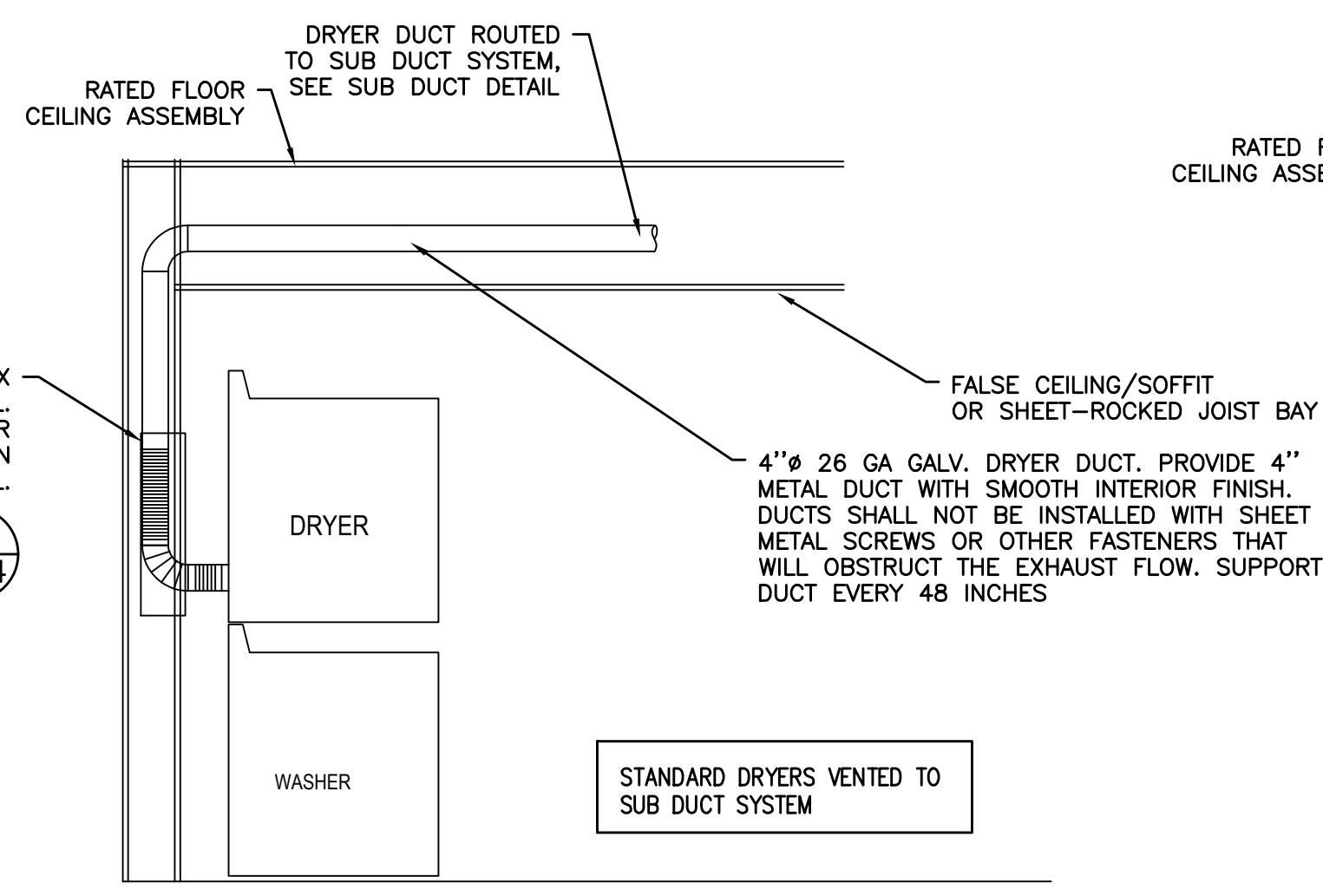
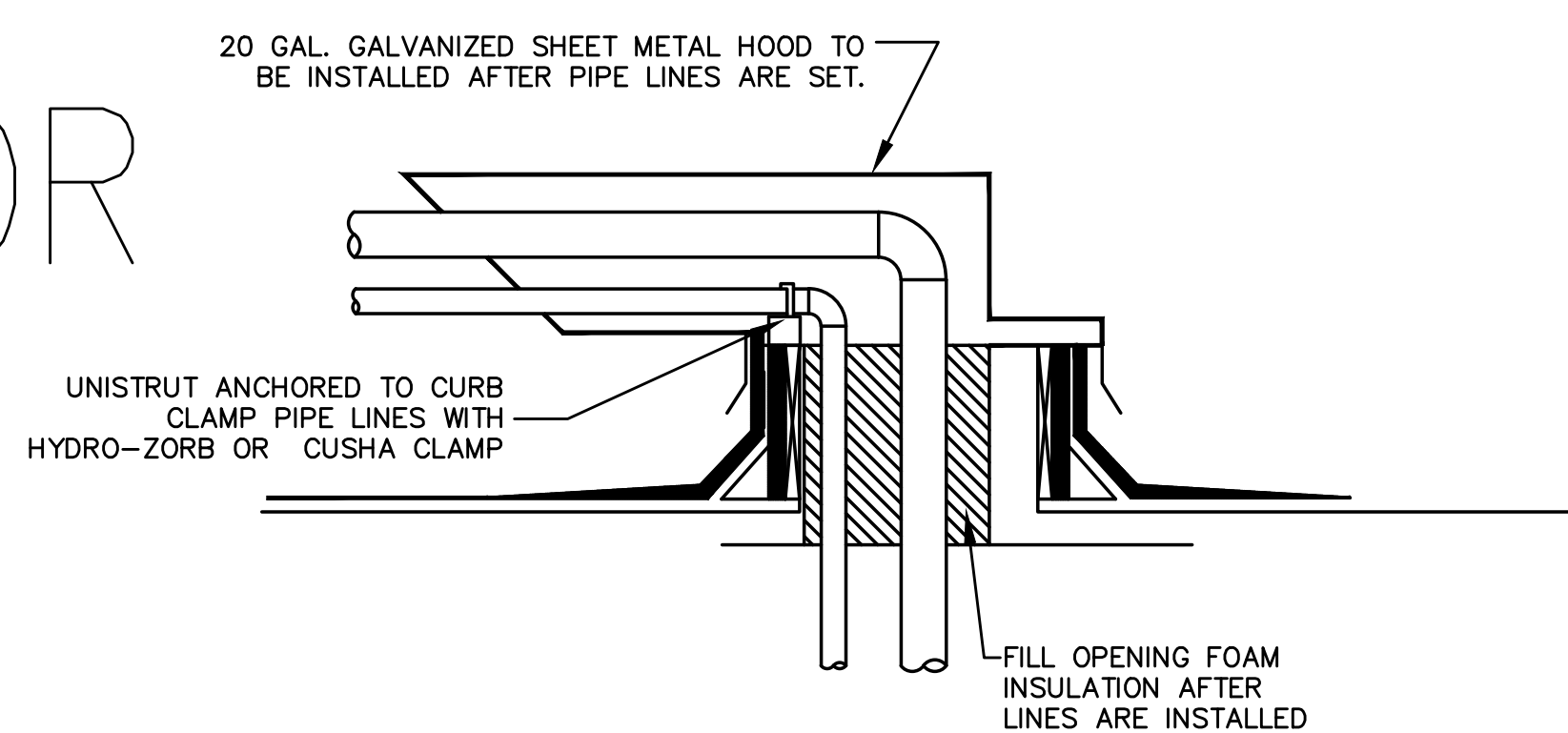
4 HEAT PUMP CURB
M6.02 DETAIL



1 TYPICAL HP WALL BRACKET
M6.02 DETAIL

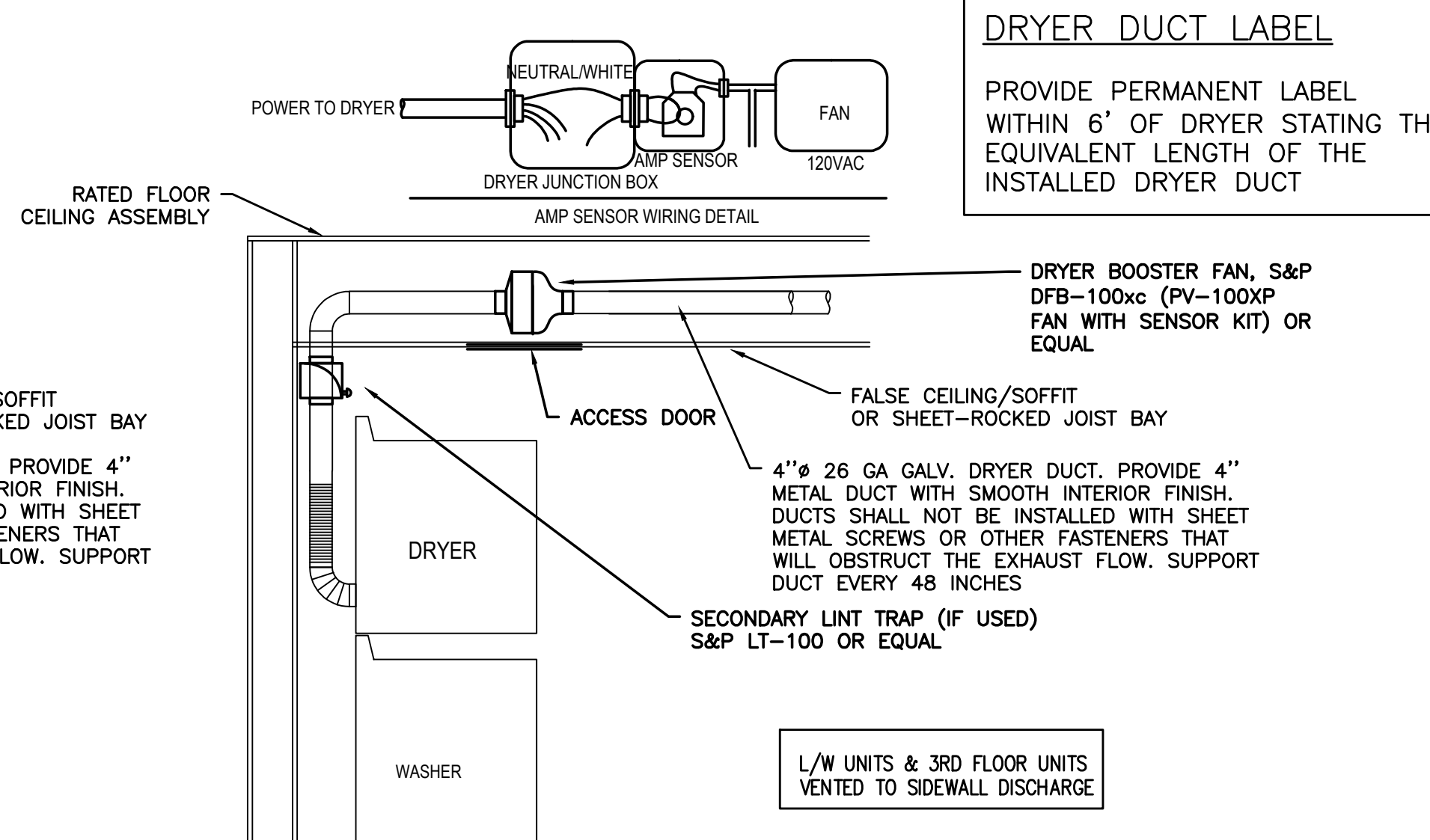


2 REFRIGERANT ROOF PENETRATIONS
M6.02 DETAIL

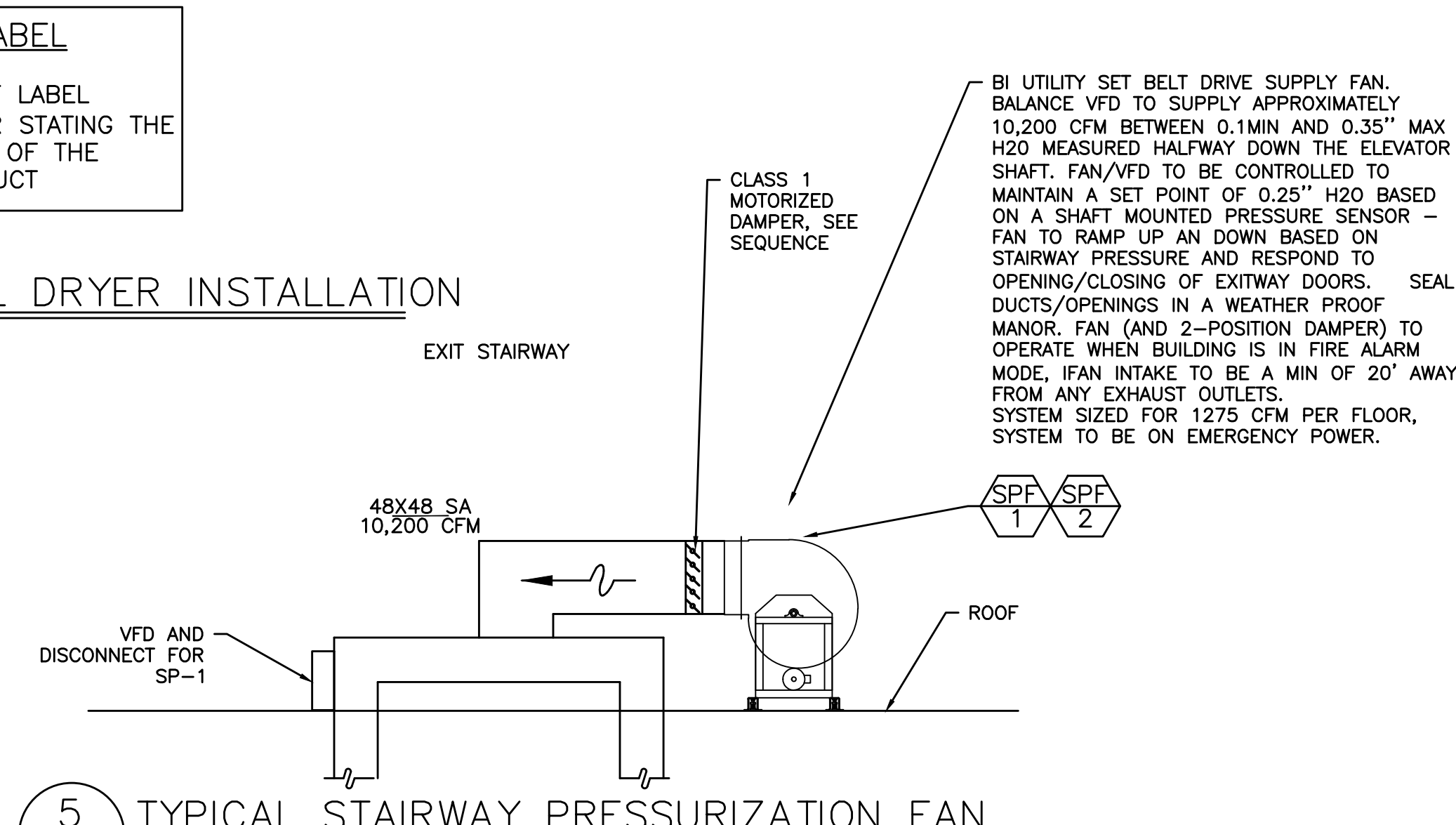


DRYER DUCT LABEL
PROVIDE PERMANENT LABEL WITHIN 6' OF DRYER STATING THE EQUIVALENT LENGTH OF THE INSTALLED DRYER DUCT

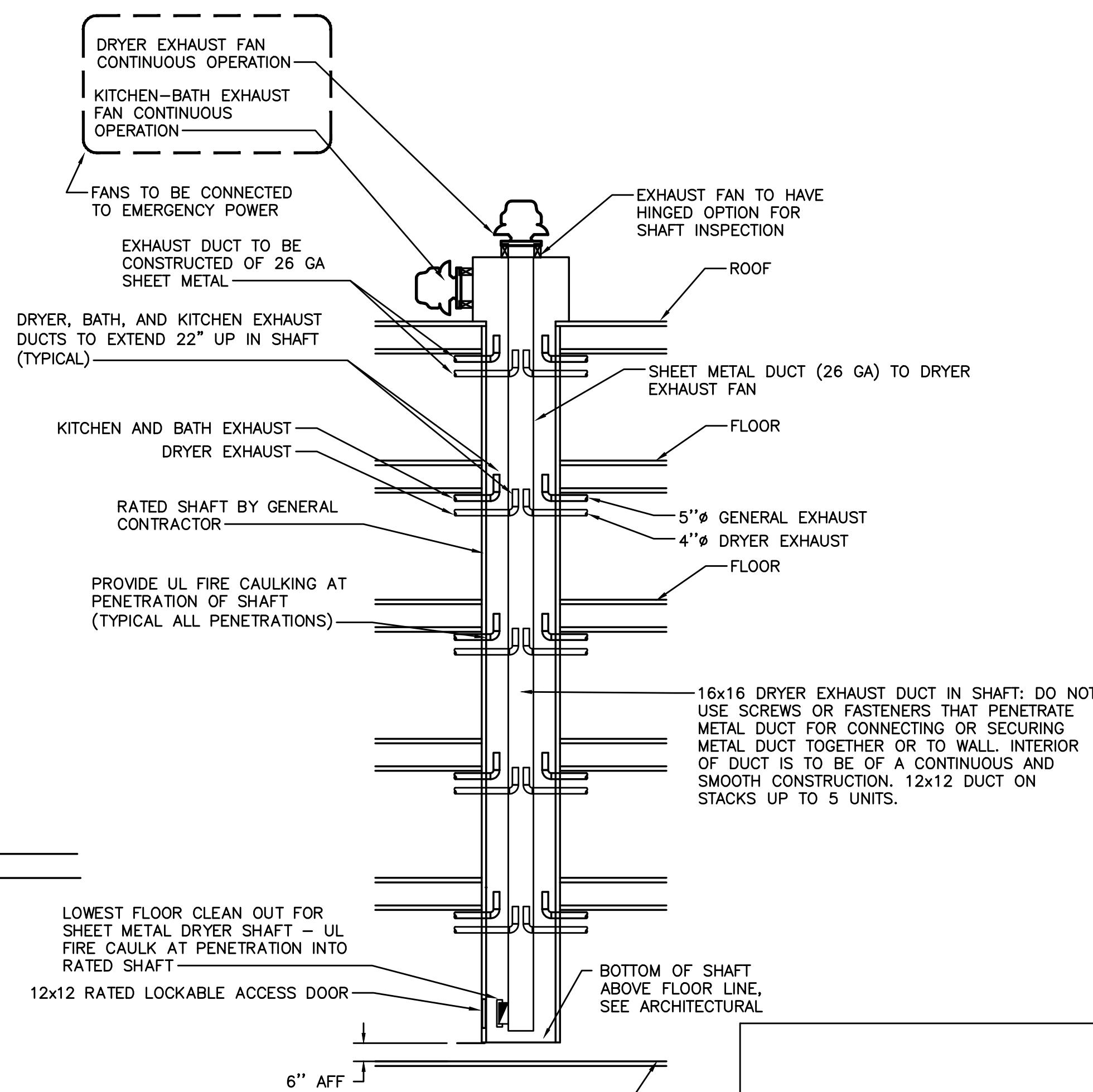
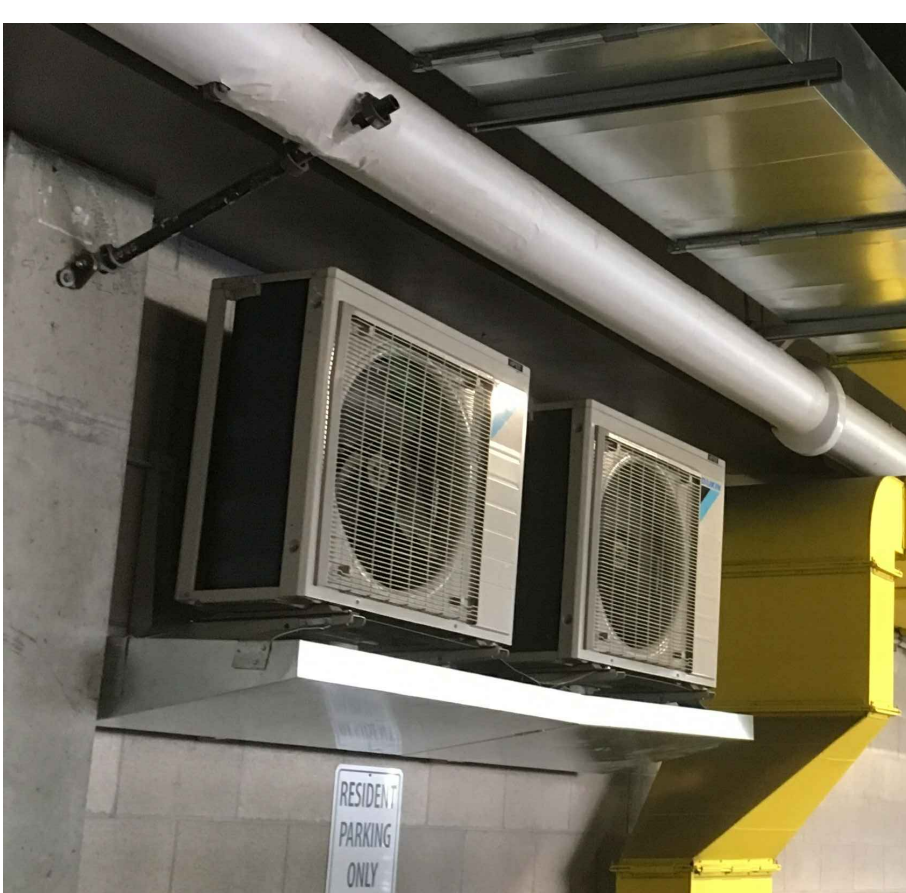
6 TYPICAL DRYER INSTALLATION
M6.02 DETAIL



DRYER DUCT LABEL
PROVIDE PERMANENT LABEL WITHIN 6' OF DRYER STATING THE EQUIVALENT LENGTH OF THE INSTALLED DRYER DUCT



5 TYPICAL STAIRWAY PRESSURIZATION FAN
M6.02 DETAIL



3 BATHROOM & DRYER SUBDUCT SHAFT DETAIL
M6.02 DETAIL

STAIRWAY PRESSURIZATION

MARK NUMBER	SPF 1	SPF 2
TYPE	BI UTILITY SET BELT DRIVE-****	
SYSTEM	STAIR 2	
CFM	10,200	
TOTAL SP. (IN H2O)	2,414 - *	
RPM	795	
TIP SPEED (FPM)	6869	
MOTOR POWER -**	5.41BHP/7.5 HP	
CONTROLLED BY	FIRE ALARM	
INTERLOCK WITH		
FAN SPEED CONTROLLER	VFD	
WHEEL TYPE	BI	
BACK DRAFT DAMPER - ***	2-POSITION	
ISOLATION	SPRING ISOLATOR	
DESIGN WEIGHT (LBS)	1200	
MAX. SONES	24.0	
HOOD SIZE		
DAMPER SIZE	TO FIT FAN	
VOLTS/PHASE **	208/3	
AMPS (FLA) **	24.2	
BASIS OF DESIGN GREENCHECK	USF-333-10-BI-CW	

* - TOTAL STATIC PRESSURE INCLUDES .414 FOR DAMPER AND SYSTEM EFFECTS.
** - FAN AND DAMPER TO BE SUPPLIED WITH STAND-BY POWER SOURCE. ELECTRICAL DATA LISTED FOR REFERENCE ONLY, SEE ELECTRICAL DRAWINGS FOR REQUIREMENTS.
*** - DAMPER TO BE 208 V POWER AND BE CONTROLLED BY STARTED PROVIDED BY MECHANICAL CONTRACTOR.
**** - FAN RATED FOR SMOKE CONTROL, PROVIDE FAN WITH FLEX DUCT CONNECTION, INLET SCREEN SEISMIC SPRING ISOLATORS, INVERTER DUTY MOTORS, 1.15 MOTOR SERVICE FACTOR AND 1.5 TIMES THE REQUIRED BELTS (50% REDUNDANCY WITH A MIN OF 2 BELTS).

ADDENDUM 4 SET

10.25.2019

Issue:	date:
50% SD	07.20.2018
100% SD	09.28.2018
50% DD	11.02.2018
100% DD	12.21.2018
60% CD	02.12.2019
PERMIT SET	04.30.2019
GMP SET	06.26.2019
CONSTRUCTION SET	10.25.2019

revision:	date:
1	CITY RESPONSE 07.15.2019
2	CITY RESPONSE 07.15.2019
3	ADDENDUM 1 07.15.2019
4	CITY RESPONSE 3 07.16.2019
5	CITY REVISION 5 08.19.2019
6	ADDENDUM 3 08.19.2019
7	CITY REVISION 6 09.12.2019
8	ADDENDUM 4 10.25.2019
9	ADDENDUM 4 10.25.2019
AS1 02	11.25.2019
AS1 05	01.28.2020

MECHANICAL
DETAILS

sheet:

CARTEE
APARTMENTS

406 S 4TH ST.
BOISE, ID 83702

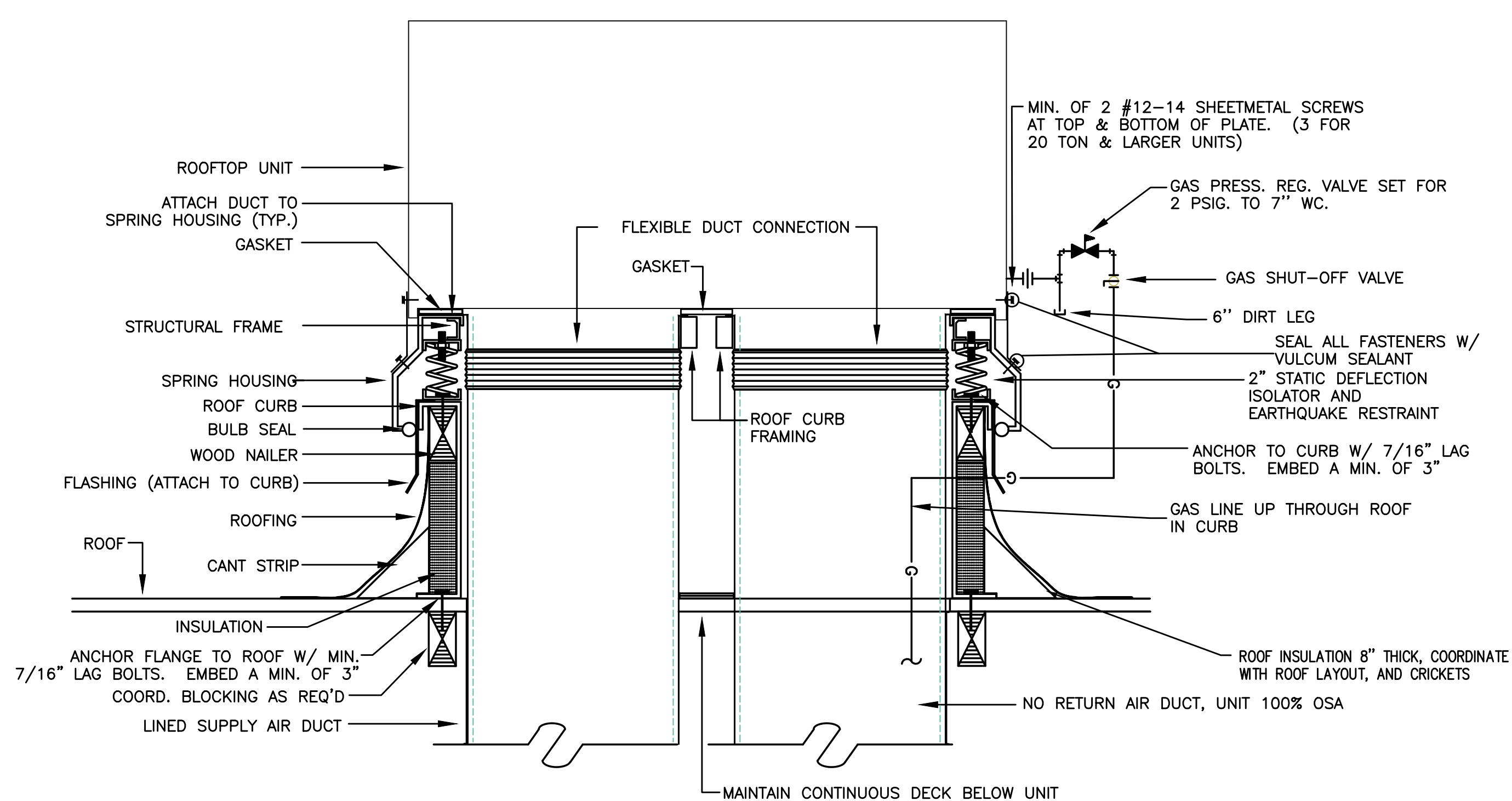
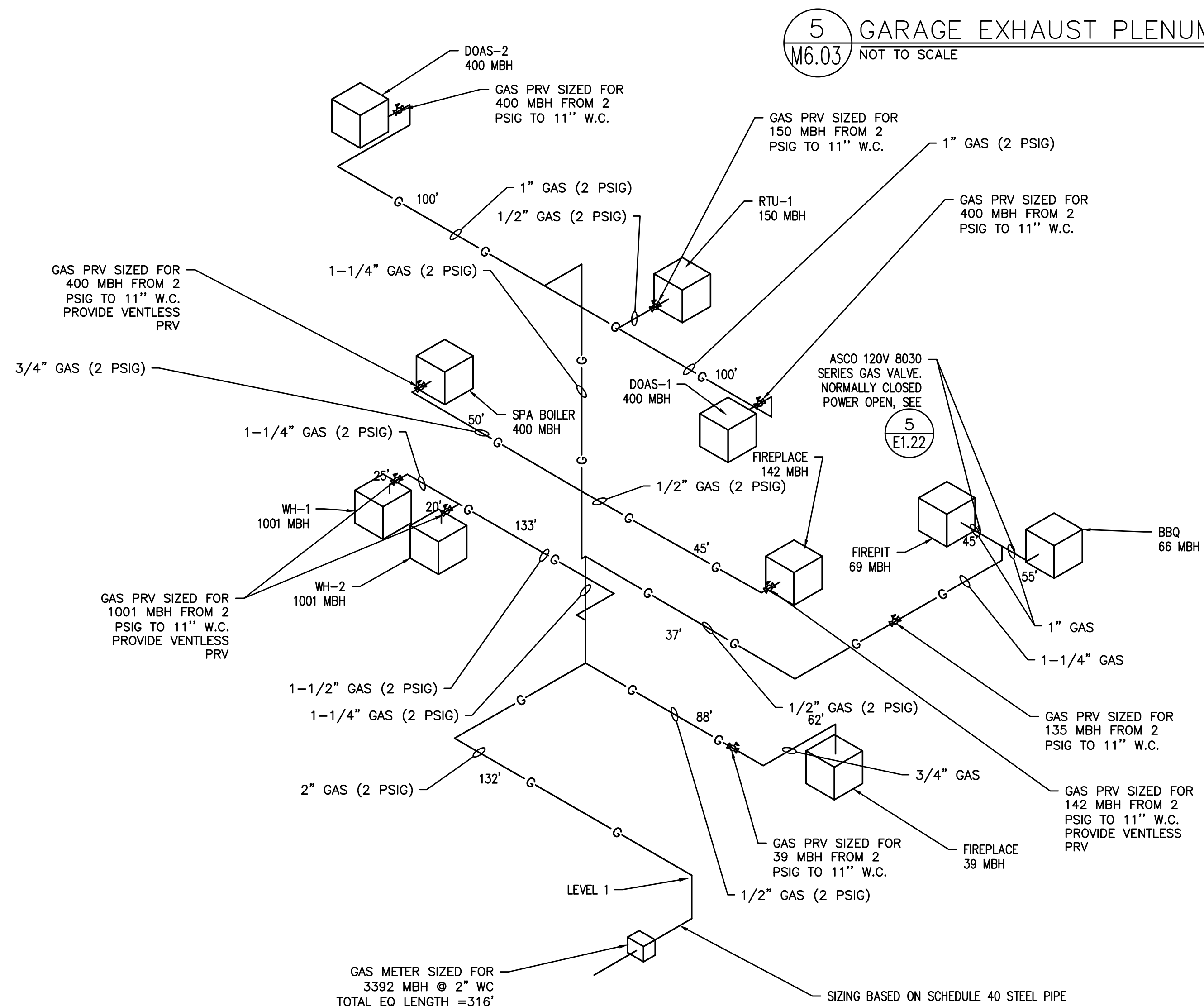
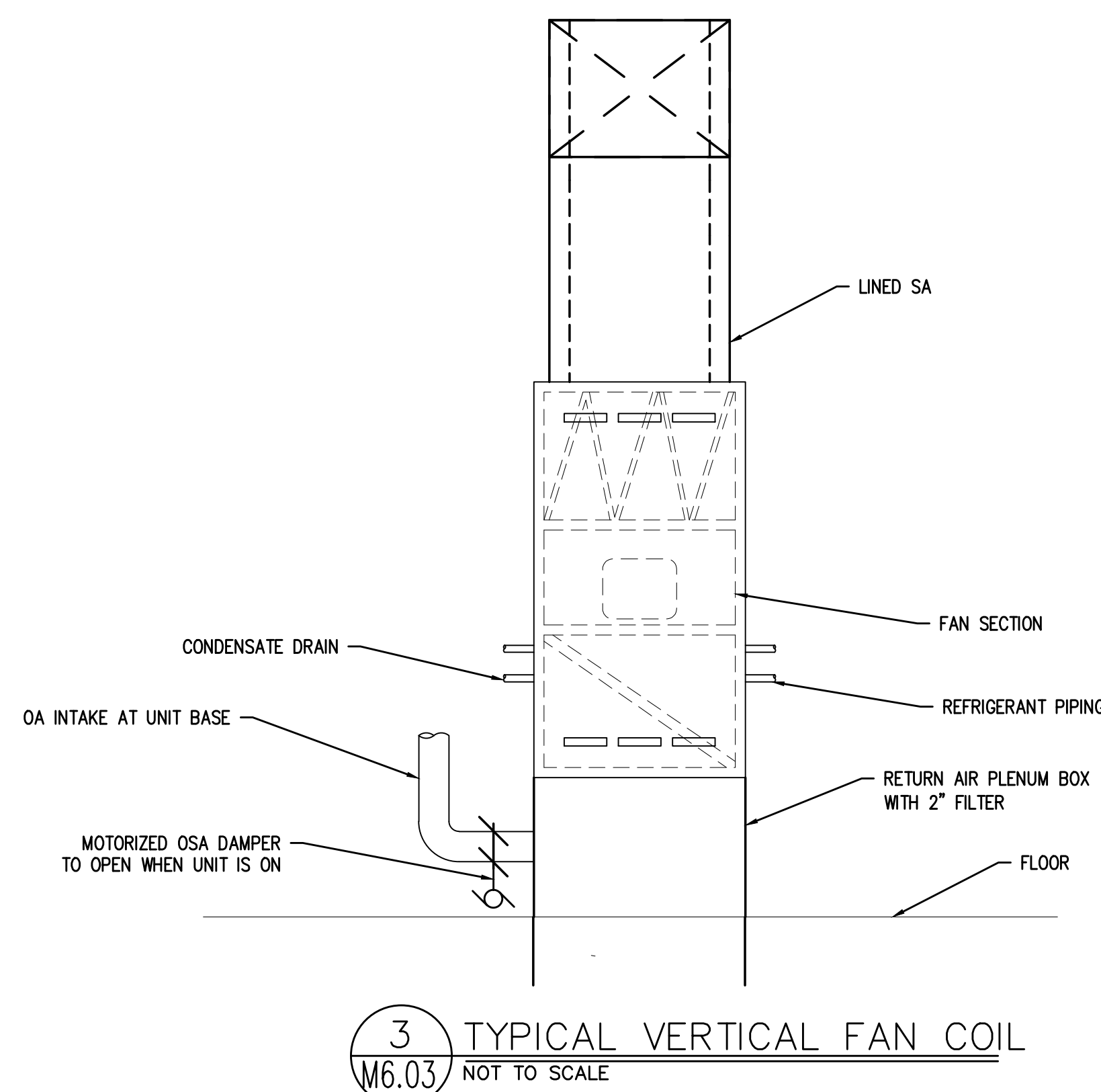
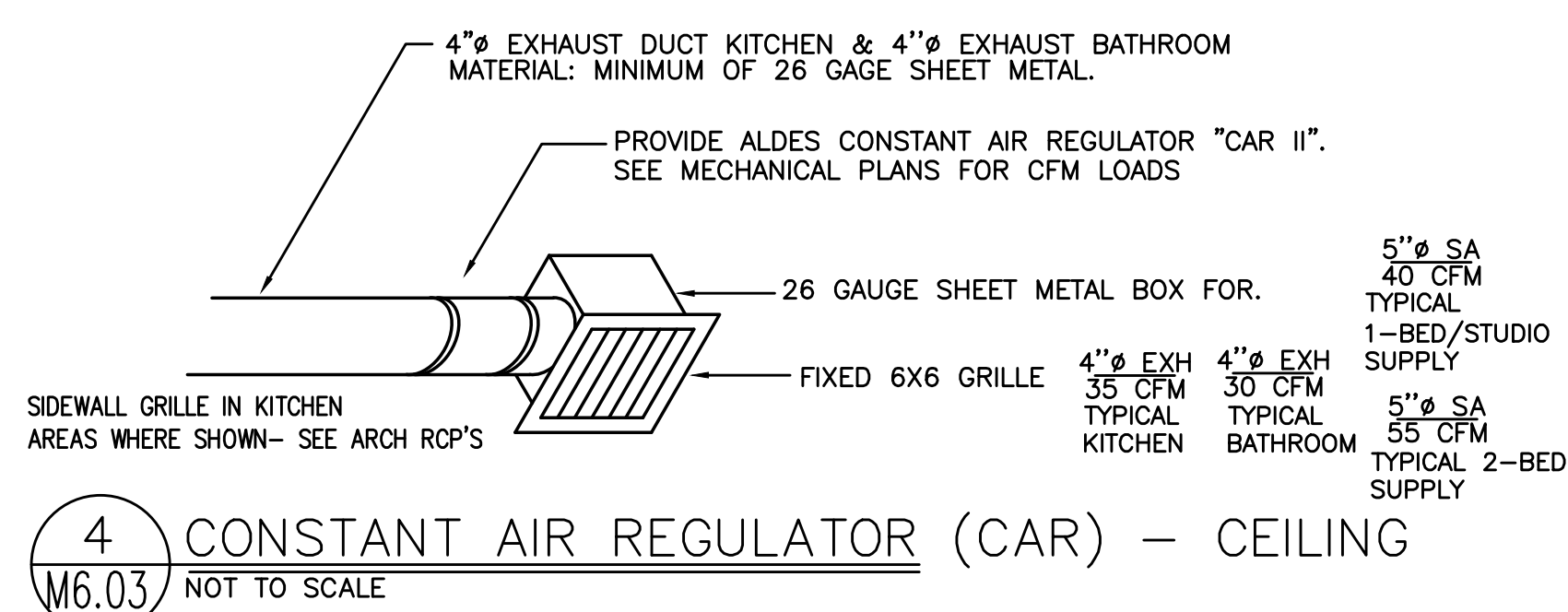
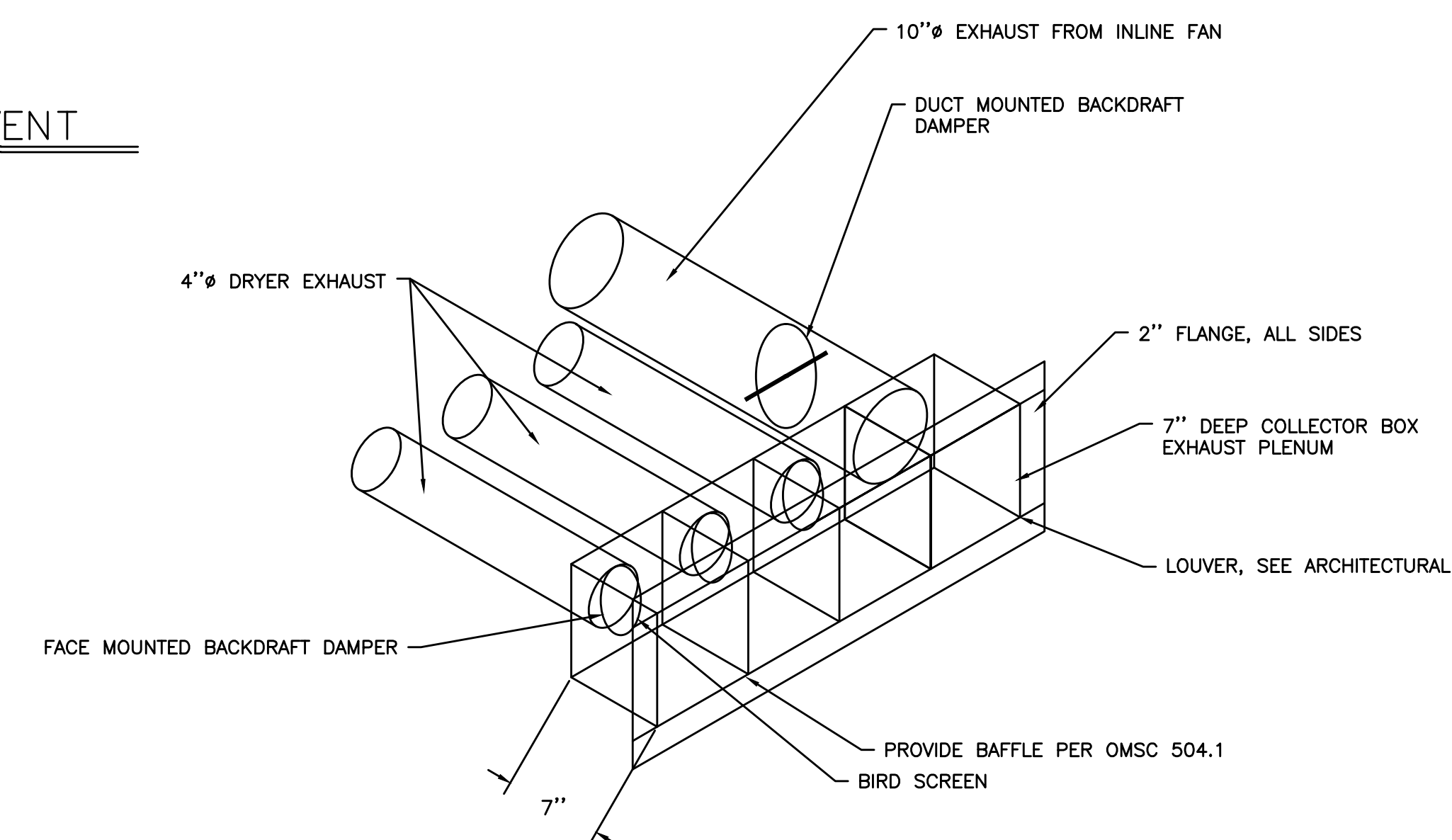
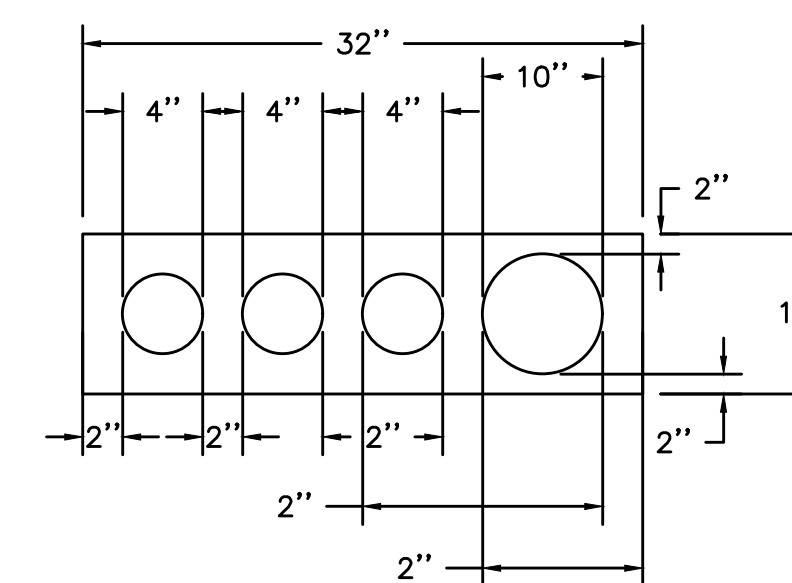
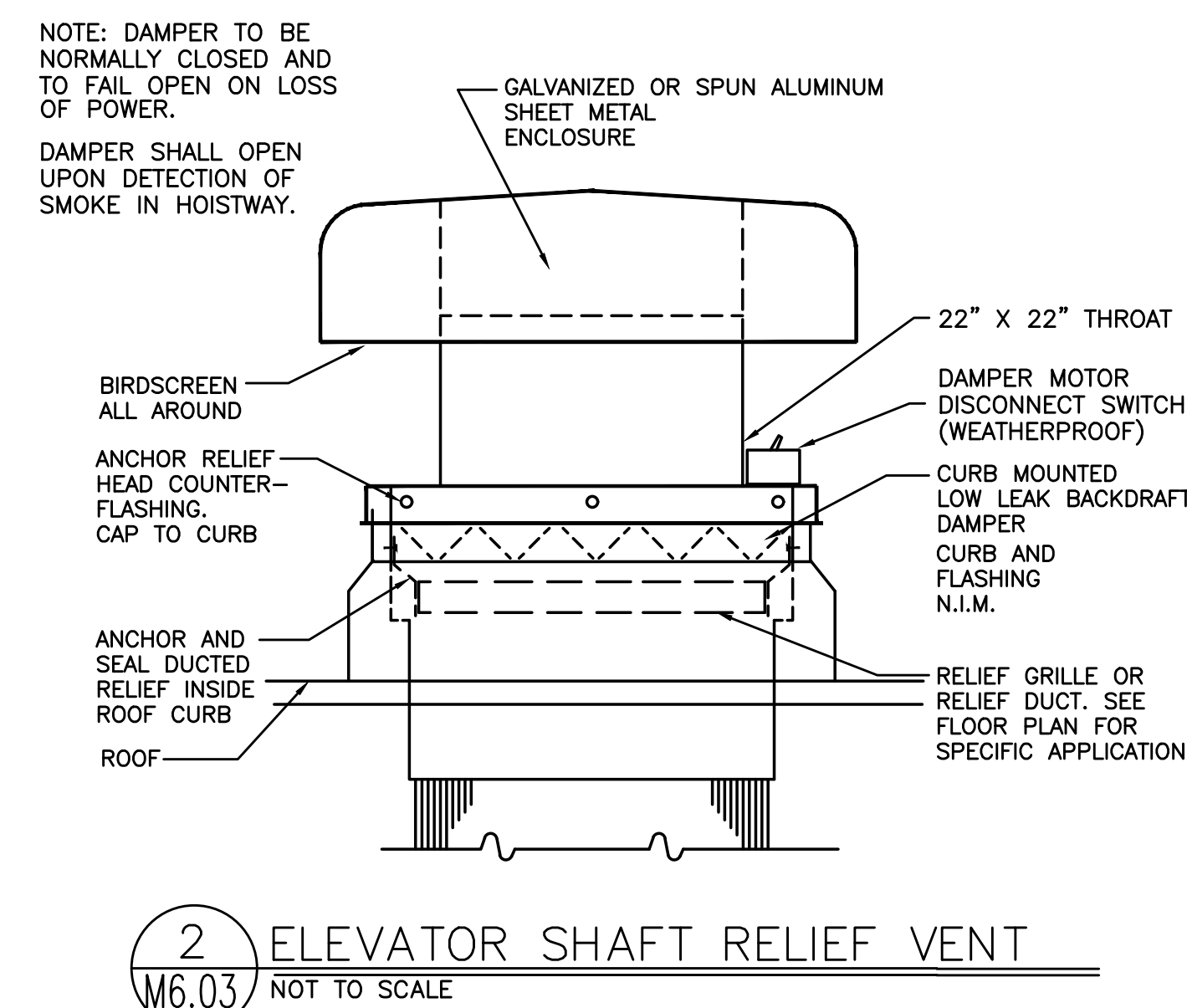
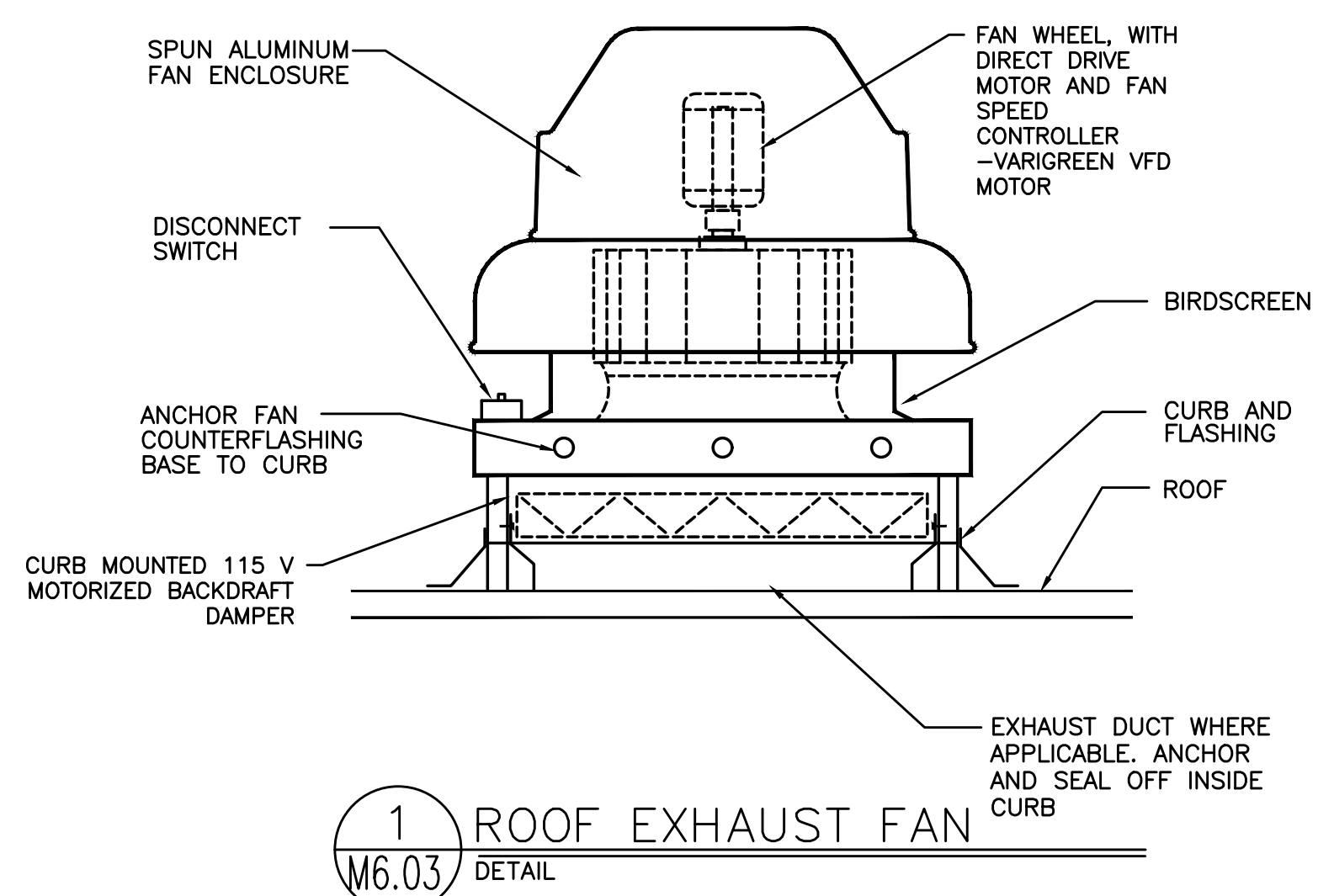
JOB NO. 18-001.00

6-18-2019



Expires May 31, 2021

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ADDENDUM 4 SET

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GMP SET	06.26.2019
CONSTRUCTION SET	10.25.2019

revision:	date:
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4	CITY RESPONSE 3 07.16.2019
5	CITY REVISION 5 08.19.2019
7	ADDENDUM 3 08.19.2019
8	CITY REVISION 6 09.12.2019
9	ADDENDUM 4 10.25.2019
△	ASI 02 11.25.2019
△	ASI 05 01.28.2020

MECHANICAL
DETAILS

sheet:

M6.03

CARTEE
APARTMENTS

406 S 4TH ST.
BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



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ADDENDUM 4 SET

10.25.2019

issue:	date:
50% SD	07.20.2018
100% SD	09.28.2018
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60% CD	02.12.2019
PERMIT SET	04.30.2019
GMP SET	06.26.2019
CONSTRUCTION SET	10.25.2019

revision:	date:
1 CITY RESPONSE	07.15.2019
2 CITY RESPONSE	07.15.2019
3 ADDENDUM 1	07.15.2019
4 CITY RESPONSE 3	07.16.2019
5 CITY REVISION 5	08.19.2019
6 ADDENDUM 3	08.19.2019
7 CITY REVISION 6	09.12.2019
8 ADDENDUM 4	10.25.2019
9 ASI 02	11.25.2019
10 ASI 05	01.28.2020

title:

MECHANICAL
DETAILS

sheet:

M6.05

System No. W-L-7018

ANSI/UL1479 (ASTM E814)	CANULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 1/2 Hr	FT Rating — 1-1/2 Hr
	FH Rating — 2 Hr
	FTH Rating — 1-1/2 Hr

WL 7018

SECTION A-A

1. Wall Assembly — The 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, V400 or W400 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 channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.

B. Gypsum Board* — Two layers of nom 5/8 in. (16 mm) thick gypsum wallboard as specified in the individual Wall and Partition Design No. Max diam of opening is 9 in. (229 mm).

2. Metallic Sleeve — Cylindrical sleeve fabricated from min 0.016 in. (0.40 mm) thick (No. 28 gauge) galv steel sheet steel and having a min 2 in. (51 mm) lap along the longitudinal seam. Length of sleeve to be 1/8 in. (3 mm) less than thickness of wall. Sleeve to be installed by coiling the sheet metal to a diam smaller than the through opening, inserting the coil through the openings and releasing the coil to let it uncoil against the circular cutouts in the gypsum wallboard layers.

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Page: 1 of 2

System No. W-L-7018

3. Steel Duct — Nom 6 in. (152 mm) diam (or smaller) No. 28 gauge (or heavier) galv steel duct to be installed concentrically within the firestop system. Duct to be rigidly supported on both sides of the wall assembly.

4. Pipe Covering* — Nom 1 in. (25 mm) thick hollow cylindrical heavy density (3.5 pcf or 56 kg/m³) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt laps supplied with the product. The annular space between the insulated pipe and the steel sleeve shall be min 0 in. (point contact) to max 1 in. (25 mm).

See Pipe Equipment Covering — Materials — (BRGU) Category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

5. Fill, Void or Cavity Material* — Sealant — Min 1-1/4 in. (32 mm) depth of sealant applied within the annulus, flush with each surface of the wall assembly. At the point contact location between insulated pipe and wall, a min 1/2 in. (13 mm) diam bead of sealant shall be applied on both surfaces of wall, lapping 1/4 in. (6 mm) beyond the periphery of the opening.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

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

WL 7018

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Page: 2 of 2

System No. W-L-7159

F Rating — 1 or 2 Hr (See Item 1)
T Rating — 1/2 Hr

WL 7159

SECTION A-A

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 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing to consist of min 3-1/2 in. (89 mm) wide steel channel studs, fabricated from 25 MSG galv steel, spaced max 24 in. (610 mm) OC.

B. Gypsum Board* — One or two layers of nom 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design. Max area of opening is 144 sq in. (903 cm²) with max dimension of 12 in. (305 mm). The hourly F Rating of the firestop system is equal to the hourly rating of the wall assembly.

2. Steel Duct — Nom 10 in by 10 in (254 by 254 mm) (or smaller) No. 28 gauge (or heavier) galv steel duct to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 1/4 in. to max 1 in. Duct to be rigidly supported on both sides of the wall assembly.

3. Fill, Void or Cavity Material - Sealant* — Min 5/8 in. (16mm) thickness of fill material applied within annular space, flush with both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — FS-ONE Sealant

*Bearing the UL Classification Mark

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Page: 2 of 2

1 FIRE PENETRATION DETAIL — 6" DUCTS
M6.05 NOT TO SCALE

2 FIRE PENETRATION DETAIL — 10X10 DUCTS
M6.05 NOT TO SCALE

System No. F-C-7013

ANSI/UL1479 (ASTM E814)	CANULC S115
F Rating — 1 Hr	F Rating — 1 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 1 Hr
	FTH Rating — 0 Hr

FC 7013

SECTION A-A

1. Floor-Ceiling Assembly — The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual U500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 5-1/4 in. (133 mm).

B. Wood Joist* — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.

C. Gypsum Board* — Nom 4 ft (1.2 m) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 5-1/4 in. (133 mm).

1.1 Chase Wall — (Not shown, Optional) The through penetrants (Item 2) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall having a fire rating consistent with that of the floor-ceiling assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Nom 2 by 6 in. (51 by 152 mm) lumber or double nom 2 by 4 in. (51 by 102 mm) lumber studs.

B. Sole Plate — Nom 2 by 6 in. (51 by 152 mm) lumber or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening shall be 5-1/4 in.

C. Top Plate — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) lumber plates or two sets of nom 2 by 4 in. (51 by 102 mm) lumber plates tightly butted. Max diam of opening is 5-1/4 in. (133 mm).

D. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

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Page: 1 of 2

System No. F-C-7013

2. Steel Duct — Nom 4 in. (102 mm) diam (or smaller) No. 28 gauge (or heavier) steel duct to be installed either concentrically or eccentrically within the firestop system. The annular space between duct and periphery of opening shall be min of 1/4 in. (6 mm) to max 3/4 in. (19 mm). Steel duct to be rigidly supported on both sides of floor-ceiling assembly.

3. Fill, Void or Cavity Material* — Sealant — Min 3/4 in. (19 mm) thickness of sealant applied within the annular space, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of sealant applied within annular space, flush with bottom surface of gypsum board or lower top plate.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

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

FC 7013

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Page: 2 of 2

3 FLOOR CEILING FIRE PENETRATION DETAIL — 4" DUCTS
M6.05 NOT TO SCALE

System No. W-L-7059

ANSI/UL1479 (ASTM E814)	CANULC S115
F Ratings - 1 and 2 Hr (See Item 1)	F Ratings - 1 and 2 Hr (See Item 1)
T Rating - 1/2 and 3/4 Hr (See Item 1)	FT Rating - 1/2 and 3/4 Hr (See Item 1)
	FH Ratings - 1 and 2 Hr (See Item 1)
	FTH Rating - 1/2 and 3/4 Hr (See Item 1)

WL 7059

SECTION A-A

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 described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing shall consist of channel studs. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. The opening in the wall to accommodate the steel duct (Item 2) shall be framed on all sides using lengths of studs installed between the vertical studs and attached to the studs at each end. The framed opening in the wall shall be a nom 6 in. (152 mm) wide and 12 in. (305 mm) higher than the width and height of the steel duct.

B. Wallboard, Gypsum* — 5/8 in. (16 mm) thick, 4 ft (1.22 mm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400, V400 or W400 Series Design in the UL Fire Resistance Directory. Max area of opening is 395 sq. in. (0.25 m²) with max dimensions of 26-3/4 in. (679 mm) for steel studs. The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T, FT and FTH Ratings are 1/2 hr and 3/4 hr for 1 and 2 hr rated assemblies, respectively.

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Page: 1 of 2

4 FIRE PENETRATION DETAIL — 24X12 DUCTS
M6.05 NOT TO SCALE

System No. W-L-7059

2. Steel Duct — Nom 24 in. by 12 in. (610 by 305 mm) (or smaller) No. 24 gauge (or heavier) steel duct to be installed eccentrically within the framed opening. The annular space shall be min 1 in. (25 mm) to max 1-3/4 in. (45 mm) Steel duct to be rigidly supported on both sides of wall assembly.

3. Batts and Blankets* — Max 1-1/2 in. (38 mm) thick glass fiber batt or blanket (min 3/4 pcf or 12 kg/m³) jacketed on the outside with a foil-sprink-ruff facing. Longitudinal and transverse joints sealed with aluminum foil tape. During the installation of the fill material, the batt or blanket shall be compressed 50% such that the annular space within the firestop system shall be min 1/4 in. (6 mm) to max 1 in. (25 mm). See Batts and Blankets - (BKNV) category in the Building Materials Directory for names of manufacturers. Any batt or blanket meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index 50 or less may be used.

4. Fill, Void or Cavity Material* - Sealant — Min 5/8 in. or 1-1/4 in. (16 or 32 mm) thickness of fill material applied within annulus, flush with both surfaces of wall for 1 or 2 hr walls, respectively. If voids develop after the fill materials cures, the voids shall be sealed with additional fill material.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

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

WL 7059

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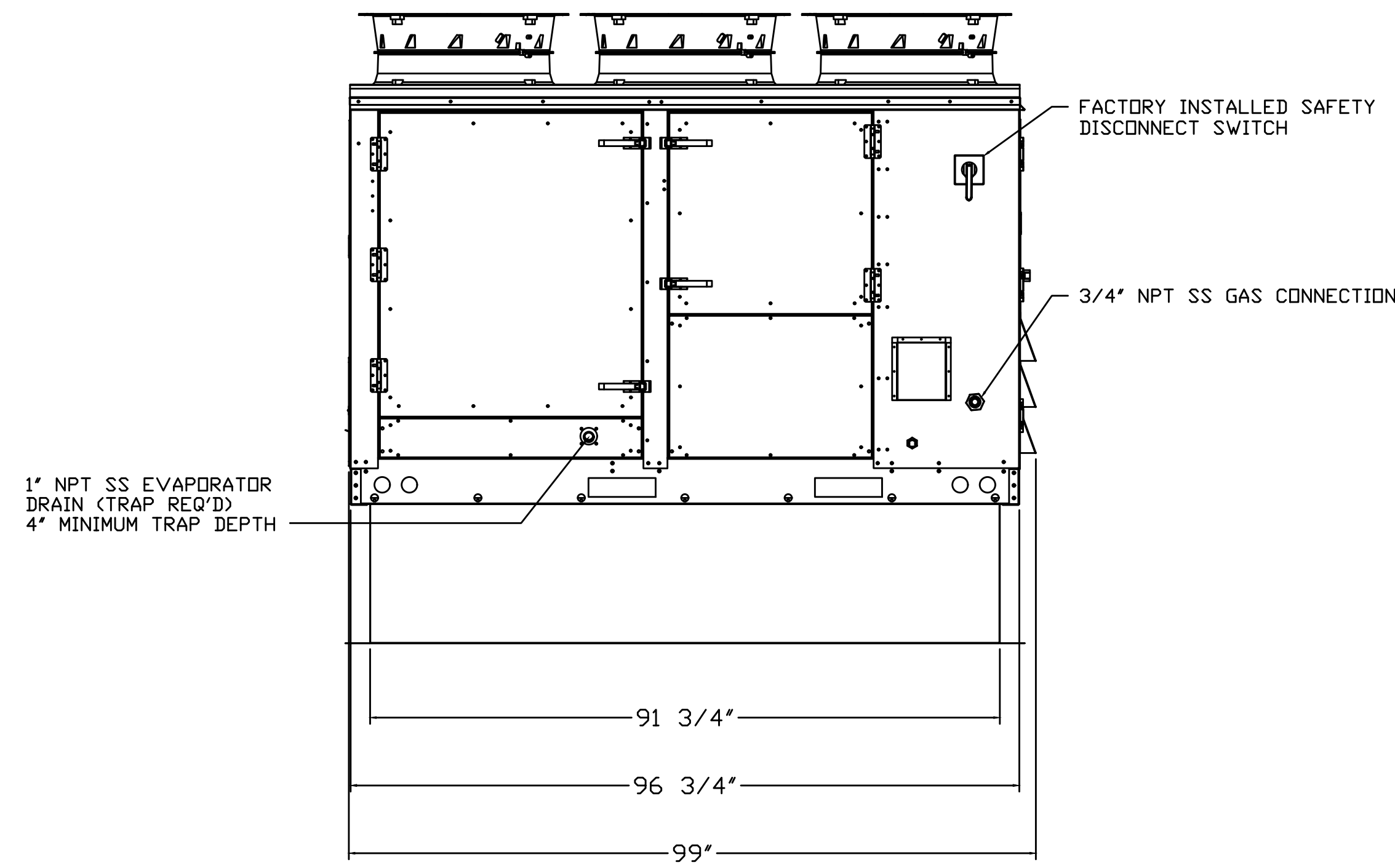
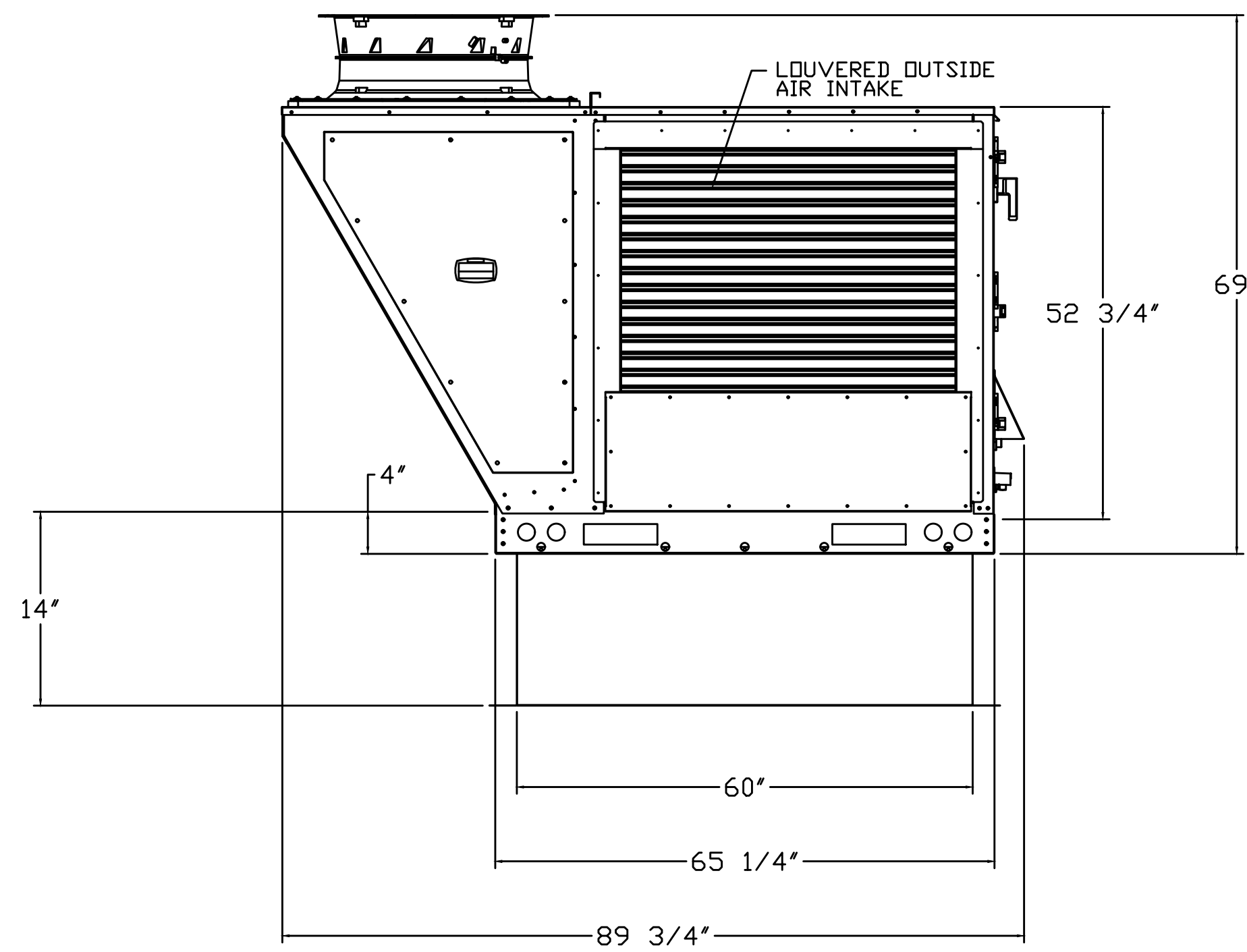
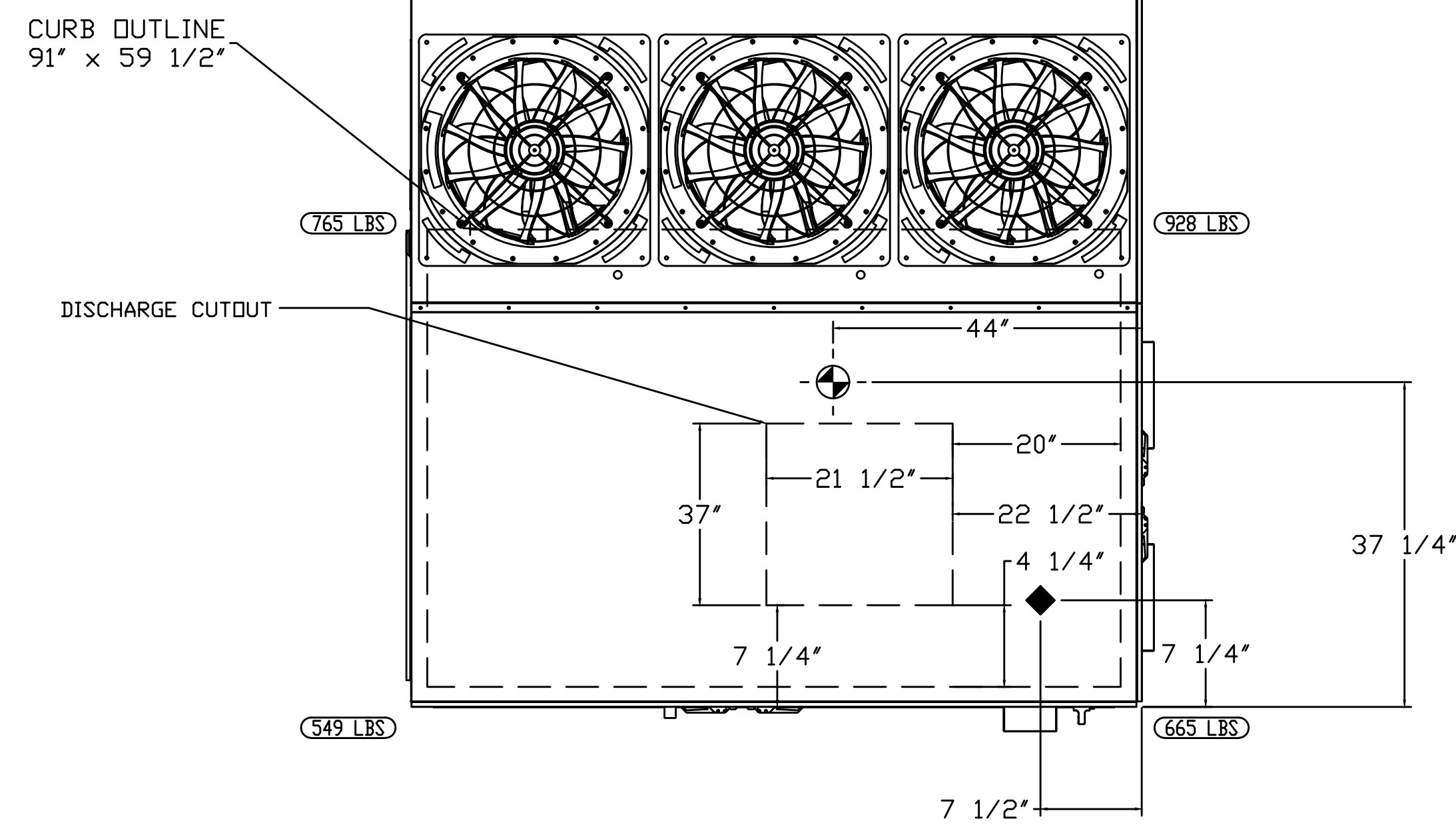
Page: 2 of 2

5 FIRE PENETRATION DETAIL — 24X12 DUCTS
M6.05 NOT TO SCALE

FAN #1 CASRTU3-1.400HE-24-18T-DDAS - HEATER (DDAS-1)

NOTES:

- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
- () DENOTES CORNER WEIGHT.
- ROOF OPENING MUST BE 2" SMALLER THAN CURB DIMENSIONS IN BOTH DIRECTIONS.
- SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH EQUAL TO THREE TIMES THE SUPPLY DUCT EQUIVALENT DIAMETER MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE UNLESS OTHERWISE SPECIFIED. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY.

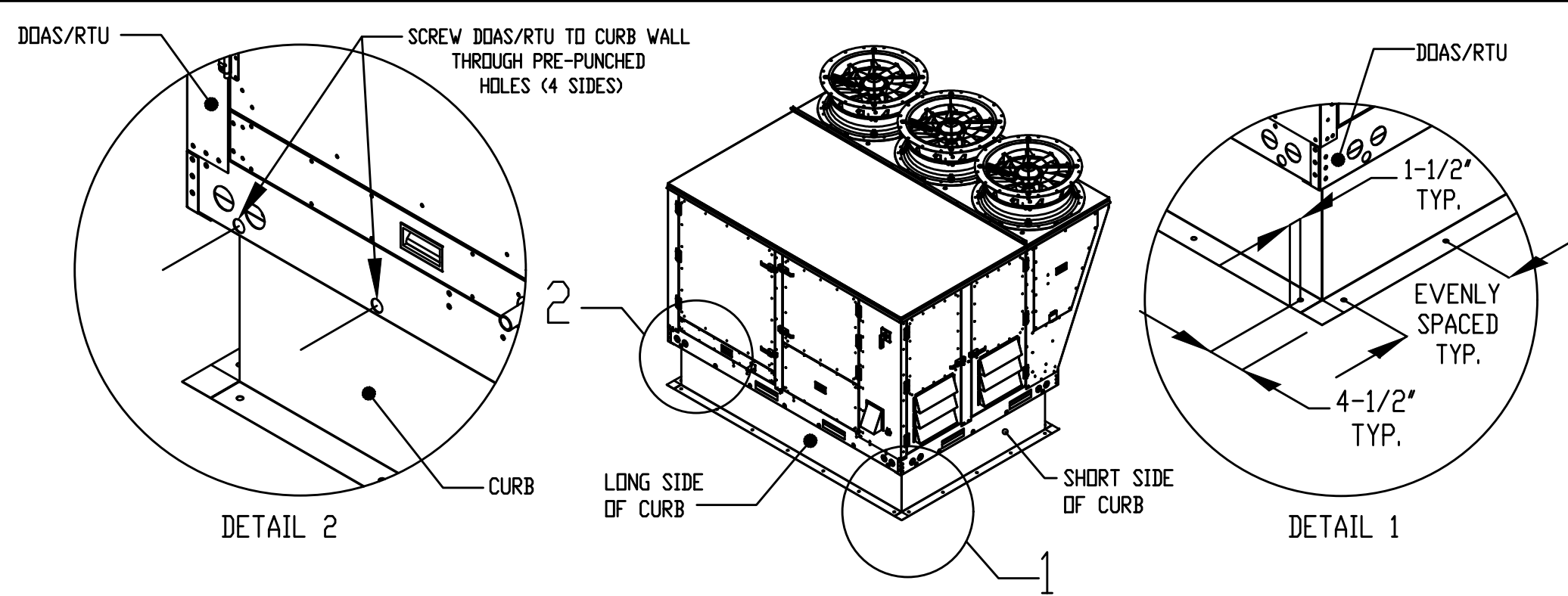


OPTIONS

- SINGLE POINT ELECTRICAL CONNECTION FOR RTU. QNTY 1 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, *MA*, OR *E2* OPTION PREWIRE MUST BE SELECTED. DO NOT PROVIDE SUPPLY STARTER IN PREWIRE.
- CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED
- RTU SIZE 3 DOWN DISCHARGE
- 2" MERV 13 FILTERS FOR SIZE 3 RTU. QTY 4.
- 2" MERV 8 FILTERS FOR SIZE 3 RTU. QTY 4.
- RTU COMPRESSOR OIL SENSOR. FACTORY INSTALLED
- VFD FACTORY MOUNTED AND WIRED IN COMMERCIAL CONTROL VESTIBULE FOR RTU
- 18 TON MODULATING COOLING OPTION, 208/230V, R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS.
- RTU FIXED 100% OA INTAKE CONTROL
- RTU SIZE 3 NO RETURN
- INLET PRESSURE GAUGE, 0-35"
- PWM INDUCER CONTROL
- MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE
- SIZE 3 RTU CURB DUCT HANGER
- COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK (SUPPLIED BY OTHERS)
- CLOGGED FILTER SWITCH WITH NOTIFICATION ON HMI
- VAV PACKAGE W/ MANUAL/DDC CONTROL (571 VFD INCLUDED)
- SIZE 3 RTU CONVENIENCE OUTLET (GFCI), 15 AMP - REQUIRES SEPARATE 120V CONNECTION. INCLUDES RECEPTACLE, COVER AND J BOX.

TYPICAL DDAS/RTU ROOF MOUNTING INSTALLATION INSTRUCTIONS

- Secure the curb to the roof framing members by drilling 1/4" pilot holes in the curb flanges at locations shown in the diagram below. Using 3/8" x 2" zinc plated steel lag bolts, and zinc plated washers, screw through the curb flanges and into the roof framing members. A minimum of (5) lag bolts on each short side, and (7) lag bolts on each long side is required.
- Secure the unit base to the side walls of the curb using (24) 1/4"-14 x 2" self-drilling, steel zinc plated screws. Pre-punched holes have been provided for each screw location.



REVISIONS	
DESCRIPTION	DATE

CAPTIVE
PARTS & SERVICE
360 Northbrook Dr, Youngsville, NC, 27586. PHONE: FAX: EMAIL: support@captiveme.com

HALSEY 106 - DDAS
PORTLAND, OR, 97214

DATE: 6/1/2018
DWG.#: 3428730
DRAWN BY:
SCALE: 1/2" = 1'-0"
MASTER DRAWING

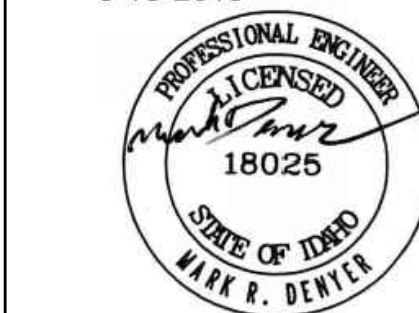
SHEET NO. 2



ADDENDUM 4 SET

issue:	date:
50% SD	07.20.2018
100% SD	09.28.2018
50% DD	11.02.2018
100% DD	12.21.2018
60% CD	02.12.2019
PERMIT SET	04.30.2019
GMP SET	06.26.2019
CONSTRUCTION SET	10.25.2019

revision:	date:
1 CITY RESPONSE	07.15.2019
2 CITY RESPONSE	07.15.2019
3 ADDENDUM 1	07.15.2019
4 CITY RESPONSE 3	07.16.2019
6 CITY REVISION 5	08.19.2019
7 ADDENDUM 3	08.19.2019
8 CITY REVISION 6	09.12.2019
9 ADDENDUM 4	10.25.2019
ASI 02	11.25.2019
ASI 05	01.28.2020



ME Consulting Engineers 2007 S.E. Ash St. Portland, OR 97214 PH: (503) 234-0548 FAX: (503) 234-0677 WWW.MEIA-ENG.COM CONTACT: Mike Denyer

Table with columns: FAN UNIT NO., TAG, DDAS/RTU MODEL #, BLOWER, RETURN AIR CFM, MAX OUTSIDE AIR CFM, TOTAL CFM, ESP, RPM, H.P., B.H.P., #, VOLT, MCA, MCDP, WEIGHT (LBS.), SONES, BURNER EFFICIENCY(%).

NOTE: UNIT MUST COMPLY WITH 2015 IECC FAN EFFICIENCY REQUIREMENT.

DDAS/RTU COOLING SCHEDULE

Table with columns: FAN UNIT NO., TAG, COMPRESSOR (TONNAGE, VOLTAGE, #, MOTOR VOLTAGE, MOTOR #, MOTOR FREQUENCY, MOTOR QTY), OUTDOOR FAN (ENTERING DB TEMP, ENTERING WB TEMP, LEAVING DB TEMP, LEAVING WB TEMP), TOTAL CAPACITY, SENSIBLE CAPACITY, LATENT CAPACITY, IEER.

DDAS/RTU HEATING SCHEDULE

Table with columns: FAN UNIT NO., TAG, INPUT BTUs, OUTPUT BTUs, TEMP. RISE, REQUIRED INPUT GAS PRESSURE, GAS TYPE.

FAN OPTIONS

Table with columns: FAN UNIT NO., TAG, OPTION (Qty. - Descr.).

CURB ASSEMBLIES

Table with columns: ND, IN FAN, TAG, WEIGHT, ITEM, SIZE.

Model CASRTU-1 Specifications

Each refrigeration system shall come standard with an Electronic Expansion Valve (EEV) used to precisely maintain a desired superheat value, a filter-drier, discharge line check valve to eliminate backflow to the compressor and multiple service access ports.

Each furnace compartment shall have a removable panel and panel that the furnace is to be easily removed for service and maintainability.

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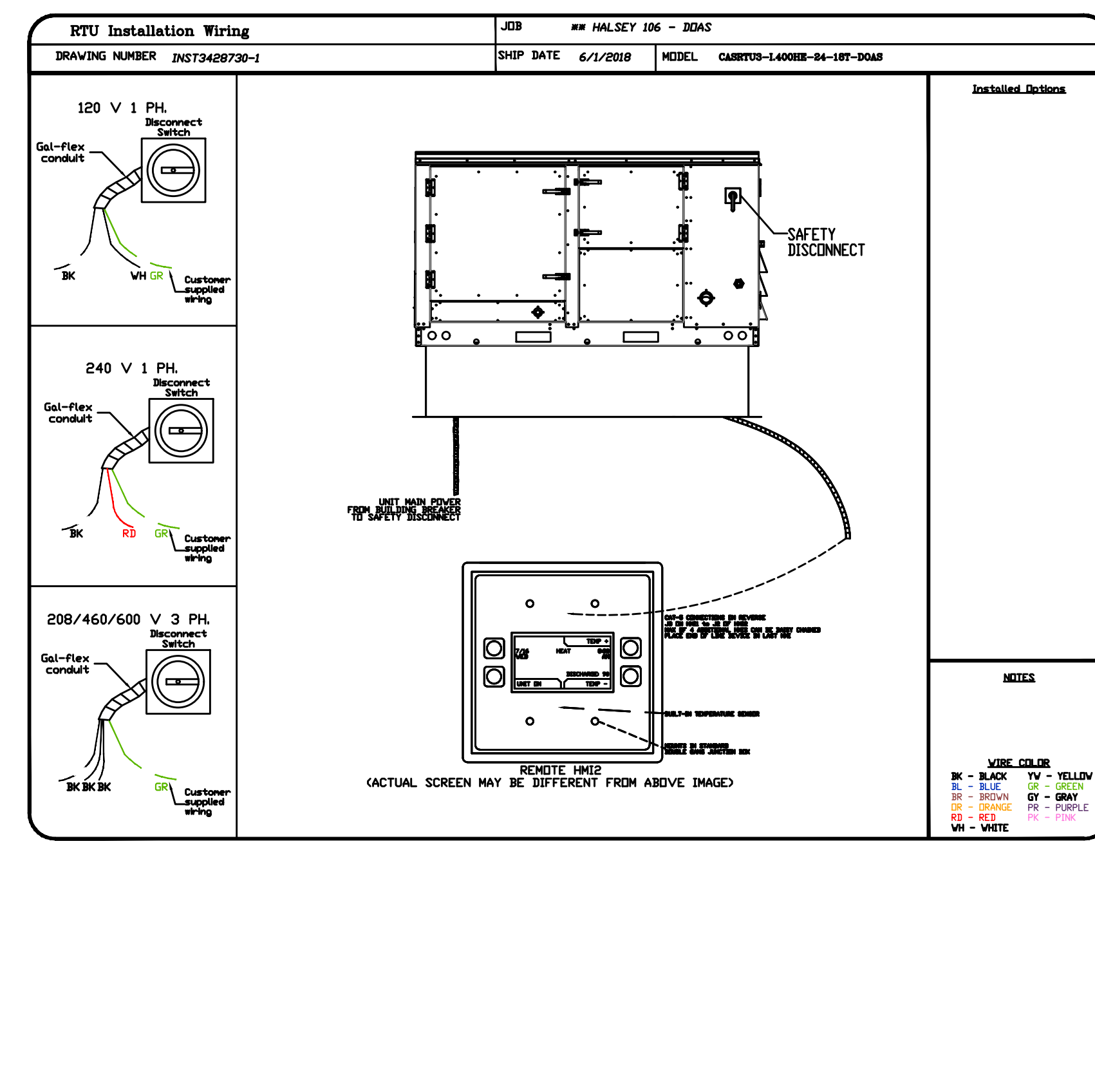
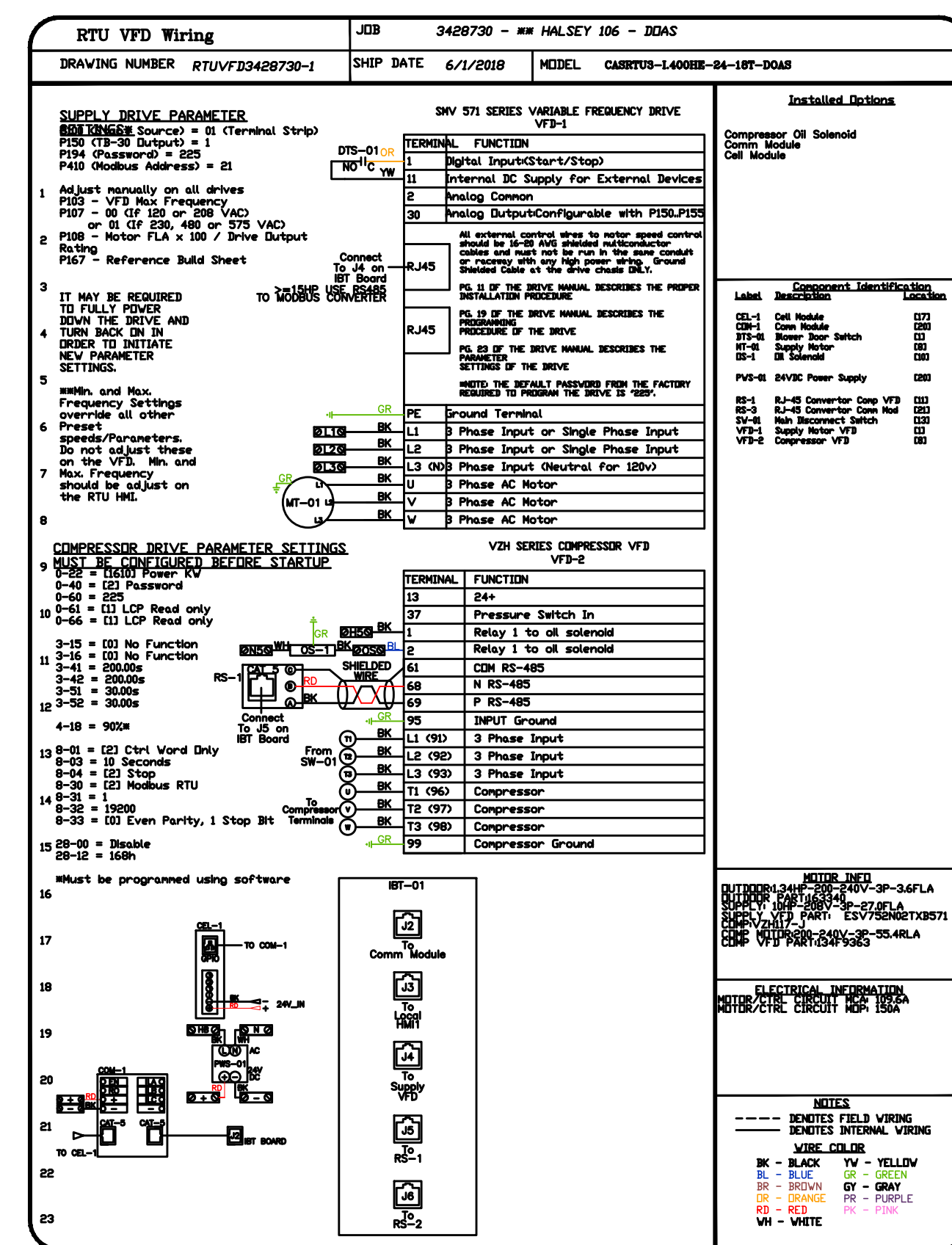
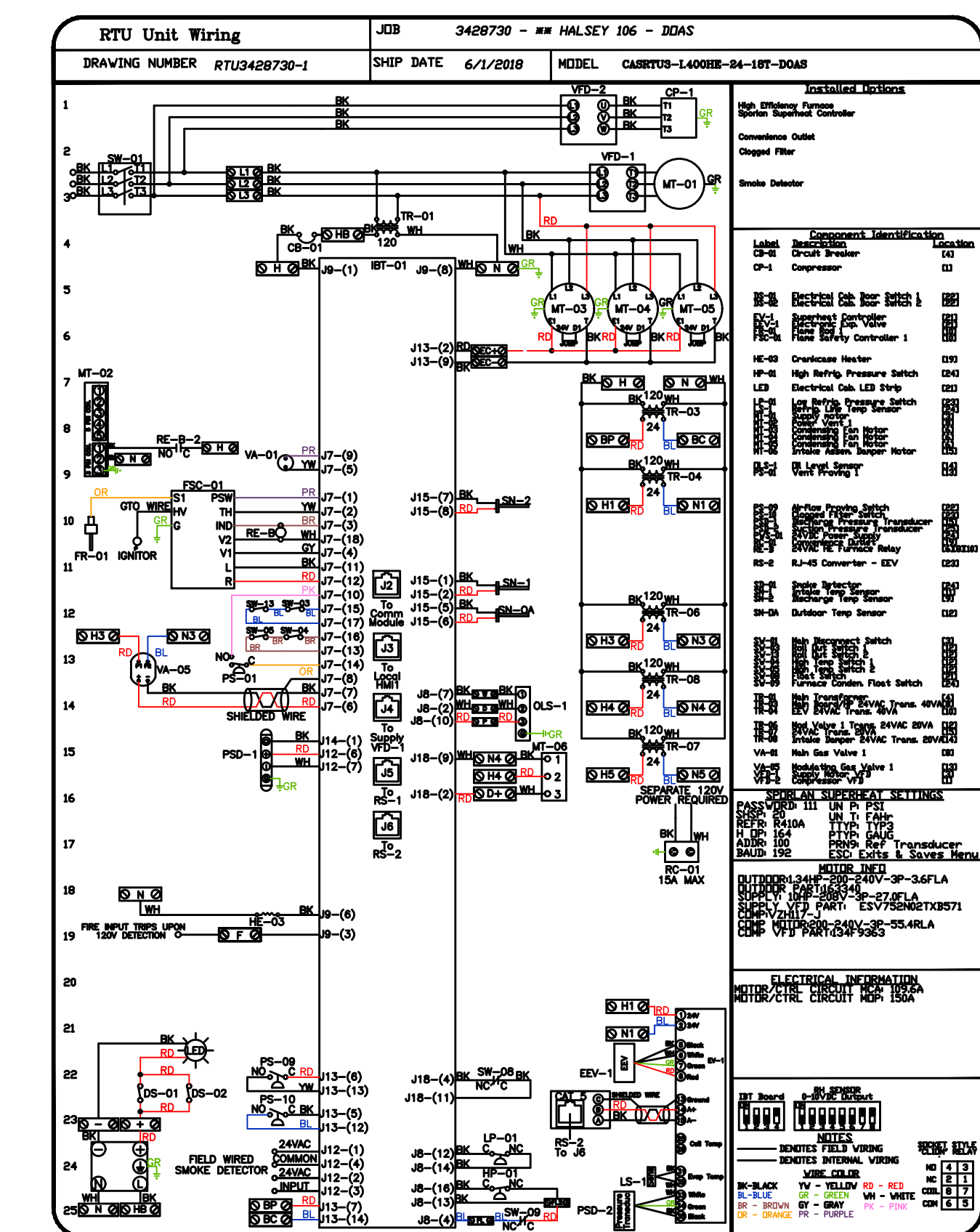
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System Design Verification (SDV)

If ordered, CAS Service will perform a System Design Verification (SDV) once all equipment has had a complete start up per the Operation and Installation Manual. Typically, the SDV will be performed after all inspections are complete.

Any field related discrepancies that are discovered during the SDV will be brought to the attention of the general contractor and corresponding trades on site. These issues will be documented and forwarded to the appropriate sales office. If CAS Service has to resolve a discrepancy that is a field issue, the general contractor will be notified and billed for the work. Should a return trip be required due to any field related discrepancy that cannot be resolved during the SDV, there will be additional trip charges.

During the SDV, CAS Service will address any discrepancy that is the fault of the manufacturer. Should a return trip be required, the general contractor and appropriate sales office will be notified. There will be no additional charges for manufacturer discrepancies.

ADDENDUM 4 SET

10.25.2019

Table with columns: Issue, Date.

revision: date:

Table with columns: revision, date.

title:

MECHANICAL DETAILS

sheet:

M6.07



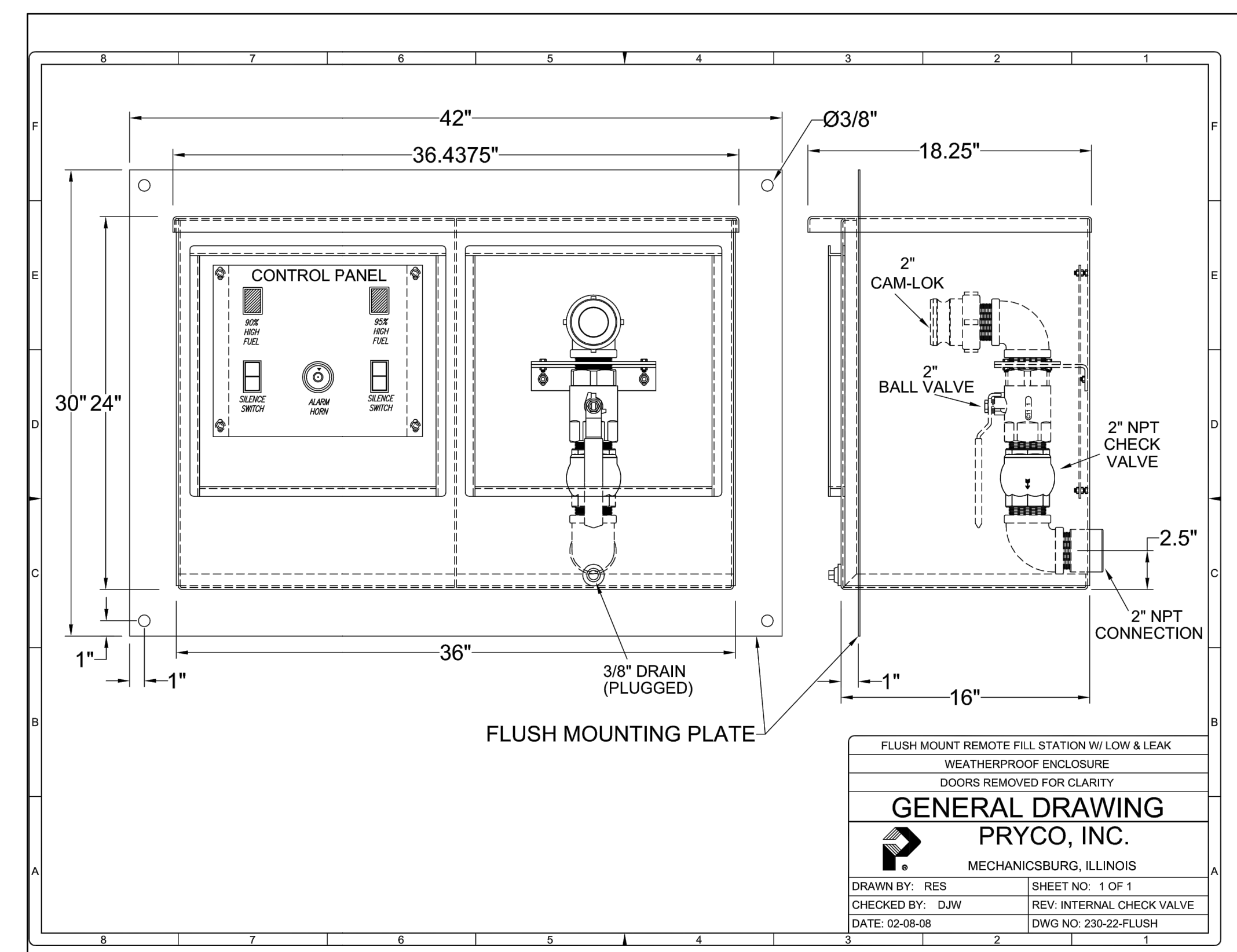
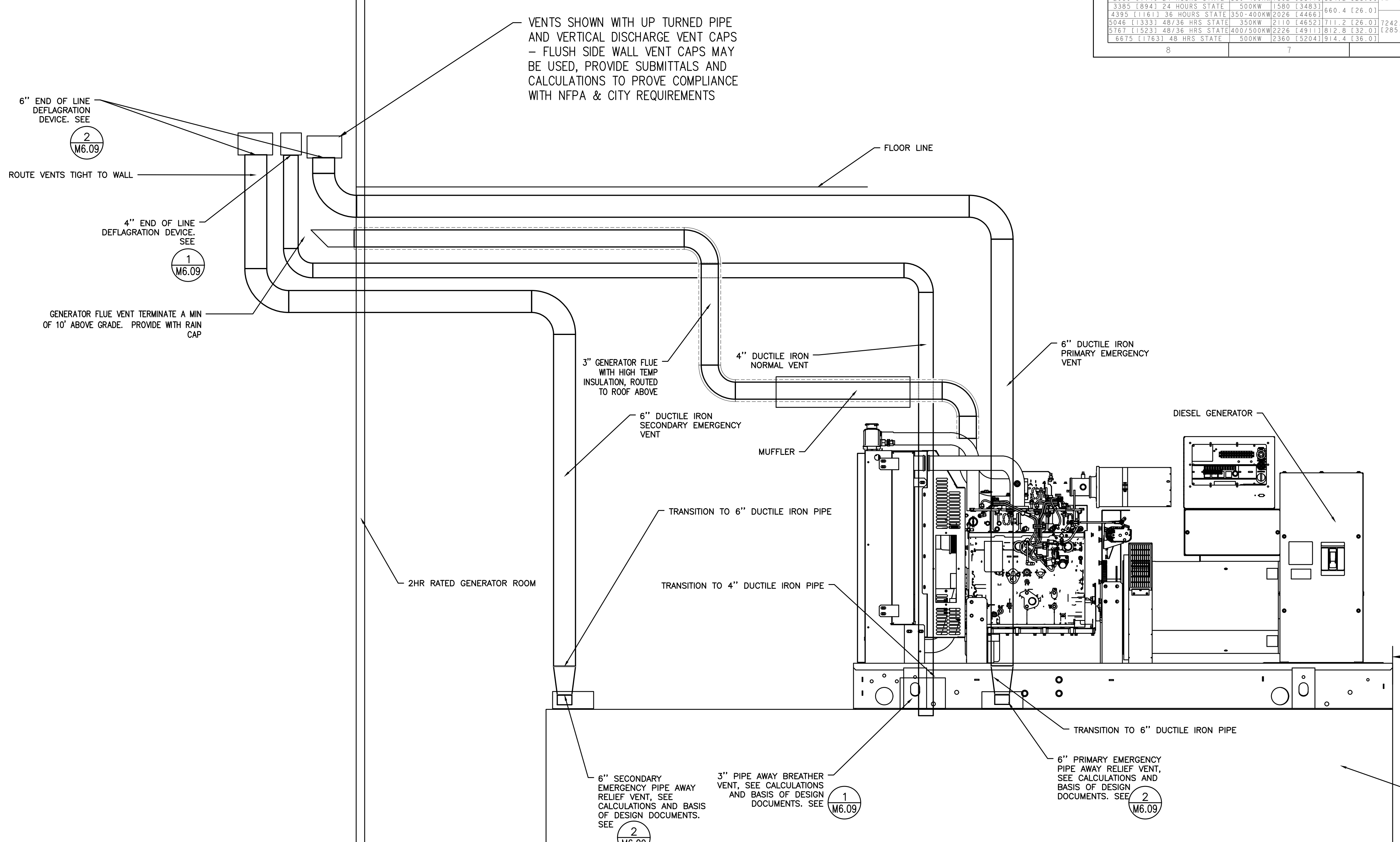
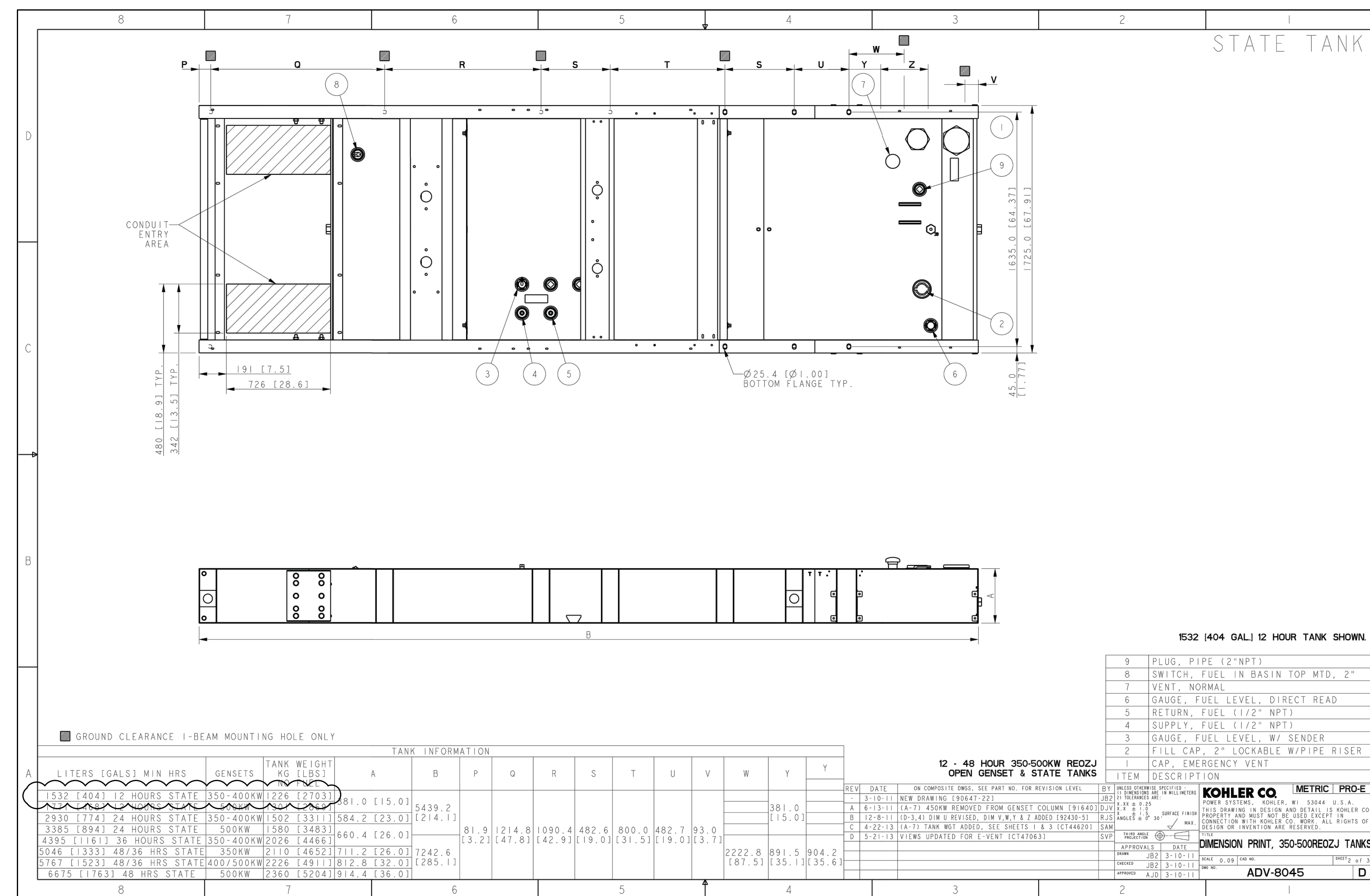
DESIGN CRITERIA-GENERATOR FUEL TANK	
Tank Volume	404 gal
Tank Size	214.1"x67.9"x15"
Wetted Area	159.7 sq ft
Vapor Flow Rate	168,000 CFH
Normal Vent	2"
Primary E Vent	4"
Secondary E Vent	4"
Fill Rate	40 GPM (MAX 65)
Empty Rate	26.5 GPH
MAWP (Tank Pressure)	5.0 psig
E-vent Pressure	2.5 psig
Normal Vent Pres	1.0 psig
Vacuum pressure	0.5 psig
EQ Vent Pipe Length	40 ft

Conservation Breather Vent	
System	Normal Vent
Type	Pipe Away Breather Vent
Size	3"
Material	Ductile Iron
Pressure Set Point	1.0 psig
Vacuum Set Point	0.5 psig
Exh Flow Rate	35,000 CFH
Intake Flow Rate	17,500 CFH
Basis of Design	Protectoseal
Model	C18543D3
Quantity	1
Valve Pressure Drop	0.105 PSI
Vac Pressure Drop	0.107 PSI
End of Line Deflagration	
Size	4"
Material	316 SS
Exh Flow Rate	35,000 CFH
Intake Flow Rate	17,500 CFH
Basis of Design	Protectoseal
Model	F674B
Pressure drop	0.201 PSI
Quantity	1

Pressure Relief Vent (E-vent)	
System	Emergency Vent
Type	Pipe Away Relief Vent
Size	6"
Material	Ductile Iron
Pressure Set Point	2.5 psig
Exh Flow Rate	133,000 CFH
Basis of Design	Protectoseal
Model	C17806H6
Quantity	2
Valve Pressure drop	0.086 psi
End of Line Deflagration	
Size	6"
Material	316 SS
Exh Flow Rate	133,000 CFH
Intake Flow Rate	NA
Basis of Design	Protectoseal
Model	F676E
Pressure Drop	0.769
Quantity	2

Vent Pipe Pressure Drops	
System	Normal Vent
Size	4"
Vapor Flow Rate	35,000 CFH
Vapor Flow Rate	583 CFM
EQ Pipe Length	40 ft
Pressure Drop	0.29 psig
System	Emergency Vent
Size	6"
Vapor Flow Rate	133,000 CFH
Vapor Flow Rate	2216 CFM
EQ Pipe Length	40 ft
Pressure Drop	0.49 psig

System-Tank Pressures		
System	Normal Vent	PSI
Pipe Pressure drop	0.29	
Breather valve	0.105	
Deflagration valve	0.201	
Set point	1.000	
Total Tank Pressure	1.596	
System	Emergency	PSI
Pipe Pressure drop	0.49	
Breather valve	0.086	
Deflagration valve	0.769	
Set point	2.500	
Total Tank Pressure	3.845	



FUEL FILL STATION	
MARK NUMBER	FS 1
TYPE	WALL FLUSH MOUNT
INLET/OUTLET	2" Ø
CONTROL PANEL	SIDE MOUNT
ELECTRIC SHUT OFF	YES
CHECK VALVE	YES
QUICK CONNECT HOSE COUPLING	YES
MANUAL BALL VALVE	YES
OUTLET LOCATION	REAR
CONTROL POWER	115/1/60 - EMERGENCY
SPILL CONTAINMENT	7.5 GALLONS
CONTAINMENT SUMP DRAIN	YES
WEIGHT	325 LBS
HIGH LEVEL ALARM	90% TANK LEVEL
EMERGENCY SHUT-OFF	95% TANK LEVEL
BASIS OF DESIGN - PRYCO	230-22 AUTOMATIC FUELPORT

1 GENERATOR FUEL TANK PIPING SCHEMATIC
M6.08 SCALE: DETAIL

2 GENERATOR FUEL FILL STATION
M6.08 SCALE: DETAIL

ADDENDUM 4 SET

Issue:	date:
50% SD	07.20.2018
100% SD	09.28.2018
50% DD	11.02.2018
100% DD	12.21.2018
60% CD	02.12.2019
PERMIT SET	04.30.2019
GMP SET	06.26.2019
CONSTRUCTION SET	10.25.2019

revision:	date:
1	CITY RESPONSE 07.15.2019
2	CITY RESPONSE 07.15.2019
3	ADDENDUM 1 07.15.2019
4	CITY RESPONSE 3 07.16.2019
5	CITY RESPONSE 5 08.19.2019
6	ADDENDUM 3 08.19.2019
7	CITY REVISION 6 09.12.2019
8	ADDENDUM 4 10.25.2019
9	ASI 02 11.25.2019
10	ASI 05 01.28.2020

GENERATOR
DETAILS

CARTEE APARTMENTS

406 S 4TH ST. BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



Expires May 31, 2021

M Consulting Engineers 2007 S.E. Ash St. Portland, OR 97214 PH: (503) 234-0548 FAX: (503) 234-0677 INC. WWW.MEA-ENG.COM CONTACT: Mark Denyer

Series 18540 Pipe-Away Conservation Pressure / Vacuum Breather Vent. Includes objective, technique, specifications, and a detailed table of dimensions and ordering information.

Series 18540 Pipe-Away Conservation Pressure / Vacuum Breather Vent. Includes specifications, dimensions and ordering information table, and pressure/vacuum settings table.

Series 670 / 6670 End-of-Line Deflagration Flame Arrestor. Includes objective, technique, specifications, and a table of dimensions and ordering information.

Series 670 / 6670 End-of-Line Deflagration Flame Arrestor. Includes specifications, dimensions and ordering information table, and additional products from Protectoseal.

Series 17800 Pipe-Away Conservation Pressure Breather Vent. Includes objective, technique, specifications, and a detailed table of dimensions and ordering information.

Series 17800 Pipe-Away Conservation Pressure Breather Vent. Includes specifications, dimensions and ordering information table, and pressure/vacuum settings table.

Series 670E End-of-Line Deflagration Flame Arrestor. Includes objective, technique, specifications, and a table of dimensions and ordering information.

Series 670E End-of-Line Deflagration Flame Arrestor. Includes specifications, dimensions and ordering information table, and additional products from Protectoseal.

SUBMITTALS: CONTRACTOR TO PROVIDE FULL SUBMITTAL PACKAGE AND VALVE PRESSURE DROPS/FLOWS FOR PROPOSED EQUIPMENT

EMERGENCY VENT ACCESSORIES - BASIS OF DESIGN

ADDENDUM 4 SET

Table with columns for Issue, Revision, and Date. Includes revisions for City Response and Permit Set.

Table with columns for revision and date. Lists revisions for City Response, Addendum 1, City Response 3, City Revision 5, City Revision 6, Addendum 3, City Revision 6, Addendum 4, and ASI 02/05.

GENERATOR CUT SHEETS

sheet:

M6.09

CARTEE APARTMENTS

406 S 4TH ST. BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



Expires May 31, 2021

M Consulting Engineers 2007 S.E. Ash St. Portland, OR 97214 PH: (503) 234-0548 FAX: (503) 234-0677 INC. WWW.MEIA-ENG.COM CONTACT: Mark Denyer

ADDENDUM 4 SET

10.25.2019

Table with columns: Issue, Date. Includes items like 50% SD, 100% SD, 100% DD, 60% CD, PERMIT SET, GMP SET, CONSTRUCTION SET.

Table with columns: Revision, Date. Includes items like 1 CITY RESPONSE, 2 CITY RESPONSE, 3 ADDENDUM 1, 4 CITY RESPONSE 3, 6 CITY REVISION 5, 7 ADDENDUM 3, 8 CITY REVISION 6, 9 ADDENDUM 4, ASI 02, ASI 05.

title:

COMCHECK FORMS

sheet:

M6.10

COMcheck Software Version 4.1.1.0 Mechanical Compliance Certificate. Project Information: 2015 IECC, Carlee, Boise, Idaho, New Construction. Mechanical Systems List: 1 DOAS-1 (Single Zone), 1 DOAS-2 (Single Zone), 102 HP-1 (Single Zone), 47 HP-2 (Single Zone).

Quantity System Type & Description. Cooling Mode: Capacity = 24 kBtu/h, Proposed Efficiency = 16.20 SEER, Required Efficiency: 14.00 SEER. Fan System: FAN SYSTEM 2 | FC-162 - Compliance (Motor nameplate HP method) - Passes.

Quantity System Type & Description. Cooling Mode: Capacity = 24 kBtu/h, Proposed Efficiency = 16.20 SEER, Required Efficiency: 14.00 SEER. Fan System: FAN SYSTEM 4 | FC-162 - Compliance (Motor nameplate HP method) - Passes.

COMcheck Software Version 4.1.1.0 Inspection Checklist. Energy Code: 2015 IECC. Requirements: 100.0% were addressed directly in the COMcheck software. Section # & Req.ID, Plan Review, Comments/Assumptions.

Section # & Req.ID, Plumbing Rough-In Inspection, Complies?, Comments/Assumptions. C404.6.1, C404.6.2, C404.6.3, C404.6.4, C404.6.5, C404.6.6, C404.6.7, C404.7 (PL7).

Section # & Req.ID, Plumbing Rough-In Inspection, Complies?, Comments/Assumptions. C404.6.1, C404.6.2, C404.6.3, C404.6.4, C404.6.5, C404.6.6, C404.6.7, C404.7 (PL7).

Section # & Req.ID, Plumbing Rough-In Inspection, Complies?, Comments/Assumptions. C404.6.1, C404.6.2, C404.6.3, C404.6.4, C404.6.5, C404.6.6, C404.6.7, C404.7 (PL7).

Section # & Req.ID, Plumbing Rough-In Inspection, Complies?, Comments/Assumptions. C404.6.1, C404.6.2, C404.6.3, C404.6.4, C404.6.5, C404.6.6, C404.6.7, C404.7 (PL7).

Section # & Req.ID, Plumbing Rough-In Inspection, Complies?, Comments/Assumptions. C404.6.1, C404.6.2, C404.6.3, C404.6.4, C404.6.5, C404.6.6, C404.6.7, C404.7 (PL7).

Section # & Req.ID, Plumbing Rough-In Inspection, Complies?, Comments/Assumptions. C404.6.1, C404.6.2, C404.6.3, C404.6.4, C404.6.5, C404.6.6, C404.6.7, C404.7 (PL7).

CARTEE
APARTMENTS

406 S 4TH ST.
BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



Expires May 31, 2021

MET
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0548
FAX: (503) 234-0677
INC. WWW.MET-ENG.COM
CONTACT: Mark Denyer

Table with 4 columns: Section # & Req ID, Mechanical Rough-In Inspection, Complies?, Comments/Assumptions. Includes rows for thermal insulation, fan system motor nameplate hp, and fan efficiency.

Table with 4 columns: Section # & Req ID, Mechanical Rough-In Inspection, Complies?, Comments/Assumptions. Includes rows for kitchen exhaust systems, ductwork air leakage, and fan efficiency.

Table with 4 columns: Section # & Req ID, Mechanical Rough-In Inspection, Complies?, Comments/Assumptions. Includes rows for ductwork air leakage testing, cooling tower air leakage, and fan efficiency.

Table with 4 columns: Section # & Req ID, Mechanical Rough-In Inspection, Complies?, Comments/Assumptions. Includes rows for VAV systems with static pressure reset controls, cooling tower air leakage, and fan efficiency.

Table with 4 columns: Section # & Req ID, Mechanical Rough-In Inspection, Complies?, Comments/Assumptions. Includes rows for refrigerated display cases, VAV systems with static pressure reset controls, and fan efficiency.

Table with 4 columns: Section # & Req ID, Final Inspection, Complies?, Comments/Assumptions. Includes rows for HVAC manuals, humidification/dehumidification systems, and heat pump controls.

Table with 4 columns: Section # & Req ID, Final Inspection, Complies?, Comments/Assumptions. Includes rows for heating and cooling controls, humidification/dehumidification, and heat pump controls.

Table with 4 columns: Section # & Req ID, Final Inspection, Complies?, Comments/Assumptions. Includes rows for HVAC systems, humidification/dehumidification, and heat pump controls.

Table with 4 columns: Section # & Req ID, Final Inspection, Complies?, Comments/Assumptions. Includes rows for HVAC systems, humidification/dehumidification, and heat pump controls.

Table with 4 columns: Section # & Req ID, Final Inspection, Complies?, Comments/Assumptions. Includes rows for HVAC systems, humidification/dehumidification, and heat pump controls.

ADDENDUM 4 SET

10.25.2019

Table with 2 columns: Issue, Date. Lists various issues and their resolution dates.

Table with 2 columns: Revision, Date. Lists revision history.

COMCHECK
FORMS

sheet:

M6.11