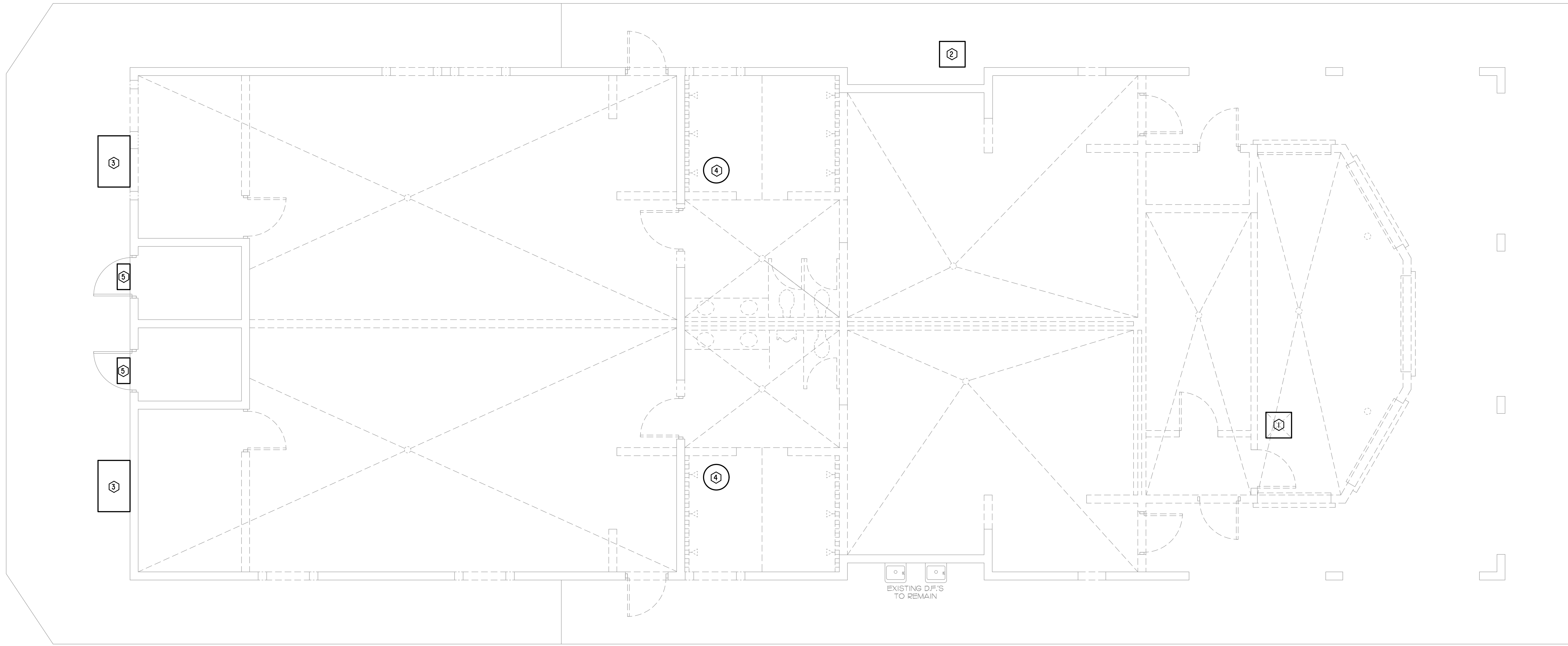


GENERAL NOTES:

1. THESE DRAWINGS HAVE BEEN CREATED FROM PREVIOUS CONTRACT DOCUMENTS. WHILE ACTUAL CONDITIONS HAVE BEEN INVESTIGATED TO THE BEST OF THE ENGINEER'S ABILITY, THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS DURING THE COURSE OF WORK AND COORDINATE ANY DISCREPANCIES WITH THE ENGINEER.
2. REMOVE ALL AIR CONDITIONING SYSTEMS, EXHAUST FANS & ASSOCIATED DUCTWORK AS INDICATED.

KEY NOTES:

- ① REMOVE EXISTING AIR HANDLER & ALL DUCTWORK, ETC.
- ② REMOVE EXISTING CONDENSING UNIT.
- ③ REMOVE EXISTING WALL MOUNTED PACKAGE AIR CONDITIONER & ALL DUCTWORK, ETC.
- ④ REMOVE ROOF EXHAUST FAN & DUCTWORK.
- ⑤ REMOVE WALL MOUNTED EXHAUST FAN & DUCTWORK.



NO.	DATE	REVISIONS	CHK.	APP.

Fort Pierce Engineering, Inc.
 Dependable Mechanical, Electrical & Plumbing Design
 C.A. No. 28173

315 South 7th Street
 Fort Pierce, FL 34950
 Phone: 772 672-4636
 Fax: 772 672-4637

PROJECT NAME:
 SRHS LOCKER ROOM REMODEL

CLIENT:
 EDW ARCHITECTS
 65 ROYAL PALM POINTE, SUITE D
 SEASIDE BEACH, FLORIDA
 32960

PROJECT LOCATION:
 SEBASTIAN RIVER HIGH SCHOOL
 SEBASTIAN, FL 32958

ENGINEER SEAL

Eric J. Svoboda, PE
 P.E. No. 60982

SHEET TITLE
 HVAC DEMO PLAN

ISSUE DATE: 08-22-2018

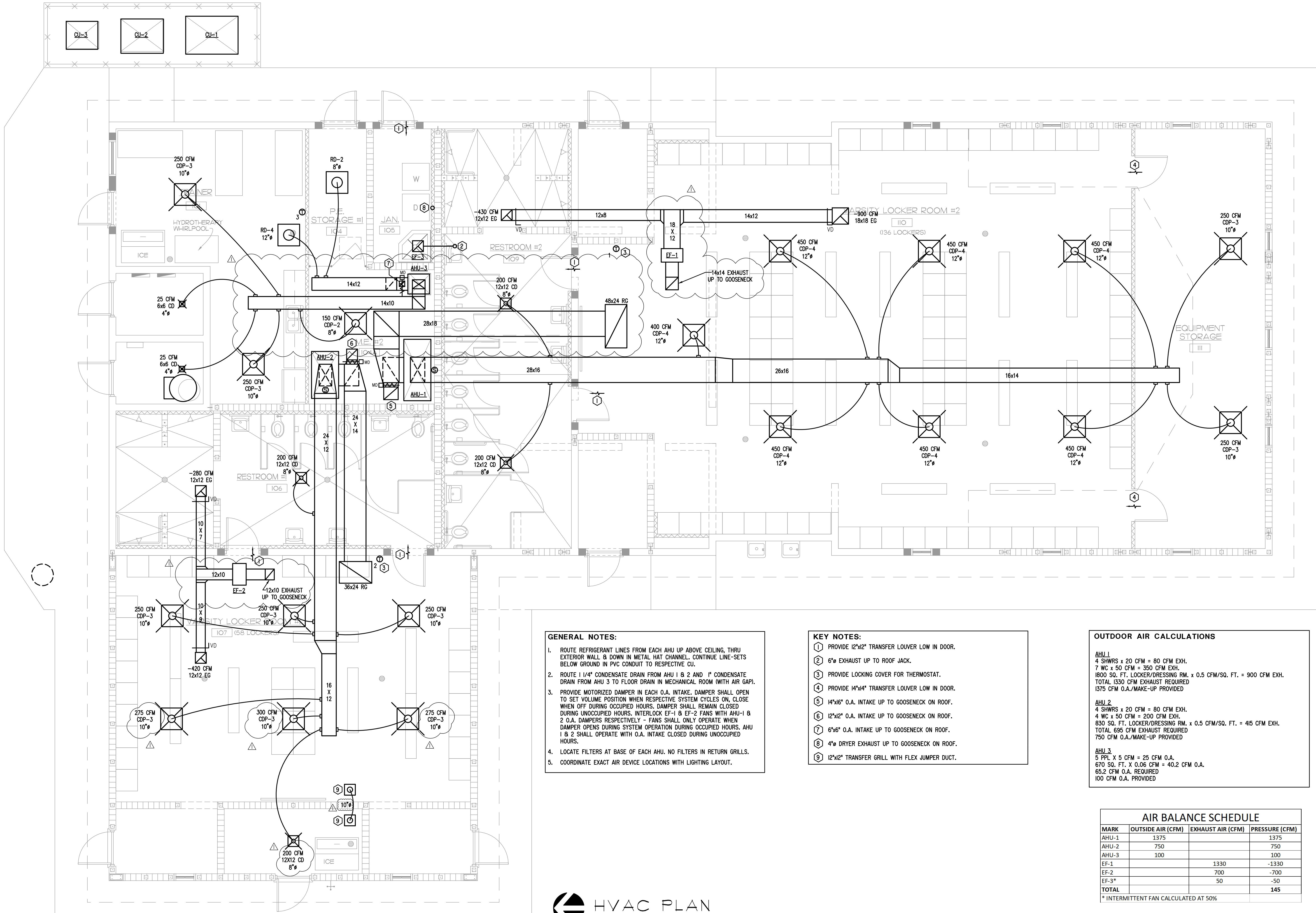
DRAWN: EJS

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DRAWING NUMBER
 M-2.1

SHEET 2 OF 5
 16003-01

HVAC DEMO PLAN SCALE 1/4" = 1'-0"



GENERAL NOTES:

- ROUTE REFRIGERANT LINES FROM EACH AHU UP ABOVE CEILING, THRU EXTERIOR WALL & DOWN IN METAL HAT CHANNEL. CONTINUE LINE-SETS BELOW GROUND IN PVC CONDUIT TO RESPECTIVE CU.
- ROUTE 1/4" CONDENSATE DRAIN FROM AHU 1 & 2 AND 1" CONDENSATE DRAIN FROM AHU 3 TO FLOOR DRAIN IN MECHANICAL ROOM (WITH AIR GAP).
- PROVIDE MOTORIZED DAMPER IN EACH O.A. INTAKE. DAMPER SHALL OPEN TO SET VOLUME POSITION WHEN RESPECTIVE SYSTEM CYCLES ON, CLOSE WHEN OFF DURING OCCUPIED HOURS. DAMPER SHALL REMAIN CLOSED DURING UNOCCUPIED HOURS. INTERLOCK EF-1 & EF-2 FANS WITH AHU-1 & 2 O.A. DAMPERS RESPECTIVELY - FANS SHALL ONLY OPERATE WHEN DAMPER OPENS DURING SYSTEM OPERATION DURING OCCUPIED HOURS. AHU 1 & 2 SHALL OPERATE WITH O.A. INTAKE CLOSED DURING UNOCCUPIED HOURS.
- LOCATE FILTERS AT BASE OF EACH AHU. NO FILTERS IN RETURN GRILLS.
- COORDINATE EXACT AIR DEVICE LOCATIONS WITH LIGHTING LAYOUT.

KEY NOTES:

- PROVIDE 12"x12" TRANSFER LOUVER LOW IN DOOR.
- 6" EXHAUST UP TO ROOF JACK.
- PROVIDE LOCKING COVER FOR THERMOSTAT.
- PROVIDE 14"x14" TRANSFER LOUVER LOW IN DOOR.
- 14"x16" O.A. INTAKE UP TO GOOSENECK ON ROOF.
- 12"x12" O.A. INTAKE UP TO GOOSENECK ON ROOF.
- 6"x6" O.A. INTAKE UP TO GOOSENECK ON ROOF.
- 4" DRYER EXHAUST UP TO GOOSENECK ON ROOF.
- 12"x12" TRANSFER GRILL WITH FLEX JUMPER DUCT.

OUTDOOR AIR CALCULATIONS

AHU 1
 4 SHWRS x 20 CFM = 80 CFM EXH.
 7 WC x 50 CFM = 350 CFM EXH.
 1800 SQ. FT. LOCKER/DRESSING RM. x 0.5 CFM/SQ. FT. = 900 CFM EXH.
 TOTAL 1330 CFM EXHAUST REQUIRED
 1375 CFM O.A./MAKE-UP PROVIDED

AHU 2
 4 SHWRS x 20 CFM = 80 CFM EXH.
 4 WC x 50 CFM = 200 CFM EXH.
 830 SQ. FT. LOCKER/DRESSING RM. x 0.5 CFM/SQ. FT. = 415 CFM EXH.
 TOTAL 695 CFM EXHAUST REQUIRED
 750 CFM O.A./MAKE-UP PROVIDED

AHU 3
 5 PPL X 5 CFM = 25 CFM O.A.
 670 SQ. FT. X 0.06 CFM = 40.2 CFM O.A.
 65.2 CFM O.A. REQUIRED
 100 CFM O.A. PROVIDED

AIR BALANCE SCHEDULE

MARK	OUTSIDE AIR (CFM)	EXHAUST AIR (CFM)	PRESSURE (CFM)
AHU-1	1375		1375
AHU-2	750		750
AHU-3	100		100
EF-1		1330	-1330
EF-2		700	-700
EF-3*		50	-50
TOTAL			145

* INTERMITTENT FAN CALCULATED AT 50%



SCALE 1/4" = 1'-0"

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 SEBASTIAN, FL 32958

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ENGINEER SEAL

Eric J. Svoboda, PE
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SHEET TITLE
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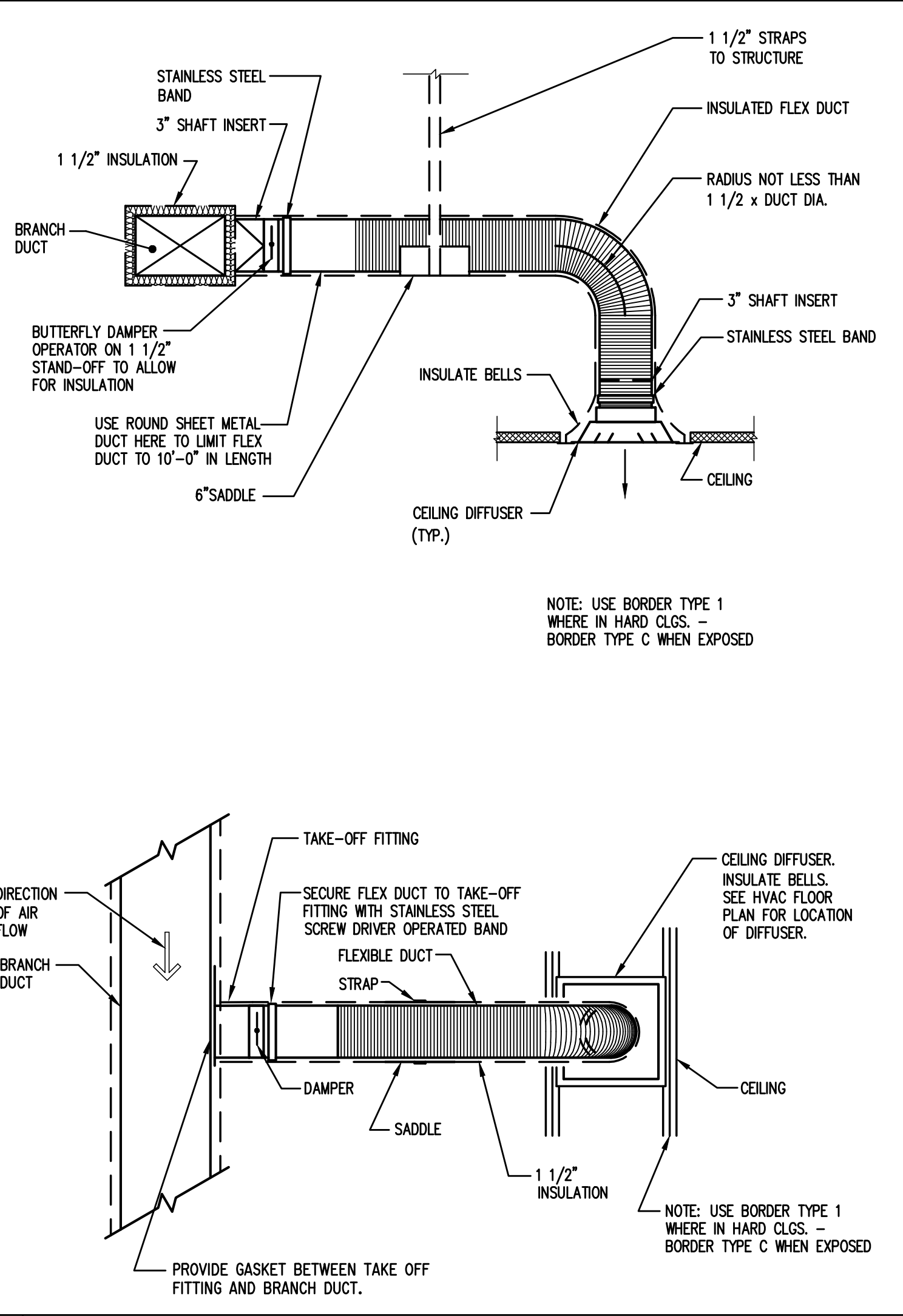
ISSUE DATE: **08-22-2018**

DRAWN: **EJS**

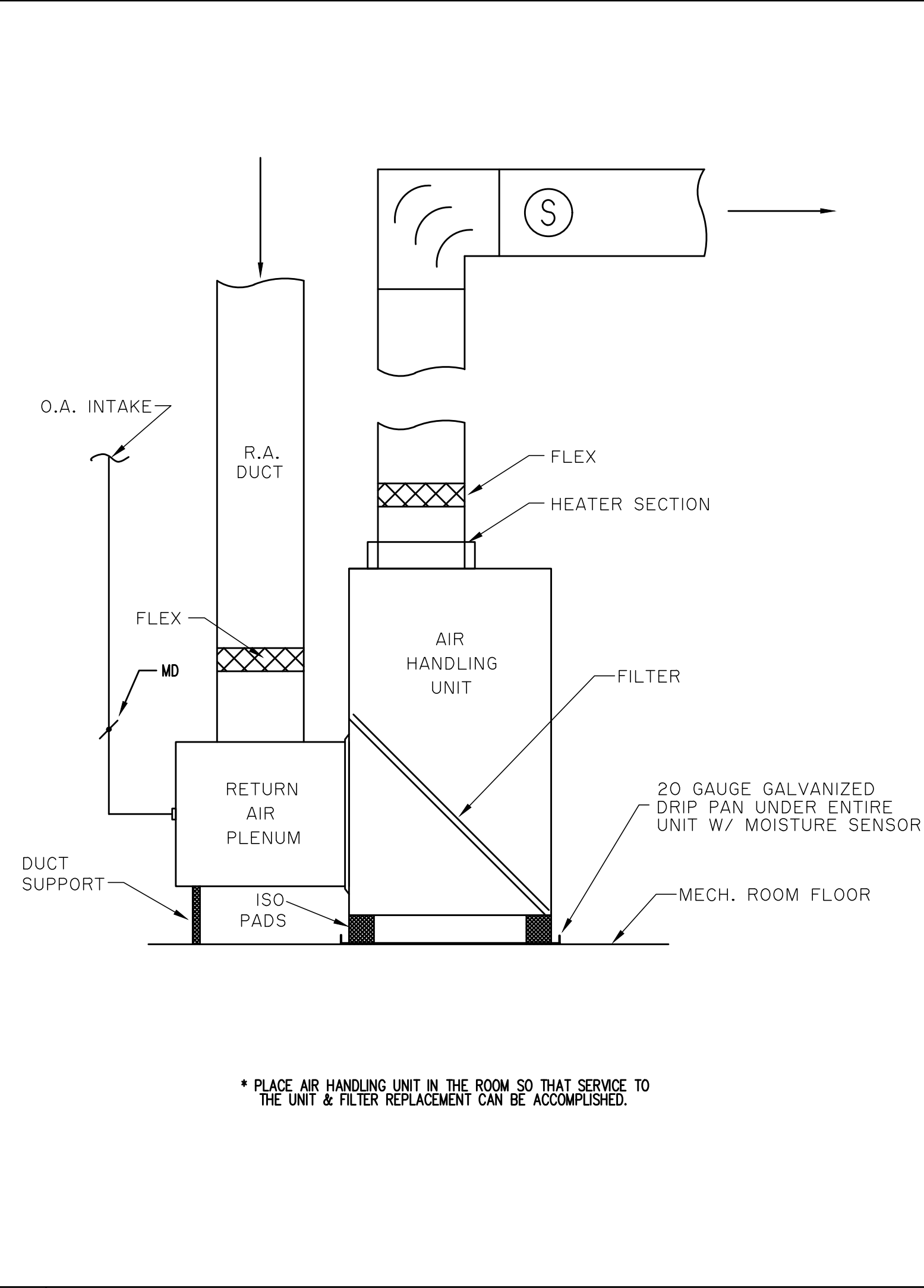
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M-2.2

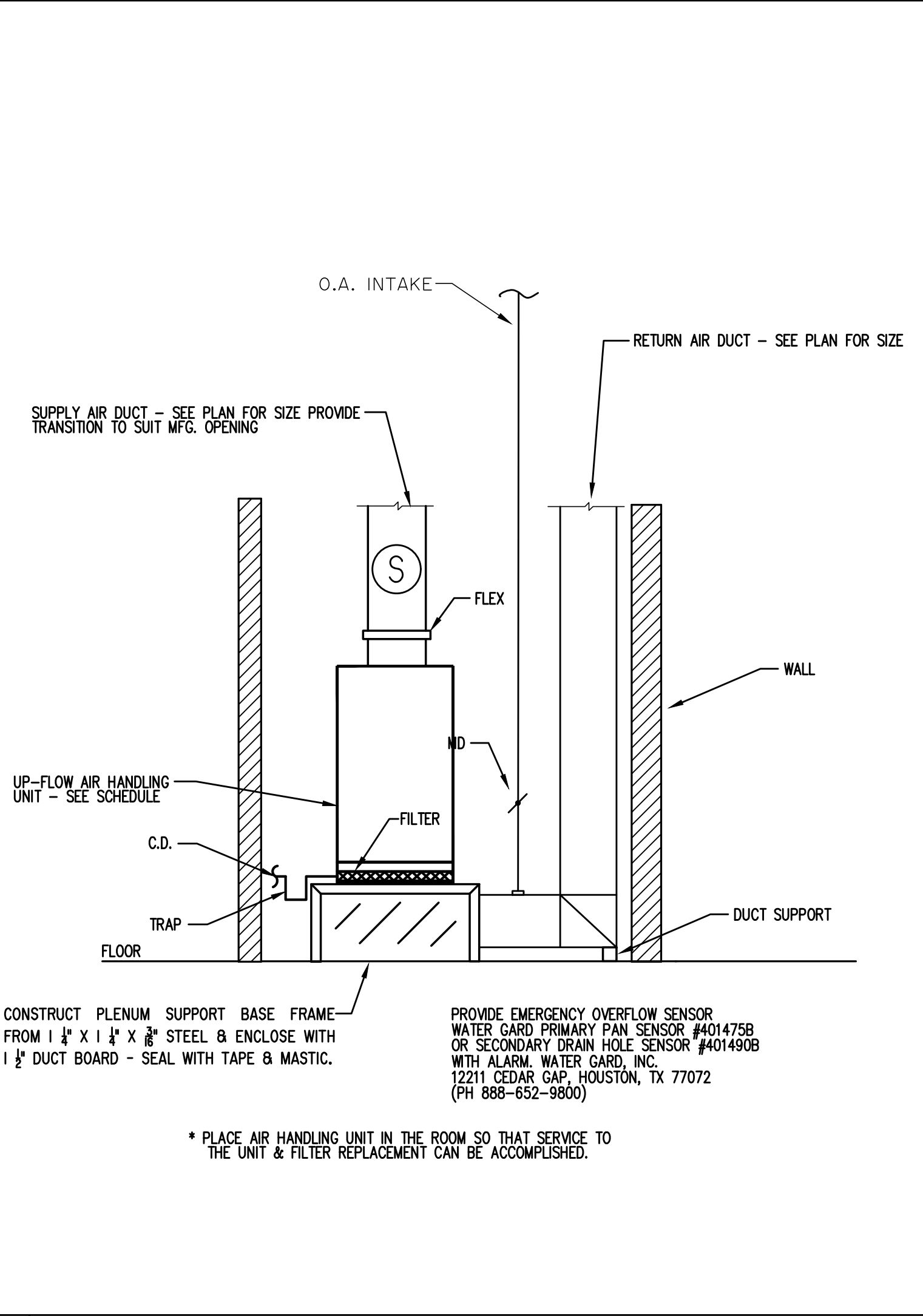
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16003-01



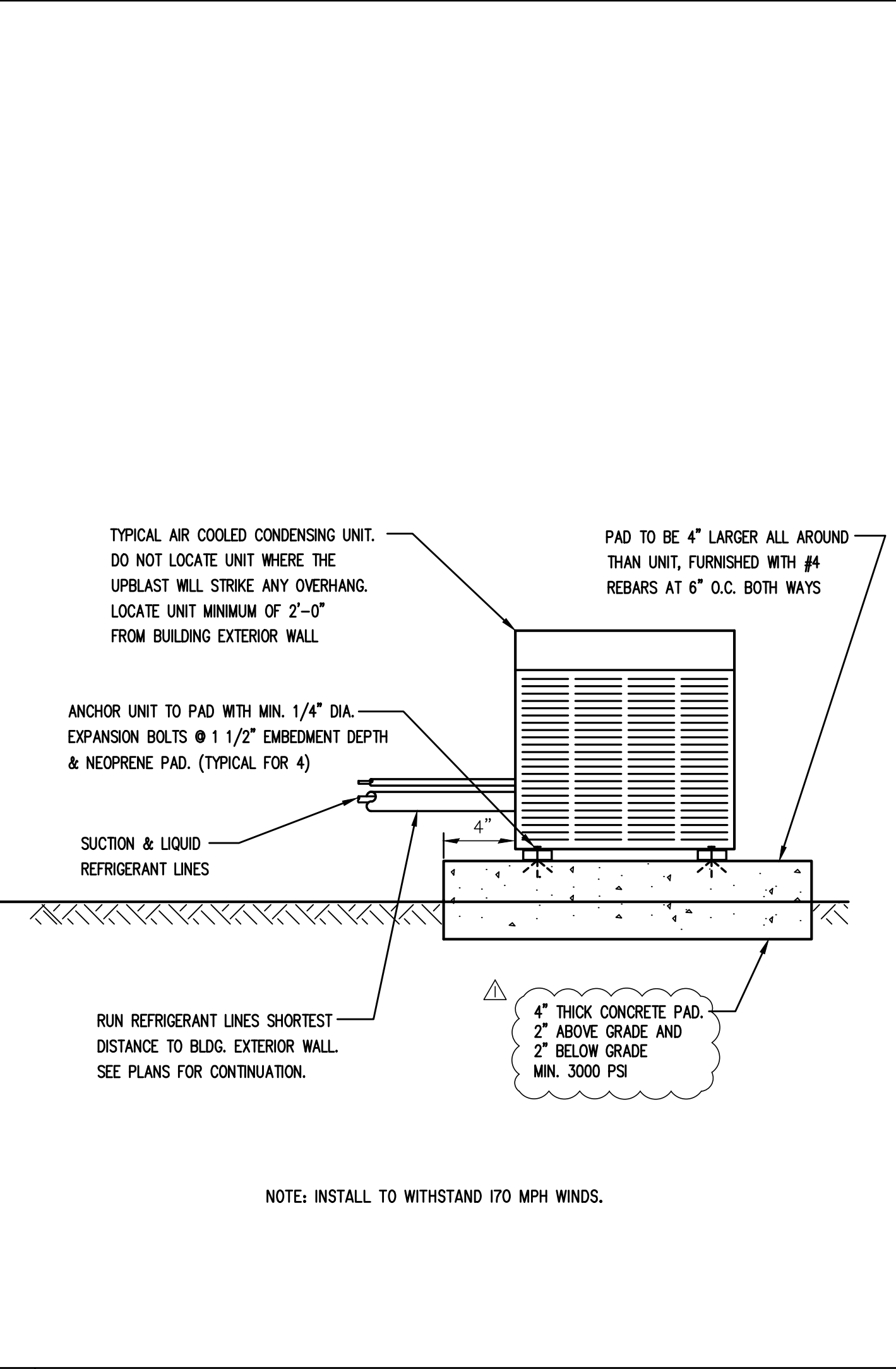
A FLEX DUCT CONNECTION DETAILS SCALE=(N.T.S.)



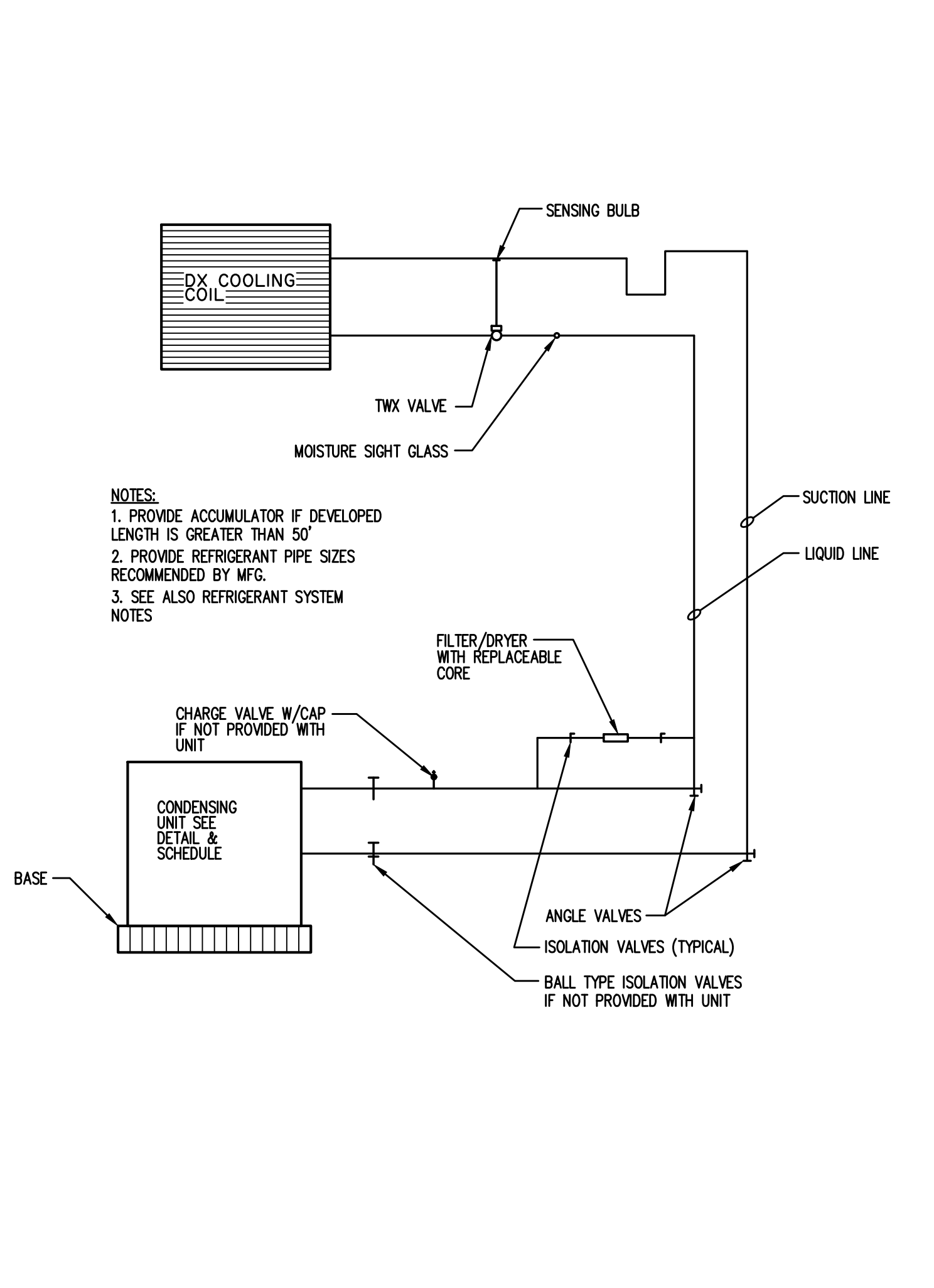
B VERTICAL AHU DETAIL - AHU 1 & 2 SCALE=(N.T.S.)



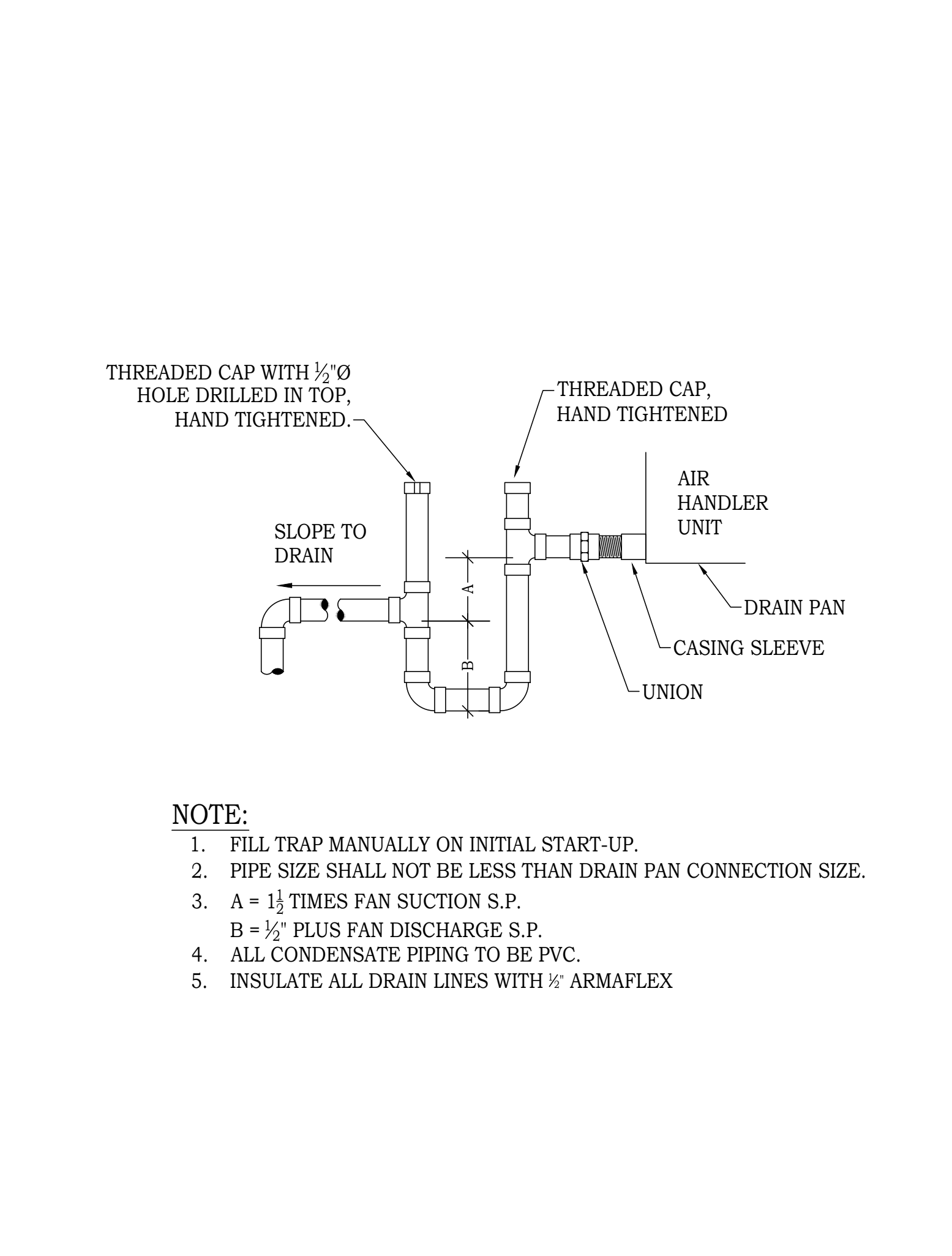
C VERTICAL AHU DETAIL - AHU 3 SCALE=(N.T.S.)



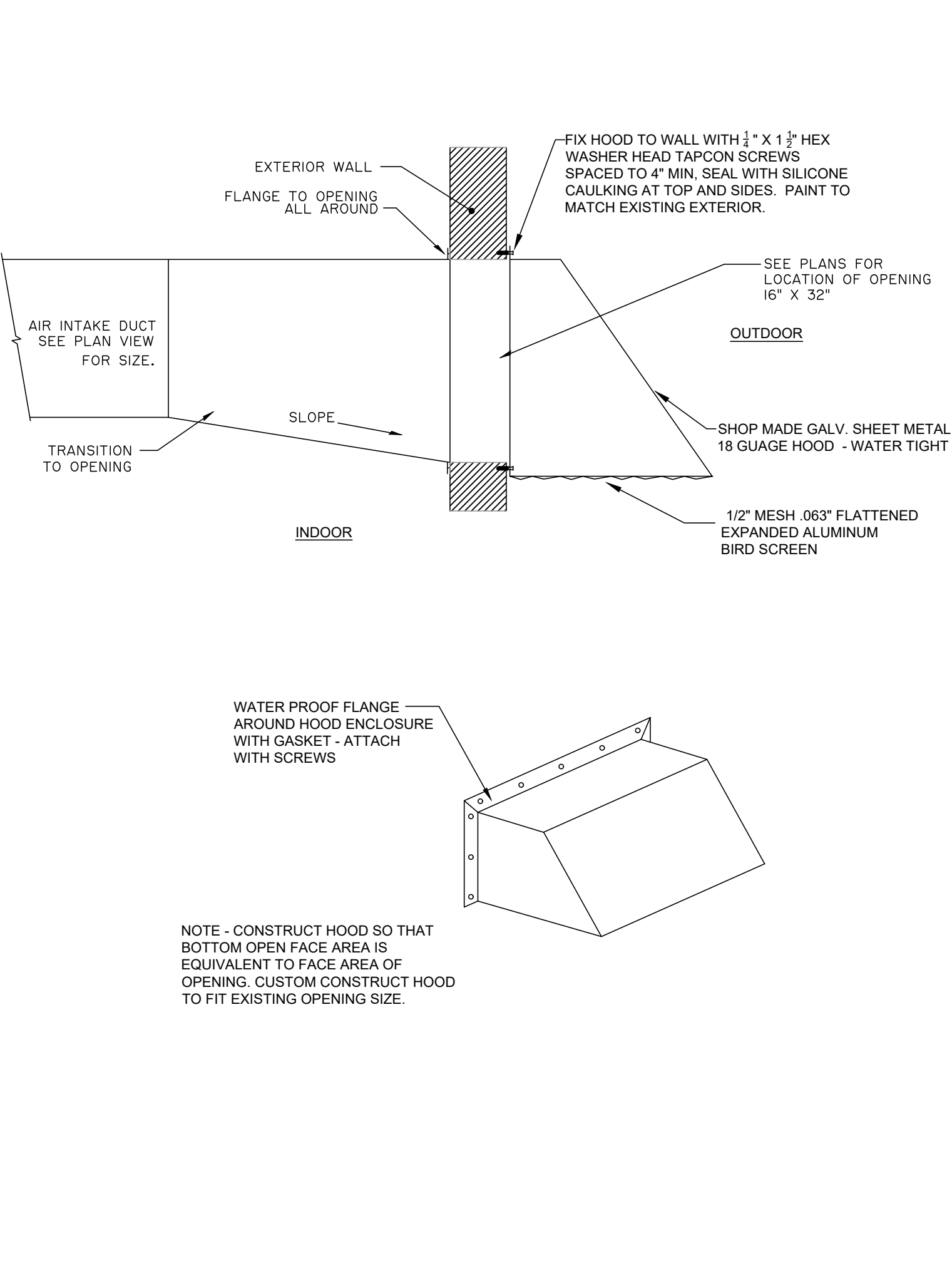
D AIR COOLED CONDENSING UNIT DETAIL SCALE=(N.T.S.)



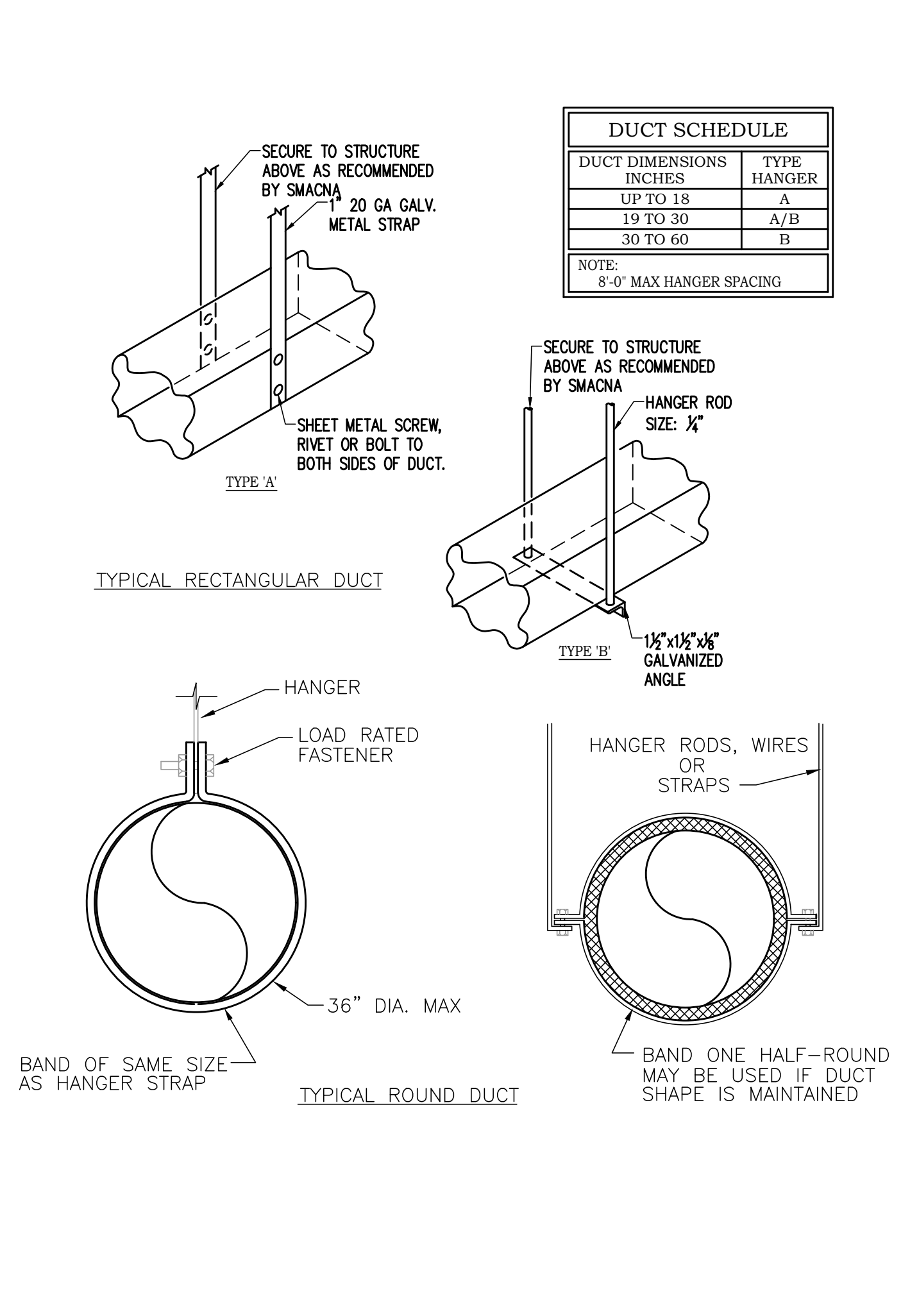
E REFRIGERANT PIPING SCHEMATIC SCALE=(N.T.S.)



F CONDENSATE DRAIN TRAP DETAIL SCALE=(N.T.S.)

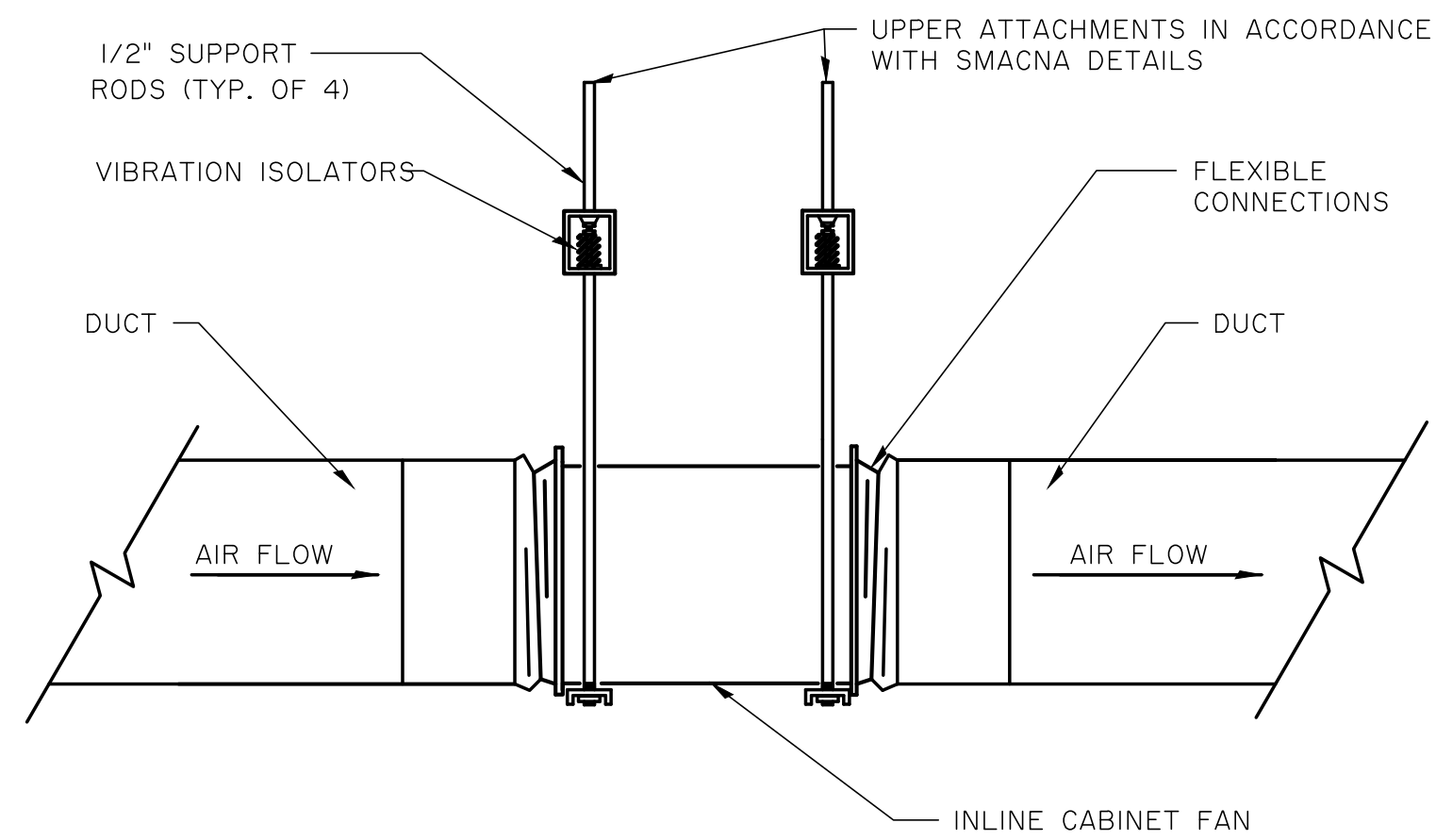


G WALL INTAKE / EXHAUST HOOD ENCLOSURE DETAIL SCALE=(N.T.S.)



H DUCT SUPPORT DETAILS SCALE=(N.T.S.)

REVISIONS	ES	ES	ES	DR	CK	APP
NO.	DATE	NO.	DATE	NO.	DATE	NO.
1	09-28-18					
<p>Fort Pierce Engineering, Inc. Dependable Mechanical, Electrical & Plumbing Design C.A. No. 28173</p> <p>315 South 7th Street Fort Pierce, FL 34950 Phone: 772-672-4636 Fax: 772-672-4637</p>						
<p>CLIENT: EBB ARCHITECTS 68 ROYAL PALM POINTE, SUITE D FORT PIERCE, FLORIDA 33980</p>						
<p>PROJECT NAME: SRHS LOCKER ROOM REMODEL PROJECT LOCATION: SEBASTIAN RIVER HIGH SCHOOL 9001 30TH AVE SEBASTIAN, FL 32958</p>						
<p>ENGINEER SEAL ERIC J. SVOBODA LICENSE No 60982 STATE OF FLORIDA PROFESSIONAL ENGINEER Eric J. Svoboda, PE P.E. No. 60982</p>						
<p>SHEET TITLE MECHANICAL DETAILS</p>						
<p>ISSUE DATE: 08-22-2018</p>						
<p>DRAWN: EJS</p>						
<p>APPROVED: EJS</p>						
<p>DRAWING NUMBER M-3.1</p>						
<p>SHEET 4 OF 5 16003-01</p>						

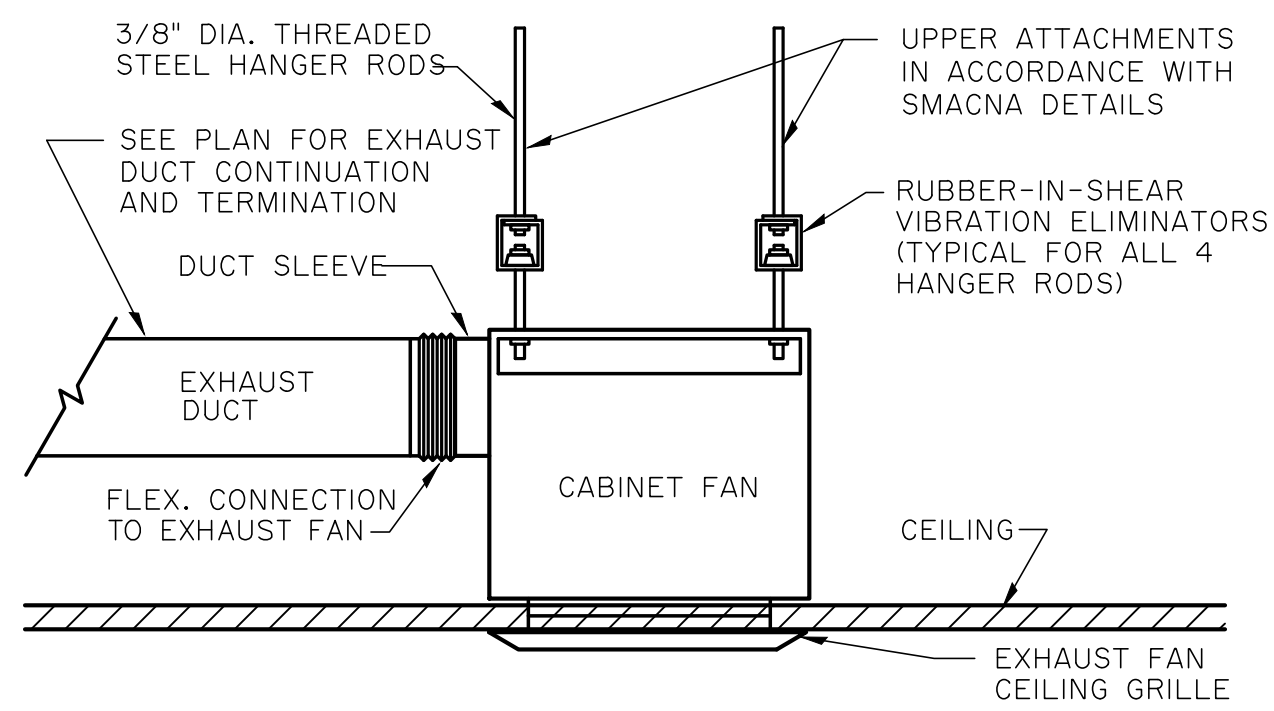


I INLINE EXHAUST FAN DETAIL

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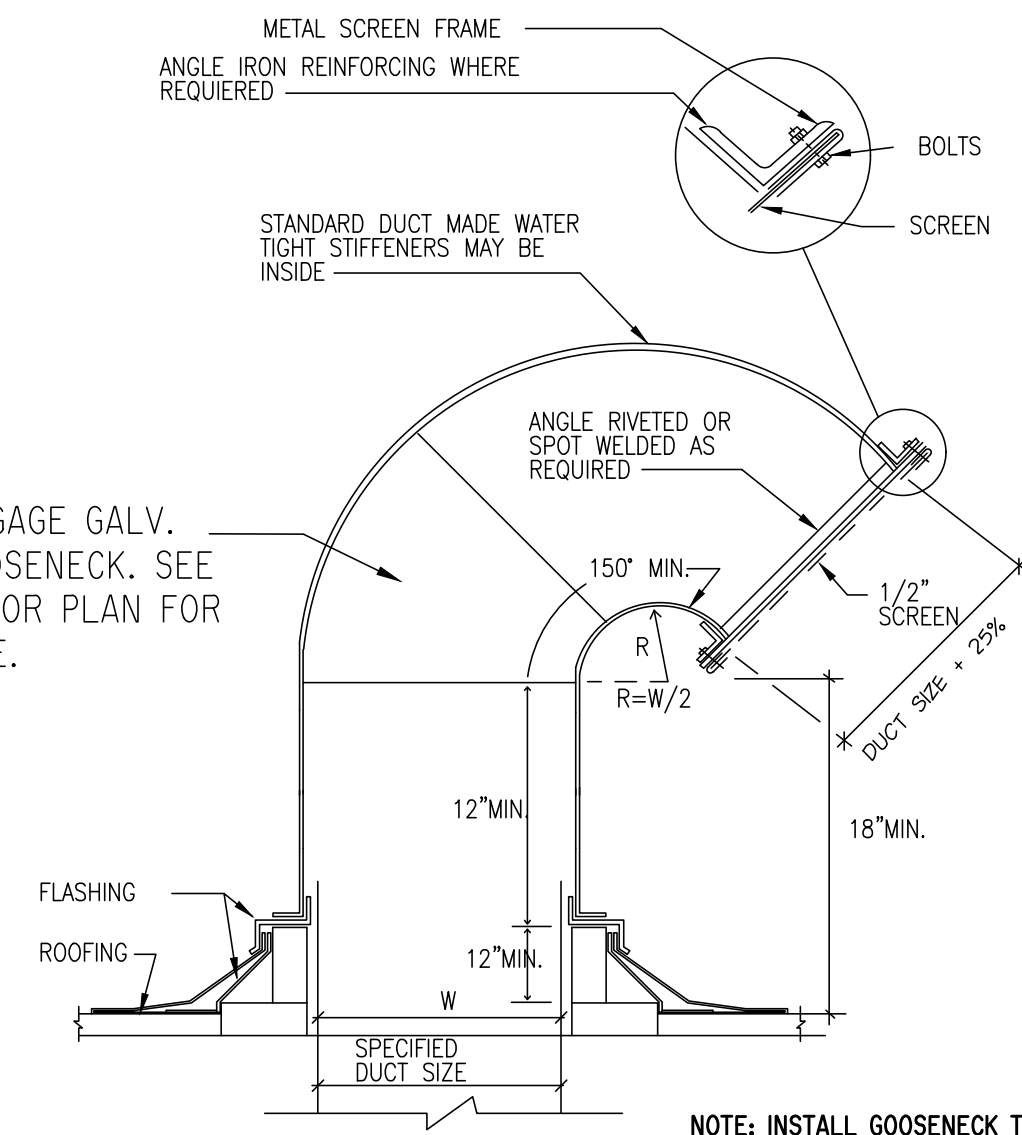
J RESERVED

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K CEILING CABINET EXHAUST FAN DETAIL

SCALE=(N.T.S.)



RECTANGULAR GOOSENECK

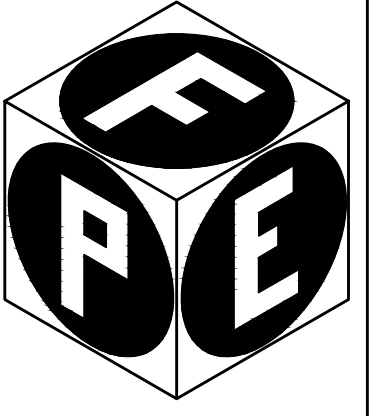
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1 GOOSENECK DETAIL

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NO.	DATE	REVISIONS
1	09-28-18	REVISED PER REVIEW COMMENTS

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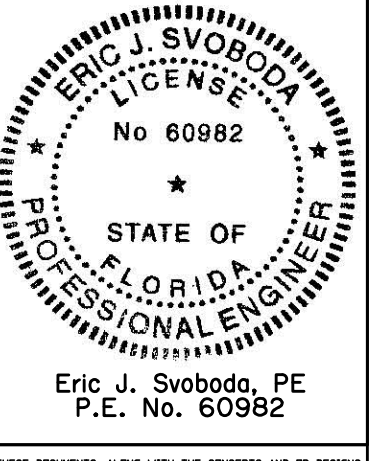


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ENGINEER SEAL



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SHEET 5 OF 5

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