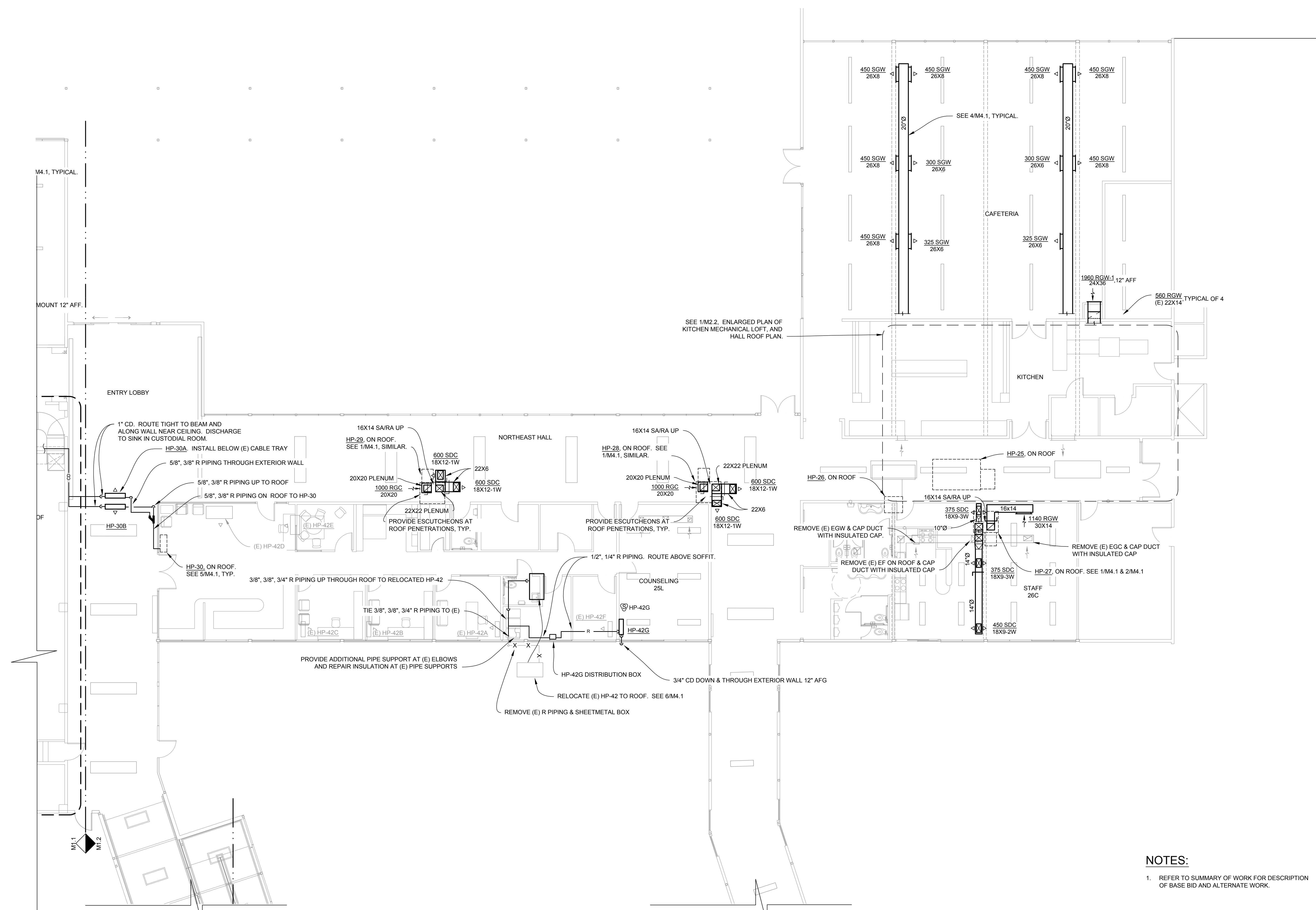


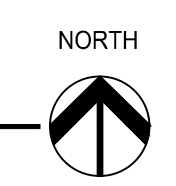
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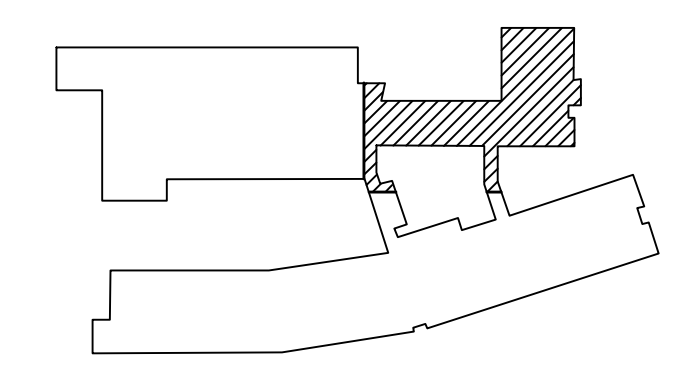
ENERGY EFFICIENCY UPGRADE
SPENCER BUTTE MIDDLE SCHOOL
500 EAST 43RD AVENUE
EUGENE, OR. 97405
C.I.P. #420.518.032



1 HVAC FLOOR PLAN - NE
1/8" = 1'-0"



NOTES:
1. REFER TO SUMMARY OF WORK FOR DESCRIPTION OF BASE BID AND ALTERNATE WORK.



KEY PLAN

HVAC FLOOR PLAN
NORTHEAST

JOB#: --

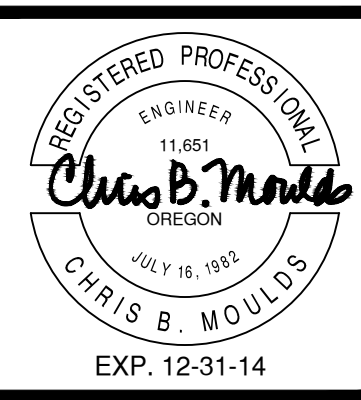
DRAWN BY: CM

DATE: --

ISSUE DATE: 04-23-2014

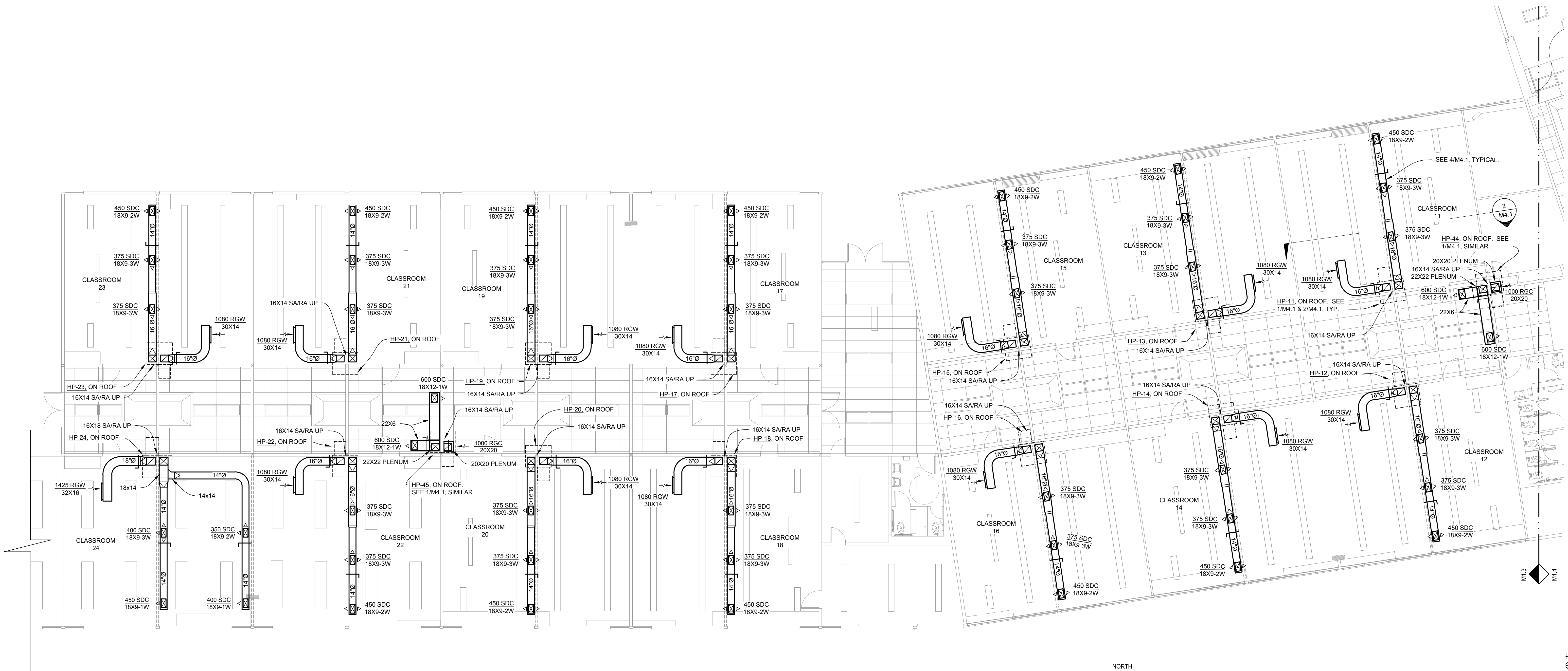
SCALE: AS NOTED





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1 HVAC FLOOR PLAN - SW
1/8" = 1'-0"



ENERGY EFFICIENCY UPGRADE
SPENCER BUTTE MIDDLE SCHOOL
500 EAST 43RD AVENUE
EUGENE, OR. 97405
C.I.P. #420518032

NOTES:
1. REFER TO SUMMARY OF WORK FOR DESCRIPTION OF BASE BID AND ALTERNATE WORK.

HVAC FLOOR PLAN
SOUTHWEST

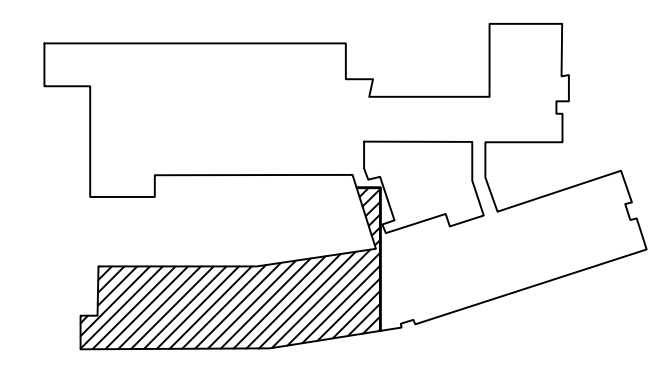
JOB#: --

DRAWN BY: CM

DATE: --

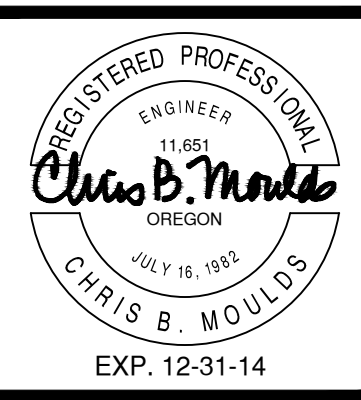
ISSUE DATE: 04-23-2014

SCALE: AS NOTED



KEY PLAN





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EUGENE, OR. 97405
C.I.P. #420518032



1 HVAC FLOOR PLAN - NW
1/8" = 1'-0"

NOTES:
1. REFER TO SUMMARY OF WORK FOR DESCRIPTION OF BASE BID AND ALTERNATE WORK.

HVAC FLOOR PLAN
SOUTHEAST

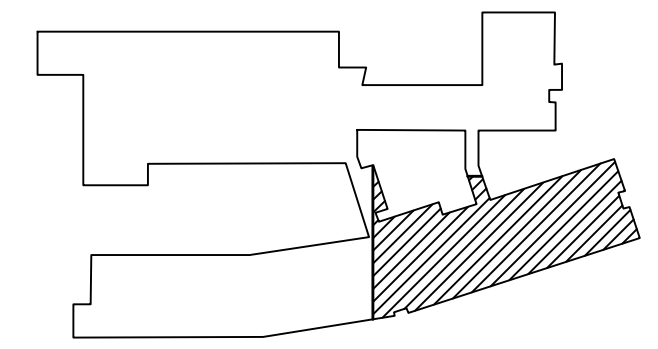
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DRAWN BY: CM

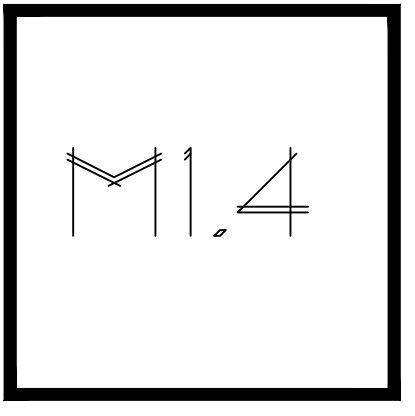
DATE: --

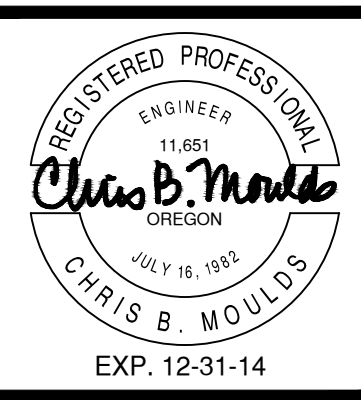
ISSUE DATE: 04-23-2014

SCALE: AS NOTED



KEY PLAN





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**ENERGY EFFICIENCY UPGRADE
SPENCER BUTTE MIDDLE SCHOOL**
 500 EAST 43RD AVENUE
 EUGENE, OR. 97405
 C.I.P. #420518032

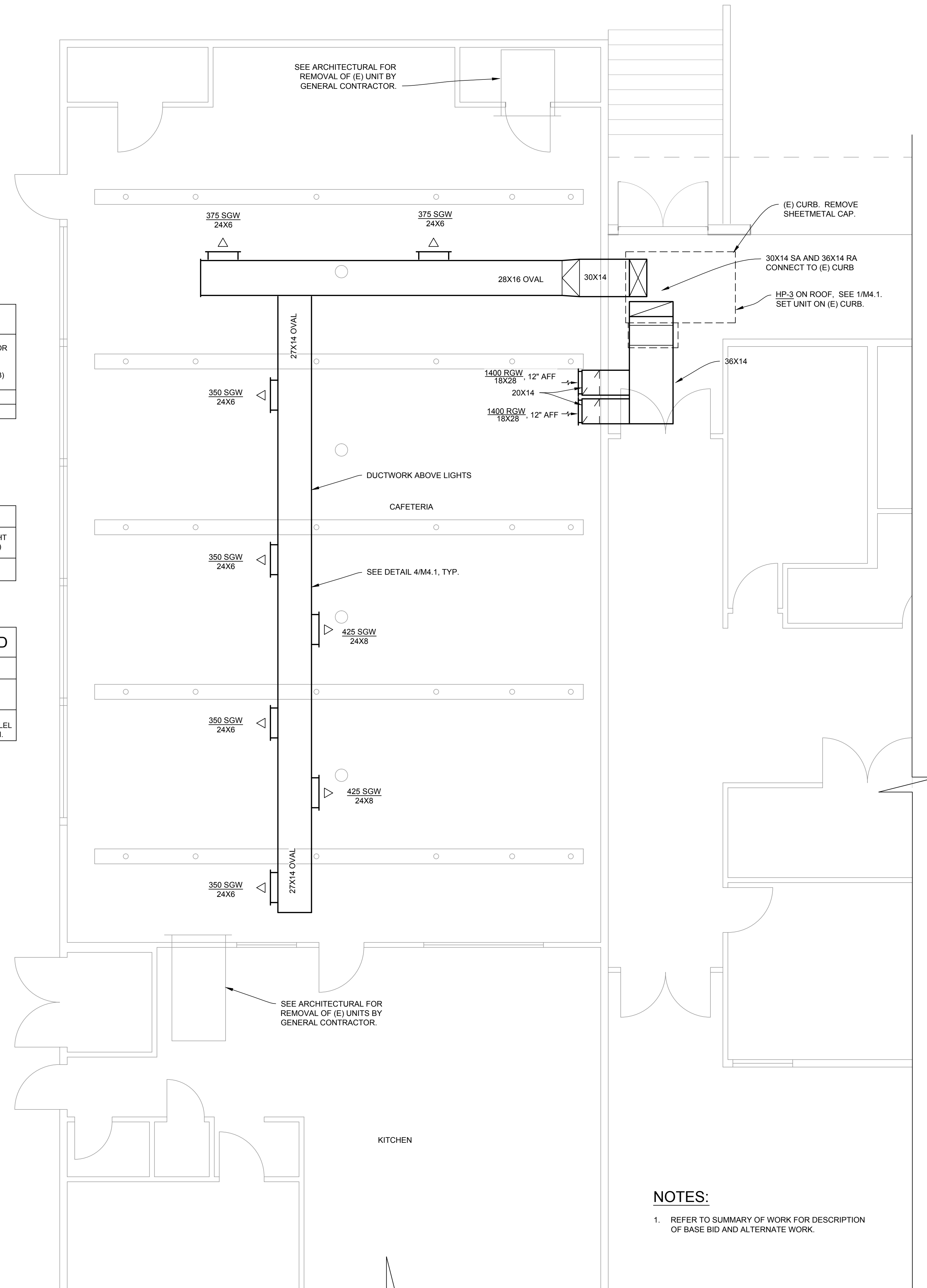
OUTSIDE AIR SCHEDULE- EDGEWOOD ELEMENTARY SCHOOL									
OCCUPANCY OMSC 403.3	OCCUPANT DENSITY PERSONS/ 1000 SF OMSC 403.0	OUTDOOR AIR CFM/ PERSON Rp OMSC 403.0	OUTDOOR AIR CFM/SF Ra OMSC 403.0	AREA SQ FT Az	ZONE POPULATION # OF OCCUPANTS Pz	BREATHING ZONE OUTDOOR AIR Vbz OMSC 403.3.1.1	ZONE OUTDOOR AIR Voz OMSC 03.3.1.3	PRIMARY OUTDOOR AIR FRACTION Zp OMSC 403.3.2.3.1	REQUIRED OUTDOOR AIR CFM Vot OMSC 403.3.2.3.4 (3)
CAFETERIA (MULTI-USE)	100	7.5	0.06	2056	103	896	--	--	896
HP-3 PROVIDED OSA									900

NOTES:

1. ZONE AIR EFFECTIVENESS Ez=1.0 WITH LOW WALL RA.
2. OCCUPANT DIVERSITY D=1 PER OMSC 403.3.2.3.3.
3. OCCUPANT LOADS REDUCED TO ACTUAL OCCUPANCY, BUT NO LESS THAN 50% OF CODE MINIMUM.

MECHANICAL EQUIPMENT SCHEDULE - EDGEWOOD ELEMENTARY SCHOOL															
UNIT	AREA SERVED	TONS CLG	EQUIP TYPE	MANUFACTURER/ MODEL	EER/ COP	CFM	ESP	HP	VOLT/ PHASE	COOLING SENSIBLE TOTAL	HEATING MBH	HEAT KW STAGE 1/2	OSA CFM	AMPS	WEIGHT (LBS)
ALT #5 HP-3	CAFETERIA	7.5	ROOFTOP	CARRIER HCQD-008	12.1/ 3.5	3000	0.50	1.2	208/3Ø	69.4/92.1	43.6 AT 17F	12/12	130/500	123.8 UNIT 6.6 ECON	1610

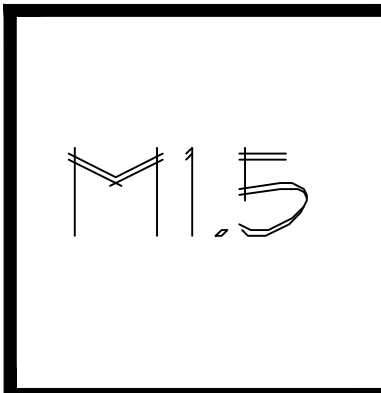
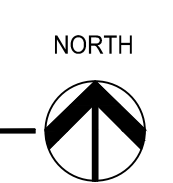
REGISTER & GRILLE SCHEDULE - EDGEWOOD				
CODE	MANUFACTURER MODEL	OBD	FINISH	REMARKS
SGW	KRUEGER 880-F22	NO	STANDARD WHITE	SUPPLY GRILLE DUCT DOUBLE DEFLECTION VERTICAL FRONT BARS
RGW-1	KRUEGER S480-F22	NO	STANDARD WHITE	RETURN GRILLE WALL HEAVY DUTY. BARS PARALLEL WITH SHORT DIMENSION.



NOTES:

1. REFER TO SUMMARY OF WORK FOR DESCRIPTION OF BASE BID AND ALTERNATE WORK.

1 HVAC FLOOR PLAN - EDGEWOOD
1/4" = 1'-0"



EDGEWOOD HVAC
FLOOR PLAN & SCH

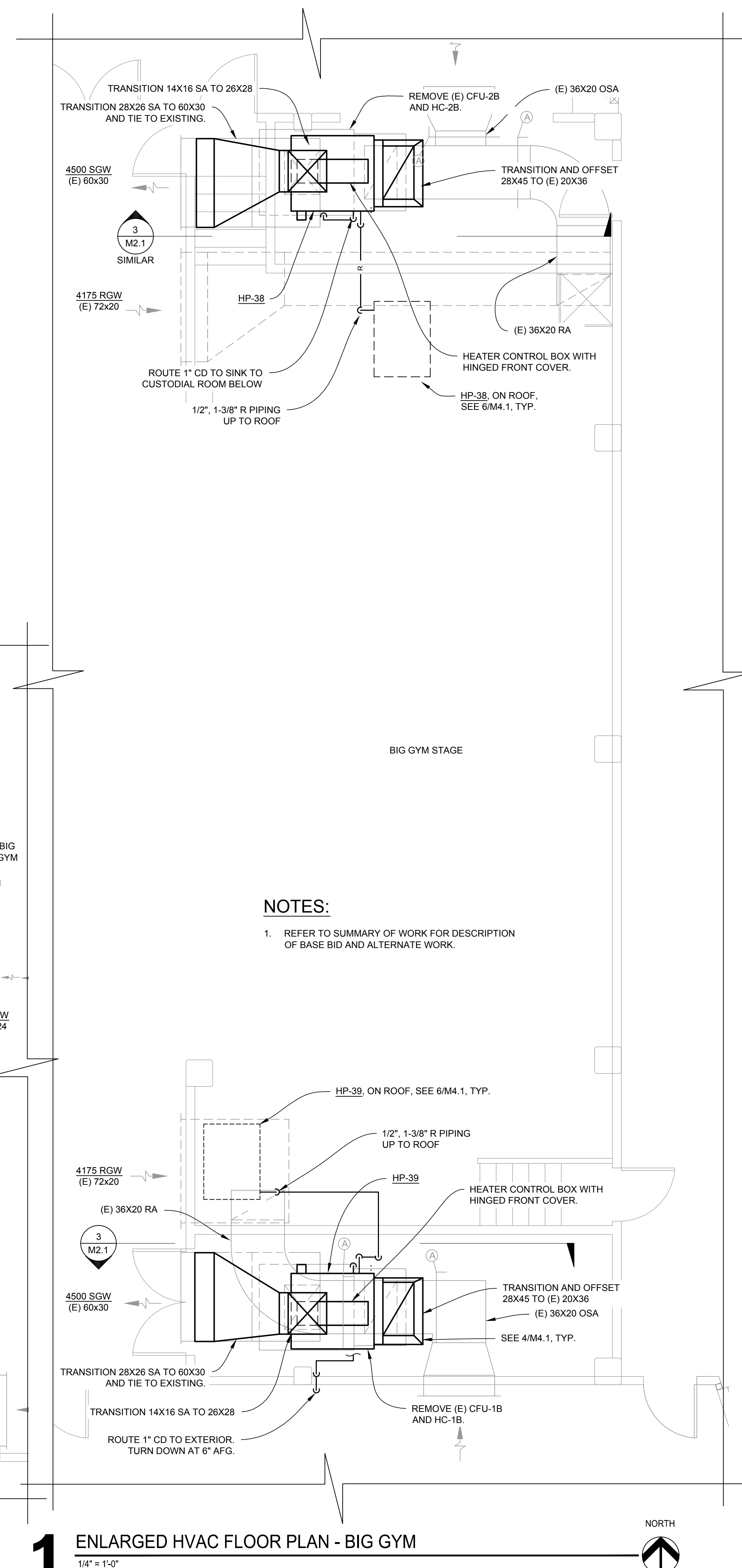
JOB#: --

DRAWN BY: CM

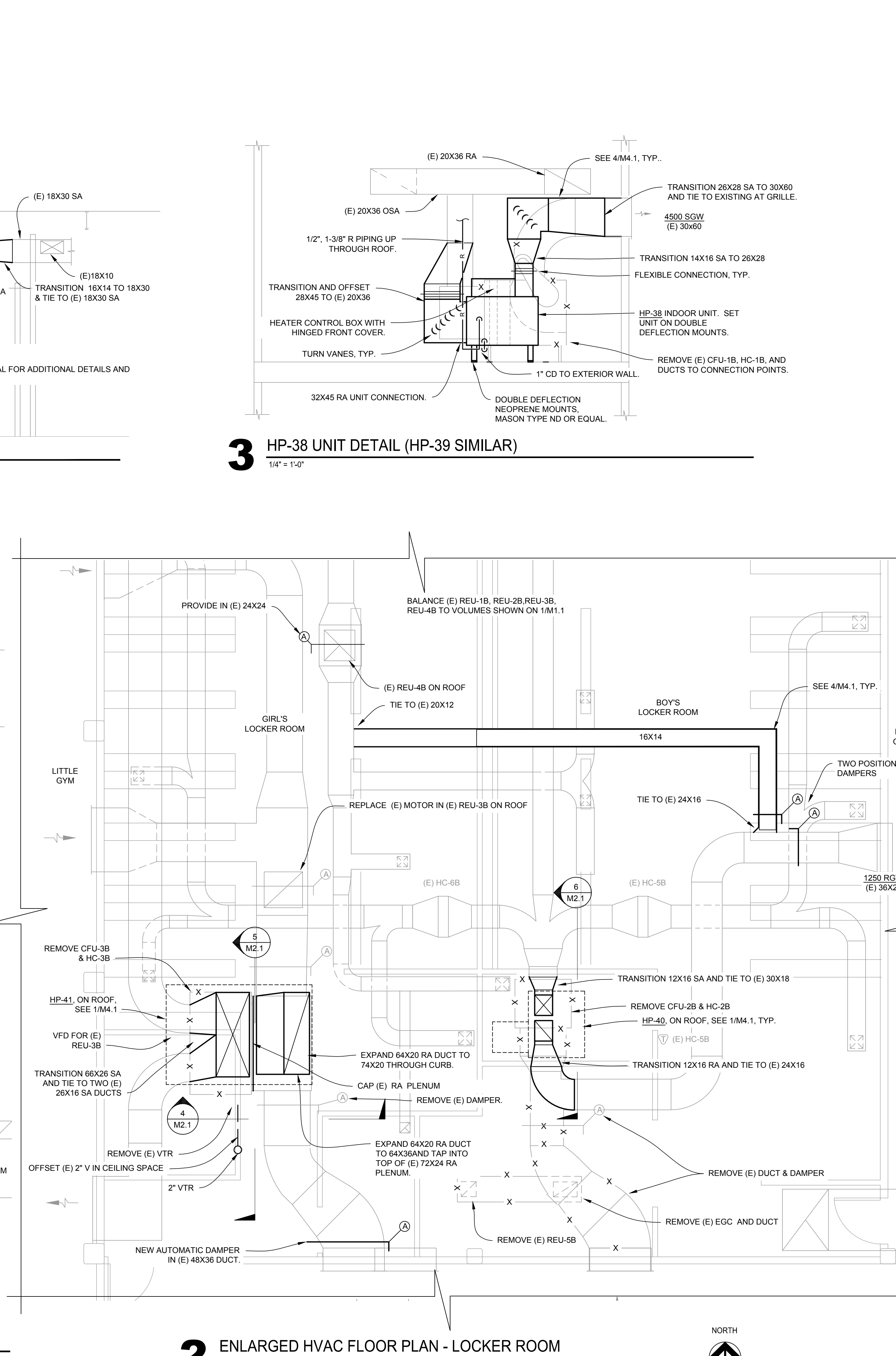
Δ --

ISSUE
DATE: 04-23-2014

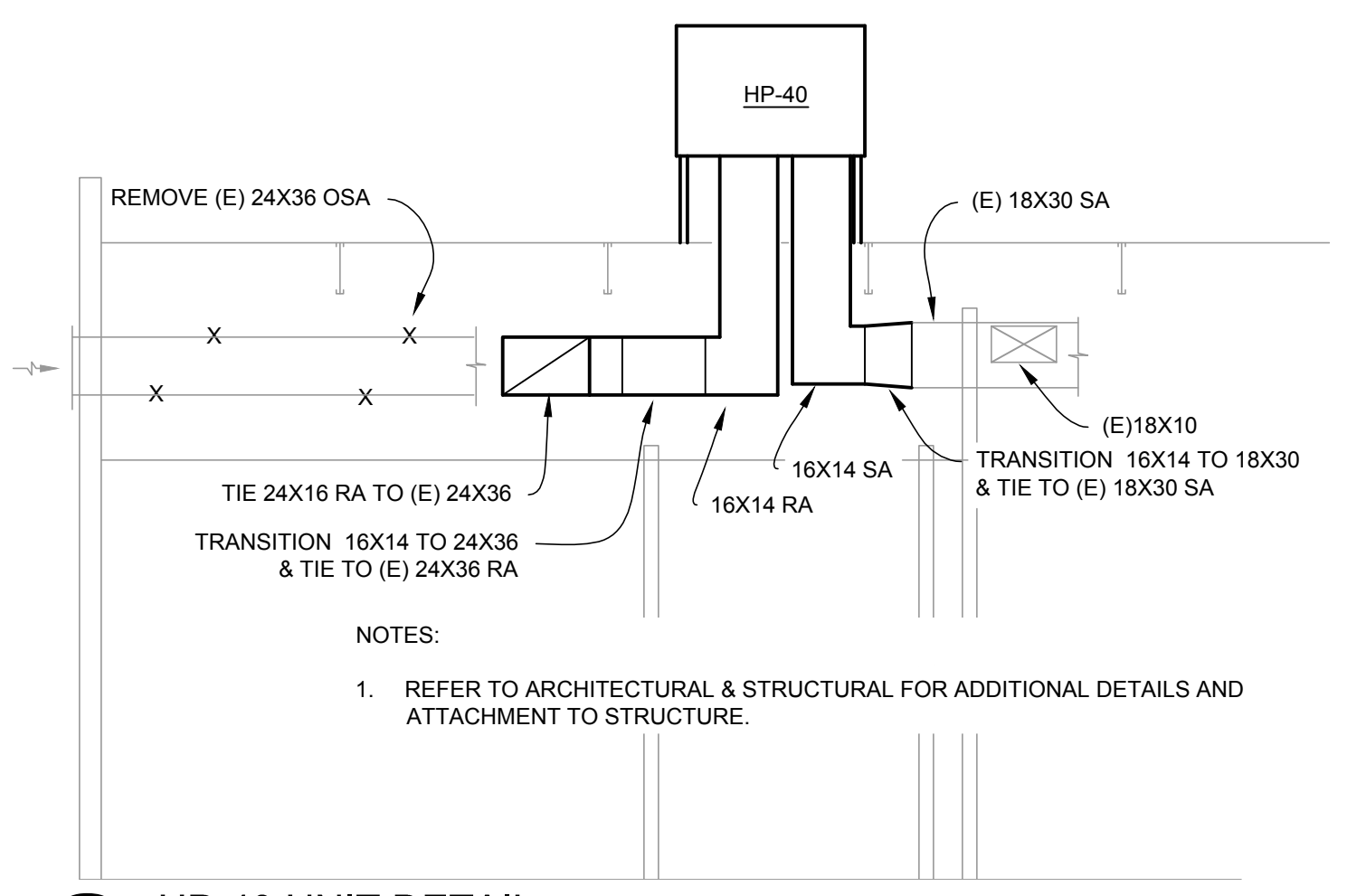
SCALE: AS NOTED



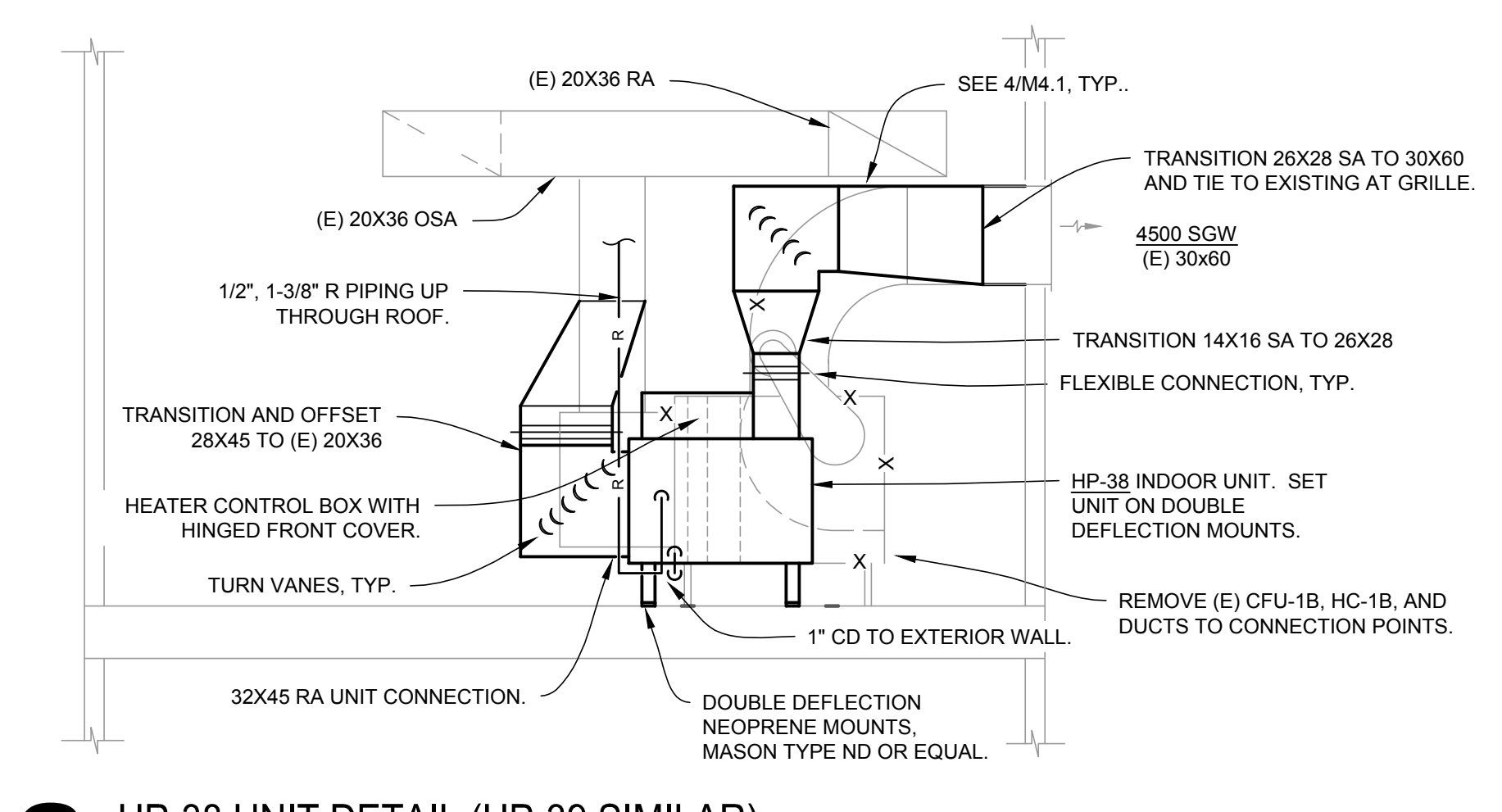
1 ENLARGED HVAC FLOOR PLAN - BIG GYM
 1/4" = 1'-0"



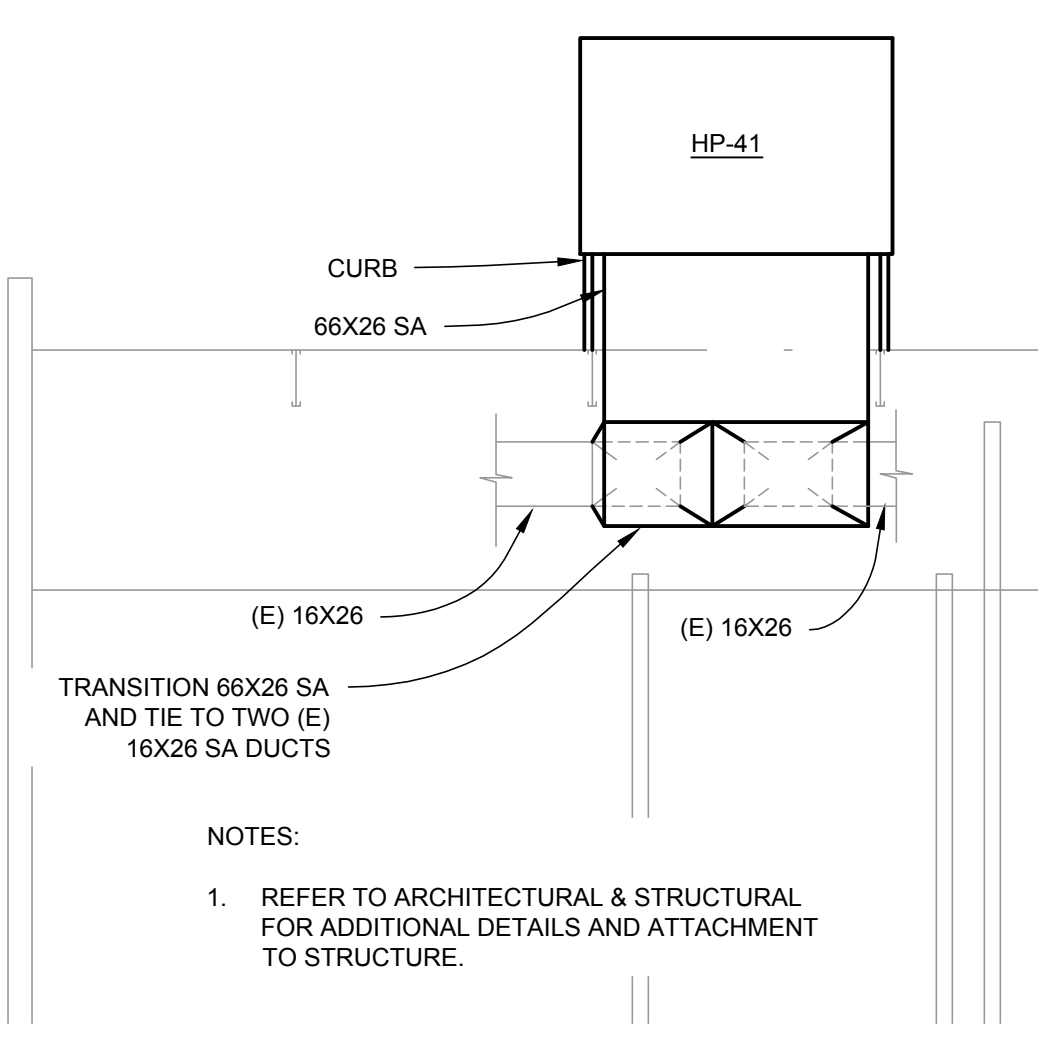
2 ENLARGED HVAC FLOOR PLAN - LOCKER ROOM
 1/4" = 1'-0"



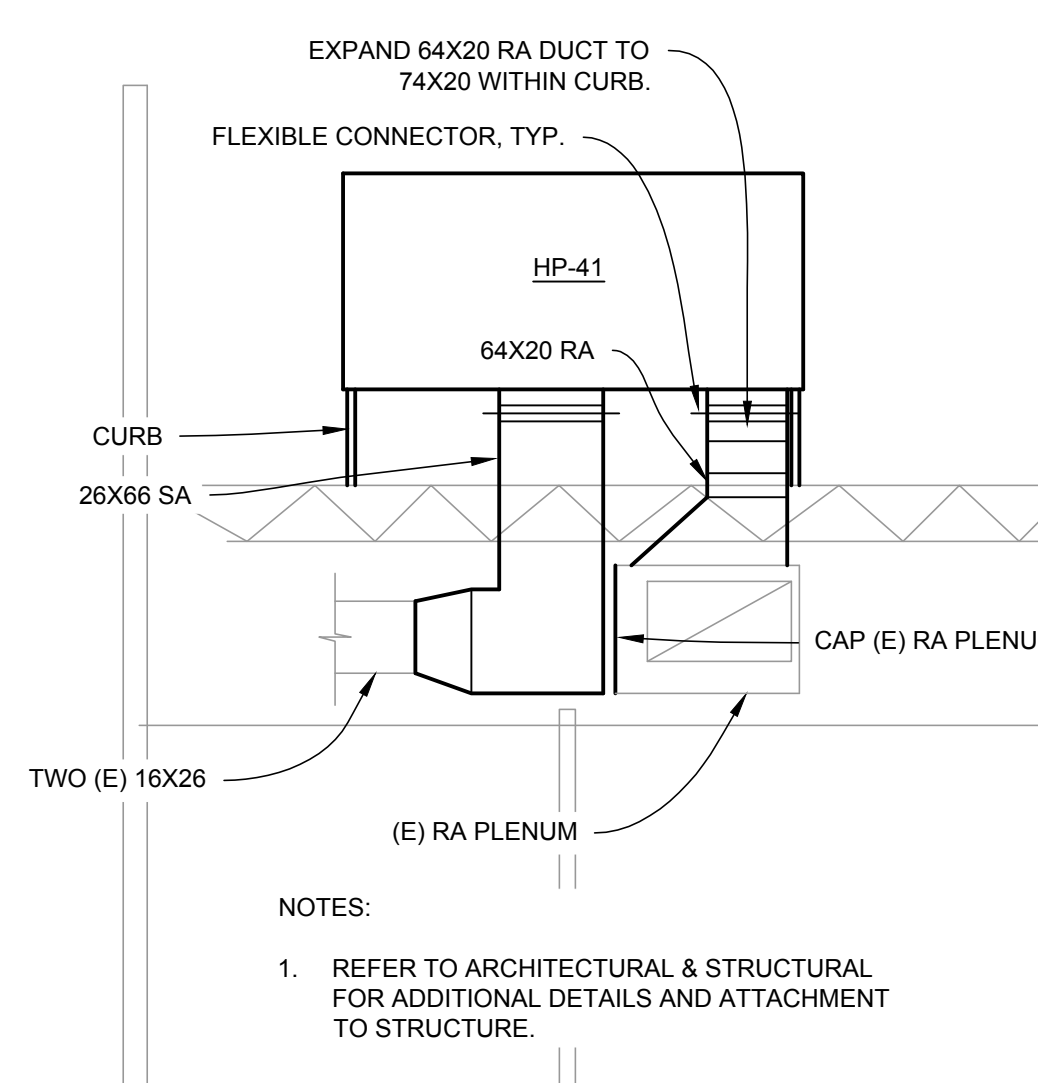
6 HP-40 UNIT DETAIL
 1/4" = 1'-0"



3 HP-38 UNIT DETAIL (HP-39 SIMILAR)
 1/4" = 1'-0"

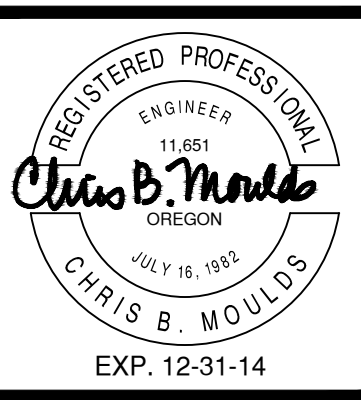


5 HP-41 UNIT DETAIL
 1/4" = 1'-0"



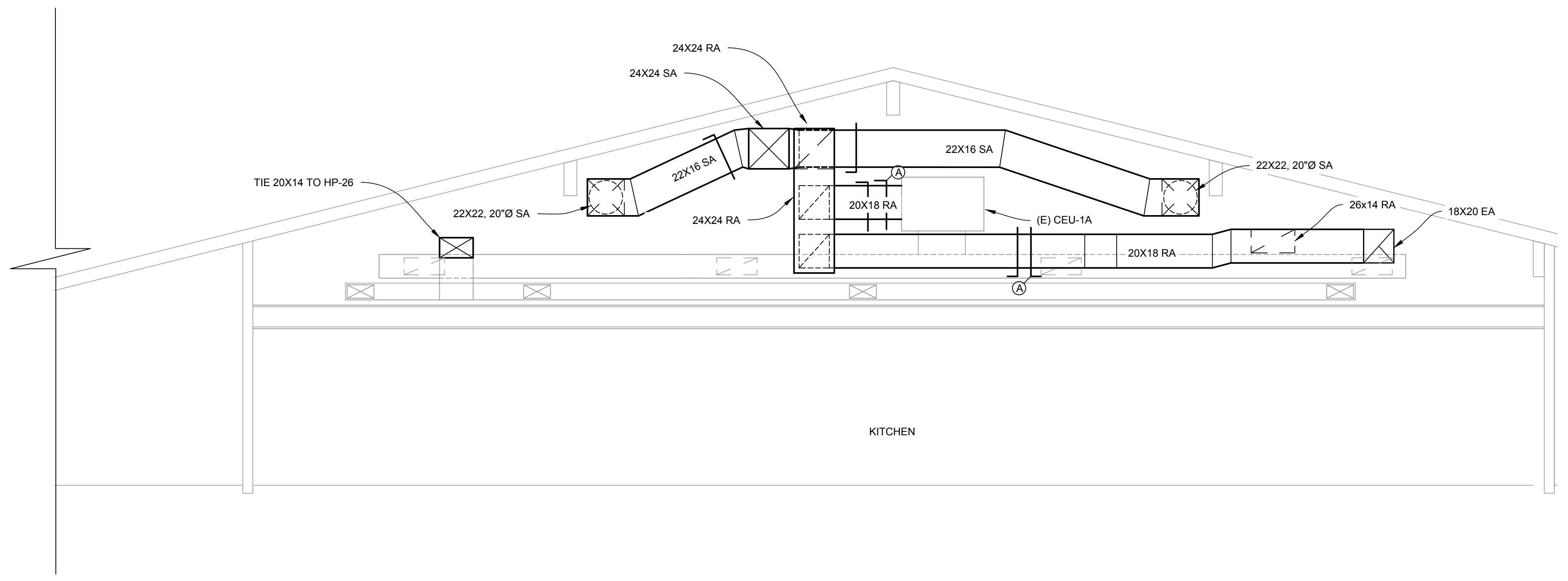
4 HP-41 UNIT DETAIL
 1/4" = 1'-0"

NOTES:
 1. REFER TO SUMMARY OF WORK FOR DESCRIPTION OF BASE BID AND ALTERNATE WORK.

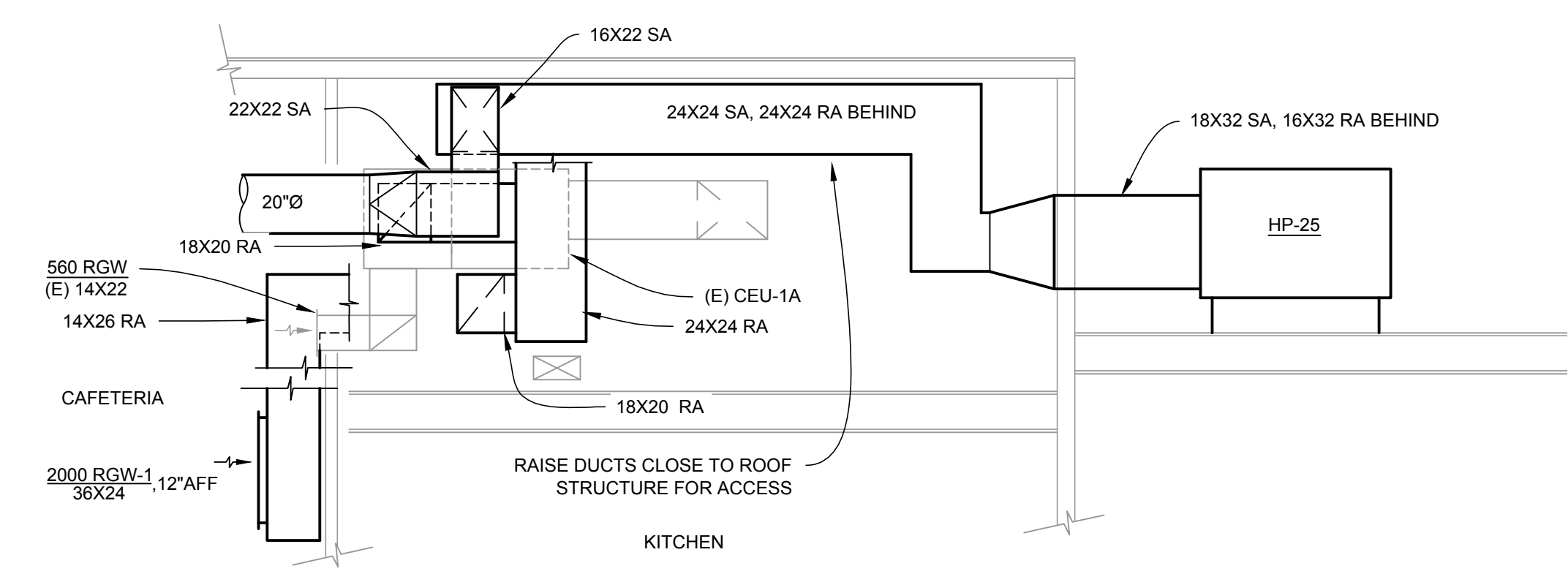


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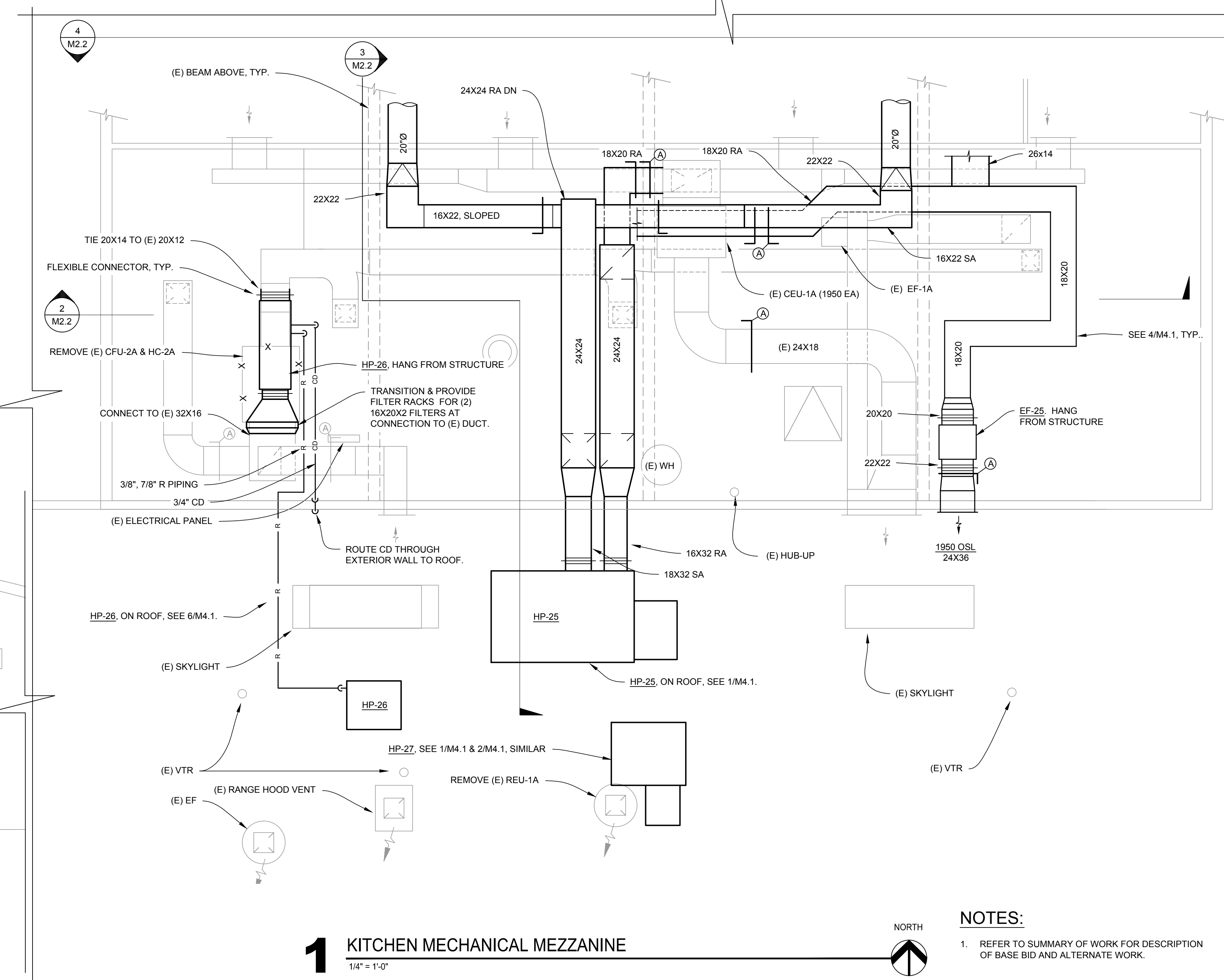
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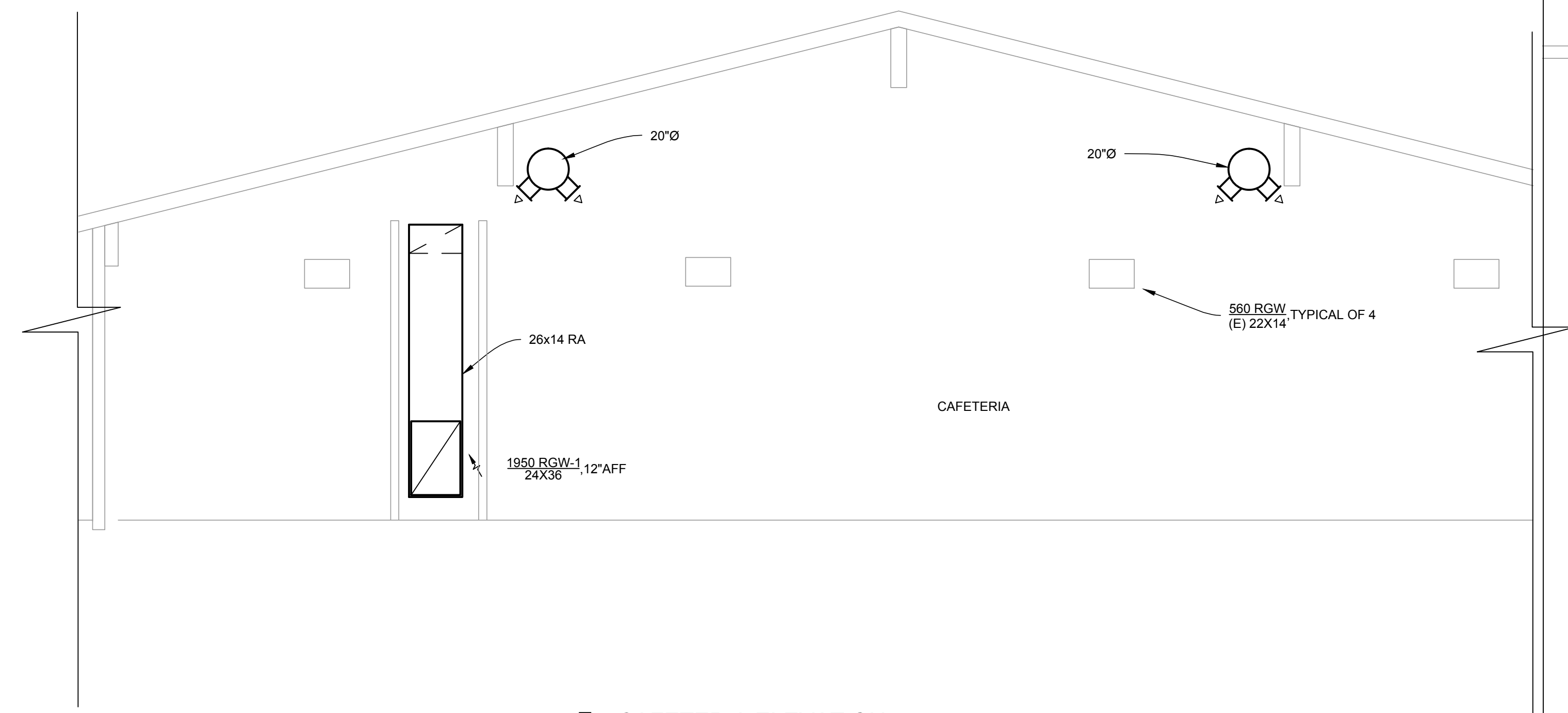
2 KITCHEN MECHANICAL MEZZANINE SECTION
1/4" = 1'-0"



3 KITCHEN MECHANICAL MEZZANINE SECTION
1/4" = 1'-0"



1 KITCHEN MECHANICAL MEZZANINE
1/4" = 1'-0"



4 CAFETERIA ELEVATION
1/4" = 1'-0"

**ENERGY EFFICIENCY UPGRADE
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HVAC ENLARGED PLANS & DETAILS

JOB#: --

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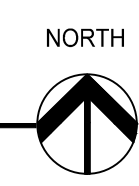
DATE: --

ISSUE DATE: 04-23-2014

SCALE: AS NOTED

NOTES:

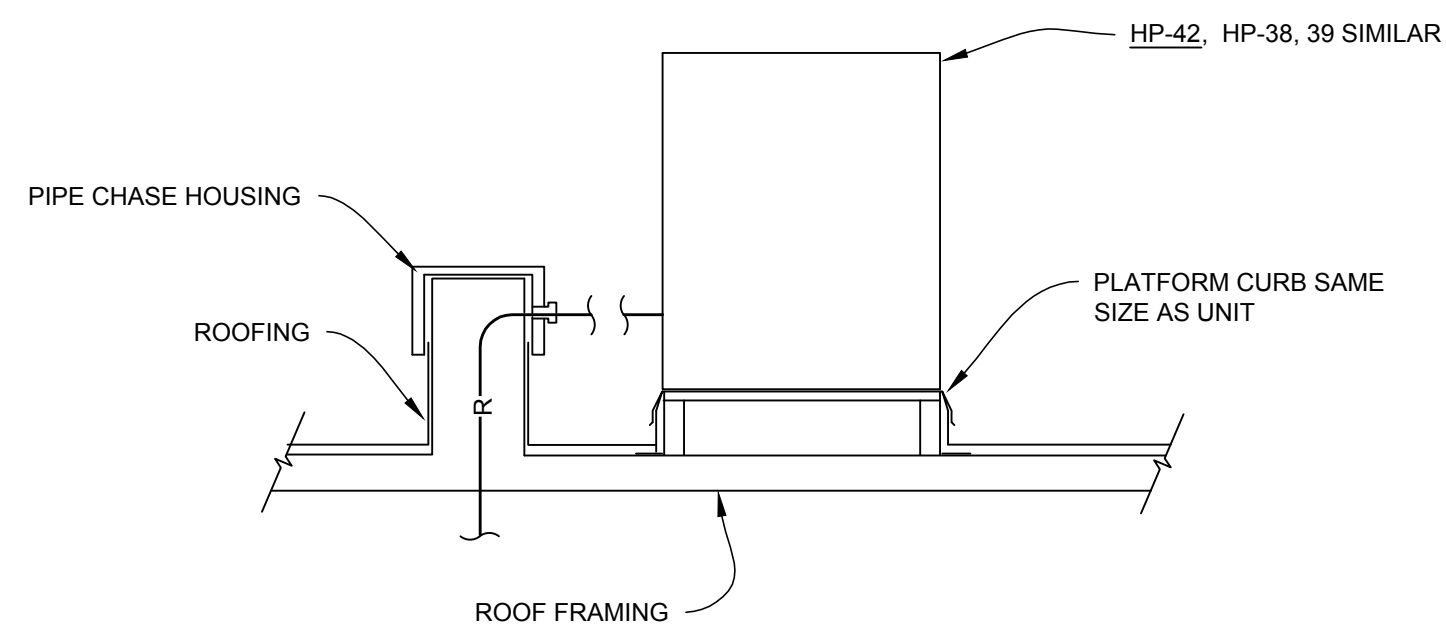
- REFER TO SUMMARY OF WORK FOR DESCRIPTION OF BASE BID AND ALTERNATE WORK.





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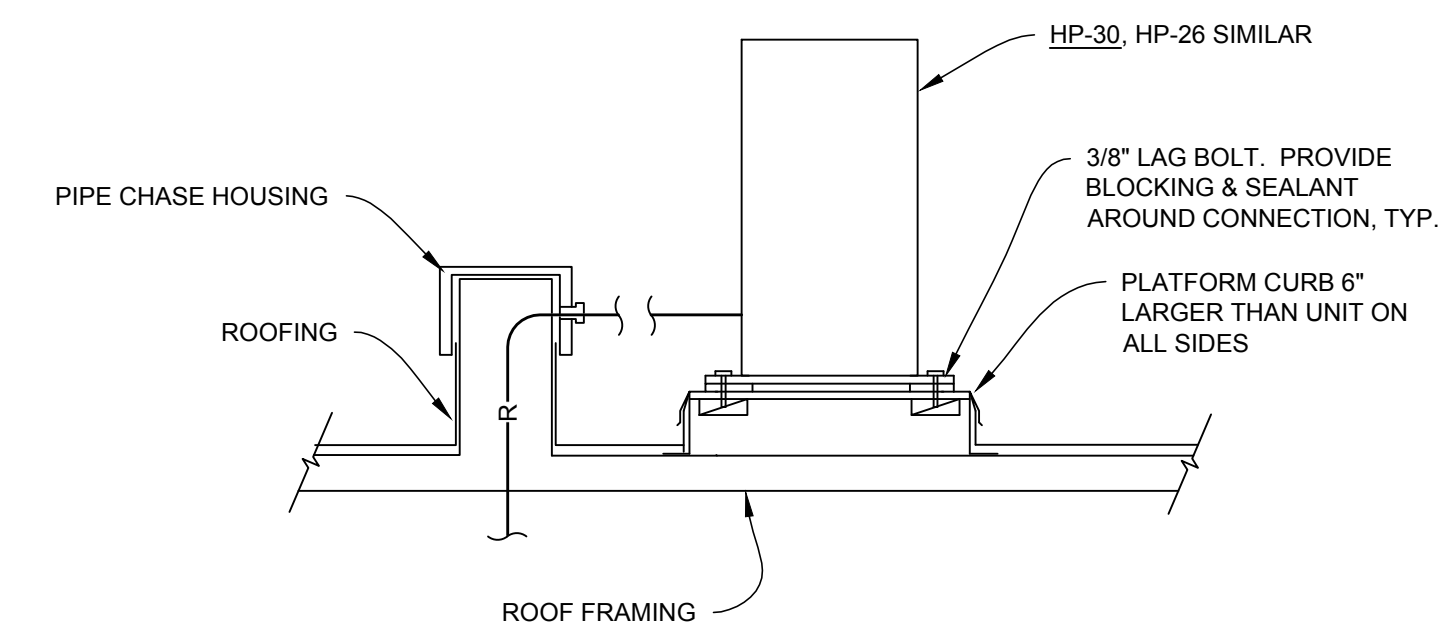
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- NOTES:
1. REFER TO ARCHITECTURAL & STRUCTURAL FOR ADDITIONAL DETAILS AND ATTACHMENT TO STRUCTURE.

6 HP-42 ROOFTOP UNIT

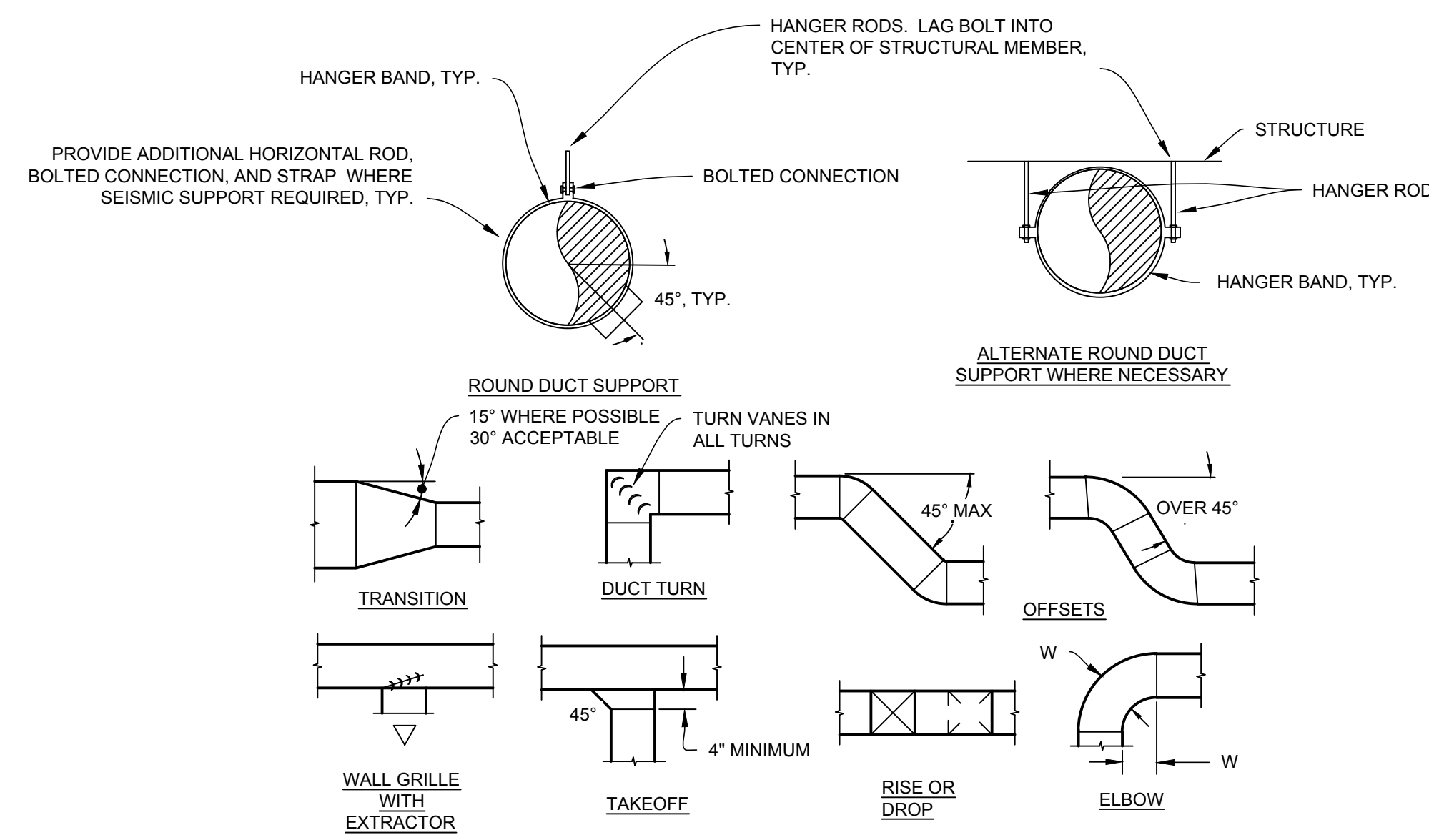
NO SCALE



- NOTES:
1. REFER TO ARCHITECTURAL & STRUCTURAL FOR ADDITIONAL DETAILS AND ATTACHMENT TO STRUCTURE.

5 HP-30 ROOFTOP UNIT

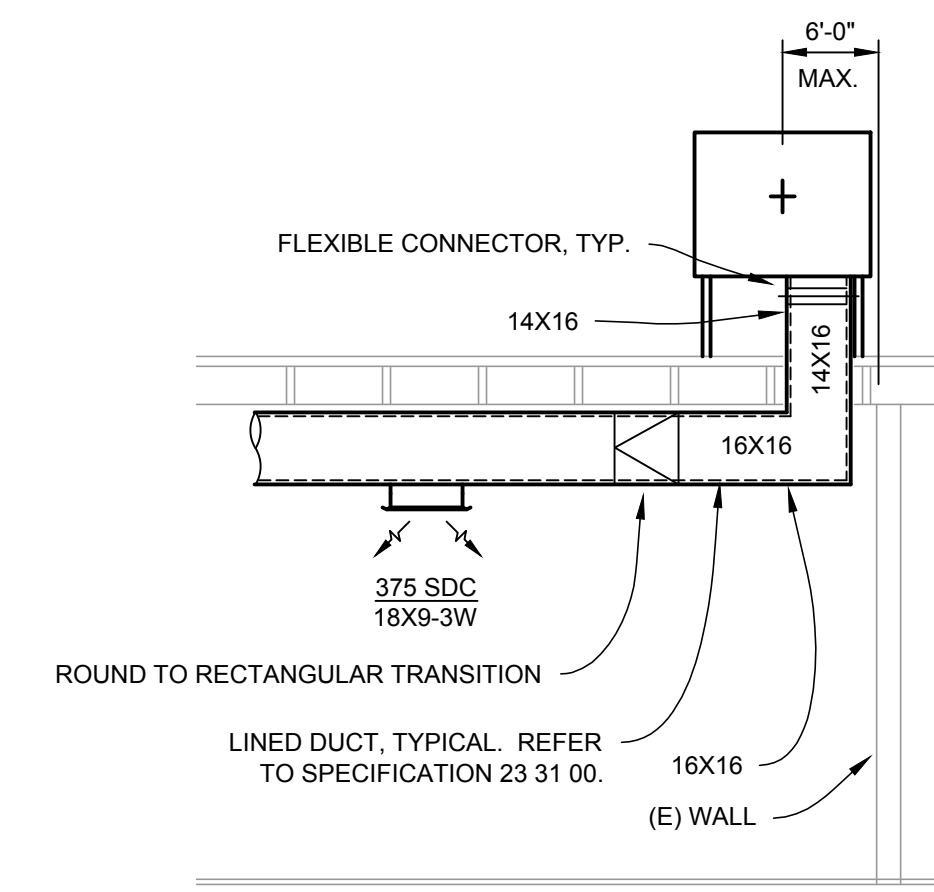
NO SCALE



- NOTES:
1. REFER TO ARCHITECTURAL & STRUCTURAL FOR ADDITIONAL DETAILS AND ATTACHMENT TO STRUCTURE.
 2. MEET SMACNA STANDARDS, REFER TO SPECIFICATION SECTION 23 31 00 FOR ADDITIONAL REQUIREMENTS.

4 DUCT CONSTRUCTION

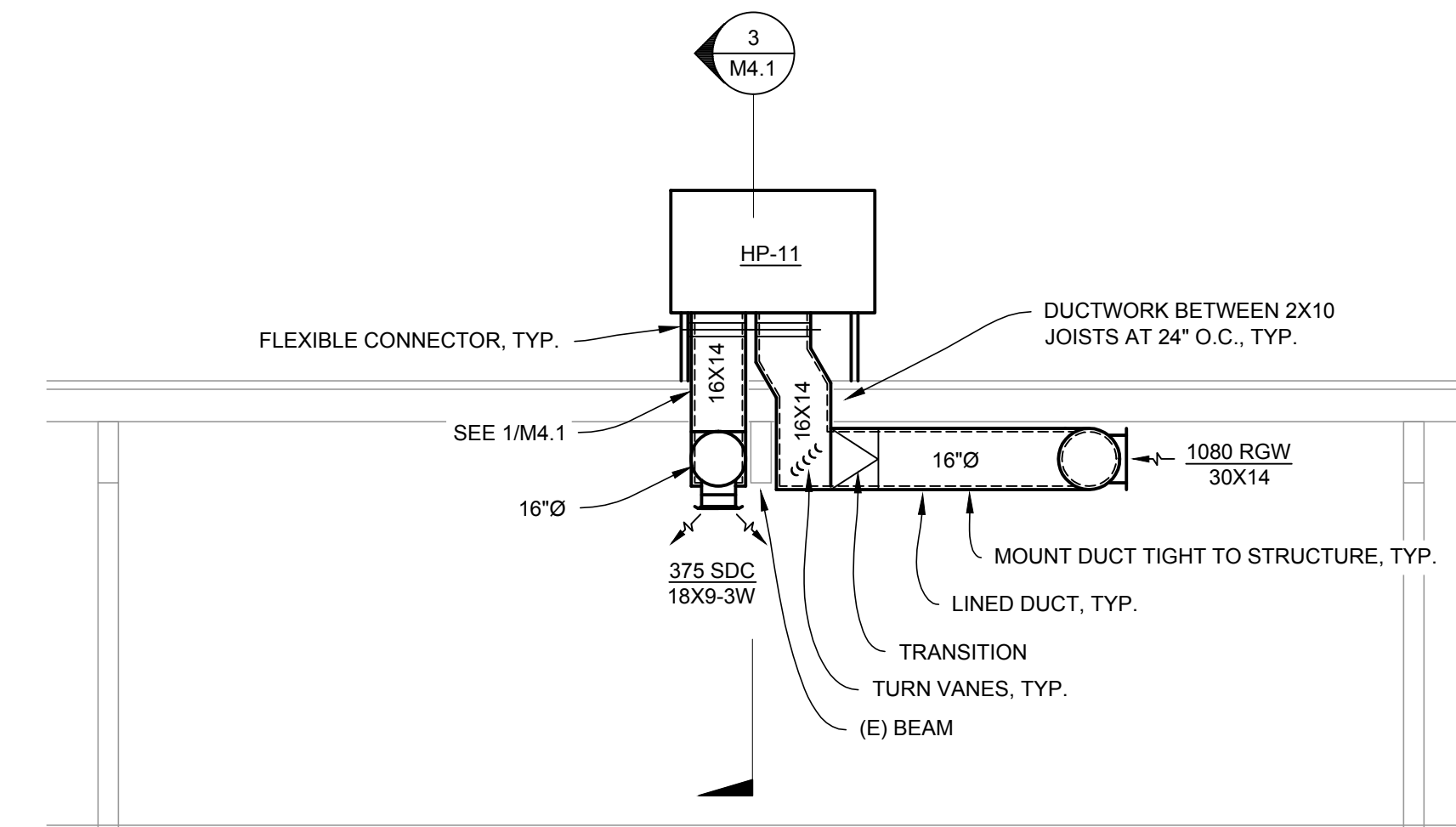
NO SCALE



HP-21 SHOWN. OTHER UNITS SIMILAR

3 TYPICAL CLASSROOM SECTION (CLASSROOM 11 SHOWN)

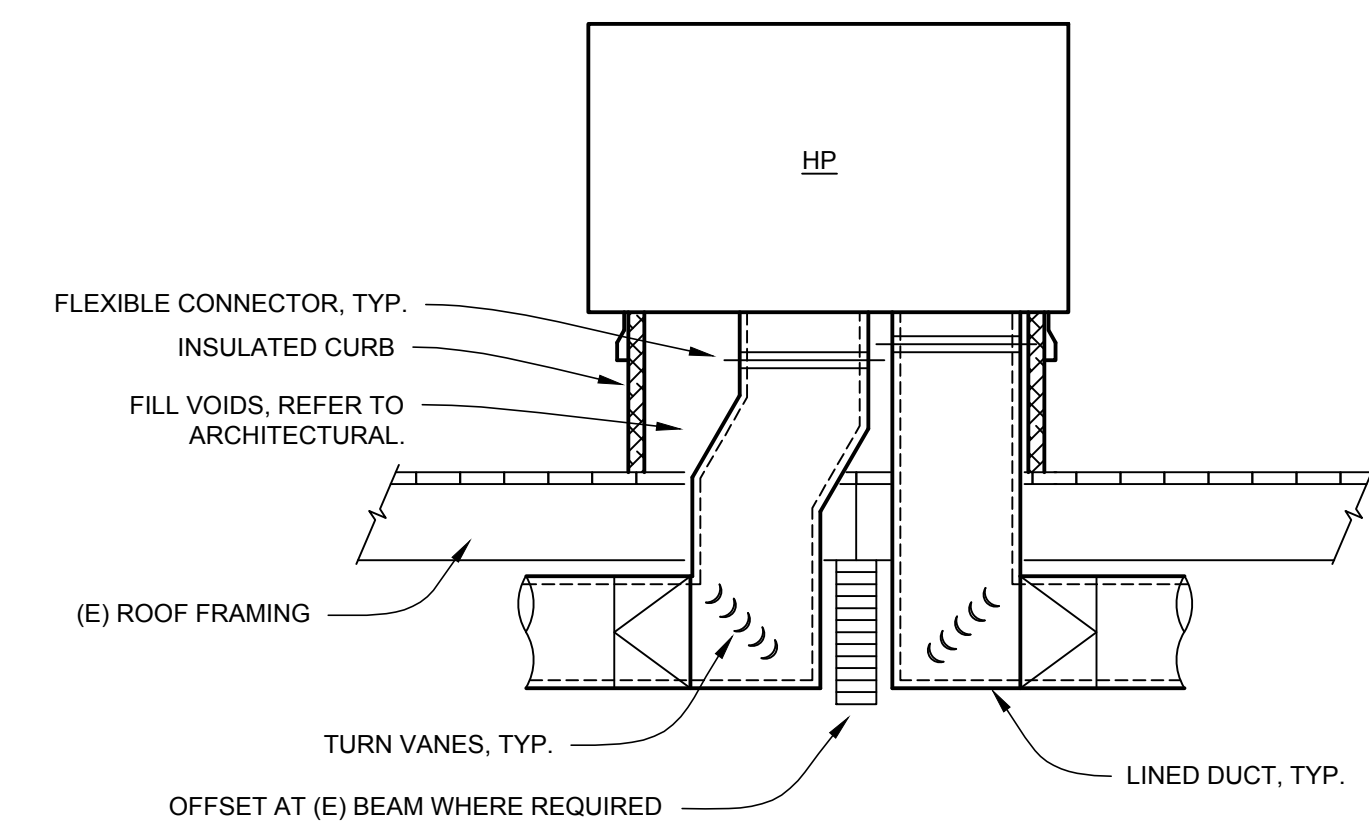
1/4" = 1'-0"



HP-11 SHOWN. OTHER UNITS SIMILAR

2 TYPICAL CLASSROOM SECTION (CLASSROOM 11 SHOWN)

1/4" = 1'-0"



- NOTES:
1. REFER TO ARCHITECTURAL & STRUCTURAL FOR ADDITIONAL DETAILS AND ATTACHMENT TO STRUCTURE
 2. TRAP CONDENSATE DRAIN AND ROUTE TO ROOF. PROVIDE CLEANOUT PLUG AT UNIT.
 3. PROVIDE SHIMS AT BASE OF CURB TO ENSURE THE UNIT IS LEVEL.

1 TYPICAL PACKAGE ROOFTOP UNIT DETAIL

NO SCALE

ENERGY EFFICIENCY UPGRADE
SPENCER BUTTE MIDDLE SCHOOL
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HYAC
DETAILS

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M4.1