







## MECHANICAL LEGEND

LINE WEIGHTS	
	EXISTING TO REMAIN
	TO BE DEMOLISHED
	NEW WORK
SYMBOLS	
	CONDENSATE DRAIN PIPING
	REFRIGERANT PIPING
	DROPPING OR RISING PIPE
	PIPE TO OR FROM ABOVE
	RECTANGULAR DUCT SIZE: FIRST DIMENSION IS SIDE DRAWN
	SPIRAL ROUND DOUBLE WALL DUCT
	ROUND DUCTWORK OR FLUE PIPING
	RECTANGULAR TO ROUND DUCT TRANSITION
	FLEXIBLE ROUND DUCT
	FLEXIBLE DUCT CONNECTION
	ADJUSTABLE DEFLECTOR VANES AT BRANCH DUCT
	SQUARE DUCT ELBOW WITH TURNING VANES
	MANUAL VOLUME DAMPER
	FIRE DAMPER IN DUCT THROUGH WALL
	FIRE/SMOKE DAMPER IN DUCT THROUGH WALL
	AUTOMATIC (MOTORIZED) CONTROL DAMPER
	ONE INCH THICK DUCT LINER
	SPLITTER DAMPER WITH SPLIT DIMENSIONS SHOWN
	VERTICAL OFFSET: ARROW INDICATES RISE
	FIRE DAMPER IN DUCT THROUGH FLOOR SLAB
	RADIANT FIRE DAMPER AT CEILING
	EQUIPMENT ON ROOF ABOVE
	WALL MOUNTED THERMOSTAT OR TEMPERATURE SENSOR
	WALL MOUNTED HUMIDISTAT OR HUMIDITY SENSOR
	WALL MOUNTED FAN SWITCH
	WALL MOUNTED TIME CLOCK
	DOOR GRILLE
	UNDERCUT DOOR 3/4"
	CONCRETE PAD
	POINT OF CONNECTION OR LIMIT OF SCOPE OF WORK
	CUBIC FEET PER MINUTE AIRFLOW
ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATE
BAS	BUILDING AUTOMATION SYSTEM
CFM	CUBIC FEET PER MINUTE
DIA	DIAMETER
db	DRY BULB
DUAL TEMP	DUAL TEMPERATURE
DX	DIRECT EXPANSION
EER	ENERGY EFFICIENCY RATING
EAT	ENTERING AIR TEMPERATURE
Edb	ENTERING DRY BULB
ESP	EXTERNAL STATIC PRESSURE
EVAP	EVAPORATOR
Emb	ENTERING WET BULB
FPM	FEET PER MINUTE
FT	FEET
H	HEIGHT
HP	HORSE POWER
IN	INCHES
IN. WG	INCHES WATER GAUGE
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
Ldb	LEAVING DRY BULB
Lwb	LEAVING WET BULB
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MIN	MINIMUM
OA	OUTDOOR AIR
PD	PRESSURE DROP
PSIG	POUNDS PER SQUARE INCH GAUGE
RPM	REVOLUTIONS PER MINUTE
SEER	SEASONAL ENERGY EFFICIENCY RATING
SQ. FT.	SQUARE FEET
TEMP	TEMPERATURE
TYP	TYPICAL
VFD	VARIABLE FREQUENCY DRIVE
W	WIDTH
Wb	WET BULB
°F	DEGREES FAHRENHEIT
ΔT	TEMPERATURE DIFFERENCE

## WALL HUNG HEAT PUMP SCHEDULE

MARK	BRAND MODEL No.	SUPPLY CFM	OA CFM FROM ERV	TOTAL COOLING MBH	SENSIBLE COOLING MBH	HEAT OUTPUT MBH	ELEC HEAT kW	NOTES
WHHP-1	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-2	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-3	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-4	T36S1DB09R	1100	200	33.8	26.2	33.0	6.0	1,2,3,4,5,6,7,8,9
WHHP-5	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-6	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-7	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-8	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-9	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-10	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-11	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-12	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-13	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-14	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-15	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9
WHHP-16	T30S1DB06R	900	200	28.0	21.2	27.8	6.0	1,2,3,4,5,6,7,8,9

1. COOLING CAPACITIES BASED ON AIR ENTERING EVAPORATOR AT 80° Fdb, 67° Fwb AND 95° F AMBIENT AIR TEMPERATURE
2. HEAT PUMP HEATING CAPACITY AT 47° F
3. PROVIDE HOT GAS REHEAT DEHUMIDIFICATION
4. PROVIDE AUXILIARY ELECTRIC HEATER OF CAPACITY SCHEDULED
5. PROVIDE REMOTE WALL MOUNTED THERMOSTAT
6. PROVIDE ENERGY RECOVER VENTILATOR WITH ROTARY CASSETTE
7. PROVIDE CARRIER HVAC CONTROLS COMPATIBLE WITH SCHOOLS NEW EMS
8. INTEGRAL CIRCUIT BREAKER OR DISCONNECT
9. PROVIDE GLOBAL PLASMA SOLUTIONS AIR PURIFICATION UNIT MODEL GPS-FC-3BAS AFTER FILTER AND BE FIRE COOLING COIL

## GRILLE SCHEDULE

MARK	TITUS MODEL No.	FACE SIZE	NECK SIZE	SERVICE	FINISH	NOTES
(A)	TDC-AA	24x24	8"Ø	SUPPLY	WHITE	1,2,3,4
(B)	TDC-AA	24x24	10"Ø	SUPPLY	WHITE	1,2,3,4
(C)	TDC-AA	24x24	12"Ø	SUPPLY	WHITE	1,2,3,4
(D)	50F	24x24	- - -	RETURN	WHITE	7,8
(E)	30RS	32x14	30x12	SUPPLY	WHITE	3,5,6
(F)	30RS	24x10	22x8	SUPPLY	WHITE	3,5,6
(G)	35RS	50x34	48x32	RETURN	WHITE	3,5,6
(H)	35RS	24x12	22x10	RETURN	WHITE	3,5,6
(J)	TDC-AA	24x24	6"Ø	SUPPLY	WHITE	1,2,3,4
(K)	33RL	50x50	48x48	RETURN	WHITE	6,10
(X)	EXISTING					9

1. LOUVER FACE SUPPLY DIFFUSER
2. IN 24x24 PANEL FOR LAY-IN T-BAR CEILING
3. PROVIDE STEEL OPPOSED BLADE BALANCING DAMPER
4. ROUND NECK
5. RECTANGULAR NECK
6. FRONT BLADES PARALLEL TO THE SHORT DIMENSION
7. 1/2"x1/2"x1/2" ALUMINUM EGG-CRATE CEILING REGISTER
8. OPEN TO RETURN AIR PLENUM
9. BALANCE TO CFM SHOWN
10. HEAVY DUTY, 3/4" SPACING, SINGLE DEFLECTION RETURN GRILLE

## GAS DUCT HEATER SCHEDULE

MARK	MODINE MODEL No.	MBH INPUT	AIR ΔT °F	CFM	DUCT SIZE		WINTER CONDITIONS		NOTES
					W	H	EDB	LDB	
GDH-1	DFS-250	250.0	35.0	5250	48"	16"	60.0	95.0	1,2,3,4,5

1. FLANGED TYPE GAS DUCT HEATER WITH INTEGRAL CONTROL BOX
2. PROVIDE SEPARATED COMBUSTION KIT
3. PROVIDE AIR PROVING SWITCH, OVER-TEMPERATURE CUT-OUT AND CONTROL CONTACTOR
4. PROVIDE ELECTRONIC MODULATION CONTROLS
5. PROVIDE BMS COMPATIBLE GAS CONTROLS

## DUCTLESS SPLIT SYSTEM SCHEDULE

MARK	INDOOR UNIT MITSUBISHI MODEL No.	OUTDOOR UNIT MITSUBISHI MODEL No.	EVAP CFM	TOTAL COOLING MBH	TOTAL HEATING MBH	SEER	NOTES
DSIU/DSOU-1	MSZ-FE09NA	MUZ-FE09NA	343	9.0	10.9	26.0	12,3,4,5,6,7,8
DSIU/DSOU-2	SLZ-KA09NA	SUZ-KA09NA	350	9.0	10.9	26.0	12,4,5,6,7,8,9,10

1. COOLING CAPACITIES BASED ON AIR ENTERING EVAPORATOR AT 80° F db, 67° F wb AND 95° F AMBIENT AIR TEMPERATURE
2. HEATING CAPACITIES BASED ON REVERSE-CYCLE HEAT PUMP OPERATION AT 47° F AMBIENT AIR TEMPERATURE
3. HIGH SIDEWALL INDOOR UNIT
4. SUPPLY AIRFLOW CFM BASED ON HIGH SPEED AND DRY COIL
5. PROVIDE CONDENSATE PUMP
6. PROVIDE LOW AMBIENT CONTROL
7. PROVIDE REMOTE WALL MOUNTED THERMOSTAT
8. PROVIDE TWO EQUIPMENT SUPPORT RAILS UNDER CONDENSING UNIT
9. CONNECT NEW CONDENSATE LINE TO EXISTING CONDENSATE LINE ABOVE CEILING
10. CEILING CASSETTE UNIT

## FAN COIL UNIT SCHEDULE

MARK	MANUFACTURER	MODEL No.	TOTAL SUPPLY CFM	OA CFM	FAN MOTOR HP	E.S.P. IN. W.G.	COOLING		HEATING		NOTES
							TOTAL MBH	SENSIBLE MBH	HEAT PUMP/AUXILIARY MBH	HEAT PUMP/AUXILIARY @ 208V/3Ø	
FCU-1	AAON	V3-BRB-8-0-141D-3B2	900	135	3/4	0.5	35.2	26.3	28.8	10.5	1,2,3
FCU-2	AAON	V3-ARB-8-0-141D-3B2	900	135	3/4	0.5	35.2	26.3	28.8	10.5	1,2,3
FCU-3	AAON	V3-ARB-8-0-141D-3B2	700	135	3/4	0.5	35.2	26.3	28.8	10.5	1,2,3
FCU-4	AAON	V3-BRB-8-0-141D-3B2	900	135	3/4	0.5	35.2	26.3	28.8	10.5	1,2,3
FCU-5	AAON	V3-ARB-8-0-141D-3B2	900	135	3/4	0.5	35.2	26.3	28.8	10.5	1,2,3
FCU-6	CARRIER	FX4D049	1600	135	3/4	0.5	48.9	40.2	48.9	7.5	1,3

1. VERTICAL CABINET FAN COIL UNIT WITH TOP DISCHARGE AND BOTTOM RETURN
2. PROVIDE HOT GAS REHEAT DEHUMIDIFICATION
3. PROVIDE GLOBAL PLASMA SOLUTIONS AIR PURIFICATION UNIT IN SUPPLY DUCT
4. PROVIDE 1/4" THICK NEOPRENE WAFFLE-PAD UNDER ALL SUPPORT POINTS

## HEAT PUMP UNIT SCHEDULE

MARK	MANUFACTURER	MODEL No.	TOTAL COOLING MBH	SENS. COOLING MBH	HEAT PUMP MBH	MIN SEER	NOTES
HP-1	AAON	CFA-003-A-A-8-DJ00H	35.2	26.3	28.8	14.0	1,2,3
HP-2	AAON	CFA-003-A-A-8-DJ00H	35.2	26.3	28.8	14.0	1,2,3
HP-3	AAON	CFA-003-A-A-8-DJ00H	35.2	26.3	28.8	14.0	1,2,3
HP-4	AAON	CFA-003-A-A-8-DJ00H	35.2	26.3	28.8	14.0	1,2,3
HP-5	AAON	CFA-003-A-A-8-DJ00H	35.2	26.3	28.8	14.0	1,2,3
HP-6	CARRIER	Z9HCD048	48.9	40.2	48.9	14.0	1,2,3

1. COOLING BASED ON 80°db/67°wb, 95° AMBIENT
2. HEATING BASED ON 17°db
3. PROVIDE 1/4" THICK NEOPRENE WAFFLE-PAD UNDER ALL SUPPORT POINTS

## EXHAUST FAN SCHEDULE

MARK	GREENHECK MODEL No.	CFM	APPROX ESP IN. WG	FAN RPM	MOTOR HP	MAX SONES	NOTES
EF-1	G-183-VG	2100	0.5	810	1/8	8.2	2,3,6
EF-2	G-75-VG	400	0.25	1550	1/8	4.9	2,3,6
EF-3	G-60-VG	125	0.25	1560	1/8	3.7	2,3,6
EF-4	SP-80-VG	75	0.25	935	1/20	1.0	1,2,3,4,5
EF-5	G-87-VG	150	0.25	1000	1/4	3.9	2,3,6

1. CEILING MOUNTED FAN
2. DIRECT DRIVE
3. PROVIDE DISCONNECT SWITCH
4. PROVIDE INLET AND DISCHARGE DUCT CONNECTION FLANGES
5. PROVIDE SPRING RUBBER IN-SHEAR ISOLATORS
6. PROVIDE NEW ROOF CURB OR CURB ADAPTER IF REQUIRED

## AIR HANDLING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL No.	TOTAL SUPPLY CFM	OA CFM	TOTAL COOLING MBH	SENSIBLE COOLING MBH	APPROX ESP IN. WG	MOTOR HP	GAS HEAT INPUT MBH	NOTES
AHU-1	CARRIER	(2) 99SP2A080E17-16	2800	400	84.6	68.4	0.5	(2) 2.0	160	1,2,5,6,8
AHU-2	AAON	V3-DRB-8-0-162C-000	5250	1000	192.9	148.4	0.6	4.0	- - -	1,2,3,4,7,8

1. VERTICAL UP FLOW UNIT WITH TOP DISCHARGE
2. COOLING CAPACITIES BASED ON AIR ENTERING EVAPORATOR AT 80° Fdb, 67° Fwb
3. PROVIDE DEHUMIDIFICATION CYCLE. SEE SPECIFICATIONS FOR DEHUMIDIFICATION CONTROL SEQUENCE
4. HEATING PROVIDED BY SEPARATED COMBUSTION DUCT HEATER
5. PROVIDE TWINNING KIT
6. PROVIDE GLOBAL PLASMA SOLUTIONS AIR PURIFICATION UNIT, MODEL GPS-FC-3BAS. MOUNT AFTER FILTER & BEFORE COOLING COIL
7. PROVIDE TWO (2) GLOBAL PLASMA SOLUTIONS AIR PURIFICATION UNITS, MODEL GPS-FC-3BAS. MOUNT AFTER FILTER & BEFORE COOLING COIL
8. PROVIDE ENTHALPY ECONOMIZER

## AHU CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL No.	TOTAL COOLING MBH	SENS. COOLING MBH	MIN EER	NOTES
AC-1	CARRIER	(2) 24ACC448	84.6	68.4	12.0	1,2
AC-2	AAON	CFA-018-C-A-8-DC00K	192.9	148.4	12.3	1,2

1. COOLING BASED ON 80°db/67°wb, 95° AMBIENT

## ELECTRIC CEILING HEATER SCHEDULE

MARK	MARKET-TRI MODEL No.	KW	HEAT OUTPUT MBH	AIR ΔT °F	CFM	NOTES
ECH-1	F3483A1	3.0	10,236	22.0	600	1,2
ECH-2	F3483A1	3.0	10,236	22.0	600	1,2
ECH-3	F3483A1	3.0	10,236	22.0	600	1,2
ECH-4	F3483A1	3.0	10,236	22.0	600	1,2
ECH-5	F3483A1	3.0	10,236	22.0	600	1,2

1. ELECTRIC CEILING HEATER WITH INTEGRAL CONTROL BOX
2. PROVIDE MANUAL RESET

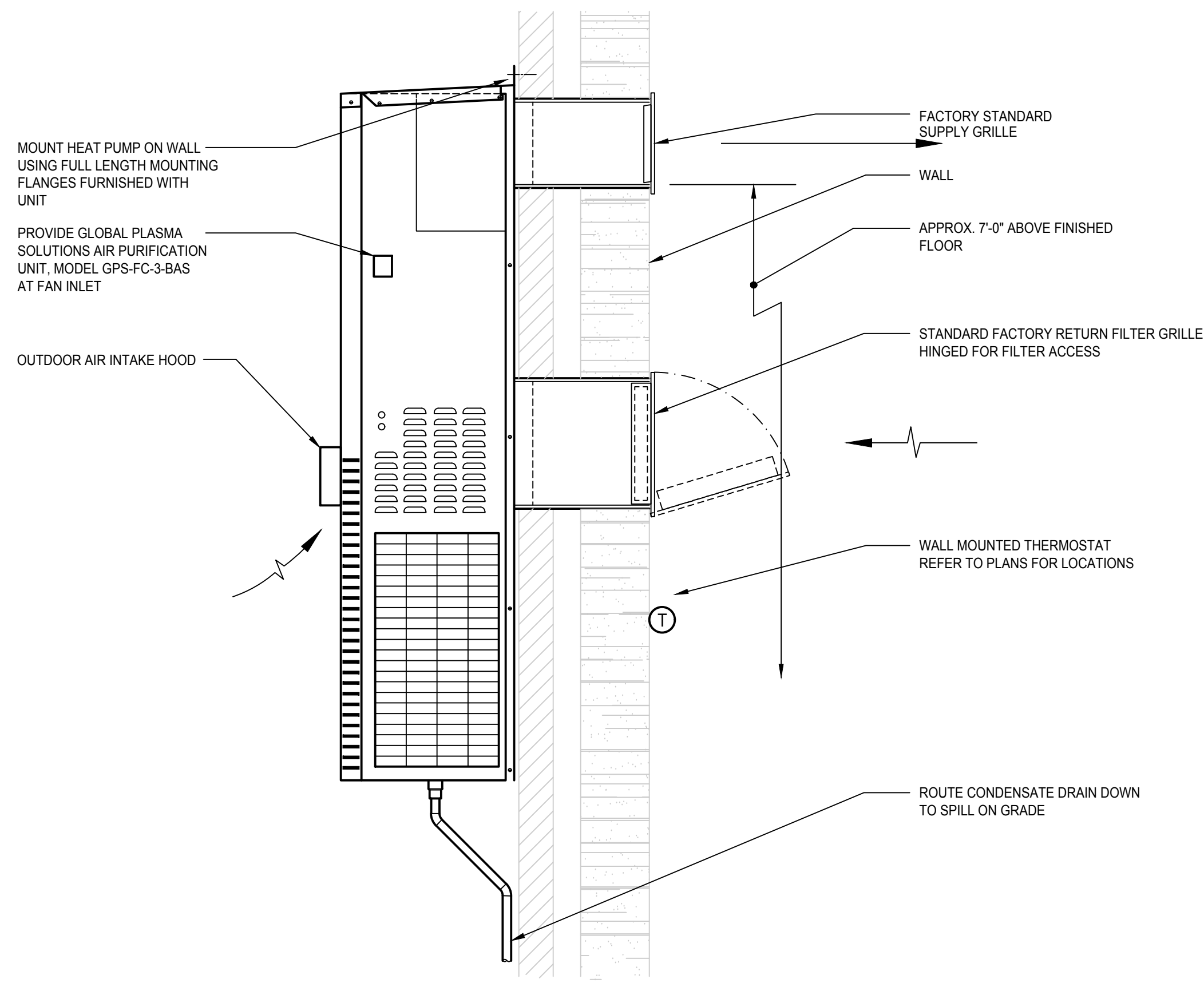
## GENERAL DEMOLITION NOTES:

1. FIELD VERIFY EXISTING CONDITIONS. LOCATION OF EXISTING EQUIPMENT, DUCT AND PIPE ROUTES MAY DEViate SLIGHTLY FROM WHAT IS SHOWN ON THE DRAWINGS.
2. WHERE EQUIPMENT, DUCTS AND PIPES, CONTROL DEVICES, CONDUITS, CABLES AND WIRING ARE DISCONNECTED FOR THE REMOVAL OF EQUIPMENT, THEY SHALL BE RECONNECTED, TESTED AND MADE OPERATIONAL.
3. UNLESS OTHERWISE NOTED, ALL MATERIALS & EQUIPMENT SHOWN OR SPECIFIED TO BE REMOVED SHALL BE THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT SITE.
4. DO ANY AND ALL CUTTING AND PATCHING REQUIRED FOR THIS SCOPE OF WORK, RESTORING ALL SURFACES TO THEIR ORIGINAL CONDITION TO MATCH SURROUNDING FINISHES. ALTERATIONS TO ANY STRUCTURAL MEMBER, EITHER STEEL OR CONCRETE, SHALL REQUIRE THE APPROVAL OF THE OWNER.
5. REMOVE ALL SUPPORTING FACILITIES NO LONGER NEEDED OR MADE OBSOLETE BY THE NEW EQUIPMENT AND MATERIALS FURNISHED UNDER THIS CONTRACT. SUCH REMOVAL INCLUDES, BUT IS NOT LIMITED TO, SUPPORT BRACKETS AND ATTACHMENTS, ABANDONED PIPING SUPPORT BRACKETS AND ATTACHMENTS, REMOVAL OF PIPING SHALL INCLUDE ASSOCIATED VALVES, WELDED SUPPORTS SHALL BE REMOVED FLUSH WITH SURFACE. SURFACE SHALL BE GROUND SMOOTH, CLEANED PRIMED AND PAINTED TO MATCH SURROUNDING FINISH.
6. AFTER EXISTING PIPING AND DUCTWORK ARE REMOVED, PATCH THE EXISTING FLOOR OR WALL OPENINGS TO MATCH SURROUNDING SURFACES AND MAINTAIN THE FIRE RATING.
7. WHERE EQUIPMENT IS SHOWN TO BE REMOVED IT SHALL BE REMOVED COMPLETE WITH ASSOCIATED PIPING, CONTROLS AND ASSOCIATED CONDUITS AND WIRING.
8. "VERIFY" SHALL MEAN CHECK EXISTING AS-INSTALLED CONDITIONS AGAINST DRAWINGS AND SPECIFICATION AND ADJUST NEW WORK TO MATCH EXISTING. OBTAIN RULING FROM THE OWNER CONTRACTING OFFICER ON ANY ITEMS REQUIRING CLARIFICATION.
9. BEFORE REMOVAL OF ANY SERVICES SUCH AS PIPING, LABEL EACH EXISTING PIPE AT THE POINT OF RECONNECTION BETWEEN EXISTING AND NEW SERVICES TO ENSURE PROPER RECONNECTION WITHOUT CROSSOVERS.

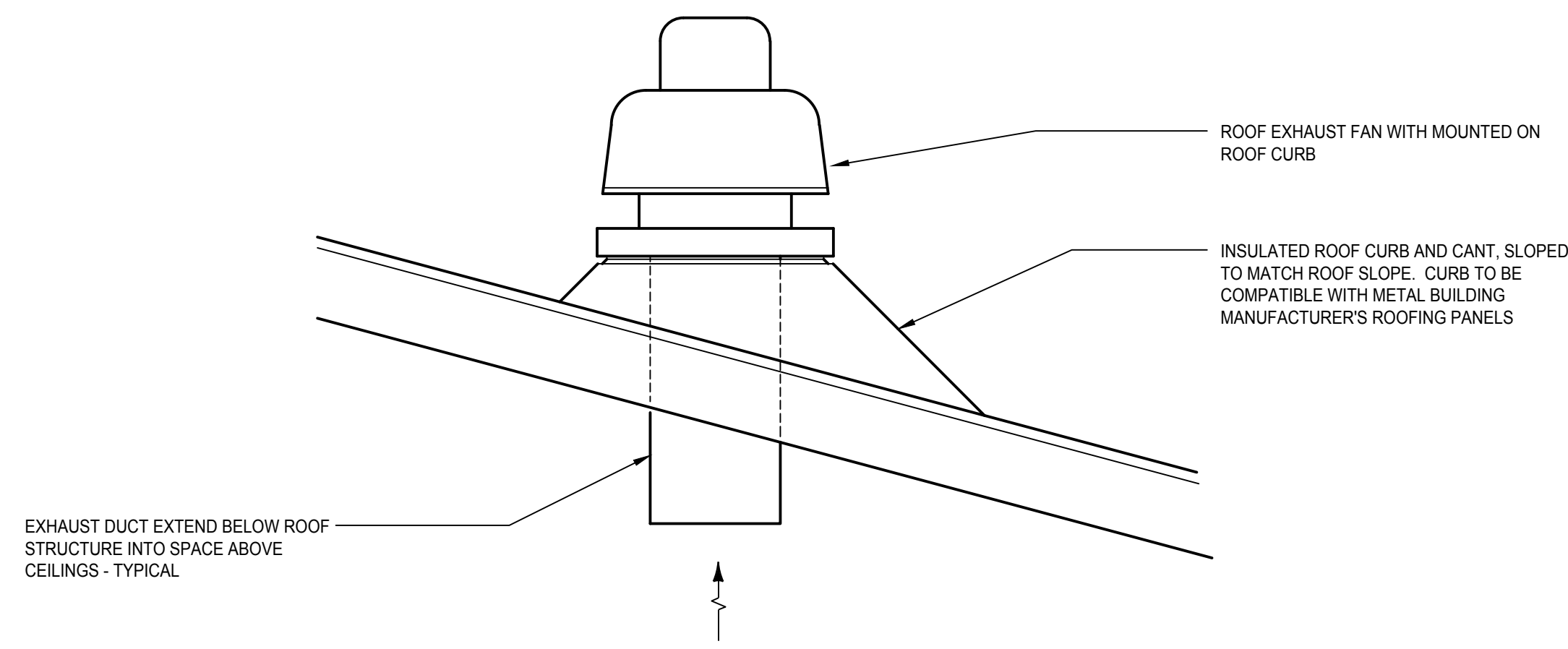
## GENERAL NOTES:

1. VERIFY ALL SIZES, MATERIALS, TEMPERATURES AND PRESSURES BEFORE ORDERING OR FABRICATION OF ANY MATERIALS.
2. MECHANICAL DRAWINGS DO NOT SPECIFY VOLTAGES OF MECHANICAL EQUIPMENT. REFER TO THE ELECTRICAL DRAWINGS FOR VOLTAGES AND MECHANICAL EQUIPMENT ELECTRICAL LOADS. VERIFY ELECTRICAL CHARACTERISTICS OF ALL MECHANICAL EQUIPMENT BEFORE ORDERING EQUIPMENT.
3. REFER TO EACH DRAWING FOR NOTES SPECIFIC TO THAT DRAWING SHEET.
4. ALL PENETRATIONS THROUGH EXISTING FIRE RATED WALLS, PARTITIONS AND FLOOR SLABS SHALL BE FIRE STOPPED TO MAINTAIN THE FIRE RATING OF OF THE EXISTING WALL, PARTITION OR FLOOR SLAB.
5. ALL FRESH AIR INTAKES SHALL BE MINIMUM 10 FT AWAY FROM ANY BUILDING GENERAL EXHAUST AND PLUMBING VENTS, AND MINIMUM 15 FT AWAY FROM FUELS AND GREASE EXHAUST.
6. WHEN ROOF MOUNTED MECHANICAL EQUIPMENT DEVIATES FROM THE BASIS OF DESIGN, COORDINATE ORIENTATION AND LOCATION OF THE OUTDOOR AIR INTAKE OF THE EQUIPMENT WITH EXHAUST FANS, PLUMBING VENTS AND GAS VENTS. ALLOW CLEARANCES AS INDICATED ABOVE.

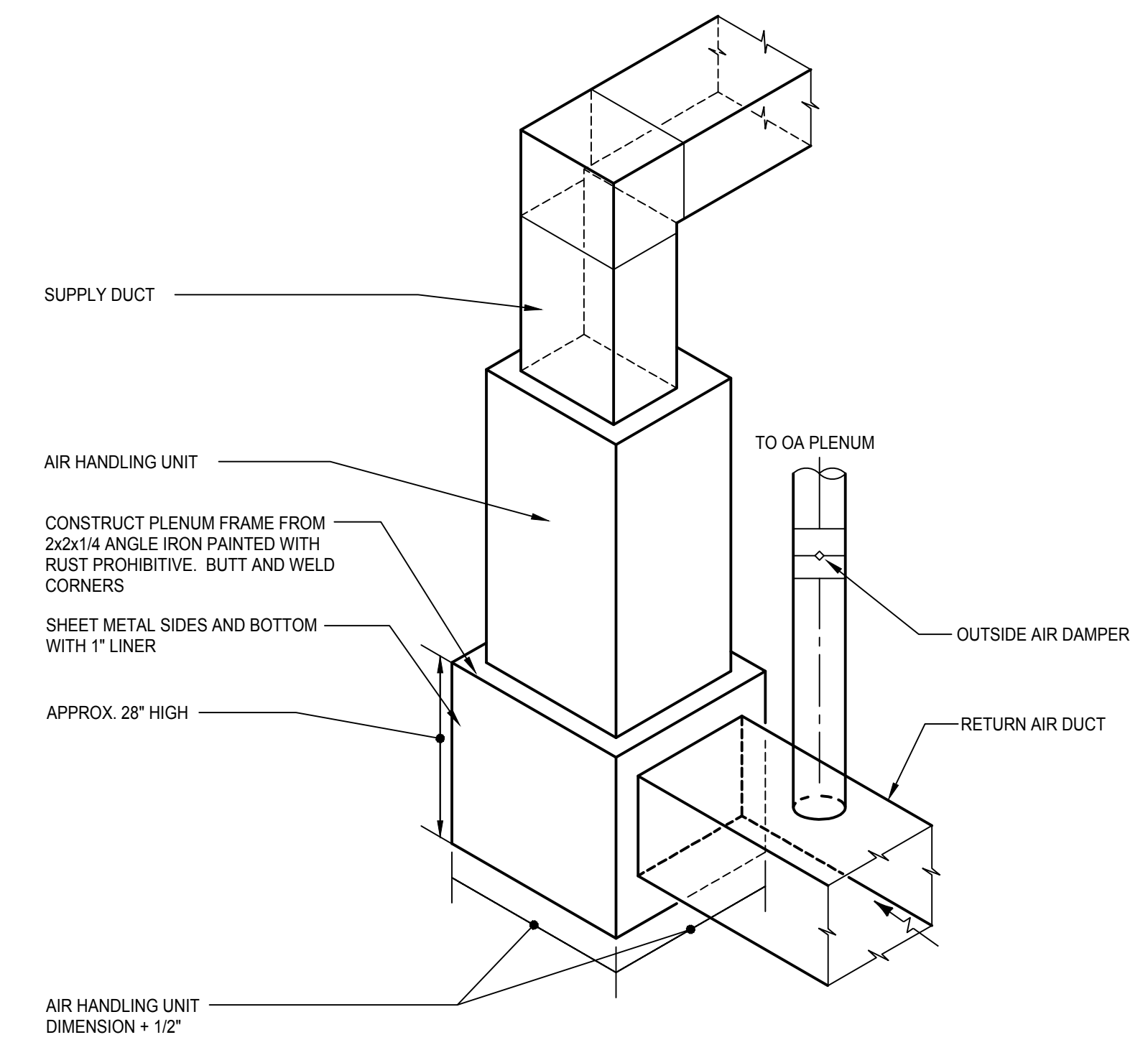




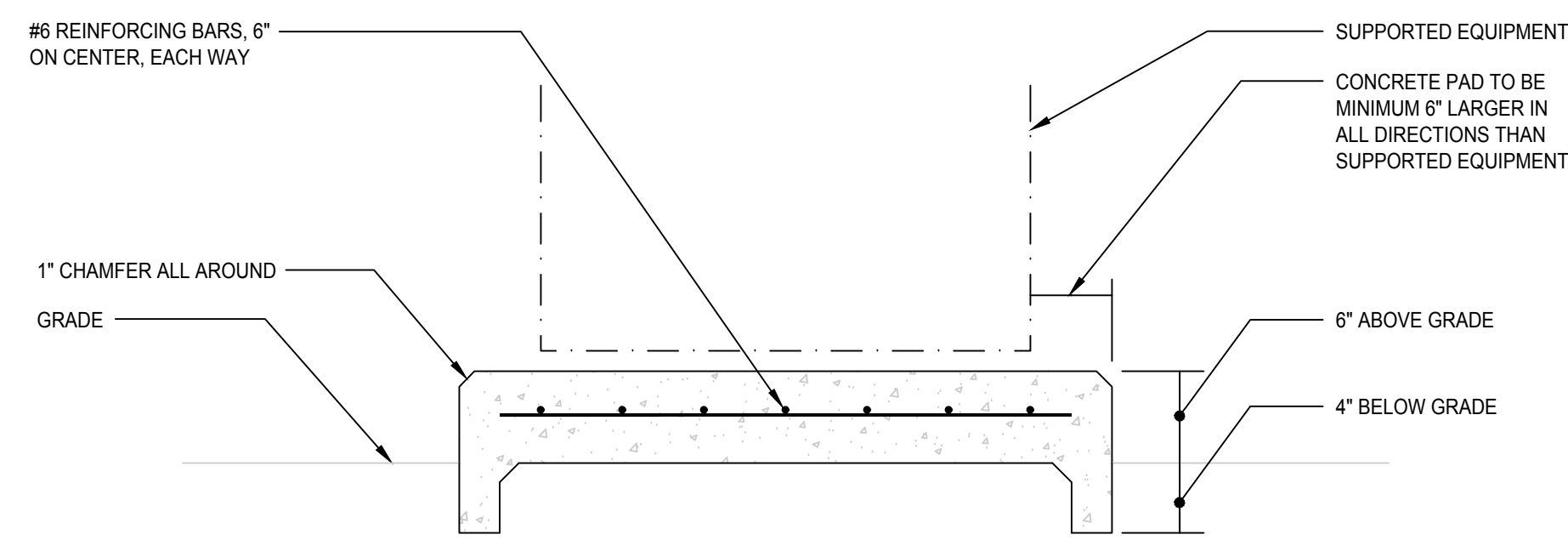
**1 WALL MOUNT HEAT PUMP DETAIL**  
SCALE: NO SCALE



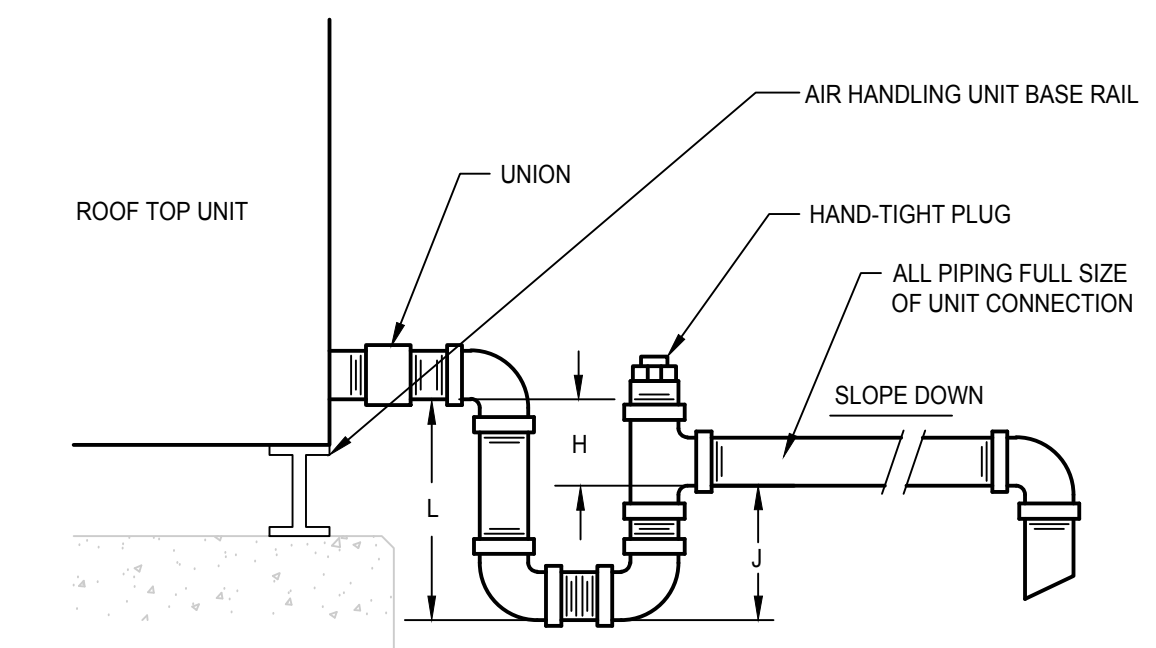
**2 ROOF EXHAUST FAN DETAIL**  
SCALE: NO SCALE



**3 VERTICAL FCU DETAIL**  
SCALE: NO SCALE



**4 CONCRETE PAD DETAIL - OUTDOORS**  
SCALE: NO SCALE



DRAW THRU UNIT: L = H + J  
H = 1 INCH FOR EACH INCH OF NEGATIVE PRESSURE PLUS 1 INCH  
J = 1/2 OF H

**5 CONDENSATE DRAIN CONNECTION**  
SCALE: NO SCALE

REVISION
MAY 10, 2017

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HVAC RENOVATIONS  
TO  
**MATILDA HARTLEY ELEMENTARY**  
FOR THE BIBB COUNTY BOARD OF EDUCATION  
BIBB COUNTY GEORGIA

PROJECT NO.  
17-005

SHEET TITLE  
MECHANICAL DETAILS

DATE  
APRIL 18, 2017

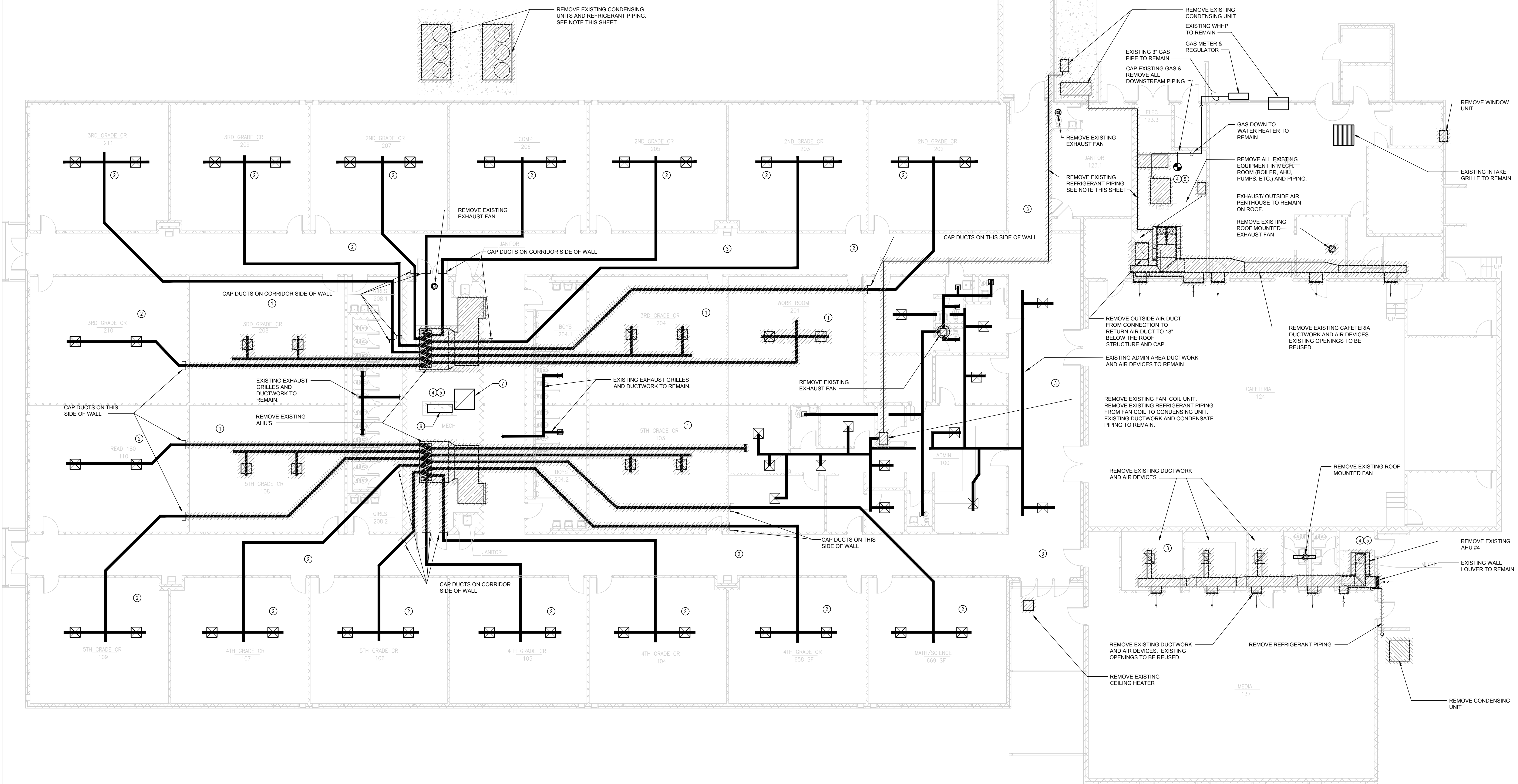
DRAWN BY  
SPJ

CHECKED BY  
VMS

SHEET NUMBER

**M002**

SEE SHEET M102 FOR CONTINUATION




1 FLOOR PLAN - MECHANICAL DEMOLITION  
SCALE: 1/8"=1'-0"

**DEMOLITION NOTES:**

- ① REMOVE ALL EXISTING DUCTWORK IN CLASSROOMS 103, 108, 204, 208 AND WORKROOM 210 SERVED BY NEW FAN COIL UNITS
- ② ALL EXISTING DUCTWORK IN CLASSROOMS SERVED BY NEW WALL HEAT PUMP UNITS, AND CORRIDORS TO BE ABANDONED IN PLACE.
- ③ ALL EXISTING HOT WATER PIPING OUTSIDE THE MECHANICAL ROOM TO BE ABANDONED IN PLACE. (NOT SHOWN)
- ④ REMOVE ALL EXISTING HOT WATER PIPING INSIDE MECHANICAL ROOMS (NOT SHOWN)
- ⑤ REMOVE ALL PNEUMATIC PIPING, COMPRESSORS, CONTROL PANELS (NOT SHOWN)
- ⑥ REMOVE EXISTING WATER COOLER AND ALL ASSOCIATED PIPING AND CONTROLS
- ⑦ EXISTING OUTDOOR AIR INTAKE TO REMAIN. REMOVE ALL OA DUCT 24" BELOW STRUCTURE. EXISTING OA INTAKE AND DUCT THRU ROOF TO REMAIN. CAP BOTTOM OF OA DUCT AIR TIGHT


**NOTES:**

BIBB COUNTY PERSONNEL WILL RECOVER REFRIGERANT R-22 PRIOR TO CONSTRUCTION. COORDINATE TIMING OF REFRIGERANT REMOVAL WITH START OF CONSTRUCTION.




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SBE Project No. 1704



LOCAL FUNDS ONLY  
BIBB BOE BID # 17-26

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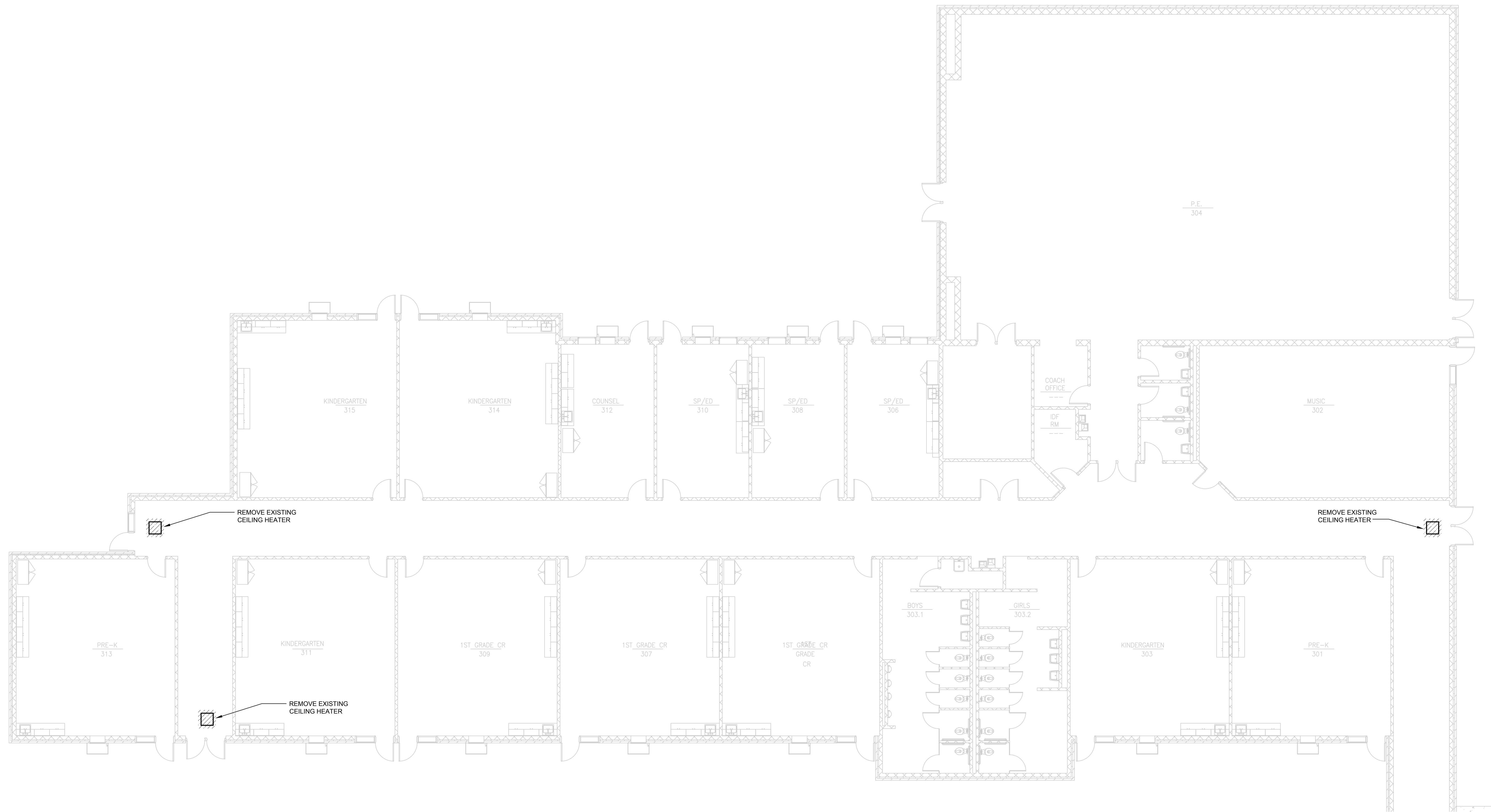
SHEET TITLE  
FLOOR PLAN  
MECHANICAL DEMOLITION

DATE  
APRIL 18, 2017

DRAWN BY  
SPJ


CHECKED BY  
VMS

SHEET NUMBER  
**M101**



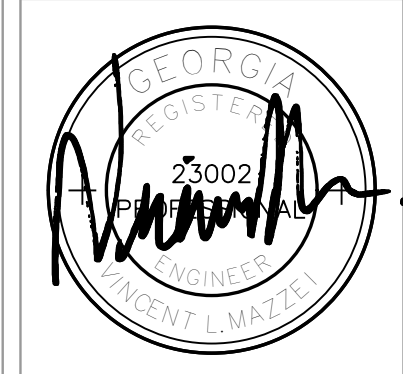
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**1** BUILDING 2020 FLOOR PLAN - MECHANICAL DEMOLITION - ALTERNATE #2  
SCALE: 1/8"=1'-0"




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HVAC RENOVATIONS  
TO  
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BIBB COUNTY GEORGIA

PROJECT NO.  
17-005

SHEET TITLE  
BUILDING 2020 FLOOR  
PLAN - MECHANICAL  
DEMOLITION -  
ALTERNATE #2

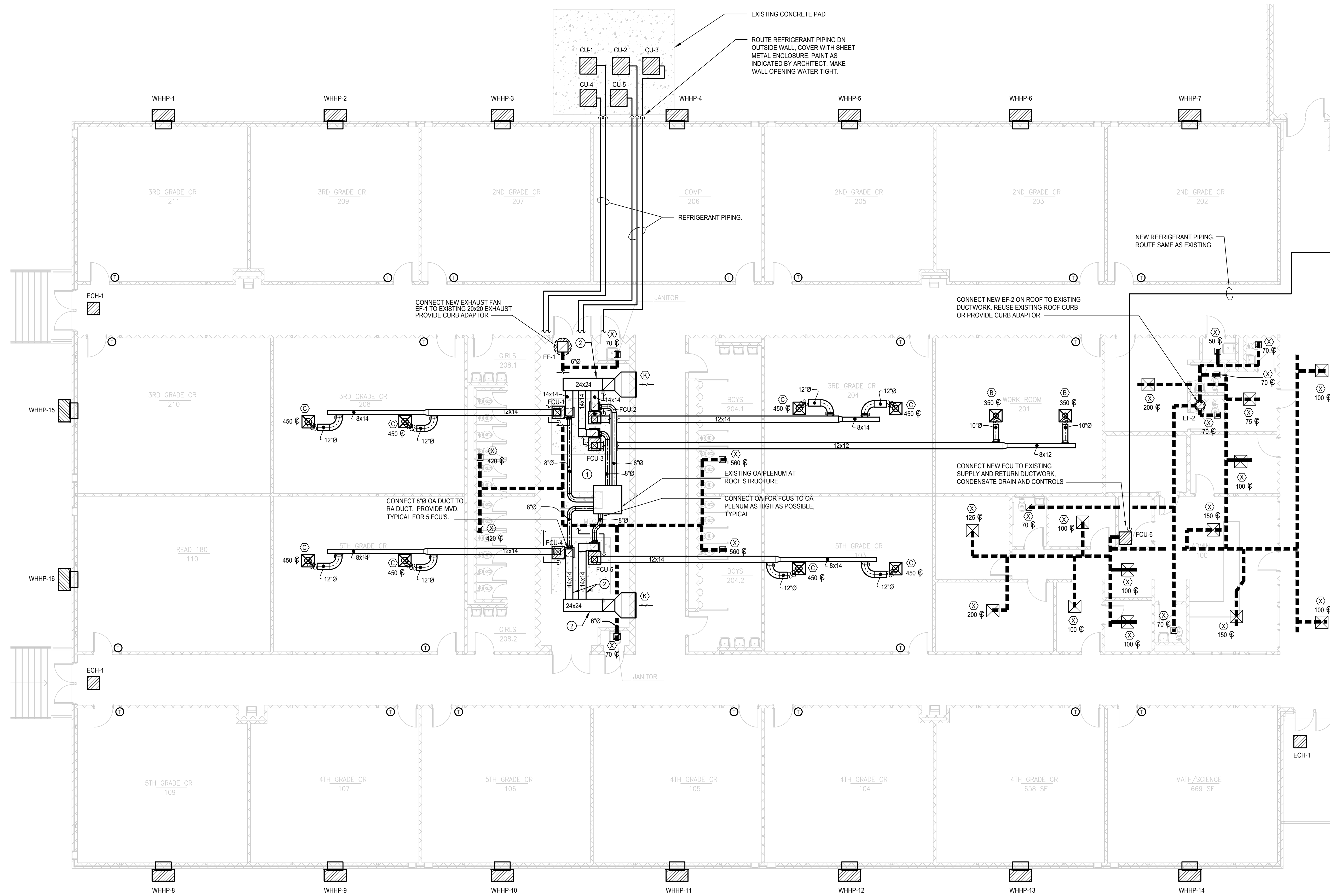
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SHEET NUMBER  
**M102**

SEE SHEET M203 FOR CONTINUATION



SEE SHEET M202 FOR CONTINUATION

**1 FLOOR PLAN BUILDING 2010 - MECHANICAL RENOVATION**  
SCALE: 1/8"=1'-0"

**FLOOR PLAN NOTES:**

- ① ROUTE NEW 3/4" TRAPPED CONDENSATE DRAINS TO EXISTING FLOOR DRAINS
- ② INSTALL RETURN AIR DUCT AS HIGH AS POSSIBLE

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PROJECT NO.  
17-005

SHEET TITLE  
MATILDA HARTLEY  
FLOOR PLAN  
BUILDING 2010 -  
MECHANICAL  
RENOVATIONS

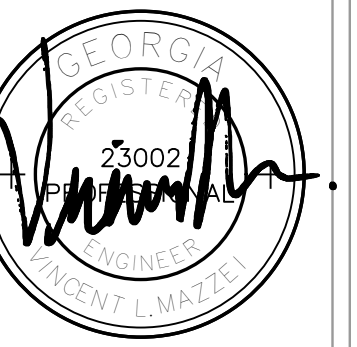
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**M201**





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BIBB COUNTY GEORGIA

PROJECT NO.  
17-005

SHEET TITLE  
MATILDA HARTLEY  
FLOOR PLAN  
BUILDING 2010 -  
MECHANICAL  
RENOVATIONS

DATE  
APRIL 18, 2017

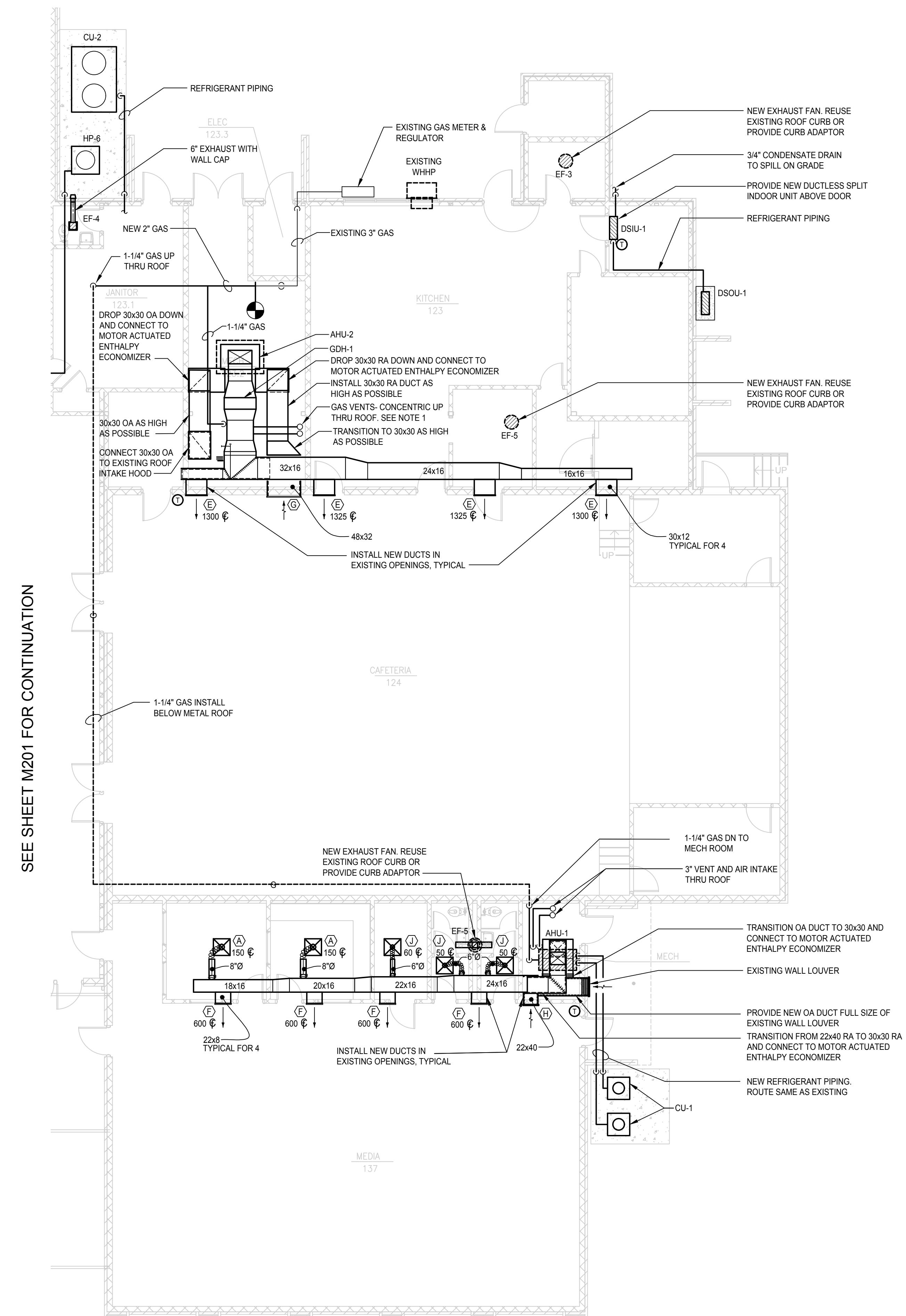
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SHEET NUMBER

**M202**

SEE SHEET M203 FOR CONTINUATION



SEE SHEET M201 FOR CONTINUATION

**1 FLOOR PLAN BUILDING 2010 - MECHANICAL RENOVATION**  
SCALE: 1/8"=1'-0"

**FLOOR PLAN NOTES:**

- ① GAS VENT SHALL TERMINATE MIN 10' AWAY FROM OUTSIDE AIR INTAKES.



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PROJECT NO.  
17-005

SHEET TITLE  
MATILDA HARTLEY  
FLOOR PLAN  
BUILDING 2020 -  
ALTERNATE #1 &  
ALTERNATE #2

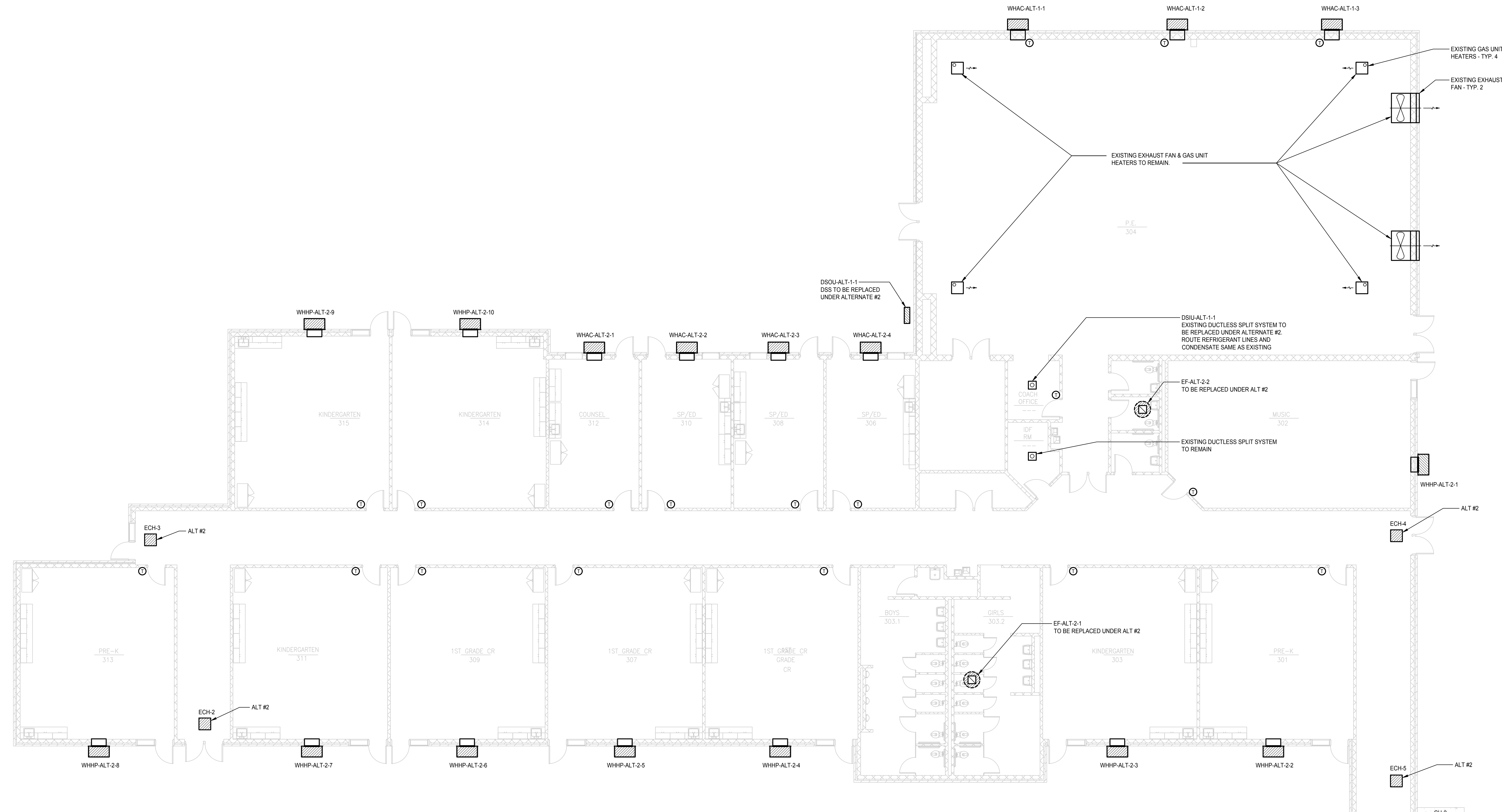
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**M203**



SEE SHEET M201 FOR CONTINUATION

**1 FLOOR PLAN BUILDING 2020 - MECHANICAL RENOVATION - ALTERNATES #1 & #2**  
SCALE: 1/8"=1'-0"

**NOTES:**

- ALTERNATE #1:  
- INSTALL 3 NEW WALL AIR CONDITIONING UNITS, COOLING ONLY
- ALTERNATE #2:  
- INSTALL NEW WALL HEAT PUMP UNITS TO REPLACE EXISTING UNITS, AS SCHEDULED AND SHOWN ON PLAN.  
- REPLACE EXISTING DUCTLESS SPLIT SYSTEM SERVING THE COACH'S OFFICE.  
- REPLACE CEILING ELECTRIC HEATERS.

EXHAUST FAN SCHEDULE (ALT #2)							
MARK	GREENHECK MODEL No.	CFM	APPROX. ESP IN. WG	FAN RPM	MOTOR HP	MAX SONES	NOTES
EF-ALT-1-1	G-103-VG	900	0.5	1450	1/6	8.0	2:3:6
EF-ALT-1-2	G-70-VG	225	0.25	1140	1/6	6.0	2:3:6

- CEILING MOUNTED FAN
- DIRECT DRIVE
- PROVIDE DISCONNECT SWITCH
- PROVIDE INLET AND DISCHARGE DUCT CONNECTION FLANGES
- PROVIDE SPRING RUBBER IN-SHEAR ISOLATORS
- PROVIDE NEW ROOF CURB OR CURB ADAPTER IF REQUIRED

DUCTLESS SPLIT SYSTEM SCHEDULE (ALT #2)							
MARK	INDOOR UNIT MITSUBISHI MODEL No.	OUTDOOR UNIT MITSUBISHI MODEL No.	EVAP CFM	TOTAL COOLING MBH	TOTAL HEATING MBH	SEER	NOTES
DSIU/DSOU-ALT-1-1	MSZ-FE09NA	MUZ-FE09NA	343	9.0	10.9	26.0	1:2:3:4:5:6:7:8

- COOLING CAPACITIES BASED ON AIR ENTERING EVAPORATOR AT 80° F db, 67° F wb AND 95° F AMBIENT AIR TEMPERATURE
- HEATING CAPACITIES BASED ON REVERSE-CYCLE HEAT PUMP OPERATION AT 47° F AMBIENT AIR TEMPERATURE
- HIGH SIDEWALL INDOOR UNIT
- SUPPLY AIRFLOW CFM BASED ON HIGH SPEED AND DRY COIL
- PROVIDE CONDENSATE PUMP
- PROVIDE LOW AMBIENT CONTROL
- PROVIDE REMOTE WALL MOUNTED THERMOSTAT
- PROVIDE TWO EQUIPMENT SUPPORT RAILS UNDER CONDENSING UNIT

**WALL HUNG AC/HEAT PUMP SCHEDULE (ALTERNATES #1 & #2)**

MARK	BARID MODEL No.	SUPPLY CFM	OA CFM FROM ERV	TOTAL COOLING MBH	SENSIBLE COOLING MBH	HEAT OUTPUT MBH	ELEC HEAT KW	NOTES
WHAC-ALT-1-1	W60ADB15R	1800	350	59.0	43.2	--	--	1:3:5:6:7:8:9 ALT #1
WHAC-ALT-1-2	W60ADB15R	1800	350	59.0	43.2	--	--	1:3:5:6:7:8:9 ALT #1
WHAC-ALT-1-3	W60ADB15R	1800	350	59.0	43.2	--	--	1:3:5:6:7:8:9 ALT #1
WHHP-ALT-2-1	T42S1DB06R	1250	270	39.5	29.7	37.3	9.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-2	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-3	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-4	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-5	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-6	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-7	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-8	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-9	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHHP-ALT-2-10	T24H1DB06R	800	200	22.4	18.4	22.2	6.0	1:2:3:4:5:6:7:8:9 ALT #2
WHAC-ALT-2-1	W12AAA005	475	75	12.0	9.2	--	5.0	1:4:5:7:8:9 ALT #2
WHAC-ALT-2-2	W12AAA005	475	75	12.0	9.2	--	5.0	1:4:5:7:8:9 ALT #2
WHAC-ALT-2-3	W12AAA005	475	75	12.0	9.2	--	5.0	1:4:5:7:8:9 ALT #2
WHAC-ALT-2-4	W12AAA005	475	75	12.0	9.2	--	5.0	1:4:5:7:8:9 ALT #2

- COOLING CAPACITIES BASED ON AIR ENTERING EVAPORATOR AT 80° F db, 67° F wb AND 95° F AMBIENT AIR TEMPERATURE
- HEAT PUMP HEATING CAPACITY AT 47° F
- PROVIDE HOT GAS REHEAT DEHUMIDIFICATION
- PROVIDE AUXILIARY ELECTRIC HEATER OF CAPACITY SCHEDULED
- PROVIDE REMOTE WALL MOUNTED TEMPERATURE SENSOR
- PROVIDE ENERGY RECOVER VENTILATOR WITH ROTARY CASSETTE
- PROVIDE CARRIER I-VU CONTROLS COMPATIBLE WITH SCHOOL'S EXISTING EMS
- PROVIDE INTEGRAL CIRCUIT BREAKER OR DISCONNECT
- PROVIDE GLOBAL PLASMA SOLUTIONS MODEL GPC-FS-3-BAS, MOUNT AFTER FILTER AND BEFORE COOLING COIL



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HVAC RENOVATIONS  
TO  
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FOR THE BIBB COUNTY BOARD OF EDUCATION  
BIBB COUNTY GEORGIA

PROJECT NO.  
17-005

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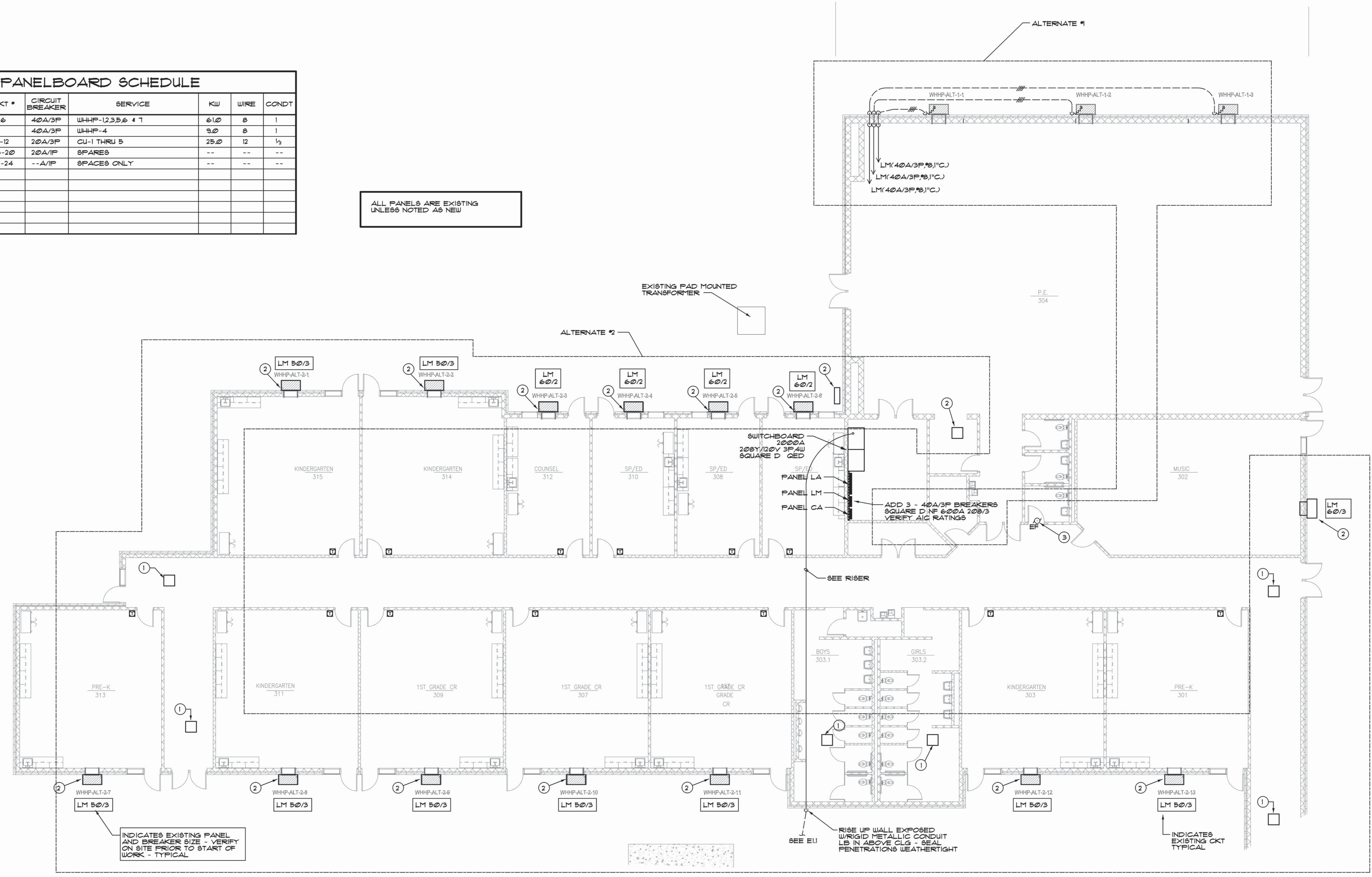
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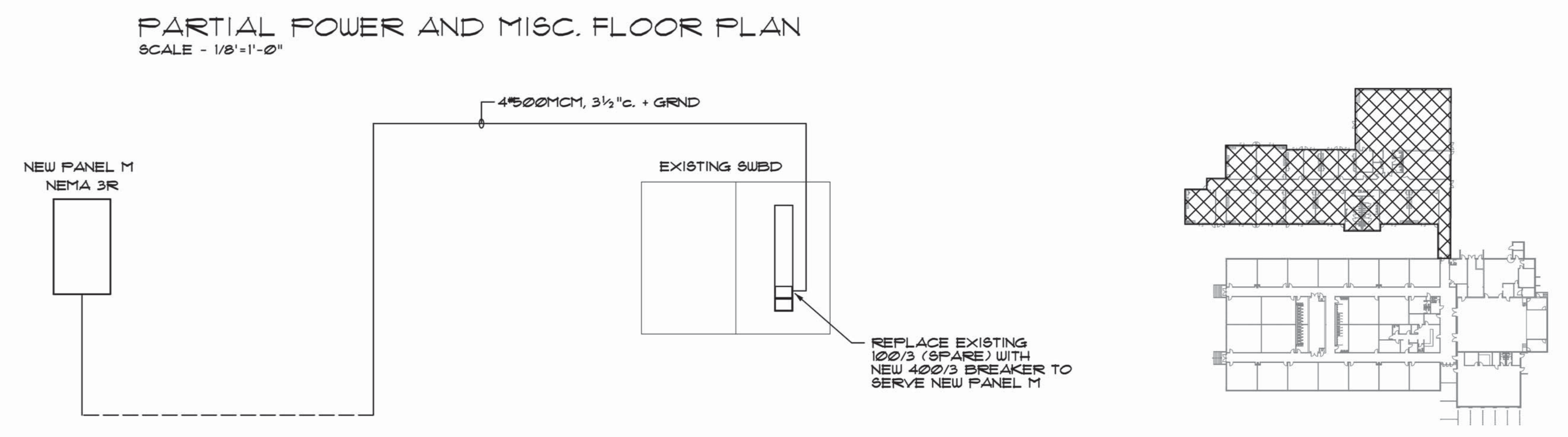
**E1.2**

PANELBOARD SCHEDULE					
PANEL	CKT #	CIRCUIT BREAKER	SERVICE	KW	WIRE COND
M	1-6	40A/3P	WHHF-1,2,3,5,6 & 7	61.0	8 1
	7	40A/3P	WHHF-4	9.0	8 1
	8-12	20A/3P	CU-1 THRU 5	25.0	12 1/2
	13-20	20A/1P	SPARES	--	-- --
	21-24	--A/1P	SPACES ONLY	--	-- --

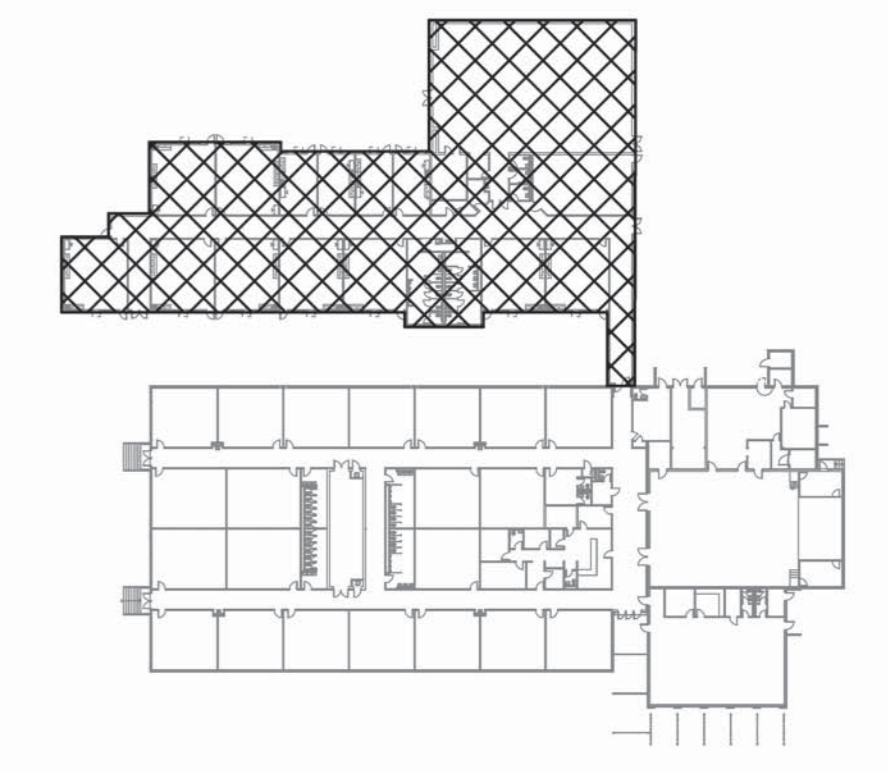
ALL PANELS ARE EXISTING UNLESS NOTED AS NEW



- NOTES**
- 1 NEW CABINET HEATER TO REPLACE EXISTING IN SAME LOCATION. REUSE EXISTING POWER AND MODIFY AS REQUIRED TO CONNECT TO NEW UNIT
  - 2 NEW UNIT IN SAME LOCATION AS EXISTING - REWORK EXISTING POWER SUPPLY AS REQUIRED TO SERVE NEW UNIT - COORDINATE WITH NEW EQUIPMENT PRIOR TO START OF WORK. VERIFY CIRCUIT SERVICE SIZE ON SITE PRIOR TO EQUIPMENT COORDINATION
  - 3 NEW EXHAUST FAN TO REPLACE EXISTING IN SAME LOCATION - REWORK EXISTING POWER SUPPLY AS REQUIRED TO SERVE NEW UNIT - COORDINATE WITH NEW EQUIPMENT PRIOR TO START OF WORK



PARTIAL POWER RISER



KEY PLAN  
SCALE - NONE