



ADDENDUM NO. 7

HVAC & CONTROLS REPLACEMENT/ADDITION AT NINE (9) SITES: BARRANCA, BEN LOMOND, CYPRESS, GROVECENTER, MANZANITA, MERWIN, MESA, ROWLAND, AND WORKMAN ELEMENTARY SCHOOLS RFQ/RFP #22-23-105

January 19, 2023

This Addendum forms a part of the RFQ/P Documents and modifies the original RFQ/P Documents. Acknowledge receipt of this Addendum in space provided on the RFQ/P Proposal Form. Failure to acknowledge may subject Proposer to disqualification. Except as specifically modified by this Addendum, all other terms and conditions set forth in the RFQ/P Documents remain in full force and effect.

RESPONSES TO RFIS:

Allison Mechanical submitted the attached two RFIs. Responses are provided on the RFI forms.

QUESTIONS WITH CLARIFICATIONS IN BLUE:

Ben Lomond Elementary School:

(Page M1.1C):

-Building J: Co2/T-Stat Locations for RTUs J1 Thru J3 are missing. Please provide locations for these sensors.

-Building C: Co2/T-Stat Locations for RTU C3 is missing. Please provide location for this sensor.

DLR Response: See attached updated drawing M1.1C.

Cypress Elementary School:

(Page M5.1 And M1.2A/M1.1A)

-ALL Buildings: Per page M1.2A/M1.1A and M5.1 the Floor/Roof Plans do not match the count on the Controls Riser Diagram. Please confirm the number of units that are to be controlled by the carrier i-Vu system as there is discrepancies on the plans. (Need an updated controls riser diagram or floor plans) Please Confirm.

DLR Response: Floor plans are correct. See attached updated M5.1 & M5.2

Grovecenter Elementary School:

(Page M1.1C)

-Building F: GL F3- There is an extra set of Co2/T-Stat per the plans. Please confirm if RTU F2 and RTU F3 Co2s/T-stats are to be on GL F2 and F4 walls.

DLR Response: See attached updated drawing M1.1C

Manzanita Elementary School:

(Page M1.3E/M1.1E/M5.1)

-Building E or D? Per the Controls Riser Diagram and Roof/Floorplans the buildings don't match. Please confirm if building D or Building E is the building the that work will be preformed in.

DLR Response: Building E is the building in scope. See attached updated M1.3E & M5.1

Rowland Elementary School:

(Page M1.1A)

-Building H: RTU-H2 There is T stat locations on both walls on GL E2 and E3. Please confirm what wall the sensor is to be located.

DLR Response: See attached updated drawing M1.1A. Also, CO2 sensors are added in each classrooms same as the other schools.

Workman Elementary School:

(Page M1.1F)

-Building K: RTU-K3 There is no Co2/T stat in the room served please confirm Co2/T stat location.

DLR Response: There is a set of CO2/T stat on M1.1F for RTU-K3 in Classroom K1103. See attached red-marked plan for reference only.

REPLACEMENT DRAWINGS:

The attached drawings replace those previously issued.

END OF ADDENDUM

PRE-BID CLARIFICATION FORM

PROJECT NAME:	HVAC & Controls Replacement / Addition at Nine (9) Sites		
PROJECT NUMBER:	RFQ/RFP #22-23-105		
TO: Robin Harbert	Robin Harbert	EMAIL:	rharbert@c-vusd.org

DATE:	01/19/2023		
FROM:	Brian Bonacic Allison Mechanical	EMAIL:	BBonacic@Allison1.net
DOCUMENT/DIVISION NUMBER:	All	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

in response to RFI response
 #5 keynote N403 (N) mechanical units attached to (E) unit curb see mechanical drawings sheet M1.3B & M1.3D.
 there is currently no existing unit curbs, or structural drawings supporting the installation of new equipment curbs of the following school sites Ben Lomand, Cypress, Grovencenter, Rowland, Workman. additionally sheets M1.3B & M1.3D are missing along with any relevant structural details.

RESPONSE TO CLARIFICATION:

Refer to drawings updated in Addendum #5.

Jesse Miller, AIA
01/20/2023

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM

PROJECT NAME:	HVAC & Controls Replacement / Addition at Nine (9) Sites		
PROJECT NUMBER:	RFQ/RFP #22-23-105		
TO: Robin Harbert	Robin Harbert	EMAIL:	rharbert@c-vusd.org

DATE:	1/19/2023		
FROM:	Brian Bonacic Allison Mechanical	EMAIL:	BBonacic@Allison1.net
DOCUMENT/DIVISION NUMBER:	All Reflected Ceiling	DRAWING NUMBER:	

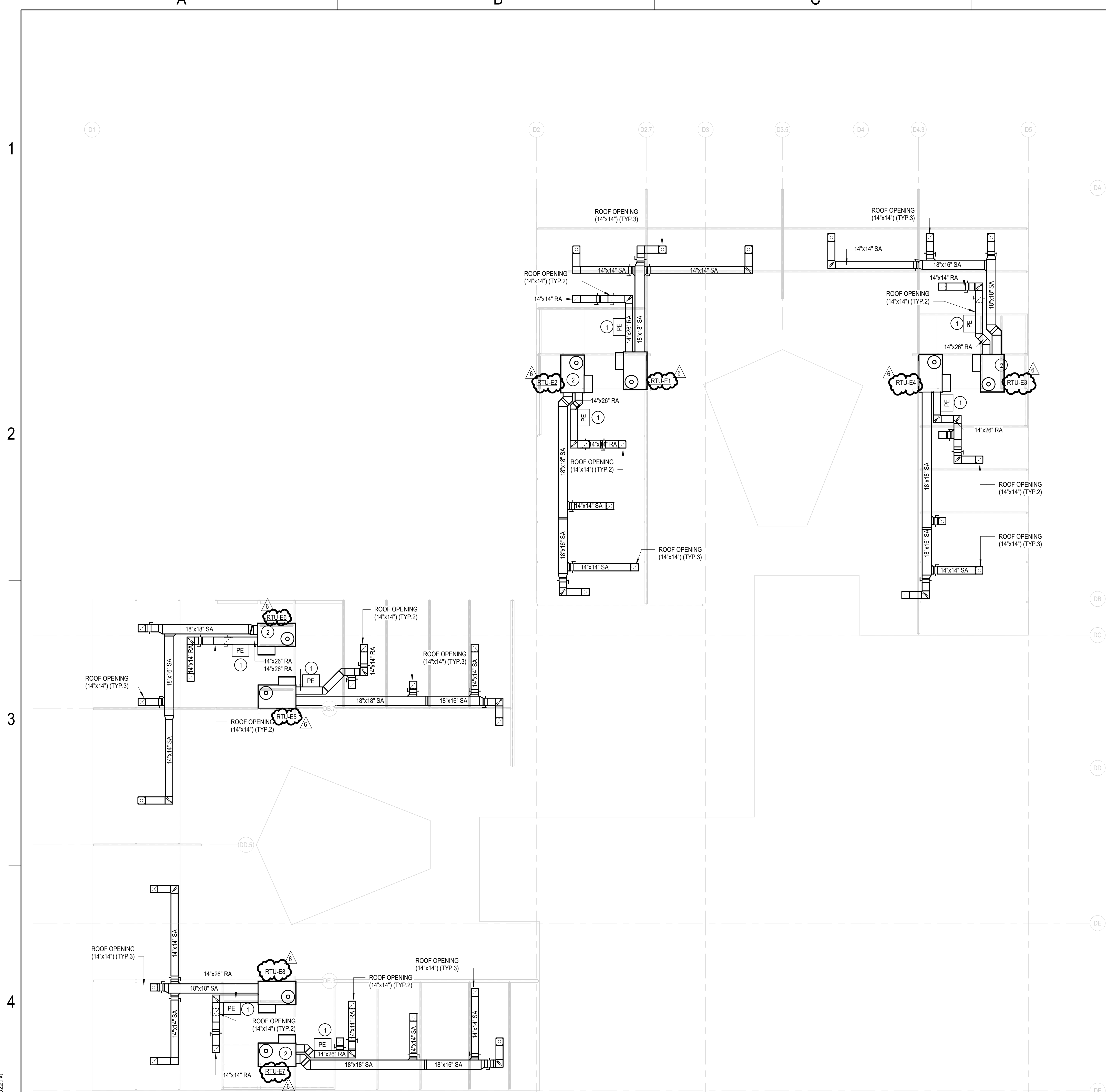
REQUESTED CLARIFICATION:

Key note D380 on the revised reflected ceiling plans indicate:
Demo (e) ceiling tiles to allow for mechanical duct work installation replace with (N) similar to existing. many of ceilings have an older style concealed spine ceiling that would be impossible to match, and would require an entire classrooms ceiling to be replaced.
Recomend replacing (e) concealed spline style ceilings with T Bar style ceilings.

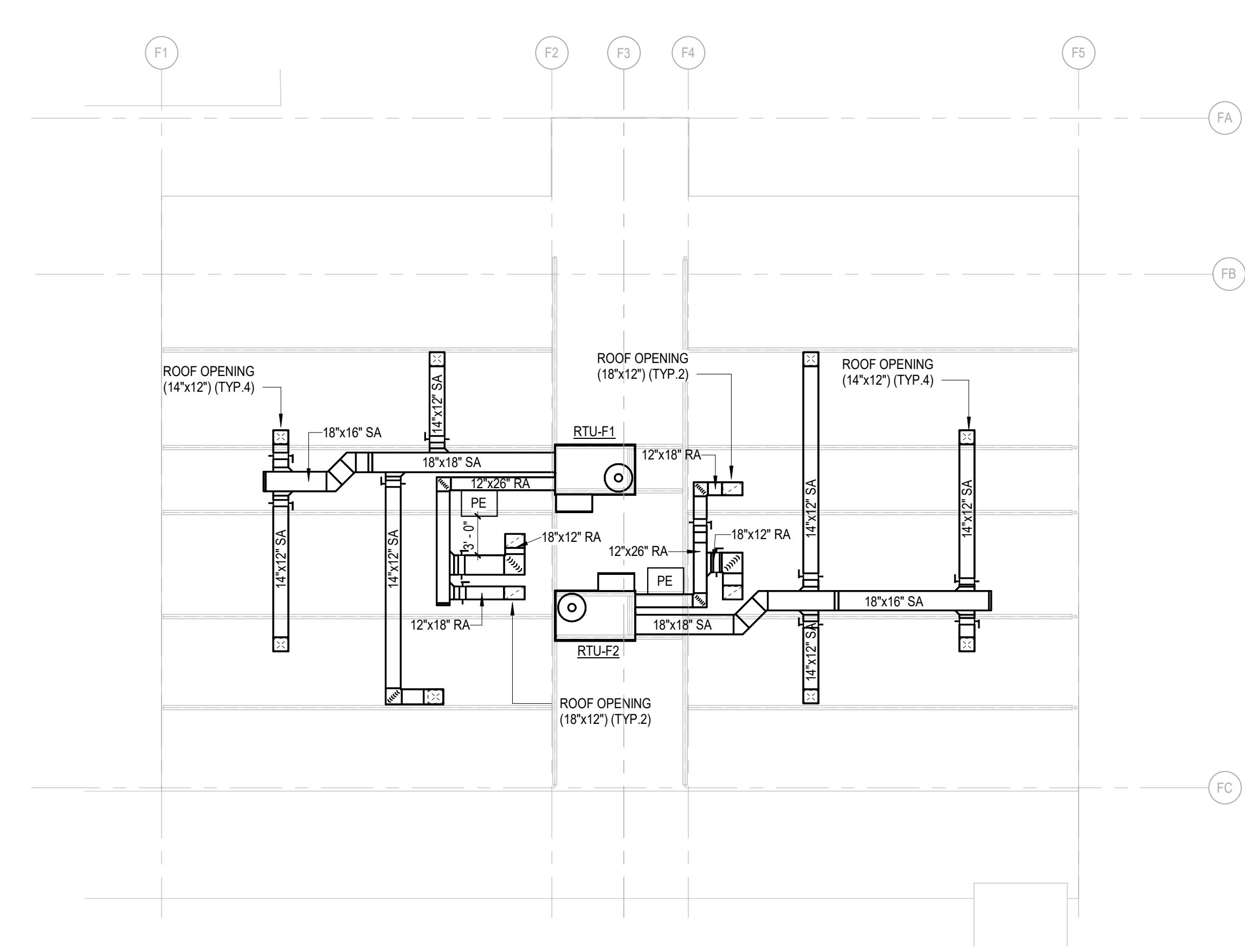
RESPONSE TO CLARIFICATION:

Work will be done per plans.

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.



BUILDING E MECHANICAL ROOF PLAN
SCALE: 1/8" = 1'-0"



BUILDING F MECHANICAL ROOF PLAN
SCALE: 1/8" = 1'-0"

GENERAL HVAC NOTES

1. INSTALL NEW RTU ON BEAM WITH ISOLATORS.
2. NEW OPENINGS FOR SUPPLY AND RETURN DUCTS SHOULD BE MADE BETWEEN THE ROOF JOISTS. DO NOT CUT THE JOISTS.
3. PROVIDE FLEXIBLE DUCT AT UNIT CONNECTION FOR SA & RA DUCT.

KEY NOTES

1. PROVIDE POWER EXHAUST ON RETURN DUCT WITH LEG LENGTH TO FIT THE ROOF SLOPE. CONTRACTOR TO VERIFY ON SITE. TYP.
2. RTU IS LESS THAN 10'-0" FROM ROOF EDGE. ARCH TO PROVIDE PROTECTION GUARDS. TYP.



Manzanita Elementary School
COVINA VALLEY USD
4131 North Nora Avenue Covina, CA 91722

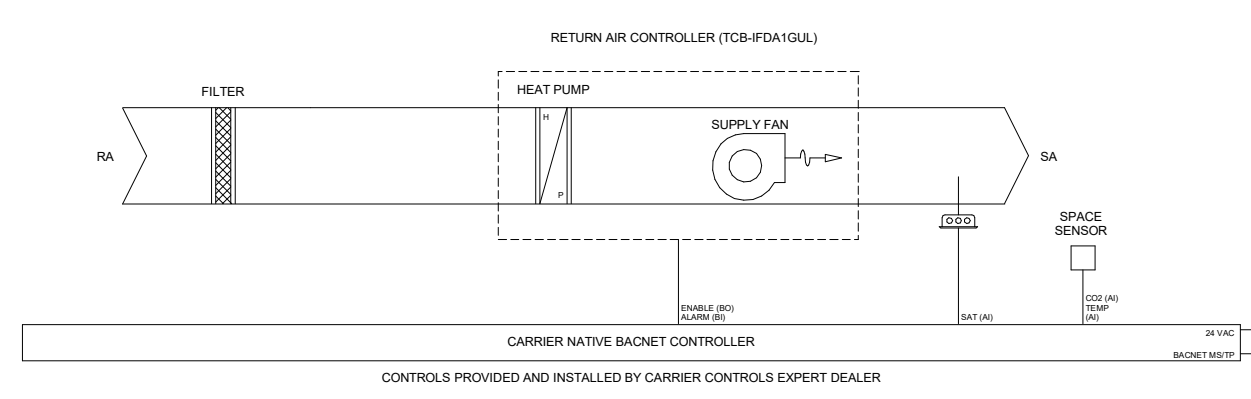
DSA Submitted Set
1/13/2023
REVISIONS
6 01/19/2023

75-22605-00

**BUILDING E & F
MECHANICAL
ROOF PLAN**

M1.3E

Autodesk Docs/75-22605-00_CVUSD - District Wide HVAC Replacement/75-22605-00_CVUSD_Manzanita ES_MEP_2023.rvt
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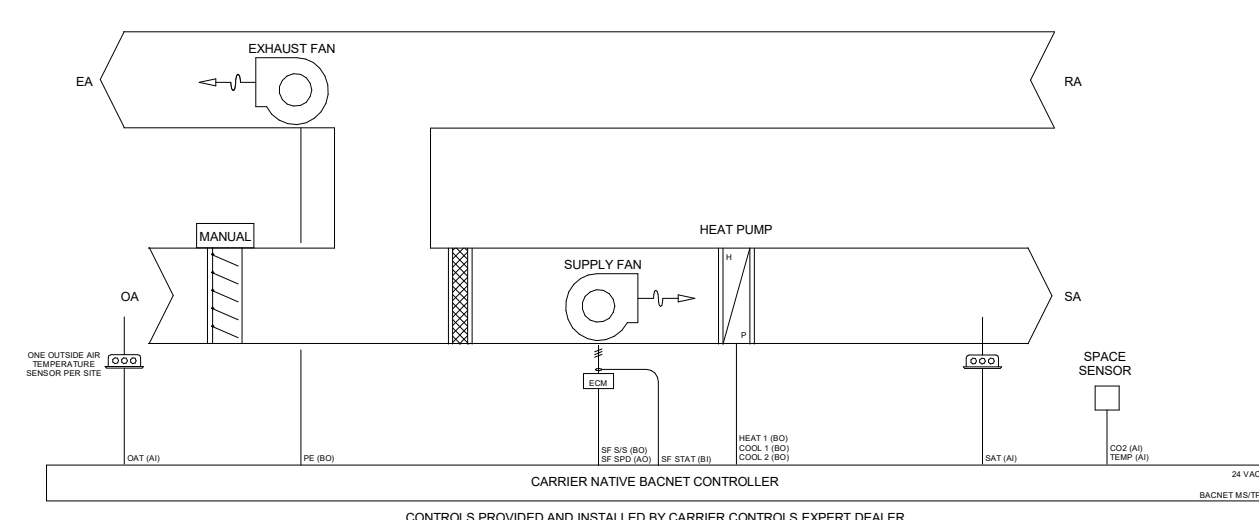


FAN COIL UNIT DETAIL (FCU-B1)

SCALE NONE 1

1 FAN COIL UNIT (FCU-B1)

MS.1 NO SCALE

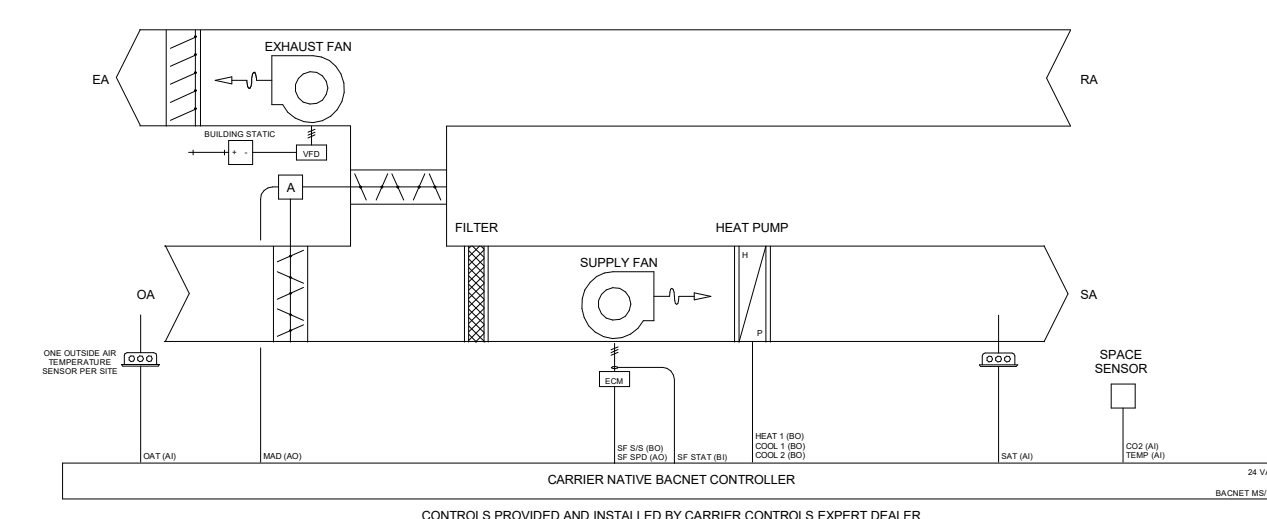


50FCQ HEAT PUMP RTU DETAIL (RTU-F1 AND RTU-F2)

SCALE NONE 3

2 50FCQ HEAT PUMP RTU (RTU-F1 & RTU-F2)

MS.1 NO SCALE

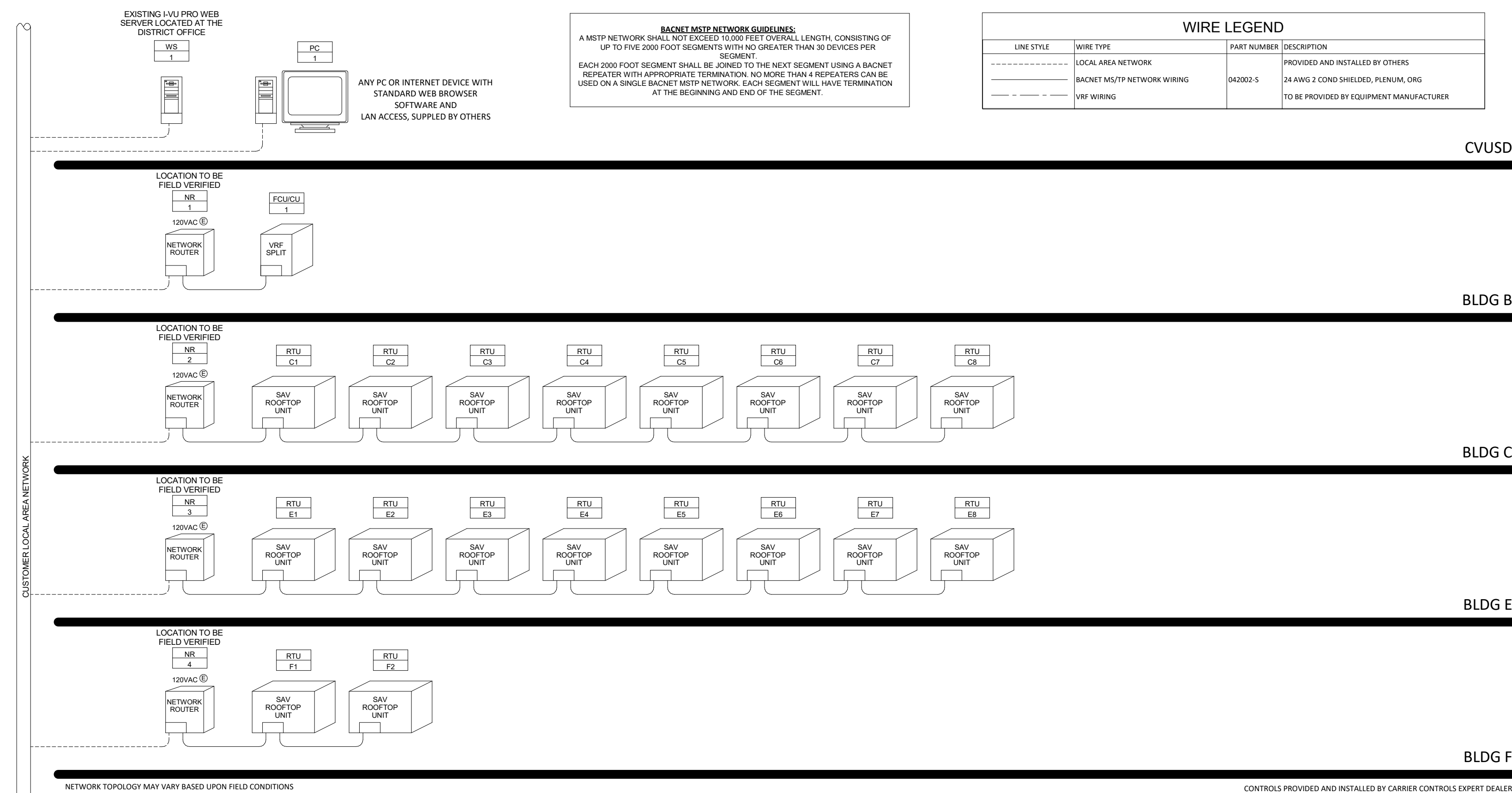


50FCQ HEAT PUMP RTU (RTU-C1 THRU RTU-C8, RTU-E1 THRU RTU-E8)

SCALE NONE 3

3 50FCQ HEAT PUMP RTU (RTU-C1 THRU RTU-C8, RTU-E1 THRU RTU-E8)

MS.1 NO SCALE



BACS RISER DIAGRAM

SCALE NONE 1

4 RISER DIAGRAM

MS.1 NO SCALE

SEQUENCES OF OPERATION

1.1 SEQUENCE OF OPERATION FOR CVUSD MANZANITA ES

1.1.1 FAN COIL CONTROLLER (FCU-1)

UNIT ENABLE

During Occupied periods, the unit will be enabled, and the fan shall operate continuously. During Unoccupied periods, the unit shall be disabled. The fan operates at 1 of 2 speeds depending on the mode of operation and load conditions. Unit shall control heating and cooling stages when enabled.

CO2 Control

Unit shall monitor space CO2 when the supply fan is energized. When CO2 is above setpoint of 1000 PPM, an alarm shall be enabled through the EMS.

1.1.2 50FCQ HEAT PUMP RTU CONTROLLER (RTU-C1 THRU RTU-C8 AND RTU-E1 THRU RTU-E8)

Indoor Fan

The fan operates at a variable speed to meet the load conditions and SAT safety requirements to provide maximum energy savings by minimizing fan horsepower consumption. Fan speed is NOT controlled by static pressure.

Heating Mode

When space temperature is below the occupied heating setpoint, unit shall operate in the heating mode. Unit shall stage available heat stages to satisfy demand in the occupied space.

Cooling Mode

When space temperature is above occupied cooling setpoint, unit shall operate in the cooling mode. Unit shall enable available cooling stages to satisfy demand in the occupied space.

Economizer

Economizer shall close when fan is off or during a loss of power. During occupied hours when fan is energized, the economizer shall open to adjustable minimum position. When outside air temperature is below 71° and occupied space requires cooling, economizer shall open. If economizer air is not sufficient to meet the demand in the occupied space, unit shall enable available mechanical cooling stages to satisfy demand in the occupied space.

CO2 Control

Unit shall monitor space CO2 when the supply fan is energized. When CO2 is above setpoint of 1000 PPM, economizer shall modulate open toward an adjustable maximum CO2 position. As the CO2 level in the space increases above the setpoint, the minimum positions of the dampers will be increased proportionally, until the maximum ventilation setting is reached. As the space CO2 level decreases because of the increase in fresh air, the outdoor-damper will follow the higher demand condition from the DCV mode or from the free-cooling mode.

Power Exhaust

The exhaust fan shall modulate to maintain the room pressure setpoint (as determined by air balancer). Not controlled through EMS.

1.1.3 50FCQ HEAT PUMP RTU CONTROLLER (RTU-F1 AND RTU-F2)

Indoor Fan

The fan operates at a variable speed to meet the load conditions and SAT safety requirements to provide maximum energy savings by minimizing fan horsepower consumption. Fan speed is NOT controlled by static pressure.

Heating Mode

When space temperature is below the occupied heating setpoint, unit shall operate in the heating mode. Unit shall stage available heat stages to satisfy demand in the occupied space.

Cooling Mode

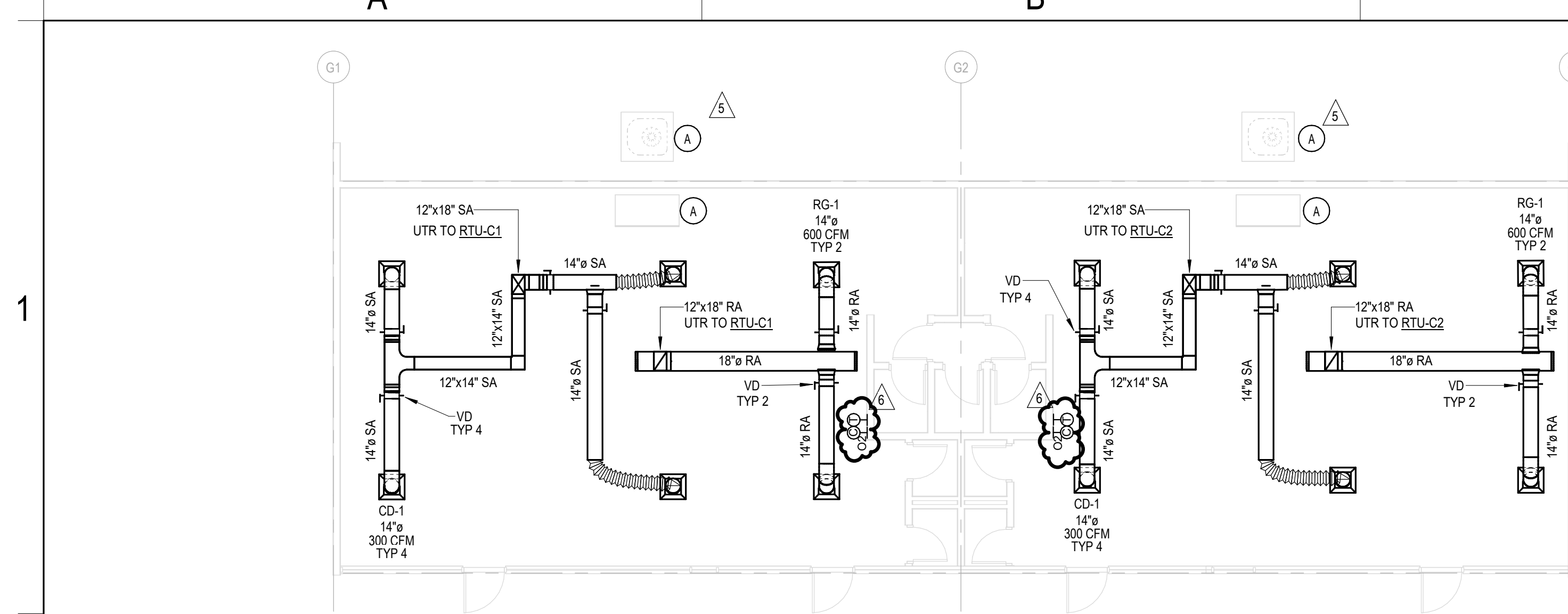
When space temperature is above occupied cooling setpoint, unit shall operate in the cooling mode. Unit shall enable available cooling stages to satisfy demand in the occupied space.

CO2 Control

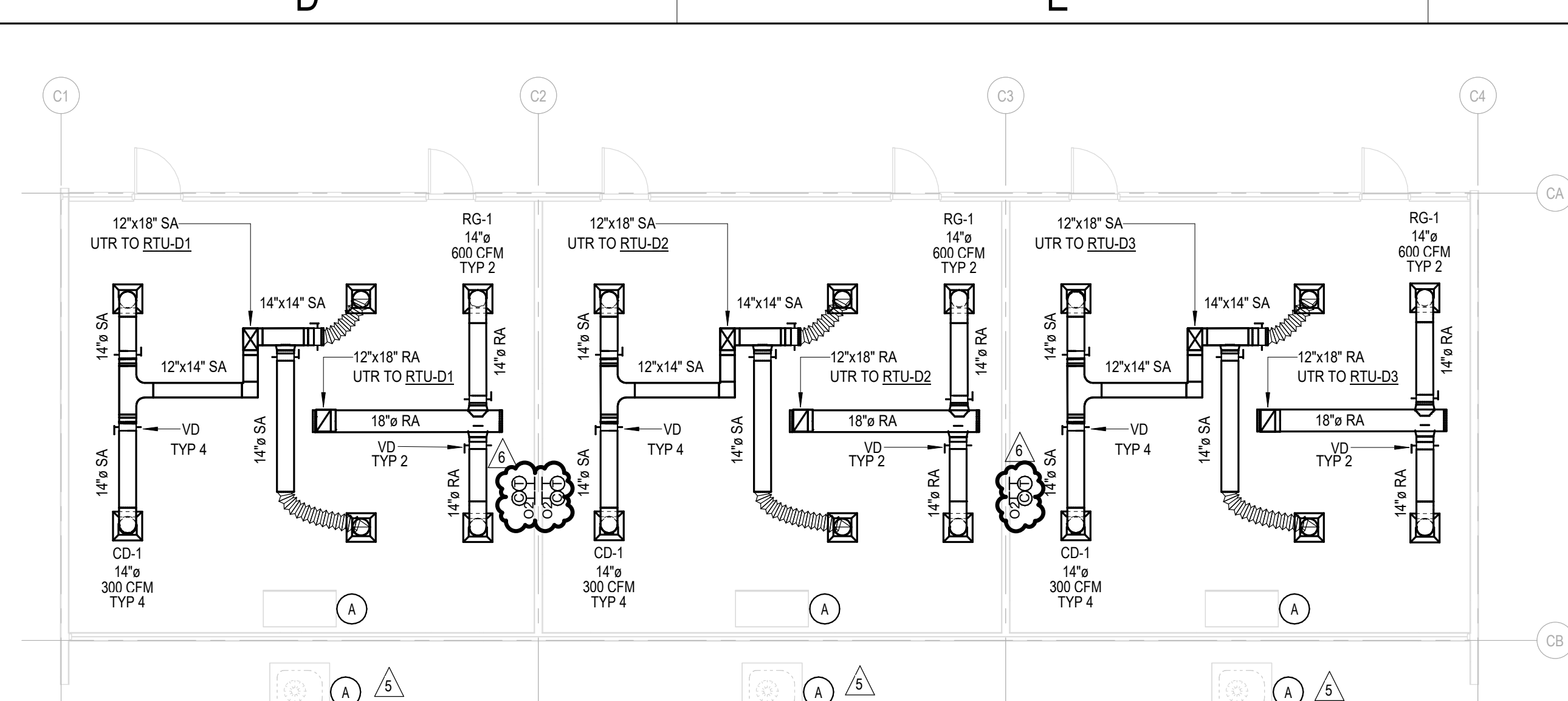
Unit shall monitor space CO2 when the supply fan is energized. When CO2 is above setpoint of 1000 PPM, an alarm shall be enabled through the EMS.

Power Exhaust

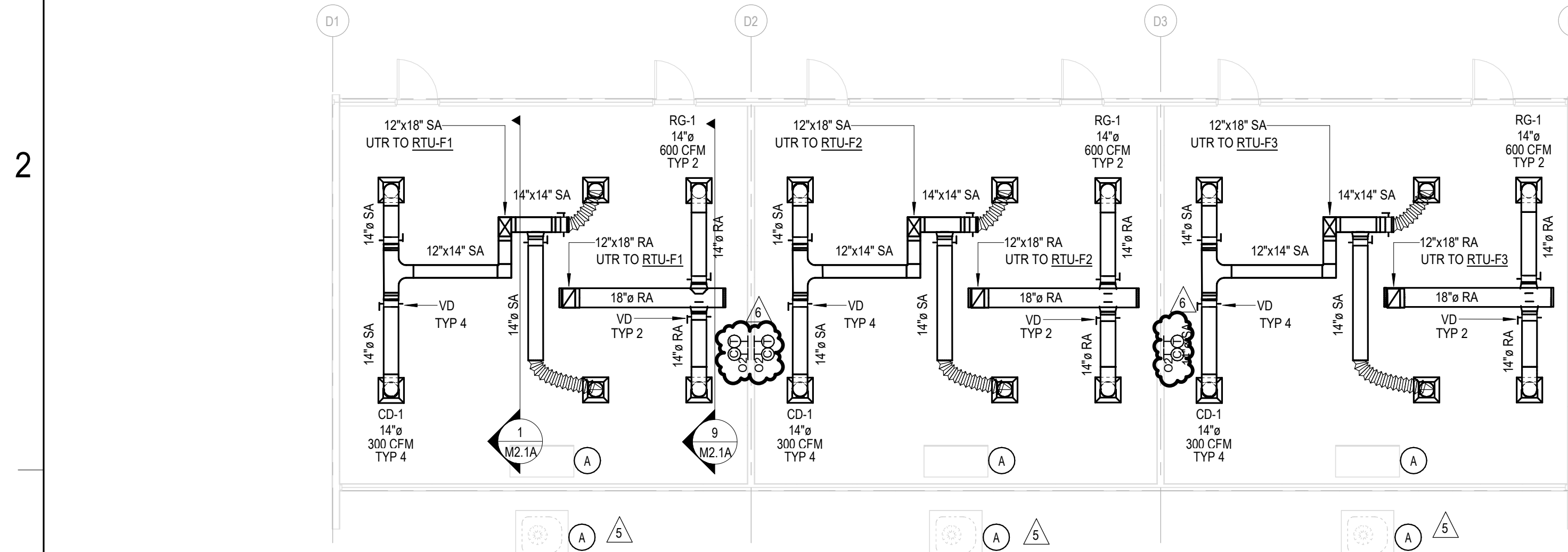
The exhaust fan shall run when the unit is occupied.



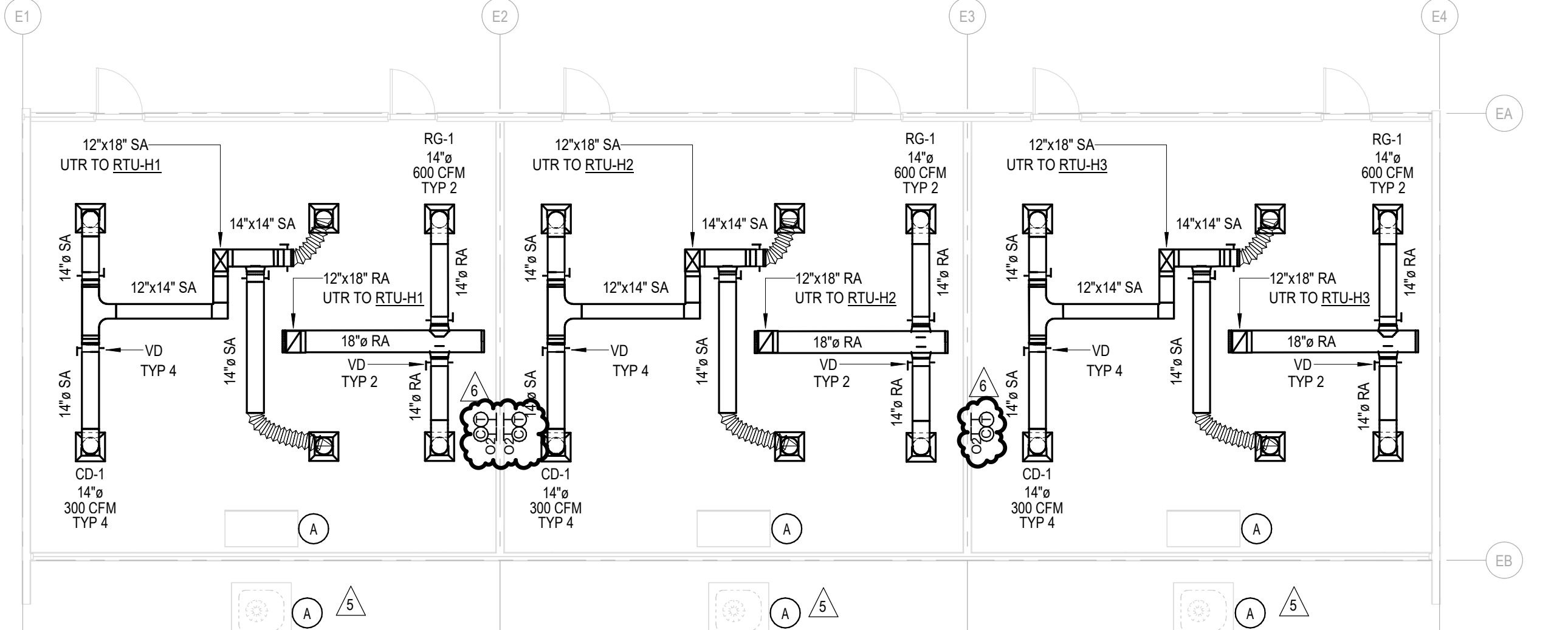
BUILDING C MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



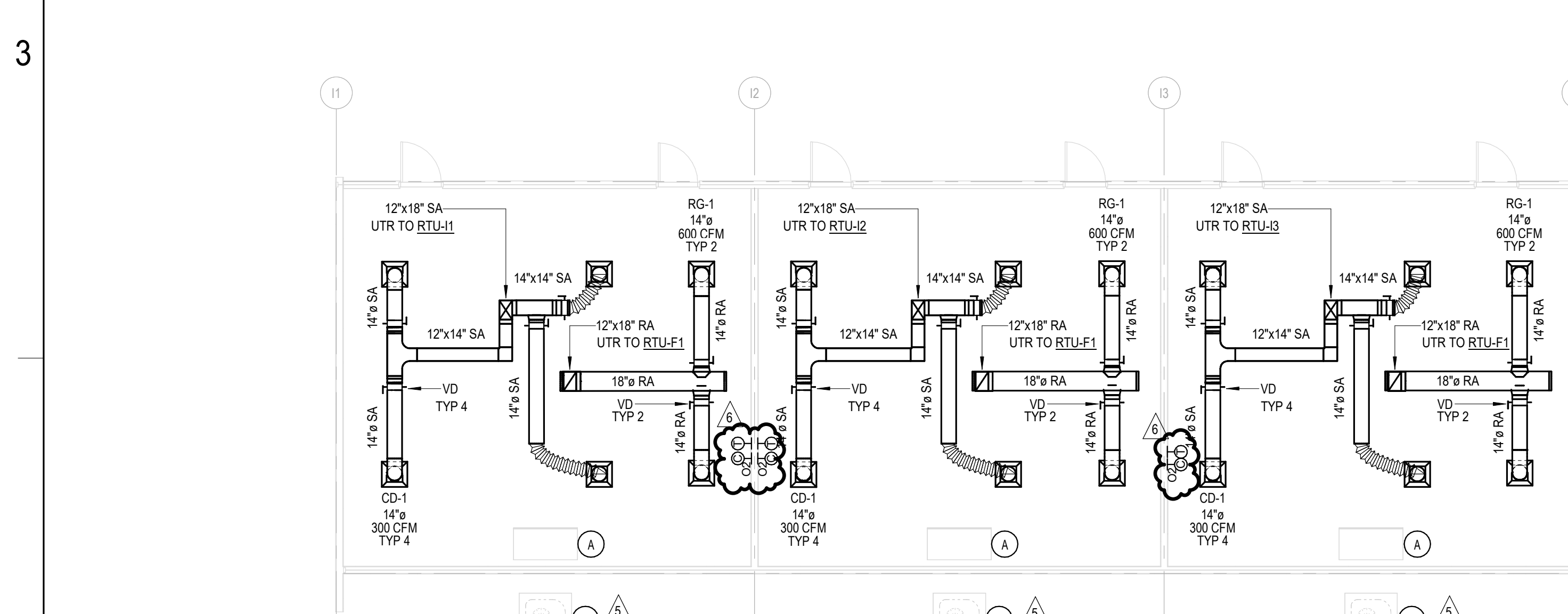
BUILDING D MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



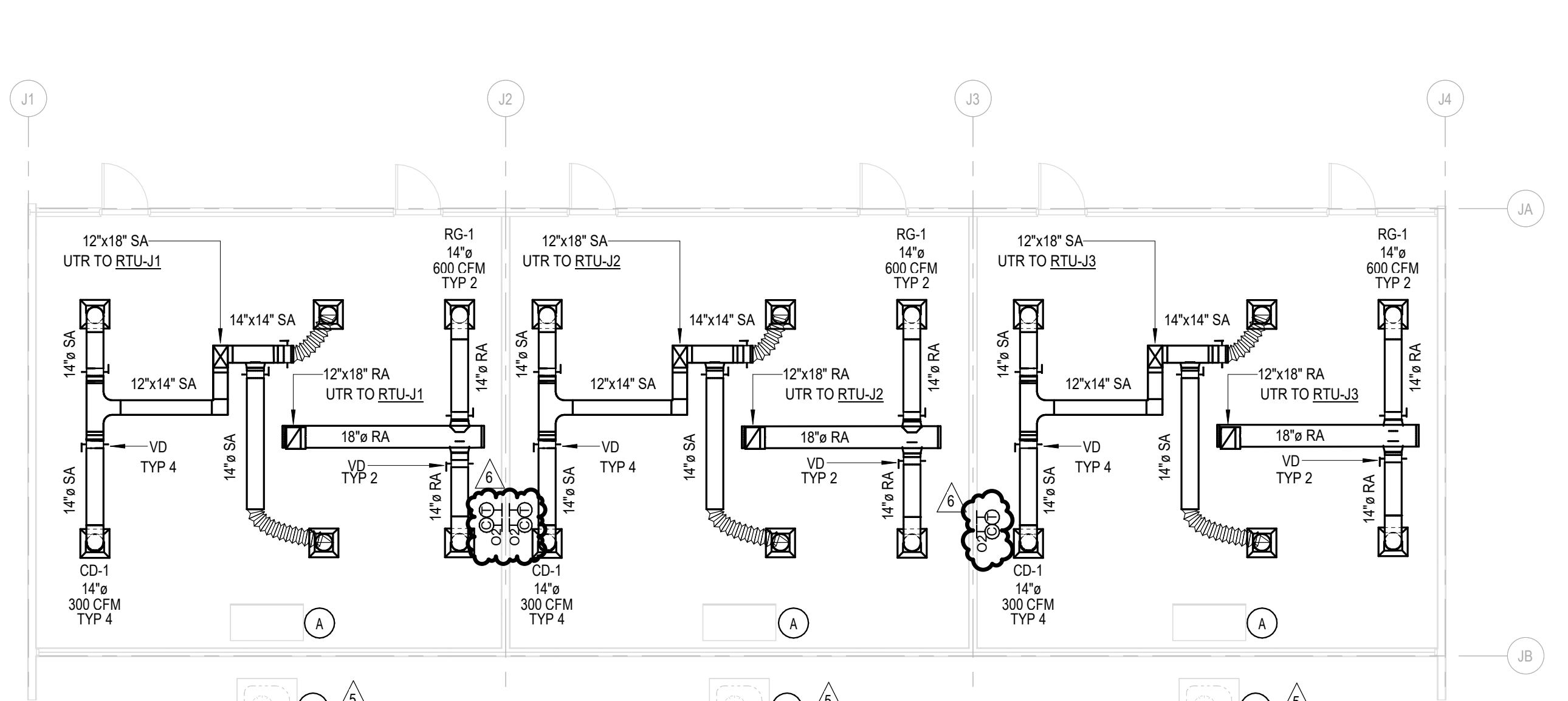
BUILDING F MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



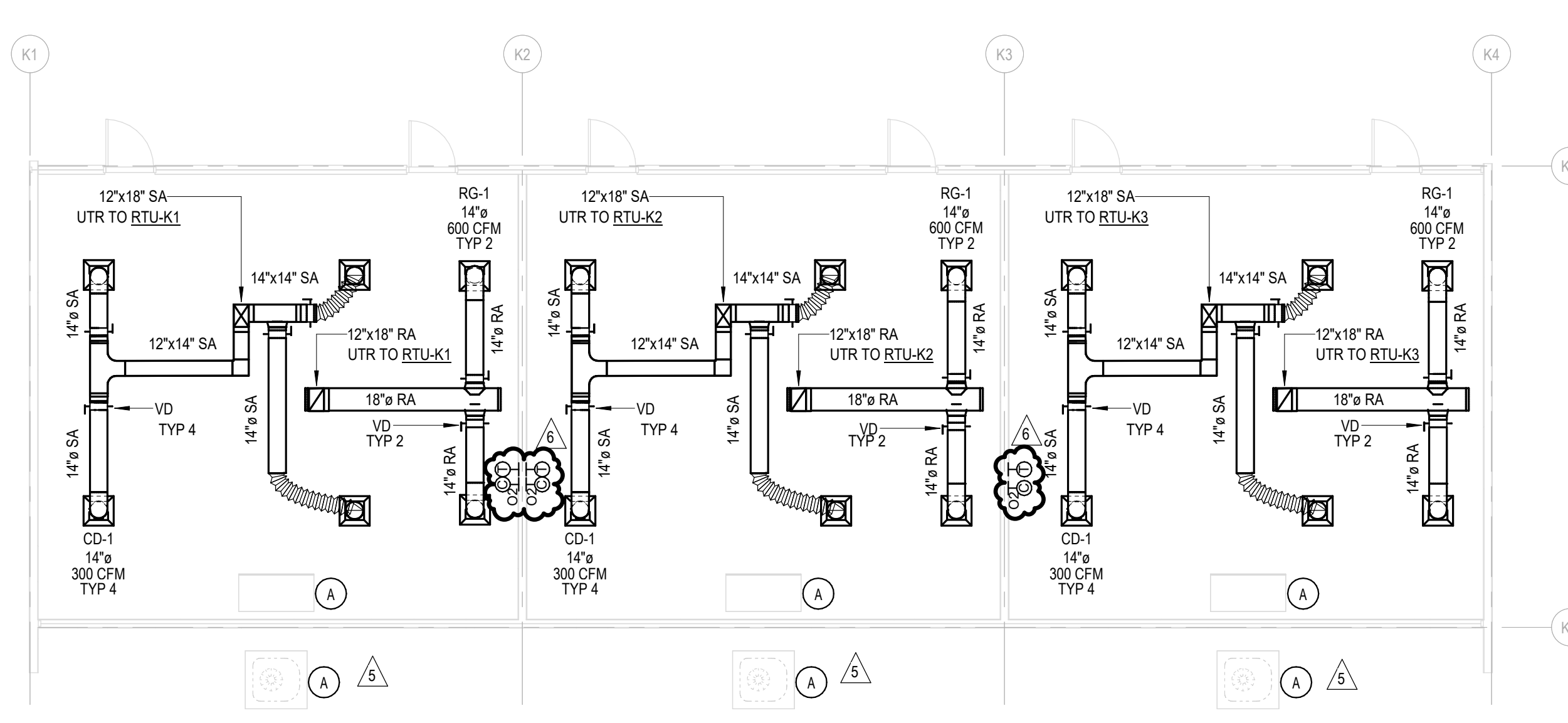
BUILDING H MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



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



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



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

DEMO NOTES

A. DEMOLISH EXISTING OUTDOOR CONDENSING UNIT AND INDOOR FANCOIL UNITS, ALONG WITH RELATED CONCRETE PADS, PIPING, CONDUIT, FENCE, SUPPORTS AND OTHER APPURTENANCES. REFER TO ARCH PLANS OR SPECS FOR FILLING HOLES AND MATCHING WALL TYPICAL FOR CLASSROOMS.

GENERAL NOTES

1. SCOPE OF WORK IS CLASSROOMS & MFR ONLY.
2. DIFFUSERS AND GRILLES TO MATCH (E) CEILING TILES. REFER TO RCP.



Rowland Elementary School
COVINA VALLEY USD
1855 E ROWLAND AVE, WEST COVINA, CA 91790

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6 01/19/23

75-22605-00

MECHANICAL FLOOR PLANS

M1.1A

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A

B

C

D

E

F

1

2

3

4

5

GENERAL NOTES

- 1. SCOPE OF WORK IS CLASSROOMS & MPR ONLY.
- 2. PROVIDE LINER TO DUCTWORK FOR 10 FEET FROM RTU.

DEMO NOTES

- A. DEMOLISH EXISTING OUTDOOR CONDENSING UNIT AND INDOOR FANCOIL UNITS, ALONG WITH RELATED CONCRETE PADS, PIPING, CONDUIT, FENCE, SUPPORTS, AND OTHER APPURTENANCES. REFER TO ARCH PLANS OR SPECS FOR FILLING HOLES AND MATCHING WALL TYP.



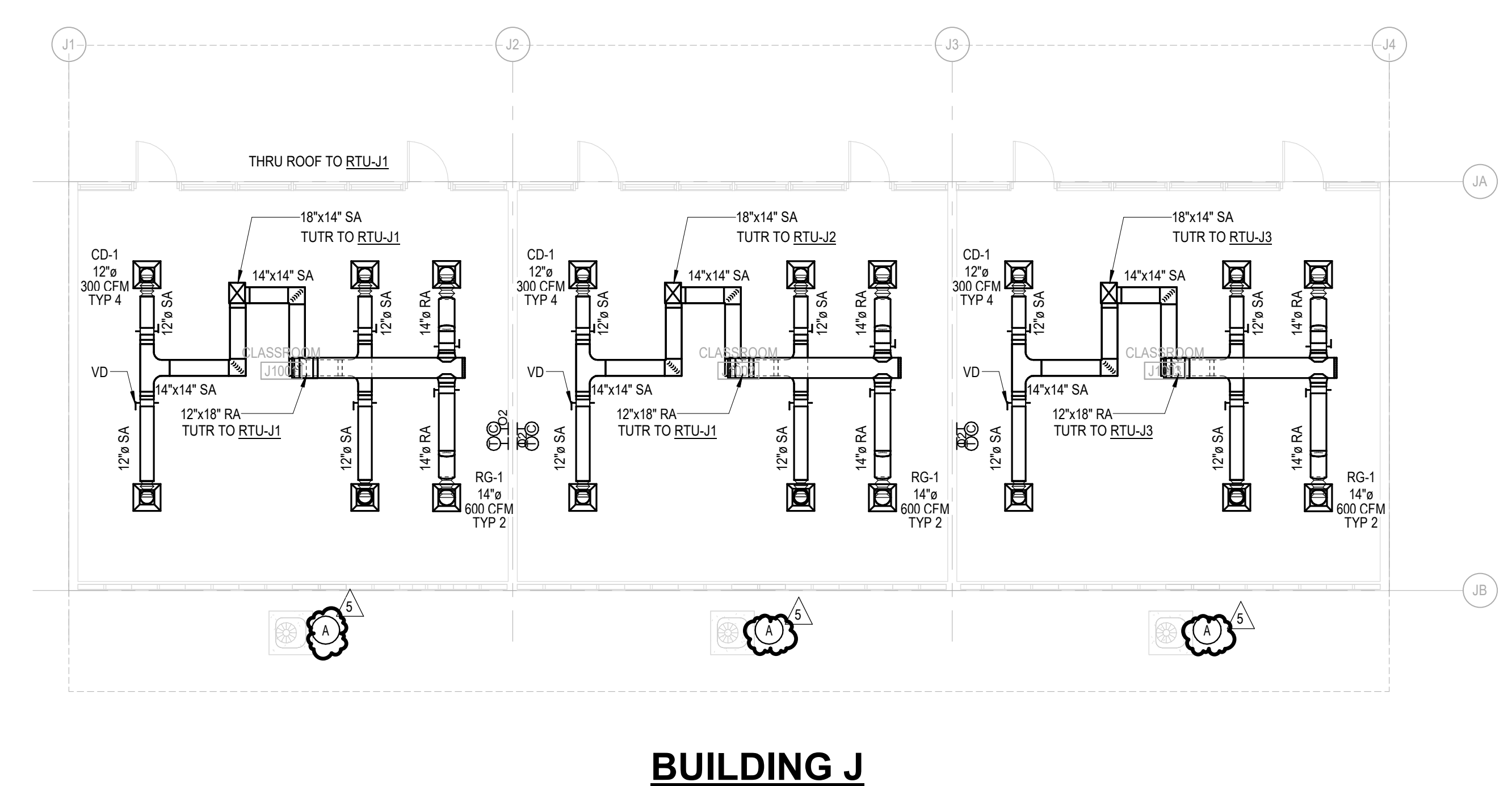
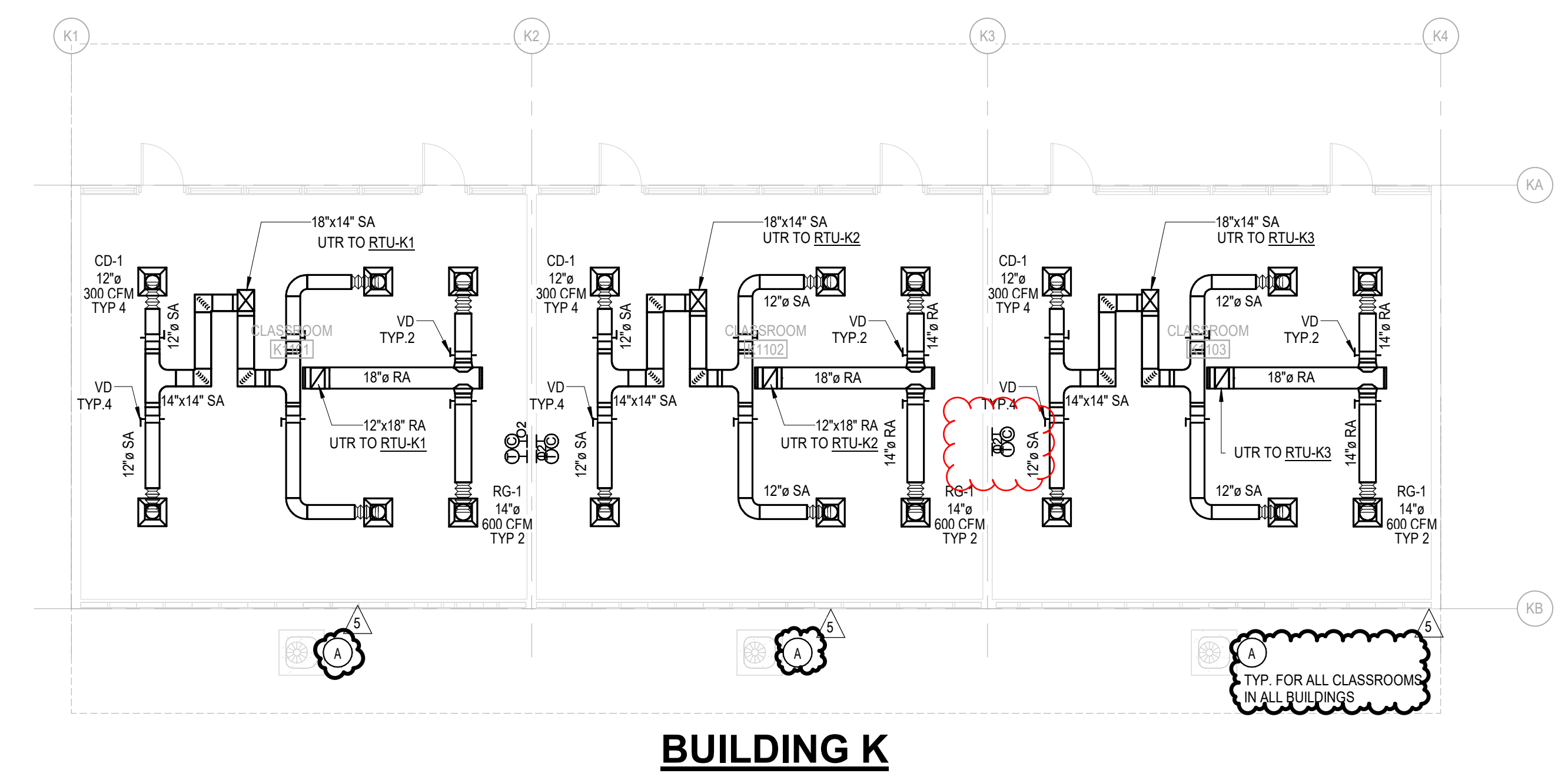
Workman Elementary School
 COVINA VALLEY USD
 1841 E WORKMAN AVE, WEST COVINA, CA 91791

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 5 01/13/2023

75-22605-00

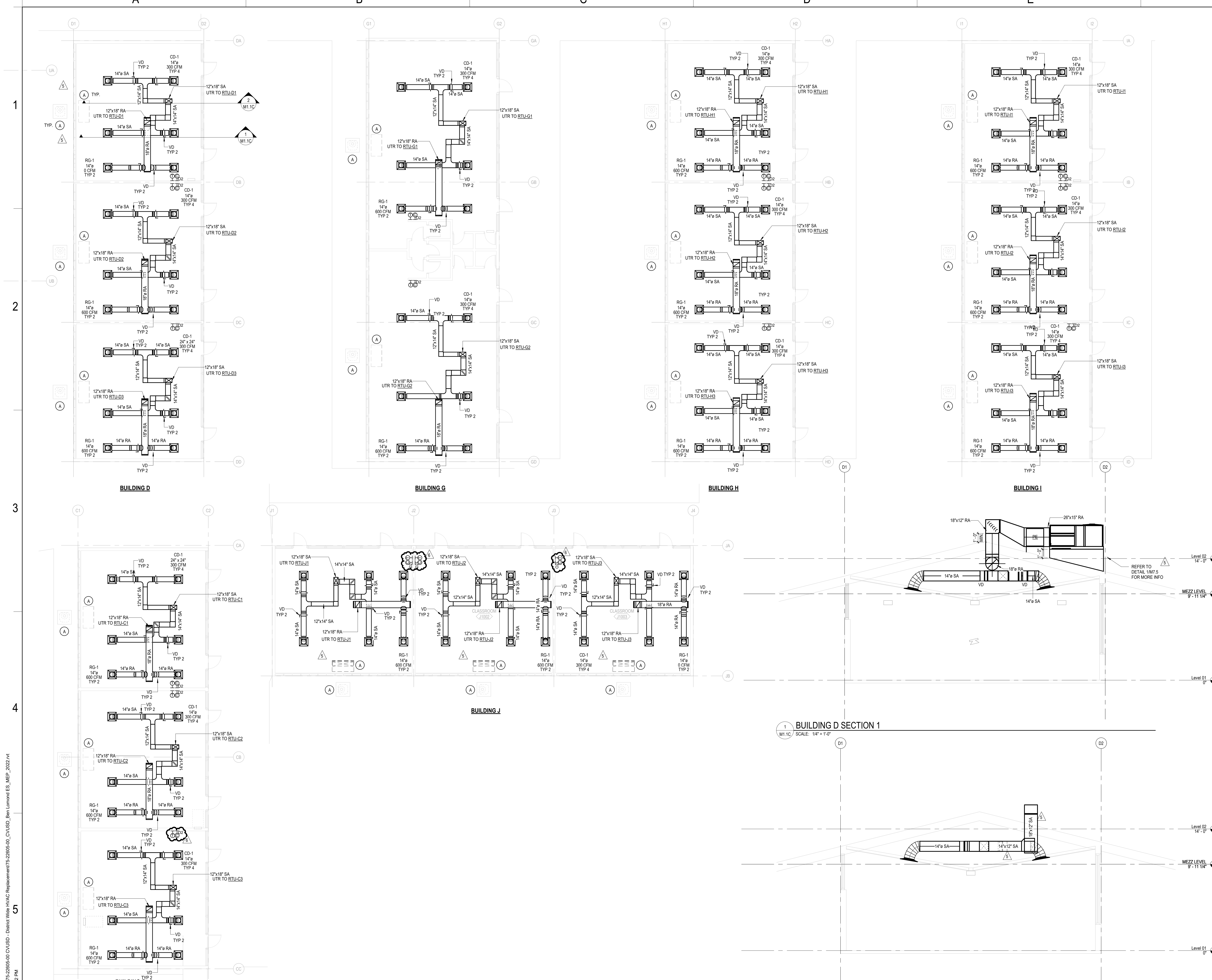
AREA F -
 MECHANICAL
 FLOOR PLAN

M1.1F



MECHANICAL FLOOR PLAN - BUILDINGS K & J
 SCALE: 1/8" = 1'-0"

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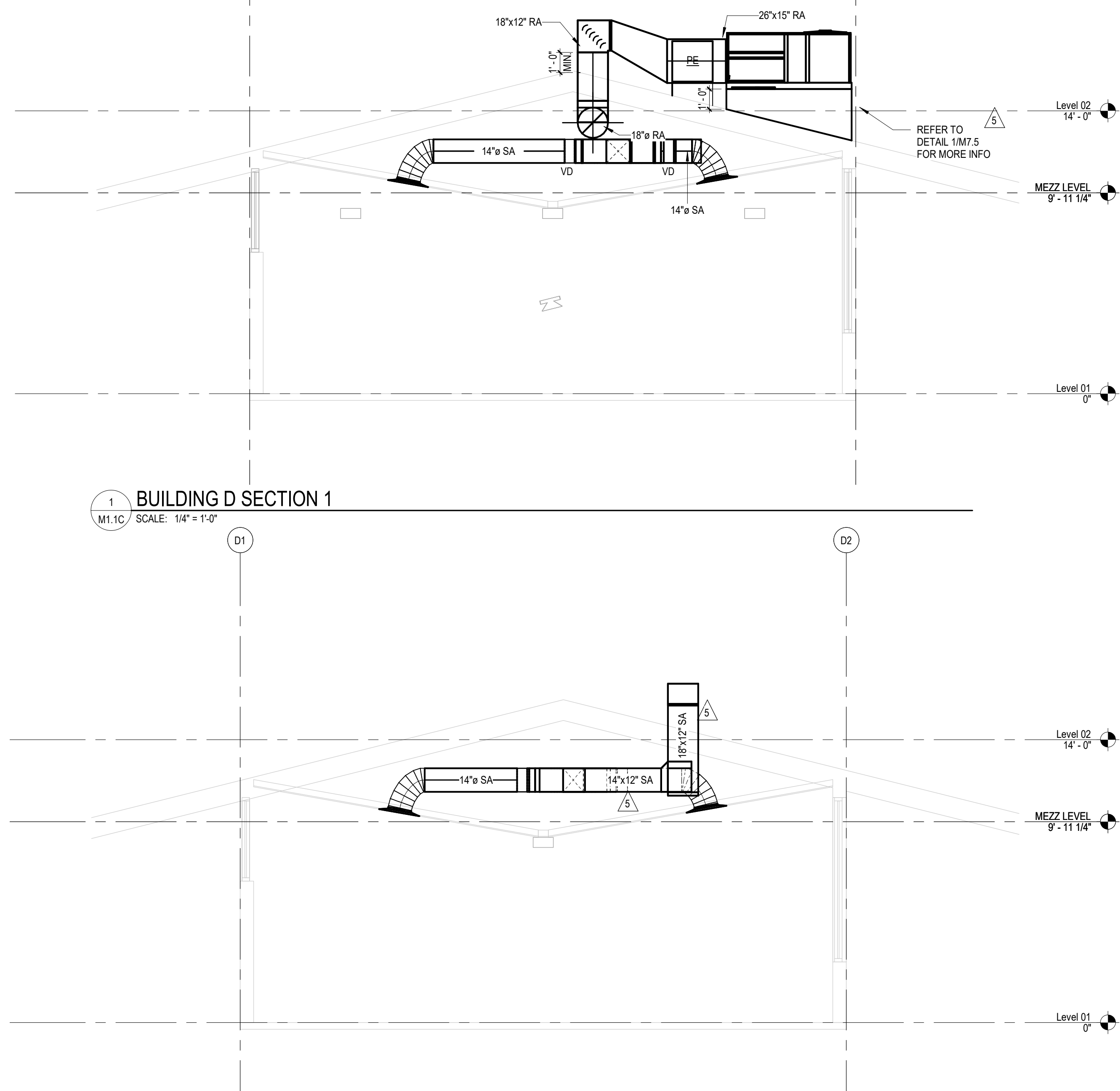
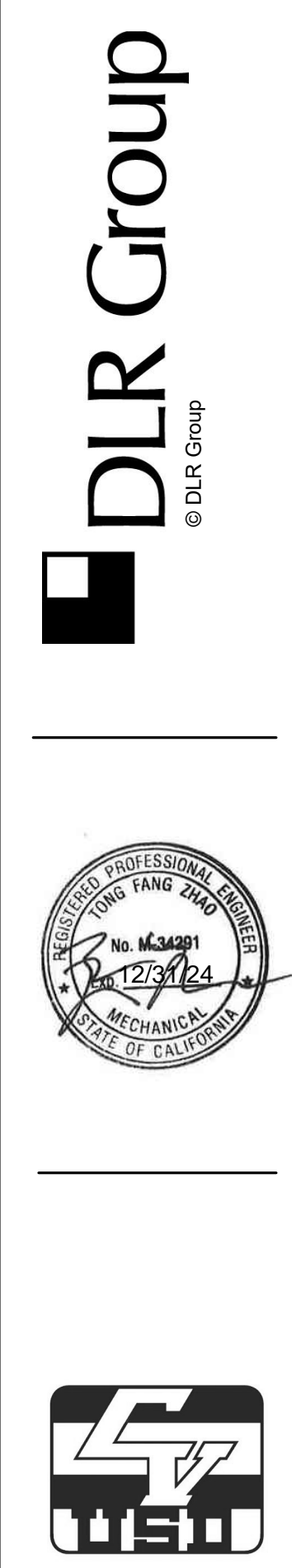


DEMO NOTES

A. DEMOLISH EXISTING OUTDOOR CONDENSING UNIT AND INDOOR FANCL. UNITS, ALONG WITH RELATED CONCRETE PADS, PIPING, CONDUIT, FENCE, SUPPORTS AND OTHER APPURTENANCES. REFER TO ARCH PLANS OR SPECS FOR FILLING HOLES AND MATCHING WALL. TYP.

GENERAL NOTES

1. SCOPE OF WORK IS CLASSROOMS & MPR ONLY.
 2. DIFFUSERS AND GRILLES TO MATCH (E) CEILING TILES. REFER TO RCP.



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BUILDINGS C, D, G, H, I AND J MECHANICAL FLOOR PLANS
 SCALE: 1/8" = 1'-0"

BUILDING D SECTION 2
 M1.1C SCALE: 1/4" = 1'-0"

Ben Lomond Elementary School
 COVINA VALLEY USD
 687 E COVINA BLVD, COVINA, CA 91722

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75-22605-00

BUILDINGS C, D,
 G, H, I AND J
 MECHANICAL
 FLOOR PLANS

M1.1C

A

B

C

D

E

F

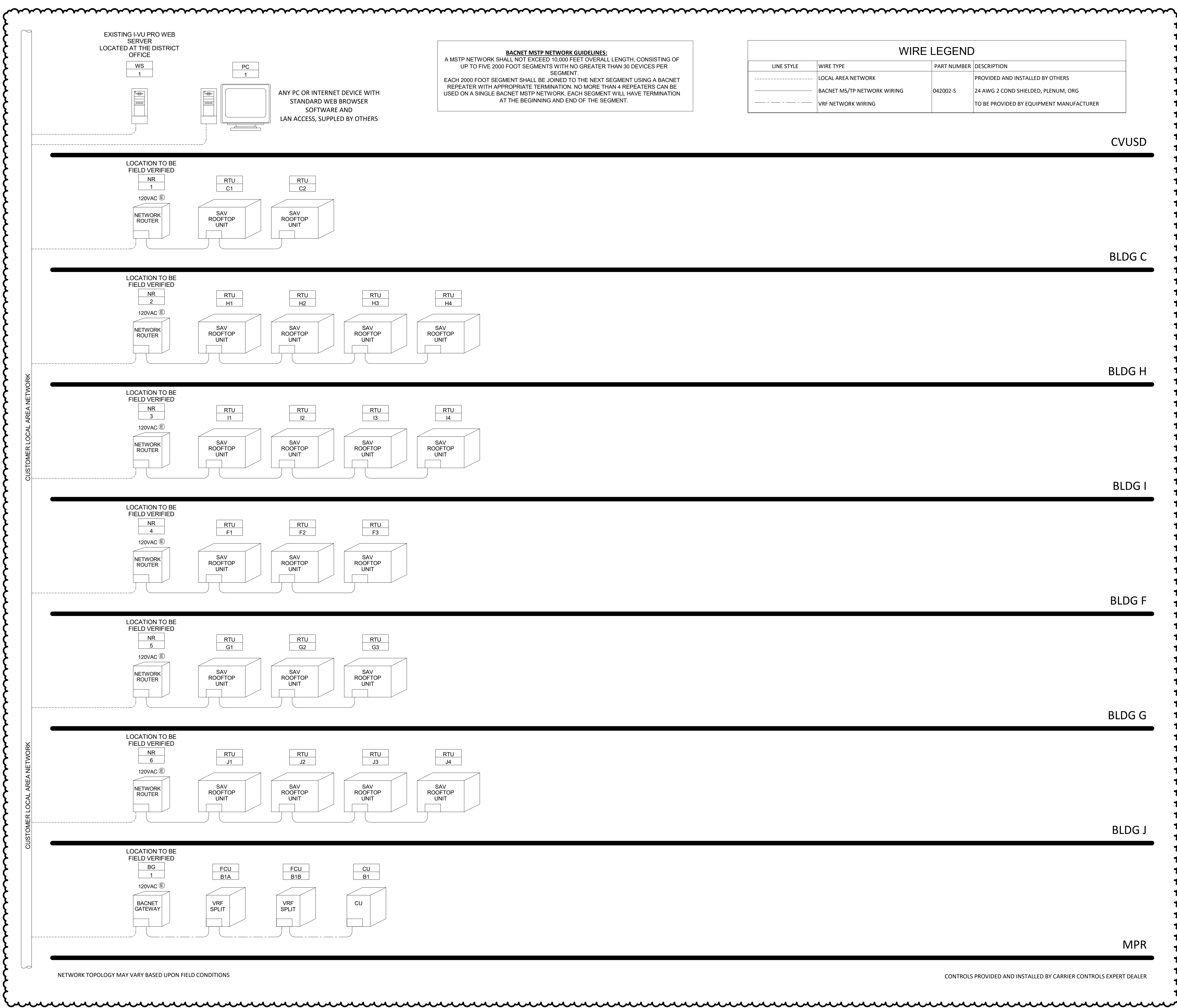
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Cypress Elementary School
 COVINA VALLEY USD
 581 CYPRESS ST., COVINA, CA 91723

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 1/13/2023
 REVISIONS
 6 1/19/2023

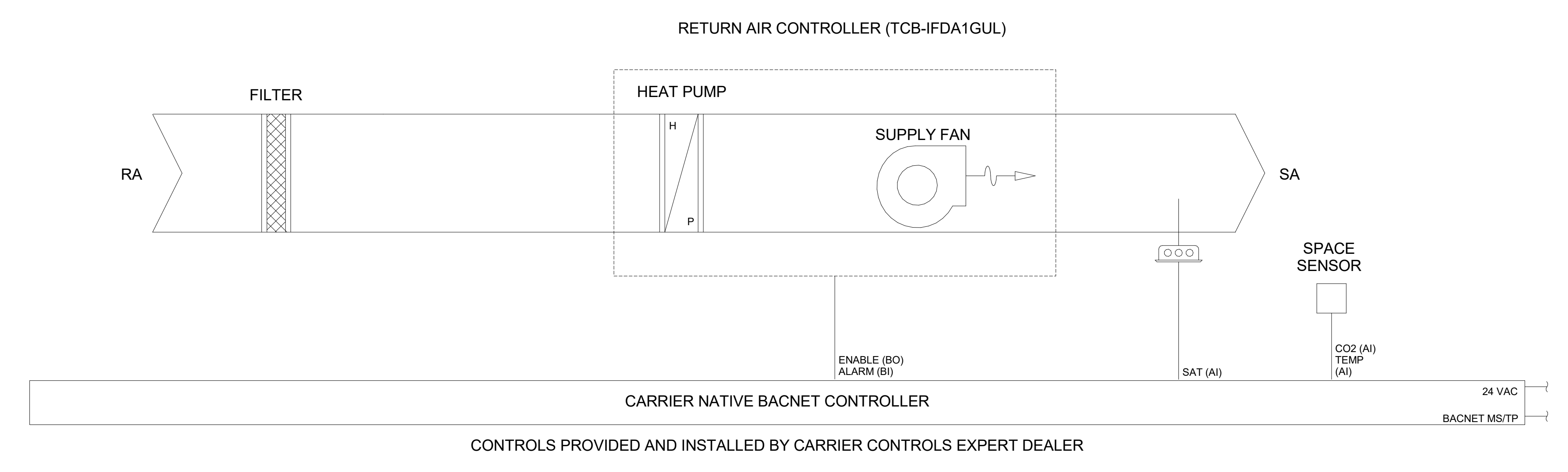
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CONTROLS DIAGRAMS

M5.1

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1 BACS RISER DIAGRAM
 M5.1 NO SCALE



CONTROLS PROVIDED AND INSTALLED BY CARRIER CONTROLS EXPERT DEALER

FAN COIL UNIT DETAIL (FCU-B1) SCALE NONE 1

3 SPLIT FAN COIL UNIT DETAIL (FCU-B1) NO SCALE

SEQUENCES OF OPERATION

SEQUENCE OF OPERATION FOR CVUSD BEN LOMOND ES
 HEAT PUMP RTU (RTU-C1, RTU-C2, RTU-G1 THRU RTU-G3, RTU-H1 THRU RTU-H4, RTU-I1 THRU RTU-I4, AND RTU-J1 THRU RTU-J4)

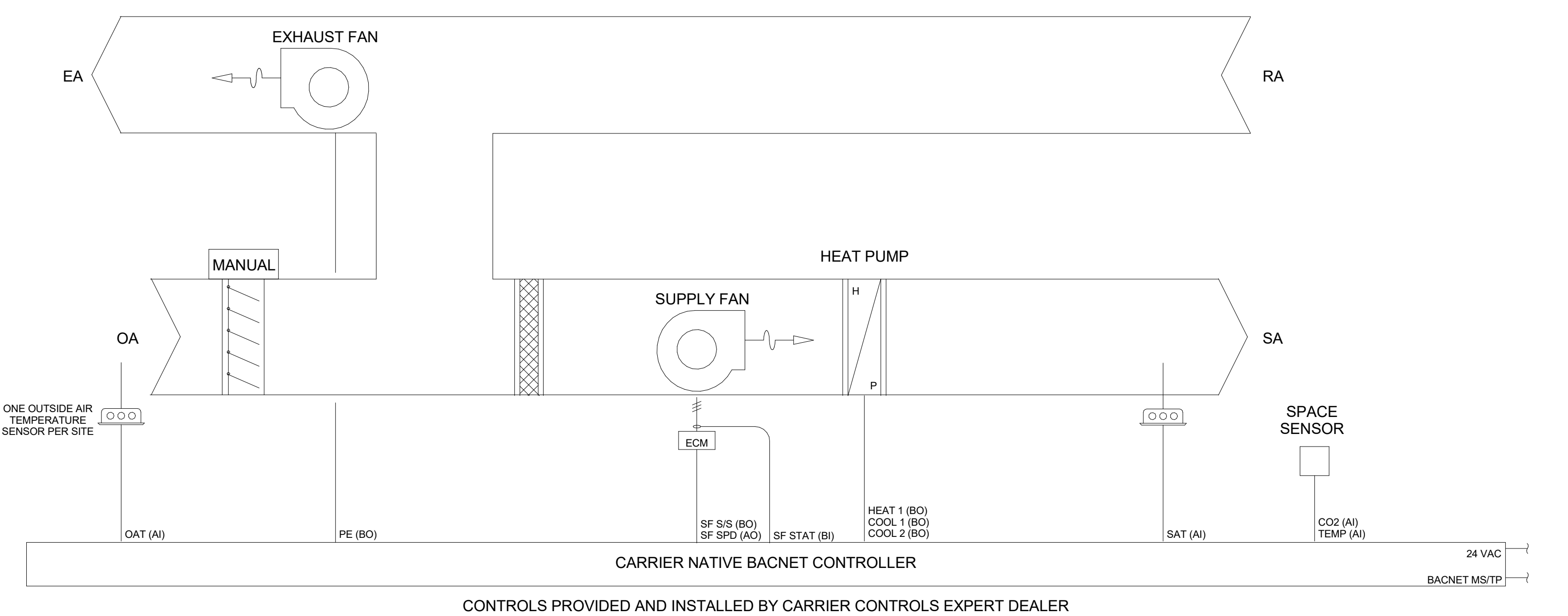
INDOOR FAN
 THE FAN OPERATES AT A VARIABLE SPEED TO MEET THE LOAD CONDITIONS AND SAT SAFETY REQUIREMENTS TO PROVIDE MAXIMUM ENERGY SAVINGS BY MINIMIZING FAN HORSEPOWER CONSUMPTION. FAN SPEED IS NOT CONTROLLED BY STATIC PRESSURE.

HEATING MODE
 WHEN SPACE TEMPERATURE IS BELOW THE OCCUPIED HEATING SETPOINT, UNIT SHALL OPERATE IN THE HEATING MODE. UNIT SHALL STAGE AVAILABLE HEAT STAGES TO SATISFY DEMAND IN THE OCCUPIED SPACE.

COOLING MODE
 WHEN SPACE TEMPERATURE IS ABOVE OCCUPIED COOLING SETPOINT, UNIT SHALL OPERATE IN THE COOLING MODE. UNIT SHALL ENABLE AVAILABLE COOLING STAGES TO SATISFY DEMAND IN THE OCCUPIED SPACE.

CO2 CONTROL
 UNIT SHALL MONITOR SPACE CO2 WHEN THE SUPPLY FAN IS ENERGIZED. WHEN CO2 IS ABOVE SETPOINT OF 1000 PPM, AN ALARM SHALL BE ENABLED THROUGH THE EMS.

POWER EXHAUST
 THE EXHAUST FAN SHALL RUN WHEN THE UNIT IS OCCUPIED.



CONTROLS PROVIDED AND INSTALLED BY CARRIER CONTROLS EXPERT DEALER

1 J4 50FCQ HEAT PUMP RTU DETAIL (RTU-C1, C2, H1 THRU H4, I1 THRU I4, F1 THRU F3, G1 THRU G3, AND J1 THRU J4) SCALE: 12" = 1'-0"

2 VRF POINTS LIST NO SCALE

POINT NAME	HARDWARE POINTS				SOFTWARE POINTS				SHOW ON GRAPHIC	
	AI	AO	BI	BO	AV	BV	SCHED	TREND		ALARM
TEMPERATURE SETPOINT					x				x	x
TEMPERATURE SETPOINT STATUS					x				x	x
INDOOR UNIT MODE					x					x
INDOOR UNIT MODE STATUS					x					x
COMMAND					x					x
SPACE TEMPERATURE					x			x	x	x
SUPPLY FAN COMMAND					x					x
SUPPLY FAN SPEED STATUS					x				x	x
INDOOR UNIT MALFUNCTION CODE					x				x	x
OUTDOOR UNIT MODE STATUS					x					x
OUTDOOR UNIT COMPRESSOR SPEED					x			x		x
OUTDOOR UNIT MALFUNCTION CODE					x				x	x
SCHEDULE							x			x
TOTALS	0	0	0	0	11	0	1	2	6	12
TOTAL HARDWARE (0)		TOTAL SOFTWARE (20)								



Cypress Elementary School
 COVINA VALLEY USD
 581 CYPRESS ST., COVINA, CA 91723

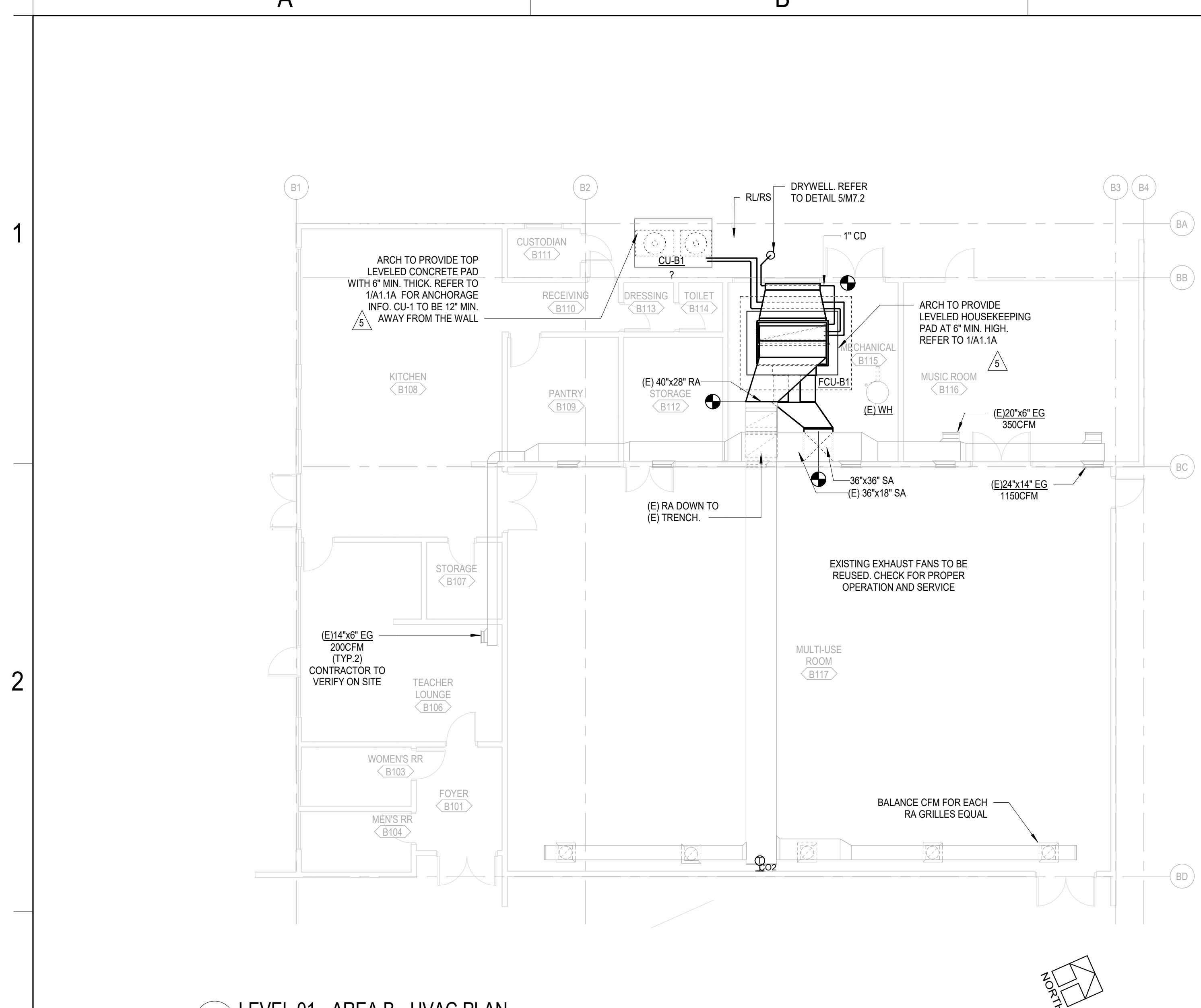
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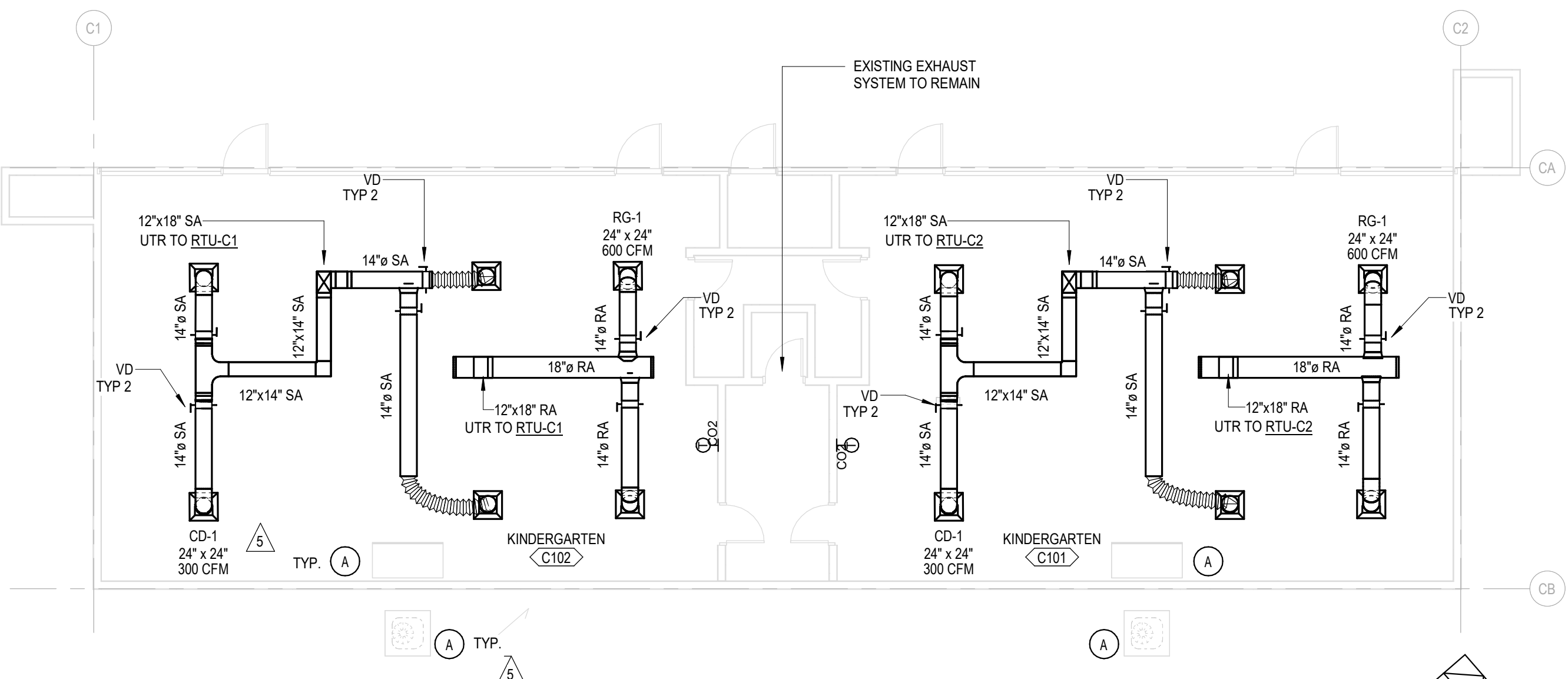
CONTROLS DIAGRAMS

M5.2

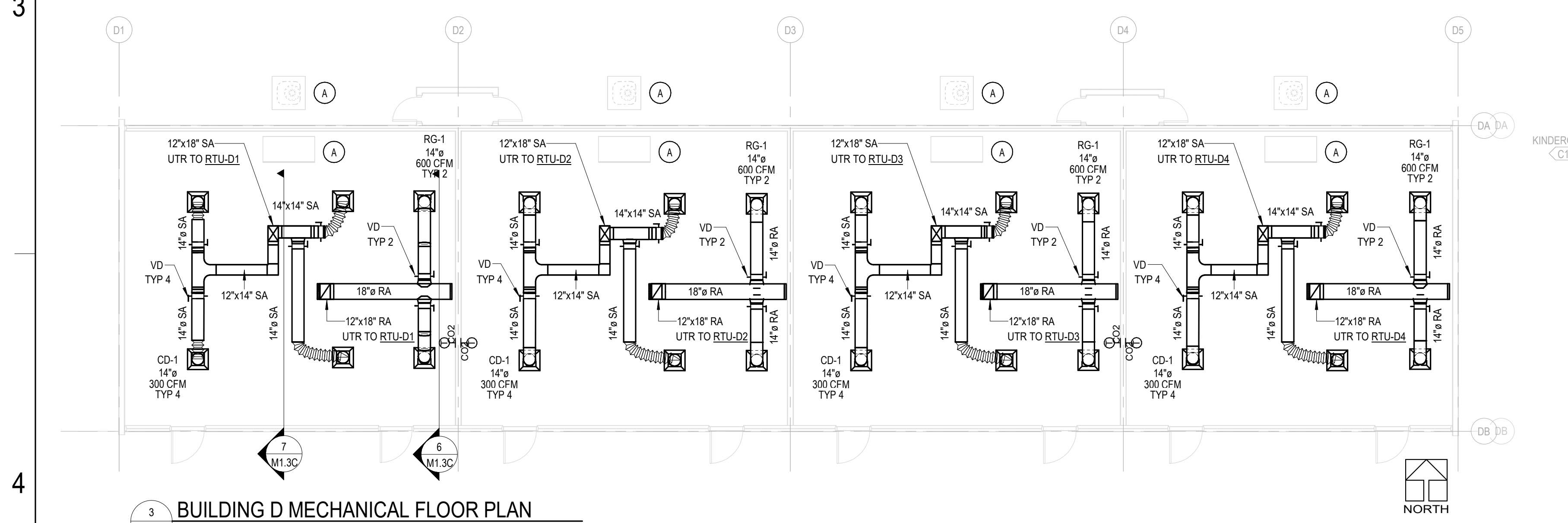
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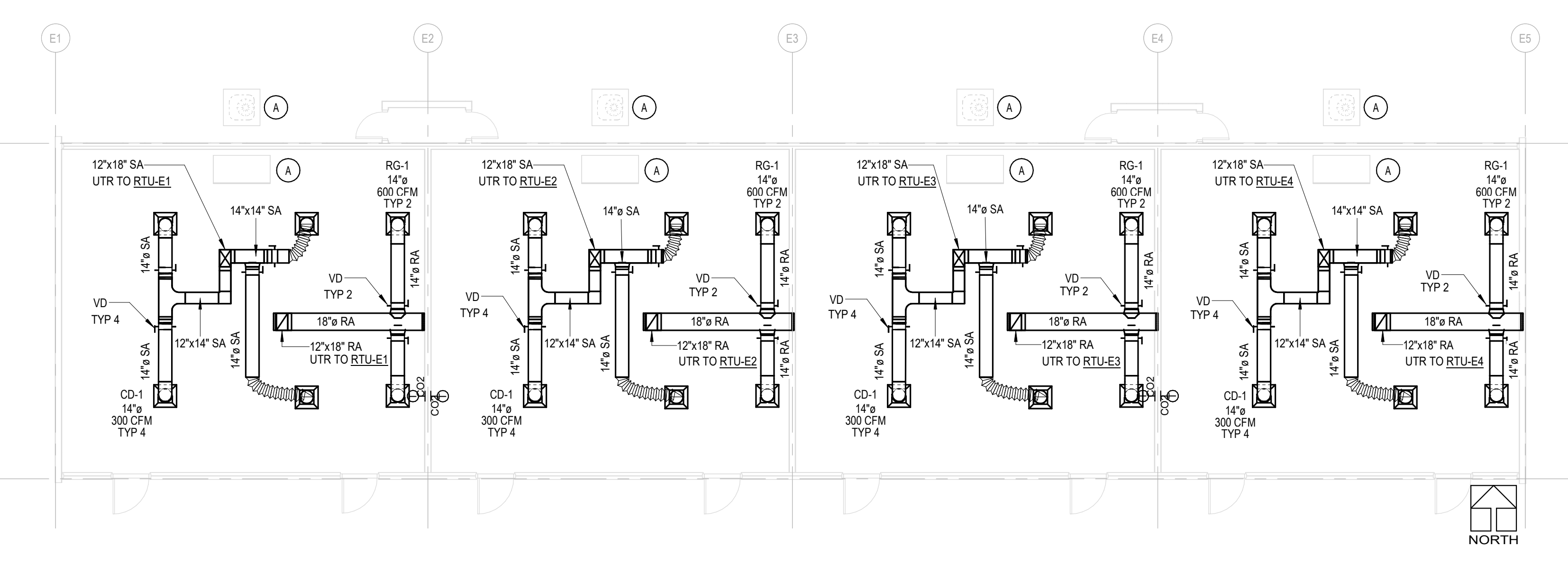
1 LEVEL 01 - AREA B - HVAC PLAN
M1.1C / SCALE: 1/8" = 1'-0"



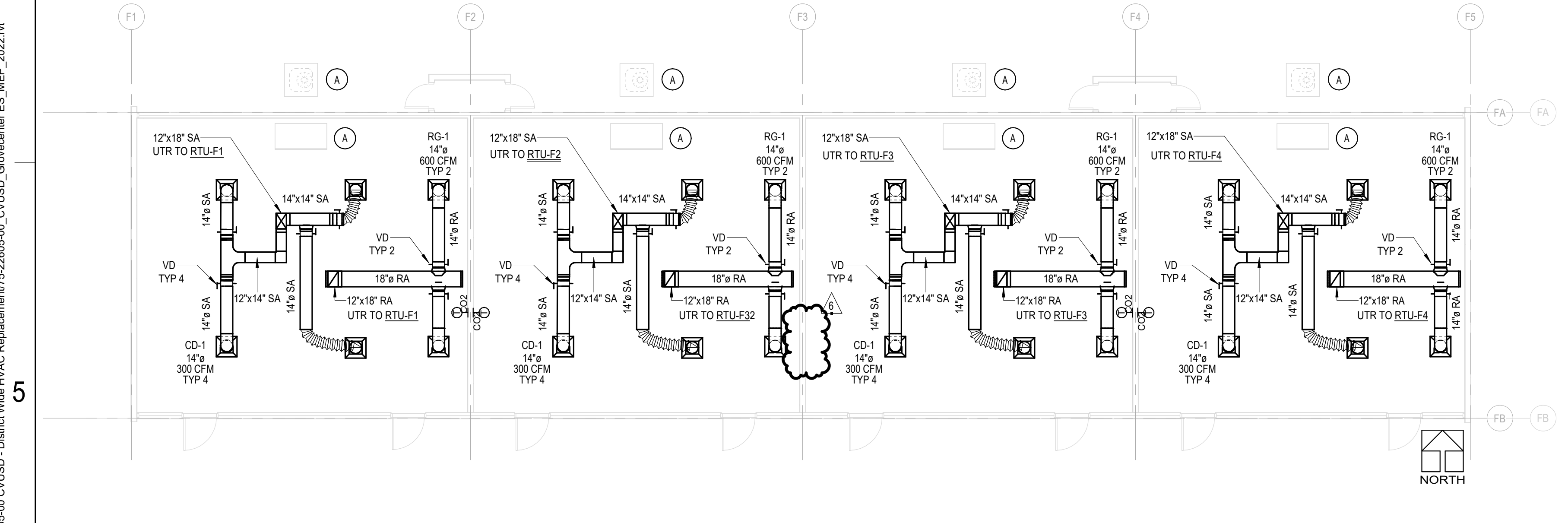
2 BUILDING C MECHANICAL FLOOR PLAN
M1.1C / SCALE: 1/8" = 1'-0"



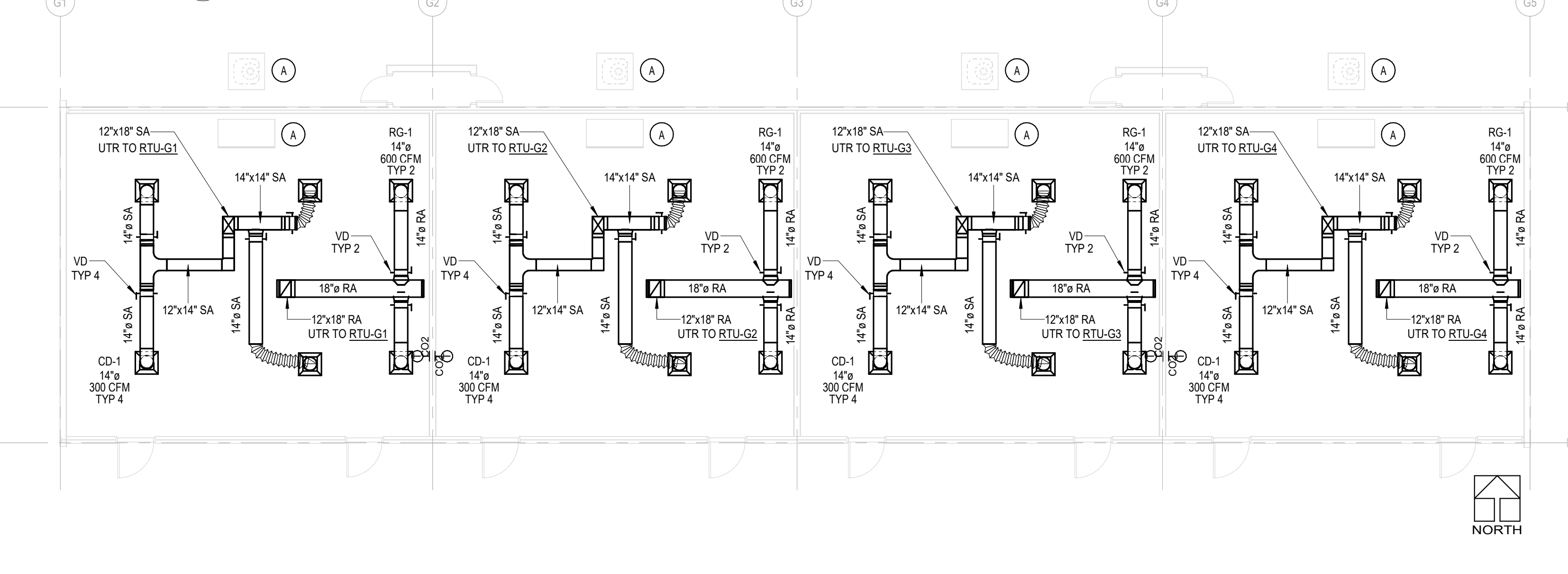
3 BUILDING D MECHANICAL FLOOR PLAN
M1.1C / SCALE: 1/8" = 1'-0"



4 BUILDING E MECHANICAL FLOOR PLAN
M1.1C / SCALE: 1/8" = 1'-0"



5 BUILDING F MECHANICAL FLOOR PLAN
M1.1C / SCALE: 1/8" = 1'-0"



6 BUILDING G MECHANICAL FLOOR PLAN
M1.1C / SCALE: 1/8" = 1'-0"

DEMO NOTES

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2. DIFFUSERS AND GRILLES TO MATCH (E) CEILING TILES. REFER TO RCP.



Grovecenter Elementary School
COVINA VALLEY USD
775 N. LARK ELLIEN AVE. WEST COVINA, CA 91791

DSA Submitted Set
1/13/2023
REVISIONS
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77-22605-00
MECHANICAL FLOOR PLANS

M1.1C

Autodesk Docs // 75-22605-00_CVUSD - District Wide HVAC Replacement // 75-22605-00_CVUSD_Grovecenter ES MEP_2022.rvt
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