



Date: February 13, 2026

TO: Prospective Bidders

RE: ISFA Rate Field – HVAC FY2026
Engineer's Project Number: 25080
Addendum Number: 01

This Addendum consists of additions and/or modifications to the plans and/or specifications to the bidding and contract documents dated January 30, 2026. The changes to these documents are only in the manner and to the extent stated herein. All drawings have “Issued for Addendum 1” and “2/13/26” in the title block. Changes are bubbled and tagged with revision Delta 1. This Addendum supersedes any oral or written information previously delivered. Contractor to acknowledge receipt of this Addendum 1 on the Bid Form; failure to do so may subject bidder to disqualification.

Revise PROJECT MANUAL as follows:

1. Bid Form
 - a. Contractor to acknowledge receipt of this Addendum 1 on the Bid Form.

Revise DRAWINGS as follows:

1. M2.01 Mechanical Plans
 - a. View 2: REVISE AHU-6-3B CFM.
 - b. View 2: ADD ceiling uninstall/reinstall requirement.
 - c. View 3: REVISE thermostat location.
2. M2.02 Mechanical Plans
 - a. View 4: REVISE isolation valve requirements. Existing isolation valves to remain and be re-used.
3. M4.01 Mechanical Schedules
 - a. AHU Schedule: CLARIFIED AHU-5B-3 dimensions.
 - b. AHU Schedule: Revise AHU-6-3B size and performance data.
4. M6.01 Mechanical Controls
 - a. View 1: REVISE damper points to binary (previous analog).
 - b. View 1: DELETE heater amps.



CLARIFICATIONS TO THE DOCUMENTS as follows:

1. **Question:** Is there to be one WBE/MBE affidavit per bid item, or one WBE/MBE affidavit for the whole project? **Answer:** Only one WBE/MBE affidavit is required for the whole project.
2. **Question:** What are the allowable construction working hours? **Answer:** 6:00 am to 6:00 pm, Monday through Friday. Overtime allowed with approval of owner.
3. **Question:** Can Siemens contact information be shared?
Answer:

Craig Crawford, P.E., LEED AP
Siemens Industry, Inc.
RC-US SI RAM Z3 CHI SAL-AUTO1
585 Slawin Court
Mount Prospect, IL 60056, USA
Fax: +1 866 269-1557
Mobile: +1 847 305-0665
<mailto:craig.crawford@siemens.com>

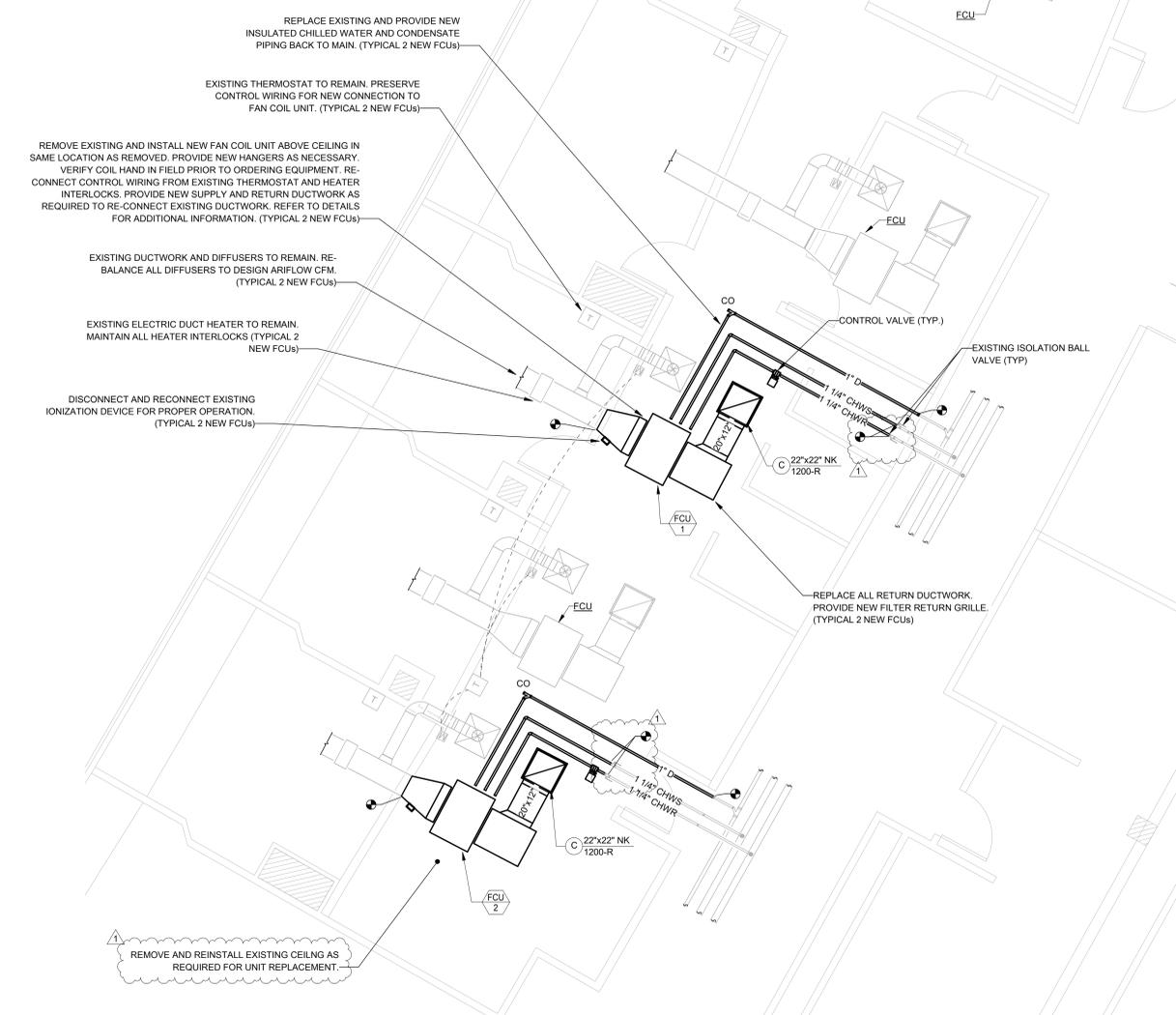
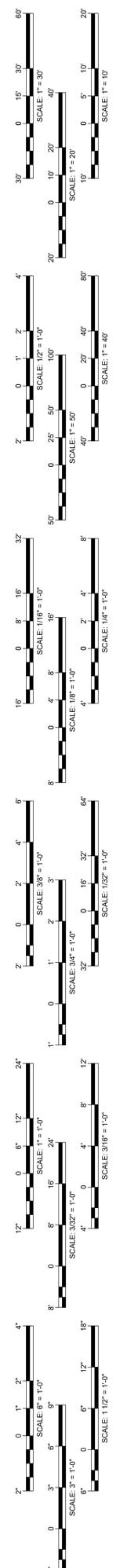
Sincerely,

CHRIS CARTER – PROJECT ENGINEER
ELARA ENGINEERING
CHICAGO, IL • HILLSIDE, IL
V: 630-204-1218 • F: 708-236-0330
WWW.ELARAENG.COM

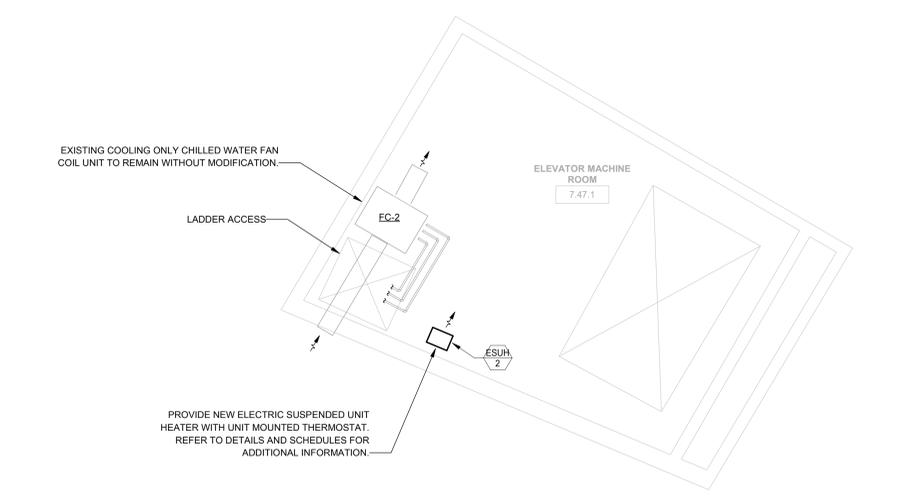
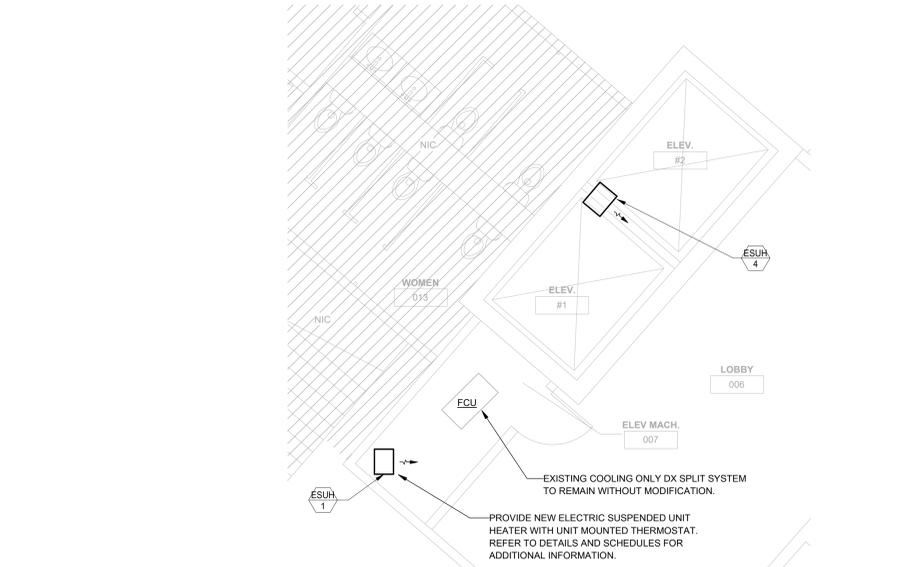
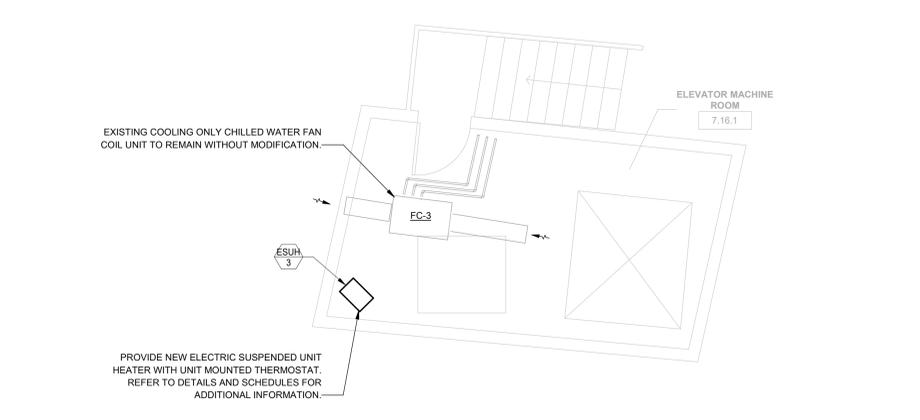
Attachments

1. M2.01
2. M2.02
3. M4.01
4. M6.01

END OF ADDENDUM NO. 1



4 MECHANICAL PLAN - ISFA OFFICES - 400 LEVEL
SCALE: 1/4" = 1'-0"



ISSUE/REVISION:		
REV	DATE	DESCRIPTION
1	01/13/20	ISSUED FOR BID
1	01/13/20	ADDENDUM 1

PROJECT:
RATE FIELD - HVAC FY2026

333 WEST 35TH STREET
CHICAGO, IL 60616

DRAWING TITLE:
MECHANICAL PLANS

DESIGNED BY: MO
CHECKED BY: CC
PROJECT NO: 25080
SCALE: 1/4" = 1'-0"
SHEET NO.

AIR HANDLING UNIT SCHEDULE (AHU)																																					
EQUIP. TAG		GENERAL										SUPPLY FAN					COOLING DATA										HEATING DATA					ELECTRICAL DATA			NOTES		
ABB.	NO.	LOCATION	MFR	MODEL	OPERATING WEIGHT (LBS)	COIL HAND	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	MIN. OA (CFM)	TOTAL AIR FLOW (CFM)	ESP (IN. WC)	TYPE	QTY.	FAN RPM	RPM	HP (EACH)	BHP (EACH)	TYPE	EAT DB/WB (DEG.F)	LAT DB/WB (DEG.F)	EWT (DEG.F)	LWT (DEG.F)	WATER FLOW (GPM)	WATER PD (FT. HD.)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	TYPE	EAT (DEG.F)	LAT (DEG.F)	TOTAL CAPACITY (KW)	STAGES	SENSIBLE CAPACITY (MBH)	VOLTS		HZ	PHASE
AHU	5B-3	ELEVATOR 3, 4 MACHINE ROOM	CARRIER	42DHA208RGMGDKAMKA	309	RIGHT	40-1/4	48	24	300	2000	0.75	DIRECT	1	1108	1108	1	-	ETHYLENE GLYCOL	82.3 / 68.9	54.5 / 53.6	44	54	20.9	33.2	96.1	61.40	ELECTRIC COIL	50	61.1	7	2	23.90	480	60	3	SEE BELOW
AHU	6-3B	ELEVATOR 7, 8, 9, 10 MACHINE ROOM	CARRIER	42BHE20LGR12408GG	309	RIGHT	40-1/4	48	21-1/2	400	2400	0.75	BELT	1	1068	1068	2	1.13	ETHYLENE GLYCOL	81.3 / 68.1	56.9 / 55.8	44	54	20.4	23.6	93.6	64.5	ELECTRIC COIL	50	76.2	20	3	67.9	480	60	3	SEE BELOW
AHU	7D-1	ELEVATOR 5, 6 MACHINE ROOM	CARRIER	42DHA168RGMGMAMKA	309	LEFT	37-3/4	47	21-1/2	200	1600	0.75	DIRECT	1	1341	1341	1	-	ETHYLENE GLYCOL	81.9 / 68.6	56.4 / 55.2	44	54	16.7	28.8	76.6	50.7	ELECTRIC COIL	50	67.4	9.9	2	33.8	480	60	3	SEE BELOW

NOTES:

- MANUFACTURER PROVIDED 1 YEAR PARTS WARRANTY ON ENTIRE UNIT. MECHANICAL CONTRACTOR TO PROVIDE A 1 YEAR LABOR WARRANTY FOR THE ENTIRE UNIT.
- FACTORY HEATER FUSING AND 40A DISCONNECT (AHU-5B-3 AND AHU-7D-1)
- MOTOR AND ELECTRIC HEAT CONTROLS WITH FUSED DISCONNECT 41 TO 60 AMPS (AHU-6-3B)
- VIBRATION ISOLATION AND OVERHEAD SUSPENSION BRACKETS.
- CONDENSATE OVERFLOW SWITCH.
- MULTI-SLOPED STAINLESS STEEL DRAIN PANS UNDER ANY COOLING COIL.
- MANUFACTURER CERTIFIED START-UP.
- 350 PSIG COIL TEST PRESSURE. 300 PSIG OPERATION PRESSURE.
- STANDARD 1" THROWAWAY FILTER. PROVIDE (1) EXTRA SET OF FILTERS FOR OWNERS STOCK.
- CHILLED WATER COILS ARE SCHEDULED WITH 30% EG.
- DOUBLE WALL 2" FIBERGLASS AND SOLID INNER LINER.
- REAR RETURN / FRONT SUPPLY.
- SINGLE POINT POWER CONNECTION.
- PROVIDE WITH FILTER RACK.

HYDRONIC FAN COIL UNITS (FCU)																						
EQUIP. TAG		GENERAL										PERFORMANCE							ELECTRICAL			NOTES
ABB.	NO.	LOCATION	SERVICE	MFR	MODEL	TYPE	OPERATING WEIGHT (LBS)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	AIRFLOW (CFM)	ESP (IN. WC)	TOTAL COOLING CAPACITY (MBH)	SENSIBLE COOLING CAPACITY (MBH)	EAT DB/WB (°F)	LAT DB/WB (°F)	CHW FLOW (GPM)	FILTERS	VOLTS	HZ	PHASE	
FCU	1	ISFA OFFICE SUITE	ISFA OFFICE SUITE	CARRIER	42DCA12	HORIZONTAL DUCTED	169	46	29.5	16.5	1200	0.3	44.6	25.5	75 / 67	54.6 / 54.3	9.9	MERV 13	115	60	1	SEE BELOW
FCU	2	ISFA OFFICE SUITE	ISFA OFFICE SUITE	CARRIER	42DCA12	HORIZONTAL DUCTED	169	46	29.5	16.5	1200	0.3	44.6	25.5	75 / 67	54.6 / 54.3	9.9	MERV 13	115	60	1	SEE BELOW

NOTES:

- CAPACITIES ARE BASED ON HIGH FAN SPEED.
- COIL CONNECTION HAND TO BE DETERMINED BY MECHANICAL CONTRACTOR.
- EXISTING ELECTRIC HEATING COIL SHALL REMAIN AND BE RE-USED.
- COORDINATE CONTROLS WITH BUILDING TEMPERATURE CONTROLS CONTRACTOR FOR THERMOSTATS. CONTROL VAVLES, INTERCONNECTION OF FAN COIL AND ELECTRIC HEATING COIL.
- INCLUDE 1" THROWAWAY FILTERS.
- ALL UNITS TO BE SIZED FOR 30% ETHYLENE GLYCOL CONCENTRATION IN CHILLED WATER.
- FUSED DISCONNECT.
- NO ALTERNATE MANUFACTURER'S PERMITTED. UNIT TO BE SOLE-SOURCED TO MATCH EXISTING UNITS AND SYSTEM CURRENTLY PRESENT IN FACILITY.

ELECTRIC SUSPENDED UNIT HEATERS (ESUH)																
EQUIP. TAG		GENERAL							PERFORMANCE				ELECTRICAL			NOTES
ABB.	NO.	LOCATION	MFR	MODEL	SHIPPING WEIGHT (LBS)	MOUNTING TYPE	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	KW	AIRFLOW (CFM)	VOLTS	HZ	PHASE		
ESUH	1	ELEVATOR 12, 13 MACHINE ROOM	KING	KB4803-3	30.5	SUSPENDED	15	11	16.5	3	520	480	60	3	1,2	
ESUH	2	ELEVATOR 11 MACHINE ROOM	KING	KB4805-3	30.5	SUSPENDED	15	11	16.5	5	520	480	60	3	1,2	
ESUH	3	ELEVATOR 1 MACHINE ROOM	KING	KB4805-3	30.5	SUSPENDED	15	11	16.5	5	520	480	60	3	1,2	
ESUH	4	ELEVATOR 12, 13 HOISTWAY	KING	KB4810-3	45	ELEVATOR HOISTWAY WALL	15	13.5	16.5	10	800	480	60	3	2,3,4	
ESUH	5	ELEVATOR 11 HOISTWAY	KING	KB4805-3	30.5	ELEVATOR HOISTWAY WALL	15	11	16.5	5	520	480	60	3	2,3,4	
ESUH	6	ELEVATOR 7, 8 HOISTWAY	KING	KB4810-3	45	ELEVATOR HOISTWAY WALL	15	13.5	16.5	10	800	480	60	3	2,3,4	
ESUH	7	ELEVATOR 9, 10 HOISTWAY	KING	KB4810-3	30.5	ELEVATOR HOISTWAY WALL	15	13.5	16.5	10	800	480	60	3	2,3,4	
ESUH	8	ELEVATOR 1 HOISTWAY	KING	KB4805-3	30.5	ELEVATOR HOISTWAY WALL	15	11	16.5	5	520	480	60	3	2,3,4	

NOTES:

- UNIT MOUNTED THERMOSTAT PROVIDED BY MANUFACTURER.
- LOCAL DISCONNECT PROVIDED BY MANUFACTURER. FIELD MOUNTED BY ELECTRICAL CONTRACTOR.
- ELEVATOR HOISTWAY APPLICATION. PROVIDE SWING ARM SUPPORT.
- REMOTE MOUNTED THERMOSTAT. AT TOP OF HOISTWAY
- 3 WIRE.

GRILLES, REGISTERS, AND DIFFUSER SCHEDULE							
EQUIP. TAG	MFR	MODEL	TYPE	MATERIAL	SIZE	MAX. NC	NOTES
A	TITUS	300RL	SUFACE MOUNTED DOUBLE DEFLECTION	ALUMINUM	VARIES	30	SEE BELOW
B	TITUS	350RL	EXHAUST GRILLE	STEEL	VARIES	30	SEE BELOW
C	TITUS	50FF	FILTER RETURN GRILLE	ALUMINUM	22"x22" NECK	30	SEE BELOW

NOTES:

- CONTRACTOR SHALL VERIFY BORDER TYPE INCLUDING FRAME, FLANGE, AND SECURING METHOD IN EACH APPLICATION; REFER TO...
- COLOR WHITE.
- SURFACE MOUNT.
- LAY-IN FRAME.
- PROVIDE HINGE WITH QUARTER TURN FASTENER. FURNISH WITH 2" MERV 8 FILTER.



ISSUE/REVISION:

REV	DATE	DESCRIPTION
1	1/30/2026	ISSUED FOR BID
1	2/13/26	ADDENDUM 1

PROJECT:
RATE FIELD - HVAC FY2026

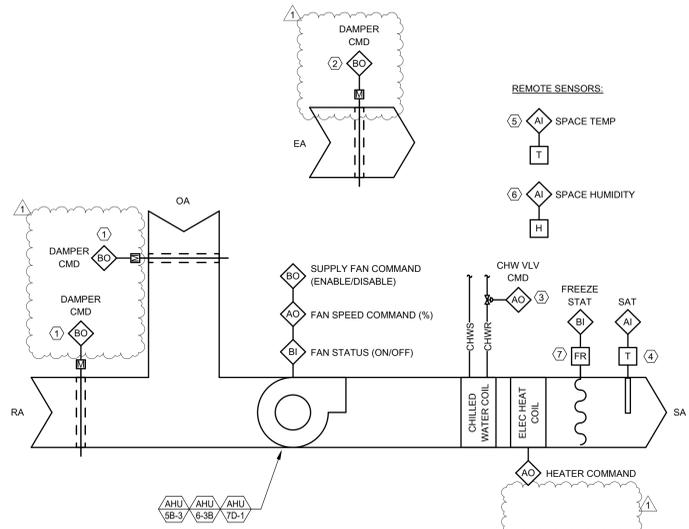
333 WEST 35TH STREET
CHICAGO, IL 60616

DRAWING TITLE:
MECHANICAL SCHEDULES

DESIGNED BY: MO
CHECKED BY: CC
PROJECT NO: 25080
SCALE: NO SCALE
SHEET NO.

M4.01

- ### AHU BAS KEYED NOTES
- DAMPER TO REMAIN. BASC TO FURNISH AND INSTALL REPLACEMENT ACTUATOR AND ENSURE PROPER OPERATION OF DAMPER. (AHU-5B-3 AND AHU-7D-1 ONLY)
 - DAMPER TO REMAIN. BASC TO FURNISH AND INSTALL REPLACEMENT ACTUATOR AND ENSURE PROPER OPERATION OF DAMPER. (MECHANICAL ROOMS 6.30.5 AND 7.29.1 ONLY)
 - BASC SHALL PROVIDE TWO-WAY MODULATING CONTROL VALVE FOR AHU COOLING COIL. FOR MC TO INSTALL BASC RESPONSIBLE FOR ALL LOW VOLTAGE WIRING AND RACEWAYS. EACH CONTROL VALVE SHALL HAVE 24 VOLT ACTUATORS AND SHALL BE CONFIGURED TO FAIL CLOSED ON LOSS OF POWER AND ON LOSS OF CONTROL SIGNAL SO THAT CONTROL VALVE CLOSURES IF CONDENSATE OVERFLOW SWITCH IS ACTIVATED. PROVIDE PRESSURE INDEPENDENT CONTROL VALVES (PICVS) THAT CAN BE FIELD ADJUSTED ABOVE AND BELOW THE FLOW RATES SPECIFIED IN THIS SCHEDULE. VALVE TO BE SELECTED SO THAT THE SPECIFIED FLOW RATE FALLS WITHIN THE MIDDLE OF THE CONTROL VALVE FLOW RANGE. CONTROL VALVES TO HAVE MINIMUM ANSI CLASS OF 125 AND MINIMUM 100PSI CLOSE OFF PRESSURE RATING. CONTROL VALVE SHALL INCLUDE BRASS TRIM AND STAINLESS STEEL STEM. EACH VALVE SHALL INCLUDE THE PIT TEST POINT OPTION.
 - BASC TO PROVIDE SUPPLY AIR TEMPERATURE SENSOR. TEMPERATURE SENSOR PROBE LENGTH TO BE SIZED SO THAT IT READS IN THE CENTER OF THE DUCTWORK.
 - BASC TO PROVIDE SPACE TEMPERATURE SENSORS AND ADD POINTS TO BAS FOR EACH AHU. REFER TO FLOOR PLANS FOR APPROXIMATE SENSOR LOCATIONS; COORDINATE FINAL LOCATION WITH OWNER. PROVIDE TEMPERATURE SENSOR WITH FLAT-PLATE FACE.
 - BASC TO PROVIDE HUMIDITY SENSOR. COMBINATION SENSOR IS ACCEPTABLE.
 - BASC TO FURNISH AND INSTALL FREEZESTAT.



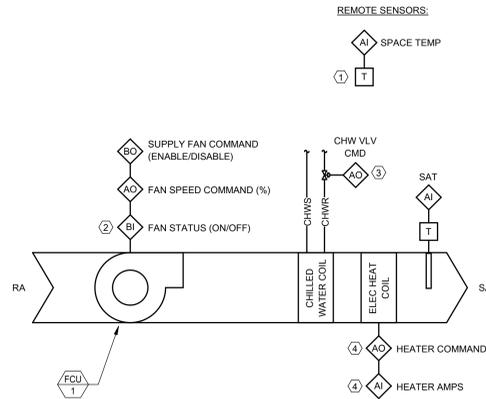
1 AIR HANDLING UNIT - CONTROLS SCHEMATIC
SCALE: NO SCALE

- ### AHU SEQUENCE OF OPERATION
- SYSTEM DESCRIPTION**
 - APPLIES TO INDOOR AIR HANDLERS SERVING ELEVATOR MACHINE ROOMS. THE AHUs ARE EQUIPPED WITH THE FOLLOWING:
 - OUTSIDE AIR DAMPER (WHERE INDICATED)
 - RETURN AIR DAMPER (WHERE INDICATED)
 - CHILLED WATER COOLING COIL WITH MODULATING VALVE
 - ELECTRIC HEATING COIL
 - CONSTANT VOLUME SUPPLY FAN
 - REMOTE SPACE TEMPERATURE SENSOR AND SPACE HUMIDITY SENSOR
 - SCHEDULING:**
 - THE AHU SHALL OPERATE YEAR-ROUND AS REQUIRED TO MAINTAIN SPACE CONDITIONS.
 - NO UNOCCUPIED MODE SHALL BE USED. NO NIGHT SETBACK SHALL APPLY.
 - UNIT START-UP:**
 - THE AHU SHALL ENABLE WHEN ANY OF THE FOLLOWING CONDITIONS ARE TRUE:
 - SPACE TEMPERATURE IS BELOW 50°F (ADJ.)
 - SPACE TEMPERATURE IS ABOVE 80°F (ADJ.)
 - SPACE HUMIDITY IS ABOVE 80% RH (ADJ.)
 - THE BAS ISSUES A GENERAL ENABLE COMMAND
 - UPON ENABLE, CONFIRM THE FOLLOWING CONDITIONS PRIOR TO START:
 - CHILLED WATER PUMP IS AVAILABLE (IF COOLING IS REQUIRED).
 - DISCHARGE AIR TEMPERATURE (DAT) SENSOR IS READING VALID VALUES.
 - AHU START SEQUENCE:
 - SUPPLY FAN SHALL START
 - OUTSIDE AIR AND RETURN AIR DAMPERS SHALL DRIVE TO OCCUPIED/MINIMUM POSITIONS.
 - HEATING AND COOLING CONTROL LOOPS SHALL BE ENABLED.
 - UNIT SHUTDOWN:**
 - UNIT SHALL SHUT DOWN ONLY IF:
 - A SAFETY TRIP OCCURS, OR
 - THE BAS IS MANUALLY COMMANDED OFF FOR SERVICE.
 - UPON SHUTDOWN, DAMPERS SHALL CLOSE AND SUPPLY FAN SHALL STOP.
 - FAN CONTROL:**
 - SUPPLY FAN SHALL OPERATE CONTINUOUSLY WHEN THE AHU IS ENABLED.
 - COOLING CONTROL - CHILLED WATER COIL:**
 - THE CHILLED WATER CONTROL VALVE SHALL MODULATE TO MAINTAIN THE SPACE TEMPERATURE COOLING SETPOINT (80°F MAX. ADJ.).
 - THE VALVE SHALL MODULATE OPEN AS THE SPACE TEMPERATURE RISES ABOVE SETPOINT AND MODULATE CLOSED AS THE SPACE TEMPERATURE FALLS BELOW SETPOINT.
 - HEATING CONTROL - ELECTRIC HEATING COIL:**
 - ELECTRIC HEATING SHALL BE ENABLED WHEN THE SPACE TEMPERATURE FALLS BELOW 50°F (ADJ.).
 - ELECTRIC HEATING SHALL DE-ENERGIZE WHEN THE SPACE TEMPERATURE SETPOINT (50°F MINIMUM) IS SATISFIED.
 - HIGH-TEMPERATURE SAFETY CUTOFF SHALL TRIP HEAT AND GENERATE AN ALARM.
 - VENTILATION CONTROL - OARA DAMPERS:**
 - OUTSIDE AIR DAMPER SHALL MAINTAIN A MINIMUM POSITION FOR VENTILATION.
 - RETURN AIR DAMPER SHALL MODULATE IN SEQUENCE WITH OUTSIDE AIR DAMPER.
 - DAMPERS SHALL CLOSE ONLY ON MANUAL SYSTEM SHUTDOWN OR SAFETY TRIP.
 - HUMIDITY MONITORING:**
 - BAS SHALL MONITOR SPACE RELATIVE HUMIDITY.
 - HIGH HUMIDITY ALARM SHALL BE GENERATED WHEN SPACE HUMIDITY EXCEEDS 80% RH (ADJ.) FOR 10 MINUTES (ADJ.).
 - GRAPHICS:**
 - DISPLAY THE FOLLOWING ON THE BAS GRAPHICS:
 - SPACE TEMPERATURE
 - SPACE HUMIDITY
 - DISCHARGE AIR TEMPERATURE
 - COOLING VALVE POSITION
 - OARA DAMPER POSITIONS
 - ALARMS:**
 - CRITICAL ALARMS SHALL BE ANNUNCIATED AT THE OPERATOR WORKSTATION AND EMAILED TO THE OWNER.
 - CRITICAL ALARMS SHALL INCLUDE:
 - SPACE TEMPERATURE BELOW 50°F (ADJ.)
 - SPACE TEMPERATURE ABOVE 90°F (ADJ.)
 - SPACE HUMIDITY ABOVE 80% RH (ADJ.)
 - HIGH-TEMPERATURE TRIP ON ELECTRIC HEAT

AHU POINTS LIST							
NAME	FACETS	TYPE	R/W	GRAPHIC	ALARM	TREND	DESCRIPTION
ZoneTemp	*F	AI	R	G	N	Y	
ZoneTempSp	*F	AI	R/W	G	N	Y	
ZoneTempAlmDelay	Min	AV	R/W	P	N	N	
ZoneTempAlm	ALARM/NORMAL	BV	R	G	Y	N	
ZoneHum	%RH	AI	R	G	N	Y	
FreezeStat	ALARM/NORMAL	BI	R	G	Y	N	Freeze Protection Device
SupAirTemp	*F	AI	R	G	N	Y	Probe Temperature Sensor
SupFanSts	ON/OFF	BI	R	G	N	Y	Current Switch
SupFanCmd	START/STOP	BO	R/w	G	N	Y	
SupFanSpdCmd	%	AO	R/W	G	N	Y	
OutAirDprCmd	% OPEN	AO	R/W	G	N	Y	Motorized Damper Actuator
RetAirDprCmd	% OPEN	AO	R/W	G	N	Y	Motorized Damper Actuator
ExhAirDprCmd	% OPEN	AO	R/W	G	N	Y	Motorized Damper Actuator
ChWtrVlvCmd	% OPEN	AO	R/W	G	N	Y	Control Valve
OccCmd	OCCUPIED/UNOCCUPIED	BV	R/W	G	N	Y	
UnoccAHUClgCall	N/A	BV	R	G	N	N	
SupFanRTTotal	Hr	AV	R	P	N	N	
SupFanRunFailDelay	Min	AV	R/W	P	N	N	
SupFanRunFailAlm	ALARM/NORMAL	BV	R	G	Y	N	
SupAirTempSp	*F	AV	R/W	G	N	Y	
SupAirTempSpMax	*F	AV	R/W	P	N	Y	
SupAirTempSpMin	*F	AV	R/W	P	N	Y	
ClgLockOutSp	*F	AV	R/W	G	N	Y	
ClgLockOutSpDb	*F	AV	R/W	P	N	N	
ElectgEnableCmd	START/STOP	AO	R/W	G	N	Y	
ElectgSts	AMPS	AI	R	G	N	Y	
ElectgLockout	N/A	AV	R/W	G	N	N	
ElectgSafetyAlm	ALARM/NORMAL	AV	R	G	Y	N	
OutAirDprMinPosSp	% OPEN	AV	R/W	G	N	Y	
MaxFlwOutAirDprPosSp	% OPEN	AV	R/W	P	N	N	
MaxFlwFanSpdPct	%	AV	R/W	P	N	N	
MinFlwOutAirDprPosSp	% OPEN	AV	R/W	P	N	N	
MinFlwFanSpdPct	%	AV	R/W	P	N	N	
LowSupAirTempAlmSp	*F	AV	R/W	G	N	N	
LowSupAirTempAlmDelay	Sec	AV	R/W	P	N	N	
LowSupAirTempAlm	ALARM/NORMAL	BV	R	G	Y	N	
LowSupAirTempAlmReset	RESET/NORMAL	BV	R/W	G	N	N	
OutAirFlowAlm	ALARM/NORMAL	BV	R	G	Y	N	
OutAirFlowAlmDelay	Min	AV	R/W	P	N	N	

NOTES:
For the graphic column, any points with a G should be shown on the schematic graphic. All points with a P should be shown on a separate parameter page, with a link to the schematic graphic. Provide a link on the parameter page to a PDF of the sequence of operation and equipment schematic.
*Provide all points available through the BACnet interface to a separate equipment parameter page with a link to the schematic graphic for each piece of integrated equipment. Up to 15 additional points shall be exposed on the schematic graphic at the request of the Engineer or Commissioning Agent. Any numeric status points shall be converted to their text value using a multistate variable.

- ### FCU BAS KEYED NOTES
- EXISTING SPACE TEMPERATURE SENSOR TO REMAIN.
 - BASC TO FURNISH AND INSTALL CURRENT SENSOR TO MONITOR FAN STATUS.
 - BASC TO FURNISH NEW CONTROL VALVE AND ACTUATOR, MC TO INSTALL NEW CONTROL VALVE. BASC RESPONSIBLE FOR FURNISHING, INSTALLING, AND WIRING THE ACTUATOR.
 - EXISTING ELECTRIC HEATING COIL AND EXISTING POINTS TO REMAIN AND BE RE-USED.



2 FAN COIL UNIT - CONTROLS SCHEMATIC
SCALE: NO SCALE

- ### FCU SEQUENCE OF OPERATION
- SYSTEM ENABLE/DISABLE**
 - THE FAN COIL SHALL BE ENABLED BY AN OCCUPANCY SCHEDULE.
 - BAS TO COORDINATE WITH OWNER FOR OCCUPANCY SCHEDULE
 - DURING OCCUPIED MODES THE UNIT SHALL CONTROL TO A ZONE TEMPERATURE SETPOINT OF 72°F (ADJ.) WITH A 42°F (ADJ.) DEADBAND.
 - PROVIDE A 5 MIN (ADJ.) DELAY WHEN SWITCHING FROM HEATING TO COOLING MODE.
 - ALLOW THE USER TO ADJUST THE SETPOINT 2°F (ADJ.) LOCALLY AT THE THERMOSTAT.
 - ALLOW THE USER TO MANUALLY OCCUPY THE UNIT FOR AT MOST 2 HRS (ADJ.).
 - DURING UNOCCUPIED MODES THE UNIT SHALL MAINTAIN AN UNOCCUPIED COOLING SETPOINT OF 80°F (ADJ.) AND AN UNOCCUPIED HEATING SETPOINT OF 65°F (ADJ.).
 - THE UNIT SHALL STAY IN UNOCCUPIED COOLING MODE UNTIL THE SPACE TEMPERATURE IS BELOW 76°F (ADJ.).
 - THE UNIT SHALL STAY IN UNOCCUPIED HEATING MODE UNTIL THE SPACE TEMPERATURE IS ABOVE 68°F (ADJ.).
 - SUPPLY FAN CONTROL**
 - THE SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED MODES.
 - THE SUPPLY FAN SHALL CYCLE ON FOR UNOCCUPIED MODES.
 - PROVIDE A TOTAL RUNTIME FOR THE SUPPLY FAN.
 - IF THE SUPPLY FAN IS COMMANDED ON AND STATUS IS NOT PROVEN IN 2 MIN (ADJ.) SEND A FAN RUN FAILURE ALARM TO THE OPERATOR WORKSTATION.
 - SUPPLY FAN SPEED CONTROL**
 - DURING NORMAL OPERATION THE FAN SHALL RUN AT A BALANCER DETERMINED SPEED.
 - IF THE UNIT IS IN HEATING MODE AND THE HEATING PID IS AT 100% (ADJ.) FOR 15 MINS (ADJ.) INCREASE THE FAN SPEED TO 100% (ADJ.).
 - IF THE UNIT IS IN COOLING MODE AND THE COOLING PID IS AT 100% (ADJ.) FOR 15 MINS (ADJ.) INCREASE THE FAN SPEED TO 100% (ADJ.).
 - TEMPERATURE CONTROL**
 - COOLING**
 - WHEN THE UNIT IS IN COOLING MODE AND THE CHILLER SYSTEM IS ENABLED, THE CHILLED WATER VALVE SHALL MODULATE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT.
 - WHEN THE UNIT IS IN HEATING MODE, THE CHILLED WATER VALVE SHALL STAY CLOSED.
 - HEATING**
 - THE DUCT MOUNTED ELECTRIC HEATING COIL SHALL BE ENABLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 30°F (ADJ.) WITH A 45°F (ADJ.) DEADBAND.
 - THE DUCT MOUNTED ELECTRIC HEATING COIL SHALL BE MODULATED TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT.
 - DISCHARGE AIR TEMPERATURE SETPOINT CONTROL**
 - THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL MODULATE TO MAINTAIN THE ZONE TEMPERATURE SETPOINT.
 - WHEN THE ZONE IS SATISFIED THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL BE EQUAL TO THE ZONE TEMPERATURE SETPOINT.
 - WHEN THE UNIT IS IN HEATING MODE THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL INCREASE FROM THE ZONE TEMPERATURE SETPOINT TO A MAXIMUM OF 95°F (ADJ.) AS THE HEATING PID LOOP INCREASES FROM 0% (ADJ.) TO 100% (ADJ.).
 - WHEN THE UNIT IS IN COOLING MODE THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL DECREASE FROM THE ZONE TEMPERATURE SETPOINT TO A MINIMUM OF 55°F (ADJ.) AS THE COOLING PID LOOP INCREASES FROM 0% (ADJ.) TO 100% (ADJ.).
 - ALARMS**
 - CRITICAL ALARMS
 - CRITICAL ALARMS SHALL BE ANNUNCIATED AT THE OPERATOR WORKSTATION AND EMAILED TO THE OWNER.
 - CRITICAL ALARMS SHALL INCLUDE THE FOLLOWING:
 - THE SPACE TEMPERATURE IS BELOW 60°F (ADJ.) FOR 5 MINS (ADJ.) OR ABOVE 85°F (ADJ.) FOR 5 MIN (ADJ.).
 - SUPPLY FAN FAILURE

FCU POINTS LIST							
NAME	FACETS	TYPE	R/W	GRAPHIC	ALARM	TREND	DESCRIPTION
ZoneTemp	*F	AI	R	G	N	Y	
ZoneTempSp	*F	AI	R/W	G	N	Y	
ZoneTempAlmDelay	Min	AV	R/W	P	N	N	
ZoneTempAlm	ALARM/NORMAL	BV	R	G	Y	N	
SupAirTemp	*F	AI	R	G	N	Y	Probe Temperature Sensor
SupFanSts	ON/OFF	BI	R	G	N	Y	Current Switch
SupFanCmd	START/STOP	BO	R/w	G	N	Y	
SupFanSpdCmd	%	AO	R/W	G	N	Y	
ChWtrVlvCmd	% OPEN	AO	R/W	G	N	Y	Control Valve
OccCmd	OCCUPIED/UNOCCUPIED	BV	R/W	G	N	Y	
UnoccAHUClgCall	N/A	BV	R	G	N	N	
SupFanRTTotal	Hr	AV	R	P	N	N	
SupFanRunFailDelay	Min	AV	R/W	P	N	N	
SupFanRunFailAlm	ALARM/NORMAL	BV	R	G	Y	N	
SupAirTempSp	*F	AV	R/W	G	N	Y	
SupAirTempSpMax	*F	AV	R/W	P	N	Y	
SupAirTempSpMin	*F	AV	R/W	P	N	Y	
ClgLockOutSp	*F	AV	R/W	G	N	Y	
ClgLockOutSpDb	*F	AV	R/W	P	N	N	
ElectgEnableCmd	START/STOP	AO	R/W	G	N	Y	
ElectgSts	AMPS	AI	R	G	N	Y	
ElectgLockout	N/A	AV	R/W	G	N	N	
ElectgSafetyAlm	ALARM/NORMAL	AV	R	G	Y	N	
MaxFlwFanSpdPct	%	AV	R/W	P	N	N	
MinFlwFanSpdPct	%	AV	R/W	P	N	N	

NOTES:
For the graphic column, any points with a G should be shown on the schematic graphic. All points with a P should be shown on a separate parameter page, with a link to the schematic graphic. Provide a link on the parameter page to a PDF of the sequence of operation and equipment schematic.
*Provide all points available through the BACnet interface to a separate equipment parameter page with a link to the schematic graphic for each piece of integrated equipment. Up to 15 additional points shall be exposed on the schematic graphic at the request of the Engineer or Commissioning Agent. Any numeric status points shall be converted to their text value using a multistate variable.