RAFAT

8850 GEORGE BOLTON PARKWAY, CALEDON, ONTARIO L7E 2Y4

Request for Information #93

Project Name:	Construction of Victoria Park Arena and Brampton Sports Hall of Fame	**Contract No.:**	NRFP2024-232
Customer Name	City of Brampton	**Prepared By:**	Veronica Soulaka
Date Submitted:	June 23, 2025	**Date Required:**	June 30, 2025
Total Pages:	1 of 1		

Attachments:

Description: Consult Mech. RFI #3 BAS Inquires

Please see below RFI questions from BAS subcontractor.

Your prompt response to this RFI would be greatly appreciated.

Veronica Soulaka
Rafat General Contracting Inc.

54 Audia Court, Unit 2
Concord, ON L4K 3N5
(905)-738-1400

Request For Information 24-280-004

Jun 23, 2025

Project Name
VICTORIA PARK ARENA

Project Address
20 Victoria Crescent, Brampton, ON L6T 1E4

To

Name
Abdullah Hissamuddin
Company
RAFAT GENERAL CONTRACTOR INC.
Email
abdullah.hissam@rafat.ca
Address
8850 GEORGE BOLTON PKWY BOLTON, ON L7E 2Y4

From

Name
PAUL LEDDY
Company
Consult Mechanical Inc.
Email
paul.l@consultmechanical.com
Address
54 Audia Court, Unit 2 Concord, ON L4K 3N5

Title	SCHEDULE IMPACT	COST IMPACT
Various Questions related to BAS	No	Probable

RETURN BY

Jun 30, 2025

Information Requested

Please see Below RFI Questions from BAS Subcontractor

Johnson Controls

Request for Information

Job Name: COB Victoria Park Arena & Brampton Sports Hall of Fame

Job Number: 5N0V-0279

Contractor: Consult Mechanical Inc

Requested By: Nathan Fletcher

Attention:

RFI Number: 001

Date: May 26, 2025

Specification Number: Section 25 05 05

Sketch (If required)

Drawing: M-900 **Rev:**

System: ERV-2,3,4

Location: **Bldg:** Victoria Park Arena

Level: Level 1 West

Other Drawing Affected:

No: _____

Cost Impact: ☐ **Yes** ☒ **No**

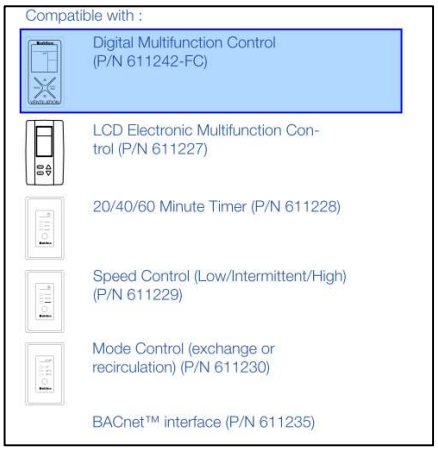
Time Delay: ☒ **Yes** ☐ **No**

Description of Problem:

For ERV units 2, 3, and 4, as indicated in the Shop Drawings and Mechanical Schedule notes, the units come with wall-mounted digital controls that do not support BAS integration for control and monitoring.

On the Mechanical Drawing (Page M-301W), there are OA and EA dampers installed on the ducts connected to the ERVs. To ensure proper operation, we will need control points or an interface with the ERV wall-mounted module to manage these dampers prior to the ERV starting.

Could you please provide guidance on the interface setup? Additionally, refer to the attached snapshot from the ERV Shop Drawings, which indicates a potential provision for BACnet interface compatibility.



Johnson Controls

Request for Information

Resolution of Problem:

Motorized dampers shall be interlocked with the ERV. The ERV controller shall be integrated with the BAS.

Accepted: **GC/CM:**_____ **Date:** _____

ARCH./ENG:_____ **Date:** _____

Request for Information

Job Name: COB Victoria Park Arena & Brampton Sports Hall of Fame

Job Number: 5N0V-0279

Contractor: Consult Mechanical Inc

Requested By: Nathan Fletcher

Attention:

RFI Number: 002

Date: May 26, 2025

Specification Number: Section 25 05 05

Sketch (If required)

Drawing: M-702 **Rev:**

System: UH, CUH

Location: **Bldg:** Victoria Park Arena

Level: Level 1 & 2

Other Drawing Affected:

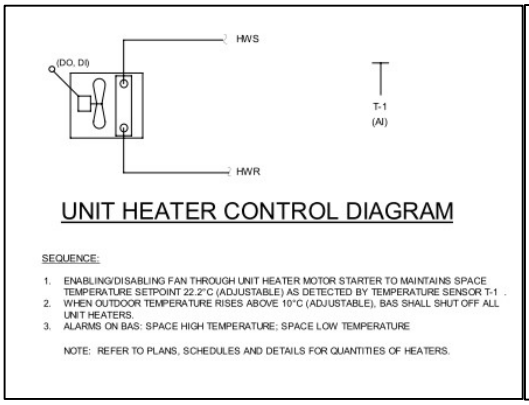
No: _____

Cost Impact: ☒ **Yes** ☐ **No**

Time Delay: ☒ **Yes** ☐ **No**

Description of Problem:

For the Unit & Cabinet Unit Heaters, the Control Schematics & Sequence of Operation shown on Drawing (M-702) didn't show/mention the Control Valve. However, the Schedules & Piping Schematics shows Control Valves. Hence, we are proceeding with the Control Valve for UH, CUH.

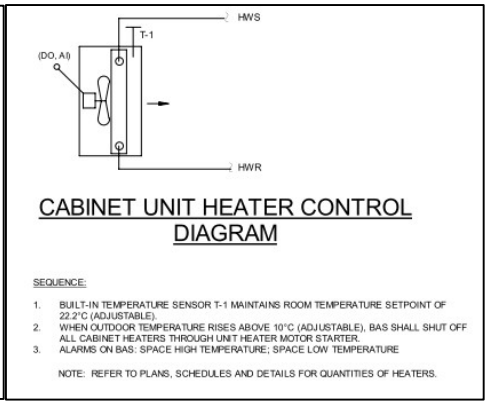


UNIT HEATER CONTROL DIAGRAM

SEQUENCE:

1. ENABLING/DISABLING FAN THROUGH UNIT HEATER MOTOR STARTER TO MAINTAINS SPACE TEMPERATURE SETPOINT 22.2°C (ADJUSTABLE) AS DETECTED BY TEMPERATURE SENSOR T-1 .
2. WHEN OUTDOOR TEMPERATURE RISES ABOVE 10°C (ADJUSTABLE), BAS SHALL SHUT OFF ALL UNIT HEATERS.
3. ALARMS ON BAS: SPACE HIGH TEMPERATURE; SPACE LOW TEMPERATURE

NOTE: REFER TO PLANS, SCHEDULES AND DETAILS FOR QUANTITIES OF HEATERS.

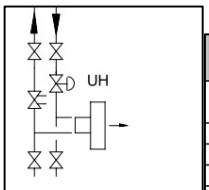


CABINET UNIT HEATER CONTROL DIAGRAM

SEQUENCE:

1. BUILT-IN TEMPERATURE SENSOR T-1 MAINTAINS ROOM TEMPERATURE SETPOINT OF 22.2°C (ADJUSTABLE).
2. WHEN OUTDOOR TEMPERATURE RISES ABOVE 10°C (ADJUSTABLE), BAS SHALL SHUT OFF ALL CABINET HEATERS THROUGH UNIT HEATER MOTOR STARTER.
3. ALARMS ON BAS: SPACE HIGH TEMPERATURE; SPACE LOW TEMPERATURE

NOTE: REFER TO PLANS, SCHEDULES AND DETAILS FOR QUANTITIES OF HEATERS.



TYPICAL CONNECTIONS FOR ALL UNIT HEATERS

SCHEDULE OF AUTOMATIC CONTROL VALVES

SYSTEM	SERVICE	TYPE	FLOW (L/s)	P.D. (kPa)
AHU-1	CENTRAL COOLING / HEATING	3-WAY	SEE NOTE 1	SEE NOTE 2
AHU-2 & 3	CENTRAL COOLING / HEATING	2-WAY	SEE NOTE 1	SEE NOTE 2
HEAT EXCHANGER	CENTRAL HEATING	3-WAY	SEE NOTE 1	SEE NOTE 2
WALL FINS RADIATORS	PERIMETER HEATING	2-WAY	SEE NOTE 1	SEE NOTE 2
INFLOOR RADIANT HEATING MANIFOLDS	PERIMETER HEATING	3-WAY MIXING	SEE NOTE 1	SEE NOTE 2
CABINET UNIT HEATERS	PERIMETER HEATING	2-WAY	SEE NOTE 1	SEE NOTE 2
UNIT HEATERS	PERIMETER HEATING	2-WAY	SEE NOTE 1	SEE NOTE 2

Johnson Controls

Request for Information

Resolution of Problem:

Please proceed with control valves.

Accepted: **GC/CM:**_____ **Date:** _____

ARCH./ENG:_____ **Date:** _____

Johnson Controls

Request for Information

Job Name: COB Victoria Park Arena & Brampton Sports Hall of Fame

Job Number: 5N0V-0279

Contractor: Consult Mechanical Inc

Requested By: Nathan Fletcher

Attention:

RFI Number: 003

Date: May 26, 2025

Specification Number: Section 25 05 05

Sketch (If required)

Drawing: M-702 **Rev:**

System: Split AC's

Location: **Bldg:** Victoria Park Arena

Level: Level 1 & 2

Other Drawing Affected:

No: _____

Cost Impact: ☒ **Yes** ☐ **No**

Time Delay: ☒ **Yes** ☐ **No**

Description of Problem:

Please confirm whether the unit controllers for the Split AC System (AC-30 to AC-36) will include BACnet capabilities. Currently, we do not have the shop drawings, and BACnet functionality is not explicitly mentioned in Specification Section 23 81 26. JCI assumes that the units will be equipped with BACnet capabilities.

Resolution of Problem:

Please refer to shop drawings 21-17. As per note 6 of the schedule please connect to BAS.
Please refer to M-702 S.O.O. for split AC systems.

Accepted: **GC/CM:**_____ **Date:** _____

Johnson Controls

Request for Information

ARCH./ENG: _____ **Date:** _____

Johnson Controls

Request for Information

Job Name: COB Victoria Park Arena & Brampton Sports Hall of Fame

Job Number: 5N0V-0279

Contractor: Consult Mechanical Inc

Requested By: Nathan Fletcher

Attention:

RFI Number: 004

Date: May 26, 2025

Specification Number: Section 25 05 05

Sketch (If required)

Drawing: M-402E **Rev:**

System: VAV's

Location: **Bldg:** Victoria Park Arena

Level: Level 1 & 2

Other Drawing Affected:

No: _____

Cost Impact: ☐ **Yes** ☒ **No**

Time Delay: ☒ **Yes** ☐ **No**

Description of Problem:

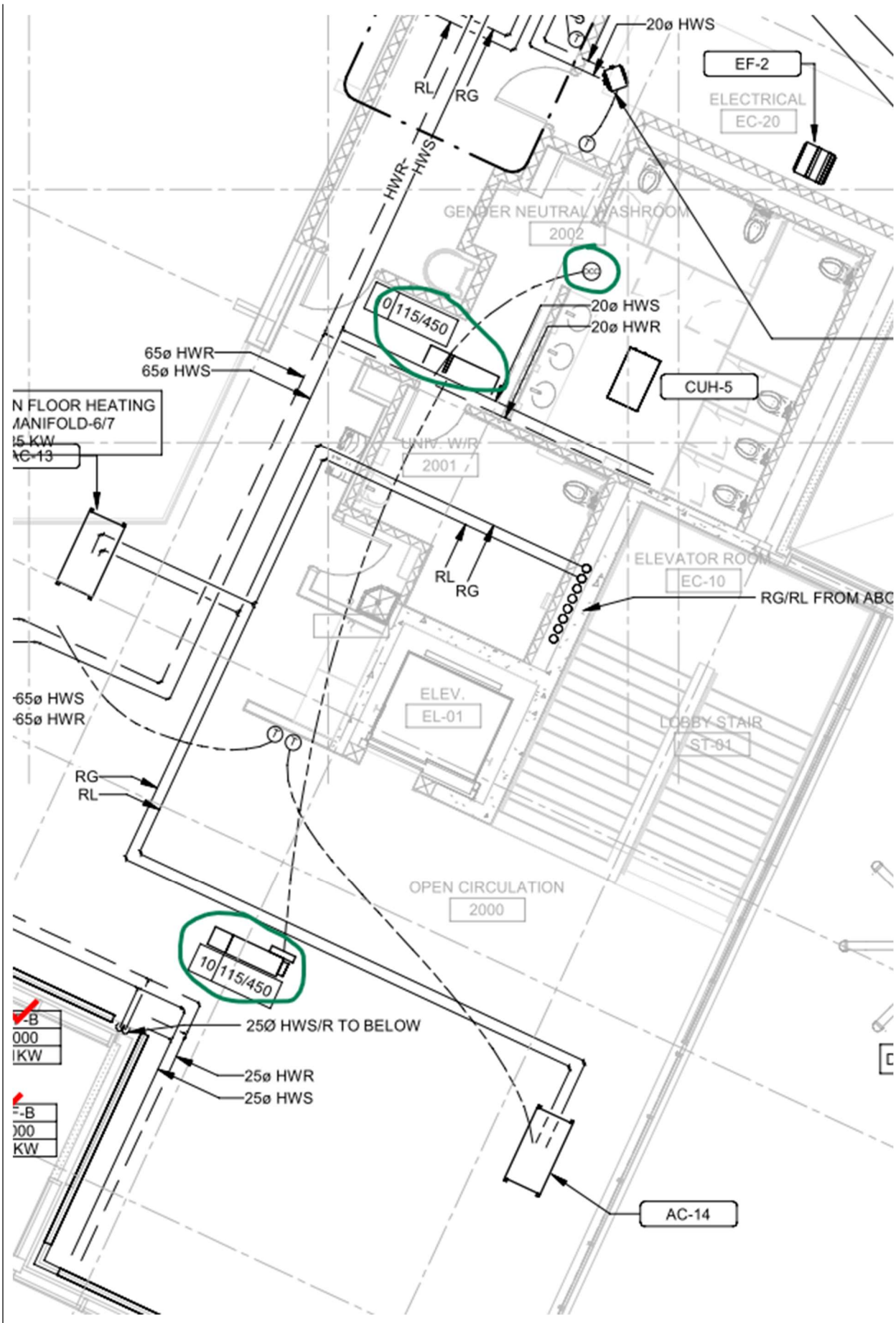
On Mechanical Drawing (M-402E), Supply Air VAV serves Open Circulation area for which we couldn't see any CO2 sensor tied. Since, the sequence of operation calls for Supply Air VAV's to maintain the zone CO2 Level. Hence, in the absence of the CO2 sensor can we assume to consider CO2 sensor as for others supply air VAV's shows. Kindly confirm.

Also, few room later, there is Toilet Exhaust VAV which is connected to the Open Circulation area VAV.

Since both these VAV's are serving different areas, we assume to work these VAV's independently to maintain their zone conditions.

Kindly confirm on the operation of these 2 VAV's.

Refer below snap for reference:


20ø HWS
EF-2
ELECTRICAL
EC-20
RL
RG
HWR
HWS
GENDER NEUTRAL WASHROOM
2002
0
115/450
20ø HWS
20ø HWR
65ø HWR
65ø HWS
CUH-5
N FLOOR HEATING
MANIFOLD-6/7
UNIV. W/R
2001
RL
RG
ELEVATOR ROOM
EC-10
RG/RL FROM ABC
65ø HWS
65ø HWR
ELEV.
EL-01
LOBBY STAIR
ST-01
RG
RL
OPEN CIRCULATION
2000
10
115/450
25Ø HWS/R TO BELOW
25ø HWR
25ø HWS
AC-14

Johnson Controls

Request for Information

Resolution of Problem:

NO CO2 sensor required for this space. The exhaust and supply VAV is required to be interlocked to ensure negative pressure is maintained in the washroom.

Accepted: **GC/CM:**_____ **Date:** _____

ARCH./ENG:_____ **Date:** _____

Johnson Controls

Request for Information

Job Name: COB Victoria Park Arena & Brampton Sports Hall of Fame **Job Number:** 5N0V-0279

Contractor: Consult Mechanical Inc **Requested By:** Nathan Fletcher

Attention:

RFI Number: 005 **Date:** May 26, 2025

Specification Number: Section 25 05 05

Sketch (If required)

Drawing: M-402E **Rev:**

System: VAV's

Location: **Bldg:** Victoria Park Arena

Level: Level 1 & 2

Other Drawing Affected:

No: _____

Cost Impact: ☐ **Yes** ☒ **No**

Time Delay: ☒ **Yes** ☐ **No**

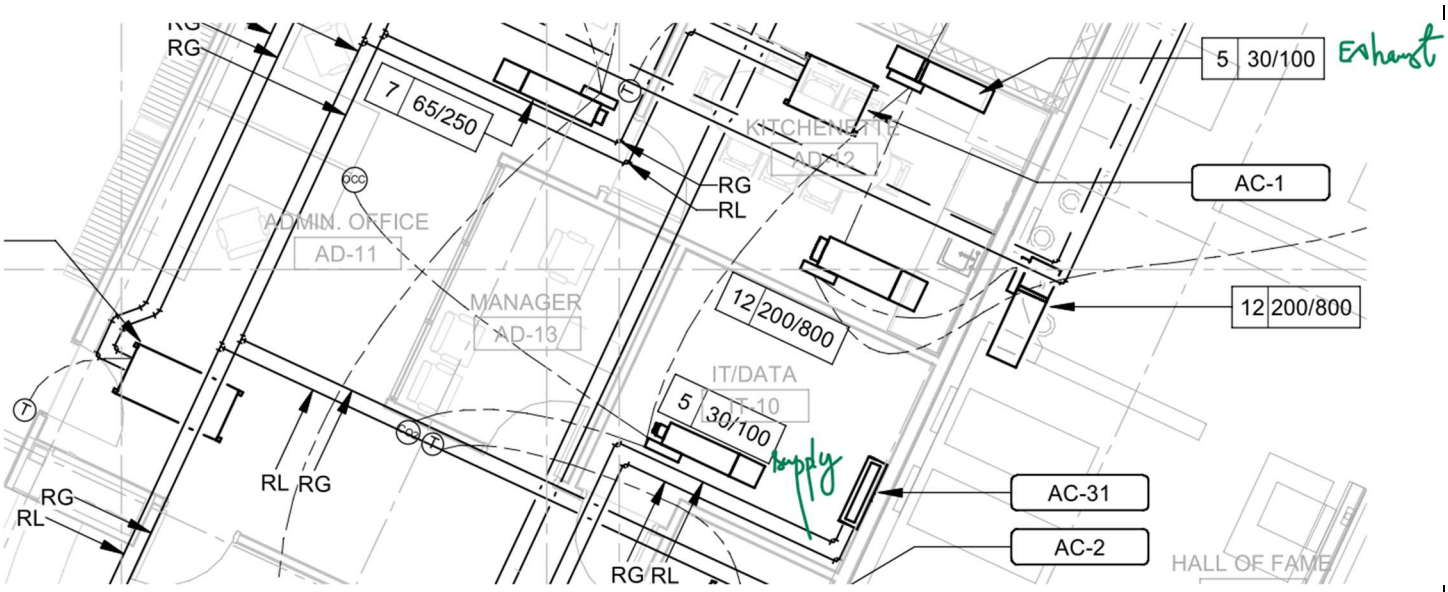
Description of Problem:

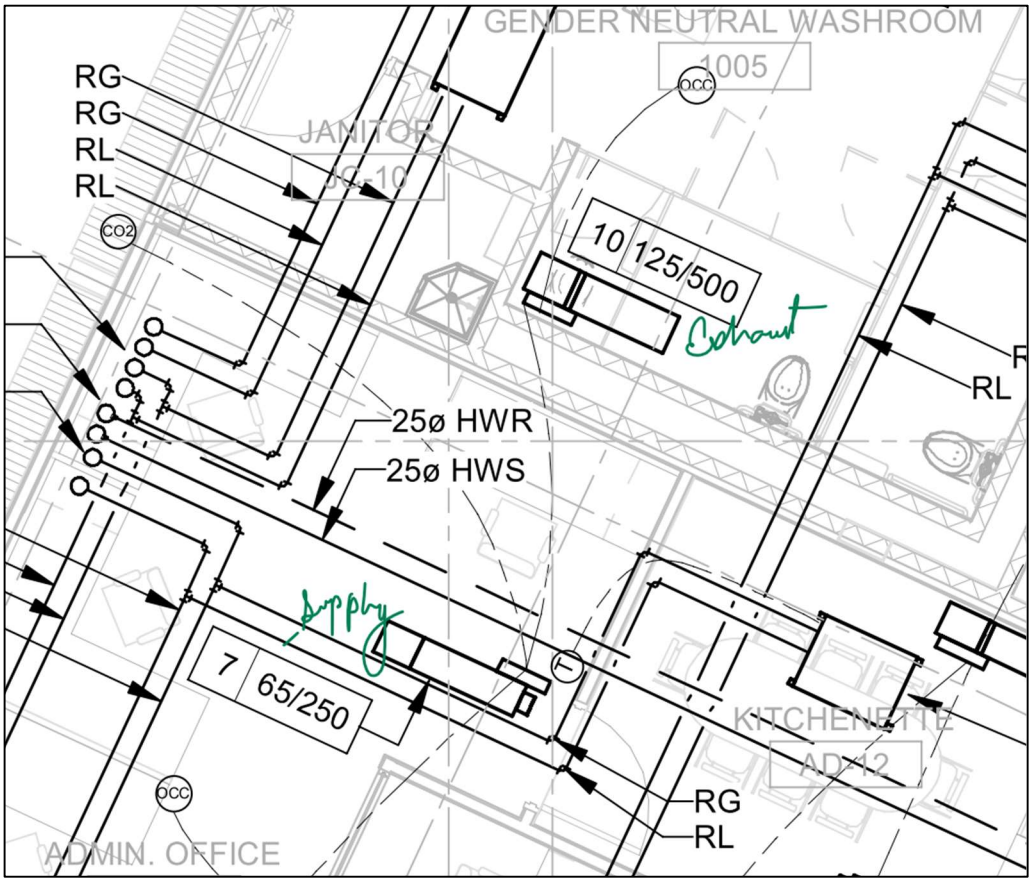
On Mechanical Drawing (M-301E & M-401E), Supply air VAV serves Admin Office area as shown on the below snap. However, it is shown as connected with Exhaust VAV which exhausts the air from Kitchenette area. These Boxes serve different areas however have same size; max/min flow & connected with each other.

Same goes with supply air VAV serving Admin Office & Exhaust VAV serving Gender Neutral washroom.

Kindly clarify on the Control strategy. We assume independent control since the serving zones are different. Please confirm.

Refer below snap for reference:


RG
RG
7 65/250
ADMIN. OFFICE
AD-11
MANAGER
AD-13
KITCHENETTE
AD-12
RG
RL
5 30/100
Exhaust
AC-1
12 200/800
12 200/800
IT/DATA
IT-10
5 30/100
supply
AC-31
AC-2
HALL OF FAME
RL RG
RG
RL
RG RL


GENDER NEUTRAL WASHROOM
1005
JANITOR
RG
RG
RL
RL
CO2
10 125/500
Exhaust
25ø HWR
25ø HWS
RL
supply
7 65/250
KITCHENETTE
AD-12
RG
RL
ADMIN. OFFICE

Johnson Controls

Request for Information

Resolution of Problem:

Supply and exhaust VAVs to be interlocked to maintain required pressures in the space.

Accepted: **GC/CM:**_____ **Date:** _____

ARCH./ENG:_____ **Date:** _____

Request for Information

Job Name: COB Victoria Park Arena & Brampton Sports Hall of Fame

Job Number: 5N0V-0279

Contractor: Consult Mechanical Inc

Requested By: Nathan Fletcher

Attention:

RFI Number: 6

Date: June 4, 2025

Specification Number: Section 25 05 05

Sketch (If required)

Drawing: M-702 **Rev:**

System: AHU-1 & AHU-3

Location: **Bldg:** Victoria Park Arena

Level: Roof

Other Drawing Affected:

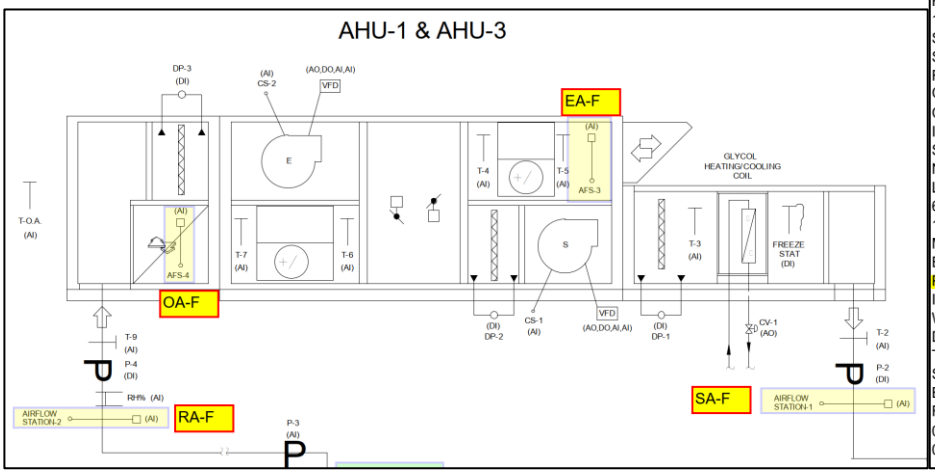
No: _____

Cost Impact: ☒**Yes** ☐**No**

Time Delay: ☒**Yes** ☐**No**

Description of Problem:

AHU-1 & AHU-3 fans are coming with the piezo rings & transducer per shop drawings i.e. SA-F & RA-F however, schematic shows them to be duct mounted. Also, OA-F & EA-F needs to be unit mounted as these AHUs are on the roof. Hence, please confirm scope for JCI to provide any airflow measuring stations for these AHUs.



Additional Features

Exterior Casing: 24 Ga G90 Galv
Interior Casing: 24 Ga G90 Galv
7.5 HP WEG ODP Premium Eff. 4 Pole 213T Frame
5 HP WEG ODP Premium Eff. 4 Pole 184T Frame
SA Drive: FC-102-P5K5-T6-131H9346
RA Drive: FC-102-P4K0-T6-131G1421
1in. Seismic Spring Isolation
SA Pre-Filter: Dafco Merv 10 (2") 400 HC
SA Final Filter: Dafco Merv 13 (12" Cartridge) Fiberglass Rigid Cell
RA Pre-Filter: Dafco Merv 10 (2") 400 HC
Chilled Water Coil
Connections on Access side
Insulated Shutoff Dampers with 2 position Belimo actuator
Single point power
Non-fused Disconnect
Low Limit
6" 10Ga Baseframe
18" Roof Curb
Multiple lights factory wired to single switch, 120V BY OTHERS
Each recepticle on individual circuit, 120V BY OTHERS
Piezo Ring & Pressure Transducer on all fans
Inlet Guard on all fans
Wheel guard on all fans
Dirty filter switch
Temperature sensor
Spare set of filters
BACNet controller
Field mounted low-pressure transmitter for SA & RA fan tracking
0-10VDC Heating control
0-10VDC Cooling control

Johnson Controls

Request for Information

Resolution of Problem:

Provide airflow sensors per contract documents. Coordinate with mechanical contractor and equipment supplier to ensure compatibility and integration.

Accepted: **GC/CM:**_____ **Date:** _____

ARCH./ENG:_____ **Date:** _____