### ADDENDA - A-03 00 91 13 A-03

The information listed below is to form part of the Contract Documents. All associated costs are to be included in Tender Price shown on Tender Form. Acknowledgment of this Addendum, by number, to be shown in space provided on Tender Form.

### 1 MECHANICAL SPECIFICATIONS

- 1.1 Specification Section: 23 62 13 Condensing Units
  - .1 Revise "1.3.2 Factory Test:" to read as follows:
  - .2 Factory Test:
    - .1 Refrigeration circuit tests for each refrigeration circuit.
    - .2 Unit safety control system operations checkout.
    - .3 Final unit inspection.

### 2 DRAWINGS

#### 2.1 M003 – MECHANICAL DETAILS II

.1 Revise the details as shown.

### 2.2 M004 - SCHEMATICS & SCHEDULES

- .1 Revise the Hydronic Heating Coil schedule as shown.
- .2 Revise the DX Cooling Coil as shown.

### 3 CONTRACTOR QUESTIONS

**Question:** The spec is not clear on quantity of DDC outputs required for these cooling systems. Drawing M002 indicates 'Compressor (3 per circuit)'. Are you able to confirm how many stages need to be controlled by DDC for each CU?

**Response:** The condensing units shall be equipped with low pressure and high-pressure safety for each refrigeration circuit. Units shall be equipped with a 120V terminal strip for field supplied and installed controls. The unit manufacturer shall provide the necessary relays for the cooling stages as stated on the equipment schedule. Each condensing unit will have 6 stages of turndown (100-83-67-50-33-17-0).

**3.2 Question:** Do you need us to include any refrigerant system wiring between CU and EVAP or will this wiring be supplied by you're refrig contractor?

**Response:** All refrigeration piping and wiring is in the scope of this tender package.

**Question:** Base price includes new heating coil. Doesn't mention that a new valve will be required for this heating coil. Do you know if your new heating coil will be the same flow as existing heating coil?

**Response:** Existing heating coil control valves to remain and be used for the new heating coils. Include for rebalancing as required.

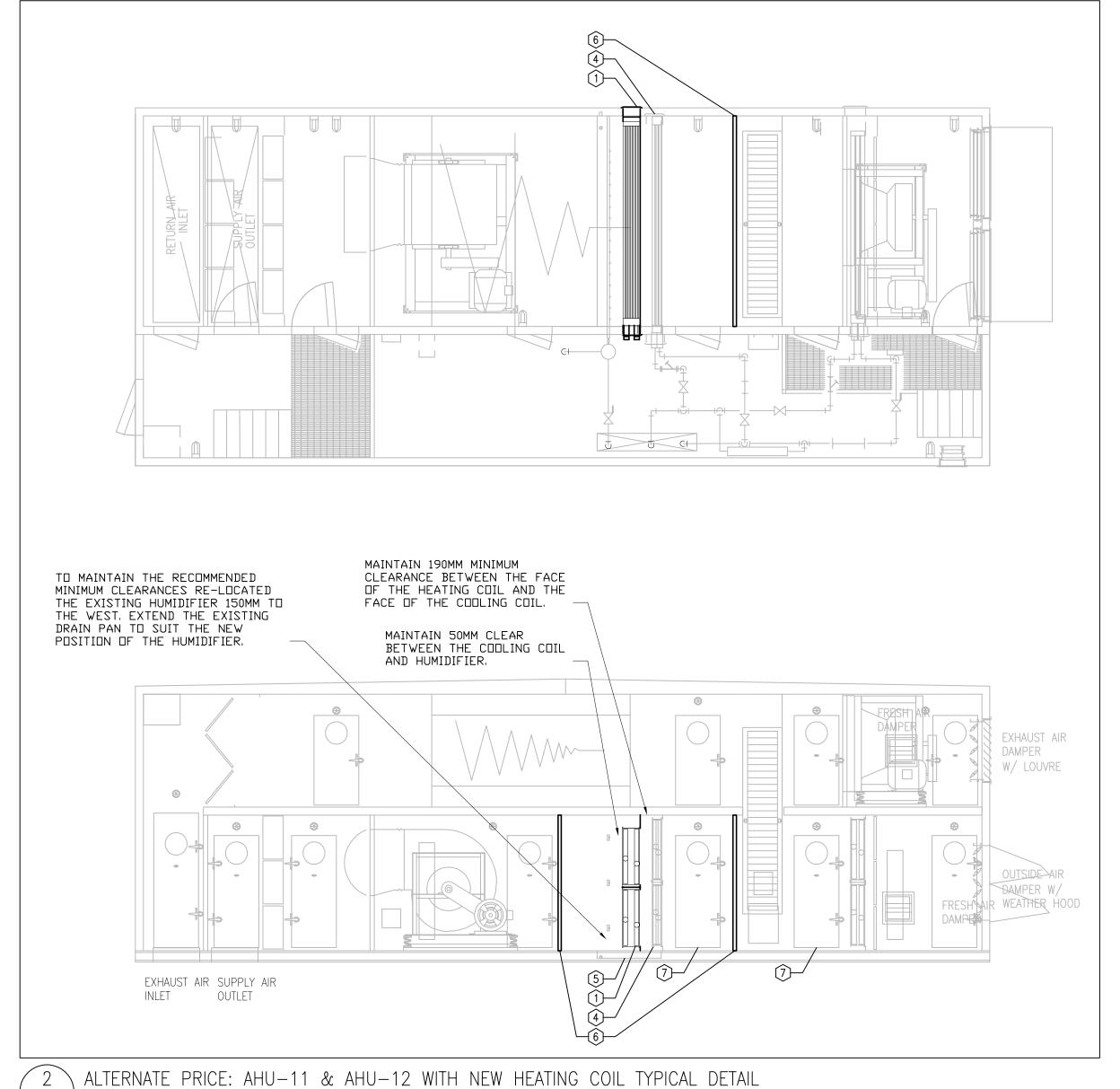
**3.4 Question:** Section 20 08 05 Testing adjusting and balancing; this is a generic spec there appears to be no drawings with outlet volumes, all we have is the volumes list in the schedules for the new coils for the air handlers. Please confirm what the balancing SOW consists of.

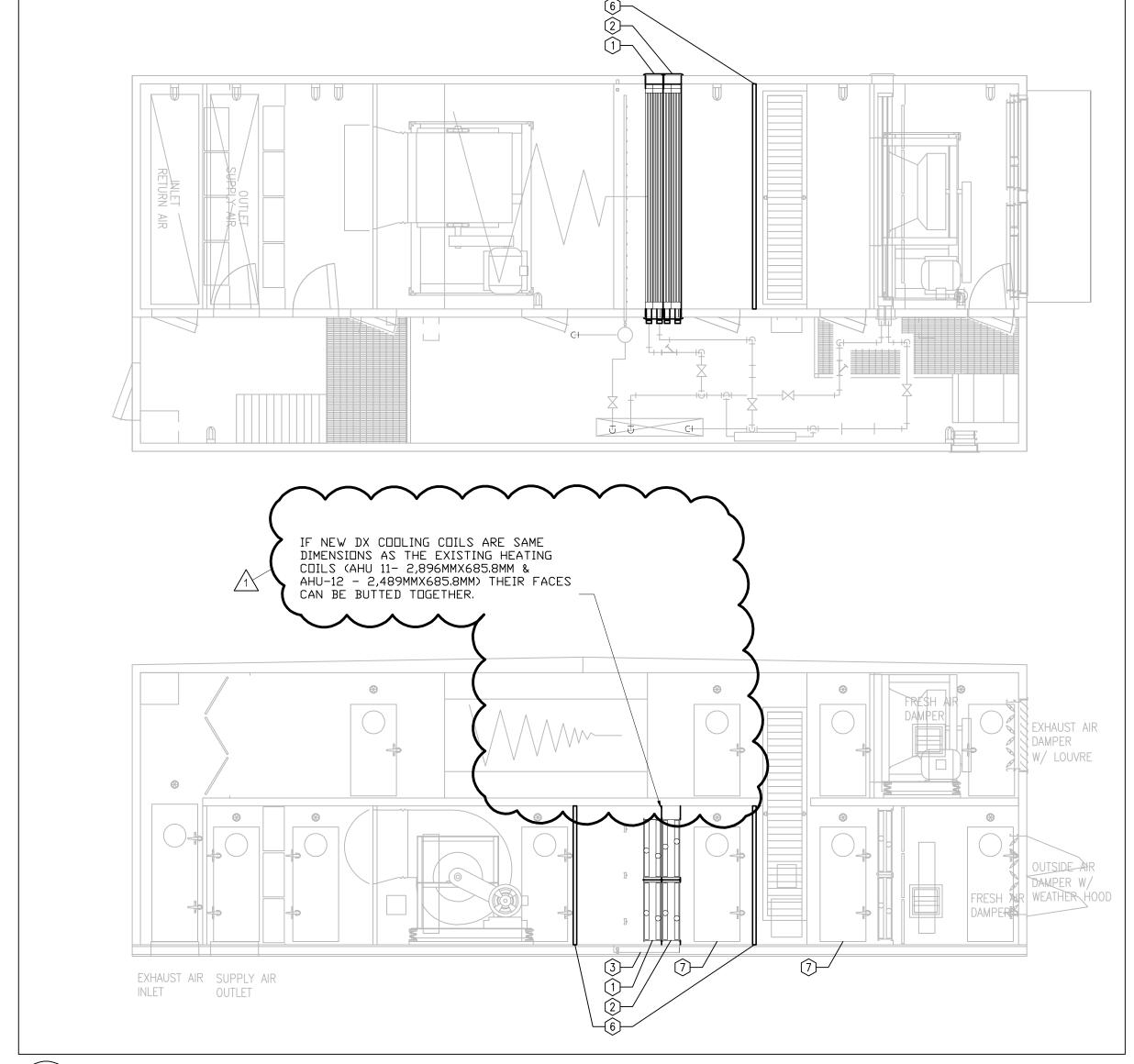
**Response:** Balancing scope of work to include air balancing of AHU 11 and AHU 12 to reinstate the AHU air volumes prior to work commencing. Hydronic balancing to be completed for the new cooling coil and new heating coil (if applicable).

**Question:** Also, at the site meeting the consultant from HHA, mentioned that the optional price was probably going to be removed from the tender documents; please confirm.

**Response:** The optional price and requested information on the duration that the each AHU will be out of service for replacing both the heating and cooling coils will remain in the Tender.

**END OF ADDENDA** 





 $\overbrace{\hspace{0.1cm}}1$  BASE PRICE: AHU-11 & AHU-12 WITH NEW HEATING COIL AND DX COOLING TYPICAL DETAIL

<u>DEMOLITION AND CONSTRUCTION SEQUENCING NOTES:</u>

BIDDERS ARE TO PROVIDE TWO SEPARATE PRICES AND SCHEDULES FOR THE FOLLOWING

WORK TO BE PLANNED AND SEQUENCED TO MINIMIZE IMPACT TO THE OPERATION OF THE FACILITY AND LIMIT DOWNTIME.

# BASE PRICE:

- INSTALL A NEW CONDENSING UNIT ON EACH BUILDING. INSTALL REFRIGERATION PIPING UP TO THE AIR HANDLING UNITS, CAP OFF AND SEAL REFRIGERATION
- SHUT DOWN AIR HANDLING UNITS. SEAL OFF EACH SIDE OF THE HEATING COIL AIRTIGHT, SEAL LOCATIONS MARKED IN DETAIL 1/M003 START UP EXHAUST FAN AND RUN AT LOWER CAPACITY. EXHAUST FAN OPERATION TO BE DETERMINED IN CONJUNCTION WITH THE OWNER TO DETERMINE THE APPROPRIATE SET POINT AT THE PLANNED TIME OF SHUT DOWN.
- DISCONNECT THE EXISTING HEATING COIL CONNECTION AND CAP OFF. DEMOLISH AND REMOVE THE EXISTING HEATING COIL FROM SITE. SLIDE IN NEW DX COOLING COIL AND HEATING COIL AS A BLOCK. REINSTATE AND SEAL. CONNECT THE EXISTING HYDRONIC PIPING TO THE NEW COIL AND THE NEW REFRIGERANT PIPING TO THE NEW DX COOLING COIL.

# ALTERNATE PRICE:

- INSTALL A NEW CONDENSING UNIT ON EACH BUILDING. INSTALL REFRIGERATION PIPING UP TO THE AIR HANDLING UNITS, CAP OFF AND SEAL REFRIGERATION
- SHUT DOWN AIR HANDLING UNITS. SEAL OFF EACH SIDE OF THE HEATING COIL AIRTIGHT, SEAL LOCATIONS MARKED IN DETAIL 2/M003 START UP EXHAUST FAN AND RUN AT LOWER CAPACITY. EXHAUST FAN OPERATION TO BE DETERMINED IN CONJUNCTION WITH THE OWNER TO DETERMINE THE APPROPRIATE SET POINT AT THE PLANNED TIME OF SHUT DOWN.
- RELOCATE THE EXISTING HUMIDIFIERS TO MAINTAIN THE MINIMUM CLEARANCES BETWEEN THE EXISTING HEATING COIL, NEW DX COOLING COIL AND EXISTING HUMIDIFIER LISTED ABOVE IN DETAIL 2/MOO3. EXTEND THE DRAIN PAN TO MATCH THE NEW POSITION OF THE HUMIDIFIER. DRIP PAN PROTRUSION DISTANCE UNDER
- HUMIDIFIER TO WARDS SUPPLY FAN TO MATCH PRE-CONSTRUCTION DISTANCE. SLIDE IN NEW DX COOLING COIL INTO THE AIR HANDLING UNIT. REINSTATE AND SEAL. CONNECT THE NEW REFRIGERANT PIPING TO THE NEW DX COOLING COIL.

# **DRAWINGS NOTES:**

- 1 NEW HEATING COIL. RE-USE EXISTING CONNECTIONS.
- (2) NEW DX COOLING COIL.
- (3) RE-USE EXISTING DRAIN PAN.
- (4) EXISTING HEATING COIL.
- MODIFY EXISTING DRAIN PAN TO NEW EQUIPMENT LAYOUT. EXTEND AS NECESSARY TO SUIT NEW POSITION OF HUMIDIFIER.
- (6) PARTITION DURING CONSTRUCTION.
- (7) ENSURE AHU DOOR IS OPEN WHILE EXHAUST FAN IS RUNNING.



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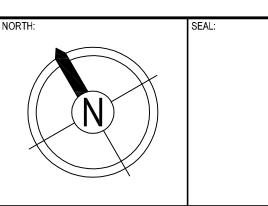
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NO. DATE (YYYY-MM-DD) DESCRIPTION DRAWING REVISIONS ISSUED FOR TENDER 02 2023-11-17 ISSUED FOR 90% CD 01 2023-10-27 ISSUED FOR 90% DD NO. DATE (YYYY-MM-DD) DESCRIPTION

DRAWING ISSUE



FORT ST. JOHN HOSPITAL RESIDENTIAL CARE COOLING UPGRADE

2230541

HHA PROJECT NUMBER:

MECHANICAL DETAILS II

PAGE SIZE: ARCH D DRAWN BY: J.O'S. CHECKED BY: M.W.

# OUTDOOR CONDENSING UNIT SCHEDULE

															POW	ER SUPF	PLY				STAF	TER		С	ONTRO	DLS	OTHER	R REQUIRE	MENTS		
TAG	COOLING COIL TAG	DESCRIPTION/ SERVICE	LOCATION	MANUFACTURER	MODEL	NOMINAL CAPACITY	REFRIGERANT	DESIGN AMBIENT TEMP.	MIN. AMBIENT TEMP. (°C)	SEER	EER	MECHANICAL REMARKS	(A)	(A)	(A)	\SE	Z	FED EDOM   S	₹M.	SUPPLIE BY	D IN	STALLED BY	PE	ż C	2	TERLOCK BY	W.P.	DISC. AT	F.A.	rhers	ELECTRICAL REMARKS
						(TON)		(°F)	` ,				MOF	MCA	FLA	PHA	Ï	FED FROM   ≧	NO		IV. DI 26 23	/. DIV 3 26		M N	DI\ 23	3 26	MOTOR	MOTOR	DOWN	О	
CU-2	CC-311	AHU-11 COOLING	BUILDING B ROOF	DAIKIN	RCS072D	60	R410A		7.2	12.06	10.6	NOTES 1, 2, 3	110	101.5	575	3	60	PP-R1-LL1	•						•			DIV. 26			
CU-3	CC-312	AHU-12 COOLING	BUILDING A ROOF	DAIKIN	RCS072D	60	R410A		7.2	12.06	10.6	NOTES 1, 2, 3	110	101.5	575	3	60	PP-R0-DD1	•					•	•			DIV. 26			

NOTES: 1. COOLING ONLY.

2. UNIT WEIGHT 1,601 KG MAXIMUM.
3. MOUNTED ON VIBRATION RESTRAINED SPRING ISOLATORS. TYPE FLSS.

# HYDRONIC HEATING COIL

<b>\</b>			_									_		
TAG	OUTDOOR UNIT TAG	DESCRIPTION/ SERVICE	LOCATION	MANUFACTURER	MODEL	DESIGN MAX AIRFLOW (L/S)	E.S.P. (PA)	WATER P.D. (KPA)	TOTAL CAPACITY (KW)	E.A.T DB (°C)	E.W.T. (°C)	L.A.T. DB (°C)	L.W.T. (°C)	MECHANICAL REMARKS
HC-311(A/B)	CU-2	AHU-11 HEATING	AHU-11	DAIKIN	5WS1302B	10,406	54.7	3.9	328.7	-12.6	68	13.2	34.4	NOTE 1
HC-312(A/B)	CU-3	AHU-12 HEATING	AHU-12	DAIKIN	5WH1202B	9,406	52.2	40.9	421.4	-12.6	68	13.7	34.2	NOTE 1
NOTES:														

NOTES: 1. 55% GLYCOL CONCENTRATION.

### DX COOLING COIL

DV COOF		IL											
TAG	OUTDOOR UNIT TAG	DESCRIPTION/ SERVICE	LOCATION	MANUFACTURER	MODEL	DESIGN MAX AIRFLOW (L/S)	E.S.P. (PA)	NOMINAL TONNES	TOTAL CAPACITY (TONS)	SENSIBLE CAPACITY (TONS)	E.A.T DB/WB (°C)	L.A.T DB/WB (°C)	MECHANICAL REMARKS
CC-311(A/B)	CU-2	AHU-11 COOLING	AHU-11	DAIKIN	5EJ1004B	10,406	131.9		60.0	41.8	26.7/19.4	15.1/13.7	NOTE 1
CC-312(A/B)	CU-3	AHU-12 COOLING	AHU-12	DAIKIN	5EJ0706B	9,406	159.3		60.0	40.8	26.7/19.4	14.2/12.9	NOTE 1
	-	-		-		-		•				•	

NOTES: 1. TYPE "FD" REFRIGERANT COOLING COIL.

INSTRUCTIONS FOR BIDDERS:

CONTRACTORS ARE TO PROVIDE TWO SEPARATE PRICES FOR THE FOLLOWING OPTIONS. BASE PRICE: INCLUDES PRICING FOR THE CONDENSING UNITS, DX COOLING COILS, AND HEATING COILS.

ALTERNATE PRICE: INCLUDES PRICING FOR THE CONDENSING UNITS AND DX COOLING



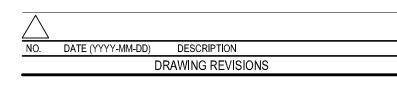
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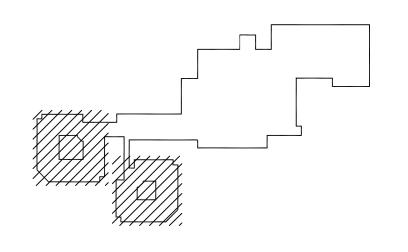
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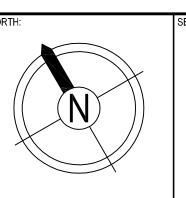
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PROJECT: FORT ST. JOHN HOSPITAL RESIDENTIAL CARE COOLING **UPGRADE** 

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SCHEDULES

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