

CBUS A/C UNIT & LEAK DETECTION SYSTEM REPLACEMENT

OTTAWA, ON
MECHANICAL

GENERAL LEGEND	
SYMBOL	DESCRIPTION
-----	EXISTING PIPING/DUCTWORK/EQUIPMENT
-----	EXISTING PIPING/DUCTWORK/EQUIPMENT TO BE REMOVED/RELOCATED
-----	NEW/RELOCATED PIPING/DUCTWORK/EQUIPMENT
(E)	DENOTES EXISTING EQUIPMENT
(R)	DENOTES RELOCATED EQUIPMENT
(N)	DENOTES NEW EQUIPMENT
(X)	DENOTES EQUIPMENT TO BE REMOVED

UTILITIES LEGEND	
SYMBOL	DESCRIPTION
---CWS---	CHILLED WATER SUPPLY
---CWR---	CHILLED WATER RETURN
⊘	THERMOMETER
⊘	PRESSURE GAUGE C/W VALVE
⊘	AUTOMATIC AIR VENT C/W VALVE
--->---	PIPING OFFSET
--->---	BRANCH PIPING DOWN
--->---	PIPING DOWN
--->---	PIPING UP
--->---	REDUCER
→	FLOW
⌈	CAP
⊘	ISOLATION VALVES
⊘	STRAINER
⊘	CHECK VALVE
⊘	UNION

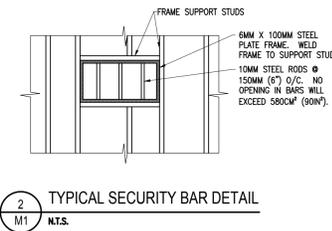
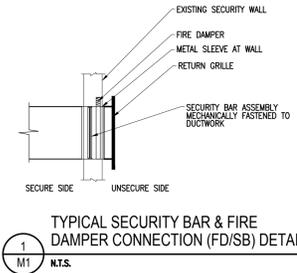
GENERAL NOTES	
1.	REFER TO SPECIFICATIONS AND FRONT END DOCUMENTS FOR PROJECT PHASING, HOURS OF WORK AND PROJECT SPECIFIC DETAILS.
2.	EXISTING LOWER AND UPPER LEVEL COMPUTER ROOMS TO REMAIN IN OPERATION AT ALL TIMES DURING THIS PROJECT. ENSURE WORK SITE IS PROTECTED/SEALED OFF TO PREVENT DUST INTRUSION. REFER TO SPECIFICATIONS AND FRONT END DOCUMENTS FOR DETAILS.
3.	ONE OF AC UNITS 5 & 6, AND TWO OF AC UNITS 1 TO 4 TO REMAIN OPERATIONAL AT ALL TIMES TO MAINTAIN COOLING TO ASSOCIATED ROOMS. COORDINATE EXACT SCHEDULE AND PHASING WITH GENERAL TRADES AND INSTRUMENTAL REPRESENTATIVE.

DRAWING LIST	
SYMBOL	DESCRIPTION
M1	MECHANICAL DRAWING LIST, LEGENDS, SCHEDULES & DETAILS
M2	MECHANICAL B137 FIRE PROTECTION, PLUMBING & UTILITIES DEMOLITION & NEW WORK
M3	MECHANICAL SB/DSS 242 MEZZANINE LEVEL FIRE PROTECTION, PLUMBING & UTILITIES DEMOLITION & NEW WORK
M4	MECHANICAL SB/DSS 242 HVAC & CONTROLS DEMOLITION & NEW WORK

CONTROLS LEGEND	
SYMBOL	DESCRIPTION
---	LOW VOLTAGE CONTROL WIRING
⊘	THERMOSTAT
⊘	TEMPERATURE SENSOR

FIRE PROTECTION LEGEND	
SYMBOL	DESCRIPTION
---	SPRINKLER PIPE
⊘	CONCEALED SPRINKLER
⊘	UPRIGHT SPRINKLER
---	PIPE UP
---	PIPE DOWN
⊘	FIRE EXTINGUISHER C/W MOUNTING BRACKET
⊘	FIRE HOSE CABINET

PLUMBING LEGEND	
SYMBOL	DESCRIPTION
---CWS---	DOMESTIC COLD WATER SUPPLY PIPING
---CWR---	DOMESTIC COLD WATER RETURN PIPING
---COND---	CONDENSATE PIPING
⊘	FLOOR DRAIN (TYPE)
---	PIPING OFFSET
---	BRANCH PIPING DOWN
---	PIPING DOWN
---	PIPING UP
---	REDUCER
→	FLOW DIRECTION
⊘	PIPE BREAK
⌈	CAP
---	RUNNING P-TRAP
---	P-TRAP
⊘	DRAIN ASSEMBLY



HOK ARCHITECTS
205 Catherine Street, Suite 101
Ottawa, ON, Canada K2P 1C3
www.hok.com

GOODKEY WEEDMARK
1688 Woodward Drive
Ottawa, ON, Canada K2C 3R8
www.gwal.com

This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Architect or Engineer.



Contractor to verify all dimensions & conditions on site and immediately notify the engineer of all discrepancies.

REV	ISSUED	DATE
4	ISSUED FOR TENDER	2017/09/01
3	ISSUED FOR 95% REVIEW	2017/06/13
2	ISSUED FOR 50% REVIEW	2017/05/10
1	ISSUED FOR 25% REVIEW	2017/03/27

REV	ISSUED	DATE
A	detail no.	no. du detail
B	location drawing no.	no. du dessin no.
C	drawing no.	no. du dessin no.

project
CBUS A/C UNIT & LEAK DETECTION SYSTEM REPLACEMENT

OTTAWA, ONTARIO

drawing
MECHANICAL DRAWING LIST, LEGENDS, SCHEDULES & DETAILS

Designed By	S. FERGUSON	Conçu par
Date	2017/03/27	(yyyy/mm/dd)
Drawn By	S. FERGUSON	Dessiné par
Date	2017/03/27	(yyyy/mm/dd)
Reviewed By	E. PERUSSE	Examiné par
Date	2017/03/27	(yyyy/mm/dd)
Approved By		Approuvé par
Date		(yyyy/mm/dd)
Tender		Soumission
Project Manager	Administrateur de projets	
Project no.	No. du projet	
	R. 010219.020	
Drawing no.	No. du dessin	
M1	OF 4	

PRECISION AIR CONDITIONING UNIT SCHEDULE																																		
UNIT NO.	LOCATION	FUNCTION	NOMINAL COOLING (TONS)	FAN SECTION					CHILLED WATER COOLING COIL							DX COOLING COIL				ELECTRIC REHEAT		HUMIDIFIER		FILTER		ELECTRICAL DATA		REMARKS						
				AIR FLOW (L/S)	EXTERNAL STATIC PRESSURE (Pa)	FAN MOTOR (kW)	FAN SPEED (RPM)	MOTOR SPEED (RPM)	QTY.	TOTAL CAPACITY (kW)	SENSIBLE CAPACITY (kW)	E.A.T. DB/WB (°C)	L.A.T. DB/WB (°C)	E.W.T. (°C)	L.W.T. (°C)	WATER FLOW (L/S)	WATER PRESSURE DROP (kPa)	TOTAL CAPACITY (kW)	SENSIBLE CAPACITY (kW)	E.W.T. (°C)	L.W.T. (°C)	WATER FLOW (L/S)	WATER PRESSURE DROP (kPa)	STAGES	CAPACITY (kW)	TYPE	CAPACITY (kg/HR)		CAPACITY (kW)	EFFICIENCY (%)	THICKNESS (mm)	TYPE	V/PH/Hz	FLA/MCA/MOP
AC-5/6	DATA CENTER B137	COOLING	35	11320	124	3.6	1750	1750	4	141	120	22/15	-	7.2	12.8	7.8	47	158	121	29.4	35	9.8	70	2	22.5	ELECTRODE	7.9	6.0	30	1	PLEATED	575/3/60	116/131/150	- FLOOR MOUNTED TYPE, TOP RETURN, BOTTOM DISCHARGE, C/W FLOOR MOUNTED STAND - UNIT MOUNTED DISCONNECT, WIRED BY ELECTRICAL - DX CONDENSER COOLED BY CITY WATER
AC-1 - AC-4	MEZZANINE 242	COOLING	5	1320	124	1.5	1750	1750	1	21.4	17.9	22/15	-	7.2	12.8	1	40	22.3	17.8	29.4	35	1.4	44	3	10.4	ELECTRODE	5	3.75	30	1	PLEATED	575/3/60	24/30/40	- HORIZONTAL TYPE, BACK INLET, BOTTOM DISCHARGE, C/W FLOOR MOUNTED STAND - UNIT MOUNTED DISCONNECT, WIRED BY ELECTRICAL - DX CONDENSER COOLED BY CITY WATER

NOTES: 1. MANUFACTURER NAME & MODEL NUMBER REPRESENT ACCEPTABLE QUALITY STANDARD ONLY.

