

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

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

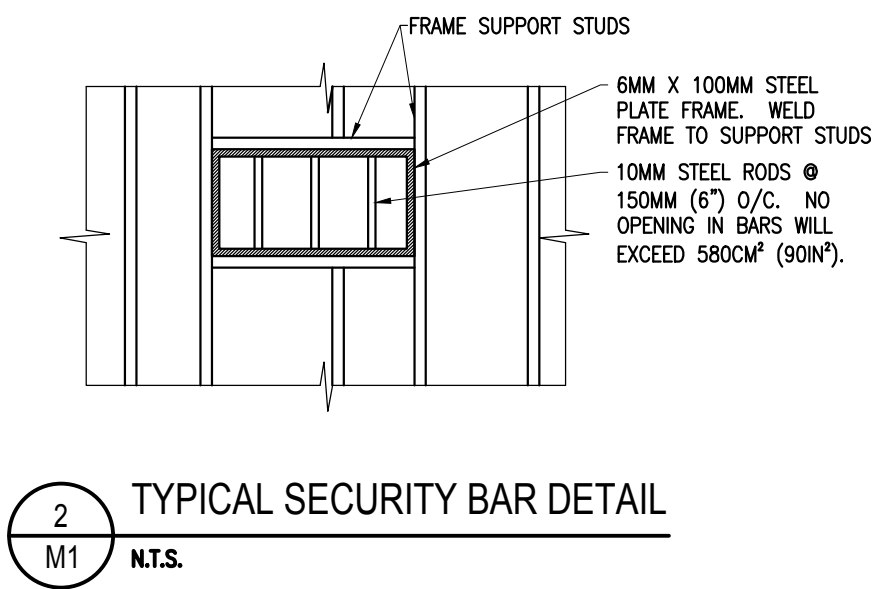
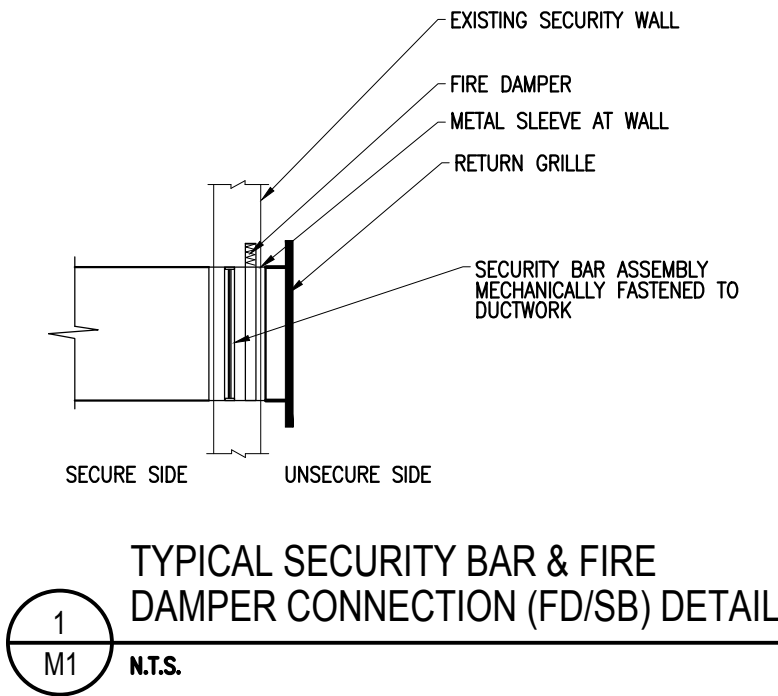
CONTROLS LEGEND	
SYMBOL	DESCRIPTION
—	LOW VOLTAGE CONTROL WIRING
⊕	THERMOSTAT
□	TEMPERATURE SENSOR

FIRE PROTECTION LEGEND	
SYMBOL	DESCRIPTION
—S—	SPRINKLER PIPE
○ C	CONCEALED SPRINKLER
⊙	UPRIGHT SPRINKLER
—	PIPE UP
—	PIPE DOWN
⊙ FE1	FIRE EXTINGUISHER C/W MOUNTING BRACKET
—	FIRE HOSE CABINET

PLUMBING LEGEND	
SYMBOL	DESCRIPTION
—DWS—	DOMESTIC COLD WATER SUPPLY PIPING
—DWR—	DOMESTIC COLD WATER RETURN PIPING
—COND—	CONDENSATE PIPING
⊙ FD1	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

UTILITIES LEGEND	
SYMBOL	DESCRIPTION
—CHWS—	CHILLED WATER SUPPLY
—CHWR—	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 MIGRATION. 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 DEPARTMENTAL REPRESENTATIVE.



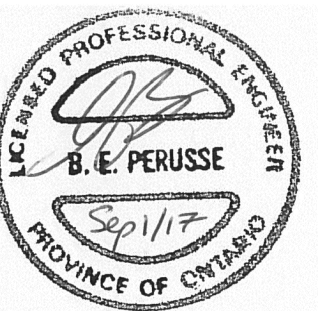
PRECISION AIR CONDITIONING UNIT SCHEDULE																																		
UNIT NO.	LOCATION	FUNCTION	NOMINAL COOLING (TONS)	FAN SECTION					CHILLED WATER COOLING COIL										DX COOLING COIL				ELECTRIC REHEAT		HUMIDIFIER			FILTER		ELECTRICAL DATA		REMARKS		
				AIR FLOW (L/S)	EXTERNAL STATIC PRESSURE (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 (IN)	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.																																		

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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.

4	ISSUED FOR TENDER	2017/09/01
3	ISSUED FOR 99% REVIEW	2017/06/13
2	ISSUED FOR 50% REVIEW	2017/05/10
1	ISSUED FOR 25% REVIEW	2017/03/27

REV	ISSUED	YYY/MM/DD
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A	A detail no. no. du detail	A
C	B location drawing no. sur dessin no. C drawing no. dessin no.	B C

project projet

CBUS A/C UNIT & LEAK DETECTION SYSTEM REPLACEMENT

OTTAWA, ONTARIO

drawing dessin

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

