

Stantec Consulting Ltd.
 Suite 500, 311 Portage Avenue
 Winnipeg MB Canada R3B 2B9
 Tel. 204.489.5900 Fax. 204.453.9012
 www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

ENERGY RECOVERY VENTILATOR SCHEDULE												
MARK	DESCRIPTION	MFR.	MODEL	AIR FLOW RATE		EXTERNAL STATIC PRESSURE		UNIT WEIGHT (lb)	ELECTRICAL			NOTES
				EXHAUST AIR (CFM)	OUTDOOR AIR (CFM)	(Pa)	(In.WC)		(V)	(Ph)	(Hz)	
ERV-1	DUAL CORE REGENERATIVE ENERGY RECOVERY	TEMPEFF	RGSP-K1600 ECM	1,650	1,650	250	1.0	887.0	230	1	60	1, 2, 3
ERV-2	DUAL CORE REGENERATIVE ENERGY RECOVERY	TEMPEFF	RGSP-K500 ECM	450	450	225	0.9	334.0	230	1	60	1, 2, 3

NOTES:
 1. PROVIDE FILTER KIT WITH MERV-13 FILTER.
 2. MINIMUM 60% WINTER HEAT RECOVERY EFFICIENCY.
 3. CW DRAIN KIT 1/2" BARB TEE AND 10FT OF 1/2" CLEAR HOSE TO COLLECT HEAT EXCHANGER CONDENSATE. PROVIDE CONDENSATE DRAIN LINE DOWN TO FUNNEL DRAIN.

DUCT MOUNTED DIRECT EXPANSION COOLING COIL SCHEDULE												
UNIT IDENTIFICATION		COIL		AIR					REFRIG TYPE	MANUFACTURER	MODEL NUMBER	NOTES
MARK	UNIT SERVED	NOMINAL CAPACITY (MBH)	TOTAL AIRFLOW (CFM)	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	FACE VELOCITY (FT/MIN)				
CC-1	ERV-1	60.0	1,650	76.9	67.2	55.0	55.0	377.0	R410a	DAIKIN	CSCF4800N	1, 2
CC-2	ERV-2	24.0	450	76.9	67.2	55.0	55.0	195.0	R410a	DAIKIN	CSCF1824N	1, 2

NOTES:
 1. PROVIDE CONDENSATE DRAIN LINE DOWN TO FUNNEL DRAIN.
 2. RUST RESISTANT, THERMOPLASTIC DRAM PANS FEATURING A LOW WATER-RETENTION DESIGN.

DUCT MOUNTED ELECTRIC HEATING COIL SCHEDULE														
UNIT IDENTIFICATION		COIL			AIR			ELEMENT		ELECTRICAL		MANUFACTURER	TYPE	NOTES
MARK	ROOM(S) SERVED	TOTAL CAPACITY (MBH)	HEIGHT (IN)	WIDTH (IN)	TOTAL AIRFLOW (CFM)	EDB (°F)	LDB (°F)	KW	NO OF STAGES	VOLTS	PHASE			
DHC-1	103 KITCHEN	51.9	22	35	1,650	54.3	75.0	15.2	1	600	3	THERMOLEC	SC	1, 2
DHC-2	123 KITCHEN	13.7	22	21	450	54.3	75.0	4.0	1	208	3	THERMOLEC	SC	1, 2

NOTES:
 1. CW AIR FLOW SENSOR AND SCR CONTROLLER.
 2. SLIP-IN ELECTRIC DUCT HEATER.

AIR COOLED CONDENSING UNIT SCHEDULE																	
UNIT IDENTIFICATION		CAPACITY (MBH)	EER	COMPRESSORS			PHYSICAL CHARACTERISTICS				ELECTRICAL		MANUFACTURER	MODEL NUMBER	NOTES		
MARK	UNIT SERVED			TYPE	NO OF STAGES	REFRIG TYPE	HEIGHT (IN)	WIDTH (IN)	LENGTH (IN)	OPERATING WEIGHT (LBS)	VOLTS	PHASE				MCA	MOP
CU-1	CC-1	60.0	11.8	SCROLL	2	R410A	41.6	35.5	35.5	306	208	1	40.6	60	DAIKIN	DX7TC6010	1
CU-2	CC-2	24.0	24.0	SCROLL	2	R410A	39.5	35.5	35.5	236	208	1	15.3	25	DAIKIN	GSXC702410A	1

NOTES:
 1. MOUNTED AND SECURED TO CEILING.

ROOF TOP UNIT SCHEDULE - PART A										
UNIT IDENTIFICATION			PHYSICAL CHARACTERISTICS					FILTER		
MARK	LOCATION	AREA SERVED	DESIGN OUTSIDE AIR (CFM)	UNIT OPERATING WEIGHT (LBS)	HEIGHT (IN)	WIDTH (IN)	LENGTH (IN)	TYPE	MERV RATING	
RTU-1	AREA A ROOF	AREA A	5,125	1,243	4.34	5.26	8.30	STANDARD PANEL	8	
RTU-2	AREA B ROOF	AREA B	1,715	804	4.34	4.44	7.34	STANDARD PANEL	8	

ROOF TOP UNIT SCHEDULE - PART B																														
UNIT MARK	COMPONENTS										CONDENSER SECTION			FAN				CAPACITY AND PERFORMANCE				ELECTRICAL				MOUNTING SUPPORT STYLE	MANUFACTURER	MODEL NUMBER	NOTES	
	DX COOLING COIL										COMPRESSORS			FANS	NOMINAL CAPACITY (TONS)	EER	REFRIG TYPE	REFRIG CHARGE	VOLTS	PHASE	MCA	MOP	ESP (IN-WG)	BHP	HP					SPEED (RPM)
	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	NO. OF COMP.	NO. OF STAGES	TYPE OF COMP.	NO. OF FANS																				
RTU-1	150.0	113.0	80.0	67.0	57.5	57.6	2	3	SCROLL	2	1.0	4.8	5	1,546	12.5	11.0	R-454B	9.8 LBS	575	3	28.0	35	ROOF CURB	TRANE	TSK150	1, 2, 3, 4				
RTU-2	50.4	36.5	80.0	67.0	56.3	56.3	2	1	SCROLL	1	1.0	0.5	3	949	13.0	13.0	R-454B	7.5 LBS	575	3	20.0	20	ROOF CURB	TRANE	THK-48	1, 2, 3, 4				

NOTES:
 1. FILTERS ARE TO BE PROVIDED WITH PRE-FILTER. MAXIMUM PRESSURE DROP SHALL BE BASED ON TOTAL PRESSURE DROP ACROSS THE FILTER BANK WITH DIRTY FILTERS.
 2. COMPLETE WITH VFD'S FOR ALL FANS. PROVIDED BY EQUIPMENT SUPPLIER AND INTEGRAL TO UNIT.
 3. COMPLETE WITH 1/4" FULL PERIMETER CURB, VIBRATION ISOLATION, AND STAINLESS STEEL DRAIN PAN.
 4. COMPLETE WITH MOUNTING SECTION AND ECONOMIZER CONTROLS.

PLUMBING FIXTURE SCHEDULE					
MARK	TYPE	BASE			DESCRIPTION
		MFG	MODEL		
DF-1	BOTTLE FILLER	MURDOCK	BFEZS168		WALL-HUNG SURFACE INSTALLATION, 20 GAUGE STAINLESS STEEL BOTTLE FILLER. 1 GPM FILL RATE SENSOR-OPERATED ACTIVATION, ADA COMPLIANT. C/W: LFH5T01LK MCGUIRE LEAD-FREE STOP VALVE, 8872C P-TRAP, & CA-321 WATTS CARRIER.
LAV-1	GROUP HANDWASHING STATIONS	ACORN	3543-2-F		3543 ON-FLOOR, SEMI-CIRCULAR, THREE STATION, SPUD CONNECTION AGAINST WALL, STAINLESS STEEL, 1.88 LPM (0.5 GPM) FLOW PER MINUTE, SEMI-CIRCULAR, -F FOOT OPERATION, THREE STATIONS, 115 MM (4-1/2") DEEP BOWL, SATIN FINISH, 14 GA. (1.9 MM) TYPE 304 STAINLESS STEEL BOWL, 18 GA. (1.2 MM) STAINLESS STEEL SPRAYHEAD 381 MM (15") DIA. X 133 MM (5-1/4") HIGH, PROVIDE AN ASSE 1070 COMPLIANT TEMPERATURE/PRESSURE BALANCING MIXING VALVE WITH STRAINERS AND INTEGRAL CHECK, 38 MM (1-1/2") OD WASTE CONNECTION WITH 102 MM (4") TAILPIECE, STANDARD IS BLACK VINYLCLAD GALVANIZED STEEL, 14 GA. TYPE 304 STAINLESS STEEL SATIN FINISH BASE, INTEGRAL BACKSPASH, VANDAL-RESISTANT SPRAY NOZZLES, STAINLESS STEEL SCUFFGUARD BASELAD FREE, SUPPLY KIT, CHROME-PLATED FINISH, LOOSE KEY HANDLE. C/W MCGUIRE LFH165LKN3
SK-1	DOUBLE COMPARTMENT COUNTER MOUNTED - DROP-IN SINK	FRANKE COMMERCIAL	ALBD6406P-1-1		DOUBLE COMPARTMENT COUNTER MOUNTED DROP-IN COMMERCIAL SINK, STAINLESS STEEL, TYPE 304, 18 GAUGE, WITH FAUCET LEDGE. C/W SUPPLY: MCGUIRE LFH165LKN3, P-TRAP: MCGUIRE PW8089
	FAUCET	CHICAGO FAUCETS	434-ABCP		CHICAGO FAUCETS MANUAL, SINGLE HOLE CENTERSET, 434-ABCP, 5.7 LPM (1.5 GPM) MAXIMUM FLOWRATE
SK-2	SINGLE COMPARTMENT COUNTER MOUNTED - DROP-IN SINK	FRANKE COMMERCIAL	LBS4010P-1		SINGLE COMPARTMENT COUNTER MOUNTED - DROP-IN COMMERCIAL SINK, STAINLESS STEEL WITH DRAINBOARD, BOWL SIZE 16"X 14"X 6". C/W SUPPLY: MCGUIRE LFH165LKN3, P-TRAP: MCGUIRE PW8089
	FAUCET	CHICAGO FAUCETS	434-ABCP		CHICAGO FAUCETS MANUAL, SINGLE HOLE CENTERSET, 434-ABCP, 5.7 LPM (1.5 GPM) MAXIMUM FLOWRATE
SK-3	SINGLE COMPARTMENT COUNTER MOUNTED - DROP-IN SINK	FRANKE COMMERCIAL	LBS4010P-1		STAINLESS STEEL, TYPE 304, 18 GAUGE, COUNTER MOUNTED, WITH FAUCET LEDGE, SINGLE COMPARTMENT, COMMERCIAL SINKS. C/W SUPPLY: MCGUIRE LFH165LKN3, P-TRAP: MCGUIRE 8912CB
	FAUCET	CHICAGO FAUCETS	434-ABCP		CHICAGO FAUCETS MANUAL, SINGLE HOLE CENTERSET, 434-ABCP, 5.7 LPM (1.5 GPM) MAXIMUM FLOWRATE
FD-1	FUNNEL FLOOR DRAIN	WATTS	FD-103NH-EG		FUNNEL, FLOOR DRAIN, ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY AND SECONDARY WEEPHOLES. EPOXY COATED CAST IRON, STANDARD BODY MATERIAL. C/W ADJUSTABLE, HEEL PROOF NICKEL BRONZE TOP AND 3" (76 MM) PIPE SIZE, NO-HUB OUTLET.
CO	FLOOR CLEANOUT	WATTS	CO-200		UNFINISHED AREA, ADJUSTABLE, GENERAL PURPOSE ROUND FLOOR CLEANOUT. C/W 1/2" (13 MM) THICK GASKETED COVER. EPOXY COATED CAST IRON, STANDARD (EPOXY COATED CAST IRON)

AIR TERMINAL UNIT SCHEDULE									
UNIT IDENTIFICATION		BOX INLET (IN)	COOLING AIRFLOW (CFM)	HEATING AIRFLOW (CFM)	REHEAT COIL CAPACITY (MBH)	MODEL	MANUFACTURER	NOTES	
MARK	SYSTEM								
VAV-1	RTU-1	101 - CLASSROOM	8	625	570	6.1	SDV08	E.H.PRICE	1, 2
VAV-2	RTU-1	102 - CLASSROOM	8	625	570	6.1	SDV08	E.H.PRICE	1, 2
VAV-3	RTU-1	103 - KITCHEN	4	150	150	2.7	SDV04	E.H.PRICE	1, 2
VAV-4	RTU-1	104 - LUNCHROOM	12	1,920	1,725	13.0	SDV0-12	E.H.PRICE	1, 2
VAV-5	RTU-1	105	5	210	210	3.4	SDV05	E.H.PRICE	1, 2
VAV-6	RTU-1	107/110/112/113/115	6	435	435	8.5	SDV06	E.H.PRICE	1, 2
VAV-7	RTU-1	108/109	5	195	195	2.7	SDV05	E.H.PRICE	1, 2
VAV-8	RTU-1	111 - BOARDROOM	8	615	550	4.8	SDV08	E.H.PRICE	1, 2
VAV-9	RTU-1	114 - SAFETY OFFICERS	4	90	90	1.7	SDV04	E.H.PRICE	1, 2
VAV-10	RTU-1	116/117/118/119	5	280	280	4.1	SDV05	E.H.PRICE	1, 2
VAV-11	RTU-2	122 - LUNCH/MEETING	5	300	250	2.7	SDV05	E.H.PRICE	1, 2
VAV-12	RTU-2	123/127/129/139/136	6	460	460	10.2	SDV08	E.H.PRICE	1, 2
VAV-13	RTU-2	124/125/126	5	280	280	3.8	SDV05	E.H.PRICE	1, 2
VAV-14	RTU-2	128 - SUPERINTENDENT	4	125	100	1.7	SDV04	E.H.PRICE	1, 2
VAV-15	RTU-2	130/131/132/133/134	7	550	550	6.8	SDV07	E.H.PRICE	1, 2

NOTES:
 1. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL.
 2. REFER TO MECHANICAL DETAILS FOR MORE INFORMATION.

GRILLE, REGISTER, DIFFUSER SCHEDULE							
MARK	GRILLE TYPE	MOUNTING TYPE	COLOR	MATERIAL	MANUFACTURER	MODEL NUMBER	NOTES
E-1	LOUVER GRILLE RETURN	SURFACE	WHITE	STEEL	E.H.PRICE	510Z	1,2,3,4
R-1	LOUVER GRILLE RETURN	SURFACE	WHITE	STEEL	E.H.PRICE	510Z	1,3,4
S-1	SQUARE PLAQUE DIFFUSER	SURFACE	WHITE	STEEL	E.H.PRICE	SPD	1,2,3,4
S-2	SQUARE PLAQUE DIFFUSER	SURFACE	WHITE	STEEL	E.H.PRICE	SPD-H	1,2,3,4
S-3	LOUVER GRILLE SUPPLY	SURFACE & DUCT	WHITE	STEEL	E.H.PRICE	520	1,2,3,4

NOTES:
 1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION. PROVIDE ALL FRAMES AND ACCESSORIES AS REQUIRED FOR PROPER INSTALLATION.
 2. FLEXIBLE DUCTWORK SHALL BE THE SAME SIZE AS THE DIFFUSER NECK OR AN EQUIVALENT ROUND DUCT. FLEXIBLE DUCTWORK SHALL BE SUPPORTED TO PREVENT SINKS OR BENDS.
 3. COLOUR TO BE SELECTED BY ARCHITECT FROM STANDARD COLOURS.
 4. REFER TO DRAWINGS FOR GRID SIZE.

DOMESTIC WATER HEATING EQUIPMENT SCHEDULE									
UNIT IDENTIFICATION		EQUIPMENT		WATER		MANUFACTURER	MODEL NUMBER	NOTES	
MARK	AREA SERVED	TYPE	INPUT HEATER (MBH)	STORAGE (GAL)	EWI (F)				LWT (F)
DWH-1	AREA A	TANK	10	5	40	140	A.O.SMITH	DSE-5-3	1, 2
DWH-2	AREA B	TANKLESS	9	-	40	140	STIEREL ELTRON	MIN 4-2 222039	1

NOTES:
 1. REFER TO ELECTRICAL DRAWINGS FOR VOLTAGE AND OTHER ELECTRICAL INFORMATION.
 2. CW DEAN PAN.

Legend

Revision

0	ISSUED FOR CONSTRUCTION	MA	BH	25.06.04
	Issued	By	Appd.	YY.MM.DD

File Name:	21006-M	GS	WD	MA	25.03.28
		Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

ENGINEERS GEOSCIENTISTS MANITOBA
 Certificate of Authorization
 Stantec Consulting Ltd.
 No. 1301



Client/Project

WINNIPEG TRANSIT MAINTENANCE FACILITY OFFICE REDEVELOPMENT

421 OSBORNE ST. SOUTH, WINNIPEG, MB

Title

MECHANICAL SCHEDULES

Project No. 115421006

Scale

Drawing No. M-701

Sheet 16 of 16

Revision 0