SHEET: COW-A1 (05/2005)

MOTOR SCHEDULE

MOTOR						STARTER										POWER						
EQUIP. NO.	DESCRIPTION	LOCATION	EQUIP. LOAD		V/PH	MCC	SIZE	TYPE	MAN.	MAG.	S/S	PL	C.O.H.	OVERCURRENT DEVICE	LOCATION	PANEL	CCT.	FEEDER	CAP. SIZE	DISC. TYPE	INTERLOCK	REMARKS
P-S160A	Ferric Chloride Feed Pump No. 1	Sulphuric Acid Rm	1.0HP	0.75kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE				
P-S170A	Ferric Chloride Feed Pump No. 3	Sulphuric Acid Rm	1.0HP	0.75kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE				
P-S180A	Ferric Chloride Feed Pump No. 2	Sulphuric Acid Rm	1.0HP	0.75kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE				
P-S230A	Sulphuric Acid Feed Pump No. 1	Ferric Chloride Rm	1.0HP	0.75kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE				
P-S240A	Sulphuric Acid Feed Pump No. 2	Ferric Chloride Rm	1.0HP	0.75kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE				
P-S250A	Sulphuric Acid Feed Pump No. 3	Ferric Chloride Rm	1.0HP	0.75kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE				
P-S350A	Sodium Hydroxide Feed Pump No. 1	Sodium Hydroxide Rm	1.0HP	0.75kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE				
P-S360A	Sodium Hydroxide Feed Pump No. 2	Sodium Hydroxide Rm	1.0HP	0.75kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE				
P-S430A	Ammonia Feed Pump No. 1	Aqua Ammonia Rm	1.0HP	0.75kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE				
FV-S107A	Ferric Chloride Rail Containment Valve	Ferric Chloride Rm	1.0HP	0.75kW	600/3									15A-3P		DP-S201	19,21,23	3/C#12 TECK				
FV-S206A	Truck Unload Containment Valve	Stairwell	1.0HP	0.75kW	600/3									15A-3P		DP-S201	25,27,29	3/C#12 TECK				
FV-S207A	Sulphuric Acid Rail Containment Valve	Sulphuric Acid Rm	1.0HP	0.75kW	600/3									15A-3P		DP-S202	19,21,23	3/C#12 TECK				
FV-S309A	Truck Unload Containment Valve	Stairwell	1.0HP	0.75kW	600/3									15A-3P		DP-S202	25,27,29	3/C#12 TECK				
HTR-S310A	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12A	1			*		*		40A-3P				3/C#8 TECK				
HTR-S310B	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12A	1			*		*		40A-3P				3/C#8 TECK				
HTR-S310C	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12A	1			*		*		40A-3P				3/C#8 TECK				
HTR-S320A	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12A	1			*		*		40A-3P				3/C#8 TECK				
HTR-S320B	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12A	1			*		*		40A-3P				3/C#8 TECK				
HTR-S320C	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12A	1			*		*		40A-3P				3/C#8 TECK				
HTR-S330A	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12B	1			*		*		40A-3P				3/C#8 TECK				
HTR-S330B	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12B	1			*		*		40A-3P				3/C#8 TECK				
HTR-S330C	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12B	1			*		*		40A-3P				3/C#8 TECK				
HTR-S340A	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12B	1			*		*		40A-3P				3/C#8 TECK				
HTR-S340B	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12B	1			*		*		40A-3P				3/C#8 TECK				
HTR-S340C	Sodium Hydroxide Tank Heater	Sodium Hydroxide Rm		24kW	600/3	12B	1			*		*		40A-3P				3/C#8 TECK				
P-S440A	Ammonia Feed Pump No. 2	Aqua Ammonia Rm	1.0HP	0.75kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE				
WSF-S701A	Water Softner	Mechanical Room	Frac		120/1									15A-1P		PP-S201	24	3/C#12 TECK				PROVIDE CORD AND CAP AND RECEPTACLE
WSF-S701B	Water Softner	Mechanical Room	Frac		120/1									15A-1P		PP-S202	24	3/C#12 TECK				PROVIDE CORD AND CAP AND RECEPTACLE
MP-S702A	Boiler Chemical Feed Metering Pump	Mechanical Room	Frac		120/1									15A-1P		PP-S202	26	3/C#12 TECK				PROVIDE CORD AND CAP AND RECEPTACLE
MXR-S702A	Boiler Chemical Mixer	Mechanical Room	Frac		120/1									15A-1P		PP-S202	28	3/C#12 TECK				PROVIDE CORD AND CAP AND RECEPTACLE
BLR-S704A	Steam Boiler	Mechanical Rm		6.8kVA	600/3									15A-3P		DP-S201	1,3,5	3/C#12 TECK		CSA 12		
BLR-S704B	Steam Boiler	Mechanical Rm		6.8kVA	600/3									15A-3P		DP-S202	1,3,5	3/C#12 TECK		CSA 12		
P-S706A	Steam Boiler Feed Pump	Mechanical Rm	3.0HP	2.2kW	600/3	12A	1	FVNR		*		*	*	7MCP				3/C#12 TECK		CSA 12		
P-S707A	Steam Boiler Feed Pump	Mechanical Rm	3.0HP	2.2kW	600/3	12B	1	FVNR		*		*	*	7MCP				3/C#12 TECK		CSA 12		
CMP-S815A	Air Compressor	Mechanical Rm	8.0HP	6kW	600/3									20A-3P		DP-S201	13,15,17	3/C#12 TECK		CSA 12		UNIT C/W MOTOR STARTER, WIRE CONTROLS TO LCP-S815A
AD-H815A	Air Dryer	Mechanical Rm	Frac		120/1									15A-1P		PP-S201	40	3/C#12 TECK				
CMP-S816A	Air Compressor	Mechanical Rm	8.0HP	6kW	600/3									20A-3P		DP-S202	13,15,17	3/C#12 TECK		CSA 12		UNIT C/W MOTOR STARTER, WIRE CONTROLS TO LCP-S815A
AD-H816A	Air Dryer	Mechanical Rm	Frac		120/1									15A-1P		PP-S202	54	3/C#12 TECK				
SF-H800A	Make-up Air Unit Supply Fan	Ferric Chloride Rm	5.0HP	3.7kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
EF-H800A	Make-up Air Unit Exhaust Fan	Ferric Chloride Rm	3.0HP	2.2kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
SF-H801A	Make-up Air Unit Supply Fan	Sulphuric Acid Rm	3.0HP	2.2kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
EF-H801B	Make-up Air Unit Exhaust Fan	Sulphuric Acid Rm	2.0HP	1.5kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
SF-H802A	Make-up Air Unit Supply Fan	Sodium Hydroxide Rm	5.0HP	3.7kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
EF-H802A	Make-up Air Unit Exhaust Fan	Sodium Hydroxide Rm	3.0HP	2.2kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
SF-H803A	Air Purify Unit Supply Fan	Electrical Room	3.0HP	2.2kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
CU-H803A	Condensing Unit	Electrical Room		15.9kW	600/3									20A-3P		DP-S201	2,4,6	3/C #10 TECK		CSA 4		CONTROLS WIRED TO BAS LCP
SF-H804A	Make-up Air Unit Supply Fan	Aqua Ammonia Rm	3.0HP	2.2kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
EF-H804A	Make-up Air Unit Exhaust Fan	Aqua Ammonia Rm	2.0HP	1.5kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE		CSA 4		CONTROLS WIRED TO BAS LCP
BG-H805A	Hot Water Boiler	Mechanical Room	3.0HP	2.2kW	600/3									15A-3P		DP-S201	8,10,12	3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
BG-H805B	Hot Water Boiler	Mechanical Room	3.0HP	2.2kW	600/3									15A-3P		DP-S202	8,10,12	3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
HTX-H806A	Plate Heat Exchanger	Mechanical Rm	1.5HP		120/1									30A-1P		PP-S201	36	3/C#10 TECK				
HTX-H806B	Plate Heat Exchanger	Mechanical Rm	1.5HP		120/1									30A-1P		PP-S202	34	3/C#10 TECK				
GP-H808A	Glycol Hot Water Inline Circulation Pump	Mechanical Rm	7.5HP	5.6kW	600/3	12A		VFD				*	*	FUSE				3/C#12 VFD CABLE				CONTROLS WIRED TO BAS LCP
GP-H808B	Glycol Hot Water Inline Circulation Pump	Mechanical Rm	7.5HP	5.6kW	600/3	12B		VFD				*	*	FUSE				3/C#12 VFD CABLE				CONTROLS WIRED TO BAS LCP
GP-H810A	Chem Building Heating Inline Circ Pump	Mechanical Rm	5.0HP	3.7kW	600/3	12A	1	FVNR		*		*	*	15MCP				3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
GP-H810B	Chem Building Heating Inline Circ Pump	Mechanical Rm	5.0HP	3.7kW	600/3	12B	1	FVNR		*		*	*	15MCP				3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
GP-H812A	Hypo Building Heating Inline Circ Pump	Mechanical Rm	10.0HP	7.5kW	600/3	12A	1	FVNR		*		*	*	30MCP				3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
GP-H812B	Hypo Building Heating Inline Circ Pump	Mechanical Rm	10.0HP	7.5kW	600/3	12B	1	FVNR		*		*	*	30MCP				3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
HTX-H814A	Domestic Hot Water Plate Heat Exchanger	Mechanical Rm	4.0HP		600/3									15A-3P		DP-S201	19,21,23	3/C#12 TECK		CSA 12		
GFT-H815A	Glycol Fill Tank	Mechanical Rm	0.5HP	0.37kW	120/1									25A-1P		PP-S201	32	3/C#12 TECK				PROVIDE CORD AND CAP AND RECEPTACLE
EF-H818B	Exhaust Fan	Rail Car Encl Roof	1.0HP	0.75kW	600/3	12B	1	FVNR		*		*	*	3MCP				3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
EF-H819B	Exhaust Fan	Rail Car Encl Roof	1.0HP	0.75kW	600/3	12A	1	FVNR		*		*	*	3MCP				3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
UH-H820A	Hydronic Unit Heater	Aqua Ammonia Room	0.25HP		208/1									15A-2P		PP-S201	21,23	3/C#12 TECK		CSA 4		
EF-H820C	Emergency Exhaust Fan	Aqua Ammonia Rm	0.5HP	0.37kW	600/3	12B	1	FVNR		*		*	*	3MCP				3/C#12 TECK		CSA 4		CONTROLS WIRED TO BAS LCP
UH-H821A	Hydronic Unit Heater	Sodium Hydroxide Rm	0.25HP		120/1									15A-1P		PP-S202	21	3/C#12 TECK		CSA 4		
EF-H821C	Emergency Exhaust Fan	Sodium Hydroxide Rm	1.5HP	1.1kW	600/3	12A	1	FVNR		*		*	*	15A-3P				3/C#12 TECK		CSA 4		CONTROLS WIRED TO BAS LCP
UH-H822A	Hydronic Unit Heater	Stairwell	Frac		120/1									15A-1P		PP-S202	25	3/C#12 TECK		CSA 1		
UH-H823A	Hydronic Unit Heater	Mechanical Room	0.50HP		208/1									15A-2P		PP-S201	25,27	3/C#12 TECK		CSA 12		
UH-H824A	Emergency Hydronic Unit Heater	Sulphuric Acid Room	0.50HP		208/1									15A-2P		PP-S202	27,29	3/C#12 TECK		CSA 4		
EF-H824C	Emergency Exhaust Fan	Sulphuric Acid Rm Roof	1.0HP	0.75kW	600/3	12B	1	FVNR		*		*	*	15A-3P				3/C#12 TECK		CSA 4		CONTROLS WIRED TO BAS LCP
UH-H825A	Emergency Hydronic Unit Heater	Ferric Chloride Room	0.50HP		208/1									15A-2P		PP-S201	59,61	3/C#12 TECK		CSA 4		
EF-H825C	Emergency Exhaust Fan	Ferric Chloride Rm Roof	1.5HP	1.1kW	600/3	12A	1	FVNR		*		*	*	15A-3P				3/C#12 TECK		CSA 4		CONTROLS WIRED TO BAS LCP
AHU-H828A	Control Room Electric Heater	Control Room		15kW	600/3									15A-3P		DP-S202	2,4,6	3/C #10 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
CU-H828A	Control Room Condensing Unit	Rail Car Encl		7.8kW	600/3									15A-3P		DP-S202	7,9,11	3/C#12 TECK		CSA 4		CONTROLS WIRED TO BAS LCP
SF-H828A	Supply Fan	Control Room	2.0HP	1.5kW	600/3	12B	1	FVNR		*		*	*	15A-3P				3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
EF-H829A	Exhaust Fan	Washroom Roof	Frac		120/1									15A-1P		PP-S201	6	3/C#12 TECK		CSA 1		
UH-H830A	Electric Unit Heater	Electrical Room		7.5kW	600/3									20A-3P		DP-S201	14,16,18	3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
SF-H831A	Supply Fan	Mechanical Rm	0.5HP	0.37kW	600/3	12A	1	FVNR		*		*	*	15A-3P				3/C#12 TECK		CSA 12		CONTROLS WIRED TO BAS LCP
UH-H833A	Hydronic Unit Heater	Ferric Chloride Room	0.50HP		208/1									15A-2P		PP-S201	29,31	3/C#12 TECK		CSA 4		
UH-H834A	Hydronic Unit Heater	Ferric Chloride Room	Frac		120/1									15A-1P		PP-S202	33	3/C#12 TECK		CSA 4		
UH-H835A	Hydronic Unit Heater	Sulphuric Acid Room	0.50HP		208/1									15A-2P		PP-S202	31,33	3/C#12 TECK		CSA 4		
UH-H836A	Hydronic Unit Heater	Mechanical Room	0.50HP		208/1									15A-2P		PP-S201	35,37	3/C#12 TECK		CSA 12		
UH-H837A	Hydronic Unit Heater	Mechanical Room	Frac		120/1									15A-1P		PP-S201	39	3/C#12 TECK		CSA 12		
UH-H838A	Hydronic Unit Heater	Sodium Hydroxide Room	0.50HP		208/1									15A-2P		PP-S202	35,37	3/C#12 TECK		CSA 4		
UH-H839A	Hydronic Unit Heater	Aqua Ammonia Room	Frac		120/1									15A-1P		PP-S201	41	3/C#12 TECK		CSA 4		

APEGM
Certificate of Authorization
Earth Tech Canada Inc.
No. 730 Expiry: April 30, 2007

B.M.
ELEV.

NO.	REVISIONS	DATE	BY
00	ISSUED FOR TENDER	07/01/31	ERC

CH2MHILL
Fredericksen Cooper ARCHITECTS
EarthTech A Tyco International Ltd. Company

DESIGNED BY	BLM	CHECKED BY	PS
DRAWN BY	ERC	APPROVED BY	AHL
SCALE:	NTS	RELEASED FOR CONSTRUCTION BY:	R. SOROKOWSKI
DATE	2007/11/29	DATE	2007/01/31

ENGINEER'S SEAL
ORIGINAL SIGNED BY
P. STRYK
2007/01/31

CONSULTANT DRAWING NO.
WS-E0507

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WATER TREATMENT PLANT
BULK CHEMICAL STORAGE
SODIUM HYPCHLORITE AND CHEMICAL STORAGE BUILDING

ELECTRICAL
SCHEDULES

CITY FILE NUMBER
SHEET OF
CITY DRAWING NUMBER
1-0601S-A-E0507-001-00D

Last Save: 2007-02-19 9:30 AM

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