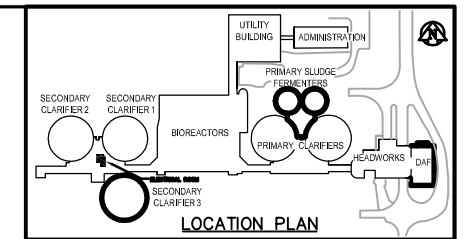


FLOOR PLAN
SCALE: 1:25

PANEL SCHEDULE											
Panel SB											
DESCRIPTION	LOAD	BKR	CCT	A	B	C	CCT	BKR	LOAD	DESCRIPTION	
Receptacle	2	15A	1	*			2	15		Glycol Feed Tank S776-GFT	
Receptacle	2	15	3	*			4	20		Natural Gas Blower S760-GH	
Receptacle	3	15	5	*			6	20		Natural Gas Blower S765-GH	
Receptacle	3	15	7	*			8	15		Supply Fan S780-SF	
Flow Transmitter S820-FIT		15	9	*			10	15		Flow Transmitter S720-FIT	
Flow Transmitter S540-FIT		15	11	*			12	15		Flow Transmitter S740-FIT	
Flow Transmitter S710-FIT		15	13	*			14	15		Flow Transmitter S821-FIT	
Spare		15	15	*			16	-		Space	
Spare		15	17	*			18	-		Space	
Spare		15	19	*			20	-		Space	
Spare		15	21	*			22	-		Space	
Spare		15	23	*			24	-		Space	
Space		-	25	*			26	-		Space	
Space		-	27	*			28	-		Space	
Space		-	29	*			30	-		Space	
Space		-	31	*			32	-		Space	
Space		-	33	*			34	-		Space	
Space		-	35	*			36	-		Space	
Space		-	37	*			38	-		Space	
Space		-	39	*			40	-		Space	
Space		-	41	*			42	-		Space	

Voltage:	120/208V/3Ø/4 wire	Feeder:	4/C#3 TECK
Mains:	225A	Main Breaker:	N/A
Location:	Secondary Clarifier Electrical Room	Power Source:	Transformer XFMR-SB
Mounting:	Surface		



NEW SECTION		MCC - 1S				MCC - 2S				NEW SECTION	
⑥	S210-FWP MCP SIZE 1 SEC. CLAR. EFFL. WATER PUMP 5.6 kW	S600-MUA 40A-3P BREAKER ELECTRIC SEC. CLAR. MAKE UP AIR UNIT 0.75 kW	S605-AEF MCP SIZE 1 SEC. CLAR. AXIAL EX. FAN 7.5 kW	S695-EF MCP SIZE 1 SEC. CLAR. EX. FAN 1.5 kW (15A-3P BREAKER?????)	S220-FWP MCP SIZE 3 SEC. CLAR. EFFL. WATER PUMP 22.4 kW	S629-UH 15A-3P BREAKER ELECTRIC ROTOR ACTUATOR 0.75 kW	S632-SMP S633-SMP 20A-3P BREAKER SUBMER. SUMP PUMP 5.6 kW	S655-AFF MCP SIZE --- --- --- kW	⑥		
	S510-CM MCP SIZE 1 SEC. CLAR. DRIVE #1 0.75 kW	S636-SMP S637-SMP 15A-3P BREAKER SUBMERS. SUMP PUMP 3.73 kW	S641-UH 15A-3P BREAKER MIX, LIQ. UNIT HEATER 10 kW	S770-GP MCP SIZE 1 GLYCOL CIRC. PUMP 3.75 kW	S520-CM MCP SIZE 1 SEC. CLAR. DRIVE #2 0.75 kW	S634-SMP S635-SMP 15A-3P BREAKER SUBMER. SUMP PUMP 3.73 kW	S650-MUA 40A-3P BREAKER SEC. CLAR. MAKE UP AIR UNIT 11.2 kW	SPARE ⑦ MCP SIZE 1			
SPACE	S710-RAP 70A-3P BREAKER RETURN ACT. SLUDGE PUMP 22.4 kW	S730-RAP 80A-3P BREAKER RETURN ACT. SLUDGE PUMP 22.4 kW	S740-RAP 80A-3P BREAKER RETURN ACT. SLUDGE PUMP 22.4 kW	SPACE	S330-DWP MCP SIZE --- DEWATERING PUMP --- kW	S720-RAP 70A-3P BREAKER RETURN ACT. SLUDGE PUMP 22.4 kW	WELDING RECEPT.				
	SPARE MCP SIZE 1	①	S750-SF 50A-3P BREAKER MAKE UP AIR UNIT SUPPLY FAN 15 kW	S750-EF 50A-3P BREAKER MAKE UP AIR UNIT EXHAUST FAN 15 kW		SPARE ① MCP SIZE 1	S750-RAP 80A-3P BREAKER RETURN ACT. SLUDGE PUMP 22.4 kW	XFMR-SB 40A-3P BREAKER TRANSFRMR PNL SB 30kW			
MOLDED CASE SWITCH 400A, 600V (EXISTING LUG CONNECTION)	S230-FWP MCP SIZE 4 SEC. CLAR. EFFL. WATER PUMP 64kW	③	SPARE ⑦ MCP SIZE 1	MOLDED CASE TIE SWITCH 400A, 600V	MOLDED CASE SWITCH 400A, 600V (EXISTING LUG CONNECTION)	S240-FP MCP SIZE 4 SEC. CLAR. FIRE PUMP 75 kW	S775-GP MCP SIZE 1 GLYCOL FEED PUMP 3.75 kW				
			S530-CM MCP SIZE 1 SECONDARY CLARIFIER 3 DRIVE 0.75 kW								

- DRAWING NOTES**
- MOTOR CONTROL CENTRES 1S & 2S**
- SIZE 1 STARTERS FOR WAS ACTIVATED SLUDGE PUMPS S810-WAP AND S820-WAP SHALL BE DISCONNECTED AND LEFT IN PLACE AS SPARES. EXISTING PUMPS S810-WAP AND S820-WAP SHALL BE DISCONNECTED AND ALL WIRING FROM EXISTING STARTERS TO BE REMOVED. (REFER TO DRAWING SE3.02) MODIFY STARTER LABELS TO SUIT REVISED EQUIPMENT. MODIFY WRAPPER DOOR AS REQUIRED.
 - REMOVE BREAKER (MCC-1S) FOR EXISTING PUMP S730-RAP. REPLACE BREAKER WITH NEW 80A-3P, 600V BREAKER. RECONNECT EXISTING WIRING. REFER TO DRAWING SE3.02.
 - SIZE 3 STARTER (MCC-1S) FOR FLUSHING WATER PUMP S230-FWP SHALL BE DISCONNECTED AND REMOVED. PROVIDE NEW MCC WRAPPER COMPLETE WITH SIZE 4 MOTOR STARTER. REMOVE EXISTING WIRING FROM EXISTING STARTER TO EXISTING PUMP MOTOR. INSTALL NEW POWER WIRING TO NEW PUMP MOTOR (3/C#1 TECK CABLE). RECONNECT EXISTING CONTROL WIRING FOR S230-FWP AT NEW MOTOR STARTER.
 - PROVIDE NEW STARTER AND BREAKER WRAPPERS IN EXISTING SPACES AS INDICATED ON MCC ELEVATION. MODIFY DOORS TO SUIT NEW STARTERS, CONTROL SWITCHES, INDICATING LIGHTS AND BREAKERS AS REQUIRED.
 - EXISTING MCC'S. REFER TO DETAIL FOR EXISTING DETAILS AND MODIFICATIONS.
 - PROVIDE ADDITIONAL VERTICAL CELL TO EACH END OF MCC. CONNECT TO EXISTING MCC BUS.
 - SIZE 1 STARTERS FOR WAS ACTIVATED SLUDGE PUMPS S850-SP AND S860-SP SHALL BE DISCONNECTED AND LEFT IN PLACE AS SPARES. EXISTING PUMPS S850-SP AND S860-SP SHALL BE DISCONNECTED AND ALL WIRING FROM EXISTING STARTERS TO BE REMOVED. (REFER TO DRAWING SE3.02) MODIFY STARTER LABELS TO SUIT REVISED EQUIPMENT. MODIFY WRAPPER DOOR AS REQUIRED.
 - PROVIDE NEW BREAKER WRAPPERS IN EXISTING SPACES AS INDICATED ON MCC ELEVATION FOR RETURN ACTIVATED SLUDGE PUMPS S740-RAP AND S750-RAP. PROVIDE NEW SIZE R5 VFD'S AS SHOWN ON FLOOR PLAN. INSTALL NEW POWER WIRING TO NEW VFD AND FROM VFD TO PUMP MOTOR (3/C#4 TECK CABLE WITH 100% GROUND WIRE).
 - PANEL SB INSTRUMENT CIRCUITS - REFER TO INSTRUMENTATION AND CONTROL DRAWINGS FOR INSTRUMENTATION LOCATIONS. PROVIDE WIRE AND CABLE AS PER INSTRUMENT CABLE LIST.
- GENERAL NOTES**
- COORDINATE WITH OTHER TRADES TO PREVENT CONFLICTS.
 - USE PVC JACKETED HITECK CABLE FOR ALL POWER WIRING.
 - WIRING FOR LIGHTING, RECEPTACLES AND COMMUNICATIONS TO IN RIGID ALUMINUM CONDUIT.
 - ALL CONDUIT TO BE 21mm# MINIMUM UNLESS OTHERWISE NOTED.

1 DETAIL - EXISTING MOTOR CONTROL CENTRE MODIFICATIONS
SCALE: 1:25



B.M. ELEV.	
DESIGNED BY	GSN
CHECKED BY	PS
DRAWN BY	ERC
APPROVED BY	JEH
HOR. SCALE:	NTS
VERTICAL SCALE:	RELEASED FOR CONSTRUCTION BY: J. VEILLEUX
DATE	2005/11/22
DATE	2006/04/26

EarthTech
A Tyco International Ltd. Company

DESIGNED BY: GSN
CHECKED BY: PS
DRAWN BY: ERC
APPROVED BY: JEH

HOR. SCALE: NTS
VERTICAL SCALE: RELEASED FOR CONSTRUCTION BY: J. VEILLEUX

DATE: 2005/11/22
DATE: 2006/04/26

ENGINEER'S SEAL

ORIGINAL SIGNED BY
P. STRYK
2006/04/26

CONSULTANT DRAWING NO.
SE4.01

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WENPCC
BIOLOGICAL NUTRIENT REMOVAL UPGRADE
CONTRACT 3

ELECTRICAL
AREA S - SECONDARY CLARIFIERS
EXISTING ELECTRICAL ROOM DETAILS

CITY FILE NUMBER
SHEET OF
CITY DRAWING NUMBER