



































LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM PULL STATION
	FIRE ALARM HEAT DETECTOR
	FIRE ALARM HORN AND STROBE
	FIRE ALARM CONTROL PANEL
	LIGHT SWITCH (3 INDICATES 3-WAY)
	DOUBLE-GANG LIGHT SWITCH
	1' x 4' FLUORESCENT FIXTURE
	WALL MOUNTED HIFI FIXTURE
	CEILING MOUNTED BILINGUAL EXIT SIGNS
	EMERGENCY BATTERY UNIT C/W HEADS
	EMERGENCY REMOTE HEADS - WALL MOUNTED
	DUPLEX RECEPTACLE
	DIRECT CONNECTION
	COMBINATION MAGNETIC STARTER
	DISCONNECT SWITCH
SYMBOL	DESCRIPTION
	METER HEAD
	JUNCTION BOX
	CONTACTOR
	PHOTOCELL
	BREAKER PANEL
	WALL MOUNTED TELEPHONE OUTLET
	SMOKE ALARM BOX C/W SMOKE GANG (W/INSULATED)
	INSULATED SERVICE ENTRANCE
	COORDINATE EXACT LOCATION W/ LOCAL AUTHORITY
	GROUND ROD
	GROUND
	CIRCUIT BREAKER
	REFER TO NOTE 1
	FIXTURE TYPE 'A'
	DENOTES GROUND FAULT INTERRUPT
	DENOTES WEATHER PROOF

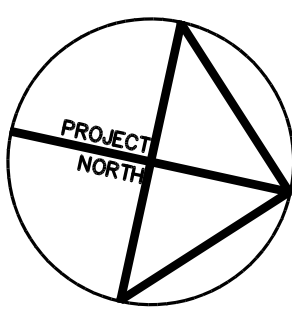
FEATURE SCHEDULE	
SYMBOL	DESCRIPTION
	<p>130mm x 190mm VAPOR PROOF FLUORESCENT</p> <ul style="list-style-type: none"> 2 x 32" T-8 LAMP FIBREGLASS REINFORCED POLYESTER HOUSING SMOOTH INTERIOR ALUMINUM LENS WITH GROVED SURFACE 120V ELECTRONIC BALLAST SURFACE MOUNTED W/IE GLAND AND CHAIN SUPPORTS
	<p>WALL MOUNTED FLUORESCENT DOWNLIGHT</p> <ul style="list-style-type: none"> 1 x 70W, HIGH PRESSURE SODIUM 120V ELECTRONIC BALLAST ALUMINUM RESISTANT DIE CAST ALUMINUM HOUSING SPECULAR ALZAK ALUMINUM BROUCLIQUE GLASS LENS C/W VANOL SHIELD
	<p>100mm VAPORFLUOR LAMP</p> <ul style="list-style-type: none"> 1 x 100W, INCANDESCENT LAMP 120V ELECTRONIC BALLAST ALUMINUM RESISTANT DIE CASTED AND GASKETED WATERPROOF, IN DIE-CAST ALUMINUM CLEAR GLASS PENDANT GLOBE C/W CAST ALUMINUM GLAND COORDINATE SUPPORT HARDWARE W/ ARCHITECT

- A. PERFORM COMPLETE INSTALLATION OF EQUIPMENT IN STRICT ACCORDANCE AND SHALL MEET THE MOST STRINGENT REGULATION OF THE FOLLOWING STANDARDS:
1. CSA C22.1-12 – 22ND EDITION OF THE CANADIAN ELECTRICAL CODE 2012.
 2. GOVERNMENT OF NUNAVUT'S GOOD BUILDING PRACTICES GUIDELINES – (SECOND EDITION DECEMBER, 2005)
 3. COMMUNITY AND GOVERNMENT SERVICES – PROTECTION SERVICES DIVISION – ON ELECTRICAL BULLETINS OFFICE OF THE NUNAVUT FIRE MARSHALL TECHNICAL BULLETINS.
- B. VERIFY WITH THE ELECTRICAL INSPECTION DEPARTMENT THE ACCEPTABILITY OF ANY PRE-WIRING DONE OUTSIDE THE PROVINCE OF NUNAVUT AND ENSURE THAT A PERMIT IS ACQUIRED.
- NOTES:**

- | | |
|----|---|
| 1 | PROVIDE AND INSTALL NEW 50kW/60VVA, 120/208V, 3ø, 4W EMERGENCY GENERATOR GL BATTERIES IN GENERATOR ROOM. |
| 2 | PROVIDE AND INSTALL BATTERY CHARGER AS INDICATED. COMPLETE CONNECTION FROM CHARGER TO BATTERIES IN GENERATOR ROOM. |
| 3 | FEED BLOCK HEATER TERMINAL BOX FROM PANEL, DE-2A AS INDICATED. REFER TO PANEL SCHEDULE. |
| 4 | OVERHEAD INCOMING POWER AND COMMUNICATION SERVICE. PROVIDE ONE (1) 3ømm RIGID GALVANIZED CONDUIT SLAB TO EXTERIOR OF BUILDING FOR SERVICE ENTRANCE AND SEAL. |
| 5 | PROVIDE MAIN INCOMING FEEDER BREAKER AS INDICATED. REFER TO SINGLE LINE DIAGRAM FOR DETAILS. |
| 6 | PROVIDE SECOND BUS IN NEW GENERATOR ROOM AS INDICATED. PROVIDE THREE (3) BRONZ PDS AS INDICATED. CONNECT 1 BRONZ PDS TO GROUND BUS WITH #6 COPPER CONDUCTOR IN PVC CONDUIT. |
| 7 | PROVIDE 12W, 120/208V, 3ø ELECTRIC UNIT HEATER EQUIPPED WITH RELAY BASE AS INDICATED. PROVIDE CONDUIT AND WIRE TO THERMOSTAT AS INDICATED. COORDINATE CONNECTION WITH MECHANICAL. REFER TO PANEL SCHEDULE FOR CIRCUIT DETAILS. |
| 8 | PROVIDE FIRE ALARM CONTROL PANEL AND ASSOCIATED FIRE DETECTING DEVICES AND ALARMS AS INDICATED. |
| 9 | PROVIDE POWER FROM PANEL, DE-2A TO CONTROL PANEL, DE-01 PROVIDED BY DIVISION 23. PROVIDE TWO (2) 27mm EMT CONDUIT FROM CONTROL PANEL TO WATER PUMP STARTERS TO CONTROL THEIR OPERATION. COORDINATE CONNECTION WITH MECHANICAL. |
| 10 | PROVIDE TWO (2) HAND-OFF-AUTO COMBINATION MANUETS COMPLETE WITH 50% of 3 x 4 AWG TECK CABLE, FEED FROM PANEL, DE-2A TO FEED WATER PUMPS WE-01 AND WE-02 AS INDICATED. COORDINATE CONNECTION WITH MECHANICAL. PROVIDE 100A DISCONNECTS IN MAIN PUMPING ROOM. |
| 11 | PROVIDE HEAT TRACE CONTROLLERS AND 6 x 154'-208V REPTACABLES TO MATCH THE HEAT TRACE CABLES' LENGTH. PROVIDE GRT BREAKERS ON ASSOCIATED CIRCUITS. REFER TO DETAIL 1/2E. |
| 12 | PROVIDE POWER FROM PANEL, DE-2A TO FUEL CONTROL PANEL, DE-01 AS INDICATED. TWO (2) DUPLEX FUEL TRANSFER PUMPS AND ONE (1) CONTROL PANEL, PROVIDED BY DIVISION 23. FEED EACH PUMP WITH SEPARATE FEEDER FROM CONTROL PANEL TO INDIVIDUAL PUMP IN LIQUID TIGHT FLEX COORDINATE CONNECTIONS WITH DIVISION 23. |
| 13 | PROVIDE 120V OUTLET TO LOW VOLTAGE TRANSFORMER FOR CONTROL CONNECTIONS PROVIDED BY DIVISION 23. COORDINATE CONNECTIONS WITH MECHANICAL. |
| 14 | PROVIDE COMPLETE 120V CONNECTION FROM PANEL, DE-2A TO DAMPER MOTORS AS INDICATED. TYPICAL FOR ALL DAMPER MOTOR CONNECTIONS. MOTORIZED DAMPERS SUPPLIED AND INSTALLED BY DIVISION 23. |
| 15 | PROVIDE ONE (1) 27mm RIGID PVC CONDUIT FOR CONTROL WIRING FROM FUEL CONTROL PANEL TO MAIN TANK AS INDICATED. COORDINATE CONDUIT RUN WITH MECHANICAL. |
| 16 | PROVIDE ONE (1) 27mm EMT CONDUIT FOR CONTROL WIRING FROM FUEL CONTROL PANEL TO DAYTANK DE-02 AS INDICATED. COORDINATE CONDUIT RUN WITH MECHANICAL. |
| 17 | PROVIDE PHOTOCELL AS INDICATED TO CONTROL TYPE B EXTERIOR LIGHTS. |
| 18 | PROVIDE LIGHTING CONTROL. CONTACTOR COMPLETE WITH HAND-OFF-AUTO CONTROL. CONNECT TO PHOTOCELL. |
| 19 | PROVIDE INSTRUIT CHANNEL, COMPLETE WITH TWO (2) 20A OUTLETS AND TWO (2) HP RATED TONGUE-AND-SHOES AS INDICATED TO POWER CONTROL. THE OPERATION OF MAKER WE-01 AND PUMP DE-02 PROVIDED BY OTHERS. PANEL CIRCUITS ACCORDINGLY. |
| 20 | PROVIDE ONE (1) HAND-OFF-AUTO COMBINATION MANUETS COMPLETE WITH WIRE AND PDS AS INDICATED. CONNECT TO FEED PUMPS WE-01 AND WE-02. CONNECT TO REMOTE SIGNAL PROVIDED BY DIVISION 24. INTERCONNECT TO DE-02. |
| 21 | PROVIDE FOUR (4) CHANNEL, AUTO-DIALER COMMUNICATION MODULE AS INDICATED INCLUDING SIGNAL RELAY. PROVIDE TWO (2) 27mm EMT CONDUITS TO RUN FROM MAIN TANK ALARMS AS FOLLOWS:
- ONE PAIR, 3 #14 TO SIGNAL GENERATOR TROUBLE/TFAILURE
- ONE PAIR, 3 #14 TO SIGNAL LOW BUILDING TEMP
- ONE PAIR, 3 #14 TO SIGNAL THE ALARM ACTIVATION |
| 22 | INSTALL DAYTANK, 120/208V, 3ø, 4W AFS, PROVIDED BY OWNER. |
| 23 | PROVIDE GREASE AS REINFORCED POLYESTER (FRP) BACKGAGES AND JUNCTION BOXES FOR ALL DEVICES INSTALLED INSIDE THE CHEMICAL ROOM. PROVIDE PVC CONDUIT FOR ALL CIRCUITS ENTERING THE CHEMICAL ROOM. |

No.	Description	Date	By	Apt'D					
R E V I S I O N S									
3	ISSUED FOR 90% REVIEW	06/12/2013							
2	ISSUED FOR 75% REVIEW	22/03/2013							
1	ISSUED FOR REVIEW	03/01/2013							

NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND / OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.



PROJECT	
CORAL HARBOUR, NUNAVUT NEW PUMPING STATION	
TITLE	
ELECTRICAL NEW POWER AND LIGHTING LAYOUT	
drawn by	A.W.
checked by	D.O.
designed by	R.M.M.
date	MARCH 2013
AS SHOWN	
project no.	8011-116
drawing no.	E1

GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES



OTIOWA :
1000-1960 Robertson Road, Suite 100, K2H 5S9
T.(613) 596.6454 F.(613) 596.3346
www.bdo.ca

Gatineau :
430 de l'hôpital bid, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031

Consulting Engineers

CORAL HARBOUR, NUNAVUT
NEW PUMPING STATION

ELECTRICAL NEW POWER AND LIGHTING LAYOUT

design by	A.W.	project no.	8011-116
drawn by	D.O.	drawing no.	
checked by	R.M.M.		
date	MARCH 2013		E1
	AS SHOWN		