

SMALL CRAFT HARBOURS



- NOTES:
1. ALL ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
 2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER
Class "A"
This Permit Allows
CROSBIE ENGINEERING LIMITED
To practice Professional Engineering in Newfoundland and Labrador
Permit No. as issued by PEG-NL 00123
which is valid for the year 2021.

STAMP
REGISTERED PROFESSIONAL ENGINEER
KENNETH R.P. NEIL
SIGNATURE
JUNE 25, 2021
SHEPARD & LASSER

O	ISSUED FOR TENDER	25/06/21
I	RE-ISSUED FOR REVIEW BASED ON 2021 SCOPE	11/05/21
H	RE-ISSUED FOR REVIEW BASED ON 2021 SCOPE	29/04/21
G	ISSUED FOR TENDER	06/03/18
F	RE-ISSUED FOR REVIEW	19/01/18
E	RE-ISSUED FOR REVIEW	04/12/17
D	RE-ISSUED FOR REVIEW	13/10/17
C	RE-ISSUED FOR REVIEW	13/07/17
B	ISSUED FOR 99% REVIEW	12/05/17
A	ISSUED FOR REVIEW	31/03/17

WHARF RECONSTRUCTION (PHASE II)
GRAND BANK, NL

PANEL SCHEDULES, DISTRIBUTION AND TRENCH DETAILS

designed	K.N.	concu
date	MAY 2021	
drawn	D.R.	desine
date	MAY 2021	
approved		approve

Tender Submission

DFO Project Manager

project number no. du projet

C2-00200

drawing no. no. du dessin

E6

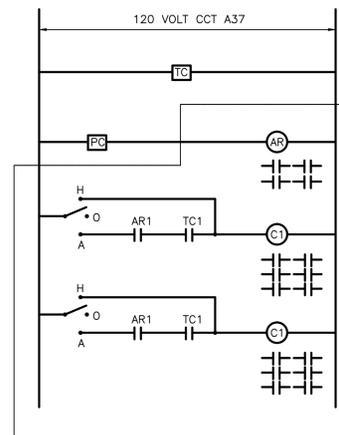
EXISTING PANEL

VOLTS <u>120/208</u>		PANEL NAME <u>"A"</u>		MAINS RATED <u>200</u> AMPS	
PHASE <u>3</u>		LOCATION <u>ELECTRICAL SHED</u>		MOUNTING <u>SURFACE</u>	
WIRE <u>4</u>		FED FROM <u>UTILITY</u>		CIRCUITS <u>60</u>	

DESIGNATION	WATTAGE			WIRE	BKR	CCT	A	B	C	CCT	BKR	WIRE	WATTAGE			DESIGNATION
	φ A	φ B	φ C										φ A	φ B	φ C	
ST EXISTING JIB CRANE	933			6	20	1				2	15	12	160			EXISTING FAN F-1 (1/6 HP)
GF30 EXISTING JIB CRANE RECEPT	120			4	15	7				4	15	10	300			NEW LIGHT POLE #5
GF30 EXISTING JIB CRANE LIGHTING		300		10	15	9				6	15	10				NEW LIGHT POLE #6
GF30 SPARE										8	15					FUTURE LIGHT POLE #7
EXISTING HEATER-ELECTRICAL SHED	1000			12	15	11				12	15	10				NEW JIB CRANE RECEPT
EXISTING LIGHTING-ELECTRICAL SHED		1000			15	13				14	15	10	300			NEW JIB CRANE LIGHTING
GF30 EXISTING EXT. RECEPT-SHED	120			200	12	15				16	20		933			JIB CRANE #2
EXISTING RECEPTACLE-SHED		480			12	15				18	3		933			
EXISTING LIGHT POLE #1		300			10	15				20	50		4800			PEDESTAL #6 - RECEPTACLE #6
EXISTING LIGHT POLE #2		300			10	15				22			4800			
EXISTING LIGHT POLE #3		300			10	15				24	3					
EXISTING LIGHT POLE #4		300			10	15				26						
GF30 FUTURE LIGHT POLE #8					10	15				28						
GF30 FUTURE LIGHT POLE #9		300			10	15				30						
GF30 FUTURE LIGHT POLE #10					10	15				32						
EXTERIOR LIGHTING CONTROL PANEL	200			12	15	37				34						
SPARE					15	49				36						
SPARE					15	51				38						
SPARE					15	53				40						
SPARE					15	55				42						
SPARE					15	57				44						
SPARE					15	59				46						
φ A TOTAL :	8066															
φ B TOTAL :	8566															
φ C TOTAL :	7466															

DEMAND LOAD 24 KW 67 AMP

- * - INDICATES GROUND FAULT CIRCUIT BREAKER
- ** - INDICATES NEW CIRCUIT AND CIRCUIT BREAKER C/W MOUNTING HARDWARE, IC RATING TO MATCH. COORDINATE ON SITE.
- *** - INDICATES CIRCUIT BREAKER C/W MOUNTING HARDWARE, IC RATING TO MATCH. COORDINATE ON SITE.
- GF - INDICATES CONTRACTOR TO SUPPLY AND INSTALL NEW CIRCUIT AND CIRCUIT BREAKER. CIRCUIT BREAKER SHALL BE GFCI CLASS A TYPE. SUPPLY AND INSTALL NEW CIRCUIT BREAKER AS INDICATED C/W MOUNTING HARDWARE, IC RATING TO MATCH. COORDINATE ON SITE. SUPPLY AND INSTALL NEW WIRING AND CONDUIT AS INDICATED.
- GF30 - INDICATES CONTRACTOR TO SUPPLY AND INSTALL NEW CIRCUIT AND CIRCUIT BREAKER. CIRCUIT BREAKER SHALL BE GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING AT 30mA. SUPPLY AND INSTALL NEW CIRCUIT BREAKER AS INDICATED C/W MOUNTING HARDWARE, IC RATING TO MATCH. COORDINATE ON SITE. SUPPLY AND INSTALL NEW WIRING AND CONDUIT AS INDICATED.
- ST - INDICATES CONTRACTOR TO SUPPLY AND INSTALL NEW CIRCUIT AND CIRCUIT BREAKER. CIRCUIT BREAKER SHALL BE C/W SHUNT TRIP BREAKER, AND CONNECTED TO A 30 mA GROUND FAULT PROTECTION RELAY (EATON D64RPB100 OR APPROVED EQUAL, C/W ENCLOSURE). SUPPLY AND INSTALL C/W MOUNTING HARDWARE, IC RATING TO MATCH. COORDINATE ON SITE. SUPPLY AND INSTALL NEW WIRING AND CONDUIT AS INDICATED.



EEMAC 2 (SPRINKLER PROOF) ENCLOSURE, C/W HINGED COVER & LOCKING DOOR. PROVIDE LAMICOID NAMEPLATES READING: "EXTERIOR LIGHTING PHASE 1" & "EXTERIOR LIGHTING PHASE 2". MOUNT NAMEPLATES OVER SWITCHES. SURFACE MOUNTED CONTROL PANEL 1.4m A.F.F. IN ELECT. ROOM NEAR PANEL "A". COORDINATE EXACT LOCATION ON SITE.

PHASE 1:
LIGHT POLE #1 - CCT A23
LIGHT POLE #2 - CCT A25
LIGHT POLE #3 - CCT A27
LIGHT POLE #4 - CCT A29
LIGHT POLE #9 - CCT A33
JIB CRANE LIGHTING - CCT A9

PHASE 2:
NEW LIGHT POLE #5 - CCT A4
NEW LIGHT POLE #6 - CCT A6
FUTURE LIGHT POLE #7
FUTURE LIGHT POLE #8
FUTURE LIGHT POLE #10
NEW JIB CRANE LIGHTING - CCT A12

- LEGEND
- TC TIME CLOCK "PARAGON" EC7000/120 OR EQUAL. 120 VOLT, C/W 4-N.O. CONTACTS. WALL MOUNT 1400mm. IN ELECTRICAL ROOM. SUPPLIED & INSTALLED BY ELECTRICAL CONTRACTOR.
 - PC PHOTOCELL. "INTERMATIC" No. K1121 OR EQUAL. 120 VOLT. WALL MOUNT 300mm. BELOW BLDG. EAVE.
 - AR AUXILIARY RELAY C/W 4 N.O. CONTACTS.
 - C 6 POLE CONTACTOR. - VOLT, 20 AMP.
 - H-O-A HAND-OFF-AUTO SELECTOR SWITCH. MOUNT IN ENCLOSURE DOOR.

EXTERIOR LIGHTING CONTROL PANEL
N.T.S.

SYMBOL	WIRE AND CONDUIT SIZE
①	2 PARALLEL RUNS OF (2 #4/0 RW90 + 1 #4 TW GROUND IN 53mm EMT CONDUIT).
②	2 PARALLEL RUNS OF (3 #3/0 RW90 + 1 #4 TW GROUND IN 53mm EMT CONDUIT).

BROKEN LINE INDICATES EXISTING
SOLID LINE INDICATES NEW

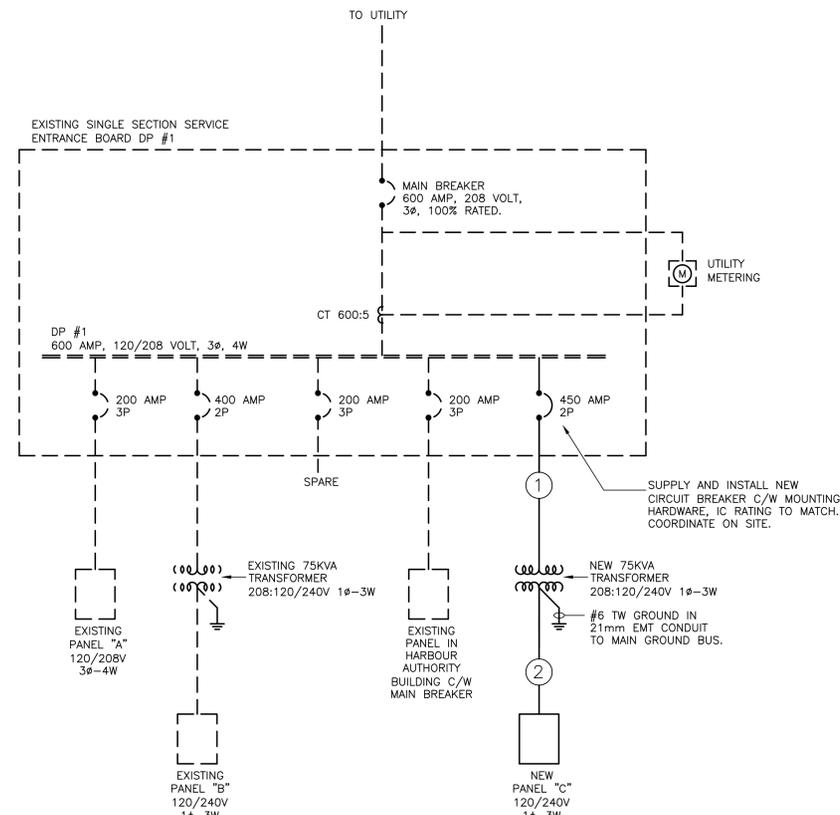
NEW PANEL

VOLTS <u>120/240</u>		PANEL NAME <u>"C"</u>		MAINS RATED <u>400</u> AMPS	
PHASE <u>1</u>		LOCATION <u>ELECTRICAL SHED</u>		MOUNTING <u>SURFACE</u>	
WIRE <u>3</u>		FED FROM <u>75 KVA TRANSFORMER</u>		CIRCUITS <u>42</u>	

DESIGNATION	WATTAGE			WIRE	BKR	CCT	A	B	C	CCT	BKR	WIRE	WATTAGE			DESIGNATION
	φ A	φ B	φ C										φ A	φ B	φ C	
GF30 PEDESTAL #5 - RECEPTACLE #1	4800	4800		4	50	1				2	50					FUTURE PEDESTAL #7 - RECEPTACLE #1
GF30 PEDESTAL #5 - RECEPTACLE #2	2880			6	30	5				6	30					FUTURE PEDESTAL #7 - RECEPTACLE #2
GF30 PEDESTAL #5 - RECEPTACLE #3	2880			4	30	9				10	20					FUTURE PEDESTAL #7 - RECEPTACLE #3
GF30 PEDESTAL #5 - RECEPTACLE #4	2880			4	30	11				12	30					SPARE
GF PEDESTAL #5 - RECEPTACLE #5	1920			6	20	13				14	2					SPARE
SPARE					30	15				16	20					SPARE
SPARE					30	19				18	20					SPARE
GF30 PEDESTAL #6 - RECEPTACLE #1	2880			4	30	21				20	30					FUTURE PEDESTAL #8 - RECEPTACLE #1
GF30 PEDESTAL #6 - RECEPTACLE #2	2880			4	30	23				22	2					FUTURE PEDESTAL #8 - RECEPTACLE #2
GF30 PEDESTAL #6 - RECEPTACLE #3	2880			4	30	25				24	30					FUTURE PEDESTAL #8 - RECEPTACLE #3
GF30 PEDESTAL #6 - RECEPTACLE #4	2880			2	30	29				26	2					SPARE
GF30 PEDESTAL #6 - RECEPTACLE #5	1920			4	20	33				28	20					SPARE
SPARE					15	35				30	20					SPARE
SPARE					30	37				32	20					SPARE
SPARE					2	39				34	30					SPARE
SPARE					15	41				36	30					SPARE
SPARE					15	41				38	30					SPARE
DEMAND LOAD @ 240V, 1φ	45.36 KW			189 AMP												

PANEL TUB FOR PANEL "C" SHALL BE MINIMUM 710mm (28") WIDE TO ACCOMMODATE MULTI-CIRCUIT METERING SYSTEM CT'S & LARGE BRANCH CIRCUIT WIRING.

- GF - INDICATES GFCI CLASS A TYPE CIRCUIT BREAKER
- GF30 - INDICATES GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING AT 30mA
- ST - INDICATES CIRCUIT BREAKER SHALL BE C/W SHUNT TRIP BREAKER AND CONNECT TO A NEW 30 mA GROUND FAULT PROTECTION RELAY (EATON D64RPB100 OR APPROVED EQUAL, C/W ENCLOSURE).



ELECTRICAL SERVICE SINGLE LINE DIAGRAM
N.T.S.