

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  
CROSSIE 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.



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. dessine  
date MAY 2021  
approved  
Tender Soumission  
DFO Project Manager  
project number no. du projet  
C2-00200  
drawing no. no. du dessin  
E6

EXISTING PANEL

VOLTS	120/208	PANEL NAME	"A"	MAINS RATED	200	AMPS
PHASE	3	LOCATION	ELECTRICAL SHED	MOUNTING	SURFACE	
WIRE	4	FED FROM	UTILITY	CIRCUITS	60	
DESIGNATION	WATTAGE	WIRE	BKR	CCT	A B C	DESIGNATION
ST EXISTING JIB CRANE	933	6	20	1		EXISTING FAN F-1 (1/6 HP)
GF EXISTING JIB CRANE RECEPT	120	4	15	7		NEW LIGHT POLE #5
GF30 EXISTING JIB CRANE LIGHTING	300	10	15	9		FUTURE LIGHT POLE #7
GF30 SPARE			15	11		NEW JIB CRANE RECEPT
ST EXISTING HEATER-ELECTRICAL SHED	1000	12	15	13		NEW JIB CRANE LIGHTING
GF EXISTING LIGHTING-ELECTRICAL SHED	1000	200	12	15	17	JIB CRANE #2
GF EXISTING EXT. RECEPT-SHED	120	12	15	19		
ST EXISTING RECEPTACLE-SHED	480	12	15	21		PEDESTAL #6 - RECEPTACLE #6
ST EXISTING LIGHT POLE #1	300	300	10	15	23	
ST EXISTING LIGHT POLE #2	300	10	15	25		
ST EXISTING LIGHT POLE #3	300	10	15	27		
GF30 EXISTING LIGHT POLE #4	300	300	10	15	29	
GF30 FUTURE LIGHT POLE #8			15	31		
GF30 EXISTING LIGHT POLE #9	300	10	15	33		
GF30 FUTURE LIGHT POLE #10			15	35		
GF30 EXTERIOR LIGHTING CONTROL PANEL	200	12	15	37		
			39			
			41			
			43			
			45			
			47			
SPARE			15	49		
SPARE			15	51		
SPARE			15	53		
SPARE			15	55		
SPARE			15	57		
SPARE			15	59		

ø A TOTAL : 8066  
ø B TOTAL : 8566  
ø C TOTAL : 7466

DEMAND LOAD 24 KW 67 AMP

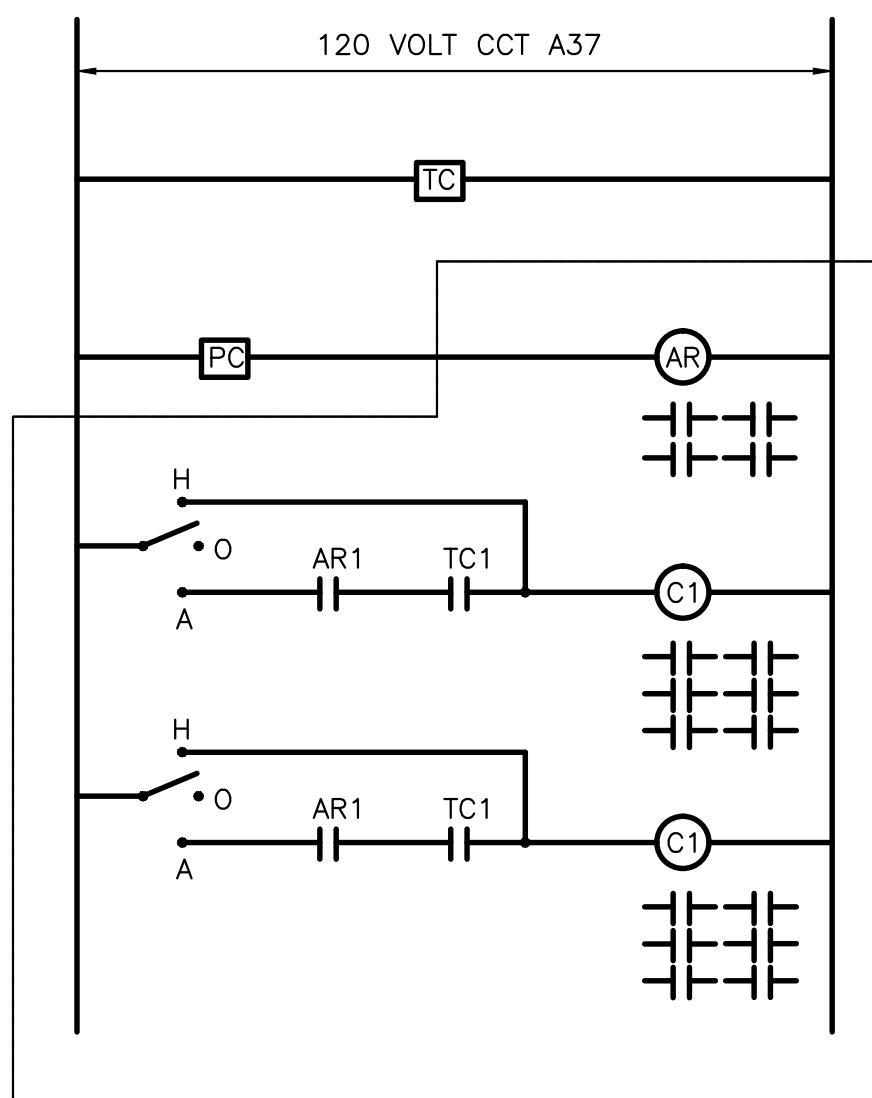
- \* - INDICATES GROUND FAULT CIRCUIT BREAKER  
\*\* - INDICATES NEW CIRCUIT AND CIRCUIT BREAKER C/W MOUNTING HARDWARE, IC RATING TO MATCH. COORDINATE ON SITE.  
\*\*\* - INDICATES CIRCUIT BREAKER C/W MOUNTING HARDWARE, IC RATING TO MATCH. COORDINATE ON SITE.  
GF - INDICATES CONTRACTOR TO SUPPLY AND 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.

NEW PANEL

VOLTS	120/240	PANEL NAME	"C"	MAINS RATED	400	AMPS
PHASE	1	LOCATION	ELECTRICAL SHED	MOUNTING	SURFACE	
WIRE	3	FED FROM	75 KVA TRANSFORMER	CIRCUITS	42	
DESIGNATION	WATTAGE	WIRE	BKR	CCT	A B	DESIGNATION
GF30 PEDESTAL #5 - RECEPTACLE #1	4800	4	50	1		FUTURE PEDESTAL #7 - RECEPTACLE #1
GF30 PEDESTAL #5 - RECEPTACLE #2	2880	6	30	5		FUTURE PEDESTAL #7 - RECEPTACLE #2
GF30 PEDESTAL #5 - RECEPTACLE #3	2880	4	30	9		FUTURE PEDESTAL #7 - RECEPTACLE #3
GF30 PEDESTAL #5 - RECEPTACLE #4	2880	4	30	11		SPARE
GF PEDESTAL #5 - RECEPTACLE #5	1920	6	20	13		SPARE
SPARE			30	15		SPARE
SPARE			30	17		SPARE
GF30 PEDESTAL #6 - RECEPTACLE #1	2880	4	30	21		FUTURE PEDESTAL #8 - RECEPTACLE #1
GF30 PEDESTAL #6 - RECEPTACLE #2	2880	4	30	23		FUTURE PEDESTAL #8 - RECEPTACLE #2
GF30 PEDESTAL #6 - RECEPTACLE #3	2880	4	30	25		FUTURE PEDESTAL #8 - RECEPTACLE #3
GF30 PEDESTAL #6 - RECEPTACLE #4	2880	2	30	29		SPARE
GF30 PEDESTAL #6 - RECEPTACLE #5	1920	2	30	31		SPARE
GF SPARE		4	20	33		SPARE
SPARE			15	35		SPARE
SPARE			30	37		SPARE
SPARE			2	39		SPARE
SPARE			15	41		SPARE

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).



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

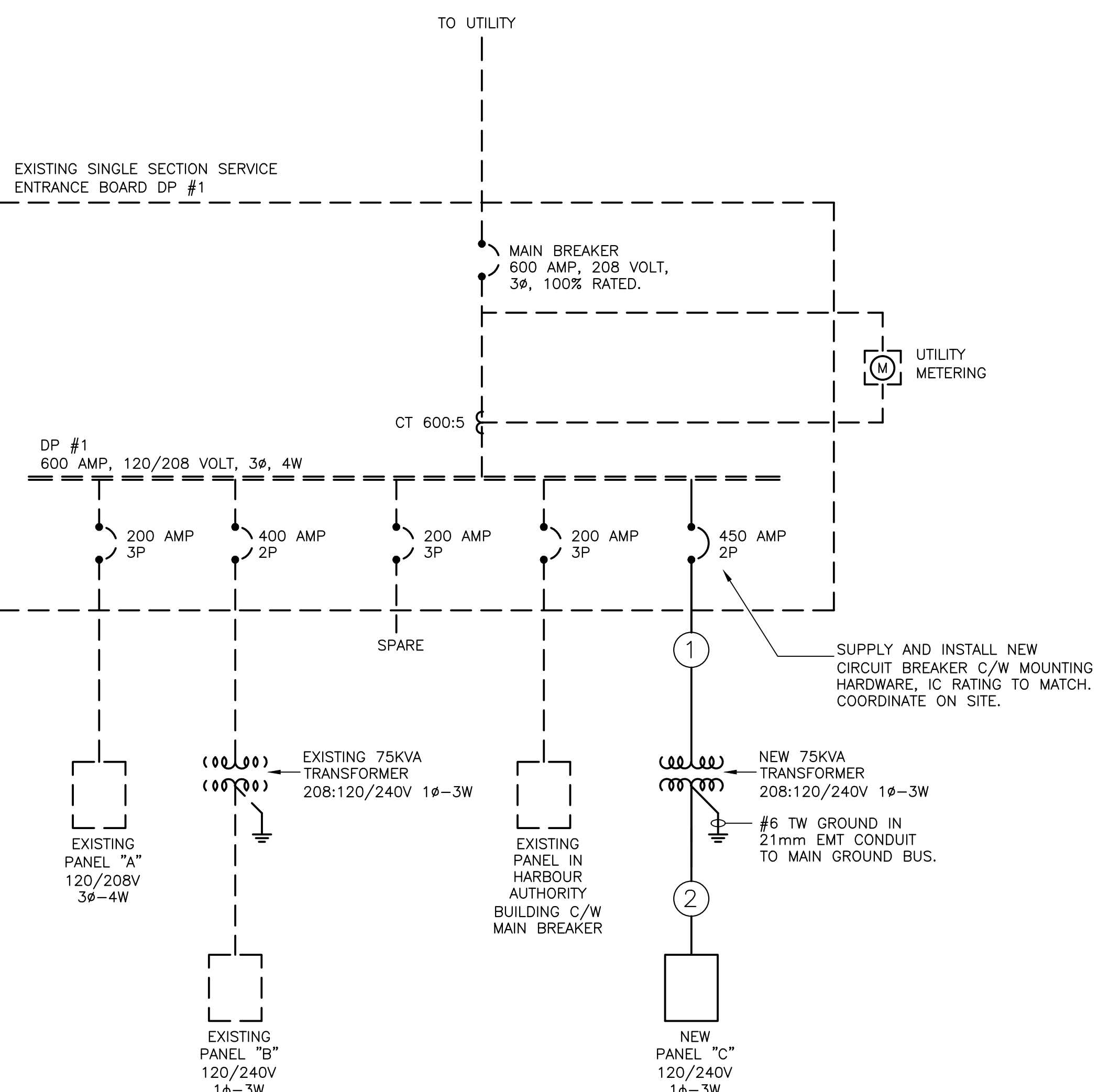
PHASE 2:  
NEW LIGHT POLE #5 - CCT A4  
NEW LIGHT POLE #6 - CCT A6  
FUTURE LIGHT POLE #7  
FUTURE LIGHT POLE #8  
FUTURE LIGHT POLE #10  
NEW JIB CRANE LIGHTING - CCT A12

- LEGEND
- 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.
- PHOTOCELL. "INTERMATIC" No. K1121 OR EQUAL. 120 VOLT. WALL MOUNT 300mm. BELOW BLDG. EAVE.
- AUXILIARY RELAY C/W 4 N.O. CONTACTS.
- 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



ELECTRICAL SERVICE SINGLE LINE DIAGRAM  
N.T.S.