

LEGEND

LIGHTING

- LED LIGHTING FIXTURE, WALL MOUNTED. LETTER DENOTES TYPE. SEE LIGHTING FIXTURE SCHEDULE & SPECIFICATIONS FOR DESCRIPTION.
- LED LIGHTING FIXTURE. LETTER DENOTES TYPE. SEE LIGHTING FIXTURE SCHEDULE & SPECIFICATIONS FOR DESCRIPTION.
- SINGLE POLE TOGGLE SWITCH. 15 AMP, SPECIFICATION GRADE, WHITE C/W STAINLESS STEEL COVERPLATE. SEE SPEC. FOR MORE INFORMATION. MOUNT 1200mm ABOVE FINISHED FLOOR.
- "a" OR "b" INDICATES CIRCUIT TO BE CONTROLLED.
- "p" INDICATES PILOT LIGHT
- "k" INDICATES KEY OPERATED

ELECTRIC HEATING

- ELECTRIC HEATER. SEE HEATER FIXTURE SCHEDULE AND/OR SPECIFICATION FOR DESCRIPTION.
- LOW VOLTAGE ELECTRONIC THERMOSTAT. MOUNT 1200mm ABOVE FINISH FLOOR.

CONTROLS & MISCELLANEOUS

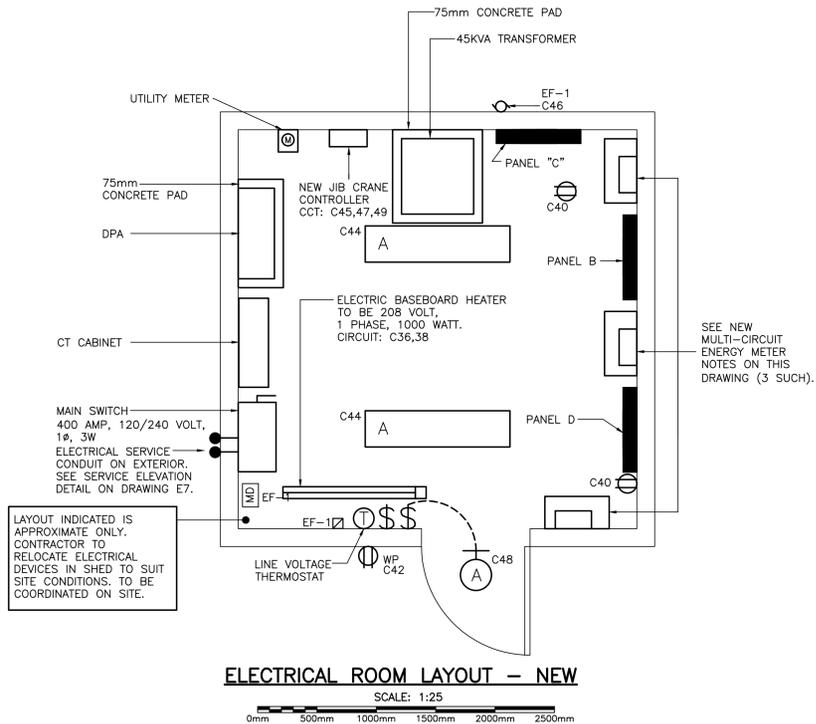
- DISCONNECT SWITCH SUPPLIED AND INSTALLED BY ELECTRICAL DIVISION UNLESS NOTED OTHERWISE. EEMAC 2 (SPRINKLER PROOF) FOR INTERIOR AND EEMAC 4X FOR EXTERIOR.
- MANUAL STARTER SUPPLIED AND INSTALLED BY MECHANICAL DIVISION WIRED BY ELECTRICAL DIVISION. WALL MOUNT 1400mm ABOVE FINISHED FLOOR.
- DAMPER MOTOR. SUPPLIED AND INSTALLED BY MECHANICAL DIVISION AND WIRED BY ELECTRICAL DIVISION.
- ELECTRICAL PANEL. EEMAC 2 (SPRINKLER PROOF) IF THERE IS A SPRINKLER SYSTEM.
- ELECTRIC MOTOR. SUPPLIED BY MECHANICAL DIVISION, WIRED BY ELECTRICAL DIVISION.

WIRING DEVICES

- DUPLEX U-GROUND RECEPTACLE. 120 VOLT, 15 AMP, SPECIFICATION GRADE. WHITE & C/W STAINLESS STEEL COVERPLATE. WALL MOUNT 400mm ABOVE FINISHED FLOOR. "WP" INDICATES WEATHERPROOF COVERPLATE. "C" INDICATES CEILING MOUNTED, COORDINATE EXACT LOCATION ON SITE. "HRV" INDICATES FOR HRV UNIT, COORDINATE EXACT LOCATION ON SITE WITH MECHANICAL PRIOR TO ROUGH-IN.

NEW MULTI-CIRCUIT ENERGY METER NOTES:

- NEW MULTI-CIRCUIT ENERGY METER ENCLOSURES C/W DISPLAYS AND CT'S. SHALL MONITOR ALL RECEPTACLE CIRCUITS (54 SUCH) OF ALL ELECTRICAL PEDESTALS (13 SUCH). CAPACITY FOR MONITORING 70 CIRCUITS MINIMUM. MEASURE AMPERAGE, VOLTAGE, KW, KVA, KVAR, PF, HZ, KWH. INTELLIMETER OR APPROVED EQUAL. ALL METERS TO BE FACTORY SEALED AND REGISTERED WITH MEASUREMENT CANADA. COORDINATE WITH HARBOUR AUTHORITY.
- CONTRACTOR TO SUPPLY AND INSTALL TEST BLOCK EQUAL TO MESURINA 4 POLE TEST SWITCH C/W COVER. TEST BLOCK TO BE TIED INTO NEW MULTI-METERING SYSTEM TO MEASURE VOLTAGE REFERENCE. PROVIDE LABEL TO READ "VOLTAGE TEST BLOCK".
- CONTRACTOR SHALL ENSURE THAT THE INFORMATION LABELS OF THE CURRENT TRANSFORMERS (POLARITY MARK / DIRECTION OF CURRENT FLOW, SERIAL NUMBER, APPROVAL NUMBER, ETC.) ARE PLACED AT THE FRONT AND ARE VISIBLE AND LEGIBLE BY THE INSPECTOR.
- CONTRACTOR TO INSTALL MULTI-METERING SYSTEM IN COMPLIANCE WITH MEASUREMENT CANADA. REFER TO THE FOLLOWING MEASUREMENT CANADA DOCUMENTS:
  - 4.1. S-E-04--INSTALLATION REQUIREMENTS FOR MULTIPLE CUSTOMER METERING SYSTEMS <https://www.ic.gc.ca/eic/site/mc-mc.nsf/eng/m00586.html>
  - 4.2. S-E-03--SPECIFICATION FOR THE INSTALLATION AND USE OF ELECTRICITY METERS -- INPUT CONNECTIONS AND RATINGS. <https://www.ic.gc.ca/eic/site/mc-mc.nsf/eng/m00172.html>
  - 4.3. S-E-08--SPECIFICATIONS FOR THE INSTALLATION AND USE OF ELECTRICITY METERS -- MEASUREMENT CANADA STANDARD DRAWINGS FOR ELECTRICITY METERING INSTALLATIONS <https://www.ic.gc.ca/eic/site/mc-mc.nsf/eng/m04068.html>
- CONTRACTOR SHALL ARRANGE FOR SUPPLIERS, EQUIPMENT MANUFACTURERS, AND/OR OTHERS AS REQUIRED FOR ALL COMMISSIONING ACTIVITIES OF THIS SYSTEM. ENSURE PROPER OPERATION OF EQUIPMENT AND ON SITE TRAINING, MAKING NECESSARY CORRECTIONS AS REQUIRED. PROVIDE COMMISSIONING REPORT INCLUDING LIST OF ATTENDEES AND DATE OF ON SITE COMMISSIONING. ALL COSTS ASSOCIATED WITH COMMISSIONING REQUIREMENTS SHALL BE INCLUDED WITHIN TENDER PRICE.



ELECTRICAL ROOM LAYOUT - NEW

SCALE: 1:25

0mm 500mm 1000mm 1500mm 2000mm 2500mm

SMALL CRAFT HARBOURS

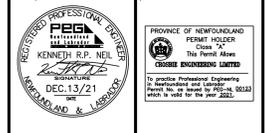


NOTES

- ALL ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- DO NOT SCALE FROM DRAWINGS.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE PRIOR TO PROCEEDING WITH ANY PORTION OF THIS WORK.

stamp

permit



O	ISSUED FOR TENDER	DEC 13 2021
D	ISSUED FOR PRE-TENDER REVIEW	NOV 24 2021
B	ISSUED FOR REVIEW	AUG 24 2020
C	ISSUED FOR REVIEW	JUNE 11 2020
A	ISSUED FOR REVIEW	MAY 21 2020

WHARF RECONSTRUCTION HARBOUR GRACE, NL ELECTRICAL DETAILS

designed	K. NEIL	concu
date	DECEMBER 2021	
drawn	K. NEIL	dessine
date	DECEMBER 2021	
approved		approve
Tender	Paul Curran	Submission
DFO Project Manager		
project number	C2-00201	no. du projet
drawing no.	E6	no. du dessin

NEW PANEL

VOLTS 120/208, PHASE 3, WIRE 4, PANEL NAME "C", LOCATION ELECTRICAL ROOM, MAINS RATED 200 AMPS, MOUNTING SURFACE, FED FROM DPA, MIN.CIRCUITS 60

DESIGNATION	WATTAGE			U/G WIRE	WIRE	BKR	CCT	A	B	C	CCT	BKR	WIRE	U/G WIRE	WATTAGE			DESIGNATION
	φ A	φ B	φ C												φ A	φ B	φ C	
GF30 PEDESTAL #4	2184	2184		8	10	30	1				2	15						SPARE
GF30 PEDESTAL #4			2520	6	10	30	5				6	30	10	4	2184	2184		PEDESTAL #1
GF30 PEDESTAL #4	2520			6	10	30	7				8	2						PEDESTAL #1
GF PEDESTAL #4	1680			8	12	20	9				10	30	10	2	2520			PEDESTAL #1
GF30 PEDESTAL #5	2184	2184		8	10	30	11				12	30	10	2	2520	2520		PEDESTAL #1
GF30 PEDESTAL #5	2520			6	10	30	15				14	20	12	3	1680			PEDESTAL #1
GF30 PEDESTAL #5	1680			8	12	20	19				16	30	10	4	2184	2184		PEDESTAL #2
GF30 PEDESTAL #5	2184	2184		6	10	30	21				18	2						PEDESTAL #2
GF30 PEDESTAL #7	2520			4	10	30	25				20	30	10	3	2520			PEDESTAL #2
GF30 PEDESTAL #7	2520			4	10	30	27				22	30	10	3	2520	1680		PEDESTAL #2
GF30 PEDESTAL #7	300			6	10	30	29				24	20	12	4	2184	1680		PEDESTAL #2
GF30 LIGHT POLE #1	300			10	10	15	31				26	30	10	4	2184	2184		PEDESTAL #3
GF30 LIGHT POLE #2	300			10	10	15	33				28	2						PEDESTAL #3
GF30 LIGHT POLE #3	300			10	10	15	35				30	30	10	4	2520	2520		PEDESTAL #3
GF30 SPARE				10	10	15	37				32	10	6	2184	2184		PEDESTAL #3	
GF30 LIGHT POLE #5	300			10	10	15	39				34	20	12	6	1680			PEDESTAL #3
GF30 LIGHT POLE #6	300			10	10	15	41				36	15	12		500	500		HEAT-ELECTRICAL SHED
GF30 SPARE				10	10	15	43				38	2						RECEPTACLES - SHED
ST JIB CRANE	933	933		6	6	20	45				40	15	12		120			EXTERIOR RECEPTACLE - SHED
GF JIB CRANE RECEPTACLE	120			10	10	15	51				42	15	12		100			LIGHTING - SHED
GF30 JIB CRANE LIGHTING	300			10	10	15	53				44	15	12		233			EF-1 (0.25HP)
GF30 SPARE				10	10	15	55				46	15	12					EXTERIOR LIGHTING
GF30 SPARE				10	10	15	57				48	15	12					PEDESTAL #13
GF30 SPARE				10	10	15	59				50	30	10	4	2520	2520		PEDESTAL #13
				10	10	15	51				52	30	10	4	2520	2520		PEDESTAL #13
				10	10	15	53				54	30	10	4	2520	2520		PEDESTAL #13
				10	10	15	55				56	15						SPARE
				10	10	15	57				58	15						SPARE
				10	10	15	59				60	15						SPARE

GF - INDICATES CLASS A GFCI CIRCUIT BREAKER  
 GF30 - INDICATES GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING AT 30mA.  
 ST - INDICATES C/W SHUNT TRIP. SUPPLY AND INSTALL GROUND FAULT RELAY (EATON D64RPB100 OR APPROVED EQUAL). CONNECT TO SHUNT TRIP WITH GROUND FAULT SETTING AT 30mA. GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING AT 30mA ALSO ACCEPTABLE.

DEMAND 69.18 kW 192 AMP @ 208 VOLT, 3Ø

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

PANELS B, C, & D:  
TOTAL DEMAND 116.7 kW 324 AMP @ 208 VOLT, 3Ø

NEW PANEL

VOLTS 120/240, PHASE 1, WIRE 3, PANEL NAME "D", LOCATION ELECTRICAL ROOM, MAINS RATED 400 AMPS, MOUNTING SURFACE, FED FROM 45 KVA TRANSFORMER, MIN.CIRCUITS 20

DESIGNATION	WATTAGE			U/G WIRE	WIRE	BKR	CCT	A	B	C	CCT	BKR	WIRE	U/G WIRE	WATTAGE			DESIGNATION
	φ A	φ B	φ C												φ A	φ B	φ C	
GF30 PEDESTAL #2	3640	3640		3	8	50	1				2	50	8	4	3640	3640		PEDESTAL #8
											4	2						PEDESTAL #9
											6	50	8	3	3640			PEDESTAL #9
											8	2						PEDESTAL #9
											9							
											10							
											11							
											12							
											13							
											14							
											15							
											16							
											17							
											18							
											19							
											20							

DEMAND 36 kW 150 AMP @ 240 VOLT, 1Ø

GF30 - INDICATES GFCI CIRCUIT BREAKER WITH GROUND FAULT SETTING AT 30mA.

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

NEW PANEL

VOLTS 120/208, PHASE 3, WIRE 4, PANEL NAME "B", LOCATION ELECTRICAL ROOM, MAINS RATED 200 AMPS, MOUNTING SURFACE, FED FROM DPA, MIN.CIRCUITS 42

DESIGNATION	WATTAGE			U/G WIRE	WIRE	BKR	CCT	A	B	C	CCT	BKR	WIRE	U/G WIRE	WATTAGE			DESIGNATION
	φ A	φ B	φ C												φ A	φ B	φ C	
GF30 PEDESTAL #10	2184	2184		4	10	30	1				2	30	10	6	2184	2184		PEDESTAL #6
GF30 PEDESTAL #10			2520	3	10	30	5				4	2						PEDESTAL #6
GF30 PEDESTAL #10	2520			3	10	30	7				6	30	10	4	2520	2520		PEDESTAL #6
GF PEDESTAL #10	1680			4	12	20	9				8	30	10	4	2520			PEDESTAL #6
											10	20	12	6	1680			PEDESTAL #6
											11							
											12							
											13							
GF30 PEDESTAL #11	2184	2184		4	10	30	15				16	30	10	6	2184	2184		PEDESTAL #8
GF30 PEDESTAL #11	2520			2	10	30	19				18	2						PEDESTAL #8
GF30 PEDESTAL #11	2520			2	10	30	21				20	30	10	4	2520	2184		PEDESTAL #8
GF PEDESTAL #11	1680			4	12	20	23				22	30	10	4	2520			PEDESTAL #8
GF30 PEDESTAL #12																		