

**DO NOT SCALE DRAWINGS**

Revision/	Description/Description	Date/Date
5		
4		
3		
2	RE-ISSUED FOR TENDER	15/06/26
1	ISSUED FOR TENDER	14/03/25
0	ISSUED FOR REVIEW	14/03/21

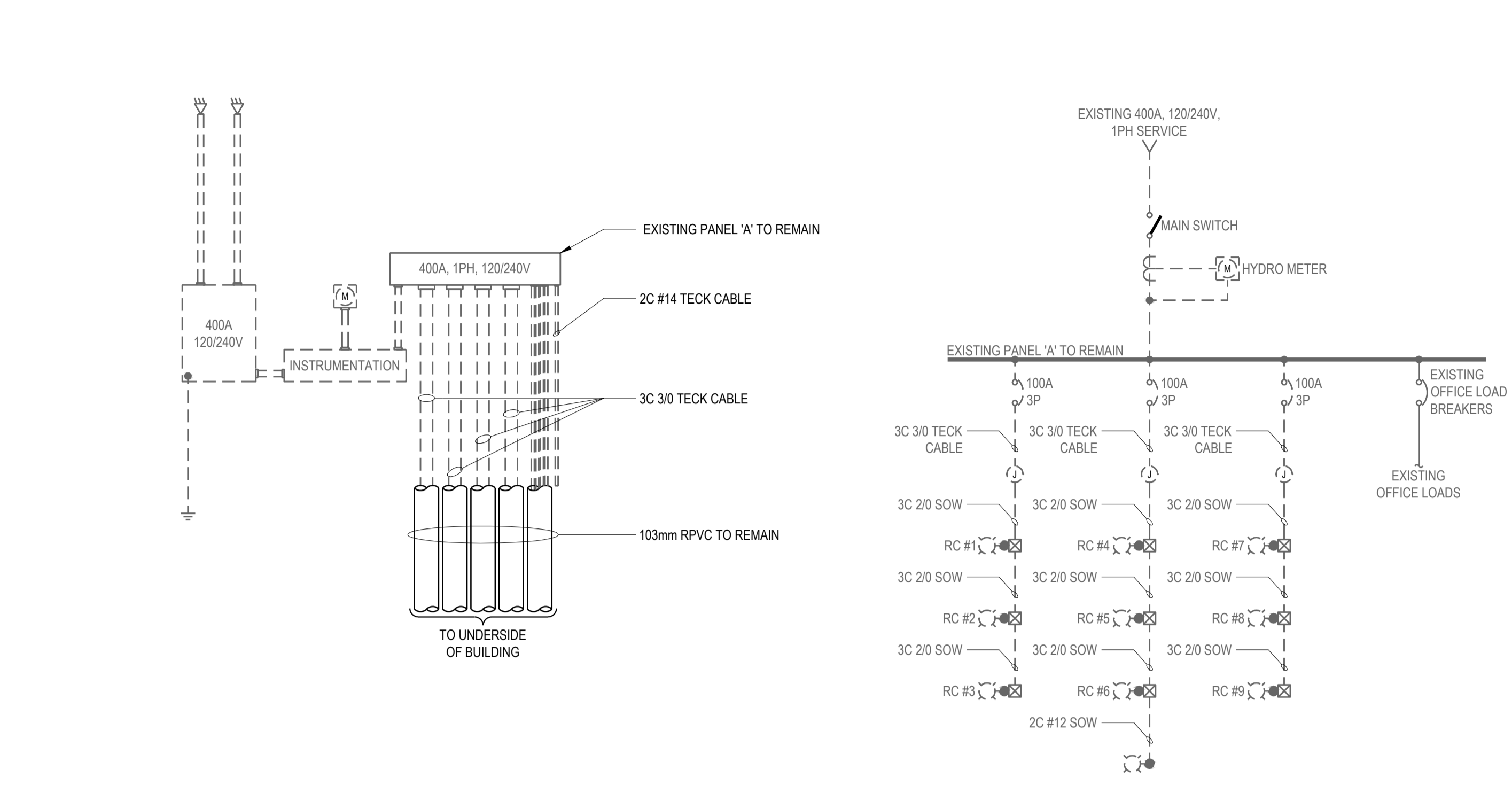
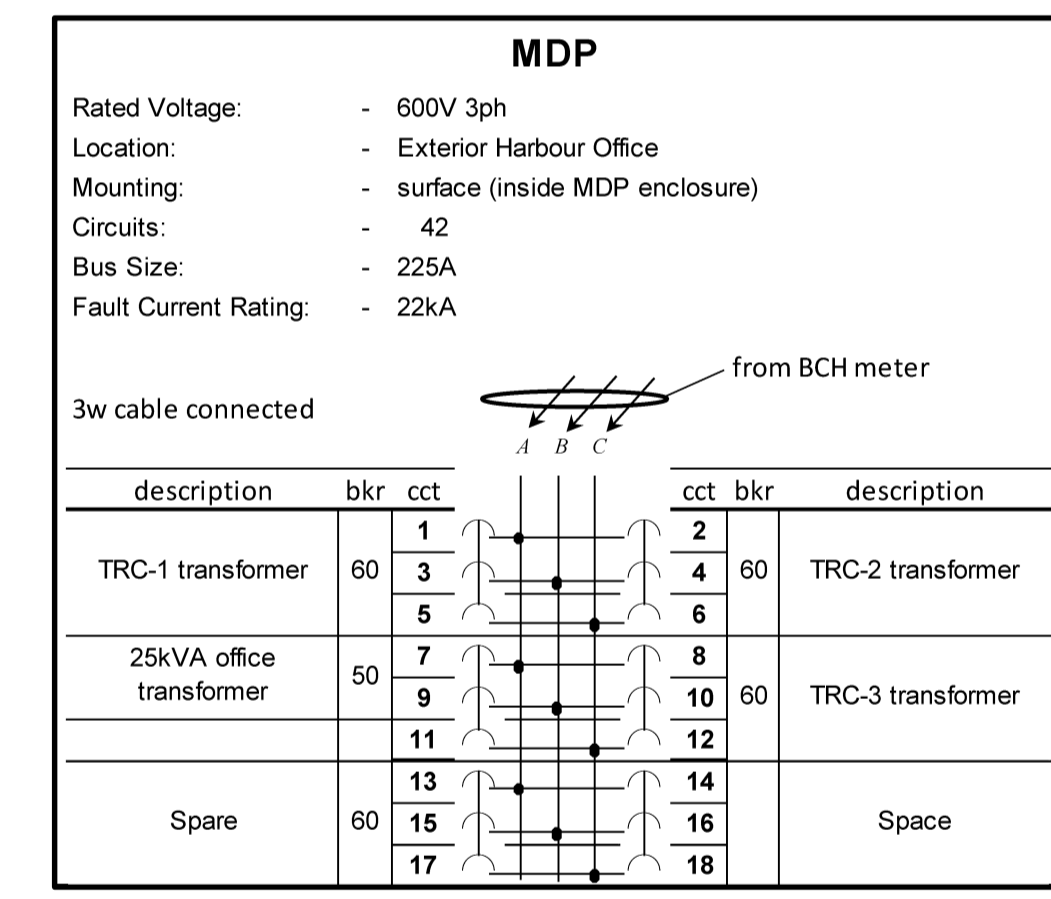
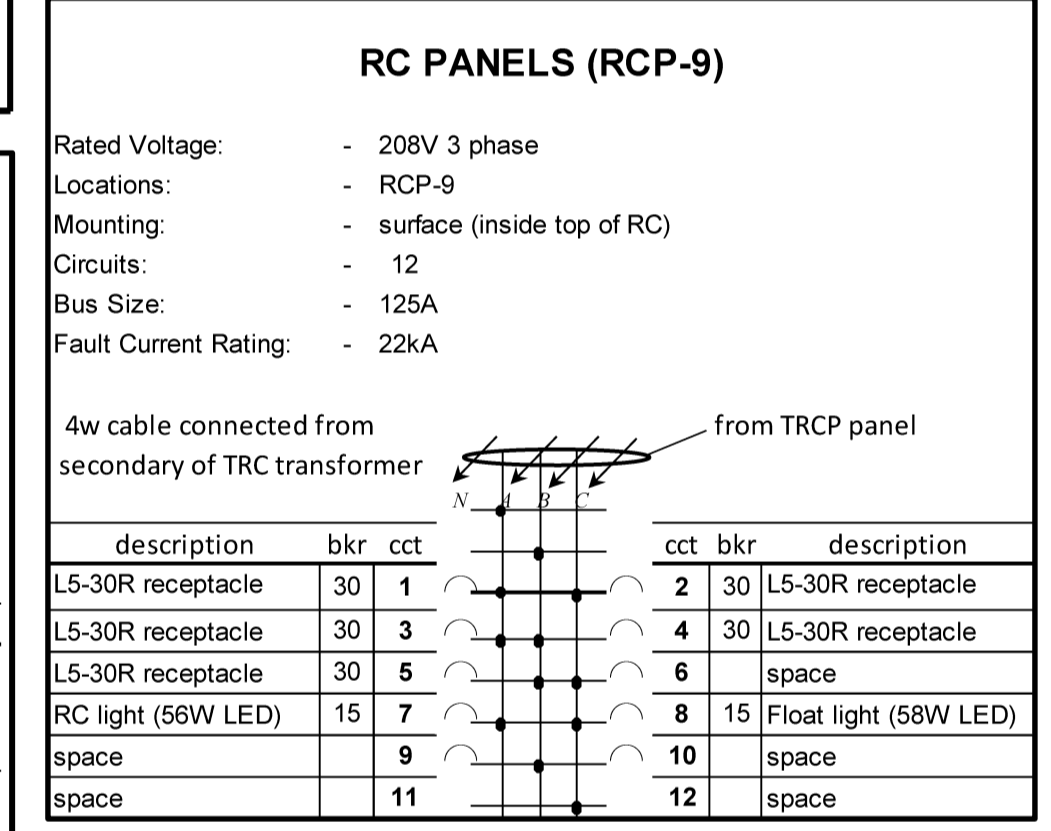
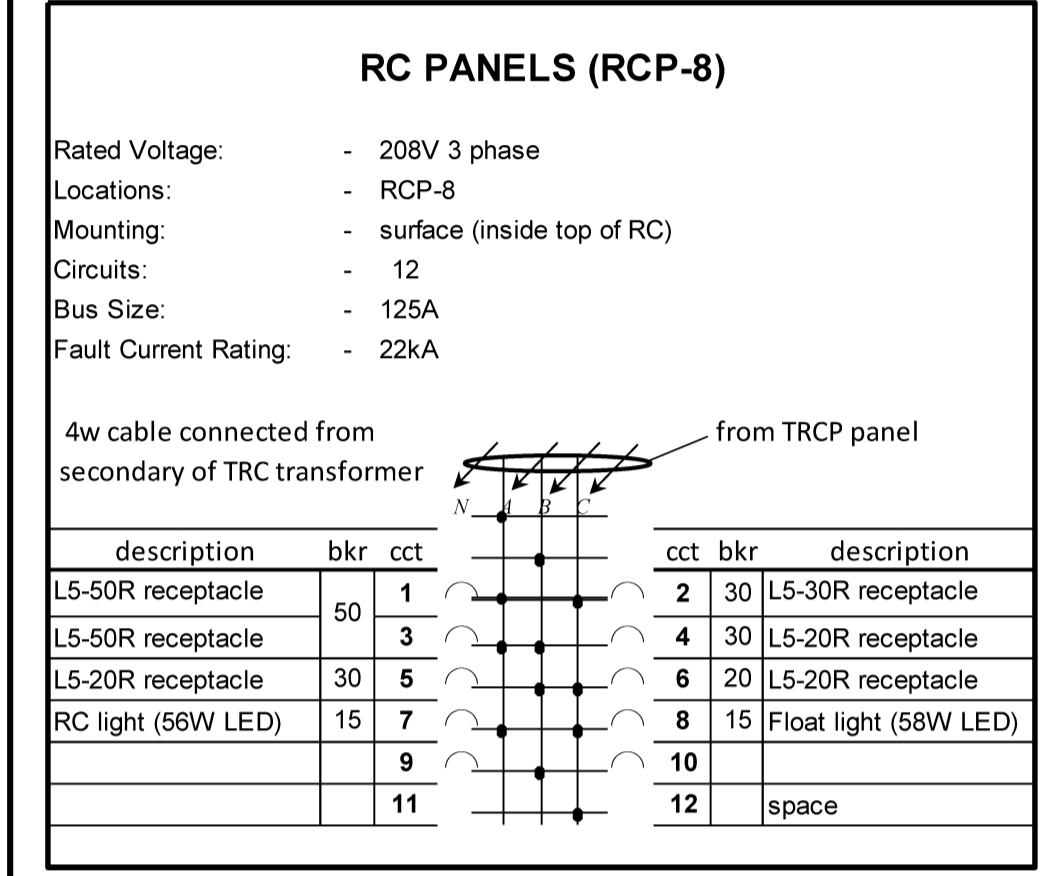
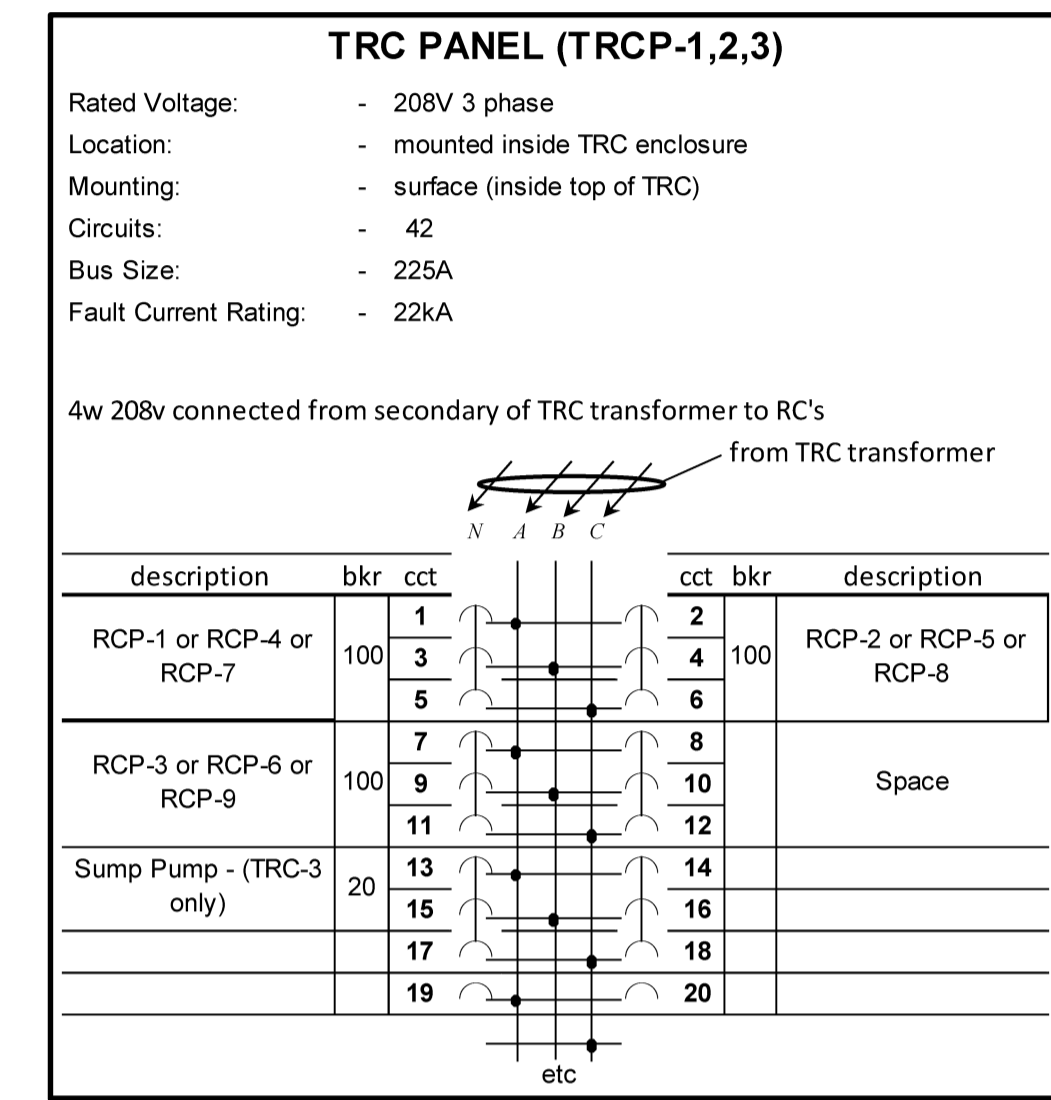
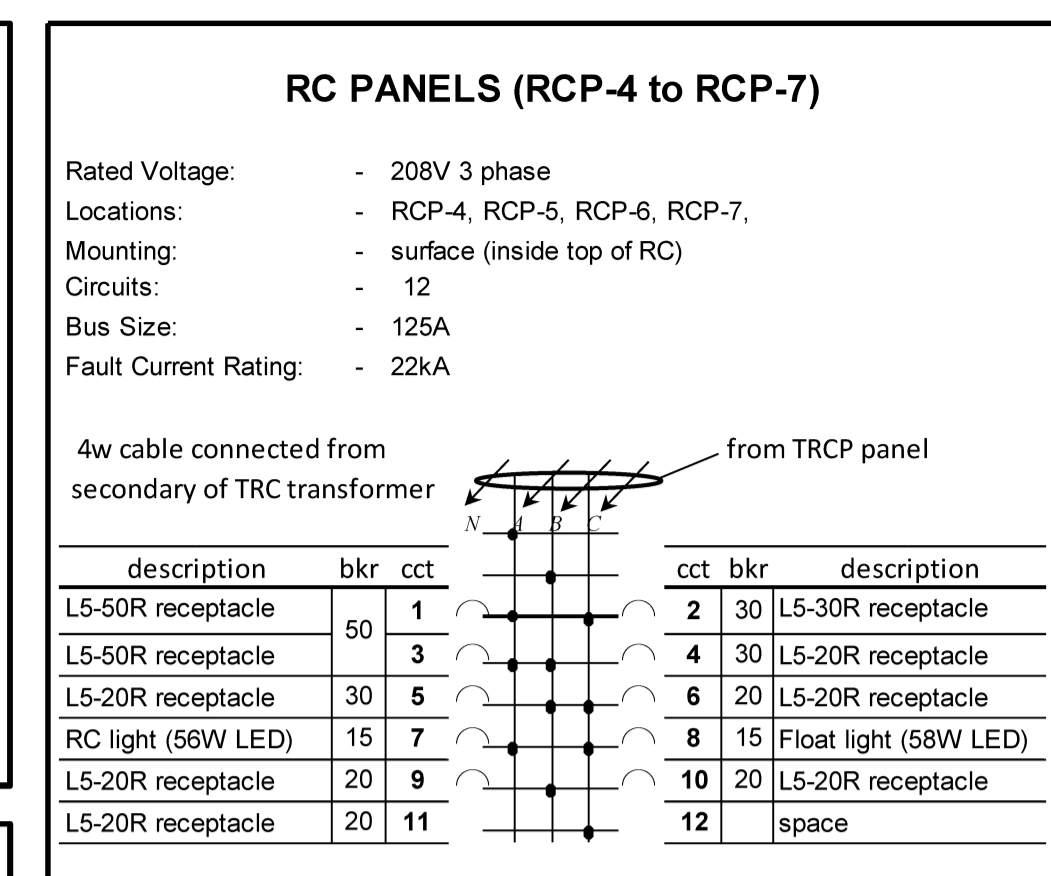
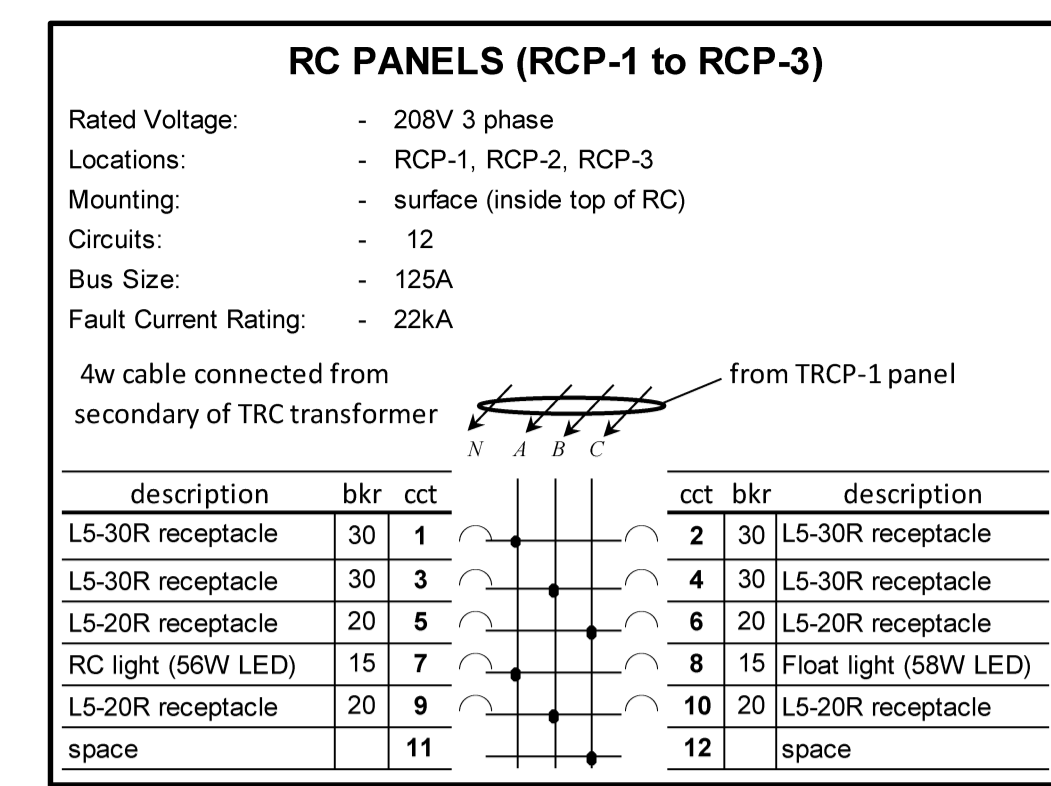
**FISHERIES AND OCEANS  
SMALL CRAFT HARBOURS**  
401 BURRARD STREET, SUITE 200  
VANCOUVER, BC

Project Title/Titre du projet  
**MISSION, B.C.**  
**ELECTRICAL  
RECONSTRUCTION - MISSION  
SMALL CRAFT HARBOUR**

Approved by/Approve par  
  
Designed by/Concept par  
G.P./T.D.  
Drawn by/Dessine par  
P.P.  
PWGSC Project Manager/Administrateur de Projets TP50C

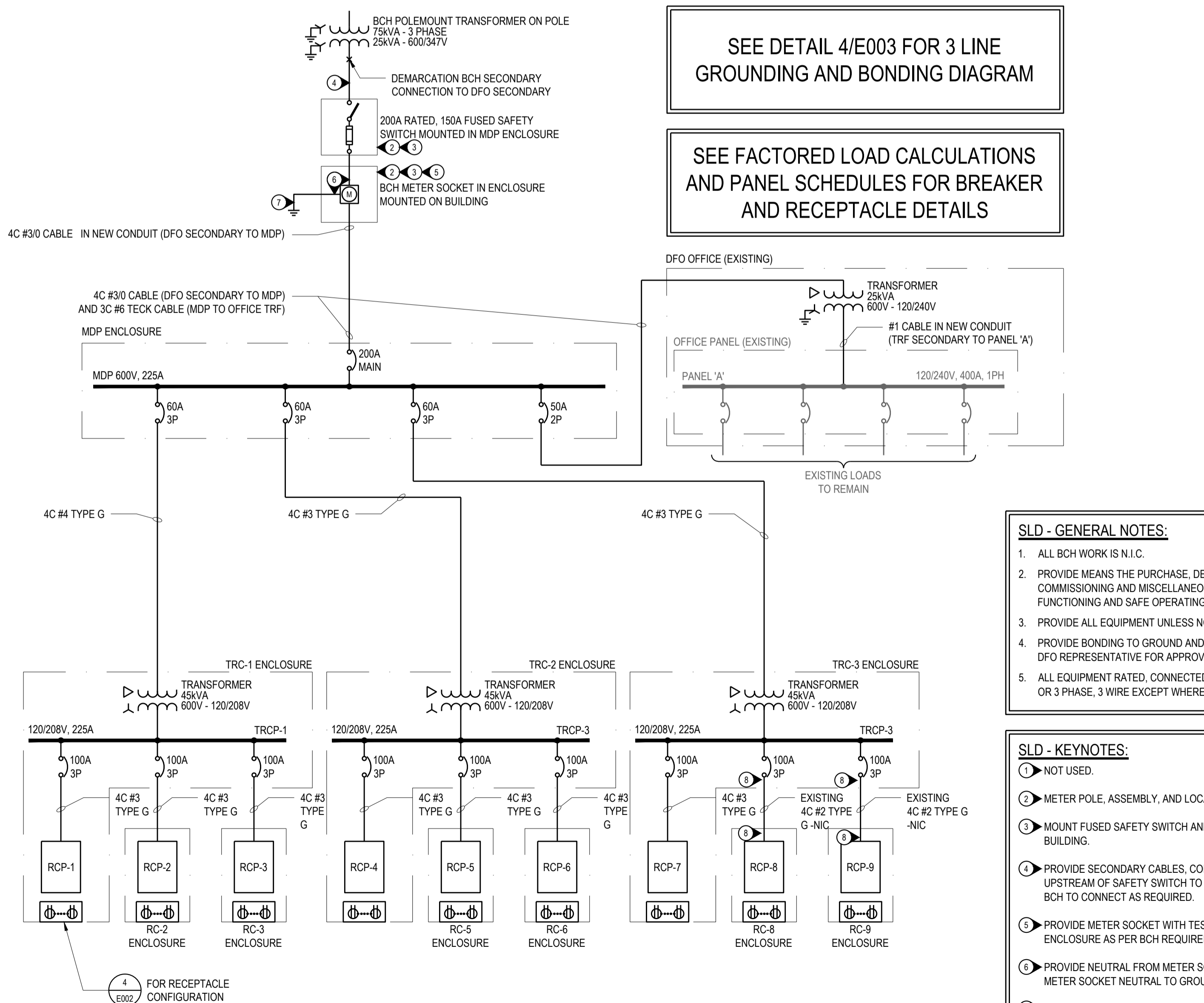
PWGSC, Architectural and Engineering Resources Manager/  
Ressources Architectural et de Directeur d'Ingénierie, TP50C  
Client/client  
DFO - SCH  
Drawing Title/Titre du dessin

**SINGLE LINE DIAGRAM, PANEL  
SCHEDULES AND  
CALCULATIONS**



SEE DETAIL 4/E003 FOR 3 LINE  
GROUNDING AND BONDING DIAGRAM

SEE FACTORED LOAD CALCULATIONS  
AND PANEL SCHEDULES FOR BREAKER  
AND RECEPTACLE DETAILS



- #### SLD - GENERAL NOTES:
- ALL BCH WORK IS N.I.C.
  - PROVIDE MEANS THE PURCHASE, DELIVERY, INSTALLATION, CONNECTION, COMMISSIONING AND MISCELLANEOUS REQUIRED FOR A FULLY FUNCTIONING AND SAFE OPERATING SYSTEM.
  - PROVIDE ALL EQUIPMENT UNLESS NOTED OTHERWISE.
  - PROVIDE BONDING TO GROUND AND EARTH GROUND TEST RESULTS TO DFO REPRESENTATIVE FOR APPROVAL PRIOR TO ENERGIZATION.
  - ALL EQUIPMENT RATED, CONNECTED, AND OPERATED AS 3 PHASE, 4 WIRE OR 3 PHASE, 3 WIRE EXCEPT WHERE NOTED.

- #### SLD - KEYNOTES:
- NOT USED.
  - METER POLE, ASSEMBLY, AND LOCATION TO BE APPROVED BY BCH AND DFO.
  - MOUNT FUSED SAFETY SWITCH AND METER SOCKET ENCLOSURE ON BUILDING.
  - PROVIDE SECONDARY CABLES, CONDUIT, MISCELLANEOUS AS REQUIRED UPSTREAM OF SAFETY SWITCH TO WEATHERHEAD AT TOP OF BUILDING FOR BCH TO CONNECT AS REQUIRED.
  - PROVIDE METER SOCKET WITH TEST SWITCH COMPARTMENT AND METER ENCLOSURE AS PER BCH REQUIREMENTS.
  - PROVIDE NEUTRAL FROM METER SOCKET TO WEATHERHEAD. CONNECT METER SOCKET NEUTRAL TO GROUND ROD.
  - PROVIDE GROUND ROD AND REQUIRED CONNECTIONS ADJACENT TO POLE.
  - CONTRACTOR SHALL CONNECT EXISTING CABLES TO NEW CABINET PANELBOARDS.



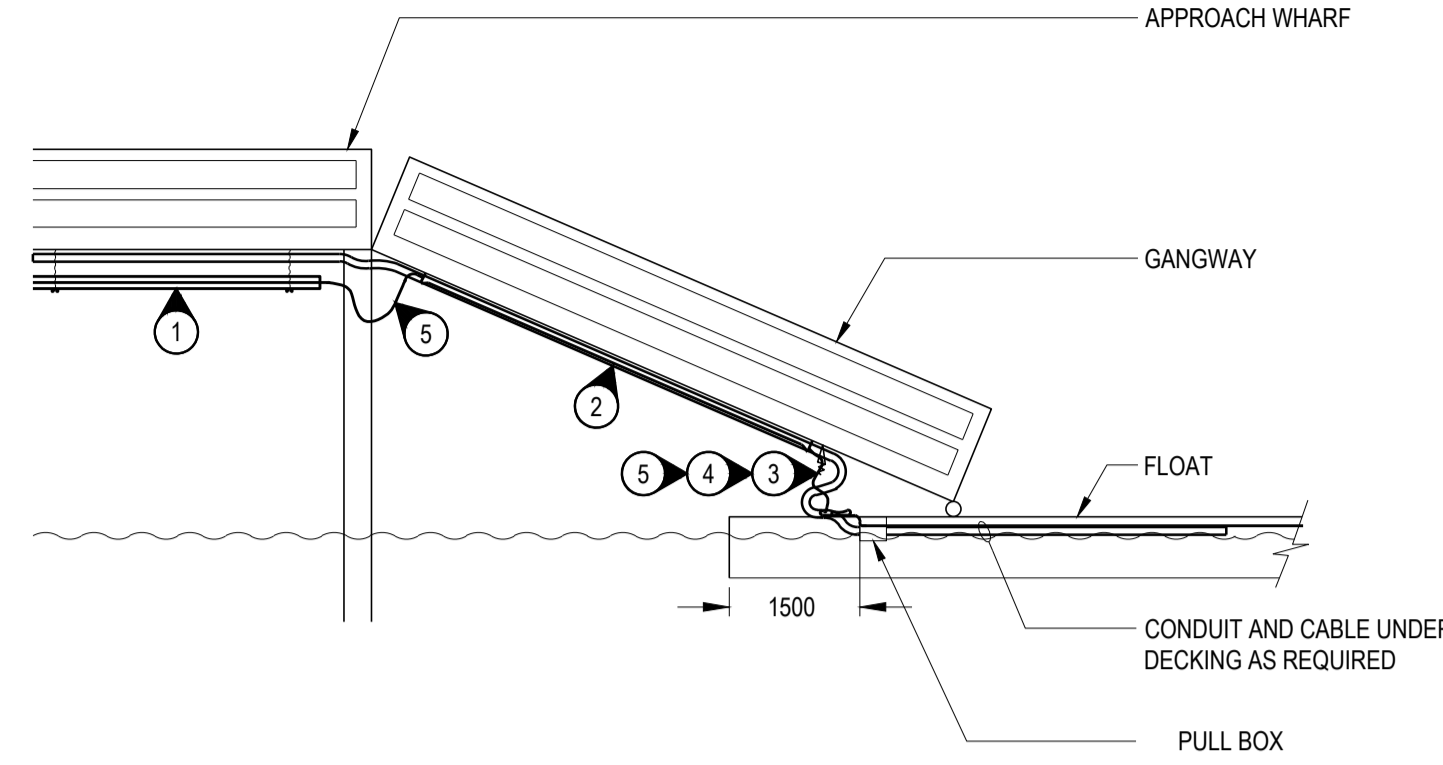
#### MDP Factored Load Calculations: 3ph 600v NEW SUPPLY, NEW LOAD

Load at Service Entrance: To SCH office + 3 TRC's on floats

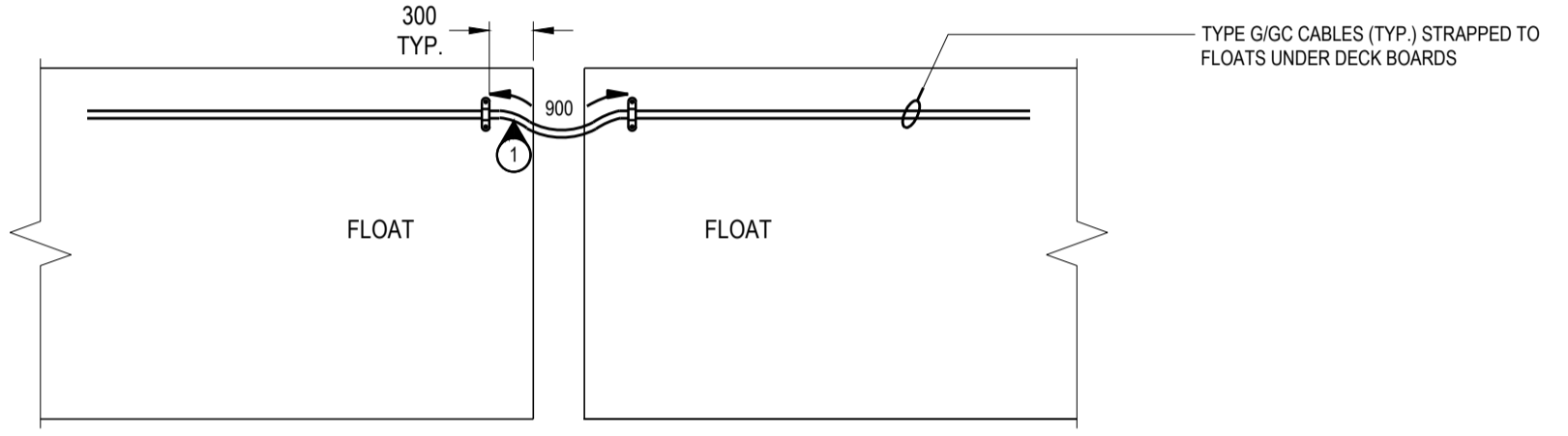
Receptacle count	recpt	qty	amps	volts	ph	kW	mult	Total kW
1st 4 highest rated		4	50	208	1	41.6	1.00	41.6
Next 4 highest rated		2	30	120	1	7.2	0.65	4.7
Next 5 highest rated		5	30	120	1	18.0	0.50	9.0
Next 16 highest rated		16	30	120	1	57.6	0.25	14.4
Next 20 highest rated		7	30	120	1	25.2	0.20	5.0
Next 20 highest rated		13	20	120	1	31.2	0.20	6.2
Next 20 highest rated		20	20	120	1	48.0	0.15	7.2
Remaining receptacles		3	20	120	1	7.2	0.10	0.7
<b>Total plug/receptacles</b>		<b>72</b>						<b>102.4</b>
Cabinet Lighting Fixture		56W	9			0.1	1.00	0.5
Dock Lighting Fixture		58W	23			0.1	1.00	1.3
Heat Trace								1.3
Office load (est.)								
building		50W/m <sup>2</sup>	144	m <sup>2</sup>		1.00		7.2
water heater			1			1.9	1.00	1.9
elec heat			2			1.3	0.75	1.9
<b>Estimated MDP load (89 recpts + office)</b>								<b>116.4</b>
<b>Feeder ampacity:</b>		volts	ph	amps				
from xfmr to MDP		600	3	112				



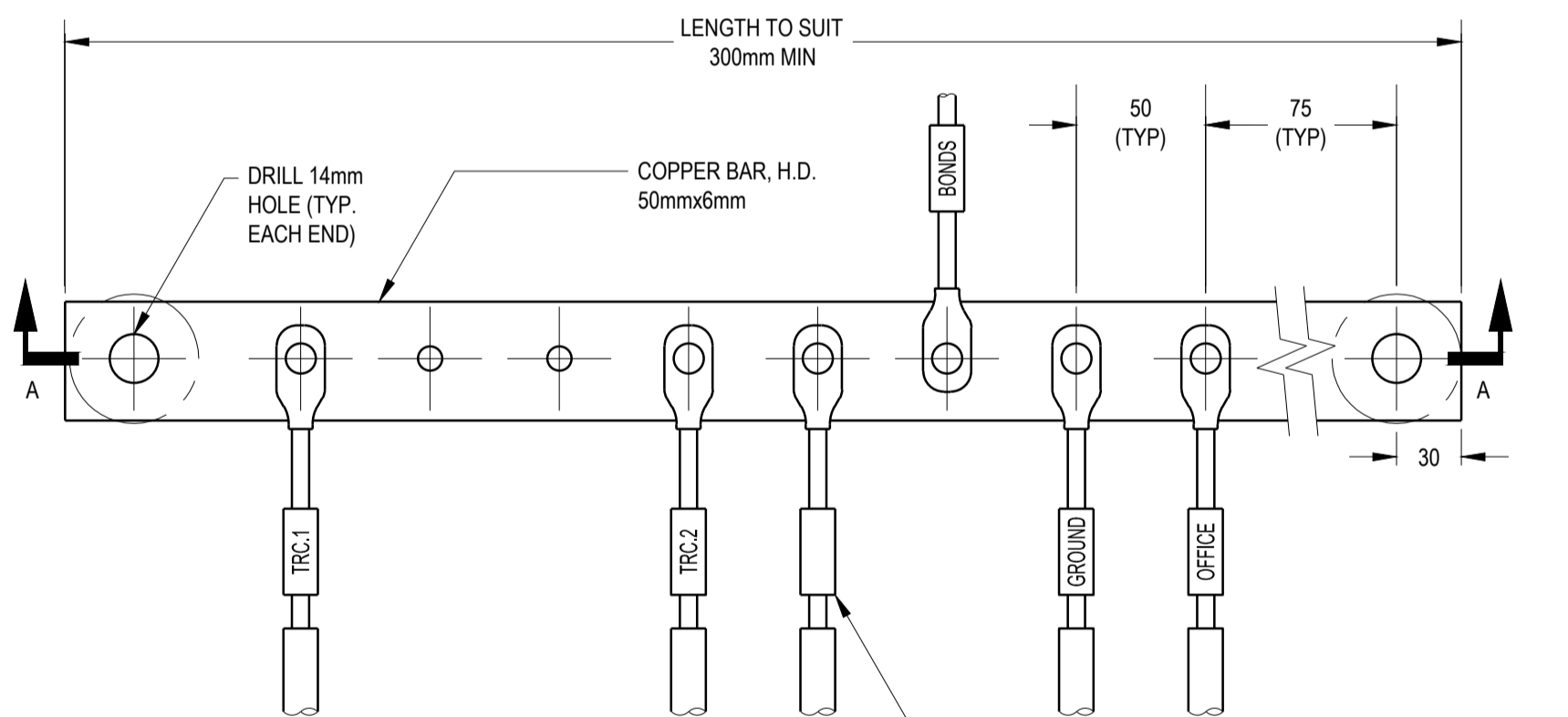




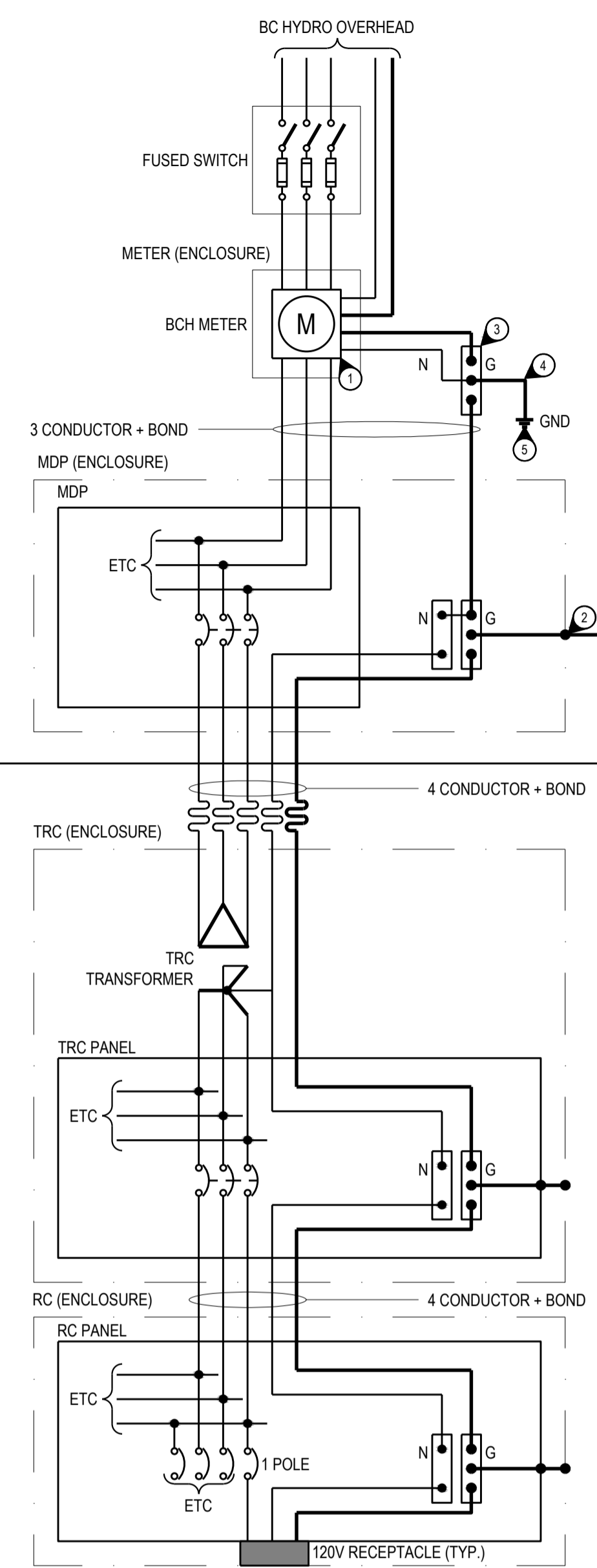
**1 TYPE G/GC CABLES  
GANGWAY CABLE/CONDUIT SUPPORT**  
SCALE: N.T.S.



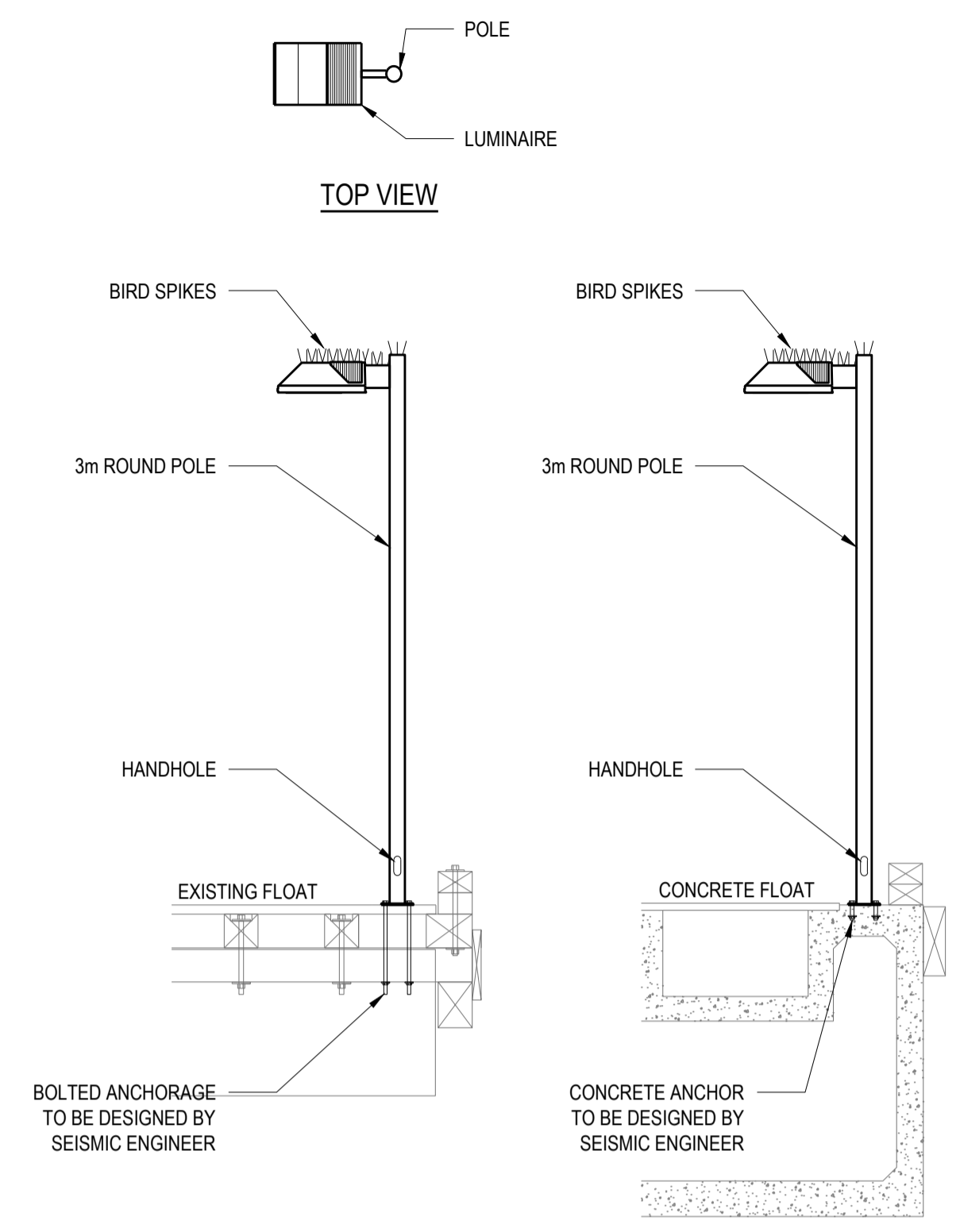
**2 CABLE LOOP BETWEEN FLOAT SECTIONS**  
SCALE: N.T.S.



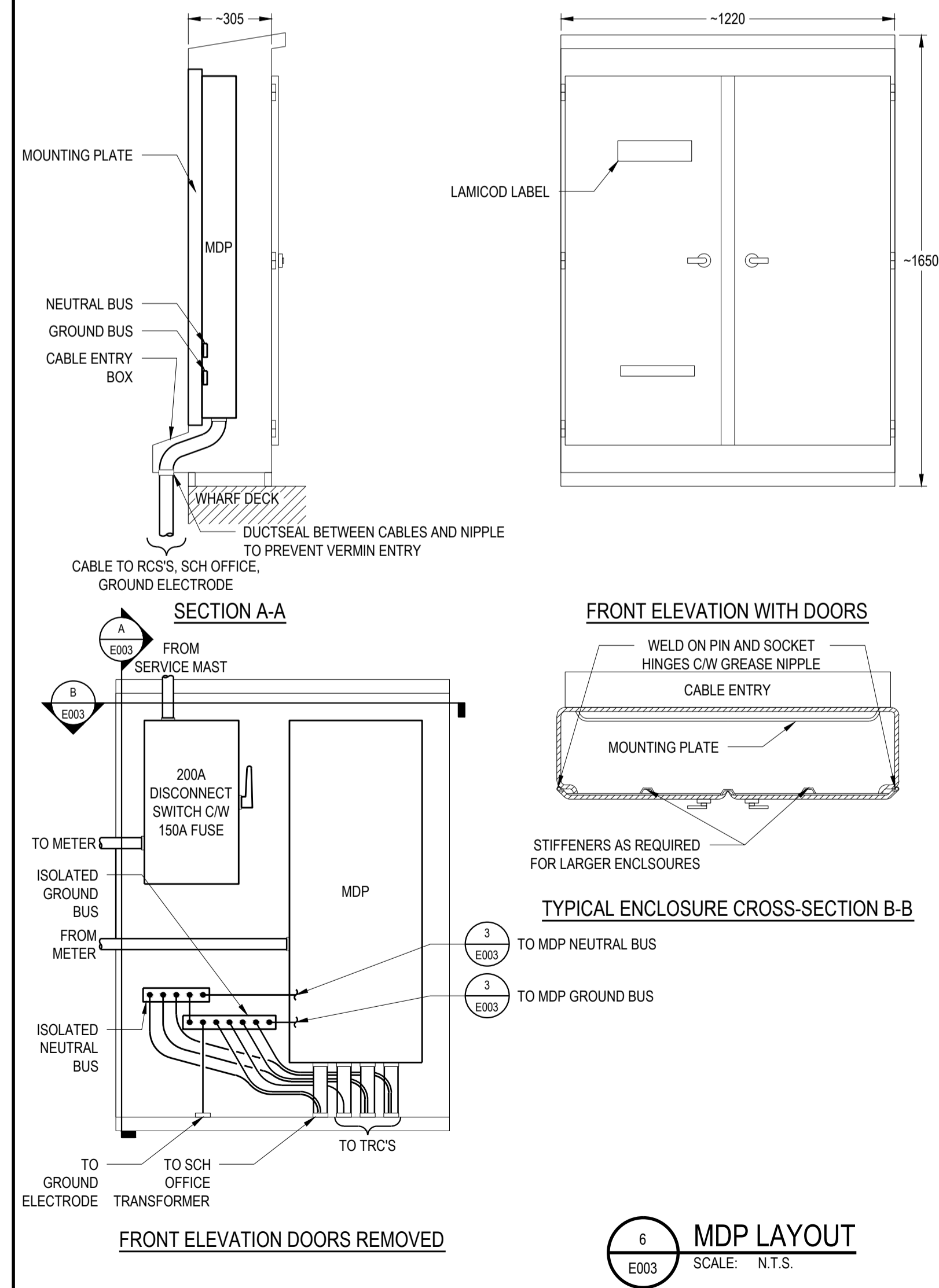
**3 GROUND AND ISOLATED NEUTRAL BUS**  
SCALE: N.T.S.



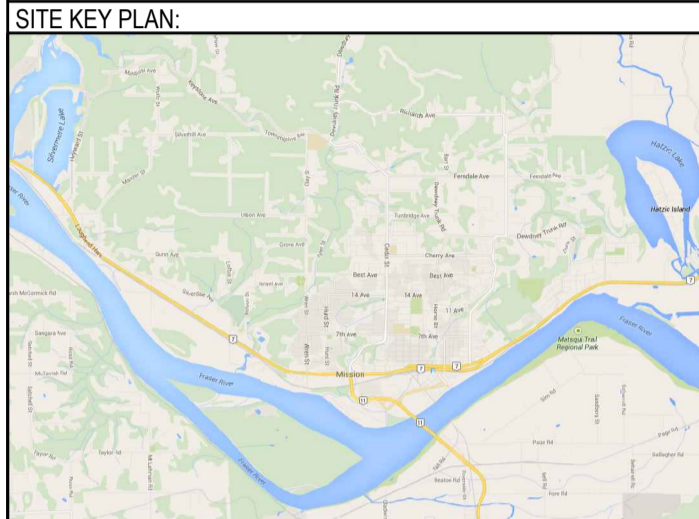
**4 3 LINE DIAGRAM  
GROUNDING AND BONDING (N.I.C.)**  
SCALE: N.T.S.



**5 LUMINAIRE POLE DETAIL**  
SCALE: N.T.S.



**6 MDP LAYOUT**  
SCALE: N.T.S.



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Client/client

**FISHERIES AND OCEANS  
SMALL CRAFT HARBOURS**  
401 BURREARD STREET, SUITE 200  
VANCOUVER, BC

Project title/Titre du projet  
**MISSION, B.C.**

**ELECTRICAL  
RECONSTRUCTION - MISSION  
SMALL CRAFT HARBOUR**

Approved by/Approve par

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G.P./T.D.

Drawn by/Dessine par  
P.P.

PWGSC Project Manager/Administrateur de Projets TPSGC

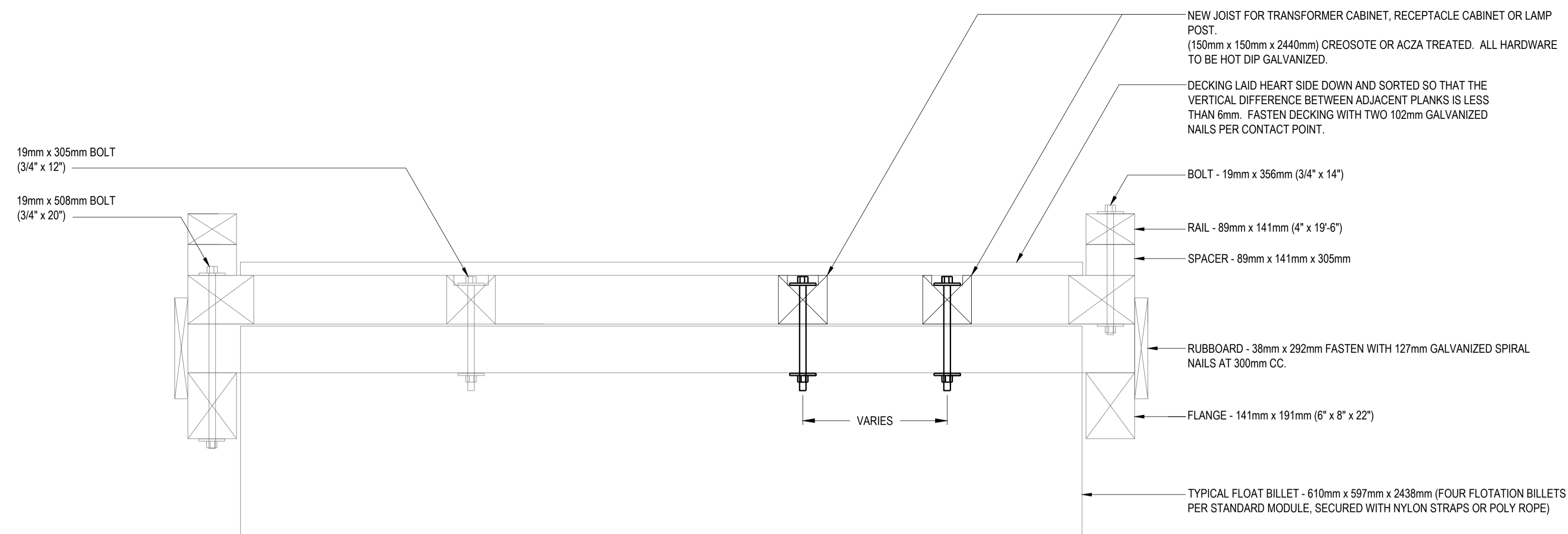
PWGSC, Architectural and Engineering Resources Manager/  
Ressources Architectural et de Directeur d'Ingénierie, TPSGC

Client/client  
DFG - SCH

Drawing title/Titre du dessin

**ELECTRICAL DETAILS**





1 TYPICAL CROSS-SECTION OF EXISTING 2743mm (9'-0") WIDE FLOAT  
E004 SCALE: N.T.S.

**GENERAL NOTES:**

- TIGHTEN ALL ANCHOR BOLTS TO 80 FOOT POUNDS.
- OBTAIN REQUIRED CLEARANCES FROM HARBOUR MASTER FOR EACH CABINET ON EACH FLOAT PRIOR TO INSTALLATION.

**KEYNOTES:**

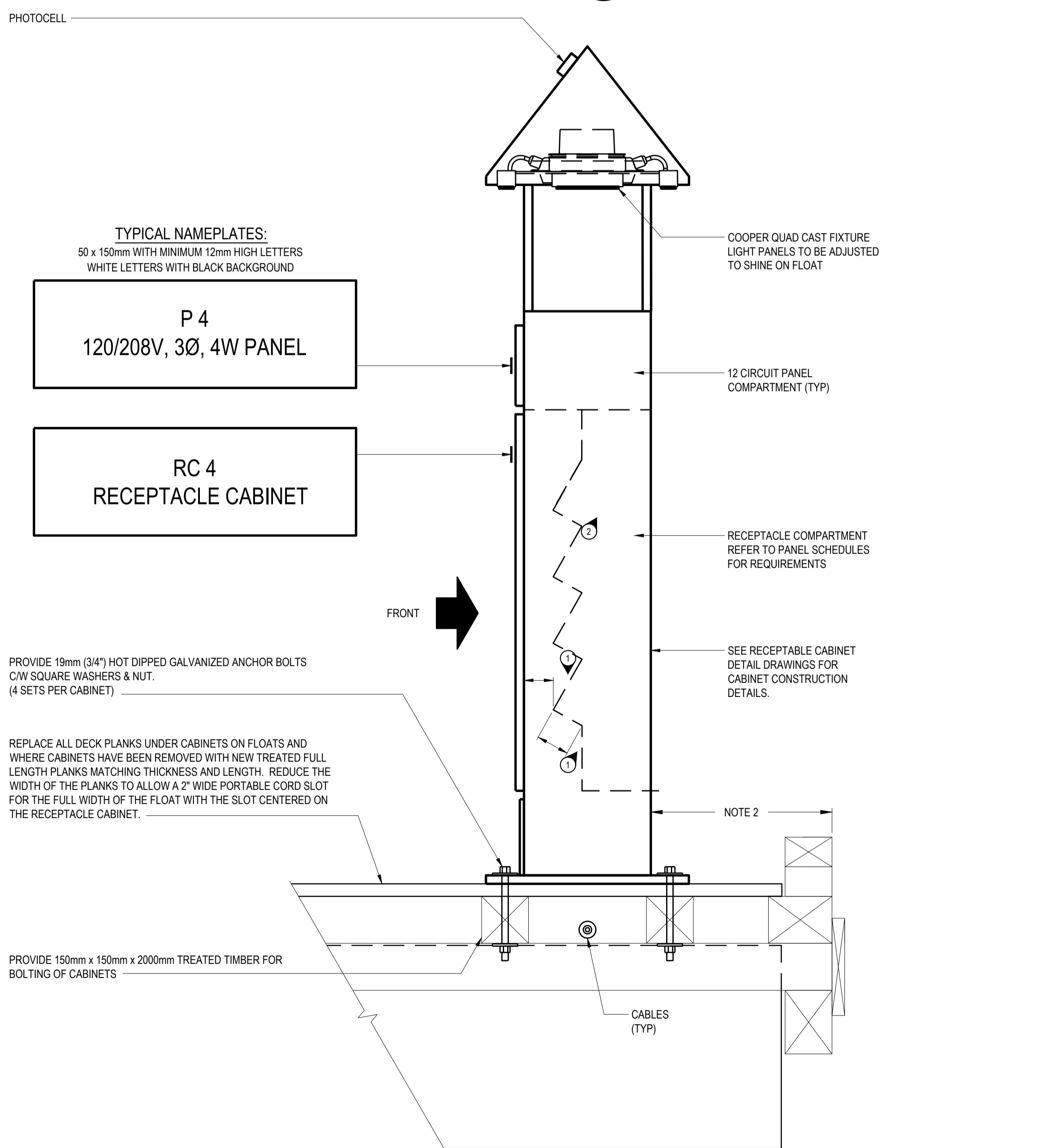
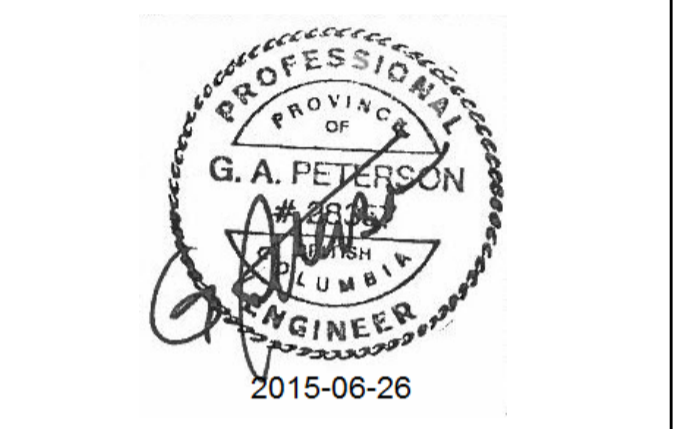
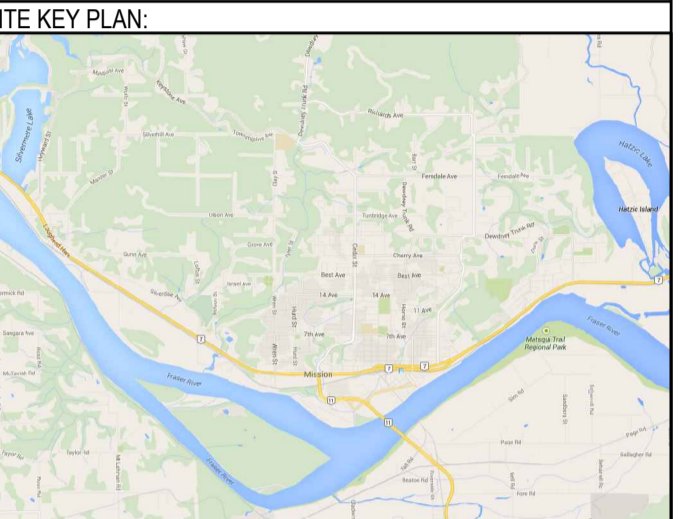
- MODIFY RECEPTACLE MOUNTING PLATE LOCATION AND DIMENSIONS TO ACCOMMODATE ALL RECEPTACLES AND THEIR CORRESPONDING PLUG AND CABLE ASSEMBLIES.
- RECEPTACLE SHALL BE SINGLE, TWIST LOCK MARINE GRADE, WITH MELAMINE BODY AND NYLON FACE.
- REPLACE CABTYRE SUPPORT KELLEMS GRIPS, RE-ARRANGE AND TIDY UP CABLES AS NECESSARY, KELLEMS GRIPS - DOUBLE EYE, DOUBLE WEAVE, STAINLESS STEEL.
- REPLACE SUPPORT HARDWARE WITH STAINLESS STEEL HARDWARE AS NECESSARY, RE-ARRANGE AND TIDY UP CABLES AS NECESSARY.

**FISHERIES AND OCEANS  
CANADA**

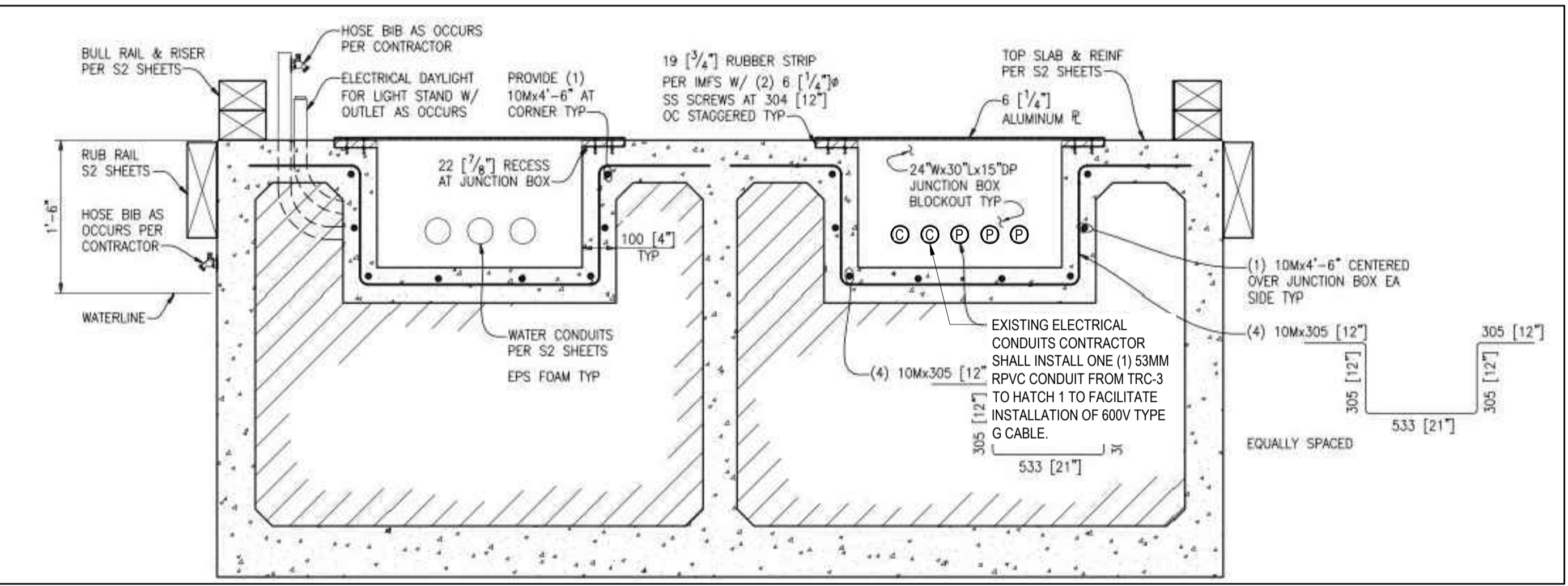
REAL PROPERTY AND SAFETY  
AND SECURITY

SUITE 400-401 GARBALLY ROAD  
VICTORIA (BRITISH COLUMBIA) CANADA V8T 5M3  
TEL: 250-384-8510 | FAX: 250-386-2844 | WWW.WSPGROUP.COM  
JOB No. 131-19108-05

**PRELIMINARY  
NOT FOR CONSTRUCTION**



2 RECEPTACLE CABINET (RC) DETAIL ON A FLOAT  
E004 SCALE: N.T.S.



3 TYPICAL CROSS SECTION OF CONCRETE FLOAT  
E004 SCALE: N.T.S.

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Client/client

**FISHERIES AND OCEANS  
SMALL CRAFT HARBOURS**  
401 BURRARD STREET, SUITE 200  
VANCOUVER, BC

Project title/Titre du projet  
**MISSION, B.C.**

**ELECTRICAL  
RECONSTRUCTION - MISSION  
SMALL CRAFT HARBOUR**

Approved by/Approve par  
Designed by/Concept par  
G.P./T.D.  
Drawn by/Dessine par  
P.P.  
PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/  
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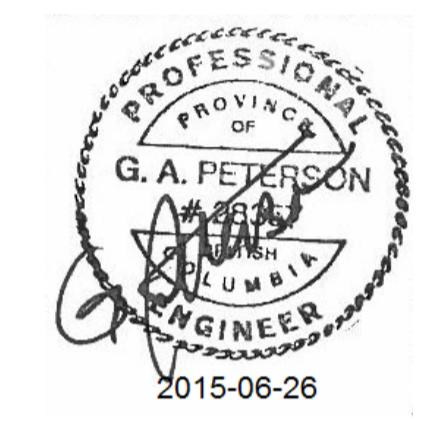
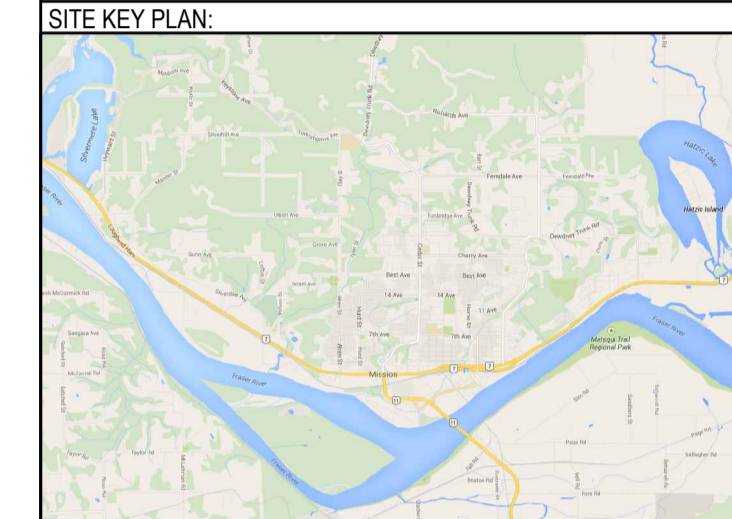
Client/client  
DFG - SCH  
Drawing title/Titre du dessin

**RECEPTACLE CABINET (RC)  
AND FLOAT DETAILS**

Project No./No. du projet <b>131-19108-05</b>	Sheet/Feuille <b>E004</b> 4 OF 5	Revision no./La Révision no. <b>1</b>
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PWD Date: Jun 26, 2015 1:49 PM  
 Prepared by: Dawson, Nye  
 File Name: Y:\PROJECTS\131-19108-05\131-19108-05-04-RECONSTRUCTION\PRODUCTION\RECEPTACLE CABINET (RC) AND FLOAT DETAIL.DWG





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Client/client

**FISHERIES AND OCEANS SMALL CRAFT HARBOURS**  
401 BURRARD STREET, SUITE 200  
VANCOUVER, BC

Project title/Titre du projet  
**MISSION, B.C.**

**ELECTRICAL RECONSTRUCTION - MISSION SMALL CRAFT HARBOUR**

Approved by/Approuvé par

Designed by/Concept par  
G.P./T.D.

Drawn by/Dessiné par  
P.P.

PWGC Project Manager/Administrateur de Projets TPSGC

PWGC, Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'Ingénierie, TPSGC

Client/client  
DFG - SCH

Drawing title/Titre du dessin

**TRANSFORMER RECEPTACLE CABINET (TRC) DETAILS**

Project No./No. du projet  
**131-19108-05**

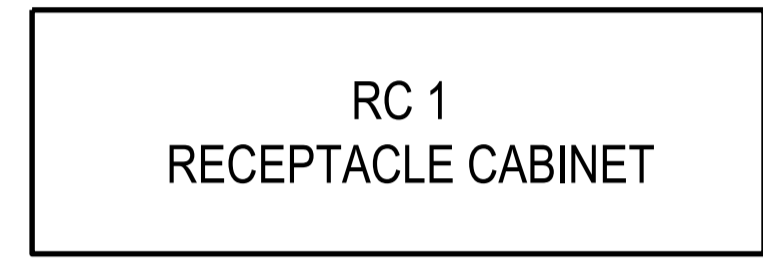
Sheet/Feuille  
**E005**  
5 OF 5

Revision no./La Révision no.  
**1**

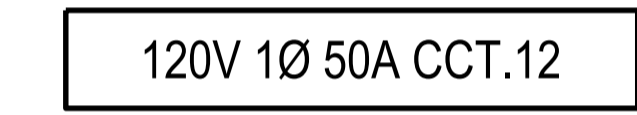
**GENERAL NOTES:**  
1. TIGHTEN ALL ANCHOR BOLTS TO 80 FOOT POUNDS.  
2. OBTAIN REQUIRED CLEARANCES FROM HARBOUR MASTER FOR EACH CABINET ON EACH FLOAT PRIOR TO INSTALLATION.

**KEYNOTES:**  
① DESIGN CORD OPENING AND RECEPTACLE MOUNTING PLATE LOCATION AND DIMENSIONS TO ACCOMMODATE ALL RECEPTACLES LISTED IN PANEL SCHEDULES AND THEIR CORRESPONDING PLUG AND CABLE ASSEMBLIES.

**TYPICAL NAMEPLATES:**  
50 x 150mm WITH MINIMUM 12mm HIGH LETTERS  
WHITE LETTERS WITH BLACK BACKGROUND



**TYPICAL RECEPTACLE NAMEPLATE:**  
12 x 70mm WITH MINIMUM 5mm HIGH LETTERS  
WHITE LETTERS WITH BLACK BACKGROUND



PROVIDE 19mm (3/4") HOT DIPPED GALVANIZED ANCHOR BOLTS C/W SQUARE WASHERS & NUT. (4 SETS PER CABINET)

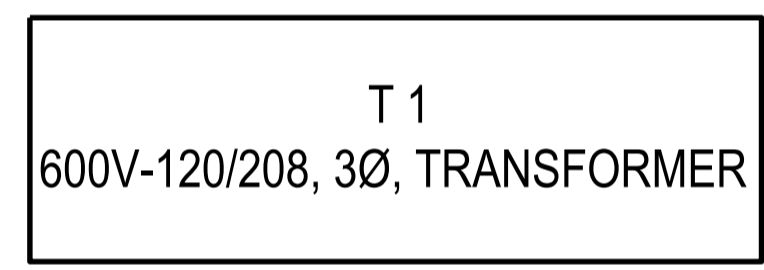
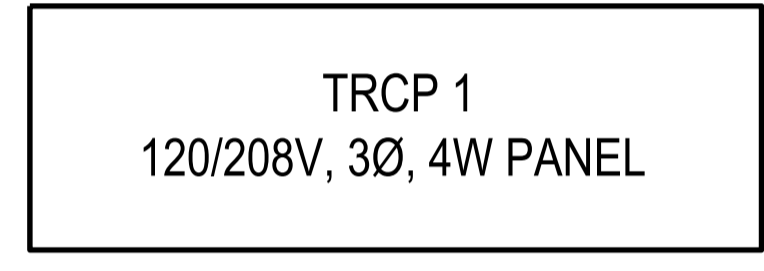
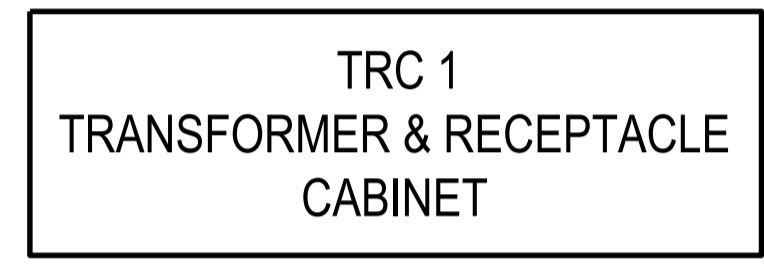
REPLACE ALL DECK PLANKS UNDER CABINETS ON FLOATS AND WHERE CABINETS HAVE BEEN REMOVED WITH NEW TREATED FULL LENGTH PLANKS MATCHING THICKNESS AND LENGTH. REDUCE THE WIDTH OF THE PLANKS TO ALLOW A 2" WIDE PORTABLE CORD SLOT FOR THE FULL WIDTH OF THE FLOAT WITH THE SLOT IN FRONT OF THE RECEPTACLE SECTION.

PROVIDE 150mm x 150mm x 2000mm TREATED TIMBER FOR BOLTING OF CABINETS AND LIGHT POSTS

**1** **DETAIL - TRANSFORMER AND RECEPTACLE CABINET (TRC) ON FLOAT - FRONT VIEW**  
SCALE: 1:10

**2** **DETAIL - TRC CABINET - SIDE VIEW**  
SCALE: 1:10

**TYPICAL NAMEPLATES:**  
50 x 150mm WITH MINIMUM 12mm HIGH LETTERS  
WHITE LETTERS WITH BLACK BACKGROUND



GROUND BUS

SIDE BRACKETS

