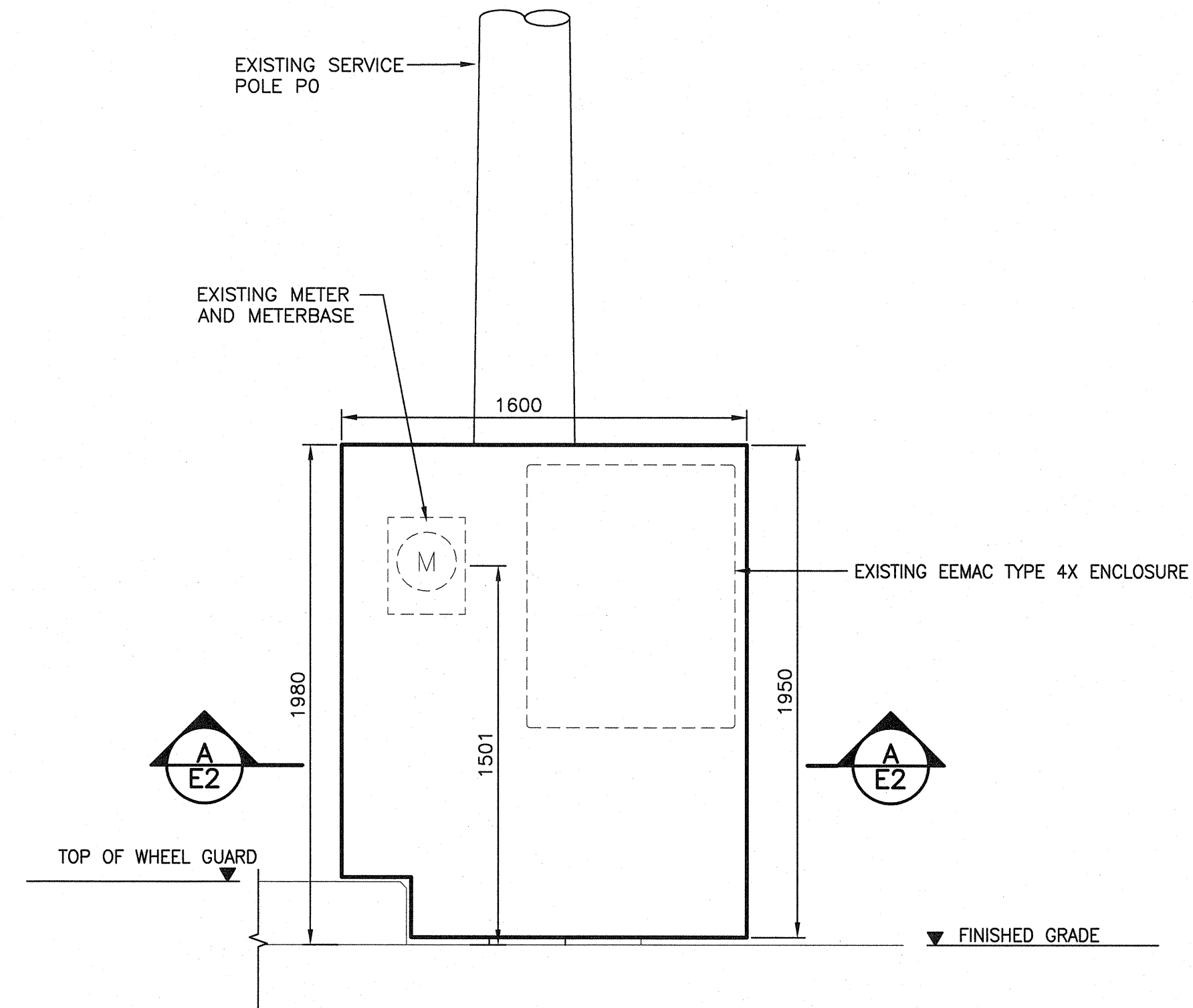
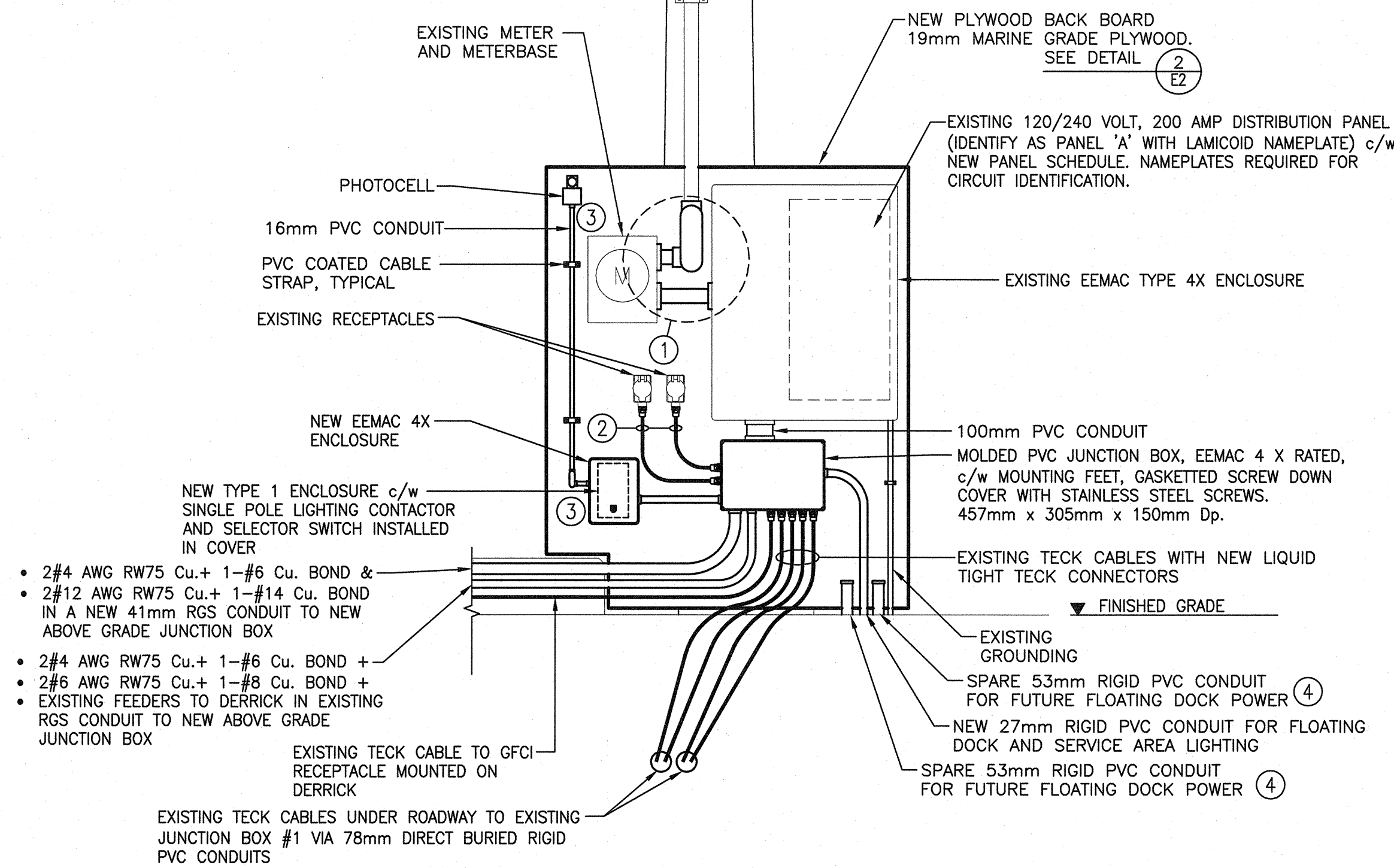


SECTION - PLYWOOD BACKBOARD POLE P0
SCALE : N.T.S.



BACKBOARD STRUCTURAL DETAIL
SCALE : 1:20
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS.



- 2#4 AWG RW75 Cu.+ 1-#6 Cu. BOND &
- 2#12 AWG RW75 Cu.+ 1-#14 Cu. BOND IN A NEW 41mm RGS CONDUIT TO NEW ABOVE GRADE JUNCTION BOX
- 2#4 AWG RW75 Cu.+ 1-#6 Cu. BOND +
- 2#6 AWG RW75 Cu.+ 1-#8 Cu. BOND +
- EXISTING FEEDERS TO DERRICK IN EXISTING RGS CONDUIT TO NEW ABOVE GRADE JUNCTION BOX

NEW SERVICE BACKBOARD ON POLE P0
SCALE : 1:20

NOTES:

1. NEW PVC CONDUIT AND 'LL' ACCESS FITTING, SIZED AS PER EXISTING
2. NEW TECK CABLE AND LIQUID TIGHT TECK CONNECTORS, SIZED TO SUIT EXISTING RECEPTACLES.
3. NEW LIGHTING CONTACTOR AND PHOTO CELL TO REPLACE NSPI LIGHTING DISCONNECT SWITCH FOR CONTROL OF NEW WHARF LIGHTS.
4. ALL SPARE CONDUITS TO BE STUBBED UP 150mm A.F.G. AND CAPPED c/w NYLON PULL CORD.

NOTES	VOLTS		120/240		PANEL		PANEL A (EXISTING)		TYPE		1					
	PHASE		1		LOCATION		WHARF		MAINS		250 AMPS					
	WIRE		3		FED FROM		NSPI TRANSFORMER		MAIN BREAKER		200 AMPS					
									BRANCH BREAKER I.C.		10kA MTG. S					
	DESIGNATION		KW		WIRE SIZE	CIR NO.	BKR	A	B	BKR	CIR NO.	WIRE SIZE	KW		DESIGNATION	
	A	B	A	B									A	B		
		SPACE				1					2				SPACE	
		SPACE				3					4				SPACE	
		SPACE				5					6				SPACE	
		SPACE				7					8				SPACE	
		SPACE				9					10				SPACE	
1/4.	20A TL RECEPTACLE @ NEW PP3			1.92	12/4/12	11	20A				12				SPACE	
3.	30A TL RECEPTACLE @ POLE P2	2.88				13	30A				14				SPACE	
2.	WHARF LIGHTING		1.176	12	15	15A					16				SPACE	
2.	FLOATING DOCK LIGHTING		0.708	12	17	15A					18				SPACE	
3.	20A TL RECEPTACLE @ PP1			1.92		19	20A				20				SPACE	
3.	20A TL RECEPTACLE @ PP2		1.92			21	20A				22	1.92		20A TL RECEPTACLE @ POLE P3		3.
3.	20A DUPEX GFCI RECEPTACLE @ DERRICK		1.92			23	20A				24		1.92	20A DUPEX RECEPTACLE @ POLE P3		3.
3.	20A TL RECEPTACLE @ PANEL		1.92			25	20A				26	1.92		20A DUPEX RECEPTACLE @ POLE P2		3.
3.	30A TL RECEPTACLE @ PANEL		2.88			27	30A				28		1.92	20A TL RECEPTACLE @ POLE P2		3.
3.	DERRICK		1.194			29	2P				30	1.92		20A DUPEX RECEPTACLE @ POLE P1		3.
						31	30A				32		1.92	20A TL RECEPTACLE @ POLE P1		3.
NOTES: 1. SUPPLY AND INSTALL NEW 1P,20A BREAKER IN EXISTING SPACE. 2. REMOVE EXISTING 1P,20A BREAKER. SUPPLY AND INSTALL NEW 1P,15A BREAKER. 3. EXISTING BREAKER FEEDING AN EXISTING LOAD. 4. CIRCUIT CONDUCTORS TO INCREASE IN SIZE TO ALLOW FOR VOLTAGE DROP																
FEEDER EXISTING																
TOTAL LOAD 29.958 KW 124.825 AMPS @ 240V																

- NOTES:
1. SUPPLY AND INSTALL NEW 1P,20A BREAKER IN EXISTING SPACE.
 2. REMOVE EXISTING 1P,20A BREAKER. SUPPLY AND INSTALL NEW 1P,15A BREAKER.
 3. EXISTING BREAKER FEEDING AN EXISTING LOAD.
 4. CIRCUIT CONDUCTORS TO INCREASE IN SIZE TO ALLOW FOR VOLTAGE DROP

FEEDER EXISTING

TOTAL LOAD 29.958 KW 124.825 AMPS @ 240V

LOAD CALCULATION (DEMAND)

1. RECEPTACLE LOAD (CEC 78-056)
 - 2 - 120V, 30 AMP TWIST LOCK RECEPTACLES - EXISTING
 - 6 - 120V, 20 AMP TWIST LOCK RECEPTACLES - EXISTING
 - 1 - 120V, 20 AMP TWIST LOCK RECEPTACLE - NEW
 - 4 - 120V, 20 AMP GFCI DUPLEX RECEPTACLES - EXISTING

- (2 x 30A x 120) 100% = 7.200 kW
- (2 x 20A x 120) 100% = 4.800 kW
- (4 x 20A x 120) 65% = 6.240 kW
- (1 x 20A x 120) 50% = 1.200 kW
- (4 x 20A x 120) 50% = 4.800 kW
- SUBTOTAL = 24.240 kW

2. WHARF LIGHTING
 - 7 - 168 WATT AREA LIGHTS = 5 x 168 = 1.176kW
 - 4 - 177 WATT FLOOD LIGHTS = 4 x 177 = 0.708 kW
 - SUBTOTAL = 1.884 kW

3. DERRICK (NON-CONTINUOUS LOAD)
 - 1 x 2.0HP x 746W = 1.492 kW x 80%
 - SUBTOTAL = 1.194 kW

4. LIGHTING CONTACTOR = 0.500kW

TOTAL LOAD = 24.240 kW
1.884 kW
1.194 kW
0.500 kW
27.818 kW

TOTAL = 27.818 kW @ 240 VOLTS x 1.25 = 34.7725 kVA
SERVICE LOADING = 34.7725 kVA/240 VOLTS = 144.8854 AMPS

0 ISSUED FOR TENDER APR 2017

revisions revisions date

project project

WHARF EXTENSION

EASTERN PASSAGE
HALIFAX COUNTY
NOVA SCOTIA

drawing dessin

MAIN SERVICE DETAILS
AND PANEL SCHEDULE

designed G. BOWSER conçu

date MARCH 2017

drawn K. WOLFE dessiné

date MARCH 2017

approved approved

date 17/3/2017

Tender Submission

PWOSC Project Manager / Administrateur de projets TPSGC

project number no. du projet

R.082417.001

drawing no. no. du dessin

E2