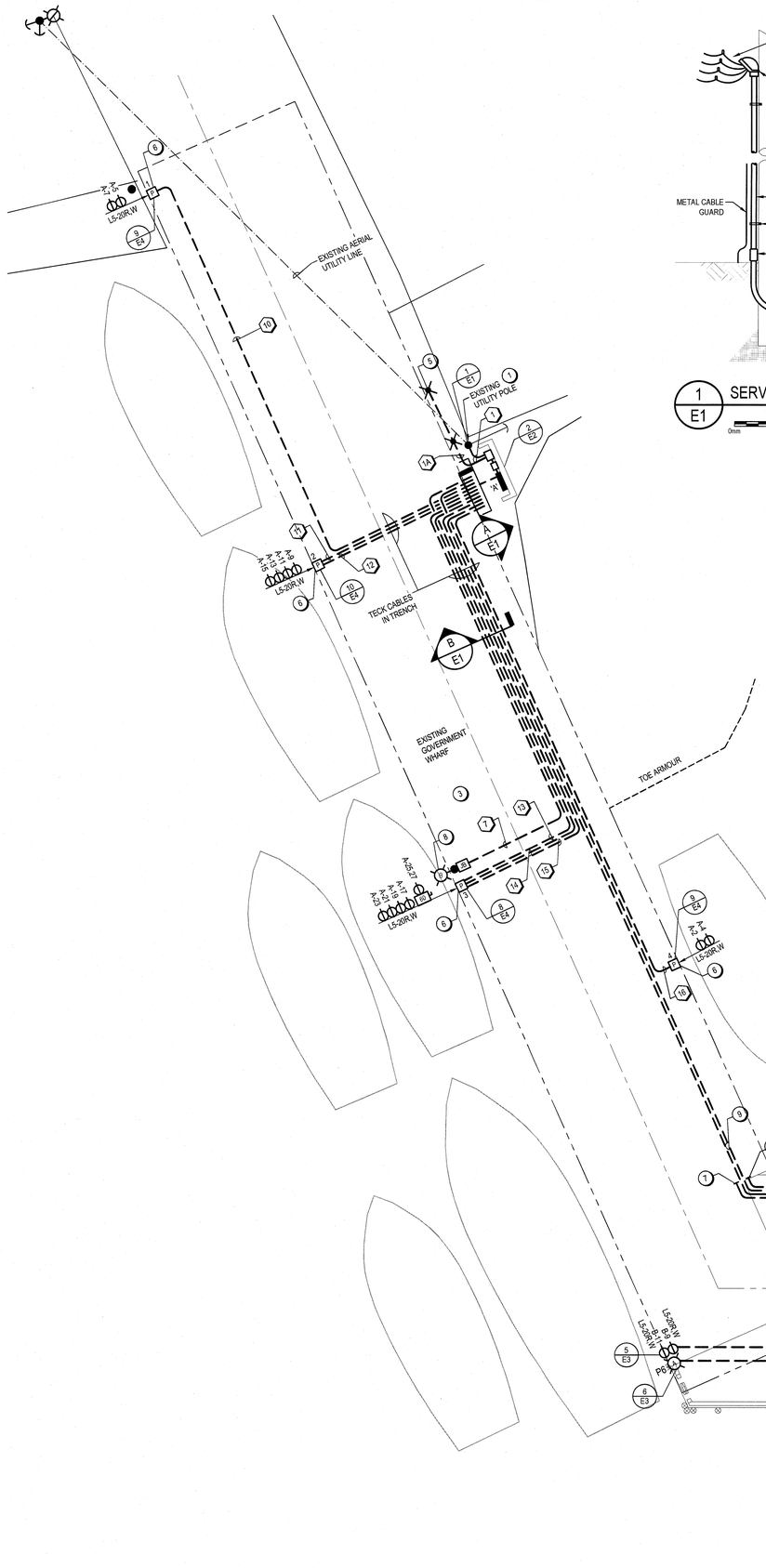
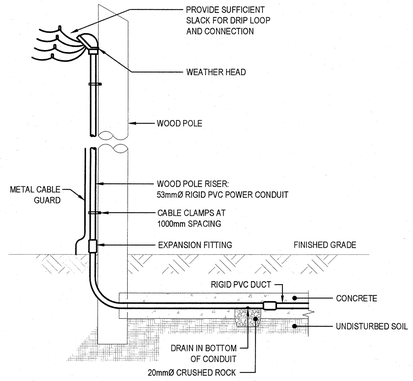




1 / E1 SERVICE POLE RISER DETAIL

SCALE : 1:20

VOLTAGE DROP/WIRE SIZE CALCULATIONS

LOAD	RATING	VOLTS	CIRCUIT	RATED CURRENT	DISTANCE (METERS)	VOLTAGE DROP	WIRE SIZE
SERVICE MODULE 1	20A	120V	A-5,7	16A	35	2.27%	3C#6 TECK
SERVICE MODULE 2	20A	120V	A-9,11	16A	15	1.55%	3C#10 TECK
SERVICE MODULE 2	20A	120V	A-13,15	16A	15	1.55%	3C#10 TECK
SERVICE MODULE 3	20A	120V	A-17,19	16A	35	2.27%	3C#6 TECK
SERVICE MODULE 3	20A	120V	A-21,23	16A	35	2.27%	3C#6 TECK
MODULE 3 WELDER	50A	240V	A-25,27	40A	35	1.79%	2C#6 TECK
SERVICE MODULE 4	20A	120V	A-2,4	16A	30	1.95%	3C#6 TECK
POLE 1 RECEPT	20A	120V	B-1,3	16A	45	2.92%	3#6
POLE 2 RECEPT	20A	120V	B-2,4	16A	32	2.08%	3#6
POLE 3 WELDER	50A	240V	B-13,15	40A	25	2.58%	2#6
POLE 4 RECEPT	20A	120V	B-6,8	16A	12	1.24%	3#10
POLE 4 RECEPT	20A	120V	B-10,12	16A	12	1.24%	3#10
POLE 5 RECEPT	20A	120V	B-5,7	16A	14	1.44%	3#10
POLE 6 RECEPT	20A	120V	B-9,11	16A	25	2.58%	3#10
LTS 1,,2,3,4,6	4A	120V	A-1	3A	50	<3%	2#10
EXIST WHARF LTG	1A	120V	A-1	1A	30	<3%	2C#10TECK
PANEL B	100A	240V		80A	50	<2%	3C#1 TECK

PANEL A FEEDER LOAD DIVERSITY

RECEPT TOTAL WATTS:	4 x 20A x 120V x 100%	9600
	4 x 20A x 120V x 65%	6240
	5 x 20A x 120V x 50%	6000
	11 x 20A x 120V x 25%	6600
WELDER OUTLETS	2 x 40A x 240V x 25%	4800
LIGHTS TOTAL WATTS:	6 x .58A x 120V x 100%	420
	TOTAL Watts =	33660
	TOTAL AMPS @ 240V =	140A

LEGEND

W - INDICATES WEATHERPROOF
X - INDICATES EXISTING TO BE REMOVED

CONDUIT AND WIRING UNDERGROUND OR EMBEDDED IN CONCRETE DECK

AERIAL WIRING

'A' — ELECTRICAL PANEL SURFACE MOUNTED
A - INDICATES PANEL DESIGNATION

A-1 — INDICATES CIRCUIT #1 IN PANEL 'A'

L5-20R — SINGLE L5-20R RECEPTACLE (TWISTLOCK) C/W GFCI MODULE

60 — COMBINATION 60A, 240V DISCONNECT SWITCH / PIN AND SLEEVE WELDING OUTLET

A P1 — SITE LIGHTING LUMINAIRE ON ALUMINUM POLE;
A - INDICATES TYPE IN LUMINAIRE SCHEDULE
P1- INDICATES POLE 1

B — NEW LUMINAIRE ON EXISTING WOOD POLE

B — EXISTING LUMINAIRE ON EXISTING WOOD POLE

JB — CSA 4X JUNCTION BOX

P 1 — SHORE POWER SERVICE MODULE C/W OUTLETS AS INDICATED
1 - INDICATES SERVICE MODULE NUMBER

LC — LIGHTING CONTACTOR

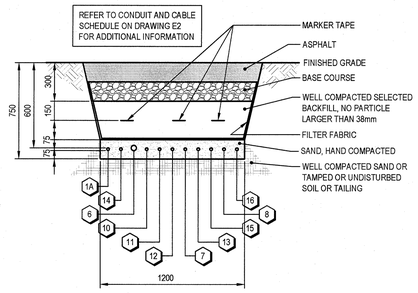
PC — PHOTO-ELECTRIC CONTROLLER

GUY WIRE

WOOD POLE

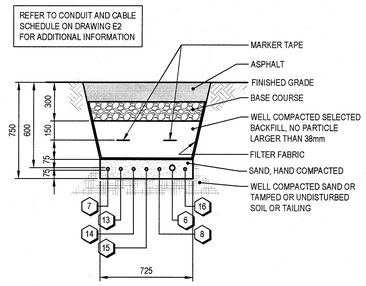
P — PROTECTION POST

GROUND ROD



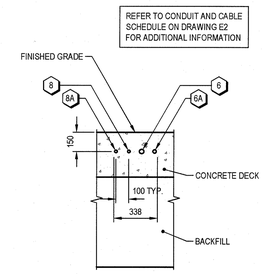
A / E1 TRENCH DETAIL

SCALE : N.T.S.



B / E1 TRENCH DETAIL

SCALE : N.T.S.



C / E1 WHARF CONDUIT DETAIL

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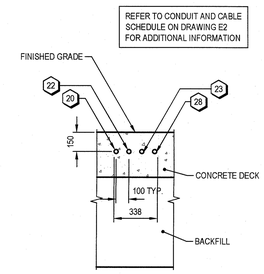
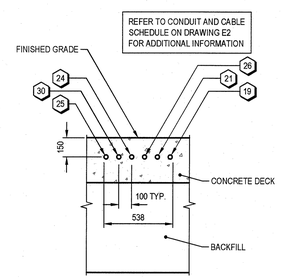


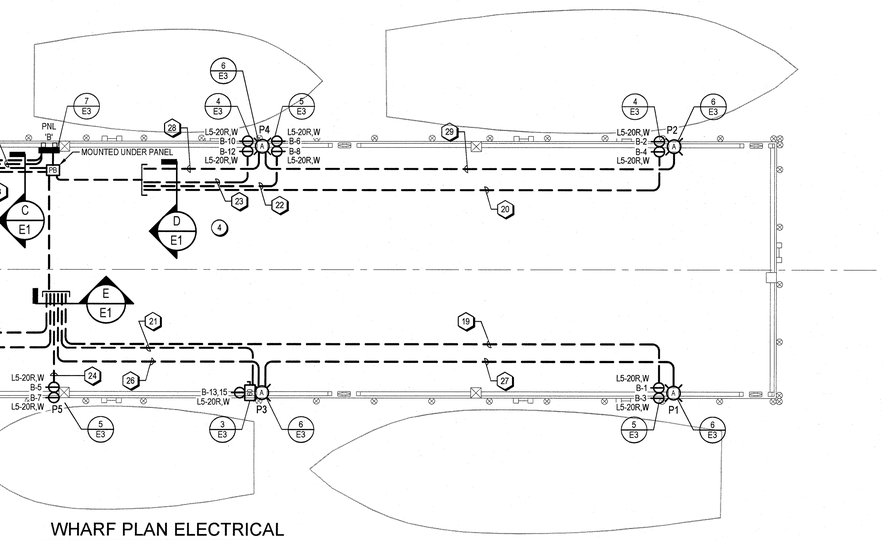
D / E1 WHARF CONDUIT DETAIL

SCALE : N.T.S.



E / E1 WHARF CONDUIT DETAIL

SCALE : N.T.S.



WHARF PLAN ELECTRICAL

SCALE: 1:125

NOTES

1. COORDINATE WITH UTILITY TO FEED NEW SERVICE FROM POLES AS INDICATED. FIT UP POLE IN ACCORDANCE WITH NB POWER STANDARD CONSTRUCTION PRACTICES ED7U-25.
2. CONDUIT STUBBED OUT INTO EXISTING WHARF AND CAPPED FOR FUTURE REFEED TO PANEL 'E'.
3. CONDUIT AND WIRE ARE SHOWN IN DIAGRAMATIC FORM. TECK CABLES INSTALLED IN EXISTING WHARF ARE TO BE GROUPED WHERE POSSIBLE AND INSTALLED IN TRENCHES CUT IN EXISTING DECK.
4. CONDUITS IN THIS PORTION OF WHARF ARE TO BE EMBEDDED IN NEW CONCRETE DECK.
5. 20mmØ x 3m COPPERWELD GROUND RODS DRIVEN 3m APART TO BE INSTALLED 300mm UNDER ROADWAY SHOULDER. USE COMPRESSION CONNECTIONS.
6. EXACT LOCATION OF SERVICE MODULE ON EXISTING WHARF TO BE COORDINATE WITH DEPARTMENTAL REPRESENTATIVE. ALLOW FOR AN ADDITIONAL ± 5 METERS OF CABLING.
7. CONDUIT STUBBED OUT INTO EXISTING WHARF AND CAPPED FOR FUTURE LIGHTING CIRCUIT REFEED.
8. EXISTING LUMINAIRE TO BE REPLACED WITH NEW LED UNIT. EXISTING RIGID PVC SERVICE MAST CAN BE REUSED IF ACCEPTABLE. PROVIDE METAL GUARD AROUND CONDUIT TO 2 METERS ABOVE DECK.
9. LEAVE 600mm SLACK IN TECK CABLES AT EDGE OF CONCRETE TO ALLOW FOR EXPANSION.

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revisions		date
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EXTENSION OF EXISTING WHARF
ALMA WHARF
ALBERT COUNTY, NB

drawing / dessin
NEW WHARF PLAN ELECTRICAL AND WHARF DETAILS

designed EFS — conçu
date FEBRUARY 2016
drawn RMB — dessiné
date FEBRUARY 2016
approved BET — approuvé
date FEBRUARY 2016
Tender — Soumission
PWGSC Project Manager — Administrateur de projets TPSGC
project number / no. du projet: R.075081.001
drawing no. / no. du dessin: E1 of 5

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