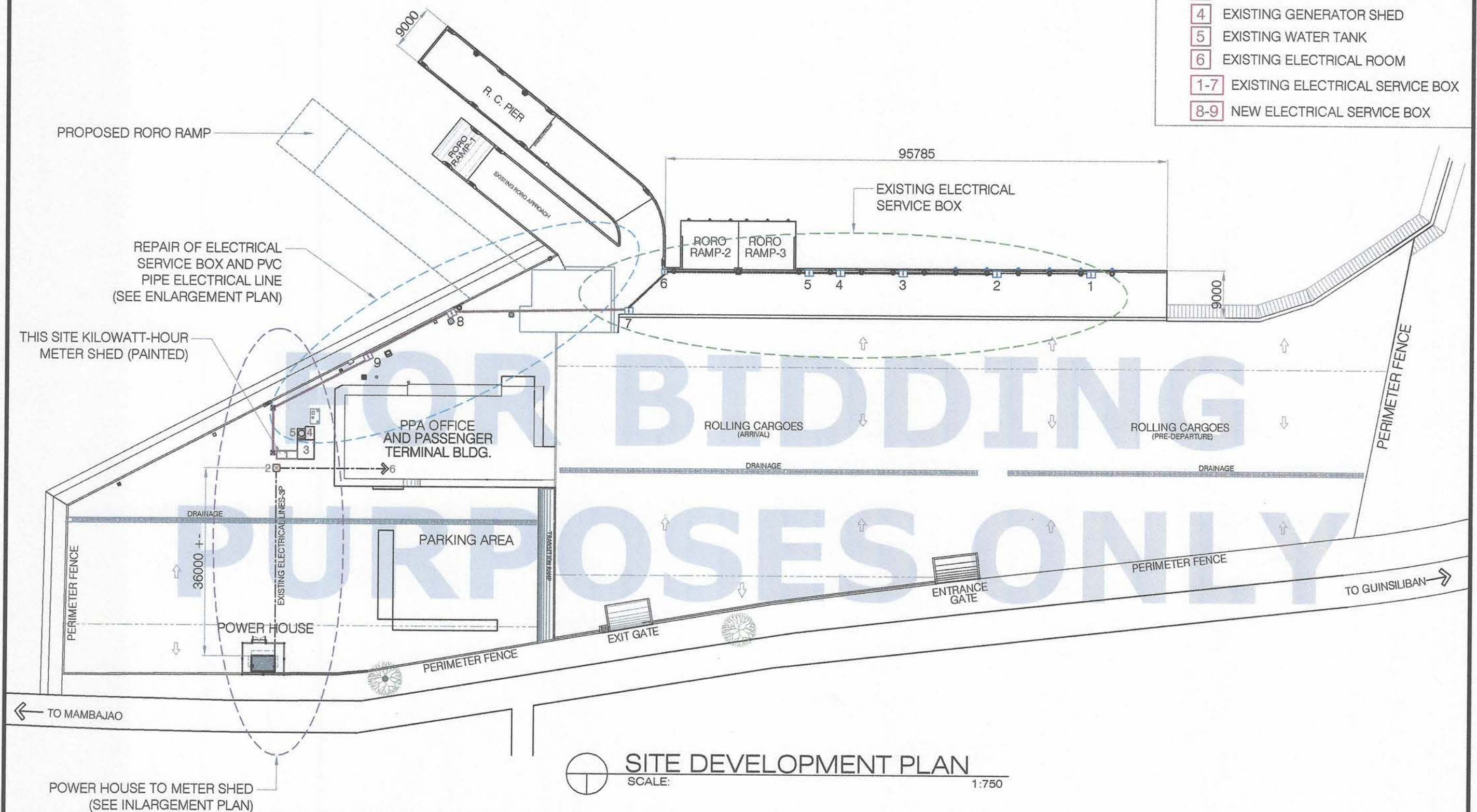



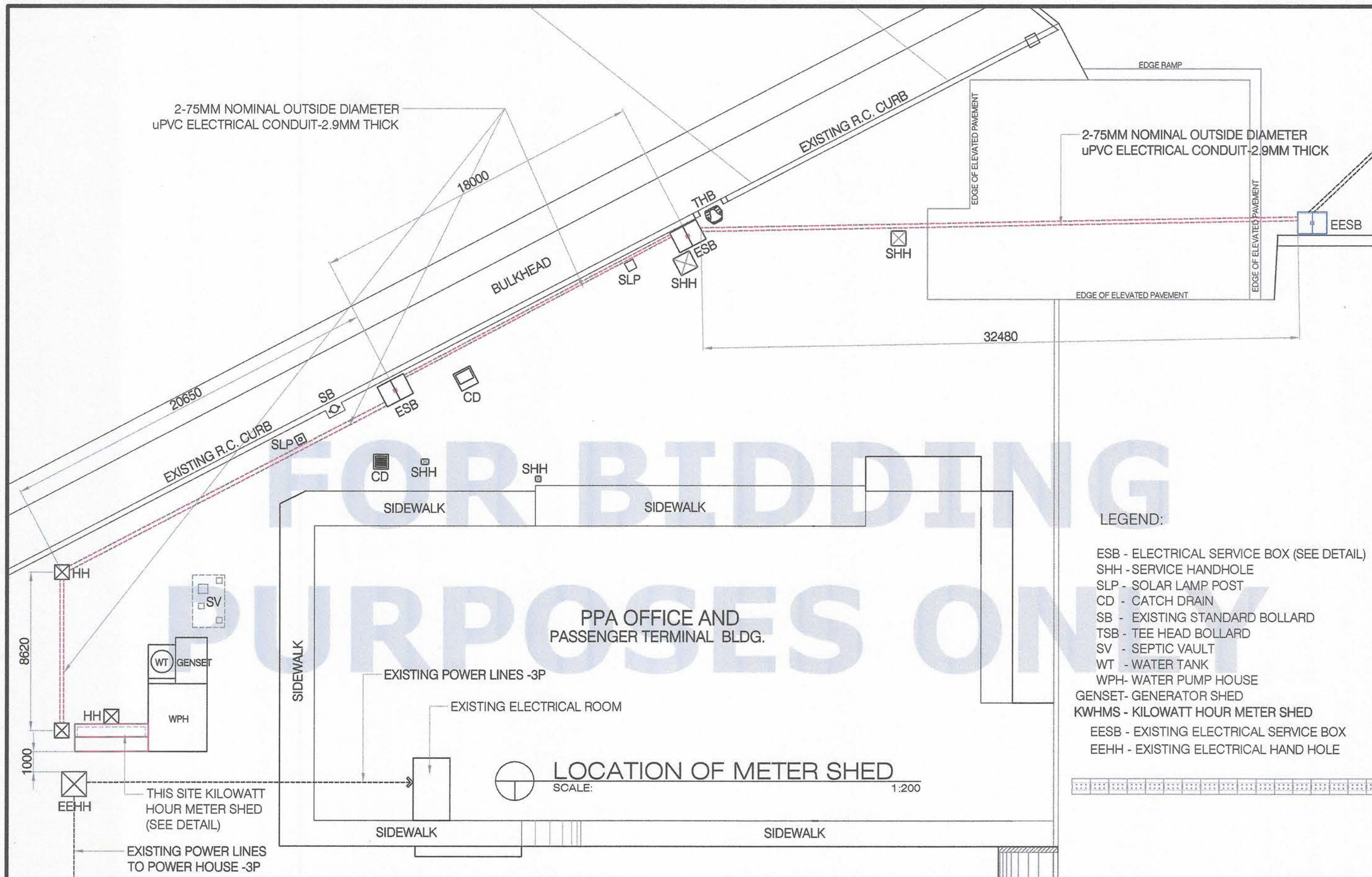
LEGEND:


- 1 KILOWATT- HOUR METER SHED
- 2 EXISTING ELECTRICAL HAND HOLE
- 3 EXSITING WATER PUMP HOUSE
- 4 EXISTING GENERATOR SHED
- 5 EXISTING WATER TANK
- 6 EXISTING ELECTRICAL ROOM
- 1-7 EXISTING ELECTRICAL SERVICE BOX
- 8-9 NEW ELECTRICAL SERVICE BOX

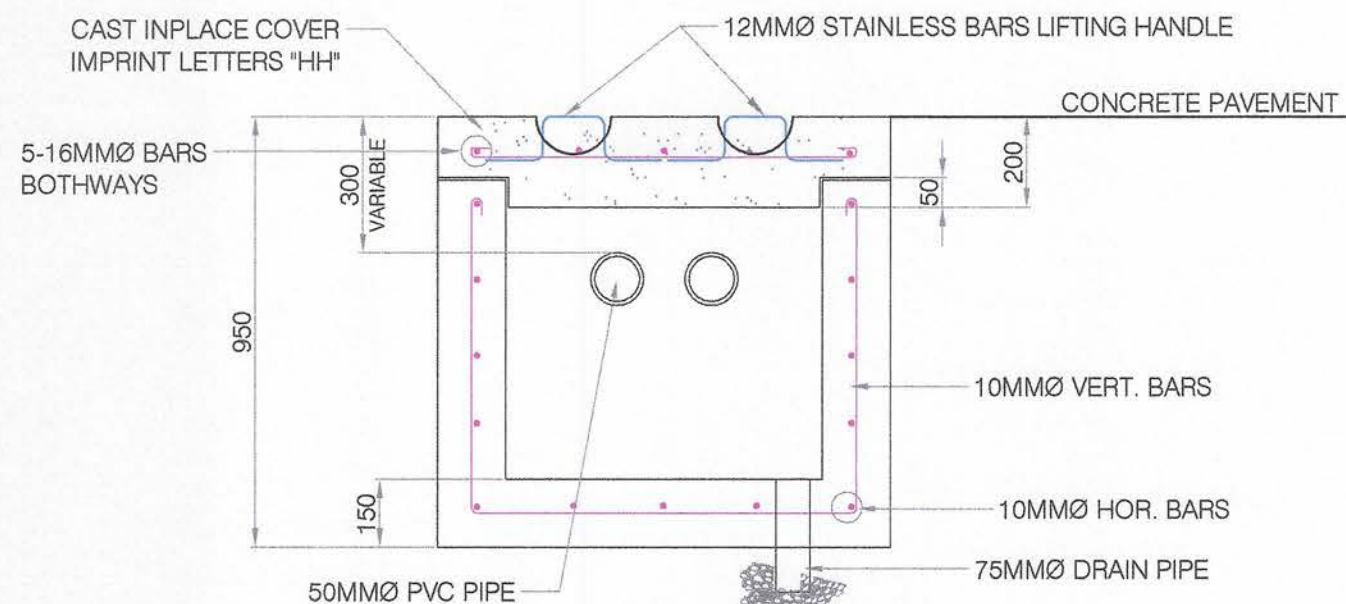


SITE DEVELOPMENT PLAN
 SCALE: 1:750

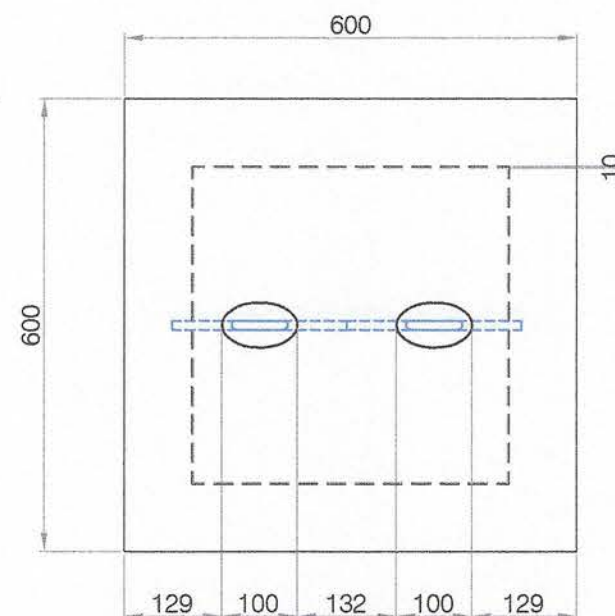
<div><div>PHILIPPINE PORTS AUTHORITY</div></div> <div>PORT OF CAGAYAN DE ORO MISAMIS ORIENTAL</div>	TITLE:		REPAIR/REWIRING OF SHORE BASED POWER SUPPLY		CIVIL WORKS	<div>SHEET NO.</div> <div><div>1</div><div>9</div></div>	
	LOCATION:		PORT OF BENONI, CAMIGUIN PROVINCE		SHEET CONTENTS		
	PREPARED BY:		CHECKED & SUBMITTED BY:	RECOMMENDED BY:	APPROVED:		SITE DEVELOPMENT PLAN
	<div>ORIGINAL SIGNED</div> <div>KAREL T. SUMICAD</div> <div>Engineering Assistant A</div>		<div>ORIGINAL SIGNED</div> <div>LEXTER-LOU V. SEVILLA</div> <div>Supervising Engineer A</div>	<div>ORIGINAL SIGNED</div> <div>CLARO SAMUEL P. FONTANILLA</div> <div>ESD Manager</div>	<div>ORIGINAL SIGNED</div> <div>ISIDRO V. BUTASLAC, JR.</div> <div>Port Manager</div>		



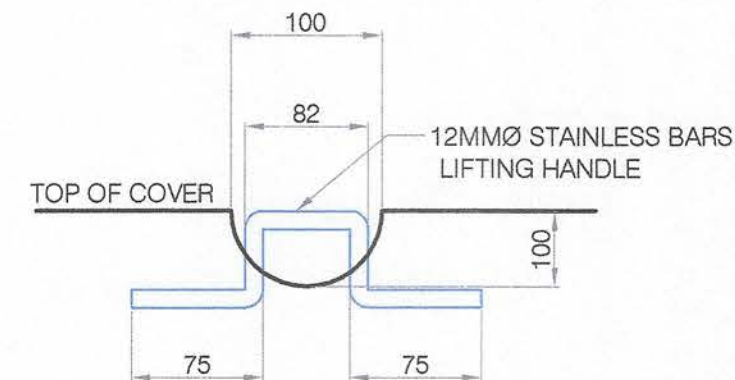
 <p>PORT OF CAGAYAN DE ORO MISAMIS ORIENTAL</p>	TITLE: REPAIR/REWIRING OF SHORE BASED POWER SUPPLY				CIVIL WORKS	<p>SHEET NO.</p> <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="border: 1px solid black; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> 2 9 </div> </div>
	LOCATION: PORT OF BENONI, CAMIGUIN PROVINCE				SHEET CONTENTS	
	PREPARED BY:	CHECKED & SUBMITTED BY:	RECOMMENDED BY:	APPROVED:	LOCATION OF METER SHED	
	<i>ORIGINAL SIGNED</i> KAREL T. SUMICAD Engineering Assistant A	<i>ORIGINAL SIGNED</i> LEXTER-LOU V. SEVILLA Supervising Engineer A	<i>ORIGINAL SIGNED</i> CLARO SAMUEL P. FONTANILLA ESD Manager	<i>ORIGINAL SIGNED</i> ISIDRO V. BUTASLAC, JR. Port Manager		



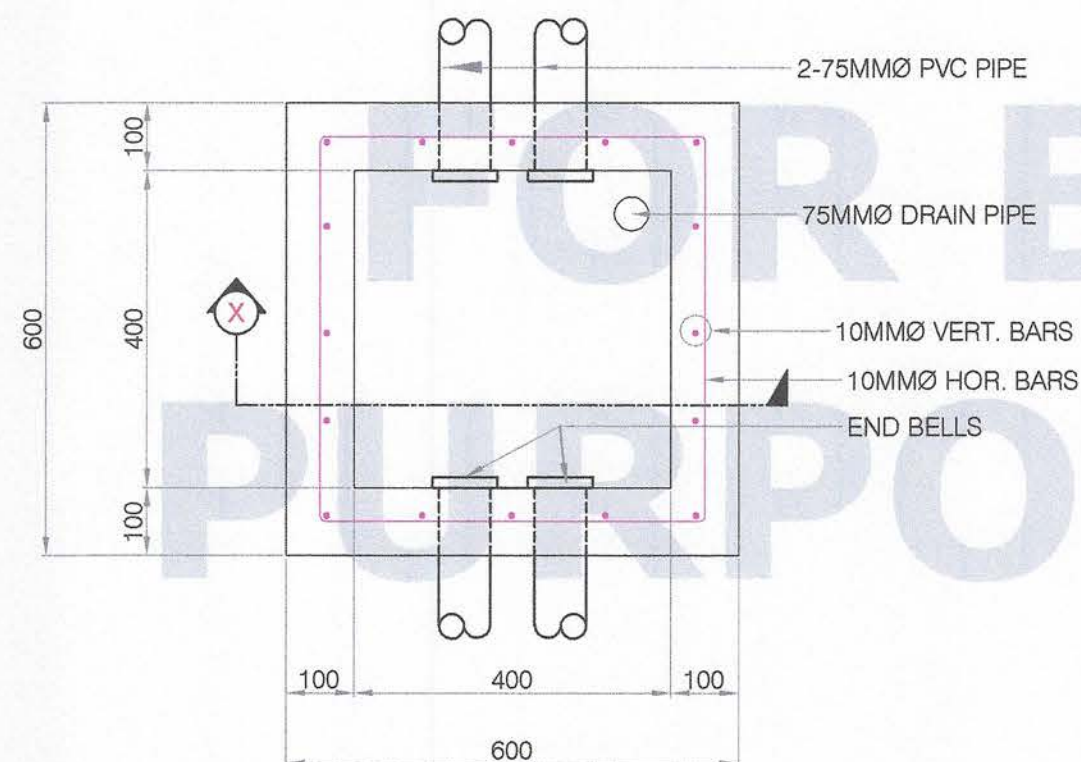
SECTION -X



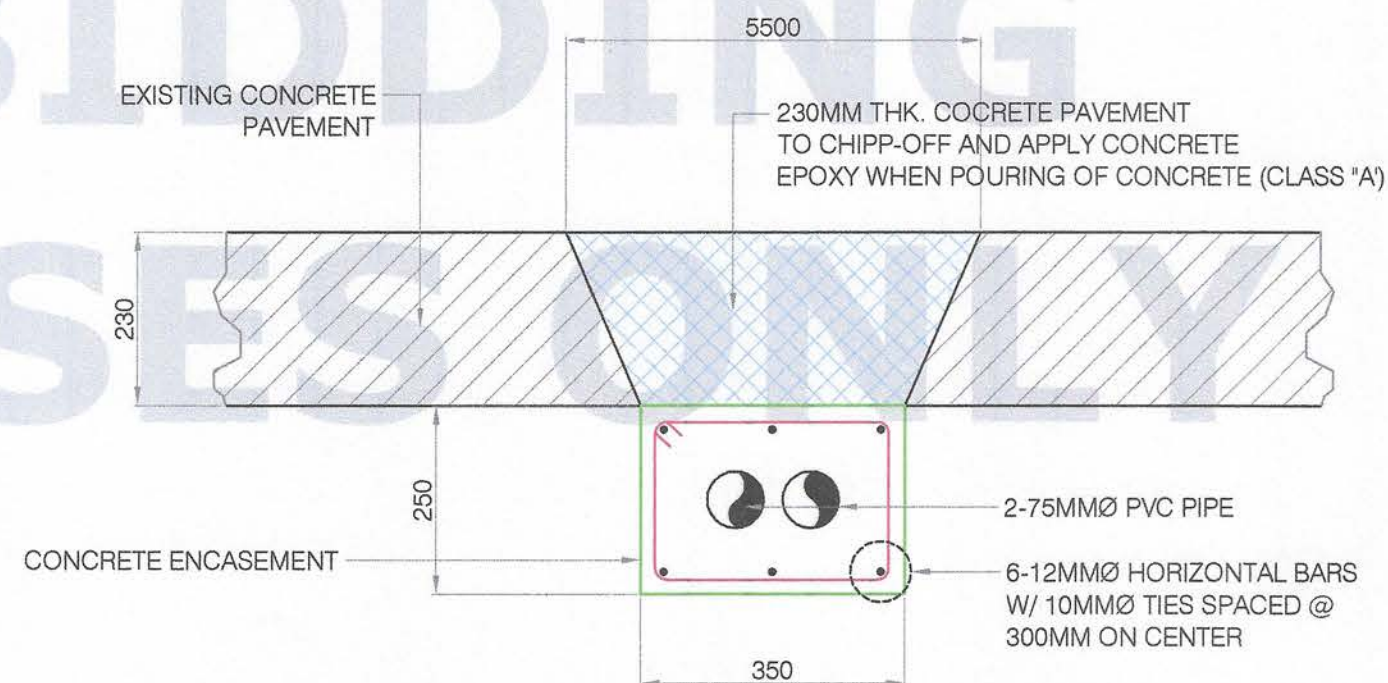
TOP COVER



DETAIL OF HANDLE
SCALE: 1:5



PLAN



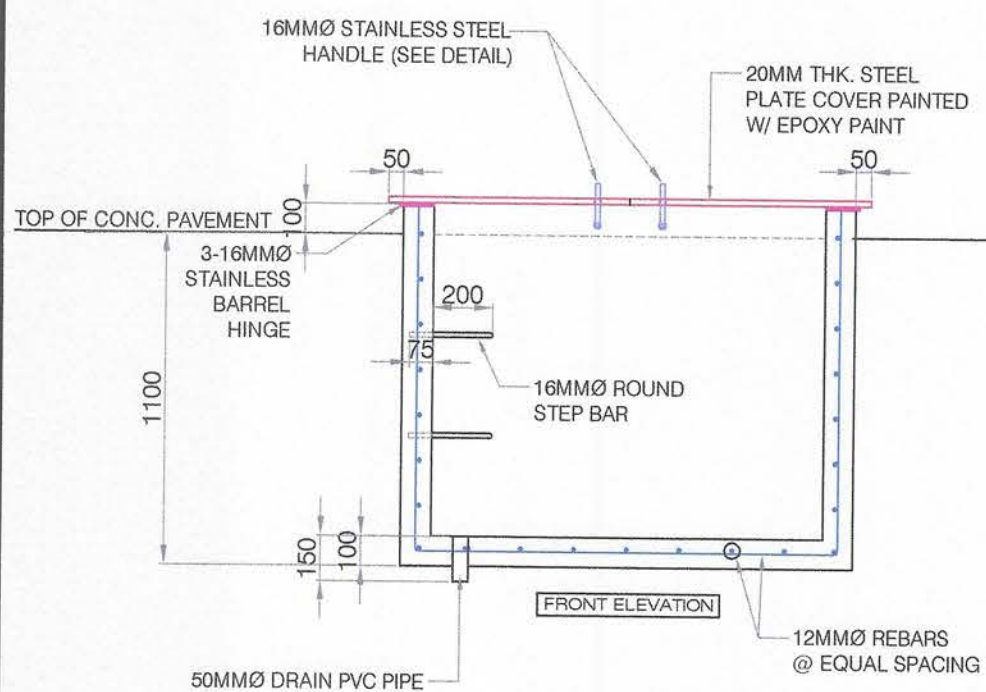
DET. OF CONC.DUCT ENCASEMENT
SCALE: 1:10

TYPICAL DETAIL OF HANDHOLE
SCALE: 1:10

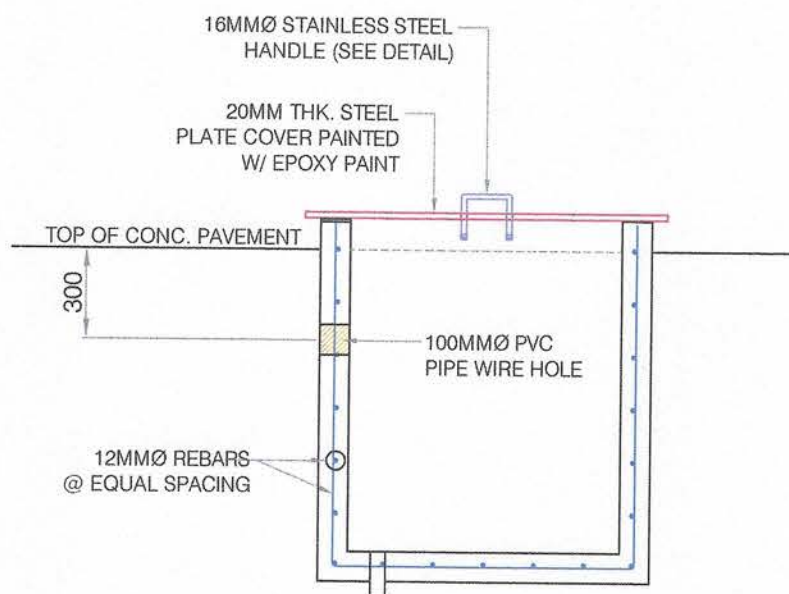


PORT OF
CAGAYAN DE ORO
MISAMIS ORIENTAL

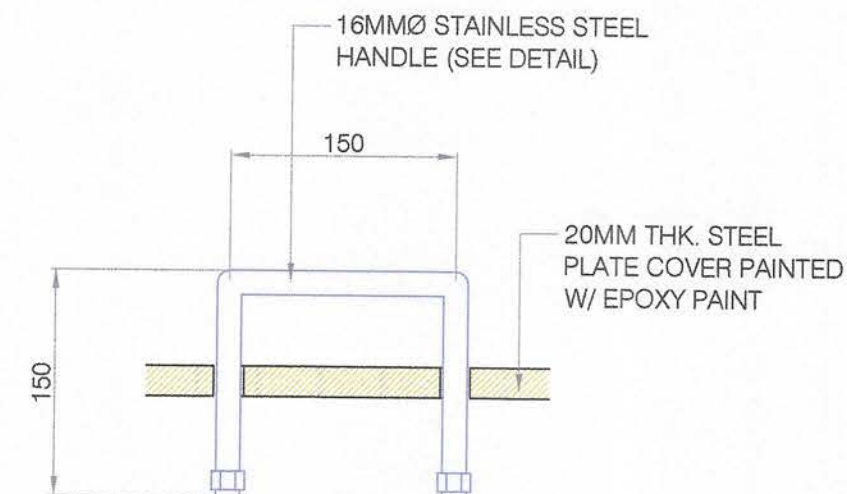
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LOCATION:		PORT OF BENONI, CAMIGUIN PROVINCE				SHEET CONTENTS		<div>39</div>	
PREPARED BY:		CHECKED & SUBMITTED BY:		RECOMMENDED BY:		APPROVED:		DET. OF CONC.DUCT ENCASEMENT TYPICAL DETAIL OF HANDHOLE	
ORIGINAL SIGNED KAREL T. SUMICAD		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA		ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA		ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR.			
Engineering Assistant A		Supervising Engineer A		ESD Manager		Port Manager			



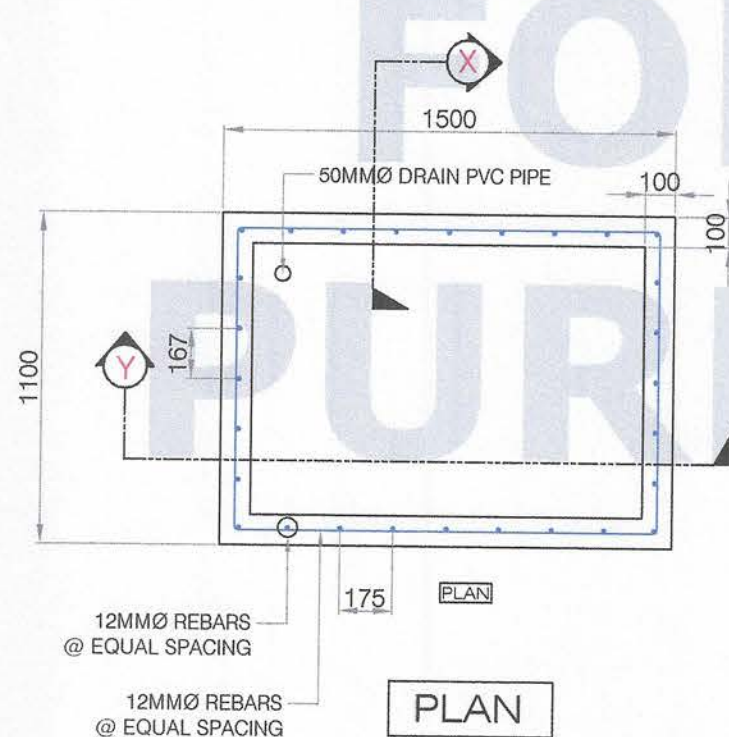
SECTION -Y



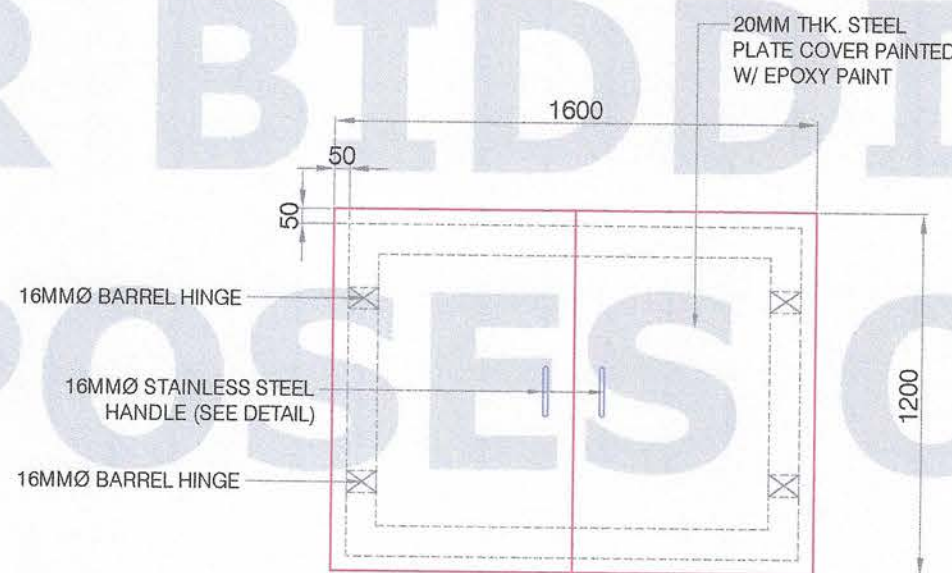
SECTION -X



DETAIL OF HANDLE
SCALE: 1:5



PLAN



TOP COVER

DETAIL OF ELECTRICAL SERVICE BOX
SCALE: 1:25

NOTE:

1. PAINTING OF ELECTRICAL SERVICE STEEL COVER TWO COATS EPOXY WHITE PRIMER AND TWO COATS AUTOMOTIVE LACQUER CATERPILLAR YELLOW (TOP & BOTTOM)
2. PAINTING OF CONCRETE HAND HOLE, TWO COATS FLAT LATEX, AND TWO COATS AQUA EPOXY YELLOW (INTERIOR & EXTERIOR)



PORT OF
CAGAYAN DE ORO
MISAMIS ORIENTAL

TITLE:

REPAIR/REWIRING OF SHORE BASED POWER SUPPLY

LOCATION:

PORT OF BENONI, CAMIGUIN PROVINCE

PREPARED BY:

ORIGINAL SIGNED
KAREL T. SUMICAD
Engineering Assistant A

CHECKED & SUBMITTED BY:

ORIGINAL SIGNED
LEXTER-LOU V. SEVILLA
Supervising Engineer A

RECOMMENDED BY:

ORIGINAL SIGNED
CLARO SAMUEL P. FONTANILLA
ESD Manager

APPROVED:

ORIGINAL SIGNED
ISIDRO V. BUTASLAC, JR.
Port Manager

CIVIL WORKS

SHEET CONTENTS

DETAIL OF HANDLE
DETAIL OF ELECTRICAL SERVICE BOX

SHEET NO.

4
9

SCHEDULE OF LOADS & COMPUTATION

Main	Meter	POWER OUTLET	Volt	Hz	AMPERE	Protection	Wattage	Computation	Size of Conductor &Conduit
	M1	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC
	M2	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC
	M3	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC
	M4	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC
	M5	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC
	M6	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC
M7	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC	
M8	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC	
M9	1 Shore Based Outlet	220	60	52.55A	60A	10kW	$I = 20kW/(220 \times 1.73) = 52.55A$	#14 mm ² THHN 20mmØ PVC	
Total Current					472.95	Ampere			
@125% derating factor					591.1875	Ampere			
							For Main Protection: 600AF 600AT 3PST		
							For Main Conductor: #250mm ² THW Cu. wire		

GENERAL SPECIFICATION

Experienced men under the provision of a licensed Professional Electrical Engineer (PEE) shall do all electrical works and installations herein.

All works and installations shall be done in accordance with the latest edition of the Philippine Electrical Code and shall comply with all applicable rules and regulations of Cagayan de Oro City.

All electrical materials shall be of new and approved type in accordance to its location, uses, and purposes as much as possible conceal all wire splices in the construction.

All exposed surfaces must be clean and free from grease, dirt and other foreign materials. Chrome, fittings, trimmings shall be polished on completion of the work.

Electrical lines shall be shut-off after the installation of the units, the use of it shall be prohibited during the progress of the construction.

Electrical materials and equipment shall be properly protected from damage and shall be cleaned in accordance with the manufacturer's guide and manual.

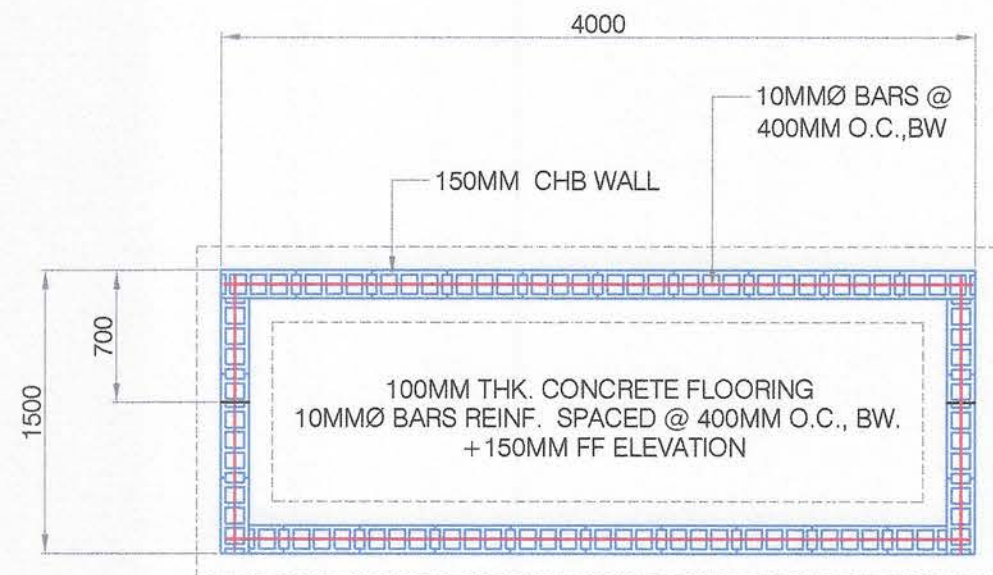
LEGEND:

	-	SOURCE
	-	POWER METER
	-	KILOWATT HOUR METER
	-	MAIN PROTECTION
	-	CIRCUIT BREAKER
	-	GROUND

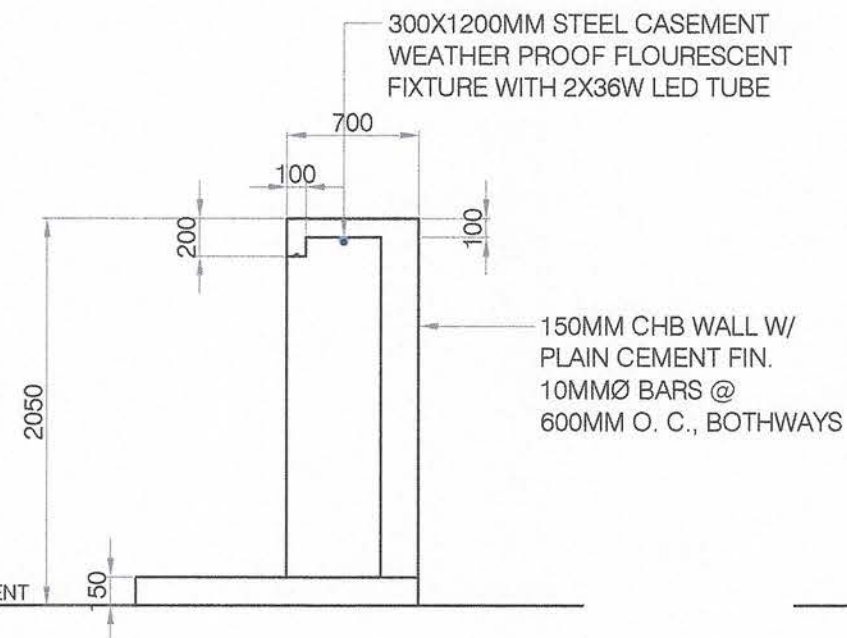


PORT OF
CAGAYAN DE ORO
MISAMIS ORIENTAL

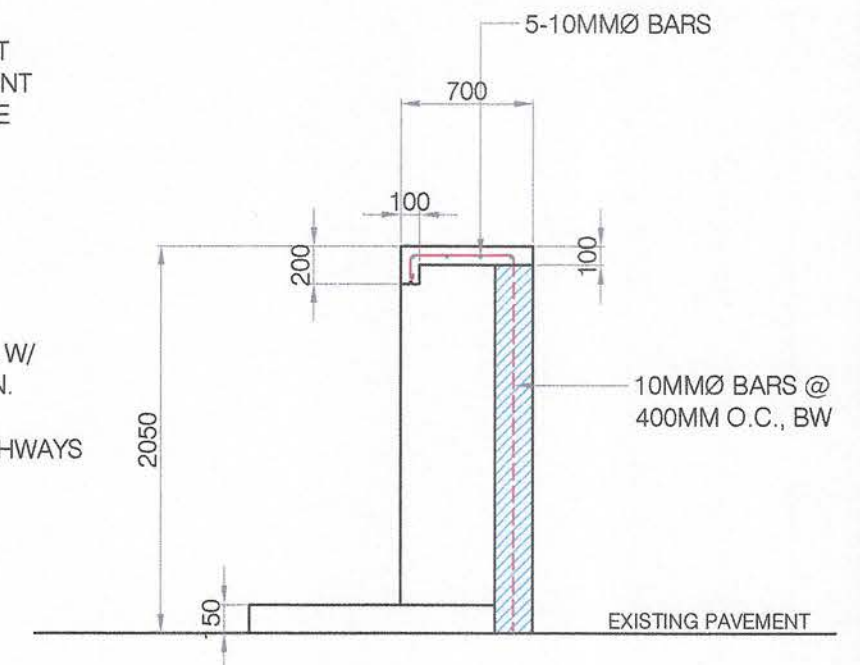
TITLE:	REPAIR/REWIRING OF SHORE BASED POWER SUPPLY				ELECTRICAL	SHEET NO. 5 9
LOCATION:	PORT OF BENONI, CAMIGUIN PROVINCE				SHEET CONTENTS	
PREPARED BY:	CHECKED & SUBMITTED BY:	RECOMMENDED BY:	APPROVED:	POWER DISTRIBUTION ONE-LINE DIAGRAM		
ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A	ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A	ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager	ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager			



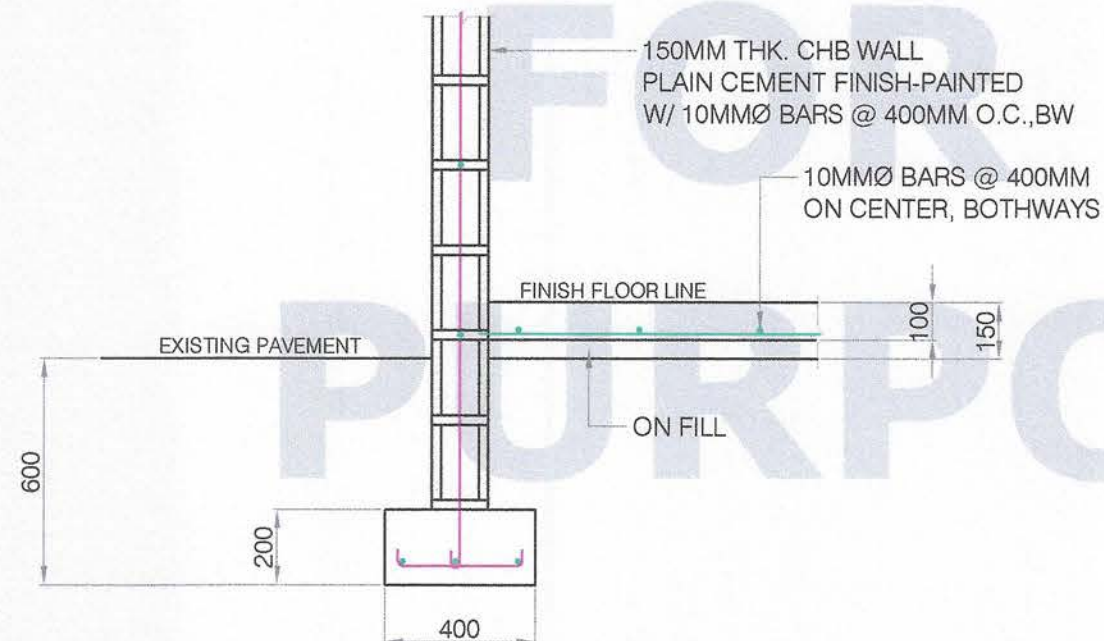
FOUNDATION PLAN



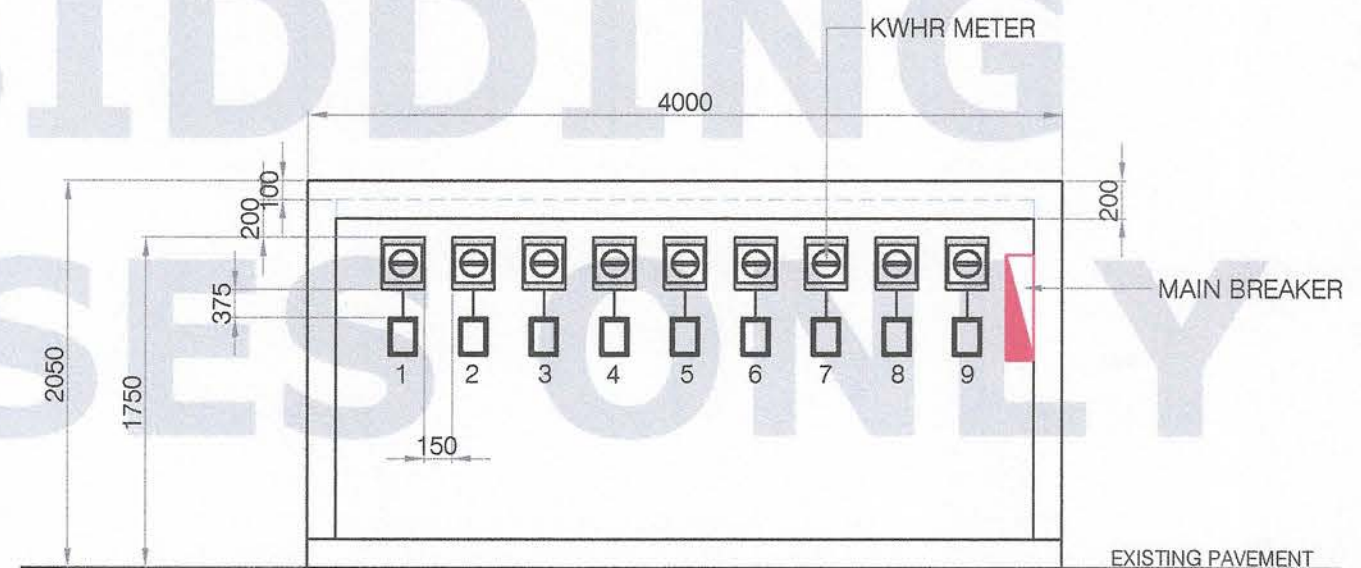
SIDE ELEVATION



SIDE ELEVATION



SECTION OF WALL FOOTING
SCALE: 1:25



SHED ELEVATION

NOTE:
1. PAINTING OF KILOWATT-HOUR SHED, TWO COATS FLAT LATEX WHITE AND TWO COATS GLOSS LATEX ELASTOMERIC PAINT

DETAIL OF KILOWATT-HOUR SHED
SCALE: 1:40



PORT OF
CAGAYAN DE ORO
MISAMIS ORIENTAL

TITLE:

REPAIR/REWIRING OF SHORE BASED POWER SUPPLY

LOCATION:

PORT OF BENONI, CAMIGUIN PROVINCE

PREPARED BY:

ORIGINAL SIGNED
KAREL T. SUMICAD
Engineering Assistant A

CHECKED & SUBMITTED BY:

ORIGINAL SIGNED
LEXTER-LOU V. SEVILLA
Supervising Engineer A

RECOMMENDED BY:

ORIGINAL SIGNED
CLARO SAMUEL P. FONTANILLA
ESD Manager

APPROVED:

ORIGINAL SIGNED
ISIDRO V. BUTASLAC, JR.
Port Manager

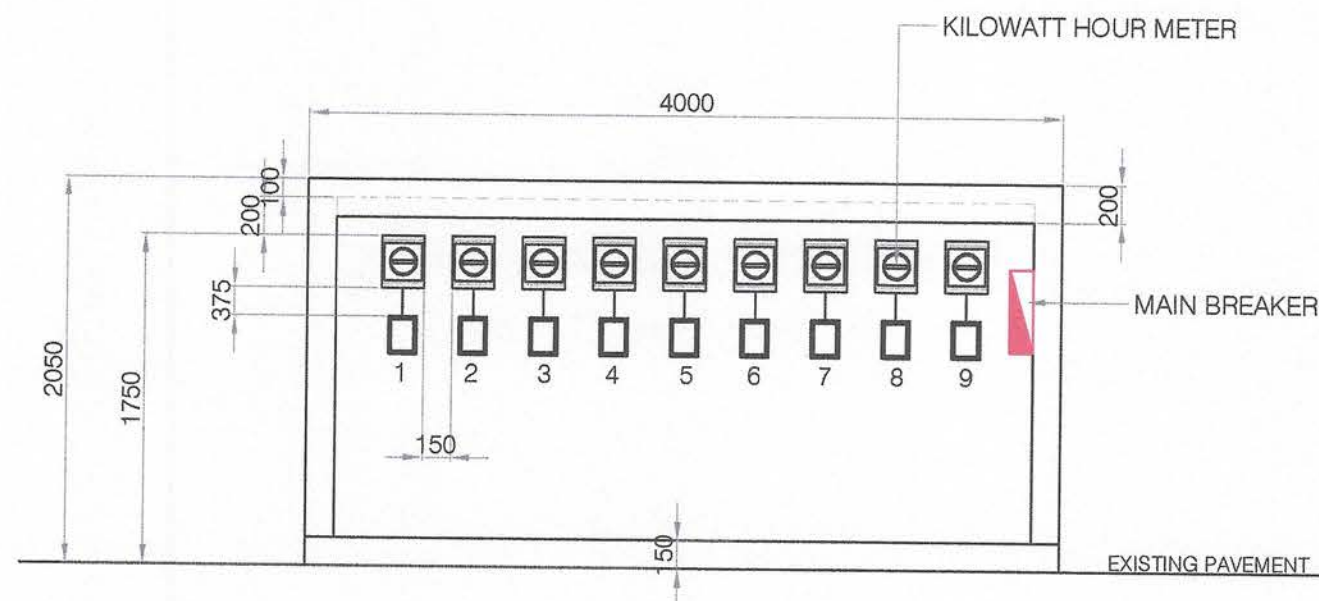
CIVIL WORKS

SHEET CONTENTS

DETAIL OF KILOWATT-HOUR SHED

SHEET NO.

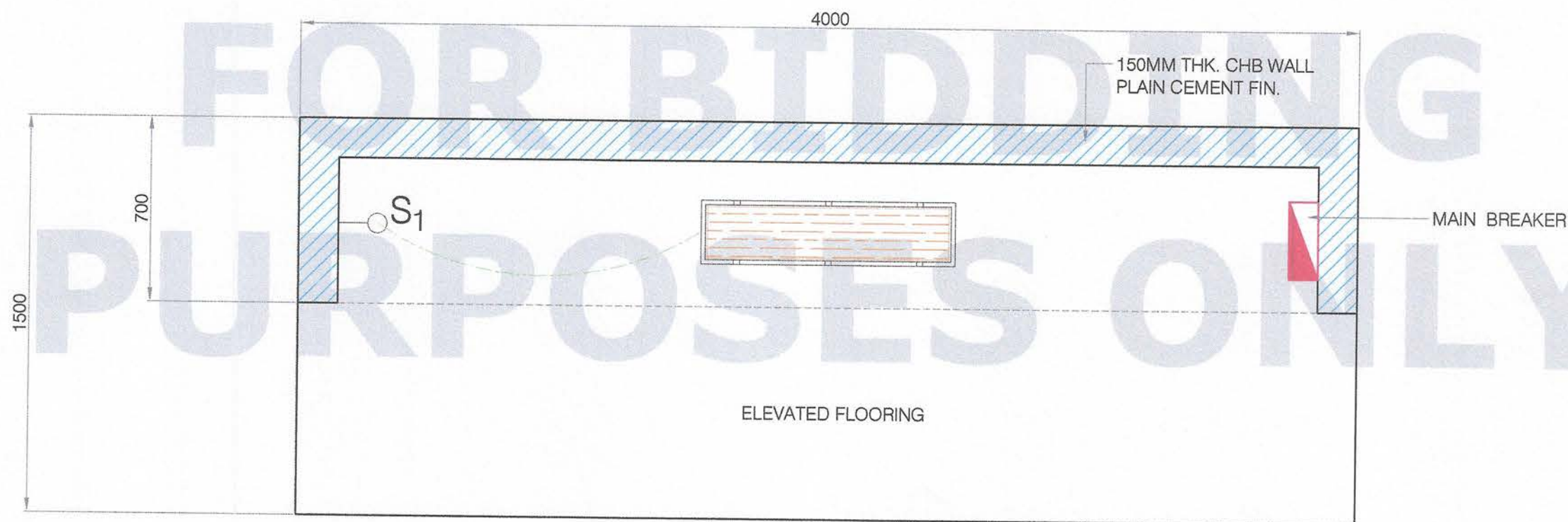
6
9



LEGEND:

- 300X1200MM STEEL CASEMENT
WEATHER PROOF FLOURESCENT-FIXTURE
WITH 1X36W LED TUBE
- ONE-GANG SWITCH
- SWITCH LINE

LOCATION OF KILOWATT-HOUR METER
SCALE: 1:40



LIGHTING PLAN
SCALE: 1:20



PORT OF
CAGAYAN DE ORO
MISAMIS ORIENTAL

TITLE:

REPAIR/REWIRING OF SHORE BASED POWER SUPPLY

LOCATION:

PORT OF BENONI, CAMIGUIN PROVINCE

PREPARED BY:

ORIGINAL SIGNED
KAREL T. SUMICAD
Engineering Assistant A

CHECKED & SUBMITTED BY:

ORIGINAL SIGNED
LEXTER-LOU V. SEVILLA
Supervising Engineer A

RECOMMENDED BY:

ORIGINAL SIGNED
CLARO SAMUEL P. FONTANILLA
ESD Manager

APPROVED:

ORIGINAL SIGNED
ISIDRO V. BUTASLAC, JR.
Port Manager

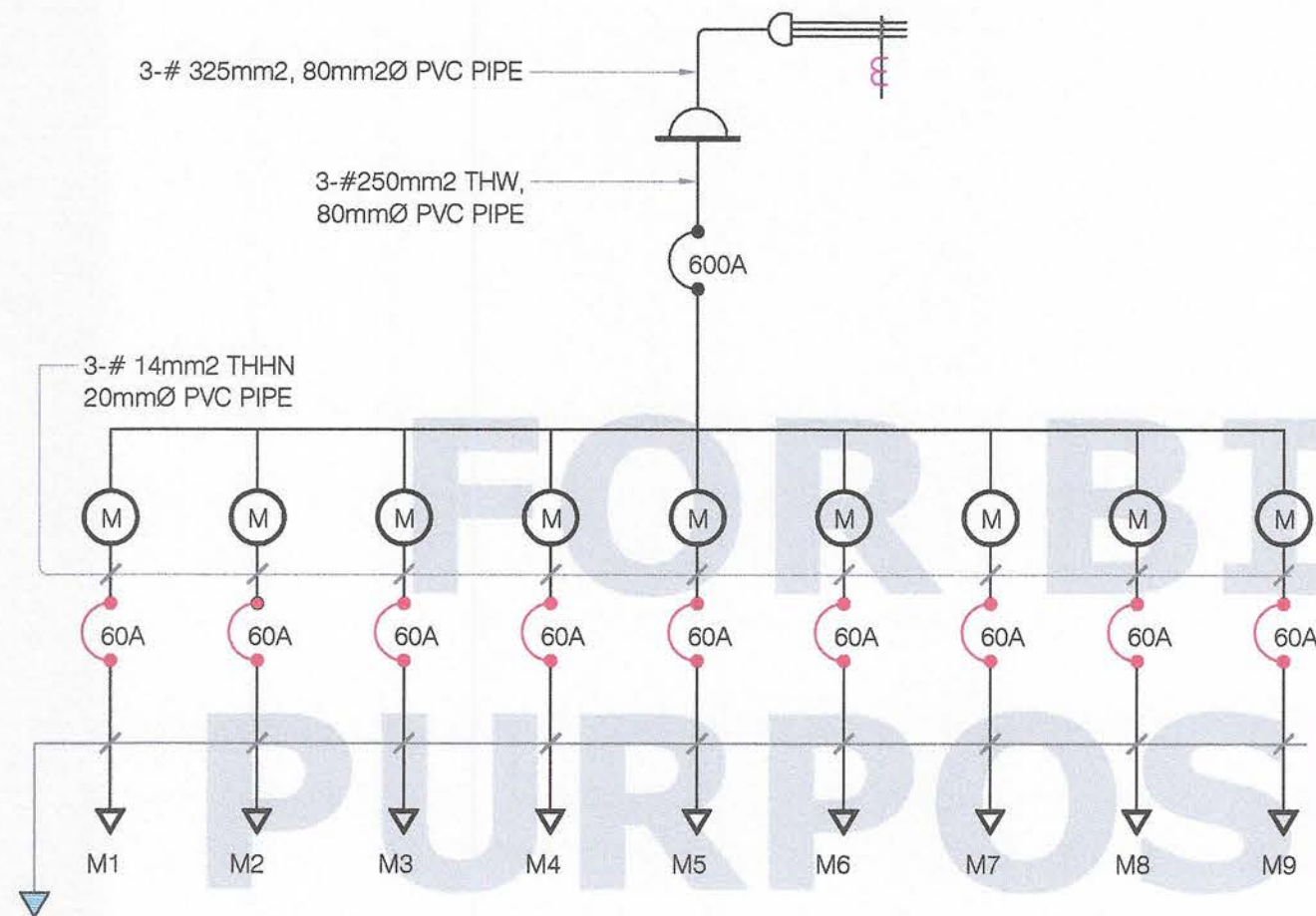
ELECTRICAL

SHEET CONTENTS

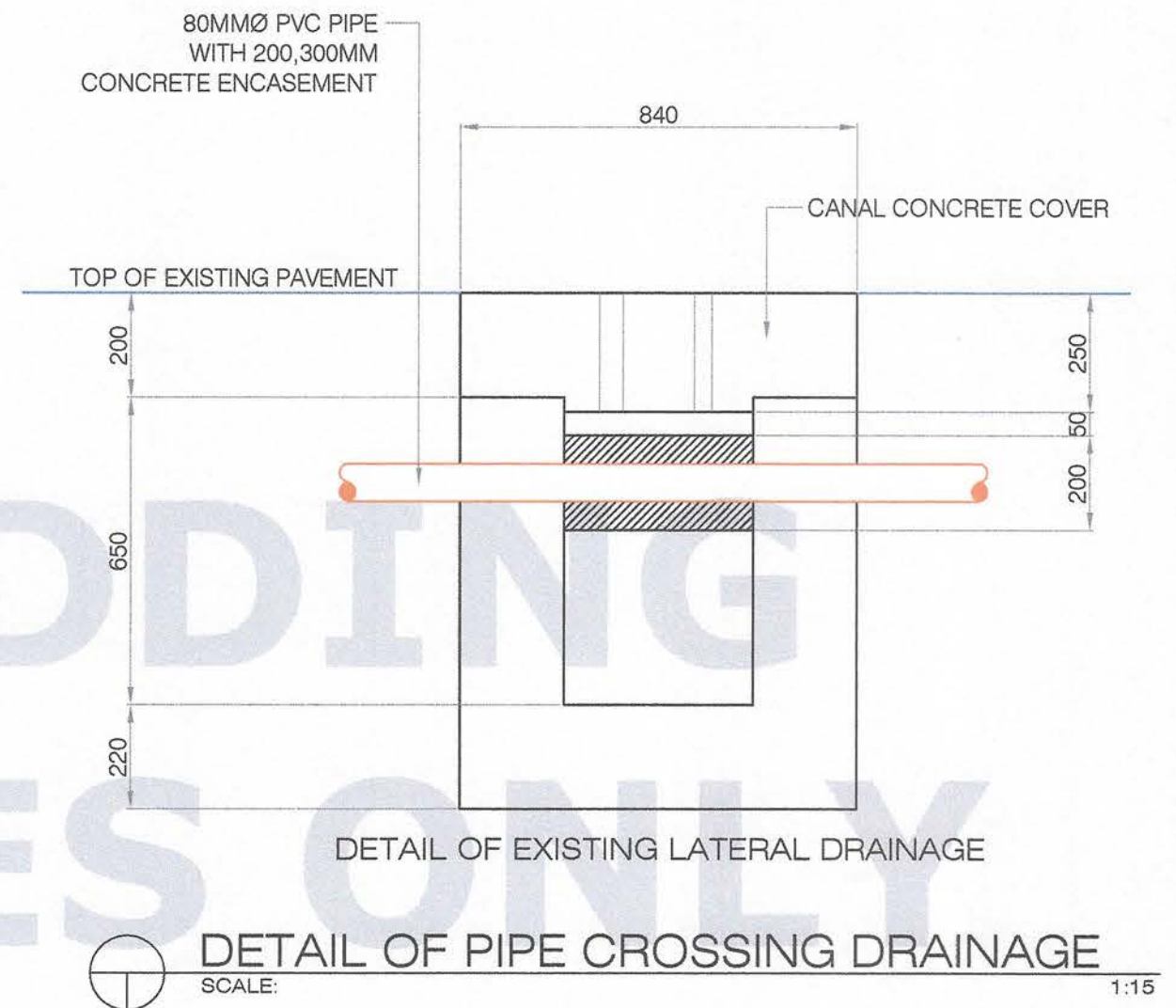
LIGHTING PLAN
LOCATION OF KILOWATT-HOUR METER

SHEET NO.

7
9

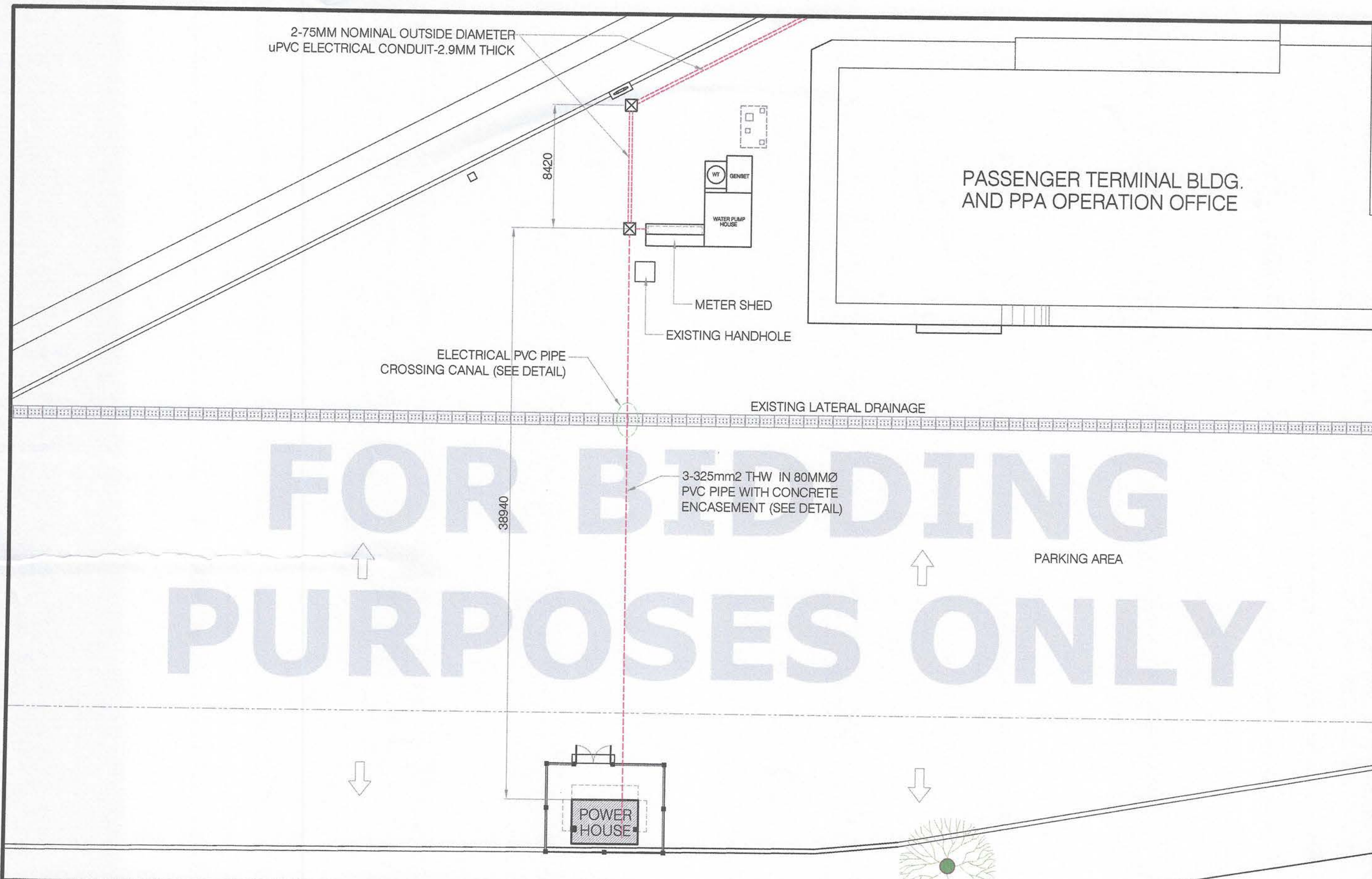


 **SCHEMATIC DIAGRAM**
SCALE: NDTs



PORT OF
CAGAYAN DE ORO
MISAMIS ORIENTAL

TITLE:		REPAIR/REWIRING OF SHORE BASED POWER SUPPLY			ELECTRICAL		SHEET NO.		
LOCATION:		PORT OF BENONI, CAMIGUIN PROVINCE			SHEET CONTENTS		<div>8</div> <div>9</div>		
PREPARED BY:		CHECKED & SUBMITTED BY:		RECOMMENDED BY:		APPROVED:		SCHEMATIC DIAGRAM DETAIL OF PIPE CROSSING DRAINAGE	
ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A		ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager		ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager			



 PORT OF CAGAYAN DE ORO MISAMIS ORIENTAL	TITLE:		REPAIR/REWIRING OF SHORE BASED POWER SUPPLY				ELECTRICAL		SHEET NO. <div>9 9</div>		
	LOCATION:		PORT OF BENONI, CAMIGUIN PROVINCE							SHEET CONTENTS	
	PREPARED BY:		CHECKED & SUBMITTED BY:		RECOMMENDED BY:		APPROVED:			LIGHTING PLAN LOCATION OF KILOWATT-HOUR METER	
	<i>ORIGINAL SIGNED</i> KAREL T. SUMICAD Engineering Assistant A		<i>ORIGINAL SIGNED</i> LEXTER-LOU V. SEVILLA Supervising Engineer A		<i>ORIGINAL SIGNED</i> CLARO SAMUEL P. FONTANILLA ESD Manager		<i>ORIGINAL SIGNED</i> ISIDRO V. BUTASLAC, JR. Port Manager				