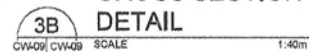




A diagram of a semi-circular arch with a central support labeled '1'.



CW-09	CW-09
-------	-------



4
CW-09 CW-09



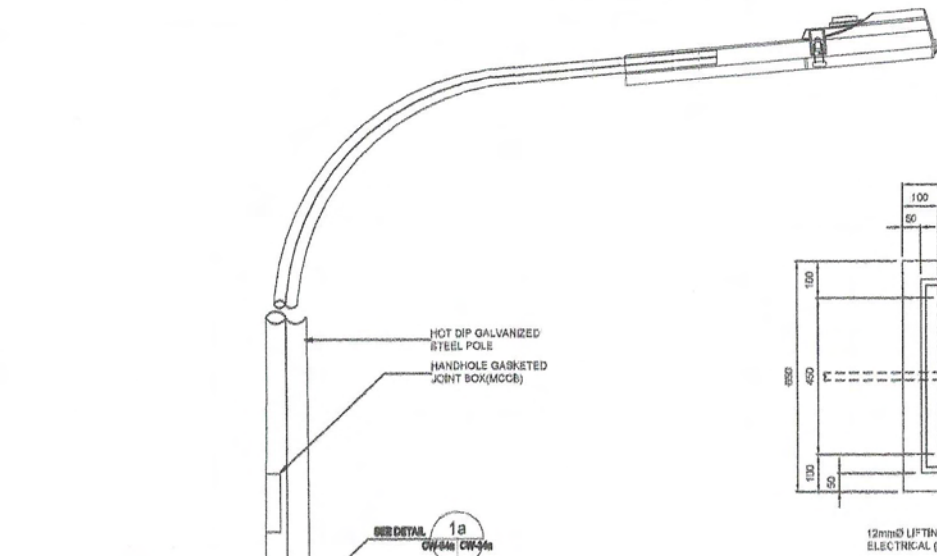
CV-09 CV-09



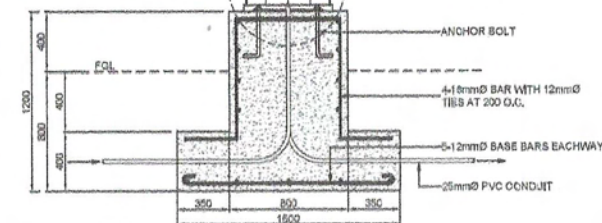
CW-09	CW-10
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SCALE 1:200

1622

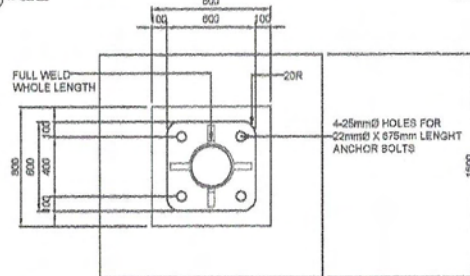


NOTES:
TYPE OF LAMP POST FOUNDATION
SHALL BE DETERMINED BY STRUCTURAL
ENGINEER TO FIT THE EXISTING
ROAD CONDITION



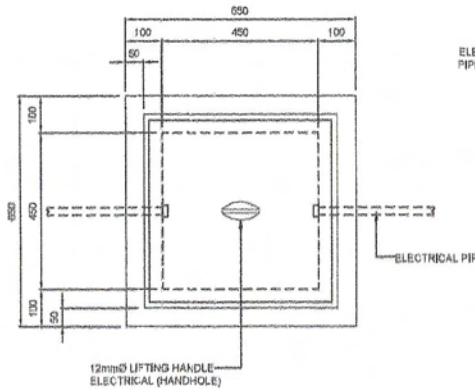
**ROADWAY LIGHTING
PEDESTAL CROSS SECTION DETAILS**

1
CW-34a CW-34a SCALE



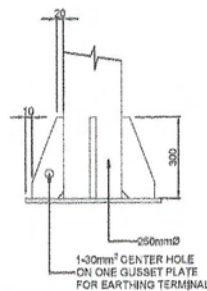
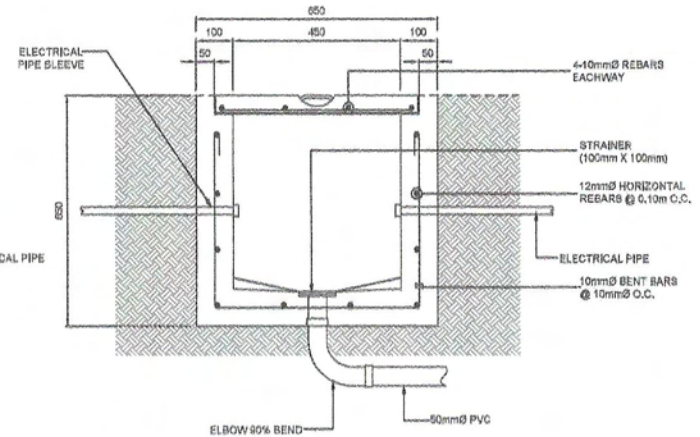
**ROADWAY LIGHTING
PEDESTAL LAYOUT PLAN**

2
CW-34a CW-34a SCALE



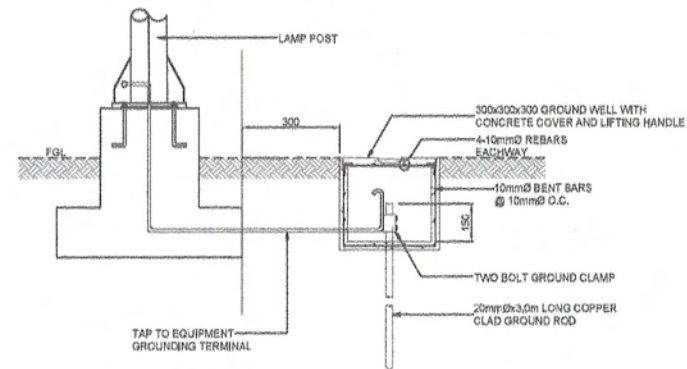
3 HANDHOLE DETAILS

CW-34a CW-34a SCALE



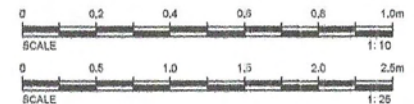
1a DETAIL

CW-34a CW-34a SCALE



**LAMP POST
GROUNDING DETAILS**

4
CW-34a CW-34a SCALE



CONSULTANT:



DESIGNED BY:

ELEAZAR C. TOBAS

PROJECT MANAGER

DATE: 05/10/2021

PLACE: MANDALAY

PREPARED BY:

MA. LOURDES M. MANATAD

PROJECT ENGINEER

SUBMITTED BY:

HENRY M. MEDINA

PROJECT ENGINEER

OWNER:



ENGR. CARLITO B. PENA

DEPARTMENT MANAGER

ATTY. GRACIELA M. BARLETA

ENERGY SUPPLY

PROJECT NAME AND LOCATION:

CONSULTANCY SERVICE FOR THE PREPARATION OF
FEASIBILITY STUDY AND DETAILED ENGINEERING
DESIGN ON THE PROPOSED DEVELOPMENT OF PNOC
ENERGY SUPPLY BASE LOCATED AT MABINI,
BATANGAS

PROPOSED PORT DEVELOPMENT
(PACKAGE CONTRACT II)

SHEET CONTENTS:

ROADWAY LIGHTING
PEDESTAL CROSS SECTION DETAILS,
ROADWAY LIGHTING PEDESTAL
LAYOUT PLAN, HANDHOLE
DETAILS AND LAMP POST
GROUNDING DETAILS

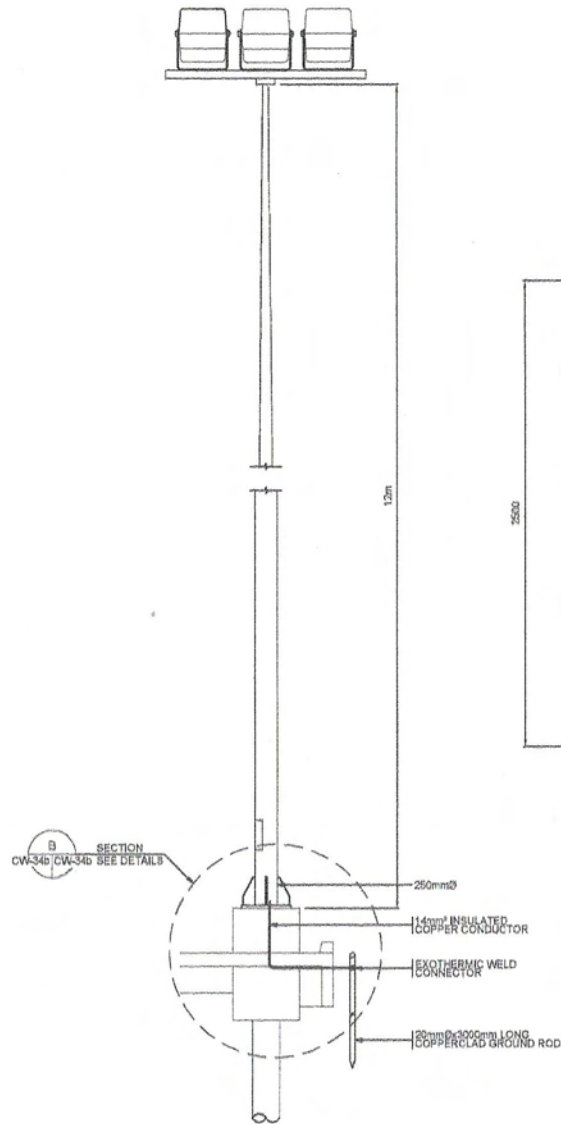
SHEET NO.

CW
34a 34

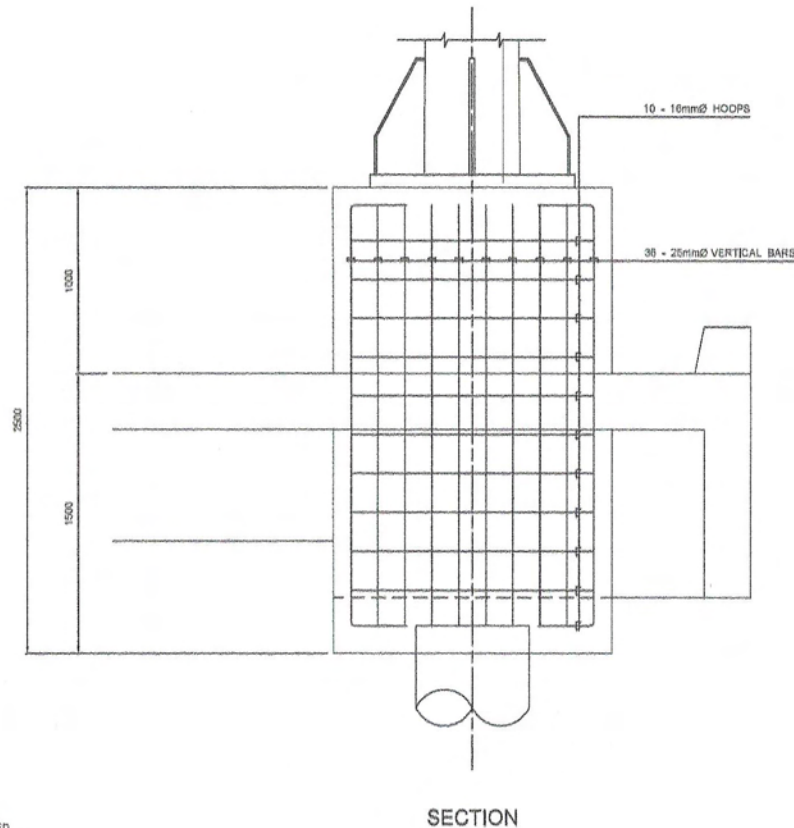
SHEET NO.

48a
63

122221

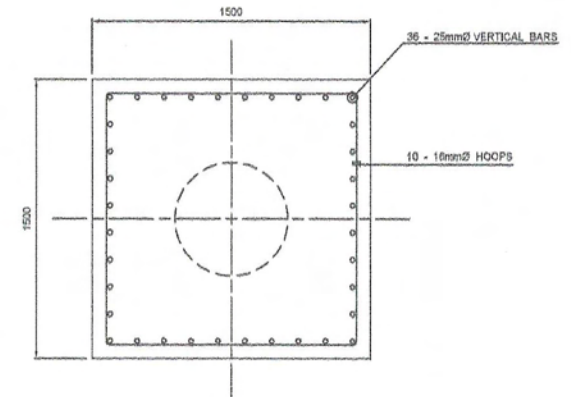


A LAMP POST HOT DIP GALVANIZED
 CW-34b/CW-34d SCALE NTS



SECTION

B DETAIL OF HIGH TOWER LAMP POST FOUNDATION
 CW-34b/CW-34d SCALE 1:20



PLAN

1 DETAILS OF T-3 & T-4 (ON PILES)
 CW-34b/CW-34d SCALE AS SHOWN



CONSULTANT:



DESIGNED BY:

ELEAZAR C. TORIAS

PRC: 810771 DATE: JAN 10/2013

PTR: 80122-RMD13 PLACE: SINGAPORE

PREPARED BY:

MA. LOURDES M. MANATAD

PROJECT TEAM LEADER

SUBMITTED BY:

HENRY M. MEDINA

PROJECT ENGINEER

OWNER:



PHILIPPINE NATIONAL OIL COMPANY

ENGR. CARLITO B. PENA

DEPARTMENT CHIEF

ATTY. GRACIELA H. BARILATA

ENERGY SUPPLY DIVISION

PROJECT NAME AND LOCATION:

CONSULTANCY SERVICE FOR THE PREPARATION OF
 FEASIBILITY STUDY AND DETAILED ENGINEERING
 DESIGN ON THE PROPOSED DEVELOPMENT OF PNOC
 ENERGY SUPPLY BASE LOCATED AT MABINI,
 BATANGASPROPOSED PORT DEVELOPMENT
 (PACKAGE CONTRACT II)

SHEET CONTENTS:

DETAILS OF T-3 & T-4 (ON PILES)

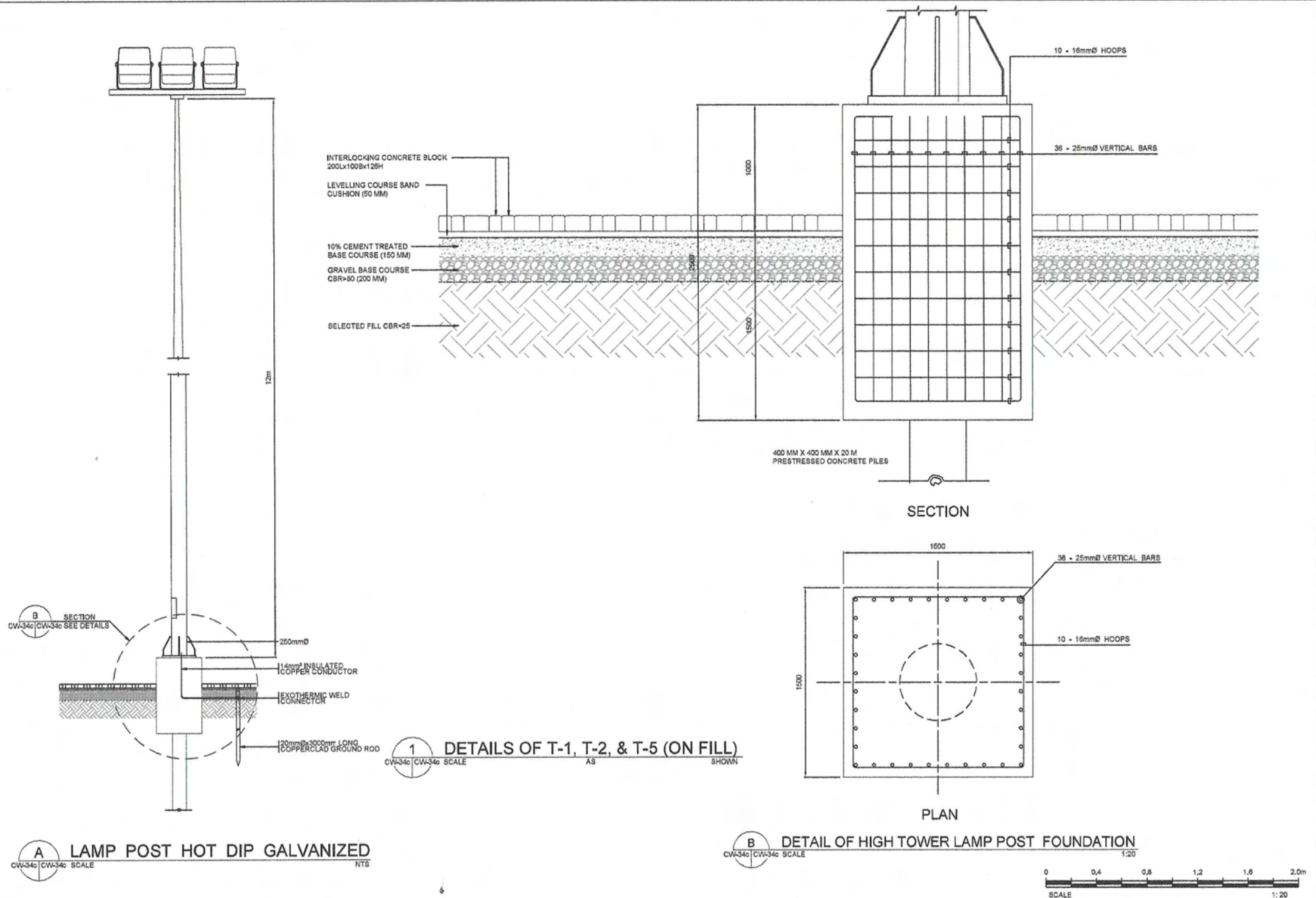
SET NO.

CW
34b 34

SHEET NO.

48b
63

1/6/2021



CONSULTANT:



DESIGNED BY:

ELBAZAR G. TOBIAS

PRJ: 118711

DATE: 05/1/2011

PTR: 00127 044913

PLACE SHOWN: DRY

PREPARED BY:

MA. LOURDES M. MANATAD

PROJECT TEAM LEADER

SUBMITTED BY:

HENRY M. MEDINA

PROJECT MANAGER

OWNER:



ENGR. CARLITO S. PENA

DEPARTMENT MANAGER

ATTY. GRACIELA M. BARLETA

ENERGY PROJECTS
ENERGY SERVICES

PROJECT NAME AND LOCATION:

CONSULTANCY SERVICE FOR THE PREPARATION OF
FEASIBILITY STUDY AND DETAILED ENGINEERING
DESIGN ON THE PROPOSED DEVELOPMENT OF PNOC
ENERGY SUPPLY BASE LOCATED AT MASIN,
BATANGAS

PROPOSED PORT DEVELOPMENT
(PACKAGE CONTRACT B)

SHEET CONTENTS:

DETAILS OF T-1, T-2, & T-5 (ON FILL)

SET NO.

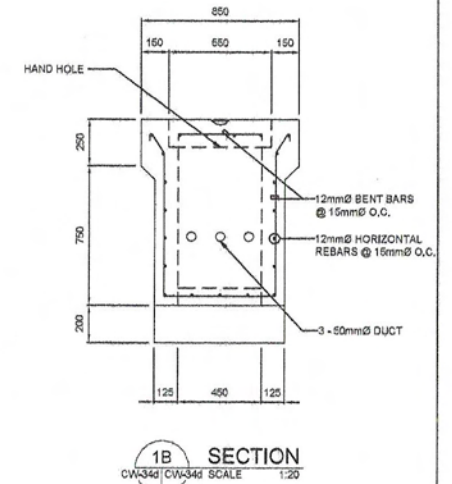
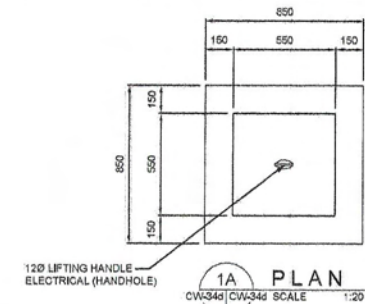
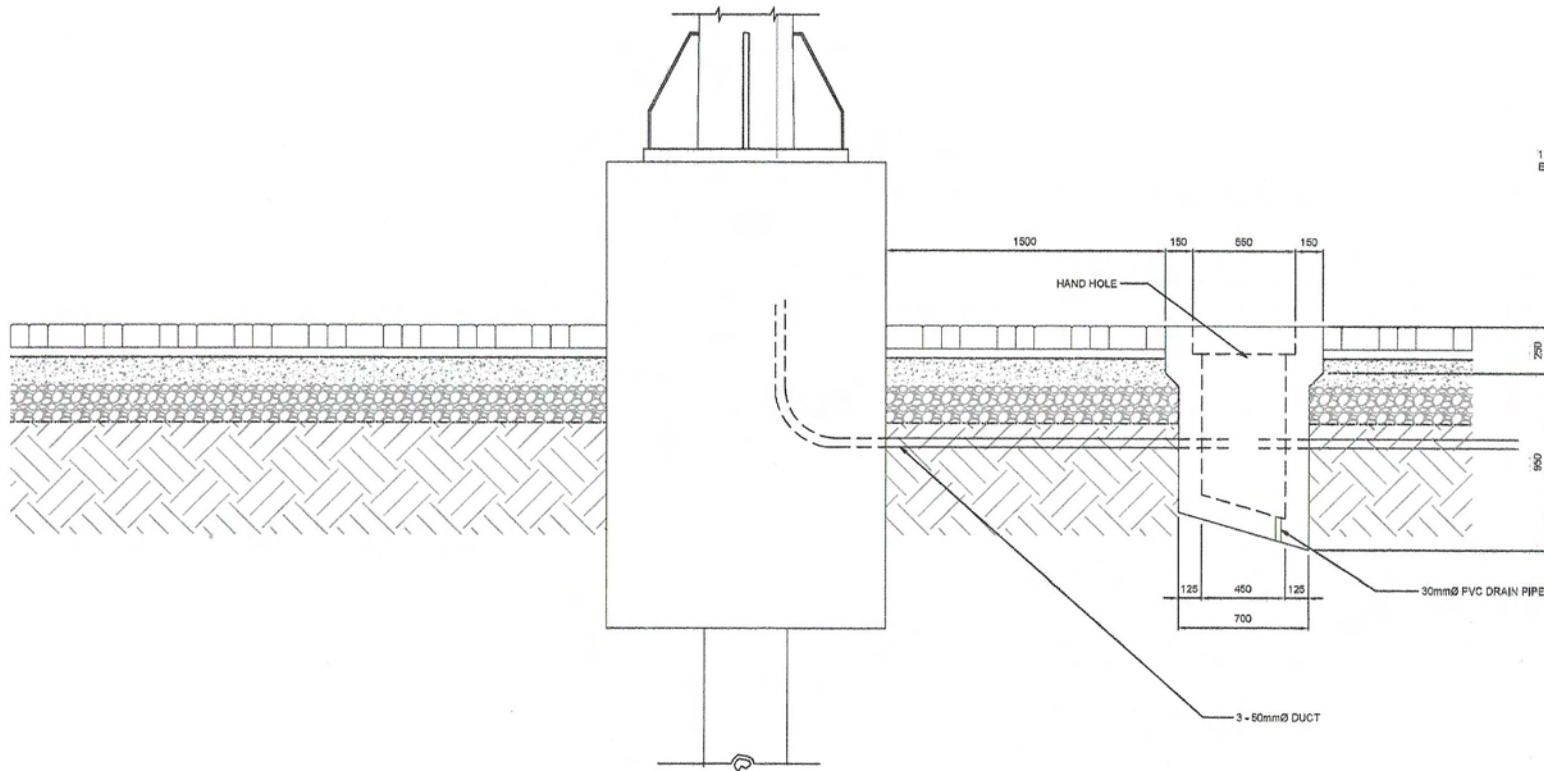
CW

34c 34

SHEET NO.



48c

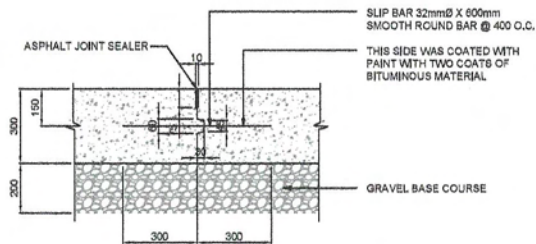
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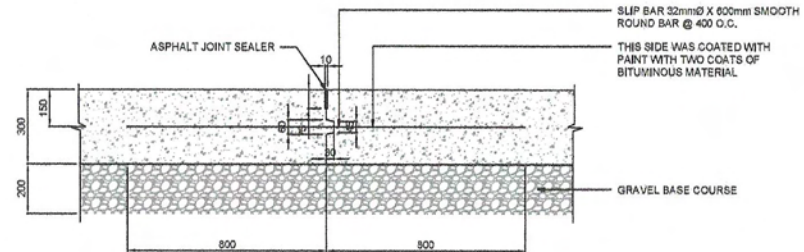
1 DETAIL OF DUCT BANK
CW-34d SCALE 1:20



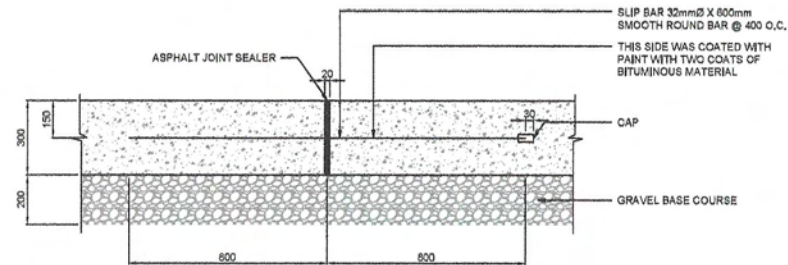
CONSULTANT:				OWNER:			PROJECT NAME AND LOCATION:		SHEET CONTENTS:		SHEET NO.	SHEET NO.
							CONSULTANCY SERVICE FOR THE PREPARATION OF FEASIBILITY STUDY AND DETAILED ENGINEERING DESIGN ON THE PROPOSED DEVELOPMENT OF PNOC ENERGY SUPPLY BASE LOCATED AT NABINI, BATANGAS		DETAIL OF DUCT BANK		<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center;"> CW 34d </div>	<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center;"> 48d 63 </div>
DESIGNED BY: <u>ELIAZAR C. TORRES</u> STRUCTURAL ENGINEER P.E. 010779 DATE: 04/10/2021 P.T.R. 0010P 044115 PLACE: 040400 GRY				PREPARED BY: <u>MA. LOURDES M. MANATAD</u> PROJECT TEAM LEADER SUBMITTED BY: <u>HENRY M. MEDINA</u> PROJECT ENGINEER			ENGR. CARLITO B. PENA DEPARTMENT ENGINEER ATTY. GRACIELA M. BARIETA SENIOR TEST PRESIDENT ENERGY BUSINESS		PROPOSED PORT DEVELOPMENT (PACKAGE CONTRACT II)			



1A TRANSVERSE JOINT
CW-34e SCALE 1:150



1B LONGITUDINAL JOINT
CW-34e SCALE 1:150





1C EXPANSION JOINT
CW-34e SCALE 1:150

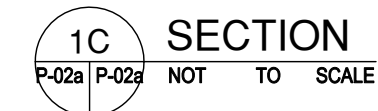
1 TYPICAL EXPANSION JOINT DETAILS
CW-34e SCALE 1:150

NOTE: ALL DIMENSIONS ARE IN MILLIMETER



CONSULTANT:				OWNER:			PROJECT NAME AND LOCATION:	SHEET CONTENTS:	SET NO.	SHEET NO.
 WOODFIELDS CONSULTANTS, INC. <i>A Planning and Engineering Consulting Firm</i>				 PHILIPPINE NATIONAL OIL COMPANY PNOC			CONSULTANCY SERVICE FOR THE PREPARATION OF FEASIBILITY STUDY AND DETAILED ENGINEERING DESIGN ON THE PROPOSED DEVELOPMENT OF PNOC ENERGY SUPPLY BASE LOCATED AT MABINI, BATANGAS	TYPICAL EXPANSION JOINT DETAILS	CW 34e 34	48e 63
DESIGNED BY: ELBAZAR C. TORRES STRUCTURAL ENGINEER DATE: 08/10/2021 CHECKED BY: MA. LOURDES M. MANATAD PROJECT LEADER PLACE: BAGUIO CITY				PREPARED BY: HENRY M. MEDINA PROJECT ENGINEER SUBMITTED BY: ENGR. CARLITO B. PENA DEPARTMENT ENGINEER ATTY. GRACIELA M. BARLETA SENIOR VICE PRESIDENT ENERGY BUSINESS			PROPOSED FORT DEVELOPMENT (PACKAGE CONTRACT B)			

1/6222





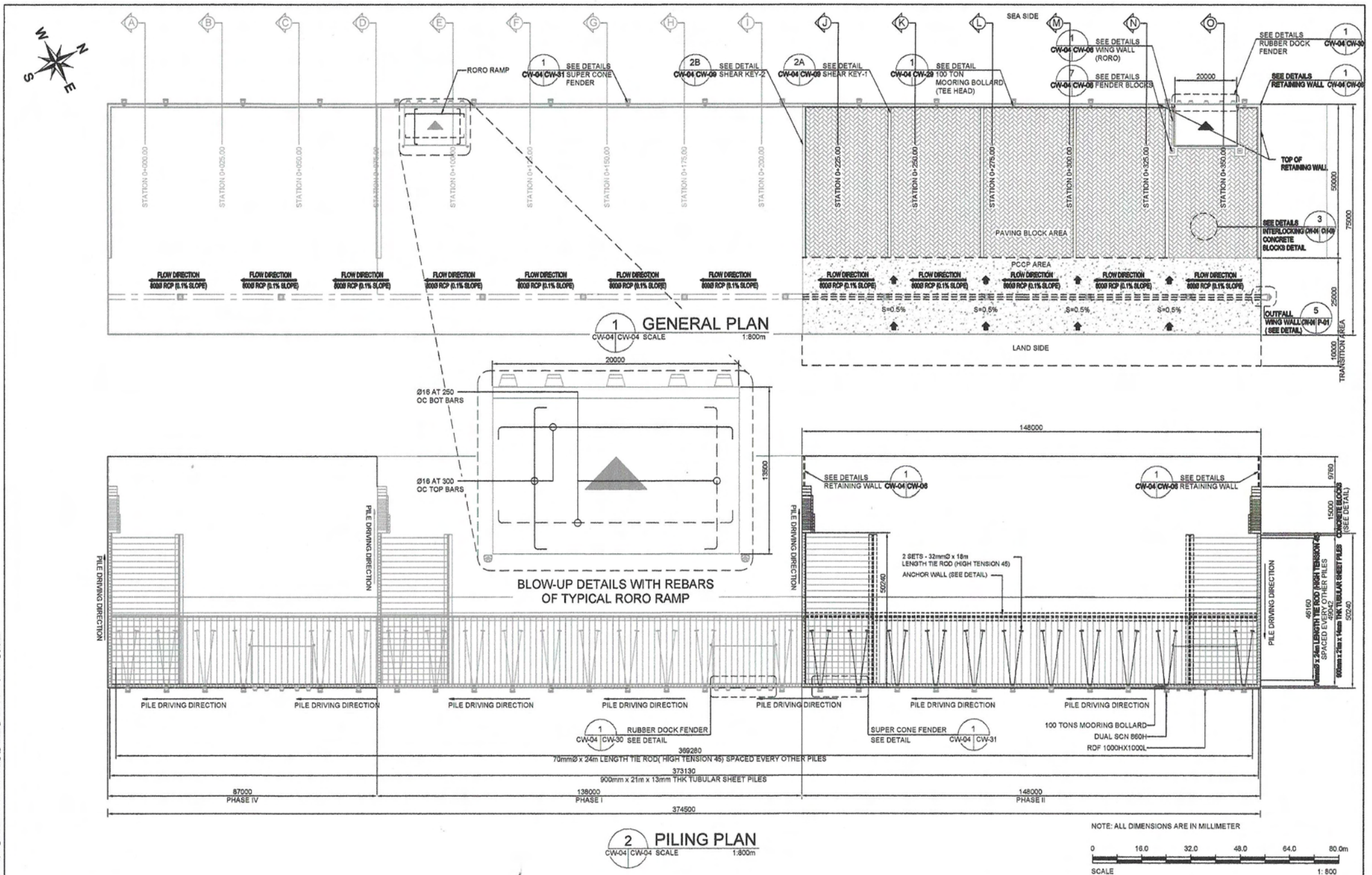
- # FIRE HYDRANT PROTECTION DETAIL



- [illegible]

- 3 100mm FIRE HYDRANT INSTALLATION

CONSULTANT:				OWNER:			PROJECT NAME AND LOCATION:	SHEET CONTENTS:	SET NO.	SHEET NO.
<div><div><div>WOODFIELDS</div><div>CONSULTANTS, INC.</div><div><small>A Planning and Engineering Consulting Firm</small></div></div></div>	DESIGNED BY:	PREPARED BY:	SUBMITTED BY:	<div><div><div>PHILIPPINE NATIONAL</div><div>OIL COMPANY</div><div>PNOC</div><div><small>Philippine National Oil Company</small></div></div></div>	<div><div>ENGR. CARLITO B. PENA</div><div>DEPARTMENT MANAGER</div></div>	<div><div>ATTY. GRACIELA M. BARLETA</div><div>SENIOR VICE PRESIDENT, ENERGY BUSINESS</div></div>	CONSULTANCY SERVICE FOR THE PREPARATION OF FEASIBILITY STUDY AND DETAILED ENGINEERING DESIGN ON THE PROPOSED DEVELOPMENT OF PNOC ENERGY SUPPLY BASE LOCATED AT MABINI, BATANGAS	100mmØ STAND PIPE, FIRE HYDRANT INSTALLATION AND FIRE HYDRANT PROTECTION DETAIL	<div><div>P</div><div>02a06</div></div>	<div><div>50a</div><div>63</div></div>
	PRC: SE 01051	DATE: 01/25/2021								
	PTB: 6349790	PL/CF: 01/EZOM/CITY								



CONSULTANT:



DESIGNED BY:

ELIAZAR C. TOBIAS

PRG: 019715
PTR: BOSTP 0448113DATE: 06/10/2023
PLACE: SAGUO CITY

PREPARED BY:

MA. LOURDES M. MANATAD
PROJECT TEAM LEADER

SUBMITTED BY:

HENRY M. MEDINA
PROJECT MANAGER

OWNER:

ENGR. CARLITO B. PEÑA
SENIOR VICE PRESIDENT
ENGR. 0-314533ATTY. GRACIELA M. BARLETA
SENIOR VICE PRESIDENT
ENGR. 0-314533

PROJECT NAME AND LOCATION:

CONSULTANCY SERVICE FOR THE PREPARATION OF
FEASIBILITY STUDY AND DETAILED ENGINEERING
DESIGN ON THE PROPOSED DEVELOPMENT OF PNOC
ENERGY SUPPLY BASE LOCATED AT MABINI,
BATANGASPROPOSED PORT DEVELOPMENT
(PACKAGE CONTRACT II)

SHEET CONTENTS:

PHASE II GENERAL PLAN
AND PILING PLAN

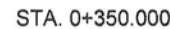
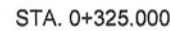
SET NO.

CW
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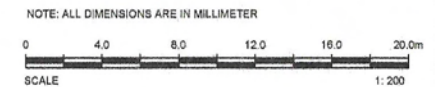
SHEET NO.

18
63

11/2/2023



1 (S⁺)
CW-13 CW-13 SCAL



11/6222