

**PROPOSED DEVELOPMENT:**

- ① CAUSEWAY (90M X 3M)
- ② CONCRETE STAIRLANDINGS (2-UNITS, 20M EACH) WITH MOORING CLEATS (8 sets)



**LIST OF DRAWINGS:**

- 1 OF 7 DEVELOPMENT PLAN, VICINITY MAP, GENERAL NOTES & SHEET CONTENTS
- 2 OF 7 GENERAL PLANS OF ROCK CAUSEWAY WITH STAIRLANDING
- 3 OF 7 SECTIONAL ELEVATIONS: STA. 0+001, STA. 0+010, STA. 0+020, STA. 0+030, STA. 0+040, STA. 0+050, STA. 0+060, STA. 0+070
- 4 OF 7 SECTIONAL ELEVATIONS: STA. 0+080, STA. 0+090 & SECTION A-A
- 5 OF 7 LAYOUT OF SLOTTED R.C. CURB, TYPICAL REINFORCEMENT OF MOORING CLEAT, DETAIL OF R.C. CURB, DETAIL OF PAVEMENT JOINT & DETAIL OF STAIRLANDING
- 6 OF 7 PAVEMENT JOINT LAYOUT & DRAINAGE LAYOUT PLAN
- 7 OF 7 HYDROGRAPHIC AND TOPOGRAPHIC SURVEY

**GENERAL NOTES :**

ALL DIMENSIONS ARE IN MILLIMETER AND ELEVATIONS ARE IN METERS BASED FROM MLLW ELEV. 0.00 UNLESS OTHERWISE SPECIFIED.

VERIFY ALL NEEDED DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES IN THE FIELD.

CONCRETE TO BE USED SHALL BE 24 MPa (3,500 psi) UNLESS OTHERWISE SPECIFIED.

ROCKS TO BE USED SHALL HAVE A MINIMUM SPECIFIC GRAVITY OF 2.65, ANGULAR IN SHAPE, HARD, DURABLE AND WILL NOT EASILY DISINTEGRATE UNDER LONG EXPOSURE TO SEA WATER.

ALL STRUCTURAL STEEL SHALL BE ASTM A-36 OR JIS 3101.

**DEVELOPMENT PLAN**  
SCALE 1:400

**PROJECT TITLE:** SAN JOSE PORT DEVELOPMENT PROJECT  
PORT OF SAN JOSE

**PREPARED BY:** CHRISTOPHER H. ORNUM  
Professional Engineer A

**CHECKED BY:** JOVENIO C. PALINAG  
Div. Mgr. PIAD

**NOTED BY:** ROLANDO T. QUERUBIN  
Div. Mgr. DEED

**RECOMMENDED BY:** REYNAND C. PARAFINA  
Manager, PPDD

**APPROVED:** COMPTON T. PARINAS JR.  
Asst. Conf. Manager - EO

**SHEET CONTENTS:**

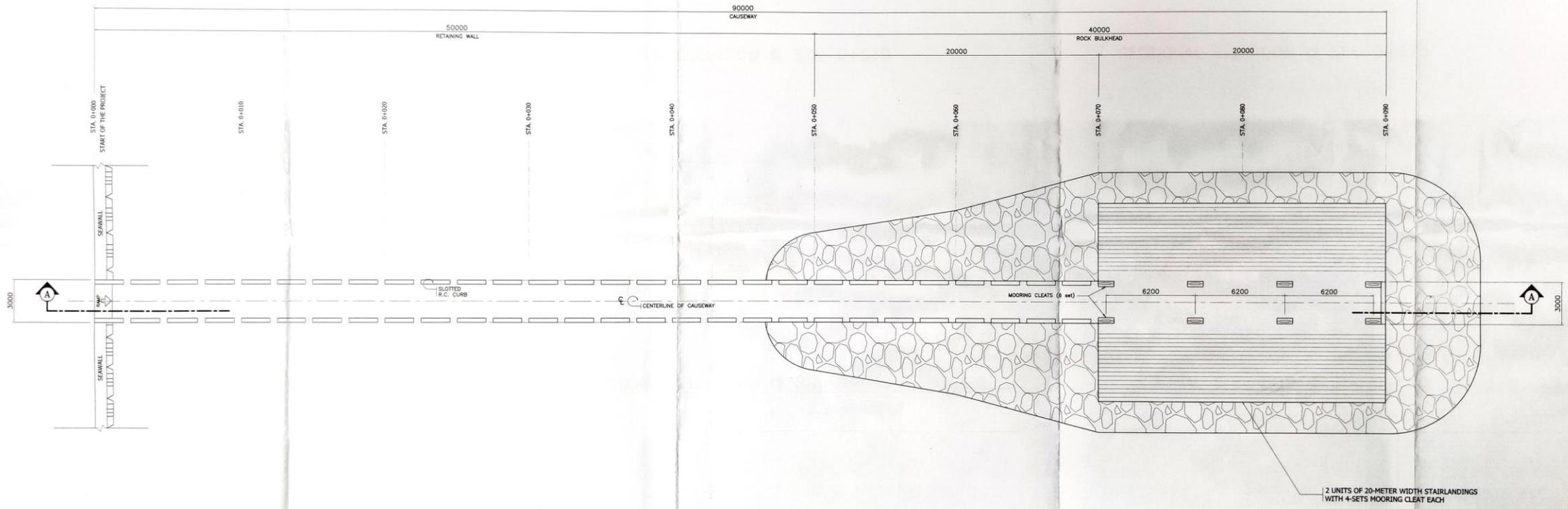
- DEVELOPMENT PLAN
- VICINITY MAP
- GENERAL NOTES
- SHEET CONTENTS

**SCALE:** AS SHOWN

**SHEET NO.:** 1 OF 7

**DATE:** NOVEMBER 2018

**PHILIPPINE PORTS AUTHORITY**



GENERAL PLAN OF ROCK CAUSEWAY WITH STAIRLANDING

SCALE

1:125



PHILIPPINE  
PORTS  
AUTHORITY

PREPARED BY:  
CHRISTOPHER H. DRANLUM,  
Principal Engineer - A

CHECKED BY:  
JOVENCIO C. PALINAG  
Div. Mgr. - PIAD

NOTED BY:  
ROLANDO T. QUERUBIN  
Div. Mgr. - DEED

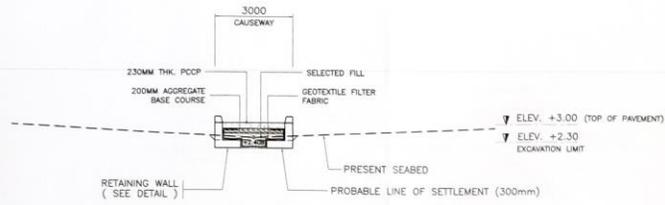
RECOMMENDED BY:  
REYNARD C. KARAFINA  
Manager - PRDD

APPROVED:  
EDUARDO T. FARINAS JR.  
Asst. 66m Manager - EO

PROJECT TITLE  
SAN JOSE PORT DEVELOPMENT PROJECT  
PORT OF SAN JOSE  
PALLAN, OCCIDENTAL MINDORO

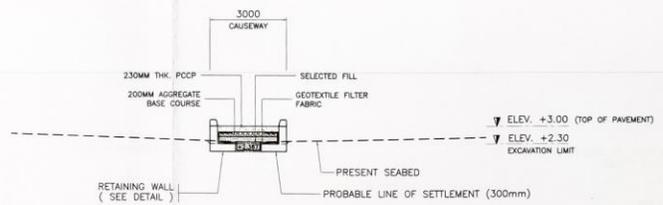
SHEET CONTENTS:  
• GENERAL PLAN OF ROCK CAUSEWAY  
WITH STAIRLANDING

SCALE: AS SHOWN  
SHEET NO.: 2 OF 7  
DATE: NOVEMBER 2018



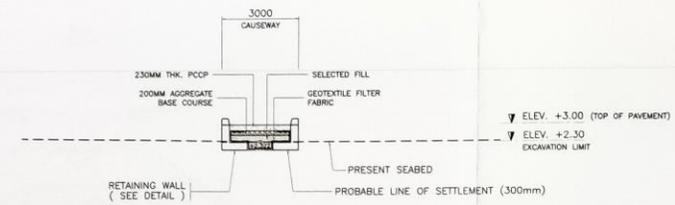
SECTIONAL ELEVATION @ STA. 0+001

SCALE 1 : 100



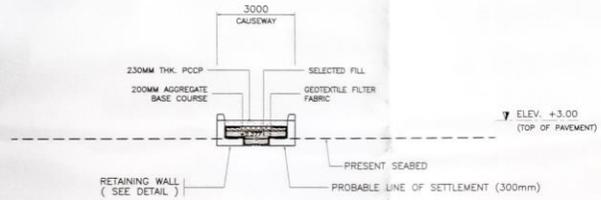
SECTIONAL ELEVATION @ STA. 0+010

SCALE 1 : 100



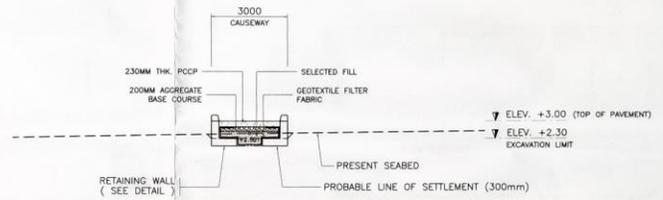
SECTIONAL ELEVATION @ STA. 0+020

SCALE 1 : 100



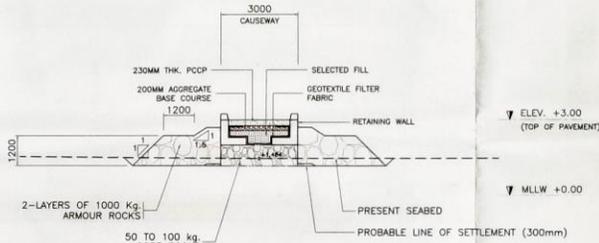
SECTIONAL ELEVATION @ STA. 0+030

SCALE 1 : 100



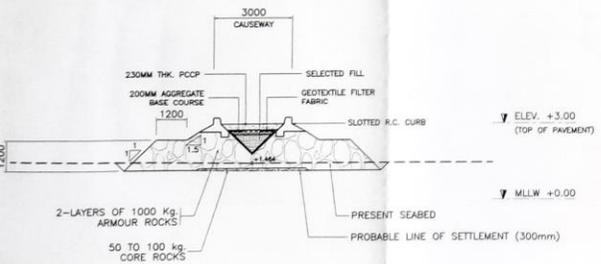
SECTIONAL ELEVATION @ STA. 0+040

SCALE 1 : 100



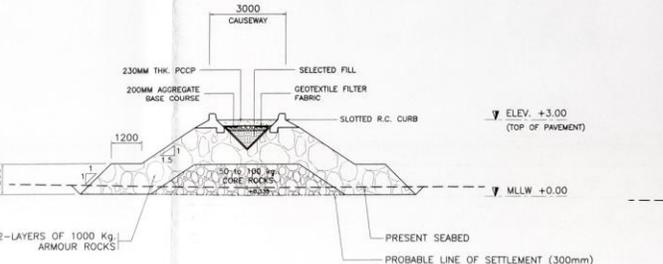
SECTIONAL ELEVATION @ STA. 0+050'

SCALE 1 : 100



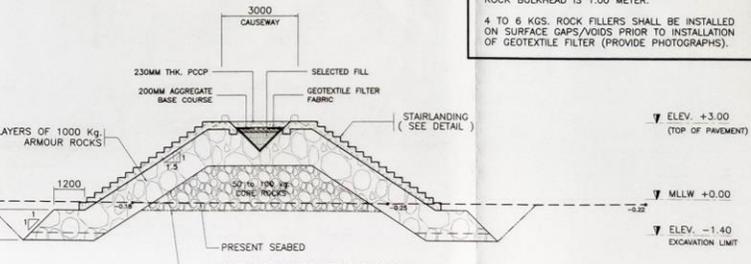
SECTIONAL ELEVATION @ STA. 0+050

SCALE 1 : 100



SECTIONAL ELEVATION @ STA. 0+060

SCALE 1 : 100



SECTIONAL ELEVATION @ STA. 0+070

SCALE 1 : 100

NOTES :  
 MINIMUM EXTENSION LENGTH OF GEOTEXTILE FILTER FABRIC BEYOND THE EDGE OF THE ROCK BULKHEAD IS 1.00 METER.  
 4 TO 6 KGS. ROCK FILLERS SHALL BE INSTALLED ON SURFACE GAPS/VOIDS PRIOR TO INSTALLATION OF GEOTEXTILE FILTER (PROVIDE PHOTOGRAPHS).

PROJECT TITLE: **SAN JOSE PORT DEVELOPMENT PROJECT**  
 PORT OF SAN JOSE  
 PALLAN, OCCIDENTAL MINDORO

SHEET CONTENTS:  
 GENERAL PLAN OF ROCK CAUSEWAY WITH STAIRLANDING

SCALE: AS SHOWN  
 SHEET NO.: 3 OF 7  
 DATE: NOVEMBER 2018

APPROVED BY: *[Signature]*  
 CONSTANCE T. PARINAS JR.  
 Asst. Chm. Manager - EO

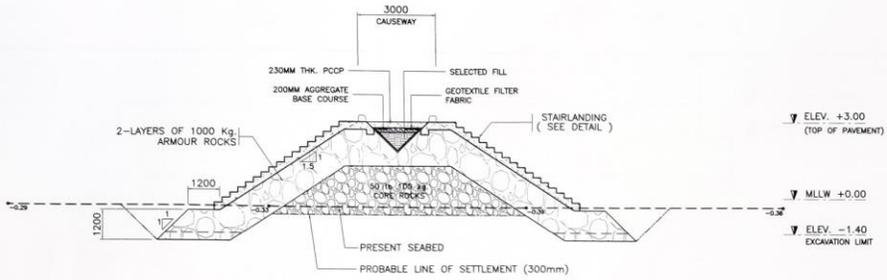
RECOMMENDED BY: *[Signature]*  
 REYNALDO P. PAFAFINA  
 Manager - PPDD

NOTED BY: *[Signature]*  
 ROLANDO T. QUERUBIN  
 Div. Mgr. DED

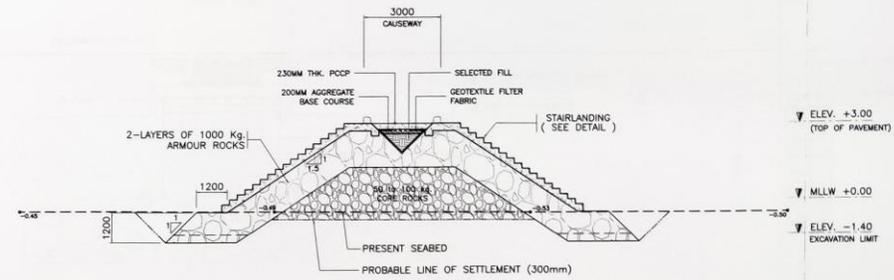
CHECKED BY: *[Signature]*  
 JOVENIO C. PAJINAG  
 Div. Mgr. PIAD

PREPARED BY: *[Signature]*  
 CHRISTOPHER ORNUM  
 Principal Engineer - A

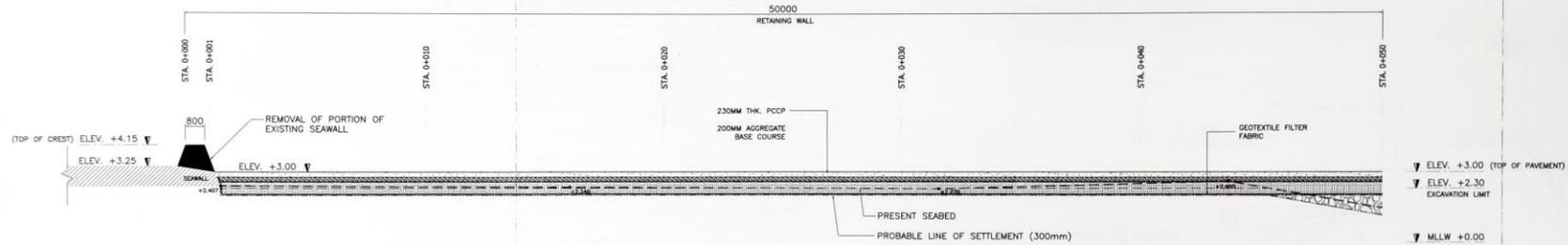
PHILIPPINE PORTS AUTHORITY



SECTIONAL ELEVATION @ STA. 0+080  
SCALE 1 : 100



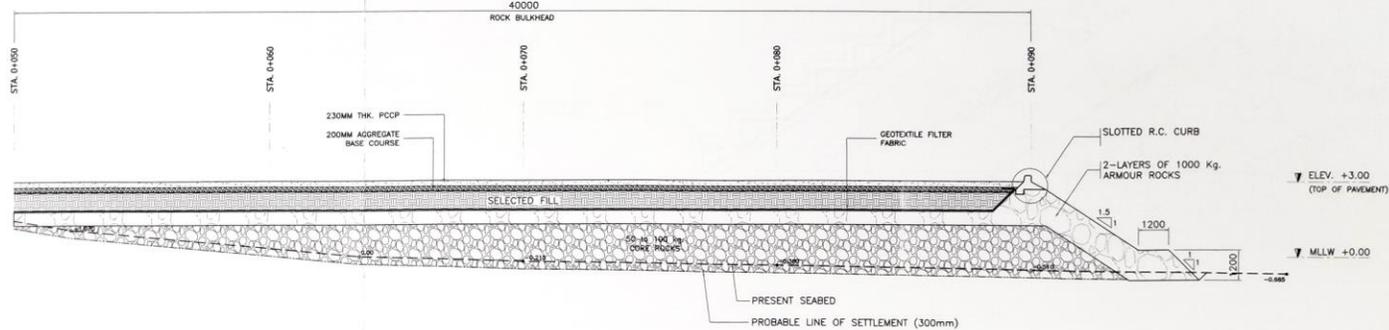
SECTIONAL ELEVATION @ STA. 0+090  
SCALE 1 : 100



NOTES :

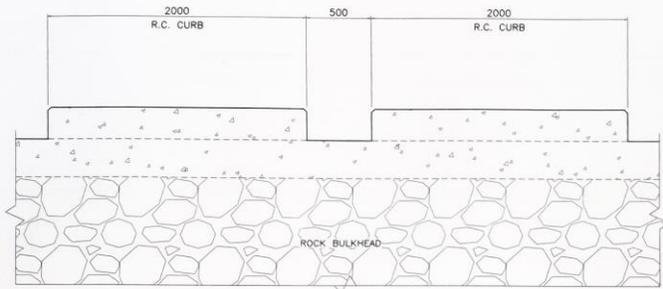
MINIMUM EXTENSION LENGTH OF GEOTEXTILE FILTER FABRIC BEYOND THE EDGE OF THE ROCK BULKHEAD IS 1.00 METER.

4 TO 6 KGS. ROCK FILLERS SHALL BE INSTALLED ON SURFACE GAPS/VOIDS PRIOR TO INSTALLATION OF GEOTEXTILE FILTER (PROVIDE PHOTOGRAPHS).



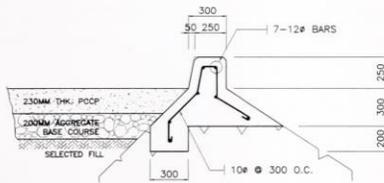
SECTION A-A  
SCALE 1 : 100

 PHILIPPINE PORTS AUTHORITY	PROJECT TITLE <b>SAN JOSE PORT DEVELOPMENT PROJECT</b> PORT OF SAN JOSE PALLAN, OCCIDENTAL MINDORO	SHEET CONTENTS: SECTIONAL ELEVATIONS @ STA. 0+080 @ STA. 0+090 SECTION A-A	SCALE: AS SHOWN
	PREPARED BY: CHRISTOPHER ORNILM Professional Engineer A	CHECKED BY: JOVENIO C. PALINAG Div. Mgr. PIAD	NOTED BY: ROLANDO T. QUERUBIN Div. Mgr. DED
APPROVED BY: REYMOND P. PARAFINA Manager, PPDD	RECOMMENDED BY: R.P. PARAFINA Manager, PPDD	APPROVED: CONSTANTE Y. PARINAS JR. Asst. Gen. Manager - EO	DATE: NOVEMBER 2018

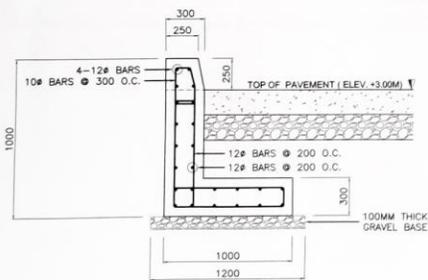


FRONT ELEVATION

LAYOUT OF SLOTTED R.C. CURB  
SCALE 1 : 20

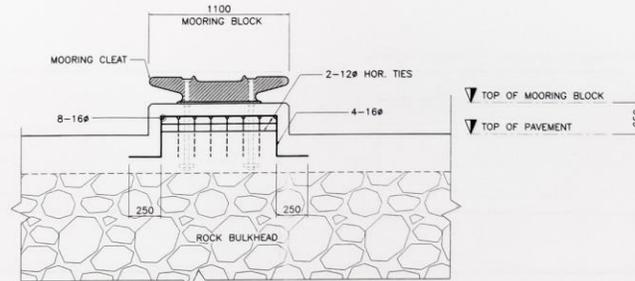


DETAIL OF R.C. CURB @ ROCK BULKHEAD  
SCALE 1 : 20



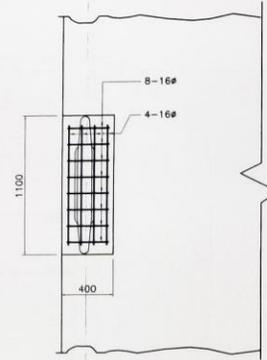
DETAIL OF RETAINING WALL  
SCALE 1 : 20

TOP OF R.C. CURB  
TOP OF PAVEMENT

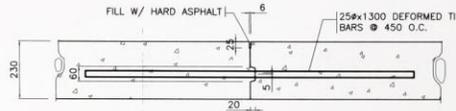


FRONT ELEVATION

TYPICAL REINFORCEMENT OF MOORING CLEAT  
SCALE 1 : 20



PLAN

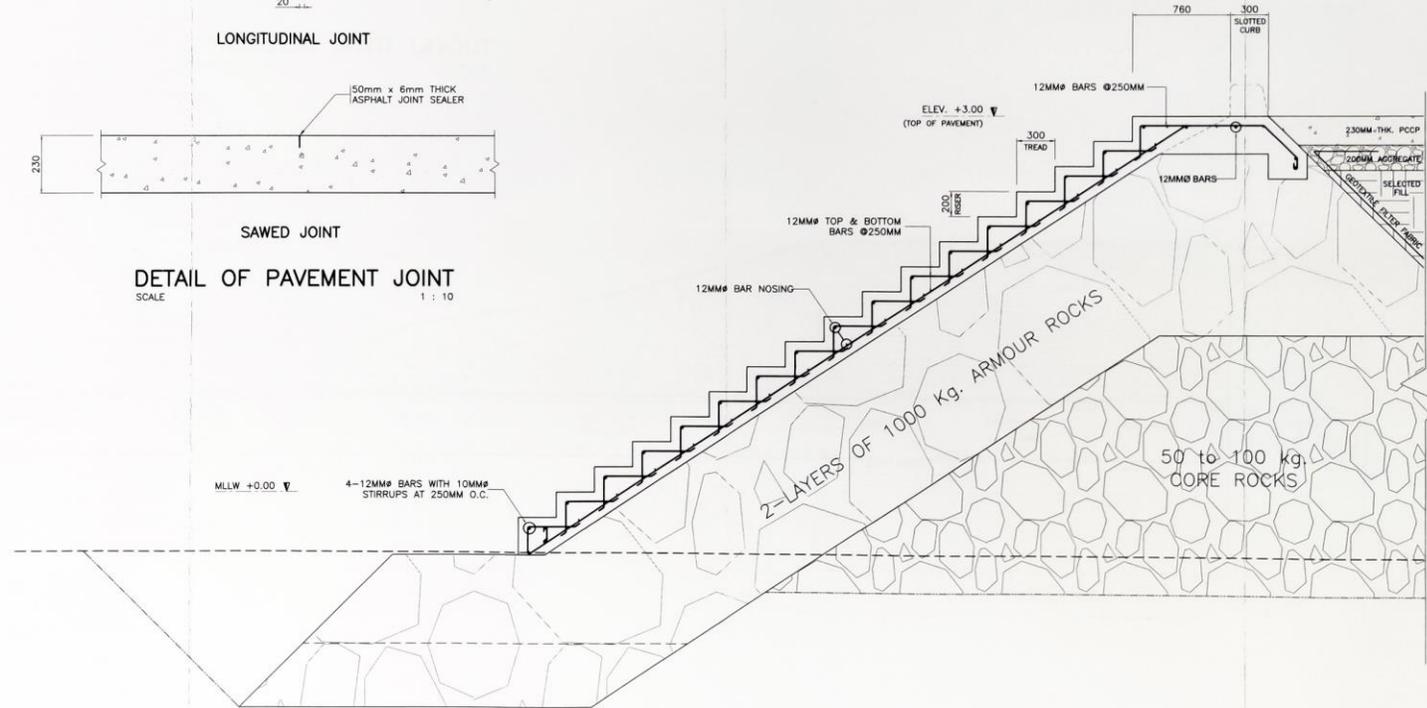


LONGITUDINAL JOINT



SAWED JOINT

DETAIL OF PAVEMENT JOINT  
SCALE 1 : 10



DETAIL OF STAIRLANDING  
SCALE 1 : 20

SCALE: AS SHOWN  
SHEET NO.: 5 OF 7  
DATE: NOVEMBER 2018

SHEET CONTENTS:  
• LAYOUT OF SLOTTED R.C. CURB  
• TYPICAL REINFORCEMENT OF MOORING CLEAT  
• DETAIL OF R.C. CURB  
• DETAIL OF RETAINING WALL  
• DETAIL OF STAIRLANDING

APPROVED:  
CONSTANTINE FARINAS JR.  
Asst. Gen. Manager - EO

RECOMMENDED BY:  
REYNARD PARAFINA  
Manager - PPDD

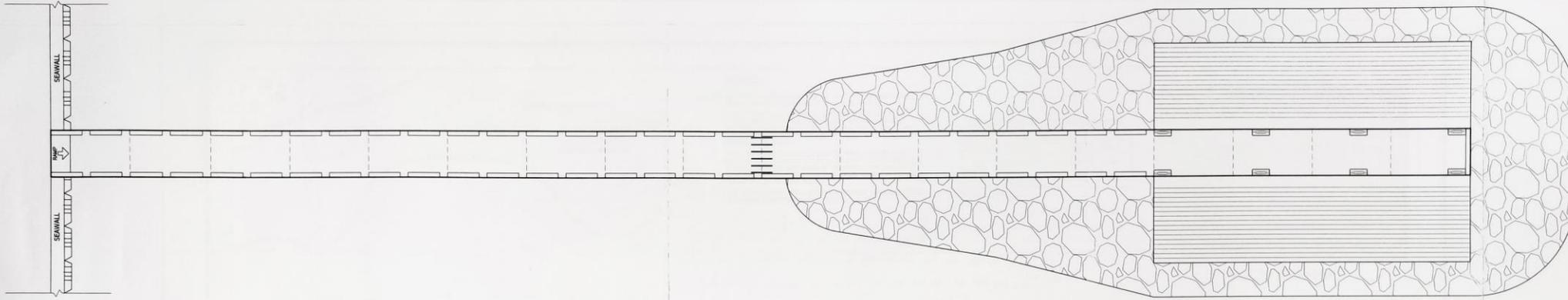
NOTED BY:  
ROLANDO T. QUERUBIN  
Div. Mgr. DED

CHECKED BY:  
JOVENIO C. PAJINAG  
Div. Mgr. PAD

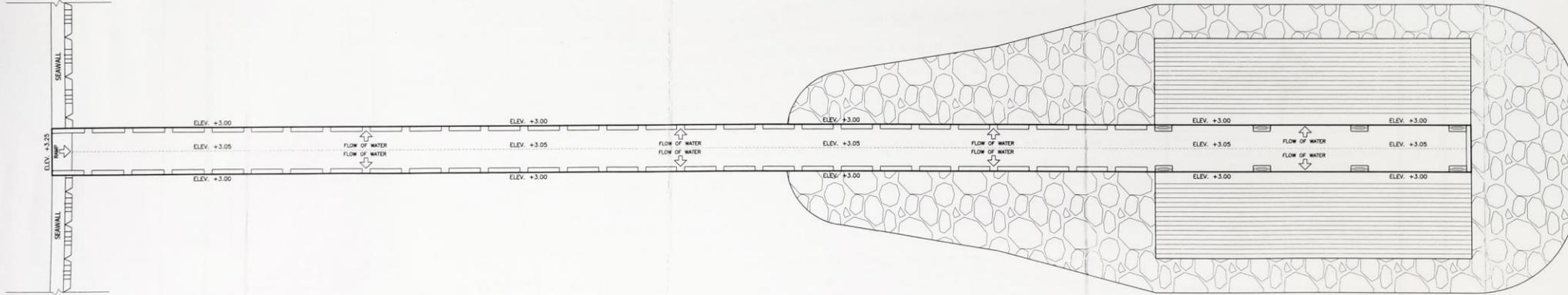
PREPARED BY:  
CHRISTOPHER H. ORNUM,  
Principal Engineer A

PROJECT TITLE:  
SAN JOSE PORT DEVELOPMENT PROJECT  
PORT OF SAN JOSE  
PALLAN, OCCIDENTAL MINDORO





PAVEMENT JOINT LAYOUT  
SCALE 1:125



DRAINAGE LAYOUT PLAN  
SCALE 1:125



PROJECT TITLE:  
PORT OF SAN JOSE

PREPARED BY:  
CHRISTOPHER H. ORNLUM  
Principal Engineer A

CHECKED BY:  
JOVENICO C. PAJINAG  
Div. Mgr. PMAD

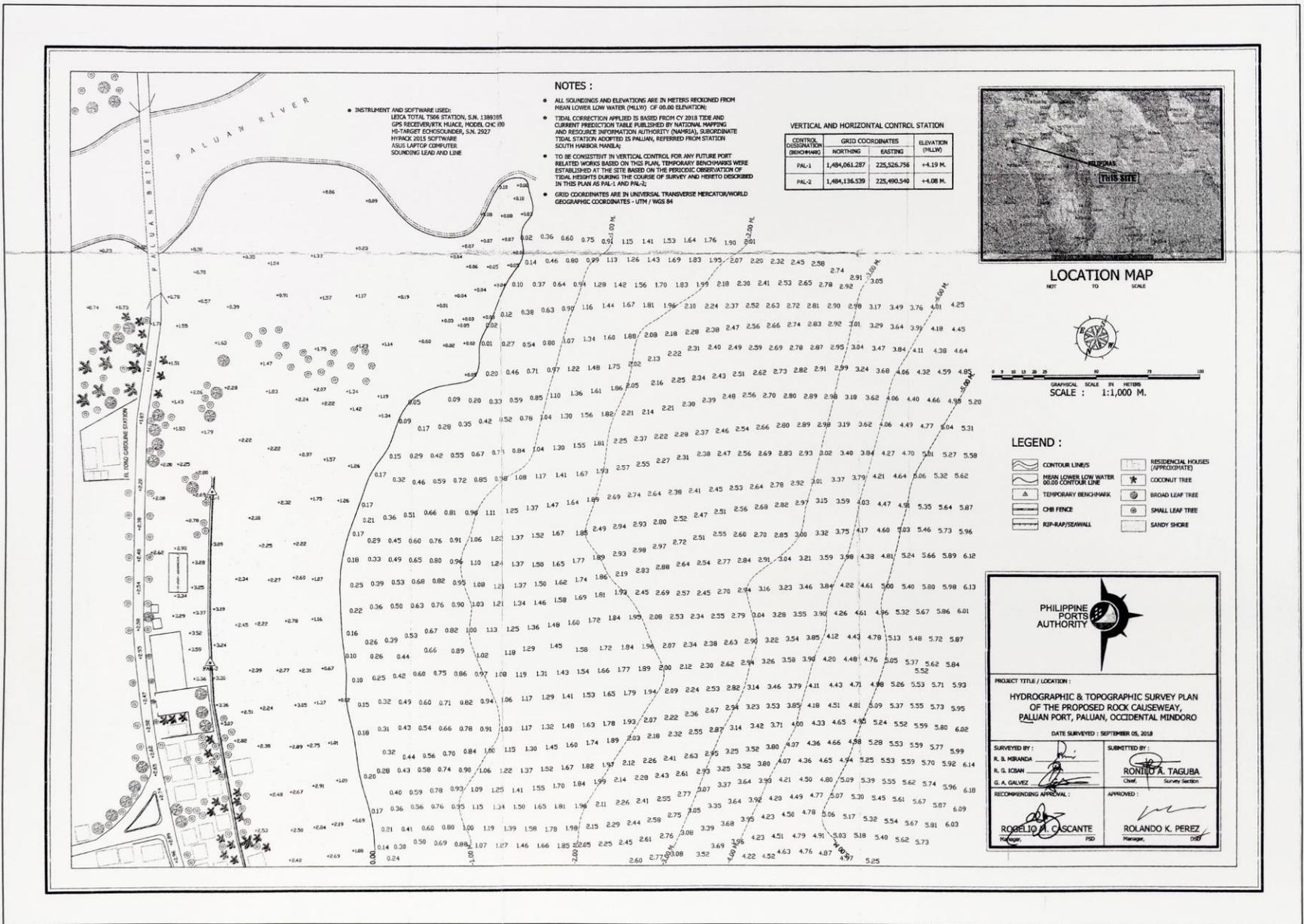
NOTED BY:  
ROLANDO T. QUERUBIN  
Div. Mgr. DED

RECOMMENDED BY:  
REYNALDO C. PABAFINA  
Manager, PPDD

APPROVED:  
CONSTANTINO FARINAS JR.  
Asst. Gen. Manager-EO

SHEET CONTENTS:  
• PAVEMENT JOINT LAYOUT  
• DRAINAGE LAYOUT PLAN

SCALE: AS SHOWN  
SHEET NO.: 6 OF 7  
DATE: NOVEMBER 2018

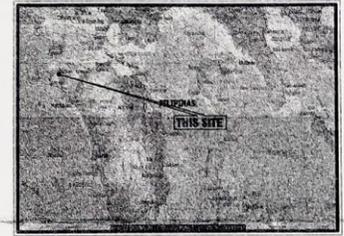


**NOTES :**

- INSTRUMENT AND SOFTWARE USED:  
LEICA TOTAL STATION, S.N. 1388385  
GPS RECEIVER/RTK PLANE, MODEL CHC 40  
HI-TARGET ECHOSOUNDER, S.N. 2927  
HYDRA 2015 SOFTWARE  
ASUS LAPTOP COMPUTER  
SOUNDING LEAD AND LINE
- ALL SOUNDINGS AND ELEVATIONS ARE IN METERS RECKONED FROM MEAN LOWER LOW WATER (MLLW) OF 00.00 ELEVATION
- TIDAL CORRECTION APPLIED IS BASED FROM CY 2018 TIDE AND CURRENT PREDICTION TABLE PUBLISHED BY NATIONAL MAPPING AND RESOURCE INFORMATION AUTHORITY (NAMRIA), SUBORDINATE TIDAL STATION ADOPTED IS PALUAN, REFERRED FROM STATION SOUTH HARBOR MARLA
- TO BE CONSISTENT IN VERTICAL CONTROL FOR ANY FUTURE PORT RELATED WORKS BASED ON THIS PLAN, TEMPORARY BENCHMARKS WERE ESTABLISHED AT THE SITE BASED ON THE PREVIOUS OBSERVATION OF TIDAL HEIGHTS DURING THE COURSE OF SURVEY AND HERETO DESCRIBED IN THIS PLAN FOR PAL-1 AND PAL-2
- GRID COORDINATES ARE IN UNIVERSAL TRANSVERSE MERCATOR/WORLD GEOGRAPHIC COORDINATES - UTM / WGS 84

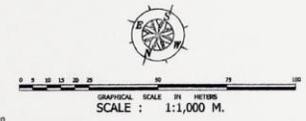
**VERTICAL AND HORIZONTAL CONTROL STATION**

CONTROL COORDINATION	NORTHING	EASTING	ELEVATION (MLLW)
PAL-1	1,484,061.287	225,526.756	+4.19 M.
PAL-2	1,484,136.539	225,490.548	+4.08 M.



**LOCATION MAP**

NOT TO SCALE



**LEGEND :**

- CONTOUR LINES
- MEAN LOWER LOW WATER (MLLW) CONTOUR LINE
- TEMPORARY BENCHMARK
- CHB FENCE
- RIP-RAP/SEAWALL
- RESIDENTIAL HOUSES (APPROXIMATE)
- COCONUT TREE
- BROAD LEAF TREE
- SMALL LEAF TREE
- SANDY SHORE

**PHILIPPINE PORTS AUTHORITY**

PROJECT TITLE / LOCATION :  
**HYDROGRAPHIC & TOPOGRAPHIC SURVEY PLAN OF THE PROPOSED ROCK CAUSEWAY, PALUAN PORT, PALUAN, OCCIDENTAL MINDORO**

DATE SURVEYED : SEPTEMBER 05, 2018

SURVEYED BY: R. B. MIRANDA R. G. IONAN G. A. GALEZ	SUBMITTED BY: RONILDO A. TAGUBA Chief Survey Section
RECOMMENDING APPROVAL: ROSELIO A. CASCANTE Manager PID	APPROVED: ROLANDO K. PEREZ Manager DSD

**HYDROGRAPHIC & TOPOGRAPHIC SURVEY**