

05102303 MAY 102023

LORMELYN E CLAUDIO, CESO IV

Regional Executive Director Department of Environmental and Natural Resources MIMAROPA Region DENR by the Bay Building, Roxas Boulevard Ermita, Manila

A CODA					
DENR MIMAROPA RECORDS SECTION					
RECEIVED					
MAY 12 2023					
BY: DATS NO.					

Dear Director Claudio:

This refers to the proposed expansion project at Port of Tablas located in Barangay Batiano, Odiongan, Romblon to be undertaken by Philippine Ports Authority.

In compliance to DENR Administrative Order No. 2018-14, we are submitting herewith pertinent documents relative to our Area Clearance application for Reclamation Project. The proposed expansion will cover additional Port Operational Area with RoRo Ramp.

For your favorable response on this request.

Truly yours,

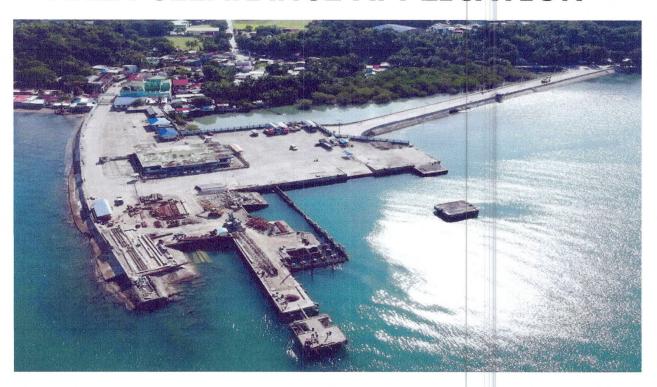
JOSELITO O SINOCRUZ PhD Port Manager

PSD/R FJR/SMN

Tel. No.: (043) 722-2429 / (043) 723-0164 Fax No.: (043) 723-0164 Email: ppa_batangas@yahoo.com / pmobatangas@ppa.com.ph

for the

AREA CLEARANCE APPLICATION



PORT OF TABLAS EXPANSION PROJECT

Barangay Batiano, Odiongan, Romblon

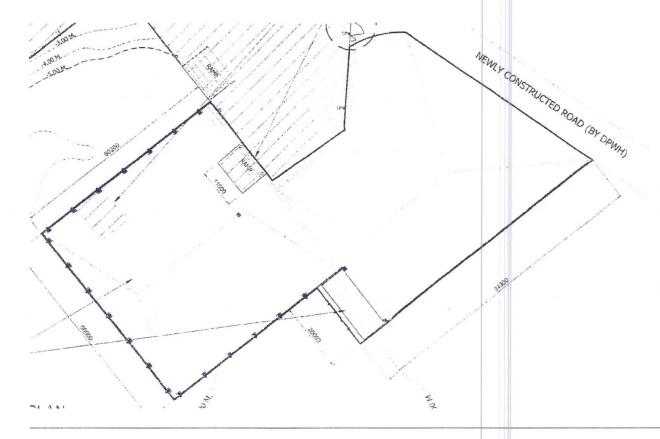
Introduction

This application for reclamation of the Philippine Ports Authority will form part of a project entitled *Construction of Port Operational Area with RoRo Ramp* to be developed in the existing Port of Tablas (Poctoy) in the Municipality of Odiongan, Romblon.

This project be implemented to cater the growing needs of port users. It involves the construction and improvement of port facilities and amenities to serve the requirements of roll-on roll-off port in the Municipality of Odiongan, Romblon including adjoining municipalities in support of government's thrust to develop regional water transportation facilities to facilitate the easy access and mobility of goods and passengers to and from the Island of Tablas and other provinces in the MIMAROPA Region. The scope of work includes a) demolition, excavation and removal works; and b.) construction of port operational area with RoRo ramp. The port project was previously issued ECC-OL-R4B-2020-0056A on 06 March 2020 and ECC-R4B-0905-104-5020 on 07 July 2009.

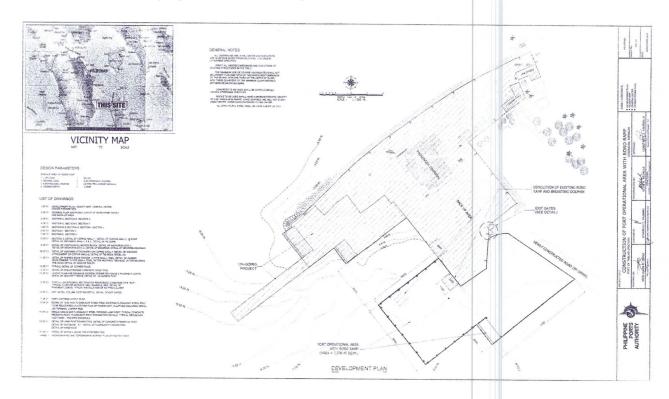
A. Sketch Plan

The specific area to be reclaimed is shown below:



B. Site Development Plan

Shown below is the project's Site Development Plan.



C. Description of the Reclamation Site

The Port of Tablas (formely Port of Poctoy) is located at Barangay Batiano in the Island of Tablas, approximately three kilometers from the town proper of Odiongan, Romblon. The proposed expansion and development can meet the demands of modern and fast-changing waterborne trade. The Terminal Management of Tablas where the Port of Poctoy is located also covers all feeder ports namely; Looc, Sta Fe, San Andres, San Jose, San Agustin, Alcantara, Calatrava, Corcuera and Carmen.

The reclamation site is located adjacent the existing port facilities in Barangay Batiano, Odiongan, Romblon. It will cover an area of 7,578.45 square meters for the construction of port operational area with RoRo Ramp. The depth of water in the proposed reclamation area ranges from 2m to 7m. There are two access road going to the port. The first one is through the main gate and adjacent the PPA Office and is located northeast of the project site while the second gate is a newly constructed road by the Department of Public Works and Highways and situated on the southeast portion of the port.

The port is provided with different facilities to ensure the comfort of passengers and those transacting business at the port. In particular, the following facilities are existing in the port:

- Terminal Management Office Building
- Wharf w/ RoRo Ramp
- Reinforce Concrete (RC) Pier with RoRo Ramp
- Back-up Area
- Breakwater
- Berthing Area
- Parking area
- Passenger Terminal Building (PTB)
- Vendor's Area
- Public Comfort Room
- Guard House
- Overhead Tank
- Mooring bollard
- Fenders
- Floodlights and electrical lines

D. Valid Sources of Fill Materials

The following are the legal sources of fill materials to be used for the project:

Item/Material	Quarry Location	Permit No.	Allowed Extraction
Boulders (50- 100kgs / 1000kg rocks	3160 Rizal, Odiongan, Romblon	001-1-22	10,000 cu.m/annum
Fill Materials (Sand and Gravel / Selected Fill)	3144 Limon, Norte, Looc, Romblon	001-1-22	10,000 cu.m/annum
Aggregates (Base / Sub-Base)	3155 Gawaran, Odiongan, Romblon	022-3-21	10,000 cu.m/annum

These sources were inspected by the assigned Project Engineer on 09 and 16 March 2022 and the following observations were noted:

- The quarry can ably sustain the quantity requirement of the above-mentioned project.
- Proposed staging and loading area is located near the quarry site.
- Extraction of boulders may be done by natural stockpiling.
- Adequate access to the guarries for transport of materials to the project site.

Further, these sources had been approved by the Manager, Port Construction and Maintenance Department (PCMD) of the PPA Head Office on 27 May 2022.

E. Reclamation Methodology

The rocks shall be placed in accordance with the typical sections and elevation. Placing of rocks will be done using Crawler Crane with Clamshell or Bucket. A payloader or Backhoe will be used in hauling the core/armour rocks from stockpile or source to the rock bulkhead. Mount core materials shall be placed in a manner that will prevent segregation of rock sizes and shall be bumped as uniformly as possible using a backhoe.

After armour rock has been laid, geotextile fabric shall be laid/installed and sand and gravel fill hauled, spread and compacted followed by aggregate subbase course, aggregate base course. CHB fence shall be constructed as prescribed in the plan.

Cement treated base course and leveling sand cushion shall then be hauled and spread as per elevation indicated in the plan. As soon as correct elevation is attained, interlocking concrete block pavement shall be installed/reinstalled taking into consideration that foundation/electrical conduits for electrical floodlight and drainage system / manhole is already constructed. Installation of lighting fixtures including accessories shall then be completed.

F. Estimated Cost of Reclamation and Land Development

The Approved Budget for the Contract is Two Hundred Forty Seven Million Nine Hundred Eighty Thousand Five Pesos and 98/100 centavos (Php 247,980,005.98) as shown below.

Republic of the Philippines PHILIPPINE PORTS AUTHORITY

INDIVIDUAL PROJECT PROGRAM OF WORK



Date: November 24, 2021

Region: __ District/City: __

Rombion

6	Name/Location of Project Port of Tablas (Poctoy), Odiongan, Rombion		Source PD# Sec#	of Funds or BP Item #	Issued	Release CDC
	Project Description CONSTRUCTION OF PORT OPERATIONAL AREA W RAMP	ITH RORO	Calendar Days to Complete: Implementation Procedure:		540 By Contract	
	Estimated Cost by Item of Work Scope of Work to be done	% of Total	Unit	Quantity	Unit Price	TOTAL AMOUNT (PESOS)
1	GENERAL EXPENSES	2.05				5,095,693.98
2	DEMOLITION, EXCAVATION AND REMOVAL WORKS	. 0.48				1,185,214.59
3	PORT OPERATIONAL AREA WITH RORO RAMP	97.31				241,297,602.3
4	REIMBURSABLE ITEMS	0,16				401,495.0€
A	PPROVED BUDGET FOR THE CONTRACT	100.00				247,980,005.98

96

1

18

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT (PESOS)
APPROVED BUDGET FOR THE CONTRACT		
A. Direct Cost		
General Expenses		
1.1 Mobilization/Demobilization	0.50	1,399,584.17
1.2 Rental of temporary site office and residence	0.10	270,000.00
1.3 Maintain temporary site office and residence	0.15	431,192.04
1.4 Provide Construction Safety & Health Program	0.89	2,496,453.94
2. Materials	60.12	168,480,677.21
2.1 Supply/Delivery		
2.2 Testing of Materials		
3. Labor	2.26	6,334,396.69
3.1 Direct Labor		
3.2 Leaves		
3.3 SSS/GSIS		
3.4 Medicare		
3.5 Handtools		
Equipment Expenses	8.66	24,267,874.17
Reimbursable Items	0.14	382,376.25
3. Indirect Cost		
 Overhead, Contingency & Miscellaneous (OCM) 		
(6% - 12% of A2 to A4) 8%	5.68	15,926,635.85
2. Profit (8% - 10% of A1.1.2 to A4)	5.77	16,182,447.52
3. Applicable VAT (5% of A1 to B2)	4.21	11,808,368.14
APPROVED BUDGET FOR THE CONTRACT	88.50	247,980,005.98
ESTIMATED GOVERNMENT EXPENSES		
ROW/Site Aquisition		
2. Soil Exploration		
3. Project Management (up to 3.0% of the 3.0%	2.65	7,439,400.18
Budget for the Contract)		
Materials to be furnished by the Government		
Sub-total	2.65	7,439,400.18
CONTINGENCIES AND RESERVES		
Physical (up to 10% of the Budget for the Contract) / 10%	8.85	24,798,000.60
Sub-total	8.85	24,798,000.60
		280,217,406.76

Prepared by:

Checked/Reviewed by:

MENANDRO R. NANTIN Principal Engineer A

JOVENCIO C. PAJINAG Manager, DED

Submitted by:

ELVIS R. MEDALLA Acting Manager, PPDD Recommending Approval:

CONSTANTE T FARINAS, JR. AGM, Engineering Office

APPROVED:

JAY DANIEL R. SANTIAGO General Manager

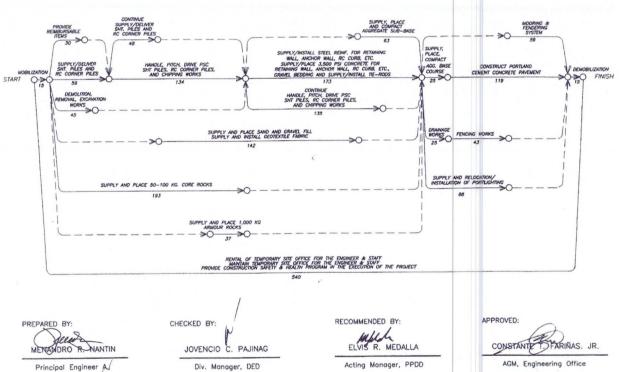
G. Proposed Funding/Financing of the Project

The source of fund for the project will come from PPA Corporate Fund.

H. Proposed Project Timetable

Please refer to the Construction PERT/CPM Schedule below

CONSTRUCTION PERT/CPM SCHEDULE CONSTRUCTION OF OPERATIONAL AREA WITH RORO RAMP Port of Tablas (Poctoy), Rombion



Acting Manager, PPDD

026-2021

PROJECT DESCRIPTION

I. Prevailing Market Land Values

The prevailing market land value is generated from available data published by the Bureau of Internal Revenue (BIR) Revenue District Office (RDO) No. 35 through its Department Order No. 026-2021 with the subject *Implementation of the Revised Schedules of Zonal Value of Real Properties in Seventeen (17) Municipalities in the Province of Romblon namely Alcantara, Banton, Cajidiocan, Calatrava, Concepcion, Corcuera, Ferrol, Looc, Magdiwang, Odiongan,. Romblon, San Agustin, San Andres, San Fernando, San Jose, Sta. Fe, and Sta. Maria all in the Province of Romblon (2nd Revision) under the Jurisdiction of Revenue District Office No. 035 – Odiongan, Romblon under Revenue Region No.9A – CaBaMiRo, for Internal Revenue Tax Purposes.*

D.O. No.

PROVINCE	: ROMBLON	
MUNICIPALITY	: ODIONGAN	d

BARANGAY : POCTOY	T	Effectivity I		07/11/2021
STREET NAME/ SUBDIVISION/ CONDOMINIUM	VICINITY	CLASSIFICA	TION	2ND REVISION ZV/ SQ./M (Final Revision)
NATIONAL ROAD	ALONG REGIONAL HWY 309 -	CR		6,200.00
	BATIANO - DAPAWAN - POBLACION*	RR		3,000.00
		I	**	4,500.00
		X	**	3,500.00
		GP	**	2,500.00
		A1	**	140.00
		A2	**	110.00
		A4		105.00
		A6	**	100.00
		A8		95.00
		A10	**	85.00
		A15	**	90.00
		A16	**	100.00
		A23	**	110.00
		A39	**	600.00
		A40	**	1,500.00
		A50		80.00
	INTERIOR*	CR		5,500.00
		RR		2,800.00
		1		4,200.00
		X		3,400.00

	PROJECT DESCRIPT	ION	
		GP	2,400.00
		A1	120.00
		A2	105.00
		A4	100.00
		A6	95.00
		A8	90.00
		A10	80.00
		A15	85.00
		A16	95.00
		A23	105.00
		A39	550.00
		A40	1,400.00
		A50	75.00
ODIONGAN-STA. MARIA EAST	DAPAWAN-TORREL RD PATO-O*	CR	5,200.00
WEST RD.***		RR	2,500.00
		ı	3,800.00
		X	3,300.00
		GP	2,000.00
DAPAWAN-TORREL RD.***	NATIONAL HIGHWAY - DAPAWAN*	CR	4,200.00
		RR	2,300.00
BAITO RD.***	DAPAWAN-TORREL RD END*	CR	4,200.00
		RR	2,300.00
ALL OTHER STREETS ***	ALONG OTHER STREETS*	CR	3,900.00
		RR	2,100.00
		1	2,500.00
		X	2,300.00
		GP	1,300.00
		A1	105.00
		A2	100.00
		A4	95.00
		A6	90.00
		A8	85.00
		A10	75.00
		A15	80.00
		A16	90.00
		A23	100.00
		A39	500.00
		A40	1,300.00
		A50	70.00
	INTERIOR*	CR	3,600.00
		UN	0,000.00

	A1	100.00
	A2	95.00
	A4	90.00
	A6	85.00
	A8	80.00
	A10	70.00
	A15	75.00
	A16	85.00
	A23	95.00
	A39	450.00
	A40	1,200.00
	A50	65.00

NOTE:

CLASSIFICATION LEGEND:

			CODE	
COD	E	CLASSIFICATION	CLASSIFICATION	
RR		Residential Regular	GL	Government Land
CR		Commercial Regular	GP	General Purposes
RC		Residential Condominium	I	Industrial
CC		Commercial Condominium	X	Institutional
CL		Cemetery Lot	APD	Area for Priority Development
Α		Agricultural	PS	Parking Slot

AGRICULTURAL LANDS

AUL	ICULI UKAL LANDS		
A1	Riceland Irrigated	A26	Bamboo Land
A2	Riceland Unirrigated	A27	Peanut Land
A3	Upland	A28	Soy beans Land
A4	Coco Land	A29	Grape vineyard
A5	Citrus Land	A30	Pepper Land
A6	Fishpond	A31	Mineral Land
A7	Swamp	A32	Non Metallic mineral Land
A8	Nipa Land	A33	Coal Deposit
A9	Cotton Land	A34	African Oil Land
A10	Cogon	A35	Rubber Land
A11	Abaca Land	A36	Forest Land/Timber Land
A12	Orchard	A37	Horticultural Land
A13	Pineapple Land	A38	Salt Beds

^{*} NEWLY IDENTIFIED VICINITY

^{**} NEWLY IDENTIFIED CLASSIFICATION

^{***} NEWLY IDENTIFIED STREET

A14	Banana Land	A39	Seashore
A15	Pasture Land	A40	Resort
A16	Corn Land	A41	Sandy/Stony
A17	Sugar Land	A42	Prawn pond
A18	Tobacco Land	A43	Sorghum
A19	Cacao	A44	Ipil-ipil
A20	Lanzones	A45	Kangkong
A21	Durian	A46	Zarate
A22	Rambutan	A47	Vegetable Land
A23	Mango	A48	Coffee
A24	Mangrove	A49	Mountainous / Hilly Areas
A25	Camote/Cassava	A50	Other Agricultural Lands

Reference: https://www.bir.gov.ph/index.php/zonal-values.html#rdo035

J. Other Documents

- 1. Inspection Report of quarry sites
- 2. Photos during inspection of the quarry site for fill materials
- 3. Test Report on Fine Aggregates
- 4. Test Report on Coarse Aggregates
- 5. Test Report on Soil Aggregates
- 6. Test Report on Concrete Aggregates
- 7. Test Report on Stone/Boulders
- 8. Memorandum of Agreement among suppliers of fill materials
- 9. Commercial Mining Permit ROM No. 022-3-21 named to Jim B. Sim (for 3160 Rizal, Odiongan Romblon)
- 10. Commercial Mining Permit ROM No. 001-1-22 named to Kim B. Sim (for 3144 Limon, Norte Looc, Romblon)

Attachments

- Certification on the status of the area and land classification of the adjacent land by the CENRO
- 2. Geotagged photos showing panoramic view of the land and adjoining areas
- 3. Board of Director's Resolution
- 4. Geohazard Identification Report

25 May 2022

MEMORANDUM FOR

The Manager, PCMD

THRU

The Division Manager, PMD-Luzon

The Project Manager

FROM

Project Engineer

SUBJECT

CONSTRUCTION OF PORTS OPERATIONS AREA

WITH RORO RAMP

Port of Tablas(Poctoy), Odiongan, Romblon

This refers to the inspection of the proposed quarry site for materials intended for the above captioned project done by the undersigned on the 09 and 16 March 2022. The said materials inspected are the following with the corresponding locations of the quarry site and allowed capacity, to wit:

ITEM/MATERIAL	QUARRY LOCATION	PERMIT NO.	ALLOWED EXTRACTION
Boulders (50-100kgs/1000kg rocks)	3160 Rizal, Odiongan, Romblon	001-1-22	10,000 cu.m./annum
Fill materials (Sand & Gravel/ Selected Fill)	3144 Limon, Norte, Looc, Romblon	001-1-22	10,000 cu.m./annum
Aggregates	3155 Gawaran, Odiongan, Romblon	022-3-21	10,000 cu.m./annum

Please be informed that based on the inspection conducted on the said quarry, the following were observed to wit:

- The quarry can ably sustain the quantity requirement of the above-mentioned project.
- · Proposed staging and loading area is located near the quarry site.
- Extraction of boulders may be done by natural stockpiling.
- Adequate access to the quarries for transport of materials to the project site.
- Samples taken from the quarry by the undersigned are to be tested for confirmation of the quality and specifications of the project.

Based on the premises stated above it is recommended that the said quarry sites be accredited as a supply of rock boulders, Fill materials and aggregates intended for the above-mentioned project.

Attached herewith are pictures taken during the inspection, quarry permits.

For your information and approval, Sir.

VAL JONATHAN V. PINEDA



PHOTOGRAPH OF QUARRY SITE DURING INSPECTION

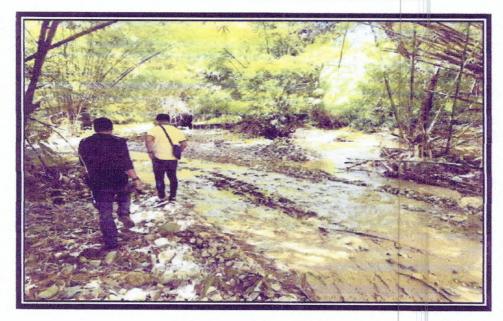


Photo Taken by: **VAL J. V. PINEDA**Date Taken: **MARCH 9, 2022**



PHOTOGRAPH OF QUARRY SITE DURING INSPECTION (FILL MATERIALS)

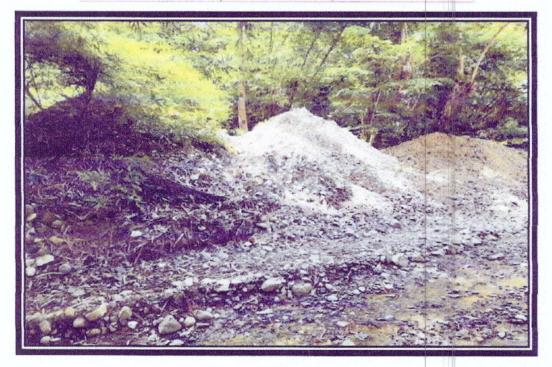
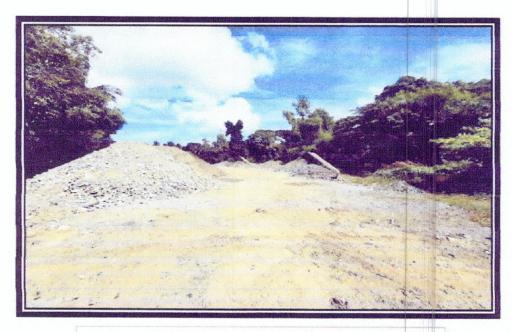


Photo Taken by: VAL J. V. PINEDA

Date Taken: MARCH 9, 2022

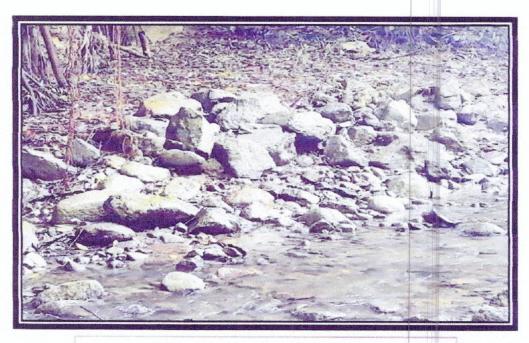


PHOTOGRAPH OF QUARRY SITE DURING INSPECTION (FILL/ AGGEGATE MATERIALS)



Photo Taken by: VAL J. V. PINEDA

Date Taken: MARCH 9, 2022



PHOTOGRAPH OF QUARRY SITE DURING INSPECTION (ARMOUR/ CORE ROCKS MATERIALS)

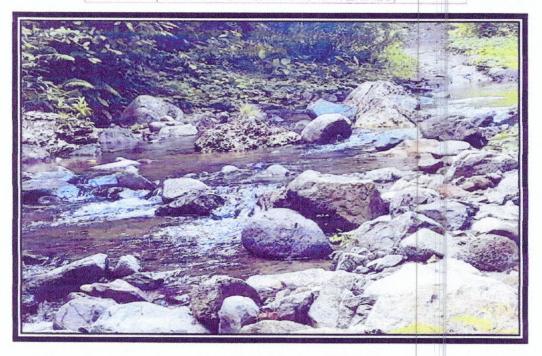


Photo Taken by: VAL J. V. PINEDA

Date Taken: MARCH 16, 2022



FDC MATERIALS TESTING CENTER INC.

DPWH - BRS Accredited Laboratory

Email: fdcmaterials@gmail.com and fdcmaterials_qc@yahoo.com Address: 109 Malakas St., Barangay Central, Quezon City Tel. No.: (02) 8939-1321/09225087582/09178617719



Lab. Report No.

FDC-22-4299-0

April 25, 2022

THE PERSON	EDI KEN	WILL WE	A CHIES A	STEEL STAFF	LIA (E)

CONSTRUCTION OF PORT OPERATIONAL AREA WITH RORO RAMP Project Port of Tablas (Poctoy), Odiongan, Romblon Location Contractor MRB II CONSTRUCTION CORP / MANCOL CONST. CORP. (JV)

Kind of Material Sample Identification Fine Aggregates : FA-1 Quantity Represented : 1,500 cu.m. Sampled at Jobsite

Original source Spec's Item No. 3155 Gawaran, Odiongan, Romblon

: 405 Sampled by Micahel Angelo D. Estrada (Name & designation) Submitted by

Micahel Angelo D. Estrada (Name & designation) A. Flores

CONTRACTOR'S

CONTRACTOR'S (Office) FDC-QC

(Date) 5/25/2022 3/26/2022

TESTS REQUIREMENTS RESULTS ieve Analysis: Cumulative % Passing Sieve Size, inch-100 No. 4 95-100 No 8 81 No.16 45-80 64 No.30 39 No.50 5-30 25 No.100 0.10 No.200 0-3 Elutriation 5% Max. 0.48 Specific Gravity Bulk Specific Gravity (Oven Dry) Bulk Specific Gravity (SSD) 2.48 2.56 Absorption, % 3.05 oundness (Na,SO₄), % Loss 10.00 max. 4.08 Unit Weight, kg/m3 Loose 1576 Rodded 1478 Organic Impurities 3 тах. Mortar Strength, % 95.0 Min. 95.5 95.0 Min. 98.4 Clay Lumps, %

This Laboratory is Responsible for test only

1.) VAL XNATHAN V. PINEDA/

2.) MICHAELSHIGELO D. ESTRADA/ MRB II CONST. GET - MANCOL CONST

DGAR JOHN C ARADILLOS

MANCOLCONST CORP. (J.V.)

MARDY DEGUICO Materials Engineer 1-3238 Sivil Engineer Pric ID 0001223;

Checked by



Project Location

Tested by

FDC MATERIALS TESTING CENTER INC.

DPWH - BRS Accredited Laboratory

Email: fdcmaterials@gmail.com and fdcmaterials_qc@yahoo.com Address: 109 Malakas St., Barangay Central, Quezon City Tel. No.: (02) 8939-1321/09225087568/09178617719



Lab. Report No. FDC-22-4360-A April 8, 2022

TEST REPORT ON SOIL AGGREGATES
CONSTRUCTION OF PORT OPERATIONAL AREA WITH RORO RAMP
Port of Tablas (Poctoy), Odiongan, Rombion
MRB II CONSTRUCTION CORP./ MANCOL CONST. CORP. (JV)

Contractor Kind of material Aggregate Base Course

Sample Identification : ABC-1

Quantity Represented : QT-1,500 cu.m., CBR-2,500 cu.m. Sampled at

3155 Gawaran, Odiongan, Rombion Original source

Spec's Item No. Sampled by Michael Angelo D. Estrada

(Name & designation) Submitted by · Michael Angelo D. Estrada

(Name & designation) H. Flores (Name & designation)

CONTRACTOR'S (Office) CONTRACTOR'S (Office) FDC-QC

3/25/22 (Date) 3/26/22

3/25/22

(Date)

(Name & designation)	(Office)	(Pate)
TESTS	REQUIREMENTS	RESULTS
sieve Analysis: Cumulative % Passing		
Sieve Size, inch		
3	- 1	100
21/2	- 1	100
2	100	100
11/2		95
1	60-85	82
3/4		61
1/2	35-65	56
3/8		44
No. 4	20-50	37
No.10		25
No.40	5-20	12
No.200	0-12	7
Liquid Limit, %	25 Max	23.6 -
Plasticity Index, %	6 Max.	4.1 -
Abrasion Loss (LAM), %	50.0 Max.	27.2
Moisture Density Relationship	-	
Max. Dry Density Kg/m ⁸		2251
Optimum Moisture Content, %	-	8.5
California Bearing Ratio:	_	
CBR Value, %	80.0 Min.	85.28
The above Test report AIEETS THE STANDARD SPECIFICATIO		
REMARKS: This report gives the result carried out on samples submitted to	FDC Materials Testing Center Inc. This Laboratory is Resp	dustible for test only.
Prepared by	Witnessed by :	1.1
MICHAEL JON RINAROLA		ALI DI DILIFORTI
	1.) VALVONALI	
Laboratory Technician	PPA BEFORE	ENIMIVE

MARDY CGUICO Materials Engineer 1-3238 Civil Engineer-PRC ID 0091221

OHN CARADITLOS

Checked by



FDC MATERIALS TESTING CENTER INC.

DPWH - BBS Accordited Laboratory

Email: fdcmaterials@gmail.com and fdcmaterials_qc@yahoo.com Address: 109 Malakas St., Barangay Central, Quezon City Tel. No.: (02) 8939-1321/09225087962/09178617719

FDC-22-4360-B April 8, 2022



(Date)

3/25/22

TEST REPORT ON SOIL AGGREGATES

CONSTRUCTION OF PORT OPERATIONAL AREA WITH RORO RAMP Project Port of Tablas (Poctoy), Odiongan, Romblon
MRB II CONSTRUCTION CORP./ MANCOL CONST. CORP. (JV) Contractor Kind of material

Aggregate Subbase Course Sample Identification

Quantity Represented

OT-1,500 cu.m., CBR-2,500 cu.m. Sampled at Jobsite

Original source

3155 Gawaran, Odiongan, Romblon 200

Spec's Hem No. Sampled by Michael Angelo D. Estrada

(Name & designation) Michael Angelo D. Estrada Submitted by (Name & designation) Tested by

H. Flores (Name & designation)

CONTRACTOR'S (Office) CONTRACTOR'S (Office)

(Date) FDC-QC 3/26/22 (Office) (Date)

TEXTS	REQUIREMENTS	RESULTS
sieve Analysis: Cumulative % Passing		
Sieve Size, Inch		
3		100
2.1/2		100
2	100	100
11/2		97
1	55-85	77
3/4		64
1/2	_	55
3/8	40-75	43
No. 4	-	38
No.10		22
No.40	-	17
No.200	0-12	7
Liquid Limit, %	35 Max.	23.7
Plasticity Index. %	12 Max.	5.7
Abrasion Loss (LAM), %	50.0 Max.	27.5
Moisture Density Relationship		
Max. Dry Density Kq/m3	_	2045.
Optimum Moisture Content, %	-	10.6 -
California Bearing Ratio	-	
CBR Value, %	30.0 Min	51.21
Swell, % 10 Blows, 30 Blows 65 Blows		
REMARKS The above Test report MEETS THE STANDARD SPECIFIES	AHON	
This report gives the result carried dut on samples submitte		aboratory is Responsible for test only
Prepared by	Witnessed by:	i
MICHAELJON R BAROLA		THAN V. PINEDAZ
Laboratory Technician	PPA REI	RESENTATIVE
	/) (
Checked by:	sot 1	
LIGAR OHN CARADILLOS	2.) MICHAELA	INCE O D. ESTRADA/
Kaboratory Jead	M.E MRI	II CONST. CORP.

MARIAT V. GUICO Materials Engineer 1-3238 Civil Engineer-PRC 10 0091221



FDC MATERIALS TESTING CENTER INC.

DPWH BRS Accordited Laboratory

Email: fdematerials@gmail.com and fdematerials_qc@yahoo.com Address: 109 Malakas St., Barangay Central, Quezon City Tel. No.: (02) 8939-1321/09225087562/09178617719

Sheet No. 1011

Lab. Report No. FDC-22-4359-Z Date: April 05, 2022



3/25/2022

3/25/2022

(Date)

(Date)

TEST REPORT ON STONE/BOULDERS

Project : CONSTRUCTION OF PORT OPERATIONAL AREA WITH RORO RAMP

Location : Port of Tablas (Poctoy), Odiongan, Romblon

(Name & designation)

Contractor : MRB II CONSTRUCTION CORP./ MANCOL CONST. CORP. (JV)

Kind of material : Armour Rocks (1000kg)

Sample identification : SAMPLE-1

Quantity represented :-

Sampled at : Jobsite

Original source : 3160 Rizal, Odiongan, Romblon

Submitted by

Tested by

Spec's Item No. Sampled by

: Michael Angelo D. Estrada (Name & designation) (Office) : Michael Angelo D. Estrada CONTRACTOR'S

(Name & designation) (Office) : H. Flores

FDC-QC 3/26/2022 (Office) (Date)

CONTRACTOR'S

TESTS	REQUIREMENTS	RESULTS
Specific Gravity		
Bulk Specific Gravity (Oven Dry)		2.55
Bulk Specific Gravity (SSD)		2.58
Bulk Specific Gravity (Apparent)	~	2.62
Absorption (%)	~	1.11
Abrasion Loss (LAM), %	40.0 Max.	17.2
Soundness (Na2SO4), % Loss	12.00 Max.	3.54

Prepared by

Witnessed by :

BAROLA Technitian

THAN V. PINEDA/ PPA REPRESENTATIVE

Checked by

JOHN C ARAPILLOS EDGAR

2) MICHAN ANGELO D. ESTRADA/ M.E. - MRB II CONST. CORP.

MARDY V. GUICO Materials Engineer 1-3238 civil Engineer-PRC 10 0091221



FDC MATERIALS TESTING CENTER INC.

DPWH - BES Accredited Laboratory
Email: fdematerials@gmail.com and fdematerials_qc@yahoo.com
Address: 109 Malakas St., Barangay Central, Quezon City
Tel. No.: (02) 8939-1321 / 09225087562 / 09178617719

(Date)

Lab. Report No. FDC-22-4360 April 1, 2022 Date:

TEST REPORT ON SOIL AGGREGATES

Project CONSTRUCTION OF PORT OPERATIONAL AREA WITH RORO RAMP

Location

Port of Tablas (Poctoy), Odiongan, Romblon
MRB II CONSTRUCTION CORP./ MANCOL CONST. CORP. (VV) Contractor

Kind of material Sand & Gravel Sample Identification : 5-1 Quantity Represented 1,500 cu.m.

Sampled at

Original source 3144 Limon Norte, Look, Rombion

Spec's Item No. 104 Sampled by Michael Angelo D. Estrada

CONTRACTOR! 3/25/22 (Name & designation) Michael Angelo D. Estrada (Office)
CONTRACTOR (Pate) 3/25/22 Submitted by (Name & designation) (Office) (Date) FDC-QC Tested By H. Flores 3/26/22

(Name & designation) (Office)

-	100
-	100
-	100
-	
-	100
	100
-	100
-	100
-	100
-	98
	73
-	55
_	36
-	21
	6
30 Max.	NIL
6 Max.	Non - Plastic
_	
3 Max.	2
and the same of th	1985
	9.3
erals Testing Center Inc. This Laboratory is Re-	paneible for test only.
Witnessed by:	
1.) VALJONATI	AN V. PINEDAZ
PPA REPRIS	ENTATIVE
12	A
	21
***************************************	ELO D. ESTRADA/
M.E MRB II C	ONST. CORP.
	6 Max. 3 Max

MARDIT GUICO Materials Engineer 1-3238 Civil Engineer-Pac ID 009122



FDC MATERIALS TESTING CENTER INC.

DPWH - BBS Accredited Laboratory

Email: fdcmaterials@gmail.com and fdcmaterials qc@yahoo.com Address: 109 Malakas St., Barangay Central, Quezon City Tel. No.: (02) 8939-1321/09825087562/09178617719

Sheet No. 1 of 1

Lab. Report No. FDC-22-4359-Y Date : April 05, 2022



3/25/2022

3/25/2022

(Date)

(Date)

TEST REPORT ON STONE/BOULDERS

Project : CONSTRUCTION OF PORT OPERATIONAL AREA WITH RORO RAMP

Location : Port of Tablas (Poctoy), Odiongan, Romblon

Contractor : MRB II CONSTRUCTION CORP./ MANCOL CONST. CORP. (JV)

Kind of material : Core Rocks (50-100kg)

Sample identification : SAMPLE-1

Quantity represented : -

: Jobsite Sampled at Original source : 3160 Rizal, Odiongan, Romblon

Spec's Item No.

Submitted by

Sampled by : Michael Angelo D. Estrada CONTRACTOR'S

(Name & designation) (Office) : Michael Angelo D. Estrada CONTRACTOR'S

(Name & designation) (Office) : H. Flores Tested by FDC-QC 3/26/2022

(Name & designation)	(Office)	(Date)
TESTS	REQUIREMENTS	RESULTS
Specific Gravity		
Bulk Specific Gravity (Oven Dry)		2.63
Bulk Specific Gravity (SSD)	-	2.65
Bulk Specific Gravity (Apparent)	_	2.7
Absorption (%)	-	1.07
Abrasion Loss (LAM), %	40.0 Max.	16.3 /
Soundness (Na2SO4), % Loss	12.00 Max.	3.66

This report gives the result carried out on samples submitted to FDC Materials Testing Center Inc. This Laboratory is Responsible for tes only

Witnessed by :

Prepared by

Checked by

MICHAEL JONR. BAROLA

chnician

JOHN & ARADILLOS Laboratory Head

1.) VAL JONATHAN V. PINEDAZ PPA REPRESENTATIVE

2.) MICHARDANGETOD. ESTRADA/ M.E. - MRB II CONST. CORP.

Materials Engineer 1-3238 Tivil Engineer-PRC ID 0091221



FDC MATERIALS TESTING CENTER INC.

DPWH - BBS Accordited Laboratory

Email: fdcmaterials@gmail.com and fdcmaterials qc@yahoo.com Address: 109 Malakas St., Barangay Central, Quezon City Tel. No.: (02) 8939-1321/09225087562/09178617719

Lab. Report No. FDC-22-4223-W Date: March 17, 2022



TEST REPORT ON STONE/BOULDERS

Project : CONSTRUCTION OF PORT OPERATIONAL AREA WITH RORO RAMP

Location : Port of Tablas (Poctoy), Odiongan, Romblon

: MRB II CONSTRUCTION CORP. / MANCOL CONST. CORP. (UV) Contractor

Kind of material : Boulders Sample identification : Q-8-22DQ0026

Quantity represented : -

: Jobsite Sampled at

Original source

Submitted by

: 3160 Rizal, Odiongan, Romblon

Spec's Item No.

Sampled by : Micahel Angelo D. Estrada

(Name & designation)

: Micahel Angelo D. Estrada (Name & designation)

Tested by : H. Flores (Name & designation)

3/9/2022 CONTRACTOR'S

(Office) CONTRACTOR'S

(Office)

FDC-QC (Office)

(Date) 3/10/2022 (Date)

3/9/2022

(Date)

TESTS	REQUIREMENTS	RESULTS
Specific Gravity		
Bulk Specific Gravity (Oven Dry)	-	2.58
Bulk Specific Gravity (SSD)	-	2.61
Absorption (%)	-	1.11
Abrasion Loss (LAM), %	40.0 Max.	17.7-
Soundness (Na2SO4), % Loss	12.00 Max.	3.19
10		· .
This Laboratory in Responsible for Prepared by :	Witnessed by :	
MICHAEL 968 BAROLA Laboratory Technician		JAN V. PINEDA/ SENTATIVE
Checked by:	m x	
EDGAR JOHN OF ARADILLOS	2.) MICHAEL AND	GELO DI ESTRADA/
Laboratory Head	MALMERII	CONST. CORP.

Materials Engineer 1-3238 Civil Engineer-PRC ID 009122



FDC MATERIALS TESTING CENTER INC.

DPWH - BES Accredited Laboratory

Email: fdcmaterials@gmail.com and fdcmaterials qc@yahoo.com Address: 81 D Malakas Street, Barangay Pinyahan, Quezon City Tel. No.: (02)9999-1821/99225067862/99178617719



Lab. Report No. Date :

FDC 22 4223 X March 16, 2022

TEST REPORT ON SOIL AGGREGATES

Project : CONSTRUCTION OF PORT OPERATIONAL AREA WITH RORO RAMP

Location : Port of Tablas (Poctoy), Odiongan, Romblon

Contractor MRB II CONSTRUCTION CORP. / MANCOL CONST. CORP. (17)

Kind of material : Foundation Fifl Sample Identification : 5-1 Quantity Represented . 1,500 cu.m. Sampled at : Jobsite

Ongina source · \$144 Liman Norte, Look, Rambian

Spec's Item No.

: 103 Sampled by : Micahel Angelo D. Estrada

(Name & designation)

Submitted by : Micahel Angelo D. Estrada CONTRACTOR'S

CONTRACTOR'S

(Date) 3/9/22 (Date)

3/9/22

(Name & designation) (Office) Tested by : H. Flores FDC-QC 3/10/22 (Name & designation) (Office)

TESTS	REQUIREMENTS	RESULTS
Sieve Analysis: Cumulative % Passing		
Sieve Size, inch		
3	_	100
2 1/2		100
2	- 1	100
11/2	- 1	100
1		100
3/4		100
1/2		98
5/8	_	81
No. 4		53
No.10		38
No.40		24
No 200	-	7
Liquid Limit, %	30 Max.	25.3
Plasticity Index, %	6 Max.	5.1
Ahrasion Loss (LAM), %	-	-
Moisture Density Relationship		
Max. Dry Density Kg/m ³	_	1675
Optimum Moisture Content, %		14.6
California Bearing Ratio:		
CBR Value, %	-	
Swell, % 10 Blows, 30 Blows, 65 Blows	_	

REMARKS:

Prepared by

Witnessed by:

Checked by:

MICHAEL JOX R BAROLA Laborat

EDGAR JOHN C. ARADILLOS oratory Head

1.) VALJONATHAN V PINEDAZ PPA REPRESENTATIVE

Materials Testing Center Inc. This Laboratory is Responsible for test only

2.) MICHAPANGELO D. ESTRADA/ MRB II CONST. CORP. - MANCOL CONST. CORP. (J.V.)

MARDAY OF GUICO Materials Engineer 1-3238 Civil Engineer-PRC ID 009122



DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS ROMBLON DISTRICT ENGINEERING OFFICE

REGIONAL OFFICE IN R Oltorgen, Romblen

> Lab. Report No. Date

RSPPF-01-QT-900-FA January 14, 2022

TEST REPORT ON CONCRETE AGGREGATE

Name of Project	ROMBLON SEAWEEDS PRODUCTION AND PROCESSING FAC	ILITY	
	BRGY, CONCEPCION NORTE, STA. MARIA, ROMBLON		
Kind of Material	FINE AGGREGATES		
Sample Identification	RSPPF-01-QT-900-FA		
Quantity Represented	1,500 cu.m.		
Sampled at	JOBSITE		
Onginal Source	TUGUIS RIVER		
Supplied by	SIM CONSTRUCTION, TRADING AND SERVICES		
Proposed Use	REINFORCED CONCRETE CLASS A		
Spec's. Item No.	ITEM 900	and the second s	
Sampled by	JIMSON MARINUPE SIM CONSTRUCTION, TRADING AND SERVICES	January 06, 2022	
Submitted by	(Name and Designation) (Office)	(Date)	
	JIMSON MARIN PE/SIM CONSTRUCTION, TRADING AND SERVICES	January 06, 2022	
	(Name and Designation) (Office)	(Date)	

TESTS	REQUIREMENTS	RESULTS
Sieve Analysis: Cumulative % passing		
Sieve Size,mm(Grading "A")		
9.50 mm (3/8°)	100	100
4.75 mm (#4)	95-100	95
2.36 mm (#8)		95 85 63
1.18 mm (#16)	45 - 80 .	63
0.60 mm (#30)		38
0.30 mm (#50)	5 - 30	38 18
0.15 mm (#100)	0 - 10	6
0.075 mm (#200)	3 max	2
Fineness Modulus		2.78
Bulk Specific Gravity		2.63
Absorption, %		2.94
Clay Lumps, %	1 max	0.85
Soundness, (Na2504), % Loss	10 max	9.33
Dry Unit Mass, kg/m3		
Loose	/	
Rodded	1	1635
Mortar Strength, %	95 min.	1743
Organic Impunties (Colorimetric Test)	Equal or Lighter than Standard	EQUAL

Mortar Strength, % 95 min. 1743
Organic Impunities (Colonimetric Test) Equal or Lighter than Standard EQUAL

REMARKS:
Sample meets specification.

Tested by:

DOEL S. SELODIO
Lato Tech I
Witnessed by:

GILBERT F. FALQUERABAO
Engineer IV/PEO

District Engineer

MEMURANDUM OF AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

This Memorandum of Agreement (MOA) made and entered into by and among

JIM B. SIM- permittee of Commercial Mining Permit –ROM NO. 022-3-21 authorized to extract and remove 10,000 cu.m. aggregates at Brgy. Progreso Weste, Odiongan, Rombion.

KIM B. SIM- permittee of Commercial Mining Permit-ROM NO. 001-1-22 authorized to extract and remove 10,000 cu.m. aggregates at Brgy. Progreso Weste, Odiongan, Romblon.

ENGR. EDISON FAJUTRAO JR.- permittee OF Environmental Compliance Certificate (ECC-OLR48-2020-0137, authorized to extract and remove 10,000 cu.m. aggregates at Brgy. Gabawan, Odiongan, Romblon.

WITNESSETH

WHEREAS, the three parties agrees to deliver their aggregates to meet the requirement of 30,000 cu.m.

WHEREAS, each parties are allowed to extract aggregates using their equipment to the above mentioned quarry sites.

This Memorandum of Agreement shall become effective upon signature of both parties and implementation will begin immediately.

In witness whereof the parties have signed this Memorandum of Agreement at Tulay, Odiongan, Romblon this KIM B. SIM ENGR. EDISON FAJUTRAO JR. IIM B. SIM Permittee CTC No.: 1 0035392 Permittee Permittee CTC NO .: D +0-47 - 16 4277 CTC No .: 000382 W Date of Issue: 122 Porw Date of Issue: 1/09/22 Date of Issue: Jan 4.7022 Place of Issue: College Place of Issue: Chiongen Norblan OD party or

ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES)
MUNICIPALITY OF ODIONGAN)
PROVINCE OF ROMBLON) S.S.

BEFORE ME, a notary Public for and in the province of following persons personally appeared this day of Community Tax Certificate.	ROMBLON, Philippines, and the 2022 with their
All known to me to be the same persons who executed consists of two (2) pages, including this page wherein the Act acknowledged to me the same is their own free and voluntary act and d	knowledgement is written and
IN WITNESS WHEREOF, I have hereunto set my hand , 2022 in the Province of Romblon, Philippines.	and seal this OV day of
	Q. /
	PANTIGO NOTARY PUBLIC
Doc. No. 377 Page No. 37 Book No. 5 Series of 2022	n. 15° 17 21° 181 261 NGUE VI. 016012/12-7-18



Republic of the Philippines PROVINCE OF ROMBLON OFFICE OF THE GOVERNOR -000-

PROVINCIAL MINING REGULATORY BOARD

4^{1H} Floor Provincial Capitol Bldg, Brgy, Capaclan, Romblon Tel No. 2120



COMMERCIAL MINING PERMIT - ROM NO. 022-3-21

Name of Permittee : JIM B. SIM

Address Dapawan, Odiongan, Romblon

Date Issued : FEB 2 4 2021

A Commercial Permit Application – RLG No.040-20 to extract and remove 10,000 cubic meters of Sand and Gravel materials, authorized under R.A 7160 and Provincial Tax Ordinance No. 04 series 2013, revised revenue code of the Province of Romblon and DENR Administrative Order No. 2010-21 Providing for a consolidated Department of Environment and Natural Resources Administrative Order for the Implementing Rules and Regulations of Republic Act No. 7942, otherwise known as the Philippine Mining Act of 1995 and Administrative Order No. 2015- 03 Revised Implementing Rules and Regulations of Republic Act No. 7076, otherwise known as the Peoples Small- Scale Mining Act of 1991, as amended for commercial purposes from the area located at.

Progreso Weste (Barangay) Odiongan, Romblon (Municipality)

Province of ROMBLON, Island of Tablas, Philippines and more particularly described as follows:

TECHNICAL DESCRIPTION

Beginning at point "1" on the plan CPA RLG - 0420-20 Bearing S 70* 51' W, 2,284.87 m to RML- 3160 RIZAL, ODIONGAN, ROMBLON.

Thence;

C 16 20 W	86.43 m. line 1-2	SOUTH.	6.14 m. line 30-31	
S 16 - 28 W,	148.63 m. line 2-3	N 61 - 18 W.	The second secon	
S 45 - 33 W,		N 33 - 59 W.	48.30 m. line 32-33	
S 42 – 16 E,	49.66 m. line 3-4			
S 09 - 44 E,	87.36 m. line 4-5	S 84 – 49 W.	54.62 m. line 33-34	
S 47 - 18 E,	40.95 m. line 5-6	S 40 - 48 W,	41.78 m. line 34-35	
S 86 - 33 E.	54.50 m. line 6-7	S 41 – 22 W,	146.93 m. line 35-36	
N 54 - 57 E.	85.15 m. line 7-8	S 55 - 24 W,	69 97 m. line 36-37	
N 69 - 35 E.	87.18 m. line 8-9	S 74 - 01 W.	22.05 m. line 37-38	
N 44 - 42 E.	56.01 m. line 9- 10	S 46 - 53 W,	58.22 m line 38-39	
S 87 - 15 E.	69.58 m. line 10-11	S 44 - 48 W.	21.57 m. line 39-40	
S 77 - 50 E.	74.17 m. line 11-12	S 51 - 34 W.	54 12 m. line 40- 41	
S 79 - 18 E.	33.79 m. line 12-13	N 89 - 47 W.	45 30 m. line 41- 42	
S 18 - 00 E,	29.12 m. line 13-14	N 62 - 50 W.	101 72 m. line 42- 43	
S 08 - 30 W.	83 85 m. line 14- 15	N 52 - 28 W.	30.39 m. line 43- 44	
S 00-16 W,	21.51 m. line 15- 16	N 53 - 48 W	78.45 m. line 44-45	
S 49 - 50 E.	67 00 m. line 16- 17	N 29 - 37 W	42 50 m line 45- 46	
S 60 - 18 E.	31 20 m. line 17- 18	N 14-01 E	75.05 m line 46- 47	
S 66 - 27 E,	103 64 m. line 18-19	14 15 - SIE	22 2 1 m line 47, 48	
S 83 - 20 E,	27 39 m line 19-20	N 89 - 49 W	18 10 m. line 48- 49	
N 61 - 32 E.	44.82 m. line 20- 21	11 /6 . 17 11.	22 10 1 10 50	
N 20 - 33 L.		N 87 W	77.10 m. line 49-50	
1120 2217		N 87 - 08 W	66.58 m line 50-51	

N 51 - 54 E, N 63 - 15 E, N 62 - 03 E, N 36 - 51 E, N 53 - 32 E, N 87 - 09 E.	65.09 m. line 24- 25 141.71 m. line 25- 26 56.55 m. line 26- 27	S 39° - 59 W, S 70 - 50 W, S 54 - 57 W, N 89 - 47 W, N 61 - 18 W,	98 m. line 51- 52 83 32 m. line 52- 53 85.14 m. line 53- 54 69 50 m. line 54- 55 51.53 m. line 55- 56
S 29 – 36 E, S 62 – 50 E,	57 47 m. line 27- 28 42.51 m. line 28- 29 61.03 m. line 29- 30	N 09 – 07 W, N 25 – 20 E, N 47 – 14 E, N 15 – 56 E, N 82 – 57 E,	93.43 m. line 56-57 71.28 m. line 57-58 148.75 m. line 58-59 67.03 m. line 59-60 24.38 m. line 60-1

Containing an area of 2.8308 hectares having been filed in this office by JIM SIM this COMMERCIAL PERMIT ROM NO. 022-3-21 is hereby granted to JIM SIM, under R.A 7160 implemented by the Provincial Tax Ordinance No. 04 series 2013, revised revenue code of the Province of Romblon and DENR Administrative Order No. 2010-21 Providing for a consolidated Department of Environment and Natural Resources Administrative Order for the Implementing Rules and Regulations of Republic Act No. 7942, otherwise known as the Philippine Mining Act of 1995 and Administrative Order No. 2015- 03 Revised Implementing Rules and Regulations of Republic Act No. 7076, otherwise known as the Peoples Small- Scale Mining Act of 1991, as amended, subject to the terms and conditions as follows:

- This permit is valid for a period of one year effective upon signing of the Provincial Governor of Romblon and renewable for another period upon application for renewal sixty (60) days before the expiry date hereof;
- 2 This permit is issued upon payment of the required extraction fee equivalent to ten percent (10%) of the fair market value in this province per cubic meter;
- The permittee shall maintain five (5) meters buffer zone from both embankments of the river system and institute mitigating measures to ensure stability of said embankments.
- 4. To guarantee compliance with the terms and conditions of this permit, a surety bond in the amount of TWENTY THOUSAND PESOS (P 20,000.00);
- This permit maybe suspended or revoked at anytime by the Governor when in his opinion
 public interest so requires or upon failure of the permittee to comply with the terms and
 conditions stated herein;
- The statements made in the application or those made later in support thereof shall be considered as a condition in the permit and any misrepresentation contained therein shall also be cause for the suspension or revocation of this permit;
- This permit shall be inoperative over areas covered by prior permits, Quarry Licenses / Permit
 or Mining Lessee, unless the prior authority of the lessee / Permit tee or lessee concerned is
 obtained;
- 8. No extraction or removal of materials shall be allowed within the distance of one half (1/2) kilometer from the boundaries or reservoirs established for public water supply or any public or private works or structure unless prior clearances of the agency or owner concerned is obtained;
- 9 The removal or taking of materials in this permit shall be confined within the area specified herein the boundaries of which according to the application are established on the ground with prominent marks as indicated in the survey plan/s submitted in support of his application;
- 10. The permittee shall assume full responsibility and shall be liable for damages to private and or public property that maybe affected as result of his mining operation,
- 11. The permit is issued for the exclusive use and benefit of the permittee and shall not be transferred to any person, partnership or corporation without prior approval of the Governor,

12. The permittee or his agent / representative shall post a copy of this permit at the place of his operation and make available at all times for inspection or examination by any authorized representative of the Governor,

13. The permittee shall post a billboard in entrance of his permit area measuring four (4) feet by eight (8) feet indicating owner's name, permit number and date issued, hectarage, affectivity

of the permit, ECC number and other information necessary.

14. The permittee shall keep a book of accounts wherein there shall be entered every day the quantity and kind of materials removed from the area covered by this permit, the fees paid therefore as well as the quality and kind of materials disposed of or sold and their selling price. The name and address of the persons or parties to whom the same were sold or disposed of and other transaction connected with the business, such accounts shall at al times be open for inspection by the representative of the Governor or his deputies;

15. The permittee shall within ten (10) days after the end of each calendar month, shall submit to the issuing officer and treasurer concerned a sworn report stating the quantity and kind of materials sold or disposed off during the period covered by the report, its selling price

and quantity and kind of materials left in the stock;

- 16. The permittee shall at all times issue to the truck drivers engaged in hauling Sand and Gravel material from the permit area a DELIVERY RECEIPT (DR) in the prescribed form for inspection by the ENRO/ PMRB or the duly authorized representative of the Governor, or his deputies. It shall be issued to and carried by the truck drivers concerned while in transit which shall be shown to proper authority for signature and a short notation of the word "USED", date and time etc. at the back portion of the DR (permittee, driver and ENRO, PMRB, PNP, PTO, BRGY.). The completely filed up PERMITTEE copy shall be retain by the permittee and attached to the monthly report to be accomplished by the permittee. The DRIVERS copy shall be signed or noted by the authority and made available at all times for inspection. And ENRO, PMRB, PNP, PTO, BRGY, copy shall be detached by the proper authorities and turn over to ENRO/ PMRB for consolidation;
- 17. The removal or taking of materials from the area covered by this permit shall be subject to the local ordinances which are not inconsistent with the provisions of Provincial Tax Ordinance No. 04 series 2013, revised revenue code of the Province of Romblon or any amendments thereof;
- 18. Unless otherwise renewed or amended, increasing the allowable volume of materials this permit ipso facto terminate after the whole quantity and kind of material specified shall have been removed or taken; or immediately after the expiration of the terms thereof and no application shall be treated if not filed on / or before the expired date of this permit, and

19. Upon termination of this permit for whatever cause, the same shall be surrendered to the issuing authority.

ADDITIONAL TERMS AND CONDITION

- 1. The permittee shall coordinate with the Brgy. Captain of Progreso Weste, Odiongan, Rombion, one (1) day before the loading operation is conducted and present original copy of DR for his verification purposes and information;
- 2 Any deviation from operation without prior approval of the ENRO/ PMRB shall be ground immediate suspension and/or cancellation of the permit.
- Any substantial complaint on damage or destruction of private and public properties shall be ground for immediate suspension and cancellation of the permit;
- 4 The permittee shall donate fifty (50) pieces of tree seedlings to the ENRO/ PMRB for its referestation program,
- 5. The operation should be subject to all applicable mining and environmental laws, rules and regulations including local ordinances,
- 6. Any authorized DENR- EMB, MGB IVB MIMAROPA and ENRO/ PMRB Personnel can initiate an on the spot inspection and monitoring even without prior notice, and

 Entries in delivery receipts should be proper considered and declared invalid Delivery Receipts 	rly filled up, no crasures otherwise it will be
	JOSE BAUANO
CONFORME:	62.09-2021
Witnesses:	
UMEX CHORERA	- Guglioeth CIM
ACKNOWLE	DGEMENT
Republic of the Philippines) Province of Romblon) Municipality of) XXXXXXXXXXXXXXXXXXXXXXX	
	as a Permittee and for the purpose there in 4) pages, including the acknowledge page is a
WHEREFORE, I hereto set my hand and day of 2021 at 2021 at	d affixed my signature and notarial seal this, Romblon
	NOTARY PUBLIC
Page No. (7	
Book No Series of 2021	PACIFICO M. B. WIANG, IR.
Series of 2021	Notary Public
	Unto December \$1, 2021
	Roll No. 3 book IBP OR No. 13 at 24 Of 18-20
	PTR No 4951018 01-06-21
	MCI I Montage 12 7 19



Republic of the Philippines PROVINCE OF ROMBLON

-000-

PROVINCIAL MINING REGULATORY BOARD

Floor Provincial Capitol Bldg. Brgy. Capacian, Rombion Tel No. 2120



COMMERCIAL MINING PERMIT - ROM NO. 001-1-22

Name of Permittee KIM B. SIM

Address Poctoy, Odiongan, Rombion

Date Issued MAR 0 3 222

A Commercial Permit Application — RLG No.026-21 to extract and remove 10,000 cubic meters of Sand and Gravel materials, authorized under R A 7160 and Provincial Tax Ordinance No. 04 series 2013, revised revenue code of the Province of Romblon and DENR Administrative Order No. 2010-21 Providing for a consolidated Department of Environment and Natural Resources Administrative Order for the Implementing Rules and Regulations of Republic Act No. 7942, otherwise known as the Philippine Mining Act of 1995 and Administrative Order No. 2015-03 Revised Implementing Rules and Regulations of Republic Act No. 7076, otherwise known as the Peoples Small- Scale Mining Act of 1991, as amended for commercial purposes from the area located at:

Progreso Weste (Barangay) Odiongan, Romblen

Province of ROMBLON, Island of Tablas. Philippines and more particularly described as follows

TECHNICAL DESCRIPTION

Beginning at point "1" on the plan CPA RLG = 0296-21 Bearing N 23* 00" W, 3,455.30 m to RML-3144 LIMON NORTE, LOOC, ROMBLON

Thence

N 19 - 35 E.	51.68 m. line 1-2	S 61 01 E	40.50 m. line 32-33
N 51 - 01 E.	41.41 m. line 2-3	S 70 - 28 W.	
N 88 21 E.	68.33 m line 3-4	N 53 - 07 W	45.48 m. line 34435
S 71 - 48 E.	17.72 m. line 4-5	N 33 - 54 W.	40.64 m. line 35-36
S 10 - 45 E.	8.17 m. fine 5-6	N 12 - 25 E.	72,06 m. line 36-37
S 84 16 E.	68.50 m. line 6-7	N 25 - 51 W.	32.69 m. line 37-38
N 65 - 01 E,	38.31 m. line 7-8	N 51 - 39 W.	59.39 m. line 38-39
N 78 - 12 E,	21.06 m. line 8-9		56.46 m. line 39-40
S 26 - 13 E,	75.73 m. line 9-10	N 28 - 39 E.	24.85 m line 40 - 41
N 54 25 E.	25.97 m line 10-11	N 13 - 19 E,	45.66 m line 41-42
N 31 - 21 E,	56.16 m. line 11-12	N 60 - 44 W.	14.72 m. line 42143
N 16 - 39 E.	76.20 m. line 12-13	S 77 - 02 W.	44.56 m. line 43-44
N 43 - 59 E,	55 89 m. line 13- 14	N 87 - 10 W.	20,61 m. line 44-45
S 63 - 10 E.	73.36 m. line 14-15	N 32 - 45 W.	15.68 m. line 45-46
S 67 - 49 E.	83.44 m. line 15-16	N 00 - 40 E.	37.19 m line 46-47
S 01 - 33 E.	40 44 m line 16-17	N 32 - 19 E.	68.53 m line 47-48
S 35 - 37 W.	67.55 m. line 17- 18	N 07 - 10 W.	35.06 m line 48-49
S 00 - 02 E,	23.81 m. line 18-19	N 70 - 05 W,	142.78 m. line 49-50
S 62 - 42 E.	26 79 m line 19- 20	S 44 - 16 W	33.87 m. line 50 - 51
N 84 - 40 E.	39.30 m. line 20- 21	S 17 - 05 W.	82 38 m. line 51 - 52
5 61 24 E.	21/29 m line 21-22	S 33 - 16 W.	72.44 m. June 52 - 53
	10.65 m. line 22-23	S 76 - 08 W.	19.28 m. line 53- 54
S 01 26 W.	22.02 m. line 23- 24	N 50 - 04 W.	38.34 m. line 54- 55

S 27 - 20 W.	40.54 m. line 24- 25	N 17 - 00 W.	49 13 m line 55 56
S 71 47 E.	27.68 m. line 25- 26	S 60 -46 W.	54 18 m. tipe 56 - 57
S 66 40 E	29.65 m. line 26-27	N 81 - 52 W,	63 69 m. line 57 - 58
S 53 35 E.	33.83 m. line 27- 28	S 64 - 58 W.	11.51 m line 58 59
S 39 14 E.	45 30 m. line 28-29	N 11 - 23 W.	21.83 m. line 59 - 60
\$ 13 - 03 E,	46.20 m. fine 29-30	S 52 = 33 W	13.99 m. line 60 - 61
S 27 - 10 W.	51.22 m. line 30-31	N 86 - 54 W,	65,54 m. lipe 61 - 62
S 40 - 02 E _x	43.58 m. line 31 -32	S 25 - 41 W.	73.27 m. line 62 63
		N 84 - 29 W.	16.26 m. line 63-1

Containing an area of 1.5277 hectares having been filed in this office by KIM B. SIM this COMMERCIAL PERMIT ROM NO. 001-1-22 is hereby granted to KIM B. SIM under R A 7160 implemented by the Provincial Tax Ordinance No. 04 series 2013, revised revenue code of the Province of Romblon and DENR Administrative Order No. 2010-21 Providing for a consolidated Department of Environment and Natural Resources Administrative Order for the Implementing Rules and Regulations of Republic Act No. 7942, otherwise known as the Philippine Mining Act of 1995 and Administrative Order No. 2015- 03 Revised Implementing Rules and Regulations of Republic Act No. 7076, otherwise known as the Peoples Small-Scale Mining Act of 1991, as amended, subject to the terms and conditions as follows:

- This permit is valid for a period of one year effective upon signing of the Provincial Governor of Romblon and renewable for another period upon application for renewal sixty (60) days before the expiry date hereof;
- 2 This permit is issued upon payment of the required extraction fee equivalent to ten percent (10%) of the fair market value in this province per cubic meter.
- The permittee shall maintain five (5) meters buffer zone from both embankments of the river system and institute mitigating measures to ensure stability of said embankments.
- 4 To guarantee compliance with the terms and conditions of this permit, a surety bond in the amount of Twenty Thousand Pesos (P 20 000 00).
- This permit maybe suspended or revoked at anytime by the Governor when in his opinion public interest so requires or upon failure of the permittee to comply with the terms and conditions stated herein.
- 6 The statements made in the application or those made later in support thereof shall be considered as a condition in the permit and any misrepresentation contained therein shall also be cause for the suspension or revocation of this permit.
- This permit shall be inoperative over areas covered by prior permits, Quarry Licenses. Permit
 or Mining Lessee, unless the prior authority of the lessee. Permit tee or lessee concerned is
 obtained.
- No extraction or removal of materials shall be allowed within the distance of one half (1/2)
 kilometer radius from the boundaries or reservoirs established for public water supply or any
 public or private works or structure unless prior clearances of the agency or owner concerned
 is obtained.
- 9 The removal or taking of materials in this permit shall be confined within the area specified herein the boundaries of which according to the application are established on the ground with prominent marks as indicated in the survey plan's submitted in support of his application.
- 10 The permittee shall assume full responsibility and shall be liable for damages to private and/or public property that maybe affected as result of his mining operation.
- 11. The permit is issued for the exclusive use and benefit of the permittee and shall not be transferred to any person, partnership or corporation without prior approval of the Governor.
- 12 The permittee or his agent representative shall post a copy of this permit at the place of his operation and make available at all times for inspection or examination by any authorized representative of the Governor.
- 13 The permittee shall post a billboard in entrance of his permit area measuring four (4) feet by eight (8) feet indicating owner's name, permit number and date issued, hectarage, affectivity of the permit, ECC number and other information necessary.
- 4 The permittee shall keep a book of accounts wherein there shall be entered every day the

therefore as well as a squality and kind of materials disposed of or sold and men serious price. The name an address of the persons of parties to what the same were sold or disposed of and other transaction connected with the business, such accounts shall at all times be open for inspection by the representative of the Governor or his deputies.

15 The permittee shall within ten (10) days after the end of each calendar month, shall submit to the issuing officer and treasurer concerned a sworn report stating the quantity and kind of materials sold or disposed of during the period covered by the report, its selling price and quantity and kind of materials left in the stock.

- Gravel material from the permit area a DELIVERY RECEIPT (DR) in the prescribed form for inspection by the ENRO PMRB or the daly authorized representative of the Governor, or his deputies. It shall be issued to and carried by the truck drivers concerned while in transit which shall be shown to proper authority for signature and a short notation of the word "USED", date and time etc. at the back portion of the DR (permittee, driver and ENRO, PMRB, PNP, PTO, BRGY.) The completely filed up PERMITTEE copy shall be retain by the permittee and attached to the monthly report to be accomplished by the permittee. The DRIVERS copy shall be signed or noted by the authority and made available at all times for inspection. And ENRO, PMRB, PNP, PTO, BRGY, copy shall be detached by the proper authorities and turn over to ENRO, PMRB for consolidation.
- 17 The removal or taking of materials from the area covered by this permit shall be subject to the local ordinances which are not inconsistent with the provisions of Provincial Tax Ordinance No. 04 series 2013, revised revenue code of the Province of Rombion or any
- 18 Unless otherwise renewed or amended, increasing the allowable volume of materials this permit ipso facto terminate after the whole quantity and kind of material specified shall have been removed or taken, or immediately after the expiration of the terms thereof and no application shall be treated if not filed on or before the expired date of this permit, and
- 19 Upon termination of this permit for whatever cause, the same shall be surrendered to the

ADDITIONAL TERMS AND CONDITION

- The permittee shall coordinate with the Brgy. Captain of Progress Weste, Odiongan, Romblon, one (1) day before the loading operation is conducted and present original copy of DR for his verification purposes and information.
- 2. Any deviation from operation without prior approval of the ENRO PMRB shall be ground for immediate suspension and or cancellation of the permit.
- 3 Any substantial complaint on damage or destruction of private and public properties shall be ground for immediate suspension and cancellation of the permit.
- 4 The permittee shall donate fifty (50) pieces of tree seedlings to the ENRO PMRB for its referestation program.
- 5 The operation should be subject to all applicable mining and environmental laws, rules and regulations including local ordinances.
- 6 Any authorized DENR-EMB, MGB MIMAROPA Region and ENRO/PMRB Personnel can initiate an on the spot inspection and monitoring even without prior notice; and

7. Entries in delivery receipts should be properly filled up, no erasures otherwise it will be considered and declared invalid Delivery Receipts

CONFORME

Witnesses

KIM SIM
PERMITTEE

quer Burece

JOSE R. RIANO

PROJECT DESCRIPTION

ACKNOW	omblon) of 3		
Republic of the Philippines) Province of Romblon) Municipality of) XXXXXXXXXXXXXXXXXXXXXX			
No	exhibiting to me his Community Tax Certificate on and the foregoing documents and acknowledge to tech as a Permittee and for the purpose there in ur (4) pages, including the acknowledge page is a Sand and Gravel materials therein specified for		
WHEREFORE, I hereto set my hand day of 2022 at	and affixed my signature and notarial seal this Rombion		
Doc No 194 Page No 194 Book No 1 Series of 2022	NOTARY PUBLIC PACIFICO M BANTANG ID Notary Public Up to John 30, 2022 Roll No. 2022 Roll No. 7958465701 MCLE VI: 0016012/12-7-16		

LUC Form No. 06 Series of 2023 (To be filled-up by the DENR)

ATTACHMENT 1



Republic of the Philippines

Department of Environment and Natural Resources

Provincial Environment and Natural Resources Office

Brgy. Tabin-Dagat, Odiongan, Romblon Tel. No. (042)567-2199

C E R T I F I C A T I O N

THIS IS TO CERTIFY that the Rehabilitation and Expansion Project for the Port of Tablas situated at Barangay Poctoy, Municipality of Odiongan, Province of Romblon, Island of Tablas specifically identify as follows;

Per verification made by Forester Catherin O. Atienza, LMI's Romer F. Gervacio and Christine N. Pasiona the subject are is classified as: (Please check)

Registered Owner	OCT/TCT/TD No.	Lot No.	Area per Title (hectares)	Area Applied for conversion (hectares)
---------------------	-------------------	---------	------------------------------	--

Port of Tablas Rehabilitation and Expansion Project (Construction of Port Operational Area with RORO Ramp)

- 1. [] Within protected areas under the National Integrated Protected Area system (NIPAS)
- 2. [] Within mossy and virgin forest
- 3. [] Within riverbanks
- 4. [] Within swamp forest and marsh lands
- 5. [Within reclaimed area
- 5. [] None of the above

The area where the project is being constructed is in the offshore part of Barangay Poctoy and is not connected to any land mass but adjacent to the existing port and causeway leading to the national highway. Further, the area is not within mangrove areas, civil and military reservation and watershed areas.

This certification is issued upon the request of Mr. Joselito O. Sinocruz relative to the requriements by the Philippine Port Authority. The amount of fifty pesos (P50.00) has been paid and acknowledged under O.R. No.4747281 dated February 17, 2023.

Given this 17th day of February 2023.

ARNOLDO A. BLAZA, JR.

DIC, PENR Officer

Note:

- 1. This certification shall not be considered as development permit
- 2. This certification shall not be construed as an Environmental Compliance Certificate (ECC)



SECRETARY'S CERTIFICATE

I, HANES LOUISE M. ALIVIO, duly designated Acting Board Secretary VI of the Philippine Ports Authority (PPA), a government instrumentality attached to the Department of Transportation, created by virtue of Presidential Decree No. 857, as amended, with principal office at the 6th Floor PPA Head Office Building, A. Bonifacio Drive, South Harbor, Port Area, Manila, and having custody of the Board records of the PPA, do hereby certify:

That, during the 513th Regular Board Meeting of the Board of Directors of the Philippine Ports Authority, held on 25th January 2023, at the Board Room, 6th Floor, PPA Head Office Bldg., A. Bonifacio Drive, South Harbor, Port Area, Manila, the following Resolution was adopted:

BOARD RESOLUTION NO. 3198

WHEREAS, the Philippine Ports Authority (PPA) is currently implementing port expansion/improvement projects, which include reclamation works;

WHEREAS, PPA needs to apply for an Environmental Compliance Certificate (ECC) with the Department of Environment and Natural Resources (DENR), for all reclamation projects.

WHEREAS, DENR Administrative Order (DAO) No. 2018-14, provides that an Area Clearance from the DENR is required for reclamation projects;

WHEREAS, PPA Management requests for the issuance of authority to apply for an Area Clearance and other permits for reclamation projects from the DENR, and/or other agencies concerned;

NOW BE IT -

RESOLVED, as it is hereby resolved, that on motion duly made and seconded, the Board hereby authorizes the PPA General Manager and/or his duly authorized representative to apply for an Area Clearance and other permits for reclamation projects with the Department of Environment and Natural Resources (DENR) and/or other agencies concerned, with full power and authority to sign any and all documents and/or submissions necessary for the purpose.

IN WITNESS WHEREOF, I have signed this Secretary's Certificate this 27th day of April 2023, at the 6th Floor PPA Head Office Building, A. Bonifacio Drive, South Harbor, Port Area, Manila.

HANES LOUISE M. ALIVIO
Acting Board Secretary VI

ATTACHMENT 3



Republic of the Philippines

Department of Environment and Natural Resources MINES AND GEOSCIENCES BUREAU MIMAROPA Region

7/F DENR Building, 1515 Roxas Boulevard, Ermita, Manila Telefax No. (+632) 536-0215 / (+632) 310-1369 Email: region4b@mgb.gov.ph



March 6, 2023

MEMORANDUM

FOR :

GLENN MARCELO C. NOBLE

Regional Director

Mines and Geosciences Bureau Regional Office – MIMAROPA

THRU

THE CHIEF

Geosciences Division

FROM

FELIX CARL F. FALQUERABAO

Science Research Specialist II (Geologist)

SUBJECT

GEOHAZARD IDENTIFICATION REPORT (GIR) FOR THE SITE OF TABLAS PORT EXTENSION PROJECT IN ODIONGAN, ROMBLON INVOLVING CONSTRUCTION OF A PORT OPERATIONAL AREA WITH RORO RAMP LOCATED IN BRGY. POCTOY, ODIONGAN,

PROVINCE OF ROMBLON

I. INTRODUCTION

.

In response to the request by the Port Services Division, Philippines Port Authority, Port Management Office Batangas, the undersigned conducted a Geohazard Identification Survey (GIS) at the site of Tablas Port Extension Project located in Brgy. Poctoy, Odiongan, Romblon.

The field survey aims to identify potential geologic hazards present in the area based on different factors such as geology, site location, geomorphology, tectonic setting, etc. This undertaking also provides recommendations to address issues related to potential sources of geohazards within the development site. The GIS consisted of data gathering from available literature, on-site field assessment, interviews, and desktop analysis using Geographic Information System (GIS) software.

II. PROJECT DESCRIPTION

Tablas Port is an industrial port operating in Brgy. Poctoy, Odiongan, Romblon. The port is the main access to Tablas Island operated by the Philippine Ports Authority, Terminal Management Office Tablas.

The Philippine Ports Authority stated that the expansion project involving construction of a port operational area with roro ramp is envisaged to cater the growing needs of port users. The expansion project includes the construction and improvement of port facilities and amenities to serve the requirements of roll-on roll-off port in the Municipality of Odiongan, Romblon including municipalities in support of government's thrust to develop regional water transportation facilities to facilitate the easy access and mobility of goods and passengers to and from the Island of Tablas and other provinces. The scope of work includes: a. demolition, excavation and removal works; b. construction of port operational area with roro ramp.

The geohazard identification report (GIR) is one of the mandatory requirements that the Philippine Port Authority needs to acquire for the issuance of area clearance as per DAO No. 2018-14, Guidelines on the Issuance of Area Clearance for Reclamation Projects and Proclamation / Special Patents Over Reclaimed Lands.

III. LOCATION AND ACCESSIBILITY

The project site is located at Brgy. Poctoy, Odiongan, Romblon with estimated geographical coordinates of 12°25'1.11" N and 121°59'19.32 E. It is 2.06 km southwest of Odiongan Municipal Hall and can be accessed through Tablas Circumferential Road connected to the Batiano-Poctoy Port road. Travel time from Odiongan Municipal Hall to the port expansion project is approximately 5 minutes by public utility vehicles. Odiongan is located in Tablas Island, approximately 260 kilometers southeast of Manila. It can be accessed from Manila via a three and a half hour drive to Batangas Port and a 10-hour ferry. Subsequently, it can also be reached by air via an hour flight to the neighboring municipality of Alcantara followed by an hour drive to Odiongan.

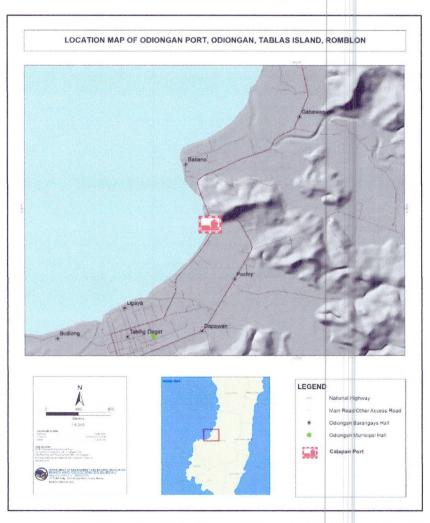


Figure 1. Location Map of the Study Area in Odiongan, Tablas Island, Romblon

IV. TOPOGRAPHY AND DRAINAGE

The Municipality of Odiongan is a flood plain of multiple rivers originating from various streams draining westward from the mountain range running through the central portion of Tablas. The streams have incised through the previously elevated terrain forming valleys that are flat and well developed, sign of a mature terrain. The project site lies offshore (reclamation) of Brgy. Poctoy, Odiongan at the west coast of Tablas Island. During the field assessment, it was observed that the topographic configuration of the site has been modified for construction purposes.

The closest stream is a minor perennial creek approximately 527 meters southeast of the project site. The creek serves as a water conduit for a minor valley draining west to the sea. The nearest major drainage system is the west trending Gabawan River located approximately 1.10 kilometers northeast of the proposed site.

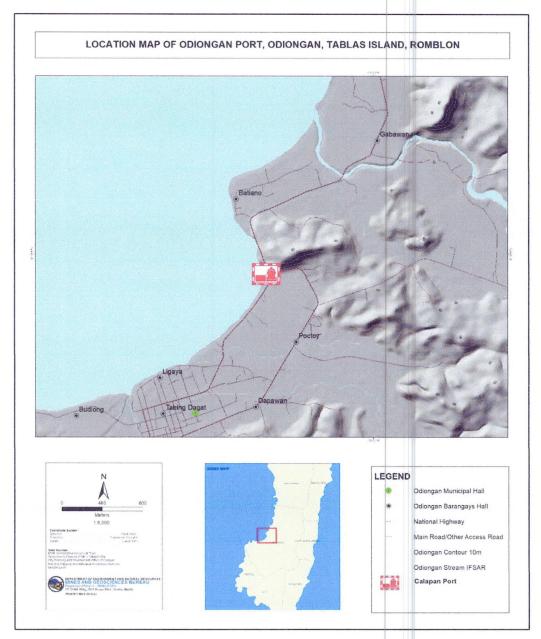


Figure 2. Topographic Map of the Study area and vicinity in Odiongan, Tablas Island, Romblon.

V. GENERAL GEOLOGY

Based on the geologic map of Romblon (Figure 3) produced on a provincial scale by MGB MIMAROPA, the project site is underlain by the Late Miocene to Early Pliocene Anahao Formation. The formation basically consists of interbedded limestone, sandstone, mudstone, and shale. The formation is well developed in Tablas Island but can also be observed in Carabao Island. The formation

represents a broad synclinorium extending from Odiongan to Looc Bay (GOP, 2010).

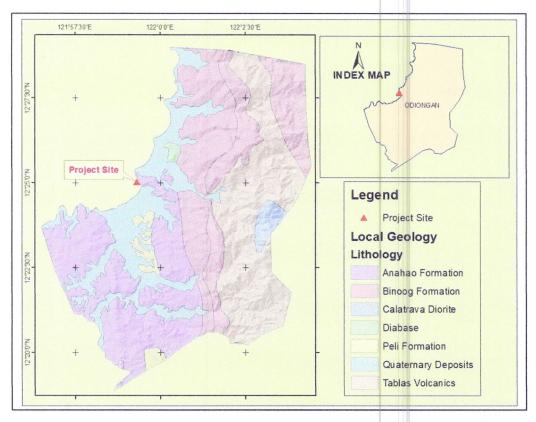


Figure 3. Geologic Map of Odiongan, Tablas Island, Romblon

On-site assessment allowed the confirmation of this formation when the contractor yielded amounts of limestone and mudstone during construction which they locally described as "burak". The samples are identified to be part of the 450-meter thick Anahao Formation.

VI. REVIEW OF MGB-MIMAROPA GEOHAZARD MAPS

a. Flood

The flood susceptibility map generated by MGB – MIMAROPA shows that the project site has high susceptibility to flooding. Since the project site is a reclamation area, the possibility of coastal flooding is high. Even though no streams might affect the project site, weather disturbances and natural

disasters like tropical cyclones and monsoons can cause enormous amounts of damages to the project. Flooding to be expected is coastal in nature, thus the elevation of the port is vital in mitigating this hazard.

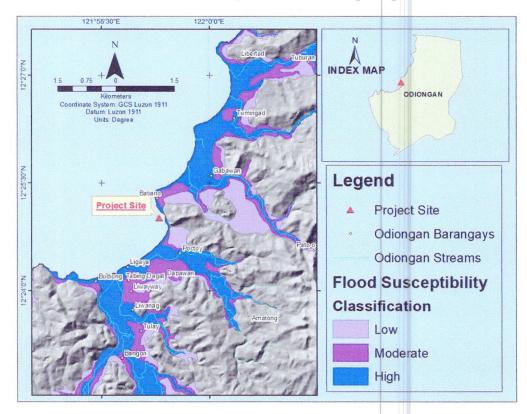


Figure 4. Flood Susceptibility Map of Odiongan, Tablas Island, Romblon.

Storm surge is a rise in sea level during intense storms. The rise of sea level is caused by the difference in atmospheric pressure inside and outside the storm. Storm surge is extremely dangerous when it happens at the same time as the high tide. This produces abnormally large waves which can easily engulf coastal areas. This makes storm surges very dangerous for coastal communities.

b. Landslide

Mass wasting is the downward movement of materials like soil and rock debris due to gravity. This is usually triggered by abnormal rainfalls, and ground shaking. Steep slopes and intense physical and chemical weathering also affect mass wasting.

Based on the landslide susceptibility map generated by MGB – MIMAROPA (Figure 6), the project site is categorized under low susceptibility. However, significant slope modification for land leveling may weaken soil consolidation and enhance slope instability, thus, triggering mass movement. During the field assessment, no critical slopes were observed.

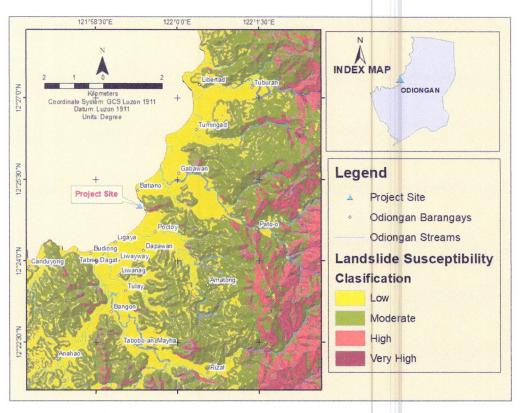


Figure 5. Landslide Susceptibility Map of Odiongan, Tablas Island, Rombton.

VII. POTENTIAL GEOLOGIC HAZARDS

a. Seismic/Fault Related Hazards

Based on the Seismic Maps seen in Figure 7 published by the Philippine Institute of Volcanology and Seismology (PHIVOLCS), the Province of Romblon is seismologically active through the years 2015 – 2017. In 2015, PHIVOLCS recorded some major offshore seismic

activities reaching scales as high as magnitude 4 in the west and east surrounding water of the island. In 2016, PHIVOLCS recorded a spike in the amount of seismic activity in Tablas Island. Various seismic activities reaching scales as high as magnitude 4 swarm the west coast of the island. The latest published seismic map of MIMAROPA Region was in 2017. Lesser seismic activities were recorded in Romblon. However, some were noted in the northern part of Tablas Island. Daresay, Romblon Island Group is seismologically active with recurring earthquakes through time. Thus, the possibility of earthquake occurrence in the area is high.

The nearest active fault from the project site is the North Tablas fault, which is approximately 11.97 kilometers north east. North Tablas fault is a northeast trending geologic structure traversing the Municipality of San Agustin. Since the occurrence of seismic-related hazards is highly dependent on the proximity to earthquake generators, this makes the project site prone to seismic hazards, such as ground shaking. The degree of hazard will highly rely upon the energy released from the movement of the structure, potential ground shaking hazard may affect the project site and vicinity. The strength of ground shaking may also intensify if the materials used for ground levelling were not properly placed or compacted. Based on available literature, the strongest recorded earthquakes felt in Romblon province are around the moment magnitude Mw 5.0. Thus, structures must be able to withstand this intensity given an 11.97 kilometer proximity.

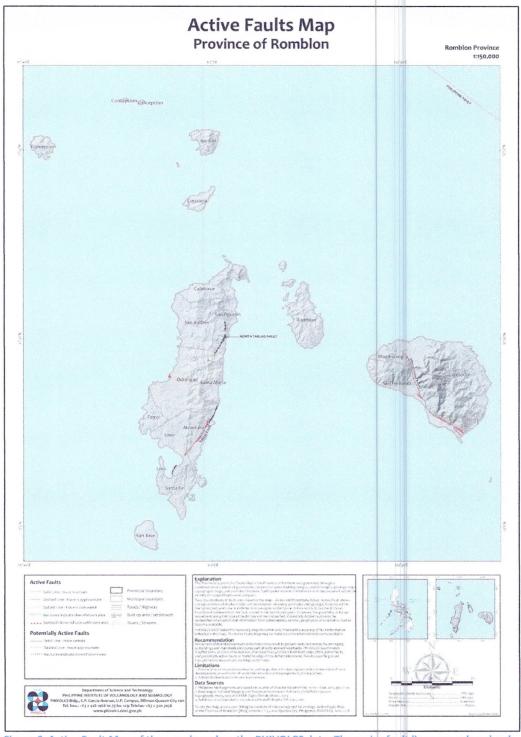


Figure 6. Active Fault Map of the area based on the PHIVOLCS data. The major fault lines are colored red while an offshore dashed line is also an inferred active fault.

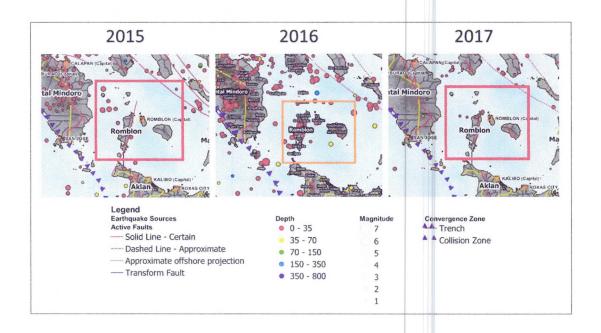


Figure 7. Earthquake Source map of earthquake events that transpired around Romblon from 2015-2017. Data taken from PHIVOLCS.

<u>Liquefaction</u>

A common occurrence during seismic hazards is liquefaction. Liquefaction is a phenomenon in which the strength and stiffness of soil is reduced due to ground shaking. Since the project lies offshore, it is safe to assume that unconsolidated materials such as sand is present in the subsurface. Reclaimed areas are also common sites for liquefaction with multiple occurrences throughout the world. Past liquefactions were mainly because of the loose sandy nature of the infill being used. Through multiple studies and past experiences, there have been technological improvements and engineering practices that have been tested and applied to improve the subsurface. Solutions and technology may vary depending on the unique situation of the sites and must be taken into account by the engineers of PPA. For this port extension project, however, it is important to note that measures to be taken must a Mw 5.0 earthquake within a 11.97-kilometer focus or epicenter.

Another possible geologic hazard is differential settlement. Differential settlement is the occurrence wherein the soil weakens due to certain conditions affecting the building foundation, and consequently the whole structure. Since the project site is found to be underlain by mudstone which has a rock strength that deteriorates significantly when it absorbs water, differential settlement is also a possibility.

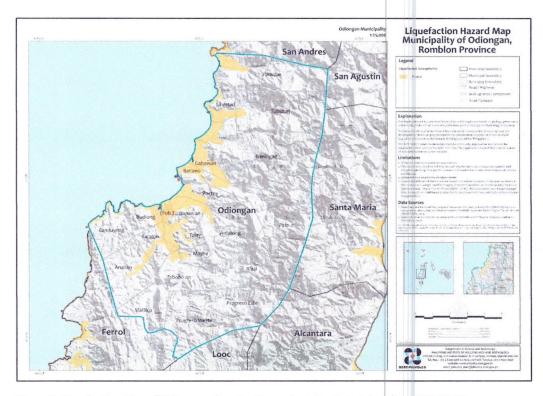


Figure 8. Liquefaction Map of Odiongan showing the project site. Data taken from PHIVOLCS.

Tsunami

Odiongan and the rest of Romblon municipalities have low susceptibility from tsunami as it is not exposed to major offshore faults and trenches that may produce tsunamis nor has had a tsunami event in recorded history. There are presence of offshore faults and active faults such as the Tablas Lineament and Sibuyan splay of the Philippine Fault which signify that there is a possibility. Therefore,

safety measures must be put in place or reinforced to mitigate or lessen this impending hazard. Below is the tsunami map produced by PHIVOLCS (Figure 9).

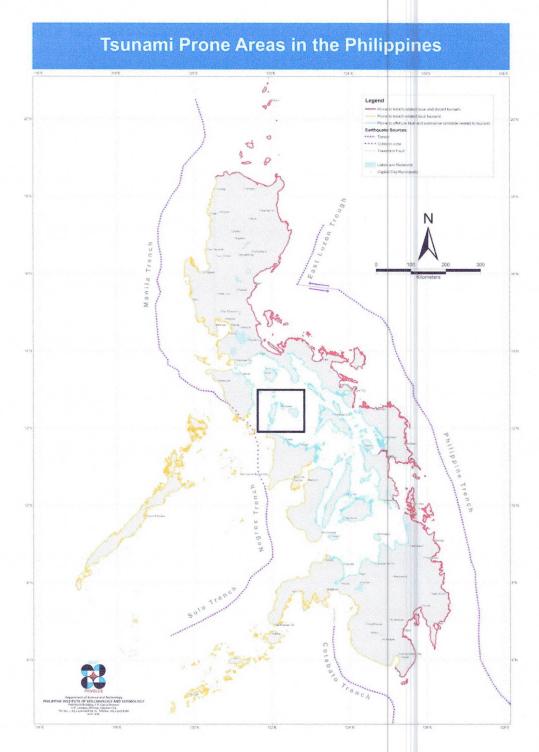


Figure 9. PHIVOLCS Tsunami Map for the entire Philippines with focus on Rombion Province.

b. Hydrometeorologic Hazard

Storm Surge

Storm surge is a rise in sea level during intense storms. The rise of sea level is caused by the difference in atmospheric pressure inside and outside the storm. Storm surge is extremely dangerous when it happens at the same time as the high tide. This produces abnormally large waves which can easily engulf coastal areas. This makes storm surges very dangerous for coastal communities.

Given the nature of this project being located along the coast, storm surge can be a potential hazard. Abnormal sea level rise coupled with a strong storm or typhoon can result to damaging effects to coastal communities. Coastal studies detailing the effect of storm surges in Barangay Poctoy must be reviewed to be able to properly mitigate the reclamation project.

VI. FINDINGS AND RECOMMENDATIONS

- 1. The project site is distant from the identified North Tablas Fault. However, differential settlement and liquefaction is a possible geologic hazard because of the mudstone identified as the building foundation and the presence of unconsolidated sand. This may occur due to the deteriorating rock strength of clay rich rich materials when wet. Construction engineers may conduct further assessment to provide effective mitigating measures to address possible foundation related problems that may affect the structural integrity of the port operational area. Engineers should also take into account that the structures must withstand high magnitude earthquakes.
- 2. Accordingly, any construction or development within the area must conform to the existing rules and regulations stated in the National Building Code of the Philippines and should be subjected to proper evaluation and approval of the Municipal Engineering Office concerned.

- 3. The project site is under low landslide susceptibility according to the MGB landslide susceptibility map. However, slope modifications and ground leveling must be done properly to avoid slope instability that may lead to mass wasting hazards.
- 4. Since the project site is susceptible to coastal flooding related to natural disasters like storm surges and tsunamis, the appropriate drainage system must be installed to limit widespread damages and control surface flow.

Prepared by:

FELIX CARLE. FALQUERABAO

APPENDIX – Photos



Photo 1. The current state of the project site as of the time of inspection.



Photo 2. The undersigned together with the contractor and employees of Philippine Ports Authority.

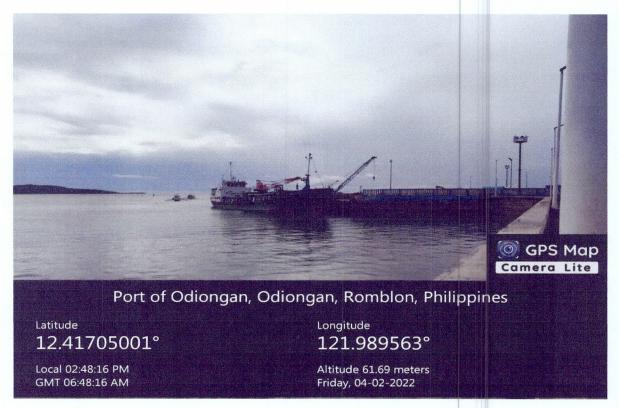


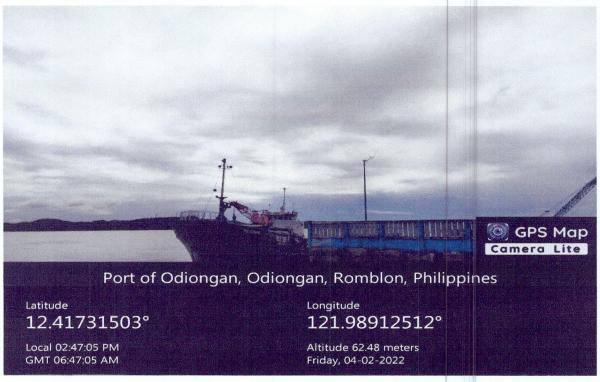


PROPOSED EXPANSION AREA IN FRONT OF THE NEWLY CONSTRUCTED ROAD

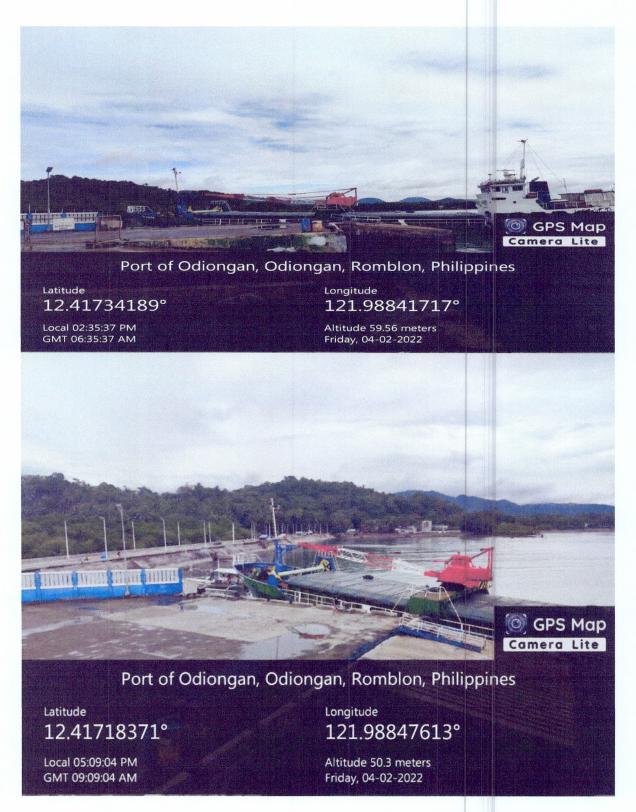


EXISTING BACKUP AREA

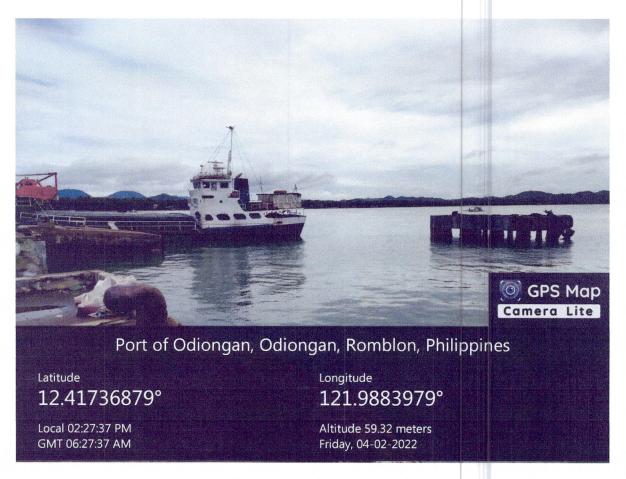




PROPOSED EXPANSION AREA



EXISTING RORO RAMPS AT FRONT OF BACKUP AREA



EXISTING BREASTING DOLPHIN