



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) 8536-0215 / (+632) 5310-1369
Email: region4b@mgb.gov.ph



14 August 2023

MEMORANDUM

FOR : The Regional Executive Director
Department of Environment and Natural Resources
MIMAROPA Region

FROM : The Regional Director
This Office

SUBJECT : Request for an Interagency Meeting with LGU – Coron,
Palawan to Discuss the Slope Protection Plan (Phase 1)
Implementation in the Rural Agriculture Center Site/
Quarry Area in Barangay 6, Coron, Palawan

DENR MIMAROPA REGION	
Office of the REGIONAL DIRECTOR	
DOC. NO.	
RECEIVED	RELEASED
BY: <i>WA</i>	TO:
DATE: 8-18-23	DATE:
TIME: 11:15 PM	TIME:

This has reference to the Memorandum dated 8 August 2023 from the Community Environment and Natural Resources Office (CENRO) – Coron, Palawan on the site investigation report dated 7 August 2023 by the MGB MIMAROPA Embedded Personnel in CENRO – Coron, Palawan.

Considering the urgency to conduct a rehabilitation and/or construction of the slope protection due to the collapse/erosion of the quarry area in Barangay 6, Coron, Palawan, this Office concurs with the call for an Interagency Task Force for Coron meeting to tackle our way-forward on the matter as well as the status of the proposed rehabilitation of the three (3) quarry sites in Coron, Palawan.

For the Regional Executive Director's information and further instruction/s.

[Signature]
FELIZARDO A. GACAD, JR.

Enc'l: Memorandum by CENRO – Coron dated 8 August 2023
Investigation Report by the MGB Embedded Personnel dated 7 August 2023
Bill of Materials for the Construction of the Slope Protection (Phase 1)

cc: **The PENR Officer**
Provincial Environment and Natural Resources Office
Province of Palawan

The CENR Officer
Community Environment and Natural Resources Office
Coron, Palawan

**“MINING SHALL BE PRO-PEOPLE AND PRO-ENVIRONMENT
IN SUSTAINING WEALTH CREATION AND IMPROVED QUALITY OF LIFE.”**

081723-R04B-2146



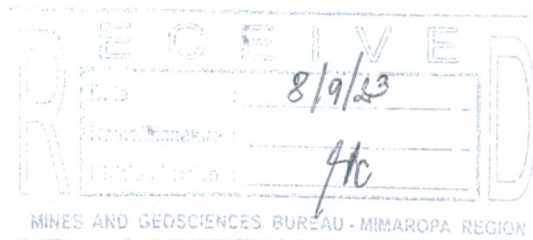
Memorandum
9/17/2023



MINES AND GEOSCIENCES BUREAU
MIMAROPA Region

[CENRO-Coron] SITE INVESTIGATION REPORT OF THE RURAL AGRICULTURE CENTER (RAC) SITE AND MOUNTAIN QUARRY IN SITIO DIPULAO, BARANGAY 6, CORON, PALAWAN

From: Alessa Estorninos (alessaest.mgb4b@gmail.com)
To: mimaroparegion@denr.gov.ph
Cc: mines_4b@yahoo.com; penropalawan@denr.gov.ph
Date: Tuesday, August 8, 2023 at 03:00 PM GMT+8



Greetings!

Respectfully forwarding a copy of the investigation report dated 07 August 2023 of the MGB –MIMAROPA Embedded Personnel regarding the above-cited subject.

For your consideration and timely action.

Kindly acknowledge receipt of this email.

Thank you very much.

--
Alessa "Les" Estorninos
Science Research Specialist II
Community Environment and Natural Resources Office - Coron
Mines and Geosciences Bureau - MIMAROPA
Department of Environment and Natural Resources



[CENRO-Coron] SITE INVESTIGATION REPORT OF THE RURAL AGRICULTURE CENTER (RAC) SITE AND MOUNTAIN QUARRY IN SITIO DIPULAO, BARANGAY 6, CORON, PALAWAN.pdf
7.6MB

Red: Ma'am Gines

8/9/23

9.12 am



Republic of the Philippines
Department of Environment and Natural Resources
Community Environment and Natural Resources Office
Barangay 5, Calamianes Island, Coron, Palawan
Telephone No. +63 917 504 2633

E-mail: cenrocoron@denr.gov.ph Website: www.denr.gov.ph

08 August 2023

MEMORANDUM

FOR : The Regional Executive Director
Department of Environment and Natural Resources
MIMAROPA Region

THRU : The Regional Director
Mines and Geosciences Bureau
MIMAROPA Region

The PENR Officer
Provincial Environment and Natural Resources Office
Province of Palawan

FROM : OIC, CENR Officer
Community Environment and Natural Resources Office
Coron, Palawan

SUBJECT : SITE INVESTIGATION REPORT OF THE RURAL AGRICULTURE
CENTER (RAC) SITE AND MOUNTAIN QUARRY IN SITIO
DIPULAO, BARANGAY 6, CORON, PALAWAN

Respectfully forwarding a copy of the investigation report dated 07 August 2023 of the MGB -MIMAROPA Embedded Personnel regarding the above-cited subject.

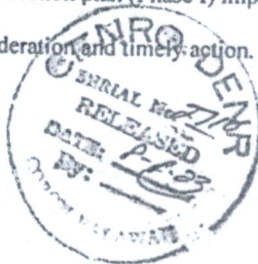
Constant rains brought by the Southwest Monsoon or *Habagat* have affected the nearby establishments in the quarried area of the Rural Agriculture Center (RAC) Site in Sitio Dipulao, Barangay 6, Coron, Palawan. During heavy rains, silt flows through the massive scarp and goes directly to the national road and establishments across the street. This was evident last 25 July 2023.

We have already requested LGU Coron through the Municipal Planning and Development Office to expedite the rehabilitation activity in the quarry site through a letter dated 21 September 2022. Accordingly, the Municipal Engineering Office of LGU Coron has submitted a slope protection plan (Phase I) to mitigate the effects of landslides in the quarry site with an estimated cost of PhP 5,000,000.00.

We recognize the importance of a rehabilitation plan before beginning the project. However, due to the urgency of the matter, we concur with the construction of the slope protection plan (Phase I) proposed by LGU Coron. Provided that they commit to submitting a rehabilitation plan even after the approval of the Phase I project for the safety and well-being of our stakeholders.

In this regard, we request your office to call for an interagency meeting with LGU Coron to discuss the slope protection plan (Phase I) implementation in the RAC Site.

For your consideration and timely action.




RODNEY C. VERIAN
OIC, CENR Officer



Republic of the Philippines
Department of Environment and Natural Resources
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
MIMAROPA Region
Coron, Palawan

07 August 2023

MEMORANDUM

FOR : The Community Environment and
Natural Resources Officer
Coron, Palawan

FROM : The Undersigned

SUBJECT : SITE INVESTIGATION REPORT OF THE RURAL
AGRICULTURE CENTER (RAC) SITE AND MOUNTAIN
QUARRY IN SITIO DIPULAO, BARANGAY 6, CORON,
PALAWAN



The undersigned conducted a site investigation last 03 August 2023 in response to the request of the Municipal Disaster Risk Reduction and Management Office (MDRRMO) of the Municipality of Coron, Palawan.

Background Information

The MDRRMO requested DENR-Coron through a letter dated 21 July 2023, to assist and provide technical assistance in relation to possible intervention and mitigation of the erosion and landslide-prone areas in the RAC site and mountain quarry in Sitio Dipulao, Brgy. 6, Coron, Palawan (**Annex 1**).

Purpose and Scope

The inspection includes an ocular inspection of the site, photo documentation, and a verbal interview with Engr. Ike D. Parangue and Engr. Yrrol Joy M. Furza of the Municipal Engineering Office of LGU Coron.

Findings and Observations

1. The subject area is the RAC Site in Sitio Dipulao, Barangay 6, Coron, Palawan. It is geographically situated at $12^{\circ}1'12.00''$ N, $120^{\circ}11'20.00''$ E (**Figure 1**). It is approximately 2 kilometers from CENRO, which is reachable by a 5-minute motorcycle ride.

DENR, Calle Nueva, Coron Town Proper, Coron, Palawan
Contact Nos.: 0917-504-2633

Scanned with CamScanner



Figure 1. Location Map of the inspected RAC Site

2. The undersigned went to the Municipal Engineering Office of Coron to discuss their slope protection plan (**Annex 2**) for the subject area. According to Municipal Engineer Ike D. Parangue, Phase I of the slope protection project covers a total of 1,200 sq. m. Based on the Program of Works and Bill of Materials, the estimated project cost is PhP 5,005,924.22 (**Annex 3**). Moreover, the project will be in 10 phases with a total estimated cost of PhP 31,565,228.63 (**Annex 4**).
3. The undersigned also followed up with Mr. Michael Fababeir of the Municipal Planning and Development Office (MPDO) regarding the revised rehabilitation plan for the subject area. He mentioned they have yet to revise the plan and are waiting for another interagency meeting.
4. Please see the following communications in relation to the rehabilitation plan of the subject area:

Date	Subject	Date Released	Recipient	Date Received
21 September 2022	Request to Expedite the Rehabilitation Activity of the Quarry Site in Sitio Dipulao, Brgy. 6, Coron, Palawan	21 September 2022	MPDO	22 September 2022
20 September 2022	Investigation Report on the Landslide in the Mountain Quarry in Sitio Dipulao, Brgy. Poblacion 6, Coron,	21 September 2022	PENR Officer	N/A

	Palawan			
N/A	Evaluation of the Rehabilitation Plan for Mountain Quarry Situated in Sitio Dipulao, Brgy. Poblacion 6, Coron, Palawan, as Submitted by Local Government Unit (LGU) - Coron, Palawan	N/A	MPDO	18 July 2022
08 July 2022	Evaluation of the Rehabilitation Plan Submitted by the Local Government Unit of Coron, Palawan for the Mountain Quarry Situated in Sitio Dipulao, Brgy. Poblacion 6, Coron, Palawan	13 July 2022	For RED, RD of MGB MIMAROPA Thru PENR Officer	N/A

5. During the site inspection, a part of the quarry has collapsed. It is observed to be debris and silt flow (Photo 1). A small spring is on top of the quarry site, continuously flowing down through the collapsed site (Photo 2).
6. The presence of the spring and onset of continuous rain increases the effect of landslides and erosion in the area, as observed last 25 July 2023. Heavy rain and strong winds brought by Southwest Monsoon intensified by Super Typhoon Egay affected the nearby establishments in the quarry site and national road (Photo 3).
7. With this, the Municipal Engineering Office of Coron requests to proceed with the slope protection (Phase I) construction. Engr. Parangue also mentioned that the fund is readily available and requests DENR to allow them to implement the project to mitigate the effects of the landslide, especially during the rainy season.

Comments and Recommendations

1. For CENRO-Coron to request DENR MIMAROPA for an interagency meeting in line with the rehabilitation plan of the quarry sites, especially the RAC Site in Sitio Dipulao, Brgy. 6, Coron, Palawan.
2. Since the project will be long-term (10 phases), the Municipal Engineering Office of Coron shall submit an updated rehabilitation plan for the entire project.

For your reference, record, and further instruction(s).


Alessa Anne S. Estorninos
 Science Research Specialist II
 MGB MIMAROPA – Embedded Personnel

Photo Documentation

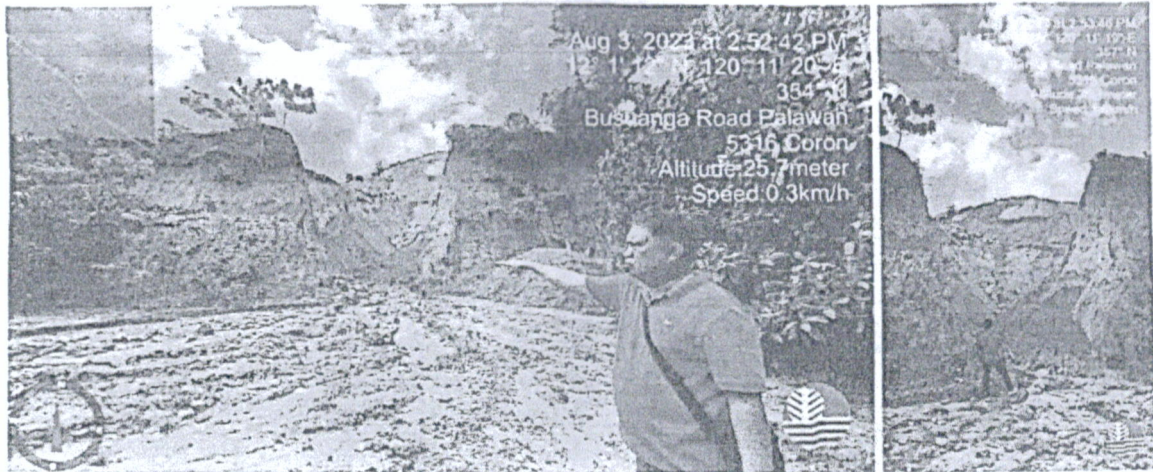


Photo 1. Debris and silt flow. Source of the silt flowing to the national road and nearby establishments.

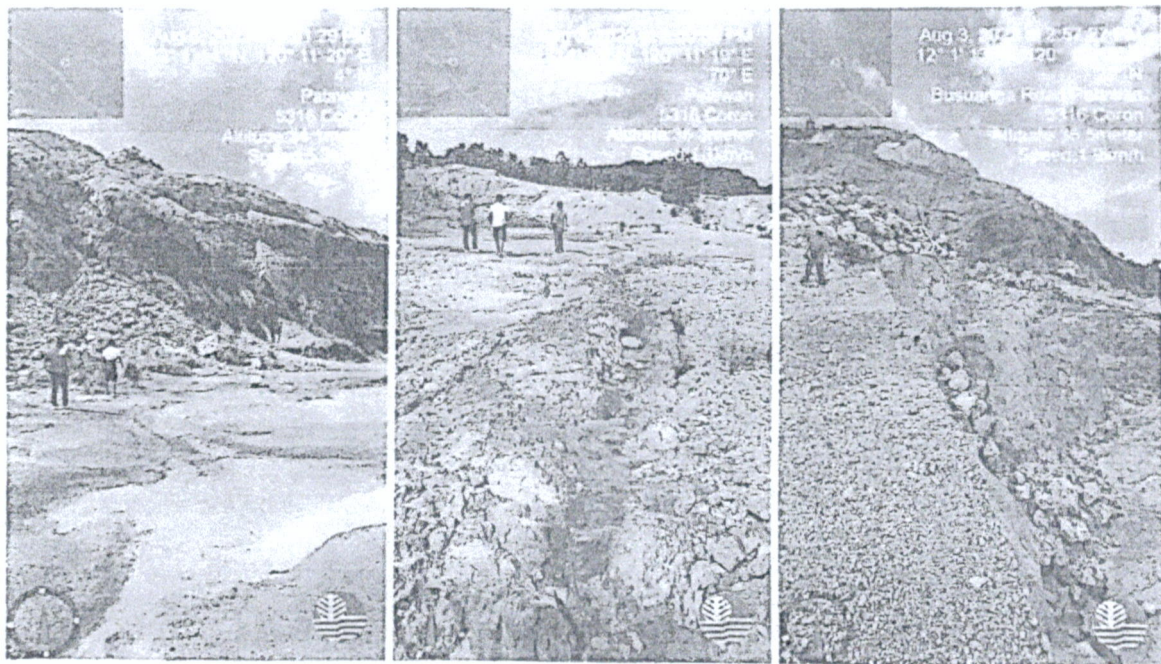


Photo 2. The presence of a small spring on top of the quarry site continuously flows down through the collapsed area.



Photo 3. Presence of silt on the national road and nearby establishments due to the heavy rain and strong winds brought by Southwest Monsoon intensified by Super Typhoon Egay.



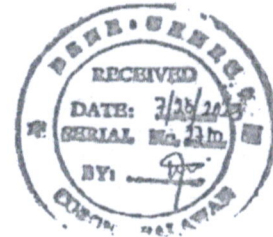
Republic of the Philippines
Province of Palawan
MUNICIPALITY OF CORON
MUNICIPAL DISASTER RISK REDUCTION
MANAGEMENT OFFICE

July 21, 2023

MR. RODNEY VERIAN
DENR Region IV-B MIMAROPA
OIC-CENRO Coron, Palawan
Brgy. Poblacion VI, Coron, Palawan

ENGR. JASON V. DE LOS REYES
OIC District Engineer
DPWH Coron, Palawan
Region IV-B MIMAROPA

MARIA THERESA J. CASARENO
Project Officer III
PMRB Monitoring & Enforcement Team



Subject: Request of Assistance for Erosion and Landslide-Prone Area

Dear Sir/Madam,

Warm greetings!

The MDRRMO is responsible for overseeing and assessing the safety of everyone in the Municipality. In line with this, we have conducted an inspection of the area at RACSITE, Barangay Poblacion 6, Coron, Palawan, last July 19, 2023. It has been observed that the area shows clear indications of soil erosion and rockfall. With the onset of the rainy season, this could eventually lead to a landslide which could cause disturbance to the adjacent National Highway as it could make the road slippery. We are deeply concerned about the significant impact on the safety of the general public, particularly the daily commuters who rely on this road.

Furthermore, on behalf of LGU Coron, we kindly request the support and assistance of the DENR-CENRO, PMRB, and DPWH for the documents needed for the intervention and mitigation measures for the said area.

We are hoping for your immediate and timely response to this matter. It is our goal to ensure to the best of our effort that we can provide peace of mind to our residents and tourist as their safety while they are within our municipality is at stake.

Thank you very much. Godbless!

Sincerely,


ENGR. FERNANDO A. LOPEZ
LDRRMO

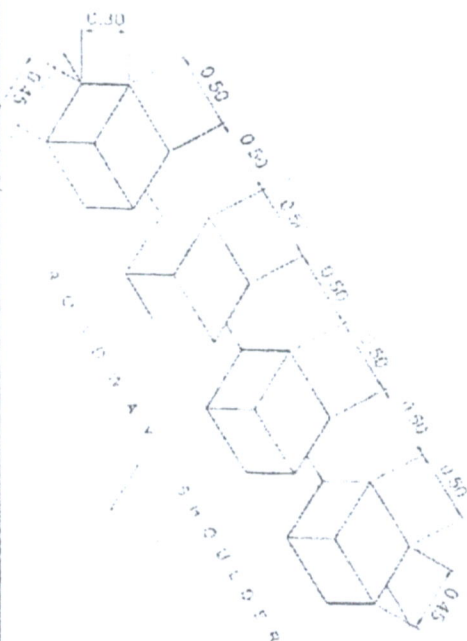
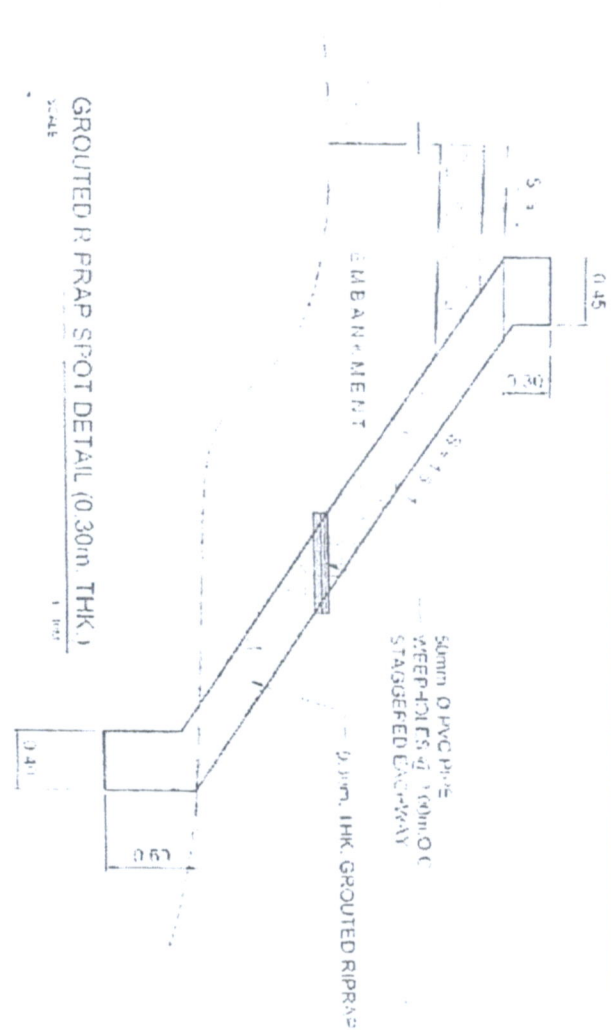
Noted by:


MARIO T. REYES JR.
Municipal Mayor

GROUTED RIPRAP SPOT DETAIL (0.30m THK.)

SCALE

1:100



REVISIONS	
NO.	DATE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
DESIGNED BY: CHECKED BY: PROJECT TITLE: RETAINING WALL - PROTECTION APPROVED BY: DATE:	
SHEET CONTAINS SHOWN AS SHOWN	
REVISIONS/REVISIONS BY: DATE: NO. DATE: NO. DATE: NO. DATE:	
A-01	



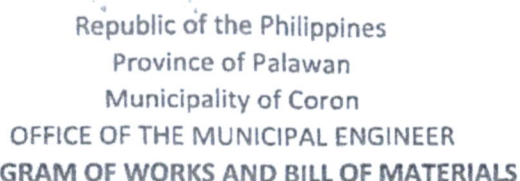
12mmØ VERTICAL BARS SPACED @ 200mm @ 32 -
12mmØ HORIZONTAL BARS SPACED @ 200mm ON
CENTER

DETAIL OF CON'C REINF. RETAINING WALL

1:80m

RECEIVED BY _____
 ORIGINAL FILED IN _____
 ALFORD OR 65-110
 CHECKED BY _____
 FILED BY _____
 RELEASING AGENCY PRODUCTION
 REQUEST NO. 15-110, FILE 15-110
 APPROVED BY _____
 WARD 1, BLOCK 1, A
 ALFORD OR 65-110

[illegible]



IMPLEMENTATION: By Contract
Starting Date: Upon Approval
CAL. DAYS TO COMPLETE: 150 Cal. Days

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	Portland Cement	2500	bags	270.00	675,000.00
2	Grave 3/4	350	cu.m	2,300.00	805,000.00
3	Fine Sand	150	cu.m	2,200.00	330,000.00
4	12mm Ø RSB	1250	pcs	280.00	350,000.00
5	16mm Ø RSB	700	pcs	480.00	336,000.00
6	Tie Wire o. 16	250	kls	90.00	22,500.00
7	1/2 x 4 x 8 Penolet Board	100	pcs	1,250.00	125,000.00
8	2 x 3 x 12 Coco-Lumber	800	pcs	210.00	168,000.00
9	2 x 2 x 12 Coco-Lumber	300	pcs	140.00	42,000.00
10	10mm Ø RSB	300	pcs	180.00	54,000.00
11	Hacksaw Blade	30	pcs	75.00	2,250.00
12	CWN 4"	6	boxes	2,000.00	12,000.00
13	CWN 3"	4	boxes	2,000.00	8,000.00
14	CWN 2"	2	boxes	2,000.00	4,000.00
15	PVC Pipe 3Ø	100	pcs	600.00	60,000.00
Material Cost:					2,993,750.00

Materials Cost:	2,993,750.00
Labor Cost:	898,125.00
ESTIMATED TOTAL PROJECT COST:	3,891,875.00

OCM 12.5%:	486,484.38
PROFIT 10%:	389,187.50
VAT 5%*(DC+PROFIT):	238,377.34
TOTAL INDIRECT COST:	1,114,049.22

ESTIMATED TOTAL PROJECT COST:	PHP 5,005,924.22
SAY>>>>>>>>	PHP 5,000,000.00

Approved:

HON. MARIO T. REYES JR.
Municipal Mayor

ENGINEERING
OFFICE



Republic of the Philippines
Province of Palawan
Municipality of Coron
OFFICE OF THE MUNICIPAL ENGINEER



PROGRAM OF WORKS AND BILL OF MATERIALS

PROJECT: Construction of Slope Protection & Retaining Wall Design
LOCATION: RAC Site Bgy. Pob. 6, Coron, Palawan
Covered Area: 1,200 Sq.mtrs

IMPLEMENTATION: By Contract
CAL.DAYS TO COMPLETE: 560 Working Days
STARTING DATE: Upon Approval

I. GENERAL REQUIREMENTS

MATERIALS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
Warehouse & Quarters	1	lot	100,000.00	100,000.00
Signage	2	pcs	10,000.00	20,000.00
			MATERIAL COST	120,000.00

BILL OF MATERIALS:

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
Portland Cement	15000	bags	270.00	4,050,000.00
Gravel 3/4	2000	cu.m	2,300.00	4,600,000.00
Fine Sand	1000	cu.m	2,200.00	2,200,000.00
12mmØ RSB	10000	pcs	280.00	2,800,000.00
16mmØ RSB	5000	pcs	480.00	2,400,000.00
Tie Wire No. 16	1750	kls	90.00	157,500.00
1/2 x 4 x 8 Penolet Board	1000	pcs	1,250.00	1,250,000.00
2 x 3 x 12 Coco-Lumber	5000	pcs	210.00	1,050,000.00
2 x 2 x 12 Coco-Lumber	1500	pcs	140.00	210,000.00
10mmØ RSB	1500	pcs	180.00	270,000.00
Hacksaw Blade	150	pcs	75.00	11,250.00
CWN 4"	30	boxes	2,000.00	60,000.00
CWN 3"	20	boxes	2,000.00	40,000.00
CWN 2"	10	boxes	2,000.00	20,000.00
PVC Pipe 3"Ø	200	pcs	600.00	120,000.00
			MATERIAL COST	19,238,750.00

EQUIPMENT REQUIRED: Fuel & Oil Lubricants (AVAILABLE CORON-BUSUANGA AREA)

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
3-units Backhoe 0.5 cu.m Capacity				
2-units Dumptruck				
2-units Transmit Mixer w/ Pump				
1-unit Water Truck				
Diesel	2000	lit.	70.00	140,000.00
Gasoline	400	lit.	85.00	34,000.00
Oil 40	60	pails	1,600.00	96,000.00
Oil 10	10	pails	4,000.00	40,000.00
			EQUIPMENT COST	310,000.00

(Refer to Detailed Estimates)

Materials Cost

19,358,750.00

Labor Cost

5,807,625.00

Equipment Required

310,000.00

ESTIMATED DIRECT COST

25,476,375.00

Contractor's profit (8% of EDC)

2,038,110.00

OCM (10% of EDC)

2,547,637.50

VAT (5% of EDC,OCM & Profit)

1,503,106.13

ESTIMATED INDIRECT COST

6,088,853.63

ESTIMATED PROJECT COST >>>>>>>

31,565,228.63

ENGR. IKE D. PARANGUE

Municipal Engineer

Approved by:

HON. MARIO T. RIVES JR.

Municipal Mayor