REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGION IV-B

PROJECT DESCRIPTION REPORT FOR PUBLIC SCOPING

ROAD OPENING OF VICTORIA-SABLAYAN ROAD PROJECT WITH TOTAL LENGTH OF 61.43 KM

KRC ENVIRONMENTAL SERVICES

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Purpose of Environmental Impact Assessment

PD 1151 (Philippine Environmental Policy) provides the Statutory Framework of the Environmental Impact Assessment (EIA) for all projects that will affect environmental quality. It is stated under this law that "all agencies and institutions of the national government, including government-owned and controlled corporation as well as private corporations, firms and entities to prepare an Environmental Impact Statement (EIS) for every action, project or undertaking which significantly affects the quality of the environment."

The Philippine Environmental Impact Statement System (PEISS) or the PD 1586 is in compliance to the above policy statement under PD 1151 and takes roots in the provisions of the Philippine Constitution, which states "The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature." Philippine Environmental Impact Statement System (PEISS) Declared Environmentally Critical Projects (ECPs) and projects within or located in Environmentally Critical Areas (ECAs) as project which require the submission of an Environmental Impact Statement (EIS).

> *Section 4: Provides that "no person, partnership or corporation shall undertake or operate any in part such declared ECP or Project within an ECA without first securing an Environmental Compliance Certificate (ECC)."*

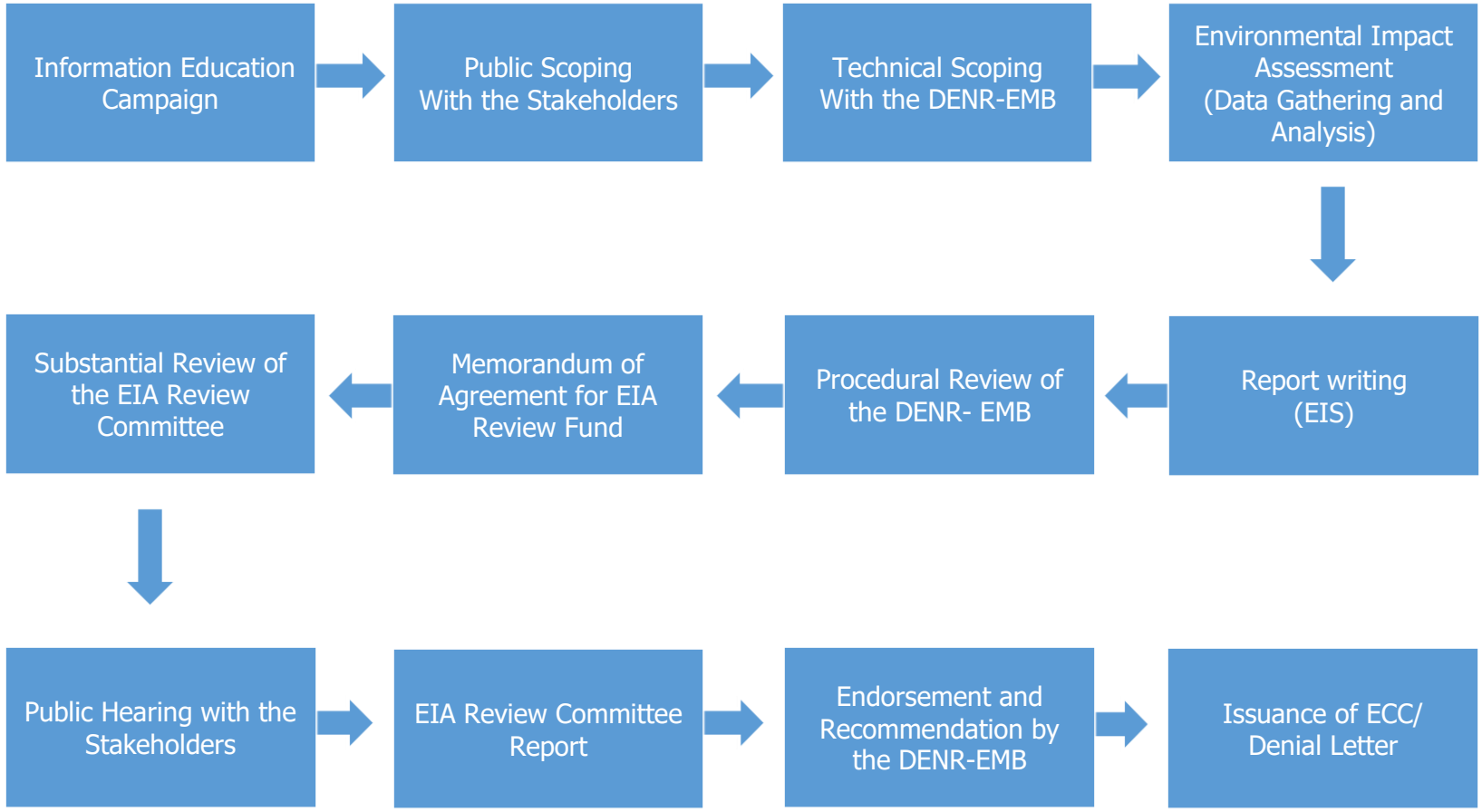
Based on the DENR AO 2003-30, an EIA is a "process that involves predicting and evaluating the likely impacts of a project as well as the ensuing preventive, mitigating and enhancement measures in order to protect the environment and community's welfare''. It aims to assess the overall impact on the environment of development projects proposed by the public and private sectors.

EIA identifies alternatives and measures which can prevent, minimize or alleviate the adverse consequences of the project in all stages. It seeks to avoid costly mistakes in project implementation, either because of environmental damages that are likely to arise during project implementation, or because of modifications that maybe required subsequently in order to make the action environmentally acceptable.

In order to promote public participation under Philippine EIS System, DENR AO 2017-15 was institutionalized. Intensive consultation/information, education and communication campaign were required prior to the conduct of the EIA.

Presented in the diagram below the EIA process.

CATEGORY A: ENVIRONMENTALLY CRITICAL PROJECT (ECP)
Environmental Impact Statement (EIS)
WORK FLOW



Abbreviations and Acronyms

AO	:	Administrative Order
DENR	:	Department of Environment and Natural Resources
DPWH	:	Department of Public Works and Highways
DIA	:	Direct Impact Area
DO	:	Department Order
ECC	:	Environmental Compliance Certificate
EIA	:	Environmental Impact Assessment
EIS	:	Environmental Impact Statement
EMB	:	Environmental Management Bureau
FGD	:	Focus Group Discussion
IEC	:	Information and Education Campaign
IEE	:	Initial Environmental Examination
GOCCs	:	Government-owned and controlled corporations
KII	:	Key Informants Interview

PROJECT DESCRIPTION FOR SCOPING

I. PROJECT NAME

Road Opening of Victoria-Sablayan Road Project with Total Length of 61.43 kms, Mindoro

II. PROJECT PROPONENT

Project Owner: **Department of Public Works and Highways**
Region MIMAROPA

Contact Person: **RD YOLANDA L. TANGCO, CESO IV**
Officer-In-Charge
Office of the Regional Director
Email: tangco.yolanda@dpwh.gov.ph

III. PROJECT LOCATION

Victoria - Sablayan Road Section starts at the existing concrete road near NIA Compound at Station 0+000 with coordinates 1450714.966N and 519705.204E. The alignment will pass the existing road in Barangay Alcate and passing thru Barangay Villa Cerveza in the Municipality of Victoria, Oriental Mindoro. The road project will end at an existing concrete road in Barangay Pag-asa near Amnay River Bridge in the Municipality of Sablayan, Occidental Mindoro. End of road project is at STA 61+431.392 with coordinates 143685.440N and 466550.010E. It has an aggregate length of 61.43km of intermittent Portland Cement Concrete Pavement (PCCP).

Existing Condition

The entire Victoria-Sablayan Road is approximately more than fifty (50) km long. However, at present, less than fifteen (15) km is open. This operational section is within the Municipality of Victoria. This road opening is connected to the Calapan South Road. At present, this road is predominantly catered by motorcycles and a very few light vehicles.

The proposed alignment will pass thru mostly on forest and mountain area of the Municipality of Sablayan (**Figure 1-2**), specifically for Brgy. Pag-asa. The rest of the alignment will pass thru residential area specifically in Brgy. Villa Cerveza of the Municipality of Victoria. The residential area only covers around 2 kilometers from the beginning point of the proposed road project. An approximate of around 100 houses will be affected on the alignment (**Figure 1 – 1**)

The proposed road alignment will pass thru the majority of the mountain rugged edges and flat lands with timber and some barren grass land. A few rice paddies is affected by the alignment. Another consideration are the ancestral domains of the Indigenous People currently within the scope of the proposed road project. The current alignment is susceptible to Rain and Earthquake Induced landslide. The alignment passes on 3 major rivers. The need to construct Bridges are required namely in Aglubang River Sta 3+250, River 2 Sta 4+595, and River 3, Sta. 58+460.

Figure 1-1: Location Map

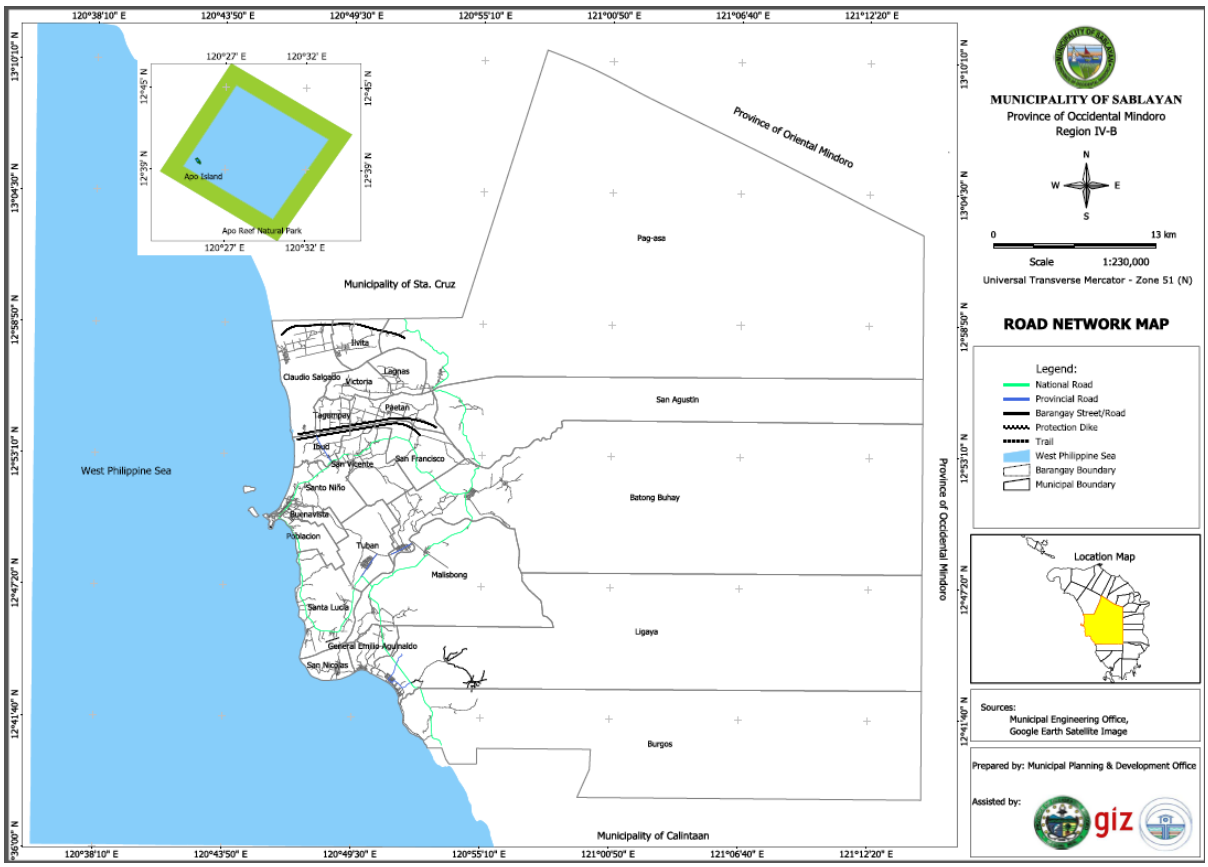


Figure 1-2: Road Map of the Municipality of Sablayan

The main primary impact area will be those that are directly affected by the project. In particular, the physical and socio-economic aspect. Impacts includes ambient air quality (including odor), water quality, solid waste generation and the socio-economic and health condition of the community. A radius of (1) kilometer of the project site may be considered as the primary impact area.

The adjacent Barangay and Municipality of Sta. Cruz, Socorro, Gloria, Calintaan and the rest of Sablayan and Victoria are considered as the secondary impact areas of the project. The project will have direct or indirect influence in terms of socio-economic aspects such as increase in employment and ease of travel. Figure 1-4 will show the Impact areas of the project.

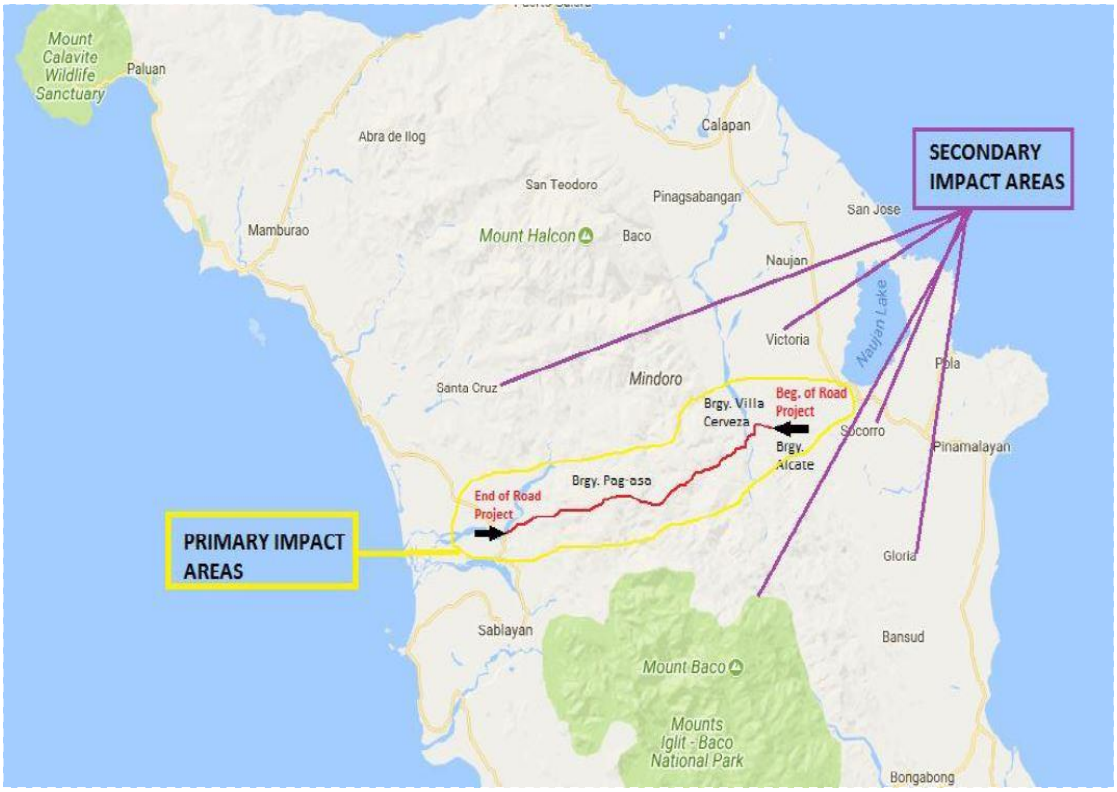


Figure 1-4: Primary and Secondary Impact Areas

IV. PROJECT OBJECTIVES AND RATIONALE

The proposed road project is an intra-provincial road connecting the Municipality of Victoria in Oriental Mindoro and the Municipality of Sablayan in Occidental Mindoro both under Region IV-B that will complete the existing Victoria – Sablayan Road. The entire Victoria – Sablayan road is approximately 50kms long, at present it only has 15 km open. The current operational road in found only in the Municipality of Victoria. The proposed road project will complete the Victoria –Sablayan road. At present, The Calapan North Road is the only existing route connecting both municipality. The completion of the missing gap will provide alternative route for both provinces. As such, the project will enhance mobility of the Region by improving the connectivity of its road network system.

Project's Objectives

- To ensure and provide a better road network linking the less developed communities to the mainstream of socio-economic development;

- To provide a more reliable, efficient, and safer transport infrastructures enhancing the broad-base development of the province and further contributing to the unimpeded flow of goods and services. It will encourage growth of commerce, agro-industry, eco-tourism and industry in Mindoro as well as neighboring provinces and regions;
- To strengthen linkages between the tourism sector and other economic sectors (i.e. agriculture, fisher, manufacturing, etc.) and generate a synergistic effects on the development of the province and the nation as a whole.

The main beneficiaries of the project are the road users and communities within the area of influence. Travelers from both Municipality and its neighboring Municipality will no longer use the exiting Calapan South Road that will usually take each traveler approximately 4-6 hrs. The road will improve traffic, ease and efficiency of travel. The main City of Calapan in Oriental Mindoro and the Municipality of Mamburao and San Jose in Occidental Mindoro will now have faster transport facility not only on Public Transport but also transfer of goods between Negros Mindoro Oriental and Mindoro Occidental. The road will encourage investors to put up business that will yield employment on the affected Barangays. Furthermore, this will also have a positive impact on those going to and from nearby LGUs.

The road project is already included on the Comprehensive Use Plan of both Municipality.

V. PROJECT ALTERNATIVES

There is no current project alternative directly related to the proposed road project. The said project is the only current project linking the two provinces.

VI. PROJECT COMPONENTS

Table 1-1 Shows to overall project components of the proposed road alignment.

Table 1 - 1Project Components

Facility	Length / Area (kms /m)			Specification/Description/Remarks
1. Road		61.43	km	Portland Cement ; Concrete Pavement
2. Bridge/s	Aglubang Bridge	460	m	AASHTO Girders; Concrete slab w/ bored piles
	Bridge 2	90	m	
	Bridge 3	120	m	
	Total Length of Bridges	670	m	
3. Drainage Facilities	TOTAL RCPC	1767	m	Reinforced concrete Box Culverts (RCBC); Reinforced Concrete Pipe Culverts (RCPC) RCBC Single, Double, and Triple barrels (Annex 2: Drainage Schedule)
	TOTAL RCBC	1428	m	
4. Associated Facilities (Guard Rails, Posts, etc.)	Kilometer Post	61.00	pcs	
	Guide Post (Drainage Marker)	386.00	pcs	
	Metal Guard Rail (Metal Beam Including Concrete post)	34,270.00	l.m.	
	Metal Guard Rail (End Piece)	256.00	pcs	
	Reflectorized (Thermoplastic Pavement Markings – White)	14,334.00	sqm	
	Reflectorized (Thermoplastic Pavement Markings – Yellow)	2,520.00	sqm	

VII. PROCESS/ TECHNOLOGY OPTIONS

The project does not require any special technology. Ordinary technologies adopted in the Philippines can be utilized. The road construction will conform to the standards set by the law or official guidelines of DPWH.

All the Quantity and Material Requirements of the project is shown in Table 1 - 2. The list of Major equipment to be used are shown in Table 1 - 3.

Table 1 – 2 Major Quantities and Material Requirements

Description	Quantity	Unit
GENERAL REQUIREMENTS		
EARTHWORKS		
Clearing and Grubbing	685.00	ha.
Surplus Common Excavation	17,259,080.00	cu.m.
Structure Excavation	150,203.00	cu.m.
Pipe Culvert and Drain Excavation	11,348.00	cu.m.
Embankment from Roadway Excavation (Common Soil)	7,538,530.00	cu.m.
Subgrade Preparation (Common Materials)	519,676.00	sq.m.
SUB-BASE AND BASE COURSE		
Aggregate Subbase Course	156,772.00	cu.m.
SURFACE COURSE		
Crushed Aggregate Surface Course	11,903.00	cu.m.
PCC Pavement(Unreinforced), 150mm thk	113,160.00	sq.m.
PCC Pavement(Unreinforced), 280mm thk	411,588.00	sq.m.
BRIDGE CONSTRUCTION		
Pile Integrity Test(Ultrasonic Test)	50.00	ea.
Pile Dynamic Analysis	2.00	ea.
Bored Piles, (2000mm dia)	240.00	m.
Bored Piles, (2500mm dia)	760.00	m.
Reinforcing Steel, Grade 60 (Bridge Structures)	959,783.00	kg.
Structural Concrete, 28MPa	4,943.00	cu.m.
Prestressed Structural Concrete Member, AASHTO Girder Type IV, L=30.00m	88.00	each
Elastomeric Bearing Pad (350 x 650 x 55mm)	176.00	ea.
Grouted Riprap, Class A (Slope Protection)	3,956.00	cu.m.
Collector Pipe 150mm Ø G.I. with complete accessories	1,320.00	l.m.

Description	Quantity	Unit
DRAINAGE AND SLOPE PROTECTION		
Reinforcing Steel, Grade 40 (Drainage Structures)	2,898,958.00	kg.
Structural Concrete, Class A (Drainage Structures)	71,664.00	cu.m.
Lean Concrete, fc'= 17Mpa (Drainage Structures)	536.00	cu.m.
Reinforcing Concrete Pipe Culvert, 910mm Ø class IV	1,379.00	l.m.
Reinforcing Concrete Pipe Culvert, 2-910mm Ø class IV	28.00	l.m.
Reinforcing Concrete Pipe Culvert, 1070mm Ø class IV	28.00	l.m.
Reinforcing Concrete Pipe Culvert, 2-1070mm Ø class IV	14.00	l.m.
Reinforcing Concrete Pipe Culvert, 1220mm Ø class IV	68.00	l.m.
Reinforcing Concrete Pipe Culvert, 2-1220mm Ø class IV	14.00	l.m.
Reinforcing Concrete Pipe Culvert, 1520mm Ø class IV	234.00	l.m.
Reinforcing Concrete Pipe Culvert, 2-1520mm Ø class IV	42.00	l.m.
Catch Basin (1-910mm Ø)	74.00	ea.
Catch Basin (2-910mm Ø)	2.00	ea.
Catch Basin (1-1070mm Ø)	2.00	ea.
Catch Basin (2-1070mm Ø)	1.00	ea.
Catch Basin (1-1220mm Ø)	3.00	ea.
Catch Basin (2-1220mm Ø)	1.00	ea.
Catch Basin (1-1520mm Ø)	4.00	ea.
Catch Basin (2-1520mm Ø)	3.00	ea.
Stone Masonry	4,201.00	cu.m.
Hand-Laid Rock Embankment	3.00	cu.m.
MISCELLANEOUS STRUCTURES		
Kilometer Post	61.00	ea.
Guide Post(Drainage Marker)	386.00	ea.
Metal Guardrail(Metal Beam Including Concrete Post)	34,270.00	l.m.
Metal Guardrail End Piece	256.00	ea.
Reflectorized Thermoplastic Pavement Markings (White)	14,334.00	sq.m.
Reflectorized Thermoplastic Pavement Markings (Yellow)	2,620.00	sq.m.
Coconet	3,436,133.00	sq.m.
Coco-logs/Fascine	329,030.00	l.m.
Vegatation	3,436,133.00	sq.m.

Table 1 – 3 Major Equipment to Be Used

EQUIPMENT	BRAND / MODEL	EQUIPMENT CAPACITY (Fr. ACEL)		EQUIP. HP.	TOTAL OPERATED PER HOUR
Crawler Tractor (w/Bulldozer & Ripper)	Komatsu D8FA-21			225	5,064.57
Wheel Type Loader	Caterpillar 908	1	m^3	76	1,669.34
Wheel Type Loader	Komatsu WA250-1	2.5	m^3	130	1,743.05
Wheel Type Loader	Komatsu WA150-1	1.22	m^3	94	1,100.35
Backhoe, Crawler Mounted	Komatsu PC200-7B	1.25	m^3	143	3,203.45
Backhoe, Crawler Mounted	Komatsu PC200-5	0.8	m^3	123	1,956.65
Backhoe, Crawler Mounted	Caterpillar 312BL	0.63	m^3	84	1,981.64
Backhoe, Wheel Mounted	Komatsu PW170ES-6	1	m^3	121	3,678.44
Backhoe, Wheel Mounted	Komatsu PW95R-2	0.34	m^3	82.5	2,483.80
Motorized Grader	Komatsu GD305A-3			100	2,258.62
Motorized Grader	Mitshubishi MG3H			110	921.80
Truck Mounted Crane (Telexcopic Boom)	All Models	36-40	tons	238	2,183.34
Truck Mounted Crane (Telexcopic Boom)	All Models	21-25	tons	200	1,510.23
Truck Mounted Crane (Telexcopic Boom)	All Models	15-Nov	tons	160	1,266.35
Truck Mounted Crane (Telexcopic Boom)	All Models	2-5	tons	100	776.28
Crawler Mounted Crane	All Models	51-60	tons	275	2,801.45
Crawler Mounted Crane Attachment	Vibratory Pile Driver	45,000	kg-m		1,994.85
Drilling Rig (Hydraulic)	Igersoll Rand,ECM490	2.5-4in	Diam	185	5,402.79
Vibratory Tandem Roller, Smooth Drum	Dynapac CC522	12	tons	118	1,717.97
Pnuematic Tire Roller	Bomag BW20R, 8 Wheels	24	tons	85.5	1,695.01
Pnuematic Tire Roller	13 WHL, 7.50x15, 4PR	15	tons	106	863.81
Vibratory Plate Compactor	All Makes			8	265.07
Welding Machine	Diesel Engine Driven	300	amp	48	425.60
Asphalt Paver / Finisher	Demag DF80P 4m	4	m	52	1,434.97
Asphalt Distributor	ROSCO / 5 tons	3,000	USG	100	1,080.59
Concrete Pavement Screeder	Roller Screed			10	999.13
Transit Mixer	Japanese Made	5-6	m^3	175	1,569.10
Concrete Batching Plant, Complete with Cement Silo, Manualor Automatic Control and De Bay System		80-100	m^3hr	90	3,068.64
Concrete Vibrator , 1" Head Diameter	Diesel Engine Driven			5	120.53
Concrete Vibrator , 2" Head Diameter	Diesel Engine Driven			5	120.53
Concrete Saw		12	in	5	157.29
Water Pump	Diesel Model	1,300	lpm	5.5	108.45
Bar Bender		3	Phase		283.51
Bar Cutter		3	Phase		236.25
Power Broom	Towered Type with engine 2M Wide	6-30	kph	90	450.91
Dump Truck	Japanese Make and others	9-12	cu.yds.	275	1,839.78
Water Truck	Japanese Make	101-3000	gals	552	2,934.78
Service Pick-up, Double Cap	4x4 2.5 Liter Diesel Engine			136	887.67
Cargo Truck	Japan and Other Makes	13-15	tons	320	2,110.27
Cargo Truck	Japan and Other Makes	Jun-80	tons	195	1,322.10
Cargo Truck	Japan and Other Makes	2-5	tons	160	1,107.21

(Based on ACEL Equipment Guidebook, Ed24)

Roadway Construction

The cross section width has a travelled way of 6.70 m with 1.50 m gravel shoulders. The normal cross fall on pavement is 2.0% and 4.0% on shoulders. The proposed road surface is PCCP with a minimum thickness of 280mm (DPWH Standard) supported by 200mm thick granular subbase.

Shoulders are granular base course. In some sections that needs consideration for erosion, and 4% grade or more bituminous surface treatment shoulder may be adopted and its cross slope will be 3%. Below figures shows the Typical Road Designs. (Figure 1-5)

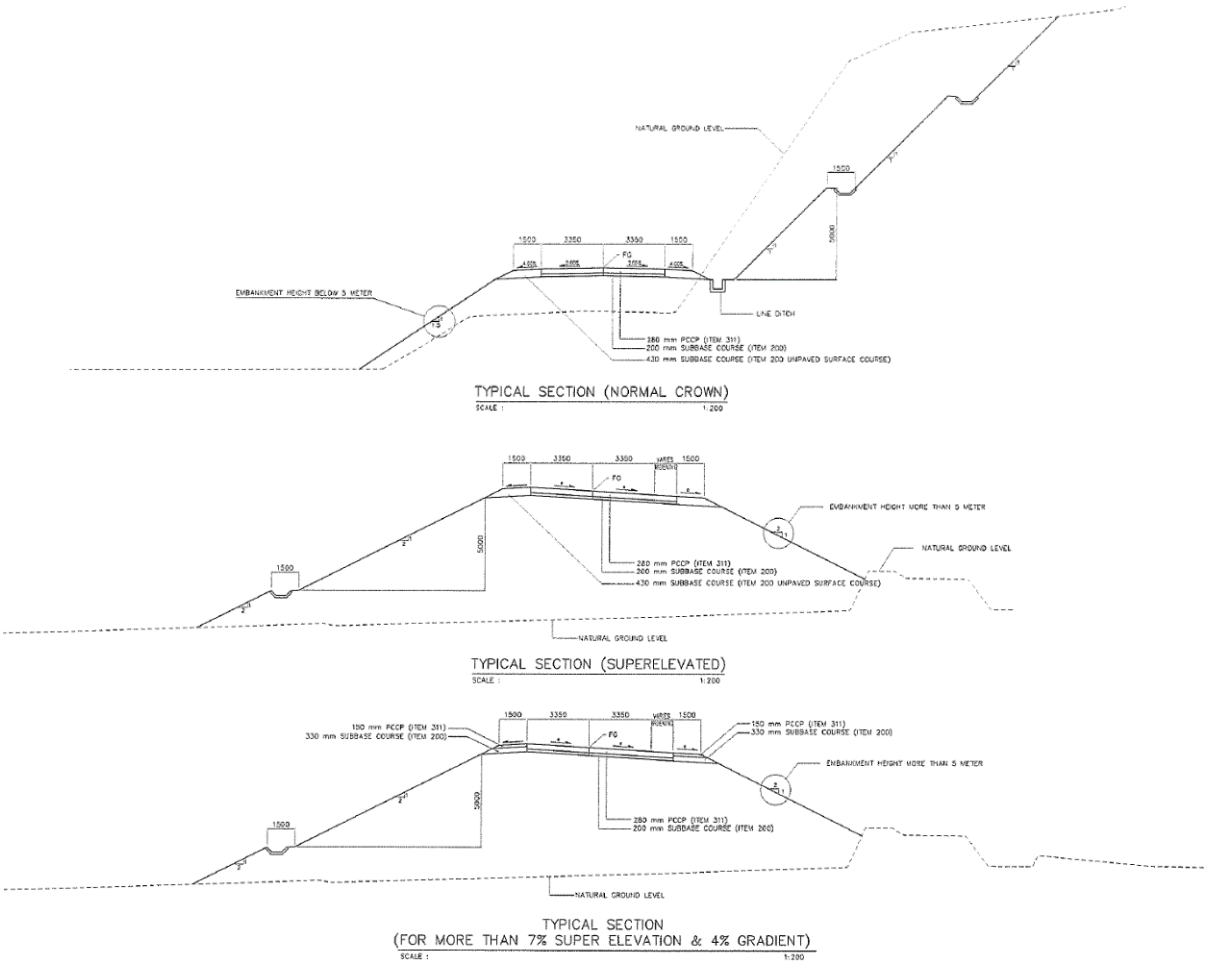


Figure 1-5: Typical Section for Norman Crown, Super Elevated and More than 7% Super Elevation & 4% Gradient)

Bridge Construction

Bridge work includes the construction of 3 new bridges along the alignment.

Table 1 – 4 Bridge Components

BRIDGE NAME	Discharge	STATION		LENGTH	IMPROVEMENTS
	(m^3/ sec)	1ST APP	2ND APP	(m)	
Aglubang	3434.34	3+020	3+480	460	New Construction
Bridge 2	371.21	4+450	4+540	90	New Construction
Bridge 2	487.27	58+400	58+520	120	New Construction
			TOTAL LENGTH	**670**	

The following specification and design criteria were adopted in the preliminary engineering design for the proposed bridges.

1. AASHTO Standard Specification for Highway Bridges, 15th Edition 1992 with interim Specification 1993, 1994 and 1995 including Division 1-A Seismic Design.
2. DPWH Standard Specification for Highways, bridges, and Airports, 2015

Slope and Stability Measures

Slope ratio for cut and fill section, the DPWH Design Guidelines Criteria and Standards (DGSC) is adopted (Table 1 - 5).

In case of high cut slope, Berm Step will be provided in the design at every 7.0m from cut end. Fill slope of more than 10.0 meter, Berm Step will be placed at every 5.0 meter from the shoulder. Minimum width of Berm Step is 1.00 meter and slope rounding will be applied.

Table 1- 5 *Source: Design Guidelines Criteria and Standards Volume II Table 3-7

Height of Slope	Nature of Material	Cut Slope Ratio	Fill Slope Ratio	Remarks
0.0 to 1.0	Earth	4:1	4:1	
1.1 to 2.0	Earth	2:1	2:1	
1.1 to 2.0	Soft Rock, Coral, Shale, Cemented GR.	Varies From 1 to 1:1	2:1	Cut slope stake will depend upon stability of material
1.1 to 2.0	Hard Rock	Natural Break (Design Slope 0.25:1)	2:1	Natural Break is slope resulting after blasting and scaling of loosened material. Design purpose, normal slope used in hard rock will be 0.25:1
Over 2.0	Earth	1.5:1	1.5:1	
Over 2.0	Soft Rock, Coral, Shale, Cemented GR.	Varies from 0.5:1 to 1:1	1.5:1	Cut slope stake will depend upon stability of material
Over 2.0	Hard Rock	Natural Break (Design Slope 0.5:1)	1.25:1 to 1.5:1	1.25:1 fill slopes will be used only where fill material consists of large rock fragments

Criteria in the selection of Applicable Cut and Fill Slope Protection

Slope protection works are performed to protect the slopes from erosion or weathering by covering them with vegetation or structures and also to stabilize the slopes by means of drainage works or retaining structures.

When vegetation alone is used, sodding works & sodding mats which are able to cover the whole slope from the beginning are suitable. Regardless of the amount of spring water, it is desirable to provide drainage facilities on the top of the slope and berms.

Slope protection works with structures are used for slopes not suited to the vegetation like grouted riprap, retaining walls, gabions or other modern technology. These are sometimes used against large scale failures.

Guardrails are generally used to mark abrupt changes in shoulder width, at approaches to structures, at drop inlets, at cut sections to provide warning. For fill slopes of 3.0m high, guardrail should be provided. Guardrails are designed to resist impact by deflecting the vehicle so that it continues to move at reduced velocity along the guardrail.
Test Pit results shows the geological profile of the proposed road alignment. This was taken into consideration on the road construction and slope stability analysis.

VIII. PROJECT SIZE

The total land length of the road project is 61.43 km. The proposed road project will be a two lane road with 1.5 meters shoulders each side thus will have an average width of 6.7meters.

IX. DEVELOPMENT PLAN, DESCRIPTION OF PROJECT PHASES AND CORRESPONDING TIMEFRAMES

Victoria - Sablayan Road Project is part of Package II under the Selected Missing Gap/Road Project of DPWH. The project includes the construction of approximately 61.43km. of PCCP Road, drainages and slope protection as well as construction of 3new bridges.

Pre-Construction Phase

The acquisition of permits and other government approvals, land acquisition and crop damage compensation, topographic surveys, mapping and detailed engineering design of the road, procurement and construction, tendering, bidding and award to contractors are all under this phase.

Preconstruction Phase includes 1) EISA preparation; 2) Resettlement Planning; and Engineering Design.

The preparation of the EIS documentation is based on the nature of the roadway project as a rehabilitation and reconstruction of an existing roadway within the limits of PROW. EIS is categorized into the following main phases.

- Description and relevant baseline information of the proposed project;
- Identification of benefits, negative effect, risk and how to mitigate environmental impacts of the project;
- Development of Environmental Monitoring Plan;
- Emphasis on Public consultation during the EISA process that are participatory and include a broad section of stakeholders;
- Enforceable environmental and social mitigation measure for ECC issuance.

The EIS will lead to the issuance of the ECC and other pertinent permits from the Government agencies and LGUs.

Resettlement activities are broadly categorized in to the development of the RPF and RAO. The activities completed under the resettlement tasks during the pre-construction phase are the following:

- Census and socio economic-survey of Potential Affected Persons
- Identification of resettlement measures;
- Asset Identification and valuation;
- Resettlement area design and assessment; and
- Monitoring and evaluation

Some of the major phase in the engineering design during the pre-construction phase include:

- Project initiation and data compilation;
- Topographic / hydrographic / utility survey;
- Geotechnical investigation;
- Borrow pit / Quarry investigation;
- Pavement investigation and design;
- Bridge investigation , rehabilitation design and/ or Bridge replacement design;
- Development of traffic management plans as required; and
- Tendering and construction contract award

Construction/ Rehabilitation Phase

Contractors will be contracted for the duration of the project to implement the road improvement works. The construction begins with hauling of earth materials to fill the road area and removal of vegetation. A borrow pit (source of obtaining fill, gravel, and rock) and a water source should be located near or in reasonable distance to the road construction site. Approval from authorities may be required to draw water of for working (crushing and screening) of materials for construction needs. Processes during earthwork include excavation, removal of material to spoil, filling, compacting, construction and trimming. If rock or other unsuitable materials is discovered, it is removed, moisture content is managed and replaced with standard fill compacted to 90% relative compaction. Pouring of ready mix concrete will successively follow upon compaction of every road segment.

Construction of storm drainage system such as underground concrete pipelines will be laid out along side of the road that will be capable for carrying the ultimate design flow from the upstream catchment to a watercourse (creek / irrigation) system. Construction of Erosion and sediment controls will follow to prevent detrimental effects.

Operation/ Maintenance Phase

Upon completion of road construction and appropriate markings signs and lighting. The Department of Public Works and Highways – Built – Operate – Transfer (DPWH-BOT) will be responsible for the whole operation and maintenance of the project. The road will be open for public use without collection of toll fee.

Abandonment/Decommissioning Phase

The proponent does not foresee abandonment of the proposed road project. In case however this happens, the road may become dormant or may be converted into another type of land development project. There will be no foreseeable environmental impact that would result from the abandonment of the project, when the road has already been constructed except that the users of the road will have to find another route for their travel.

X. MANPOWER REQUIREMENTS

The proposed project will need an estimated 400 workers. The breakdown of manpower requirements during construction stage is presented below.

Table 1 – 6 Manpower Requirements

Position	Expertise / Skills	Total
Non-skilled	Helpers, Laborers	240
Skilled	Heavy equipment, operators, Masons, Plumbers, Electricians, Welders, etc.	140
Professionals	Engineers, management staff, and office staff	20
	Total	400

XI. INDICATIVE PROJECT INVESTMENT COST

The estimated project investment cost is around Fourteen Billion Seven Hundred Million Pesos. Based on the cost estimate the financial cost is Php 14,717,031,885.64. This cost consists of two (2) lane concrete pavement on embankment at approximately 61.43km long with 3 bridges with total length of 670 meters that will complete the stretch of the Victoria – Sablayan Road.

XII. PRELIMINARY IDENTIFIED ENVIRONMENTAL ASPECTS FOR EACH ALTERNATIVE

Predicted Impact	Degree of the significance	Duration, Extent and Magnitude of Impact
PRE-CONSTRUCTION PHASE		
Loss and Damage to property	MODERATE	IRREVERSIBLE
Loss of trees and vegetative cover	MODERATE	IRREVERSIBLE
Change in land use as a consequence of development	LOW	IRREVERSIBLE
CONSTRUCTION PHASE		
LAND		
Soil contamination	MODERATE	IRREVERSIBLE, SHORT TERM
Generation of Spoils and Construction Waste Disposal	HIGH	SHORT TERM
Impair local aesthetic or scenic resources	LOW	REVERSIBLE SHORT TERM
GEOHAZARD		
Damage of structures due to liquefaction	LOW	SHORT TERM
WATER		
Increase in siltation rates along surface waters	LOW	SHORT TERM
Contamination of ground water	LOW	SHORT TERM
Decrease ground water flow	LOW	SHORT TERM
Occurrence of flooding	MODERATE	SHORT TERM
Contamination on nearby bodies of water	LOW	SHORT TERM
AIR/NOISE		
Increase in particulate matter (dust) and levels of gaseous emission	MODERATE	REVERSIBLE SHORT TERM
Increase in noise and vibration levels	MODERATE	REVERSIBLE SHORT TERM
Global warming	LOW	SHORT TERM
PEOPLE		
Traffic Congestion	MODERATE	SHORT TERM

Predicted Impact	Degree of the significance	Duration, Extent and Magnitude of Impact
Interruption of service utilities (water, power)	MODERATE	SHORT TERM
Incidence of construction-related accidents	HIGH	SHORT TERM
Loss of historical structure	NOT RELEVANT	NOT RELEVANT
Pose human health and safety hazards	MEDIUM	SHORT TERM
Generation of employment/ local hired labor	BENEFICIAL	LONG TERM
Enhanced economic activity	BENEFICIAL	LONG TERM

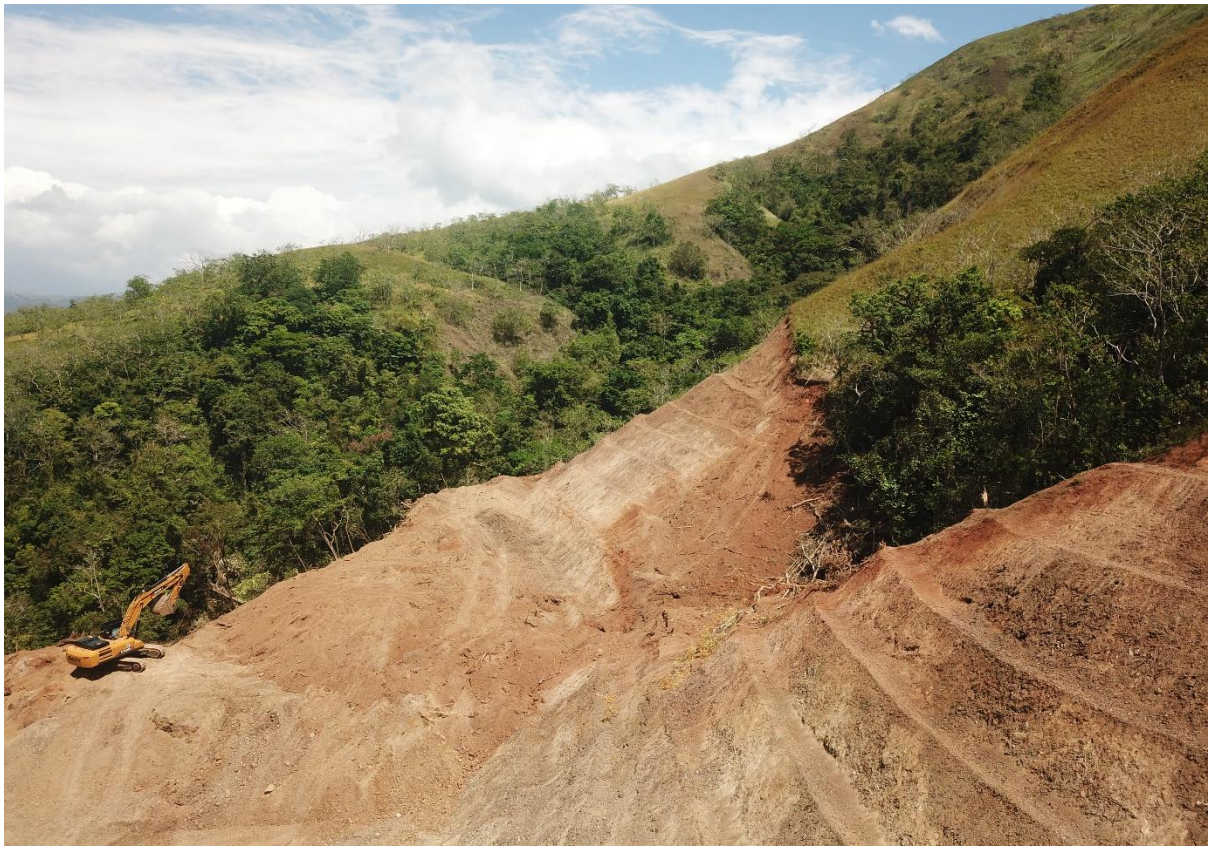
Proposed List of Invitees for Public Scoping

- LGU in the area where the project is located.
- Government agencies with related mandate on the type of projects and its impacts.
- Interest group (NGOs/ POs) preferably with missions related to the type of project and impacts
- Households, business activities, industries that will be displaced.
- People whose socio-economic welfare and cultural heritage are projected to be affected by the project especially vulnerable sectors and indigenous population
- Local institutions (schools, churches)

List Of Invitees	Position/Designation	Address
Hon. Humerlito A. Dolor	Governor	Provincial Government of Oriental Mindoro
Hon. Eduardo B. Gadiano	Governor	Provincial Government of Occidental Mindoro
Hon. Andres D. Dangeros	Municipal Mayor	Municipality of Sablayan, Occidental Mindoro
Mr. Cesar Bicera	Administrator	Sablayan North Extension, Sablayan, Occidental Mindoro
Hon. Rodel A. Sioson	Barangay Captain	Barangay Pag-Asa, Sablayan, Occidental Mindoro
Mr. Mayor Onyo Calamita	IP Representative	Barangay Pag-Asa, Sablayan, Occidental Mindoro
Ms. Maria Cristina Tapaz	OIC-Field Officer, NCIP Sablayan	Sablayan, Occidental Mindoro
Mr. Cusgad Suday	IP Leader	Barangay Pag-Asa, Sablayan, Occidental Mindoro
Mr. Cadino Danopoc	IP Leader	Barangay Pag-Asa, Sablayan, Occidental Mindoro
PCPT Jeryll John C. Lauron	Police Captain (PCPT), Regional Mobile Force Battalion (RMFB)	Sto. Nino, Sablayan, Occidental Mindoro
PLTCOL Andres C. Tejerero	Police Lieutenant Colonel (PLTCOL), OIC-Philippine National Police	Sablayan, Occidental Mindoro
PCPT Nathaniel D. Faulve	Police Captain (PCPT), Special Action Force (SAF)	Sablayan, Occidental Mindoro
Hon. Joselito C. Malabanan	Municipal Mayor	Municipality of Victoria, Oriental Mindoro
Hon. Osias Largado	Barangay Captain	Barangay Alcate, Victoria, Oriental Mindoro
Hon. Virgilio Macailo	OIC-Barangay Captain	Barangay Villa Cerveza, Victoria, Oriental Mindoro
John Regan Romantico	Philippine Army	Barangay Villa Cerveza, Victoria, Oriental Mindoro
Oliver A. Solomillo	Philippine National Police (PNP)-Special Action Force (SAF)	Barangay Villa Cerveza, Victoria, Oriental Mindoro
Mr. Constancio G. De Jesus	Editor and Chief	Municipality of Sablayan, Occidental Mindoro

Aerial Photos of the Project Site

Brgy. Pag-Asa, Sablayan, Occidental Mindoro



Victoria, Oriental Mindoro