#### **ROAD AND BRIDGE PROJECTS**

# INITIAL ENVIRONMENTAL EXAMINATION (IEE) CHECKLIST for

# REHABILITATION OF SAN ISIDRO – PAG ORING NUEVO FARM TO MARKET ROAD Project Name or Title

Below is the IEE Checklist Report for Road and Bridge Projects.

Please check applicable project category:

✓	Projects	Project Size Parameter	Corresponding Project Size/Threshold
✓	Bridges and viaducts, new construction	length	≥ 80 m but < 10.0 km
	Roads, new construction, widening (including RO-RO facilities)	length with no critical slope, OR length with critical slope	≥ 2 km but < 20.0 km, OR ≥ 2 km but < 10.0 km
	Elevated roads, flyover/cloverleaf/ interchanges		Regardless of length and width
	Tunnels and sub-grade roads and railways	length	< 1.0 km
	Pedestrian passages		All underpass projects

#### For ECC applications, this IEE Checklist Report shall be submitted with:

- Proof of Compatibility with the existing Land Use Plan
- Proof of Authority over the Project Site
- Accountability Statements of Proponent (see attached form) and the Preparer (if any, following Annexes 2-22 of Revised Procedural Manual for DAO 2003-30)
- Photographs or plates/vicinity map of the project site showing impact areas and affected areas and communities
- Duly Accomplished Project Environmental Monitoring & Audit Prioritization Scheme (PEMAPS) Questionnaire (see Annex 2-7d of Revised Procedural Manual for DAO 2003-30)
   (No other documents shall be required as pre-requisite to ECC applications per DENR MC 2010-14)

Read the questions carefully and write the required information on the blank spaces provided or otherwise check ( $\checkmark$ ) the appropriate boxes  $\Box$  or parenthesis (). Boxes with check marks( $\boxdot$ ) are automatically required. Use additional sheets if necessary and indicate this in the appropriate space.

Project proponents are strongly **discouraged** to engage the services of consultants/facilitators/preparers to accomplish/fill-up the IEE Checklist Report Form. The Report Forms have been designed to be user-friendly.

Furthermore, EMB Regional Office is required to complete the processing of an ECC application using the IEE Checklist Report within twenty (20) working days upon receipt for duly-accomplished forms with complete attachments

Misleading or erroneous answers are basis for legal actions and/or denial of ECC issuance.

## PROJECT FACT SHEET

Project Name:	Renabilitation of San Isidro – Pag Ori	ing Nuevo Farm to Market Road		
Project Location:	Libmanan, Camarines Sur			
Road Width :	5 meter			
Road/Bridge Length:	6.0 kms			
Project Proponent:	Provincial Government of Camarines	Sur		
Office Address:	Cadlan. Pili, Camarines Sur			
<b>Contact Person:</b>	Felipe Vargas			
Designation:	PPMIU Coordinator			
<b>Contact Information</b>				
Telephone Number:				
Fax Number:				
Mobile Number:				
E-mail Address:				
1.1 PROJECT LOCATION AND	AREA: Street Name, Barangay, and I	Municipality/City, Province		
See attached vicinity map/s and	photographs of the project site includi	ng alignment and design.		
Geographic coordinates of the pr	oject area (Preferably use WGS 84 da	atum, otherwise specify datum used)		
Perimeter/Boundary points (based on OCT/TCT/etc)	Longitude	Latitude		
	+			

#### 1.2 PROJECT COMPONENTS

Facilities	Length / Area (meters)	Specification/Description/Remarks
1. Road	6,000	5,509.7m x 5m PCCP and Improvement of 568.6 l.m. x 2.5m & 206 l.m. x 5m shouldering
2. Intersections		
3. Bridge/s		
4. Access roads/Ramp		
5. Drainage facilities (i.e. Reinforced Concrete Box Culverts (RCBC);Reinforced Concrete Pipe Culverts (RCPC), others)	1 line	By 7m x 0.910m dia. RCPC
Associated facilities (i.e. Guardrails, Traffic signs, etc.)	26 units	Road warning signs (triangular)
7. Solid waste management facility		
8. Others, please specify		

(Use additional sheets if needed)

### 1.3 UTILITIES/REQUIREMENTS (Construction Phase):

Utilities	Source	Estimated Demand/Consumption
Power/Electricity (Total)	Casureco 1	20 KWh
Power/Electricity (From Renewable Energy Sources)		KWh
Water (Total) (Fill-up table below if water is not obtained from the local water utility)		m³/day
Water (Rainwater Collection System)		m <sup>3</sup> /day

Water Source [√] ground water	[] well	[√] spring	[ ] others:	
[√] Surface water	[√] river	[]lake	[ ] others:	
Location of water source: Pag Oring/Malinao, Libmanan, Camarines Sur (Sitio/Zone, Barangay, Municipality/City, Province, Region)				

Energy/Water Efficiency

Utilities	Estimated Savings	Proposed Efficiency/Conservation Measures
Power/Electricity	5 KWh	Limit use of air-conditioning unit and halogen lights during night time
Water	m <sup>3</sup> /day	

#### 1.4 MANPOWER

#### a. Construction Phase

Manpower Requirement	Expertise/Skills	Total
Skilled	Foreman/Carpenter/Mason/Equipment and Mechanical Operators	60
Unskilled	Laborers/Survey Aide/ Equipment Operator Helpers	124

1.5 INDICATIVE PROJECT (	COST
Project Cost (PhP): _	

#### II. ENVIRONMENTAL IMPACTS AND MANAGEMENT PLAN

Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Cost of Mitigation/ Monitoring			
LAND	LAND						
Consistency with land use	Current land use w/in 1km radius (as per zoning ordinance):  Residential Commercial/ Institutional Industrial Agricultural/ Recreational Protected Areas Others Residential Commercial/ Institutional Industrial Agricultural/ Recreational Protected Areas Others Others Others Others Others	See attached proof of compatibility with land use					
☐ Disturbance to wildlife due to vegetation clearing	Existing vegetation in the area:  Forestland  Marshland  Grassland  Mangrove  Wetland Others, specify	<ul> <li>✓ Compliance with conditions of DENR/LGU SLUP, Tree Cutting Permit, ROW, PCA Permit</li> <li>✓ Limit land clearing as much as possible</li> <li>✓ Provide temporary fencing to vegetation that will be retained</li> <li>✓ Promote restoration of damaged or destroyed vegetation where possible (e.g., road side tree planting);</li> </ul>	Annual inspection of area replanted/ revegetated	Cost integrated in the construction /operation cost			

Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Cost of Mitigation/ Monitoring
□ Change in surface landform/ topography/ terrain/slope □ Soil Erosion	Slope:    flat (0-3%)   gently sloping to rolling (3-18%)   steep (>18%)    Is the project site located in an area identified by MGB/PAGASA/PHIVOLCS as hazard prone?   Yes   No	<ul> <li>□ Provide erosion control and slope protection measures</li> <li>□ Designate a Spoils Storage Area, with topsoil set aside for later use and allow maximum re-use of spoils</li> <li>□ Construction during dry season</li> <li>□ Stabilization of embankment with grasses ,trees or other soil cover /construction of rip-rap</li> <li>□ Others, specify</li> <li>□ Compliance with the DENR Administrative Order No. 2003-30 and DENR Administrative Order No. 2000-28, Implementing Guidelines on Engineering Geological and Geo-hazard Assessment (EGGA).</li> </ul>	□ Regular inspection of slope protection measures in erosion-prone areas □ Regular inspection for new eroded areas near the site □ Others (Pls. specify):	□ Slope/ Erosion Control Cost: □ Others, specify □ □
Soil/Land contamination due to improper solid waste disposal	Existing soil type in the area:  sandy clay sandy-loam Others, specify	<ul> <li>✓ Implementation of the Ecological Solid Waste Management Plan (ESWMP);</li> <li>☐ Set-up temporary fence around the construction area</li> <li>✓ Implement re-use and recycling of waste materials</li> <li>✓ Implement proper segregation, collection and disposal of domestic wastes in designated areas</li> <li>☐ Implement proper collection, labeling and storage of hazardous waste</li> <li>☐ Provide receptacles / bins for solid wastes</li> </ul>	<ul> <li>✓ Daily inspection of waste/recycling bins for segregation</li> <li>✓ Daily inspection for presence of mixed garbage in the facility</li> <li>✓ Weekly inspection of waste accumulated</li> <li>☐ Others, specify</li> </ul>	Cost integrated in the construction /operation cost

Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Cost of Mitigation/ Monitoring
☐ Encroachment into protected areas or ecologically-sensitive areas	Is the project area near protected areas or ecologically-sensitive areas?   Yes  No	<ul> <li>□ Coordinate with the municipal / city waste collectors</li> <li>□ Engage third party company for waste collection</li> <li>□ Others, specify:</li> <li>□ Obtain appropriate permits/clearances from concerned agencies</li> <li>□ Provide adequate buffer</li> <li>□ Others, specify:</li> <li>□ Others, specify:</li> </ul>	Regular coordination with concerned agencies	Cost integrated in the construction/operation cost
<ul><li>☐ Impairment of visual aesthetics</li><li>☐ Devaluation of land values</li></ul>	Presence of visually significant landforms/landscape/structures?  Pres No	<ul> <li>☐ Implement landscaping and other beautification measures</li> <li>☐ Provide adequate buffer</li> <li>☐ Compensate adjacent property owners</li> <li>☐ Others, specify:</li> </ul>	<ul> <li>□ Regular inspection of landscaping and other beautification activities</li> <li>□ Regular monitoring of buffer zones</li> <li>☑ Regularly monitor presence/absence of complaints from adjacent property owners</li> </ul>	Cost integrated in the construction/ operation cost
WATER				
<ul> <li>□ Increased siltation due to project activities</li> <li>□ Water quality degradation</li> <li>□ Others, specify</li> </ul>	Specify nearest/receiving water body:  Distance to nearest/receiving water body:  0 to less than 0.5 km  0.5 to 1 km	<ul> <li>✓ Set-up proper and adequate sanitary facilities</li> <li>☐ Strictly require the contractor and its workers to observe proper waste disposal and proper sanitation</li> <li>✓ Strictly observe proper waste handling and disposal</li> </ul>	Regular (ocular) inspection of:  Drainage / canal systems Sanitation facilities  Regular (ocular) inspection of water body for:	Cost integrated in the construction/ operation cost

Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Cost of Mitigation/ Monitoring
·	☐ More than 1 km  If nearest/receiving water body is fresh water, specify classification:  ☐ AA  ☐ A  ☐ B  ☐ C  ☐ D	<ul> <li>□ Set up silt trap(Gabions, Fascines)/settling ponds to minimize downstream siltation</li> <li>□ Others (Pls. specify): ————</li> </ul>	<ul><li>☐ Turbidity and/or silted condition</li><li>☐ Floating wastes or debris</li></ul>	
	If nearest/receiving water body is coastal or marine water, specify classification:  SA SB SC SD			
	Current Water Use:    Fishery   Tourist Zone / Park   Recreational   Industrial   Agricultural			
	Distance of project area to the nearest well used:  □ 0 to less than 0.5 km  □ 0.5 to 1 km  □ More than 1 km			

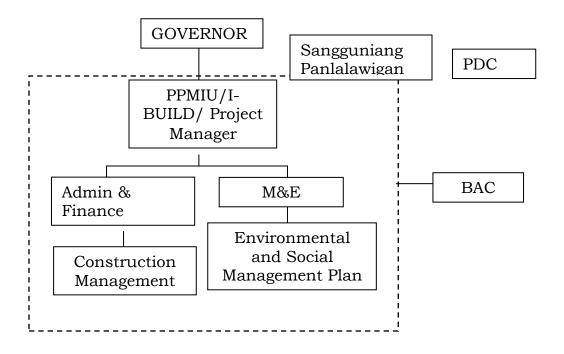
Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Cost of Mitigation/ Monitoring
☐ Competition in water use ☐ Depletion of water resources	Use of the nearest well:  □ Drinking/Domestic □ Industrial □ Agricultural  Size of population using receiving surface water: □ ≤ 1,000 persons □ >1,000 and ≤ 5,000persons □ >5,000person  Available/nearest water source. □ Deepwell □ Water district/LGU □ Surface water □ Others, specify	<ul> <li>□ Implement rainwater harvesting and similar measures as an alternative source of water</li> <li>☑ Observe water conservation measures</li> <li>□ Others, specify</li> </ul>	<ul> <li>✓ Regularly monitor for presence/absence of complaints</li> <li>✓ Regular coordination with concerned agencies</li> <li>✓ Regularly monitor for occurrences of water shortages</li> <li>Others, specify</li> </ul>	Cost integrated in the construction/ operation cost
☐ Increased occurrence of flooding	Is the project site located in an area identified by MGB/PAGASA as flood prone?    Yes  No	<ul> <li>☐ Use appropriate design for project facilities</li> <li>☐ Implement appropriate drainage system</li> <li>☐ Regularly remove debris and other materials that may obstruct water flow</li> <li>☐ Others, specify:</li> </ul>	<ul> <li>✓ Regularly monitor for presence/absence of complaints</li> <li>✓ Regular coordination with concerned agencies</li> <li>✓ Regularly monitor for increased frequency of flooding</li> <li>Others, specify</li> </ul>	Cost integrated in the construction/ operation cost

Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Cost of Mitigation/ Monitoring
AIR / NOISE				
☐ Air quality degradation	Distance to nearest community:  ☐ 0 to less than 0.5 km ☐ 0.5 to 1 km ☐ More than 1 km	<ul> <li>□ Properly operate and maintain all emission sources (e.g. vehicles, generator, etc)</li> <li>□ Install when applicable, the</li> </ul>	Regularly monitor for presence/absence of complaints  Regular (ocular) inspection	Cost integrated in the construction/ operation cost
	i wore than 1 km	<ul><li>appropriate air pollution control device/s</li><li>Strictly enforce good housekeeping practices</li></ul>	of:  Absence of white or black smoke from vehicles, heavy	
		☐ Control vehicle speed to lessen suspension of road dust	equipment, generator, etc.	
		<ul> <li>Conduct water spraying to suppress dust sources and minimize discomfort to nearby residents</li> </ul>	Presence of truck cover during deliveries	
		<ul> <li>Use covered vehicles to deliver materials that may generate dust</li> </ul>		
		Other, specify		
☐ Nuisance due to noise generation	Distance to nearest community:  0 to less than 0.5 km  0.5 to 1 km	Properly operate and maintain all noise sources (e.g. vehicles, generator, etc)	Regularly monitor for presence/absence of complaints	Cost integrated in the construction/ operation cost
	☐ More than 1 km	☐ Install when applicable, the appropriate noise control device/s (e.g., mufflers, silencer, sound barriers, etc.)	☐ Regular monitoring of buffer zones	
		☐ Implement appropriate operating hours		
		<ul> <li>Provide adequate buffer and/or planting of trees</li> </ul>		
		☐ Others, specify		

Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Cost of Mitigation/ Monitoring
Environmental/ Social Impacts  PEOPLE  Displacement of residents in the project site and within its vicinity  Displacement of Indigenous People Enhanced employment and/or livelihood opportunities  Reduced employment and/or livelihood	Size of population of host barangay:  □ ≤ 1,000 persons □ >1,000 and ≤ 5,000persons □ >5,000person  Classification of host barangay: □ Urban □ Rural	<ul> <li>□ Provide relocation/disturbance compensation packages</li> <li>☑ Prioritize local residents for employment</li> <li>☑ Promptly pay local taxes and other financial obligations</li> <li>☑ Regular coordination with LGU</li> <li>□ Prior consultation &amp; coordination to minimize disruption on daily domestic activities &amp; respect for IP rights and cultural practices</li> <li>□ Ensure participation of IPs in</li> </ul>		
opportunities  Increased revenues for LGU  Disruption/Competiti on in delivery of public services (e.g., education, peace and order, etc.)  Enhanced delivery of public services (e.g., education, peace and order, etc.)  Increase in traffic volume and worsening of traffic flow	Available services within/near the host barangay:  Schools (e.g. elementary, high school, college)  Health facilities (e.g., clinics, hospitals, etc.)  Peace and order (e.g., police outpost, brgy. Tanod, etc.)  Recreation and sports facilities  Others, specify:	consultations and dialogues  Provide appropriate traffic/warning signs, lighting, etc  Others: specify		

Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Cost of Mitigation/ Monitoring
□ Impacts on community health and safety □ Others, specify		<ul> <li>✓ Regular coordination with LGU</li> <li>✓ Provide appropriate warning signs, lighting and barricades, whenever practicable</li> <li>✓ Observe proper housekeeping</li> <li>✓ Provide on-site medical services for any emergency.</li> <li>✓ Participate in public awareness programs on health and safety</li> <li>✓ Implement appropriate safety programs for both community and workers</li> <li>Others, specify</li> </ul>	<ul> <li>✓ Regularly monitor for presence/absence of complaints</li> <li>✓ Regular coordination with LGU</li> <li>✓ Regularly monitor submission of reports to concerned agency</li> <li>Others, specify</li> </ul>	Cost integrated in the construction/ operation cost

#### III. INSTITUTIONAL PLAN FOR EMP IMPLEMENTATION



Attach design/plan/alignment of project (with dimensions and descriptions)	
Attach design/plantangiment of project (with dimensions and descriptions)	

#### SWORN STATEMENT OF ACCOUNTABILITY OF THE PROPONENT

This is to certify that all the information and commitments in this Initial Environmental Examination (IEE) Checklist Report\_are accurate and complete to the best of my knowledge.

By the authority vested in me by the <u>PROVINCIAL GOVERNMENT OF</u> <u>CAMARINES SUR</u> as <u>GOVERNOR</u>. I hereby commit to ensure implementation of all commitments, mitigating measures and monitoring requirements indicated in this IEE Checklist Report as well as the following:

- Conform with pertinent provisions of applicable environmental laws e.g., R.A. No. 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990), R.A. No. 9003 (Ecological Solid Waste Management Act of 2000), R.A. No. 9275 (Philippine Clean Water Act of 2004), and R.A. No. 8749 (Philippine Clean Air Act of 1999).
- Abide and conform with LGU development plans and guidelines.
- Promptly pay local taxes and other financial obligations.
- Regularly submit reports to concerned agencies.

I hereby bind myself to answer any penalty that may be imposed arising from any misrepresentation or failure to state material information in this IEE Checklist.

#### **MIGUEL LUIS R. VILLAFUERTE**

Governor
Provincial Government of Camarines Sur

SUBSCRI	BED ANI	O SWORN TO	D befo	ore me this _	 day of	201, affiant
		on _			<del>-</del>	
Dag Na						
Doc. No.			_			
Page No.			_			
Book No.			_			
Series of			_			