ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR GRENADA'S SOLAR PROJECT

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Contents

ACRONYMS

AGD	Account General Department
C-ESMP	Contractors Environmental and Social Management Plan
CPU	Central Procurement Unit
DCA	Development Control Authority
DOI	Department of Implementation
ESF	Environment and Social Framework
ESHS	Environmental Social Health and Safety
ESMP	Environmental and Social Management Plan
ESS	Environment and Social Standard
ESSO	Environment and Social Safeguard Officer
GAA	Grenada Airport Authority
GBV	Gender Based Violence
GCC	General Conditions of Contract
GIIP	Good International Industrial Practice
GRM	Grievance Redress Mechanism
ICZM	Integrated Coastal Zone Management
IPF	Investment Program Financing
LMP	Labour Management Procedure
MBIA	Maurice Bishop International Airport
MOF	Ministry of Finance
MTCA	Ministry of Tourism and Civil Aviation
MW	Mega Watts
NDC	National Determined Contribution
NEP/MS	National Environmental Policy/ Management Strategy
NSDP	National Sustainable Development Policy
PAP	Project Affected Persons
PPE	Personal Protective Equipment
PURC	Public Utility Regulatory Commission
RMI	Rocky Mountain Institute
SC	Supervisory Consultant
SGU	St. Georges University
STDs	Sexually Transmitted Diseases
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WHO	World Health Organisation

1. INTRODUCTION

Grenada's peak electricity demand stands at 27MW with more than 90% of this amount generated by diesel (fossil fuel). In keeping with Grenada's commitment under the National Determined Contribution to reduce its carbon emissions by 40% below its 2010 level by 2040, the main power producing company GRENLEC is seeking to establish three solar plants in St. George on property owned by Grenada Airport Authority (GAA). These power plants collectively will generate 15.1MW of clean renewable energy. Not only will this improve the quality of electricity generation in Grenada by stabilizing the current grid output but it also has the potential to boost economic growth and improve the socio-economic power of Grenadians.

GRENLEC in collaboration with Rocky Mountain Institute (RMI) has examined five (5) sites under ten (10) different scenarios (individual sites as well as combinations of sites) in order to determine the most technically and economically advantageous options to be pursued by GRENLEC. In addition to local capital investment, financing for this initiative is being sought from RMI and the World Bank (WB). In keeping with requirements/policies of the Development Control Authority (DCA) of Grenada and the WB, an Environmental and Social Impact Assessment was undertaken for this project. This Environmental and Social Management Plan (ESMP) seeks to address the E&S issues identified in the ESIA. It gives the objectives, targets and actions proposed to address them; the indicators to be used in monitoring performance of the plan and the procedure and human resource necessary for their implementation.

1.1 OBJECTIVES

This Environmental and Social Management Plan (ESMP) outlines the measures to be taken during project implementation to address the risks/impacts and mitigation measures identified in the ESIA. It addresses the allocation of institutional responsibilities, cost and implementation schedule showing links with the overall project implementation plan as well as the required reporting procedures. The objectives of the ESMP are therefore to:

- Ensure that the project complies with applicable national environmental and social legal requirements and the WB's ESF.
- Outline the mitigating/enhancing, monitoring, consultative and institutional measures required to prevent, minimize, mitigate or compensate for adverse environmental and social impacts, or to enhance the project beneficial impacts.
- Address capacity building requirements to strengthen Occupational Health and Safety requirements where necessary.
- To provide guidance on how to manage Environmental and Social Health and Safety (ESHS) risks in all phases of the project cycle.
- To ensure that construction activities are in compliance with legal requirements and WB Environment and Social Safeguards (ESS).
- To ensure the safety of persons living and working in proximity to the project
- To assist the preparation of bidding and contract documents to ensure the works are carried out in accordance with requirements.

1.2 PROJECT DESCRIPTION

GRENLEC's is proposing a ground mount utility-scale Solar PV and Battery Storage Project to be located in the parish of St. Georges at three sites owned by the MBIA. The first site is a thirteen (13) acre plot north of the Hardy Bay pond (Figure 1), the second is a seven (7) acre plot west of the runway (Figure 2), and the third a sixteen (16) acre plot outside the south fence (Figure 3).

At the site north of the pond a substation and a Battery Energy Storage System (BESS) will be constructed. All three sites will feed into the substation via underground or overhead transmission lines. Underground transmission lines will pass through existing tunnels under the airport while the overhead transmission lines will follow existing pathways. The intended route is shown in Figures 4 and 5. From the substation the power will feed into the existing national grid with no requirement for new transmission pathway. There will of necessity be upgrade of some transmission lines and poles to accommodate the new feed; 50 wooden poles each 45 feet tall will be replaced by poles 55 and 60 feet tall, approximately 27000 feet of 175mm aluminum conductor will be replaced.

While this ESMP is considering development at MBIA namely the construction of a substation and BESS at Site 1 and substation connection to PV Sites 1, 2 and 3, it should be noted that there is a proposal to connect the MBIA substation to the Grand Anse substation via underground transmission lines (see figure 6).

The Battery Energy Storage System (BESS) will be a containerized structure. At this time the exact orientation is not known but it is expected to be in the vicinity of the substation north of site 1.

Figure 1 Site 1

Figure 2. Site 2

Figure 3. Site 3

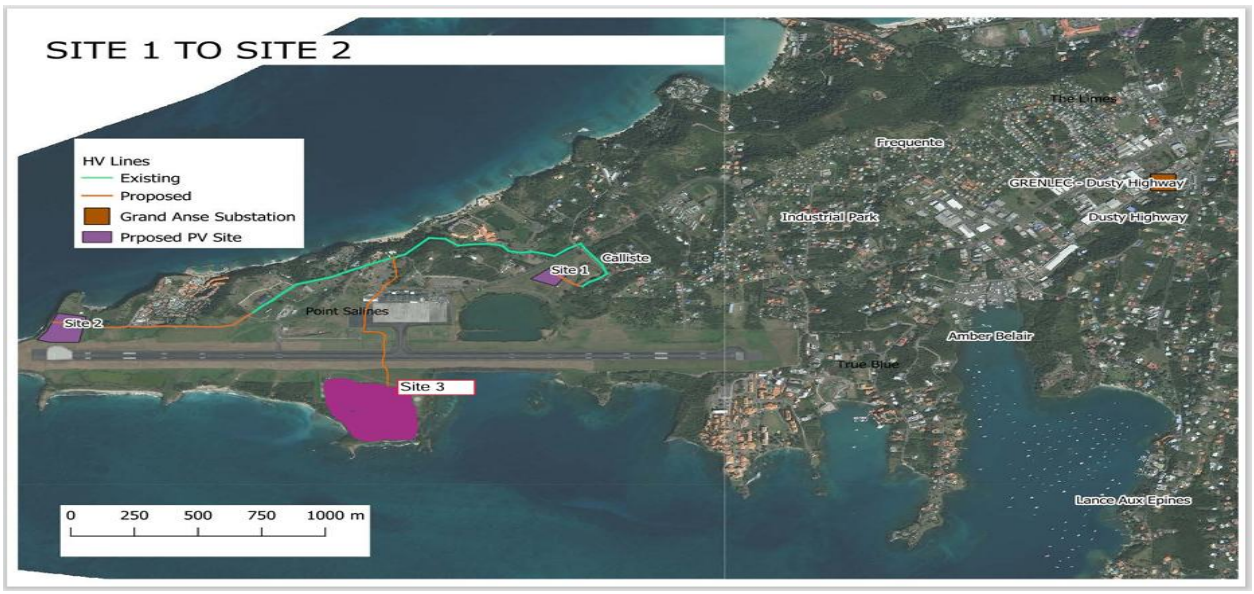

FIGURE 4 LINE ROUTE FROM SITES 1 AND 3 TO SUBSTATION

Figure 5: Transmission lines route from site 1 to substation

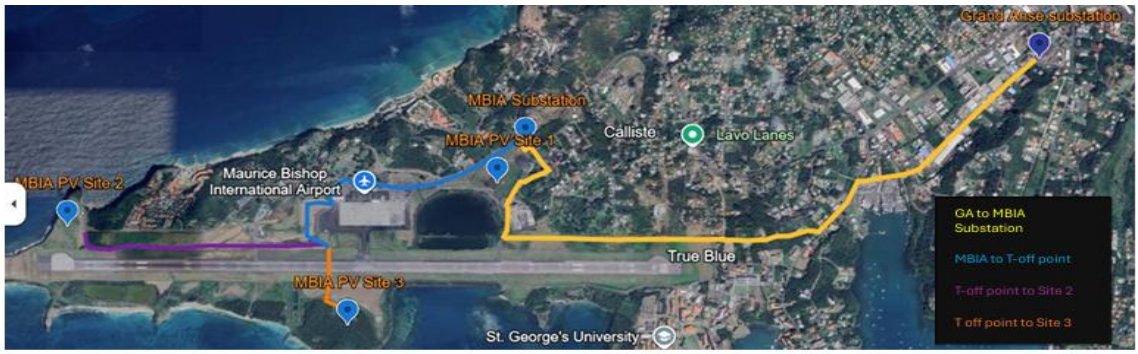

Figure 6. Proposed transmission route from Grand Anse Substation to MBIA substation

2 POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK

2.1 Roles, Responsibilities and Permitting (Institutional Framework)

Given the multiplicity of government Ministries and statutory agencies with roles in this project the following roles are delineated to facilitate smooth implementation and lines of authority.

Ministry of Climate Resilience, the Environment and Renewable Energy (MCRERE) will be the lead agency responsible for project implementation supported by GRENLEC.

The Ministry of Infrastructure and Physical Development, Public Utilities, Civil Aviation & Transportation protects and enhances the nation's investment in infrastructure and provides regulatory oversight for Public Utilities. The **Planning and Development Authority** is this Ministry's arm responsible for development planning and control, including the review and management of Environmental and Social Impact Assessments. The developer is required to submit the design drawings along with the ESIA to the PDA and obtain approval before any physical work commences. The PDA is responsible for the preparation of physical development plans, monitoring and control procedures as well as the performance of EIAs.

The **Public Utilities Regulatory Commission (PURC),** The Commission established by the PURC Act No. 20 of 2016 was established to build a robust regulatory system that supports the development of Grenada while protecting consumer interests (PURC, n.d.). The commission will provides oversight for public utilities including GRENLEC.

The Ministry of Finance (MOF) is responsible for the efficient and effective delivery of finance and economic services to the national, regional, and international communities. The Ministry plays a fiduciary and oversight role in the management of projects financed by development partners through external grants and/or loans. The MOF will support project implementation through key fiduciary activities performed by the Accountant General's Department (AGD) and the Central Procurement Unit (CPU).

The Ministry of Foreign Affairs, Trade & Export Development is the entity responsible for the formulation and execution of the foreign policy of the State of Grenada. This involves bilateral and multilateral relations with other states and with regional and international organizations.

3 ENVIRONMENTAL AND SOCIAL IMPACTS

The Environmental and Social Impacts presented here were identified during the Environmental and Social Screening of the sites and the intended works. This assessment was conducted between March 17th and March 30th, 2024. The assessment covers all physical activities relating to site preparation, installation of solar panels, construction of two road segments, connecting cables and substation. Most impacts relating to this project are rated as Moderate, none was rated as substantial or high. Impacts related to this project are summarized in Table 3-1.

Table 3-1: Environmental and Social Impacts for Sites 1, 2, 3 and the two Road Segments

Environmental Impacts	Details	Risk of Impact
Dust Nuisance	During site preparation and construction of the three PV sites, the substation and road segments, earth works, cement works and increase traffic on the road will all generate dust. Dust impact could be **Moderate**.	Moderate
Air Quality/Pollution resulting from heavy equipment work on the construction site	Dust will impact the air quality, additionally, fumes from motor vehicle will add to the air pollution. The cumulative impact is rated **Moderate**.	Moderate
Noise and vibration from heavy equipment, excavation and movement of construction material	MBIA is a very active airport so that noise level in the general area is high. Noise from trucks and heavy equipment will likely be drowned out by the existing airport noise. The impact from project related noise will be **Low.**	Low
Water Pollution – pollution of the coastal waters in the GAMPA	There is no surface water in the area to be affected by the project. Risk of pollution is to coastal waters as a result of construction waste reaching the sea. Such risk is low because there would be minimal waste generated by this project and the mitigation measures will lower the impact even more. The impact is rated as **Low**.	Low
Impact on biodiversity and coastal resources	Site clearing will involve the removal of vegetation and some topsoil. Sites 1 and 2 has minimal to no vegetation for removal. Site 3 will have some vegetation removal the volumes are small. Both road segments have small amounts of vegetation that will need to be removed. There are some birds that could be impacted –as their habitat may be destroyed. The impact is rated as **Moderate**.	Moderate
Waste management and disposal	Clearing vegetation will produce waste, other solid waste will come from construction (Cement bags, wires and connectors), oils and grease from equipment, food packaging generated by workers. Liquid waste will go into toilets or Septic tanks. The combined impact from waste would be **Moderate**.	Moderate

Soil erosion resulting from clear cutting and excavation. Sediment runoff causing turbidity impacting marine life at GAMPA.	Soil erosion can result from land preparation activities such as excavations for the road segments, drains and foundations. These activities could result in flooding. Flood waters will carry sediments to the sea impacting marine life in GAMPA. The impact would be **Low**	Low
Social Impact	**Details**	**Rate of Impact**
Public awareness and employment	Increase traffic flows, overhead and underground activities associated with transmission lines, temporary increase in population as workers come from outside the community. The impact will be **Moderate**	Moderate
Sexual harassment	Grenada Women's Health and Life Experiences Study (2018) reported a higher than expected level of sexual harassment in the work place	Moderate
Health and Safety Impacts	**Details**	**Rate of Impact**
Occupational Health and Safety	Construction workers will be required to move heavy objects over uneven ground with loose soil and gravel, conditions that make slip, trip and fall; workers interacting with moving equipment and tools, working from heights. The impact is rated as **Moderate**	Moderate
Excessive Noise	The project area is a noisy area. Adding construction noise to the existing noise levels can be challenging for workers. All workers should be provided with earmuffs among other PPEs. The cumulative impact is rated as **Moderate**	Moderate
Glint and glare	Shine metallic surfaces reflect light producing glares which could be hard on the eyes. If the selected PV panels have shine surfaces they can cause glare affecting pilots, motorist and even pedestrians. This impact is rated **Moderate.**	

Table 3-2 Environmental and Social Impact for Substation and Transmission Lines

Environmental Impact	**Details**	**Risk of Impact**
Dust Nuisance	The site is an elevated plot approximately 25 m above the surrounding community. Land clearing and levelling will generate dust that can be carried into the community below. Because the area to be cleared is small the impact is rated as **Low.**	Low
Air Quality	Because of the site elevation impact on the air quality will be greater. The impact is rated as **Moderate**	Moderate
Noise and vibrations	There is not noise sensitive receptor within 50 m of the substation and only a small amount of heavy equipment would be needed. Vibrations produced in the preparation of underground pathways (if	Low

	necessary) will be small compared to the roaring of vehicles on the highway. The impact would be **Low**.	
Water Pollution	Storm water from this site will drain to the coast quickly. Building design will also indicate drainage pathway. The impact will be Moderate	Moderate
Impact on Biodiversity and coastal resources	Vegetation removal and destruction of habitats. This impact would be low.	Low
Waste disposal	Waste from the substation will include cement bags, cement wash, packing material and fragments of building material. Wire from transmission lines, condemn poles, oils and gas from machinery, broken or condemn electrical fittings. Collectively the impact will be substantial	Moderate
Soil erosion	There will of necessity be the levelling of the site to accommodate the substation and BESS. There will also be some excavation for the foundation of the substation and underground transmission lines. The impact will be **Moderate**	Moderate
Social Impacts	**Detail**	**Risk of Impact**
Community Health and Safety	When overhead transmission lines are being changed, the streets below would be closed and the traffic diverted. The risk of negative impact to the traffic will be **Substantial**	Substantial
Sexual harassment	Grenada Women's Health and Life Experiences Study (2018) reported a higher than expected level of sexual harassment in the work place	Moderate
Health and Safety Impacts	**Details**	**Risk of Impact**
Occupational health and Safety	Construction worker on the substation, climbing poles, replacing poles expose workers to conditions that can cause slip, trip and fall, put workers close to moving trucks, cranes and heavy equipment. The impact is rated as **Moderate**	Moderate
Public awareness	Notices, warning signs and information notices placed strategically to advise workers **Moderate**	Moderate

4 ENVIRONMENTAL AND SOCIAL MITIGATION PLAN

This mitigation plan seeks to capture all Environmental and Social impacts associated with the combine works of the project including solar panels, transmission lines – above ground and underground, substation and BESS and the new road segments and to present mitigation measures to manage these impacts on the environment and its stakeholders. It also outlines the method for recording and reporting Environmental and Social issues and the monitoring process to ensure mitigation, offsetting, reducing or eliminating adverse environmental and social impacts of the activities of this subproject.

General Conditions of Contract (GCC): These general conditions in Table 4.1 are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents. Where applicable, special conditions of contract would also laid down to cover specific supplies, services or works.

The General Conditions of Contract shall include a clause regarding performance standard as follows: The goods supplied shall conform to the standards mentioned in the contract bidding documents and specifications specific to the implementation of E&S issues and the ESMP.

Table 4.1 Monitoring Plan

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
Excavation, construction, electrical and road works	Dust Nuisance impacting workers in the general area, personal property in the area including vehicles, shops and their contents	• Dust source (stockpile of sand or aggregate, unpaved road, laydown area) to be kept wet using water spray. • All vehicles transporting construction materials such as cement, sand or other fines, construction waste material and debris, aggregates from the quarry or excavated material are to be fully covered until they reach the drop-off point.	Contractor	All phases of the project	Supervisory consultant	GCC 4.18 The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.
Excavation, construction, electrical and road works, Tunnels for underground cables.	Noise and vibrations	• Construction /work activities will be conducted between 7:00 a.m. and 5:00 p.m. on weekdays. • The Community /public is to be informed in advance (at least 48 hours) of any work activities to	Contractor	All phases of the project	Supervisory consultant	GCC 4.18 and 4.8 (b) (c) (d) (e) comply with all applicable safety regulations. Take care for the safety of all persons entitled to be on the Site. Use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		occur outside of normal working hours or on weekends. • During operations, the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible. • There should be no excessive idling of construction vehicles at sites. • Noise suppression components supplied by the manufacturer should be utilised at all times. • Ensure all vehicles • and equipment are properly serviced. • The C-ESMP should address community				to these persons. Provide fencing, lighting. Guarding of the Works until completion and taking over under Clause 1 0 [Employer's Taking Over].

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		health and safety with respect to noise and working hours.				
Excavation, construction, electrical, electrical and road works	Air pollution – particulate matter/dust in the air from cement and aggregate used in construction; particulate matter from vehicular exhaust and dusty construction site; uncovered construction material being carried by trucks	• Construction materials such as sand, cement, or other fines should be kept properly covered. • Cement should be stored in a closed area wi thin a shed or container. • The sand and fines should be kept moistened with sprays of water while uncovered. • Unpaved, dusty construction access ways should be compacted and then wet periodically. • The project site should be kept free of debris to minimize dust. • There will be no open burning of	Contractor	All phases of the project	Supervisory consultant	*GCC 4.18* 4. 23 The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Engineer as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land. During the execution of the Works. The Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage. Rubbish and Temporary Works which are no longer required.

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		construction /waste material at the site. • There will be no excessive idling of construction vehicles at sites. • The bins of all haulage vehicles transporting aggregate or building materials must be covered on all public roads				
Excavation and Construction	Waste generation – Liquid and solid waste from human activities, vegetation from land clearing. Construction waste- wires and connectors, grease and oils from equipment	• The contractor must develop and implement a waste management plan in consultation with the national solid waste authorities. • The contractor shall abide by all relevant waste management and public health laws. • Waste collection and disposal pathways and sites will be identified for all	Contractor	All phases of the project	Supervisory consultant Environmental and Social Specialists	GCC 4.18. The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations. The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values indicated in the Specification. and shall not exceed the values prescribed by applicable Laws

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		major waste types expected from construction activities. • Construction wastes will be stored appropriately on site. • Waste segregation will be implemented. • Liquid and chemical wastes must be stored in appropriate containers separated from the general refuse. • All waste will be collected and disposed of regularly and at the approved landfills by licensed collectors. - The records of waste disposal will be maintained and made readily available for inspection.				

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		• Whenever feasible the contractor will reuse and recycle appropriate and viable materials except hazardous material.				
Excavation, construction and road works	Impact on Biodiversity	• No waste or runoff will be allowed to enter the marine environment directly. • All runoff will be channeled into a sedimentation pond where solids will settle out before the water enters the sea. • Workers will not fish in the GAMPA	Contractor	All phases of the project	Environment and social specialist	GCC 4.18. The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations. The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values indicated in the Specification. and shall not exceed the values prescribed by applicable Laws
Construction, Electrical and road works	Increase traffic –heavy equipment and trucks carrying construction material	• The public must be informed of the increase in heavy equipment on the road leading to the site.	Contractor	All phases of the project	Supervisory consultant. Environment and Social Specialists.	GCC 4.15 The Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes. signs and directions:

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
	passing through Calliste communities with poor road infrastructure.	• Posting warning signs to alert users of the road that heavy equipment and trucking will be accessing these roads. • Antiglare panels will be used so that glare from solar panels do not affect drivers and pilots.				
Excavation, construction, Electrical and road works	Community Health and Safety -Issues affecting communities: Traffic issues, influx of workers,	• Safe path for pedestrians • Signage will be installed providing information to visitors and persons from the communities • Implement traffic management plan • The workers, the community and anyone the project affects (PAP) must be allowed to	Environmental and Social Specialists	All stages of the work	Supervisory consultant. Environment and social Specialists	GCC 4.14 The Contractor shall not interfere unnecessarily or improperly with: (a) (b) the convenience of the public; or the access to and use and occupation of all roads and footpaths irrespective of whether they are public or in the possession of the Employer or of others

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		register issues or grievances brought about by the project and seek redress without any hindrance or discrimination. • Project workers must have access to a grievance mechanism. • Project stakeholders must have access to the project-level grievance mechanism. • A copy of the ESMP and the C-ESMP will be maintained on site and access allowed by stakeholder with inquiries. • The adjacent communities will be kept informed of work progress, changes in work flow, traffic				

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		adjustments – road closures and diversions.				
Excavation and construction	**Occupational Health and Safety**	• The contractor must ensure that an Occupational Health and Safety Plan is in place to guide work activities and provide a safe environment for workers. • All relevant Labour and Occupational Health and Safety regulations must be adhered to, to ensure worker safety. • Workers must be provided with necessary equipment as well as PPEs as per their specific tasks such as hard hats, overalls, gloves, goggles, boots, etc. which must be worn at all times while at work	Contractor .	All stages of the project	Supervisory consultant Environment and Social Specialists	GCC 6.7 The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities. 22 the Contractor shall ensure that medical staff. first aid facilities. sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel. and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		• All aerial platforms, buckets and hoists must be checked daily • Sanitary facilities must be provided for all workers on site. • Appropriate posting of information within the site must be done to inform workers of key rules and regulations to follow. • The project should commit to safety considerations in conducting all its activities • **D**evelop and implement systems, processes, policies, and services that comply with national and international legal requirements, including industry standards and best practices concerning safety.				

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		• The contractor shall provide a safe working environment for all employees, as far as is reasonably practicable, by the provision and maintenance of plants and systems of work that are safe and without risks to health. • Employees must play their part by using PPEs as appropriate, stop any activity that they consider dangerous to themselves or others and report unsafe practices or personal conduct to the employer and or the safeguard personnel.				
Excavation and construction	Moving Object like cranes and trucks	• Work area management must be clearly defined to ensure that equipment is used	Contractor	All stages of the project	Supervisory consultant,	GCC 17.3 Accidents resulting from use or occupation by the Employer of any part of the Permanent Works. except as may be specified in the Contract, (g)

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
		as instructed and meets the relevant safety guidelines. • The workforce should wear protective clothing su11111ch as high visibility jackets to b1e seen by moving vehicles, as well as steel -toe shoes and helmets to protect them against moving/falling objects. • Employees should be trained to be vigilant and aware of their surroundings and to avoid hazards.			Environment and Social Specialists	design of any part of the Works by the Employer"s Personnel or by others for whom the Employer is responsible.
Electricity generation Operations	Visual impact Glint and Glare from shine surfaces including panels and racks.	• The project will use panels with antiglare • The angle of placement of the panels have been determined by Barrette Energy	Contractor	Construction	Supervisory Consultant	

Activity	Potential Environmental Impact	Mitigation Measure	Responsible for Implementation	Project Work Phase	Monitored by	Relevant GCC As per GCC and Plans.
	Electrocution.	Research Group (BERG) model. • This project will abide by the ocular hazard standard which establishes the glare intensity depicted by the color-coded system that is deemed significant and thereby determined to produce a potential hazard to air navigation. • Workers are required to be trained and be knowledgeable of the H&S code before working with circuit breakers, capacitors, and generators				

5 ENVIRONMENTAL AND SOCIAL MONITORING PLAN

This Environmental and Social Monitoring Plan provides specific details for the monitoring of environmental and social impacts identified in the ESIA with implementation details in the ESMP. It identifies monitoring objectives for the specific mitigation measures linked to the various impacts identified in the ESIA and detailed in the ESMP. It provides specific technical details for monitoring (Table 5-1) i.e., methods to be used, sampling locations, frequency of measurements, and detection limits designed to ensure early detection of conditions that necessitate particular mitigation measures, and reporting on corrective measures.

5.1 SUPERVISION, MONITORING AND REPORTING

Prior to commencement of works, the Supervision consultant should visit the site with representatives from the client including the Environmental and Social Specialists. An Environmental and Social Management Register and check list should be developed by the client to be maintained by the contractor. The management register should include:

- A register of environmental effects including records of measurable aspects of the site's environmental performance, relative to appropriate standards.
- A log of environmental incidents and complaints, including any unexpected events along with response measures/remedial action.
- Photographs of baseline conditions and changes resulting from project implementation; evidence of equipment comply with the requirements of the Environmental Management Plan and the Contractor's Method Statement.

The management register will also define actions to be taken/corrective action required as a result of these checks. Independent records are to be maintained by the Contractor and by the Supervision Consultant. Records are to be made available to the Client or Client’s Representative upon request. The contractor should report weekly to D&SC and the D&SC report monthly to PIU.

5.2 ENVIRONMENTAL AND SOCIAL SAFEGUARDS MONITORING AND INSPECTION

The E&S officer of the supervision consultant should be on site every day during construction to ensure that construction works are in keeping with the guidelines and specifications of the contract as identified in the ESIA and ESMP particularly with reference to World Bank Environmental and Social Standards (ESS) and local laws governing environmental protection, employment and protection of vulnerable groups.

The Environmental and Social Inspection will include the following:

- Examination of the incidents and complaints log.

- Interviews with the Contractor's Environmental and Social Safeguards Manager or Health and Safety Officer and other site staff as required.
- Visual examination of the site, to examine working practices, environmental effects, mitigation measures and monitoring activities.
- Review of the results of monitoring undertaken during construction, to identify the need for any additional environmental management or mitigation measures to be implemented and timeline for implementation.

The findings of the Environmental and Social Inspection will be presented at the weekly site meetings. As soon as a non-compliant is identified for which remedial action is needed, the site manager should be notified. The reporting should include a list of all non-compliances and deficiencies found. These should be recorded in the project log and on a Corrective Action Request proforma along with corrective action required.

Table 5-1: Technical Details for Monitoring Environmental and Social Parameters

Parameter To Be Monitored	**Mitigation Measure**	**Location [Where]**	**Measurement [How]**	**Frequency [When]**	**Responsible Party [Who]**
Environmental Parameters					
Air quality	- Cover dust source (fines) - Compress and wet unpaved areas -Trucks carrying aggregate or similar material should have their sides secured and the cargo securely covered	Along the road, at construction site and any adjacent community that may be affected	-Site inspection -Monitoring particulate matter in air using monitoring equipment	Weekly	Contractor's Environmental and Social Officer.
Noise Level	-Select equipment with recommended noise level < 90 dBA	Along the road and at the adjacent community.	Measuring of noise level using Noise meter	Bi- weekly	Contractor's Environmental and Social Officer.
Coastal Water quality	-No dumping in pond or coastal waters Install sediment traps in	Where drains enter the sea	Coastal water quality assessment.	Fortnightly during construction	The E&S Officer of the Contractor

Parameter To Be Monitored	Mitigation Measure	Location [Where]	Measurement [How]	Frequency [When]	Responsible Party [Who]
	drains leading to the sea.				
Occupational Health and Safety	-Ensure proper safety measure, use of PPEs, protective clothing and implementation of health and safety plan and Health (COVID) protocols	On all work areas and adjacent community	Site inspection Visual observation, noise and dust measurements.	All project phases	Environmental and Social officer from the contractor
Acquisition and trucking of sand and aggregate	-Sand and aggregate will be acquired in accordance with national regulations -Trucks will carry loads commensurate with their licensed capacity.	At loading sites and on the highway, at borrow pits and batching plants.	Visual observation; dust and noise measurements	During loading, transporting and unloading of aggregate and concrete	Contractor
Social Parameters					
Workers Satisfaction	-OHS rules being followed; safe work environment provided, appropriate signs posted, medical services provided.	On the job site	Interviews with workers. Site observation by officer conducting monitoring	monthly	Social Safeguard Specialist of the PIU
Gender Based Violence and Sexual Harassment	All workers are required to sign a code of conduct. GBV will bdiscussed at orientation and at Toolbox talk. Implement measures from the GEPAP including gender equality to promote	On the job site	Check project log for complaints/ grievance report	Monthly	Social Safeguard Specialist

Parameter To Be Monitored	Mitigation Measure	Location [Where]	Measurement [How]	Frequency [When]	Responsible Party [Who]
	capacity building and resource distribution in environment, education, good health, sexual and reproductive health.				
Occupational Health and Safety	PPEs and safety clothes in use, signage appropriately placed.	All areas of work- on the jobsite, on the road	Visual observation, check project log, interview workers.	Daily	Contractor Supervision consultant Environmental and Social Specialists

6 PROJECT MANAGEMENT AND INSTITUTIONAL ARRANGEMENT

6.1 ESMP IMPLEMENTATION ROLES AND RESPONSIBILITIES

This section of the report provides a summary of the roles and responsibilities of the key actors (Figure 6.1) involved in the implementation of this solar project in general and the ESMP specifically.

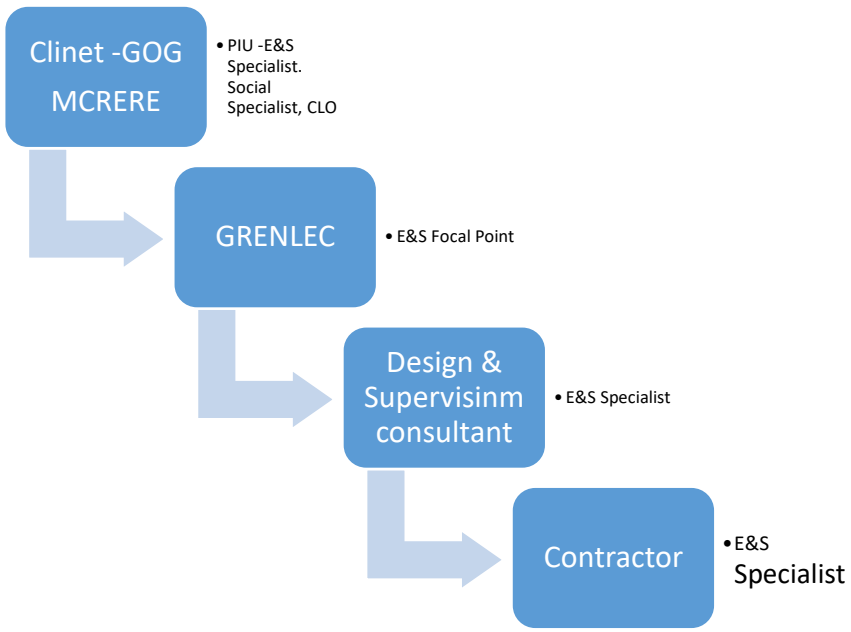

Figure 6.1 Organisational Chart

Project Management and Supervision

The Environmental and Social activities for the Project will be overseen by the Environmental specialist and Social specialist in the PIU. They will be responsible for ensuring the implementation of each activity. This includes, incorporating the E&S provisions into the bidding documents for civil work, monitoring the implementation of the E&S measures as part of periodic project monitoring visits while works are taking place at the sub-project site and overseeing the work of the supervision consultants including progress reports. GRENLEC will appoint a coordinator for E&S activities who will liaise with the E&S Specialists in the PIU, the Design and Supervision Consultant and the Contractor.

Throughout project implementation, the PIU E&S specialists in coordination with the supervision consultants will provide training and awareness raising to relevant stakeholders, contractors, and

communities, to support the implementation of the environmental and social risk management mitigation measures.

The E&S specialists will track grievances to monitor the implementation of project activities. After completion of the civil works, the E&S specialists will assess whether procedures and plans have been effectively implemented and ensure that physical sites are properly restored.

Grenada Electricity Company Limited (GRENLEC) is responsible for liaising with the community to organize community consultation(s) in conjunction with the Environmental Consultant and the Design and Supervision Consultant to ensure the community is kept up to date with the activities being undertaken as well as any notifications regarding modification of working hours, etc.

More specifically GRENLEC through their E&S focal point under the guidance of the PIU E&S specialists, will be responsible for:

- Pubic and stakeholder consultation in accordance with the Project Stakeholder Engagement Plan (SEP)
- Contributing to all project E&S documents, such as the ESIA and/or ESMP
- Representing the project during community meetings
- Reporting on environmental and social performance and any accidents/incidents as per the incident reporting tool to the WB
- Monitoring th0e environmental and social performance of the project
- Review of environmental and social management and monitoring reports
- Review of ESMP performance and implementation of corrective actions or stop procedures in the event of breaches of the ESMP.

The Design and Supervision Consultant is responsible for the supervision of the ESMP, trainings and the monitoring of the Contractor's implementation. The Design and Supervision Consultant shall:

- Perform the oversight supervisory role with all contractual obligations including E&S during construction phase
- Ensure effective communication and dissemination of the ESMP to contractors and sub-contractors.
- Reporting any incidents or non-compliance with the contract
- Prepare monthly reports on E&S supervision as well as Contractors' compliance with the contract.
    - Conduct final review of ESHS aspects of designs to ensure that they form a sound and comprehensive basis for addressing potential construction and operational ESHS.

- Preparation of ESHS Specifications for inclusion in the tender document and the subsequent works contract.
- Supervision of the contractor's compliance with contractual obligations.
- Reviewing and approving the OHSM, required plans such as traffic management plans, solid waste management plan and method statements - MSIPs (collectively the C_ESMP), and requiring revisions and updates as needed.
- Ensuring that contractors are properly briefed in relation to the importance of ESHS matters during construction; thereby ensuring that the requirements of this Environmental and Social Management Plan, including in relation to Health and Safety and the GRM requirements associated with the design and construction process are satisfactorily implemented.

The contractor is responsible for complying with the ESMP and all contractual requirements while undertaking the works. The contractor is responsible for implementing the environmental and social measures described in the contract. To facilitate this the contractor will have on site as a minimum an E&S specialist (see appendix 1). The contractor would be expected to include site-specific management plans that would guide the management of environmental and social risks.

The Contractor will be responsible for complying with the ESHS provisions of the contract, including any subcontractor(s), to the satisfaction of the Supervising Consultant and PIU. The contractor will prepare the OHSM and MSIPs to meet the requirements of the Contract, and Method Statements as required by the SC, to describe how they will deliver the ESHS requirements of the Contract, in terms of the tools, equipment and methods they will use.

The Contractor shall be responsible for:

- Implementation of the mitigation measures identified in the contract documents and ESMP.
- Monthly reports on any E&S mitigation and monitoring issues; special reports will be made for exceptional circumstances.
- Keeping records related to the environmental and social performance of works.
- Ensuring that all E&S mitigation and monitoring requirements are known and implemented by its personnel and sub-contractors
- Managing and reporting grievances received

Further the Contractor will be responsible for preparing a Contractor's Environmental and Social Management Plan (C-ESMP) following this ESMP depending upon his scope of work and implement it.

The Contractor will be responsible for ensuring compliance with all relevant legislation, environmental controls, mitigation measures and management of social issues as set out in the ESIA and ESMP for this project. Before starting work, the Contractor is to present the C-ESMP with method statements outlining how the environmental impacts of the project will be managed.

Pre-Construction Assessment: The Supervision Consultant, the Civil Works Contractor and the PIU E&S specialist shall survey the project sites prior to construction to document the condition of all work areas especially sensitive areas like road interface and adjacent receiving water bodies. The Supervision Consultant Environmental and Safety Officer will prepare a pre-construction report that documents the detailed status of each project work area prior to project activities; the report should include photographs.

Construction Assessment: The Supervision Consultant shall visit the sites as frequently as required but not less than twice per month to check progress and verify compliance at the site. Oversight agencies (Planning and Development Authority and MOIID) should also visit the site on an as needed basis at any time. A report documenting compliance with all contractual agreements and construction mitigation measures shall be prepared at the completion of each site visit.

Monitoring: Contractor and his Environmental and Social Officer would be on site on a daily basis to provide guidance and ensure compliance with all applicable mitigation measures for the work phase. A site log or journal should be kept by the contractor to document any activity or event that has the potential to negatively impact the environment.

Incidents Reporting: The Contractor and his ESO are responsible for informing the PIU of any incidents and accidents within 24hrs of occurring. Subsequently an incidents report will be prepared within 72 hours of the incident. The Health and Safety Officers shall maintain a complete project record of incidents associated with their contract scope of work. The record shall be regularly updated and included with monthly reports submitted to the Project Implementation Unit.

Corrective Action: Contractors are responsible for responding to and addressing notices of non-compliance in a timely manner and to the satisfaction of the PIU Social Safeguard Officer. Contractors will be responsible for the rehabilitation costs and work effort associated with any environmental damage that may occur due to non-compliance with mitigation measures and environmental laws.

The Environmental and Social Safeguards Officer will support environmental supervision, especially as regards inspection in the field as well as support the management of social risks and impacts, and implementation of social safeguards requirements.

Reviews of the ESMP shall be conducted during the project implementation to verify the effectiveness of the mitigation measures. The results of monitoring and measurement of performance indicators will be reported on a fortnightly basis during construction. This report will be reviewed by the Project Coordinator/Supervisory Consultant and Project Management

Team for deviations from expected outcomes, to ensure the effectiveness of the system and to identify and implement system improvements.

Performance that falls below expected levels will be addressed as soon as reasonably practicable and corrective actions will be identified and implemented where the ESMP is found to be deficient, where measures are lacking, and/or when changing circumstances are encountered. The ESSO and Project Coordinator shall record and report the results of these reviews and any other self-regulation processes to all concerned parties.

6.2 LABOUR MANAGEMENT REQUIREMENTS

The Environmental and Social Standards (ESS), specifically ESS2- Labor and Working Conditions and the project's Labour Management Procedures (LMP) provisions will apply where appropriate, to fill gaps between GoG laws and World Bank standards. The contractor will be required to maintain a register of all employees, their age, gender, hours of work, and wages. The project will engage all types of workers and national/expatriate consultants as per the labour provisions outlined in the Labour Management Procedures (LMP) and ESMP. The LMP is based on ESS2 and covers the management of worker relations including, workers' specific Grievance Redress Mechanism, terms and conditions of employment, non-discrimination and equal opportunity, protection of the workforce, and prohibition.

OHS measures in the LMP would follow ESS2, ESMF and ESMP concerning documentation and reporting of occupational accidents, diseases, and incidents; emergency prevention, preparedness and response, and remedies adverse impacts such as occupational injuries, deaths, disability, and diseases.

The PIU Social Safeguard Officer will ensure compliance with the clauses regarding non-tolerance of Gender Based Violence (GBV), sexual harassment and exploitation and abuse and sexual harassment (SEA/SH), and discrimination.

Project workers should be employed based on equal opportunity, and there should be no discrimination related to compensation, working conditions and terms of employment.

The Employment of Women, Young Persons, and Children Act (Part II/Article 8, 1938) prohibits the employment of children under the age of 14 years in any public or private industrial undertaking. Each worker must have a national identification and National Insurance card

As part of the Labour Management Procedure (LMP), grievances that relate to project workers will be reported to the Social Specialist and handled by a separate grievance redress mechanism from that of other project-related grievances. The grievance redress mechanism (GRM) will provide all direct workers and contracted workers (and, where relevant, their organizations) with channels to raise workplace concerns.

The Grievance Redress Mechanism (GRM) in the LMP also makes clear procedures for the handling of Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) grievances. Complaints can be made in person, in writing, verbally over the phone, by fax, email or any other

media. Concerns can be raised anonymously and/or to a person other than an immediate supervisor.

An appropriate receptacle (box) will be provided at the project site to receive grievances. This will be monitored by the Clerk of Works. Anyone who is affected by the project (real or perceived) can lodge a written complaint/grievance. All grievance received will be logged and treated as provided under the Grievance Redress Mechanism (GRM) in Section 7.1.

6.3 CAPACITY BUILDING

The contractor will make sure that all project staff and counterparts who are involve in project implementation receive both initial and ongoing environmental and social safeguard awareness and training sufficient to ensure they are familiar with their environmental and social responsibilities under the ESMP.

The contractor must identify the knowledge and skills necessary for implementation of the management systems and programs and identify training requirements for the organization's personnel. All persons responsible for undertaking work during the life of the project must be trained on the contents of the ESMP (Table 6.5.1). The Independent Environmental Consultant is responsible for identifying the knowledge and skills necessary for the implementation of the ESMP and ensure that all site personnel have a basic level of environmental awareness training. Such training should be conducted by the Contractor's Environment and Safety personnel at orientation. All personnel whose work may cause a significant impact on the environment, will receive environmental training as follows:

Table 6.5.1 Areas for Capacity Building

Training	Participants
Environment & sustainability element of company- induction training	All new starters
Environment & sustainability element of site – induction training	All those working on site
Site Environmental Awareness	Site Safety personnel Plus Delegated Duty Holders
Ecology and Biodiversity	Delegated Duty Holders (Persons clearing project site)
Waste Management including damage and defected panels and battery.	Delegated Duty Holders (Persons responsible for waste management)
Pollution Prevention and Emergency Spill Response	Delegated Duty Holders (Contractor, oversight officers)
Toolbox Talks on spillage, noise prevention, working conditions, and other issues relevant to the works.	All workers, HR will document the training
GRM, SEA/SH, code of conduct	All workers, HR will document the training.

In addition to GCC9.4.20 (first paragraph) and GCC18.2 (g), as a minimum the general induction: General Induction for Construction Workers: Safety, Health and the Environment (https://www.wbgkggtf.org/node/3823), shall be provided as training to all Contractor's Personnel. Each Contractor's Personnel shall receive the general induction prior to their start of any Works activity on site, and at least annually thereafter. Records of the general induction training provided shall be kept. The record shall include a copy of the induction given and as a minimum the following details:

- Name and signature (or mark) of trainee
- Employer/ organization they work for
- Date of induction training attended

Implementation Cost.

The cost associated with the training needs of this project and the implementation of the ESMP will be computed once the contractor has assembled his/her team and understands its needs. For actions that are the responsibility of the contractor, all costs for the tools, equipment, processes and methods for delivering the works in compliance with the requirements (including those set out in general and particular conditions of contract) will be incorporated as a subsidiary obligation in the prices quoted for other Bill of Quantity items.

7.0 STAKEHOLDER ENGAGEMENT

Following the government's announcement of the project, the ESIA consultant initiated stakeholder consultations to create awareness and solicit participation thereby providing necessary and valuable information to guide the design and implementation of the project. As per the Environmental and Social Standard ESS10 on Stakeholder Engagement and Information Disclosure, a Stakeholder Engagement Plan (SEP) was prepared. The overall objective of the SEP is to define a program for stakeholder engagement, including public information disclosure and consultations throughout the project cycle. The SEP outlines the ways in which the project team will engage with stakeholders and includes a grievance redress and feedback mechanism by which people can raise concerns, provide feedback, or make complaints about any activities related to the project.

As in the initial phase, all information materials will be provided in English and in a format readily understandable by project stakeholders. A range of strategies were used and will continue to be used to reach as many stakeholders as possible and to accommodate stakeholders with limited access to internet facilities. Project information will be shared in a manner that is accessible and culturally appropriate, taking into account specific needs of groups that may be differentially or disproportionately affected by the project.

Information dissemination and Feedback Mechanism: Engagement activities will employ a range of formats, depending on the activity objective and the needs of stakeholders. These include formal, in-person meetings with government counterparts, and site-level consultations with the local community, focus group meetings, site visits as well as perception surveys during and after implementation. Additionally, a series of communications activities and tools will aim to reach the general public on themes around energy conservation and efficiency.

Other mechanisms for information dissemination to stakeholder groups include:

- Written material, such as fact sheets, flyers and brochures
- Websites and social media
- Group and individual meetings
- Media releases
- Traditional media

An appropriate receptacle (box) will be provided at the project site to receive grievances. Anyone who is affected by the project (real or perceived) can lodge a written complaint/grievance. All grievance received will be logged and treated as provided under the Grievance Redress Mechanism (GRM) in Section 7.1.

7.1 GRIEVANCE REDRESS MECHANISM

Project implementation activities could result in disputes /disagreements between the Project implementers and persons/stakeholders who feel aggrieved because of the developer's employment practices, or unannounced disruption to electricity service. This section of the ESMP describes the process that will be used to deal with concerns and complaints received from affected stakeholders (individuals, groups or communities). The SEP provides more details on the grievance redress process.

Once received, the concerns will be investigated, and decisions made whether they are genuine grievances to be dealt with under the Grievance Redress Mechanism. The Grievance Redress procedure will allow project affected people (PAPs) not to lose time and resources from going

through national lengthy administrative and legal procedures, however person are free to lodge a grievance under the national system.

7.2 GRIEVANCES

Grievances can result from real or perceived impacts of Project activities. The following criteria may be applied to distinguish grievances from other types of communication received from stakeholders:

- Reports about harmful impacts, disturbance, disruption, injury and damage caused by the Project activities, including contractor operations (such as noise, traffic, pollution, damage to common amenities and private assets, impacts on the natural environment and community health).
- Dissatisfaction with outcomes of the mitigation process.
- Dissatisfaction with some aspects of the Project recruitment and hiring process, e.g., limited number of positions available to the local population, the contractor would be guided by the government quota system or if no system is in place a recommended 85% local and 15% regional and international; insufficient advertising of vacancies.
- Reports about misconduct by the Company's personnel, security or contractor workers.

The above list is not exhaustive and does not exclude other types of communications that the Company's staff may categories as a grievance.

7.3 SUBMITTING A GRIEVANCE

Affected persons can submit their complaints to the grievance redress committee (GRC) via various intake channels including in-person, in writing, Project site telephone, fax, email, SMS, WhatsApp, Facebook page and grievance submission form.

The GR process: The process for grievance management is as follows:

1. **Receive grievance/feedback**: All grievances/feedback can be received by the PIU staff, sub-project site focal points or by any other person on a sub-project, including a contractor or other designated person. Through the consultation process, stakeholders will be informed of

various avenues through which grievances/feedback can be filed, including at the sub-project level (suggestion/grievance boxes will be available in each building during construction works) or directly to the Grenada's Ministry. At the contactor/subcontractor level, the Environmental and Social Management Plans (ESMPs) will reflect site specific channels and contact point of entry for grievances. The points of receipt of grievances/feedback are detailed in SEP.

2. **Processing**: Within 3 working days of receipt, the Grievance Coordinator will categorize the grievance (high, medium, low priority) and forward grievances/feedback to relevant persons at the sub-project level or within the PIU.
3. **Acknowledgement of grievance***:* All grievances will be acknowledged by telephone or in writing by the Grievance Coordinator within 3 working days of receipt of the grievance. The grievant should be informed of the approximate timeline for addressing the complaint if it cannot be addressed immediately.
4. **Verification, investigation, action:** The Grievance Coordinator will investigate the complaint. This investigation will include, but is not limited to, meetings with the grievant, site visits, meetings/interviews with project staff and collection of relevant documentation and other forms of evidence. For meetings, the deliberations and decision will be recorded on a Meeting Record Form. Community representatives or representatives of the grievant will be allowed to sit in at these meetings.

   The Grievance Coordinator will work with the relevant authorities and with project contractors to ensure speedy resolution of grievances. If the complaint cannot be resolved by the Grievance Coordinator, it will be reviewed by the Grievance Management Committee.
5. **Monitoring and evaluation:** Data on complaints will be collected in the Grievance Management Registration and Monitoring Sheet and reported to the NCC and WB on a quarterly basis.
6. **Provision of feedback:** Feedback from grievant regarding their satisfaction with complaint resolution is collected within a month after the grievance is resolved.

Appendix 1: Qualifications for EHS and E&S Specialists for the Contractor

Qualifications for EHS Specialist

1. Bachelor's degree in environmental health, safety management, or a related field.
2. Certification in Occupational Safety and Health (such as OSHA).
3. Experience with environmental compliance and waste management.
4. Knowledge of environmental regulations of Grenada.
5. Proficiency in risk assessment and hazard identification techniques.
6. Strong communication and training skills.

Qualifications for E&S Specialist

1. Bachelor's or Master's degree in environmental science, social sciences, project management, or related field.
2. A minimum of 2 years of experience in a similar role.
3. Minimum 5 years of working experience in sustainable development projects.
4. Extensive knowledge on environmental and social assessments with preferably 3 years of experience working on projects funded by the World Bank.
5. In-depth knowledge of regulatory requirements, interpretations, and health and safety programs.
6. Aptitude to solve problems quickly with advanced conflict resolution skills.
7. Excellent written and verbal communication skills.
8. Outstanding analytical abilities.

Appendix 2: CHANCE FIND PROCEDURES

Cultural heritage encompasses tangible and intangible heritage which may be recognized and valued at a local, regional, national, or global level. *Tangible cultural heritage*, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be in urban or rural settings and may be above or below land or under the water. *Intangible cultural heritage*, which includes practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts, and cultural spaces associated therewith — that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history. Prior to starting work under the project, the relevant local authority should be notified and contact information of the cultural heritage officer that can respond in case of chance finds should be available with the PIUs.

In the event that during construction, sites, resources, or artifacts of cultural value are found, the following procedures for identification, protection from theft, and treatment of discovered artefacts should be followed and included in standard bidding documents. These procedures consider requirements related to Chance Finding under Grenada's national legislation.

- Immediately stop the construction activities in the area of the chance find.
- Delineate the discovered site or area.
- Secure the site to prevent any damage or loss of removable objects.
- Notify the PIU who in turn will notify the responsible local authorities.
- Responsible local authorities and the relevant Ministry would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures.
- Decisions on how to handle the finding shall be taken by the responsible authorities and the relevant Ministry. This could include changes in the layout (such as when finding irremovable remains of cultural or archeological importance), conservation, restoration, and salvage.
- Implementation of the authority decision concerning the management of the finding shall be communicated in writing by the relevant Ministry of Culture.
- Construction work could resume only after permission in writing is given from the responsible local authorities and the relevant Ministry concerning safeguard of the heritage.
- The World Bank needs to be notified by PIU on the issues and actions taken.

- These procedures must be referred to as standard provisions in construction contracts. During project supervision, the PIU shall monitor the above regulations relating to the treatment of any chance find encountered.
- Relevant findings will be recorded in Progress Reports and the overall effectiveness of the project's cultural property mitigation, management, and activities will be assessed.

Appendix 3 Incident Report Form

B1: Incident Details			
Date of Incident:	**Time:**	**Date Reported to PIU:**	**Date Reported to WB:**
Reported to PIU by:	**Reported to WB by**:	**Notification Type**: Email/'phone call/media notice/other	
Full Name of Main Contractor:		**Full Name of Subcontractor**:	

B2: Type of incident (please check all that apply)[1]

Fatality ☐ Lost Time Injury ☐ Displacement Without Due Process ☐ Child Labor ☐ Acts of Violence/Protest ☐ Disease Outbreaks ☐ Forced Labor ☐ Unexpected Impacts on heritage resources ☐ Unexpected impacts on biodiversity resources ☐

Environmental pollution incident ☐ Dam failure ☐ Other ☐

[1]See Annex 1 for definitions

B3: Description/Narrative of Incident

Please replace text in italics with brief description, noting for example:

I. What is the incident?

II. What were the conditions or circumstances under which the incident occurred (if known)?

III. Are the basic facts of the incident clear and uncontested, or are there conflicting versions? What are those versions?

IV. Is the incident still ongoing or is it contained?

V. Have any relevant authorities been informed?

B4: Actions taken to contain the incident

Short Description of Action	Responsible Party	Expected Date	Status

For incidents involving a contractor:

Have the works been suspended (for example, under GCC8.9 of Works Contract)? Yes ☐; No ☐;

Trading name of Contractor (if different from B1):

Please attach a copy of the instruction suspending the works.

B5: What support has been provided to affected people

Incident Types

The following are incident types to be reported using the environmental and social incident response process:

Fatality: Death of a person(s) that occurs within one year of an accident/incident, including from occupational disease/illness (e.g., from exposure to chemicals/toxins).

Lost Time Injury: Injury or occupational disease/illness (e.g., from exposure to chemicals/toxins) that results in a worker requiring 3 or more days off work, or an injury or release of substance (e.g., chemicals/toxins) that results in a member of the community needing medical treatment.

Acts of Violence/Protest: Any intentional use of physical force, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, deprivation to workers or project beneficiaries, or negatively affects the safe operation of a project worksite.

Disease Outbreaks: The occurrence of a disease in excess of normal expectancy of number of cases. Disease may be communicable or may be the result of unknown etiology.

Displacement Without Due Process: The permanent or temporary displacement against the will of individuals, families, and/or communities from the homes and/or land which they occupy without the provision of, and access to, appropriate forms of legal and other protection and/or in a manner that does not comply with an approved resettlement action plan.

Child Labor: An incident of child labor occurs: (i) when a child under the age of 14 (or a higher age for employment specified by national law) is employed or engaged in connection with a project, and/or (ii) when a child over the minimum age specified in (i) and under the age of 18 is employed or engaged in connection with a project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral or social development.

Forced Labor: An incident of forced labor occurs when any work or service not voluntarily performed is exacted from an individual under threat of force or penalty in connection with a project, including any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. This also includes incidents when trafficked persons are employed in connection with a project.

Unexpected Impacts on heritage resources: An impact that occurs to a legally protected and/or internationally recognized area of cultural heritage or archaeological value, including world heritage sites or nationally protected areas not foreseen or predicted as part of project design or the environmental or social assessment.

Unexpected impacts on biodiversity resources: An impact that occurs to a legally protected and/or internationally recognized area of high biodiversity value, to a Critical Habitat, or to a Critically Endangered or Endangered species (as listed in IUCN Red List of threatened species or equivalent national approaches) that was not foreseen or predicted as part of the project design or the environmental and social assessment. This includes poaching or trafficking of Critically Endangered or Endangered species.

Environmental pollution incident: Exceedances of emission standards to land, water, or air (e.g., from chemicals/toxins) that have persisted for more than 24 hrs or have resulted in harm to the environment.

Dam failure: A sudden, rapid, and uncontrolled release of impounded water or material through overtopping or breakthrough of dam structures.

Other: Any other incident or accident that may have a significant adverse effect on the environment, the affected communities, the public, or the workers, irrespective of whether harm had occurred on that occasion. Any repeated non-compliance or recurrent minor incidents which suggest systematic failures that the task team deems needing the attention of Bank management.