

Initial Environmental Examination

October 2022

Maldives: Strengthening Gender Inclusive Initiatives Project

Hulhumalé Subproject Site

Prepared by the Ministry of National Planning, Housing, and Infrastructure of the Republic of Maldives for the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 3 October 2022)

Currency unit	–	rufiyaa (Rf)
Rf1.00	=	\$0.065
\$1.00	=	Rf15.450

ABBREVIATIONS

ACC	–	aged community center
ADB	–	Asian Development Bank
CARES	–	COVID-19 Active Response and Expenditure Support Program
COVID-19	–	coronavirus disease
CSO	–	civil society organization
DV/GBV	–	domestic and gender-based violence
EHS	–	environmental, health, and safety
EIA	–	environmental impact assessment
EMP	–	environmental management plan
ERP	–	emergency response plan
FGD	–	focus group discussion
FCSC	–	family and children services centre
FPA	–	Family Protection Agency
GHG	–	greenhouse gas
GRC	–	grievance redress committee
GRM	–	grievance redress mechanism
IFC	–	International Finance Corporation
LARP	–	Land Acquisition and Resettlement Plan
NSC	–	national safeguards consultant
MOE	–	Ministry of Education
MOECCT	–	Ministry of Environment, Climate Change, and Technology
MOED	–	Ministry of Economic Development
MOF	–	Ministry of Finance
MGFSS	–	Ministry of Gender, Family, and Social Services
NBS	–	National Bureau of Statistics
MNPHI	–	Ministry of National Planning, Housing, and Infrastructure
PCR	–	physical cultural resources
PMU	–	project management unit
QPR	–	quarterly progress report
SEMP	–	site environmental management plan
SOMP	–	standard operation and maintenance plan
SSDDR	–	social safeguards due diligence report
SPS	–	safeguard policy statement
UNEP	–	United Nations Environment Program
WHO	–	World Health Organization

WEIGHTS AND MEASURES

dBA	–	A-weighted decibel
km	–	kilometer
km ²	–	square kilometer

Ha	–	hectare (10,000 square kilometer or 2.47105 acre)
LAeq	–	Equivalent Continuous Level 'A weighting' - 'A'-weighting = correction by factors that weight sound to correlate with the sensitivity of the human ear to sounds at different frequencies
m	–	meter
°C	–	degrees celsius
PM10	–	Particulate Matter 10 micrometers or less
PM2.5	–	Particulate Matter 2.5 micrometers or less
NO2	–	nitrogen dioxide
SO2	–	sulphur dioxide
VOC	–	volatile organic compounds
µg/m ³	–	microgram per cubic meter
kV	–	kilovolt (1,000 volts)
kW	–	kilowatt (1,000 watt)
MW	–	megawatt (1000 kilowatt)
GWh	–	gigawatt-hour
MVA	–	megavolt amperes

NOTE

In this report, "\$" refers to United States dollars.

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EXECUTIVE SUMMARY

Introduction

The Strengthening Gender Inclusive Initiatives Project will strengthen the Government of Maldives' capacity to pursue evidence-based gender equality policies and programs; and support vulnerable women in collaboration with civil society organizations (CSOs). It will heighten the impact of gender-responsive processes, practices, and service provisions at central and decentralized levels. The project supports the government's Sustainable Development Goal 5 (SDG 5) transformative agenda as laid out in the National Gender Equality Act of 2016 and its Strategic Action Plan 2019–2023.¹ The project supports gender-responsive initiatives by the Ministry of Gender, Family, and Social Services (MGFSS), Family Protection Authority (FPA), and the National Bureau of Statistics (NBS), and complements the support provided by Asian Development Bank (ADB) under its Coronavirus disease (COVID-19) Active Response and Expenditure Support Program (CARES). It also builds on earlier engagements by ADB on gender initiatives in Maldives, such as the Gender Equality Act in 2016.

Project Impacts, Outcome and Outputs²

The impact of the project is “gender-based violence minimized and gender-related barriers preventing equal rights, participation, and benefits for women in social and economic spheres eliminated”. The outcome of the project is “increased access to sustainable social services to reduce women’s unpaid care burden and minimize domestic violence / gender-based violence (DV/GBV)”.

The project’s expected outputs are:

- Output 1: Availability and use of quality gender equality and social inclusion (GESI) statistics improved; led by the Maldives National Bureau of Statistics (NBS) and including support to Family Protection Authority (FPA);
- Output 2: Gender responsive budgeting integrated into government planning and budgeting systems; led by the Ministry of Finance (MOF);
- Output 3: Capacity of the social service system strengthened for aged care, early childcare, and DV/GBV services; led by the Ministry of Gender, Family and Social Services (MGFSS);
- Output 4: Partnerships to support DV/GBV prevention, access to DV/GBV services and aged care established; delivered through partnerships with civil society organisations (CSOs), local councils, and women development committees; and
- Output 5: Climate-resilient aged shelters for DV/GBV survivors established; led by the MNPHI and in partnership with the MGFSS, and the City / Island Councils where the infrastructure and services will be built and delivered (note: the ownership and responsibility for operation and maintenance (O&M) of the project assets under project output 5 will lie with the MGFSS. The design and construction of the new pilot facilities in Addu, Hulhumale and Ungoofaaru will increase availability and access to gender responsive social services for DV/GBV survivors.

¹ Government of Maldives. 2019. [Strategic Action Plan 2019–2023](#). Malé. Under the Plan, the government seeks to: (i) improve the integration of gender equality indicators in the government’s management information system; (ii) integrate gender-responsive budgeting in program planning systems; and (iii) enhance social services that enable women to overcome barriers to equal access to economic opportunities and participation in governance, such as community care centers for children and elderly, and support services for survivors of gender-based violence (GBV).

² Details are enclosed in Report and Recommendation of the President, ADB. June - July 2022.

Government will operationalize and maintain the new climate resilient infrastructure including staffing, operation and maintenance costs. These will be integrated into the social service network and linked to local councils, WDCs and communities. The guiding principles, scope of work, staffing structure, governance and operational arrangements for the new facilities are set out in the PAM, and MGFSS and MOF have factored the staffing and recurrent budget implications into future budget requirements

Project Implementation Organizations

Executing Agency. The Ministry of Finance (MOF) is the executive agency for the project.³

Implementing Agency. The Ministry of National Planning, Housing and Infrastructure (MNPHI) is the implementing agency for project output 5 responsible for all project procurement, contract administration, preparation of design, drawings and bid documents and overseeing project implementation, including safeguards.

Project Output 5

Initial Environmental Examinations (IEEs) have been prepared for project output 5 – Climate-resilient shelters for DV/GBV survivors established in project areas. This project output 5 will construct climate-resilient shelters or accommodation blocks⁴ for such survivors and their dependents within Family and Children Services Centres (FCSCs).⁵

The project – DV/GBV – is located across the atolls in the Maldives as follows (refer to Figure 1 for project location).

- Addu atoll, Hithadhoo;
- North Malé atoll, Hulhumalé; and
- Raa atoll, Ungoofaaru.

This IEE is specific to subproject in North Malé atoll – Domestic Violence / Gender Based Violence (DV/GBV) shelter at Hulhumalé.

Salient Features of Subproject Site and DV/GBV – North Male, Hulhumalé

The DV/GBV at North Malé will be a G+2.5 building designed for total 20 units, 20 occupants (residents); procurement type is design and build; the administrative area is North Malé, Hulhumalé.

Features	Description Hulhumalé DV/GBV
Building	
Plinth Area	to be finalized when concept design is developed
Built-up Area	1822 square meter (to be finalized)

³ Refer to details under project impact, outcome and outputs of this Executive Summary.

⁴ These shelters will include a living room, kitchen, playroom, space for psychosocial support and skills or livelihood training, and temporary accommodation blocks accessible to women and children with special needs.

⁵ Based on a feasibility study to be conducted, ADB will finance a portion of the associated costs.

Features	Description Hulhumalé DV/GBV
Building	
Site	
Topography, Drainage, Site slope	Flat land; natural drainage pattern, site slope is flat
Soil Conditions for surface, sub-surface	Fine coral sand
Groundwater table	Water table was observed at 2 m below Natural Ground Level (N.G.L). obtained at medium tide.
Distance from coastline	
Accessibility to site	
Sites nearby	
Health, School facilities	
Environmental sensitivity	
	<i>"[This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]"</i>
Overhead or Underground utilities	No overhead / underground utilities within the site
Supporting Services	
	The development of supporting services / associated facilities e.g., lateral connection from new building to main sewerage line, water supply, electricity and waste collection, transport and disposal for the subproject site will be the responsibility of the PIU in close coordination with the area service provider – Malé Water and Sewerage Company (MWSC), State Electric Company Limited (STELCO), and Waste Management Corporation Limited (WAMCO). These utilities are available in the immediate vicinity of the Hulhumalé DV/GBV subproject site.

Integration of Safeguards in Subproject Design

Climate Resilience. A climate change assessment, climate risk and adaptation assessment has been prepared for the project. The assessment for this subproject site classifies the project as low risk from future climate change impacts such as cyclonic hazard (low risk), sea level rise (low risk), coastal floods (low risk), storm surge (low risk) except for increased temperatures (medium risk) and flooding due to high precipitation events (medium risk). The findings do not find the proposed site to be high risk over the design life of subproject (+50 years). The preliminary engineering design integrates measures for potential climate risks in subproject siting, orientation and structural design; these will be subject to further analysis during the detailed engineering design. Climate proofing measures that will permanently become part of the project infrastructure will be included within the main civil work contract costs.⁶

⁶ Cost estimates are included and will be confirmed during detailed engineering design.

Land Requirements. The Hulhumalé DV/GBV will involve permanent land take of 10,000 square feet (0.092 ha) that is situated in on empty land with no vegetation. There is no land acquisition involved since the land parcel belong to the Housing Development Corporation (HDC); this will be transferred over to the MGFSS in line with the land use master plans for the area.⁷ No temporary land take is associated with the subproject during construction stage except for disposal of spoils that may take up land temporarily; this temporary land take area, if any, will be further estimated during detailed engineering design and location determined by the site contractor. The siting will take into consideration of avoidance of any sensitive VERs.

Water Storage / Rainwater Harvesting. Area allocation within subproject site will be made for placement of water storage for emergency supply (5 days). PVC tanks (> 1000 litres capacity) for rainwater harvesting will be utilized; the harvested water will be used for gardening and other outdoor domestic purposes.

Supporting Services / associated facilities. The development of supporting services / associated facilities e.g., lateral connection from new building to the main sewerage line, water supply, electricity and waste collection, transport and disposal for the will be the responsibility of the PIU in close coordination with the area service providers. These utilities are available in the immediate vicinity of Hulhumalé subproject site, VERs are not impacted and no further due diligence is required. The service providers have provided an official acknowledgement letter confirming the provisions of services to the subproject site; enclosed as **Appendix 1**. Supporting services will integrated into subproject detailed engineering design; operating charges will be the responsibility of the facility operator.

ADB and Domestic Environmental Requirements

The due diligence has confirmed the project environment classification is B requiring an Initial Environmental Examination (IEE) and Environmental Management Plan (EMP) in accordance with ADB Safeguard Policy Statement (ADB SPS 2009). The Rapid Environmental Assessment (REA) checklist is enclosed as Appendix 8. The IEE and EMP cover environmental impacts and risks in the subproject area of influence for the project output 5⁸ i.e., the development of DV/GBV at Hulhumalé. The civil works will be limited to the subproject site, with exception of haulage of materials from resource areas to the work site, and potential impacts will be site-specific and largely created during the construction stage. The IEE and EMP (enclosed as Part 2 of IEE), have been prepared based on the preliminary engineering designs and will be updated where necessary to meet the final detailed engineering designs.

In discussion with the Government Environment Protection Agency (EPA) dated March 14, 2022, the subproject does not fall under Schedule D of EIA regulations (2012). However, the PIU will submit a screening form to the EPA in a specified format at the time of preliminary design for the Screening Decision; EPA will either issue a project approval or require project proponent to carry out an IEE study. EPA Decisions / Statements shall be obtained prior to award of work contracts and any specific binding requirements issued by the EPA will be included in detailed engineering design by the Design-Build contractor. The PIU will also be responsible for applying and obtaining the required construction permit, other approvals from the HDC prior to award of contract.

⁷ Subproject conforms to land use classification and HDCI planning regulations, HDC approved master plan.

⁸ Subproject area of influence has been established for assessing potential adverse impacts, total area assessed is 10,000 square feet and a 200 m buffer around the subproject site for Hulhumalé.

Project Benefits

The Project will benefit women survivors of domestic and gender-based violence and their dependent children and reduce the unpaid care burden on women who are responsible for care of aged family members and young children. The project will integrate climate resilience measures in design that will ensure long term sustainability of the project.

Anticipated Adverse Environmental Impacts and Mitigation Measures

Environmental impacts were assessed for all subproject activities in the defined area of influence across all stages of the subproject implementation cycle, i.e. (i) design and pre-construction, (ii) construction, and (iii) post construction and O&M. Impact assessment methodology consists of: (a) Identification of Valued Environmental (and Social) Receptors (VERs): to identify potential interactions between the proposed project and VERs in the project area of influence; (b) Impact prediction: to determine what could potentially happen to be identified VERs as a consequence of the project activities. (c) Impact evaluation: to evaluate the significance of the predicted impacts by considering their magnitude and the sensitivity of the affected resource/receptor; (d) Mitigation measures: to identify appropriate and justified measures to mitigate negative impacts and enhance positive impacts; and (e) Residual impact evaluation: to evaluate the significance of impacts assuming effective implementation of mitigation and enhancement measures. The results are enclosed as Appendix 2.

Impacts during Design and Pre-Construction. The potential adverse environment impacts associated with the subproject have been avoided or minimized through careful site selection and confirming the location of existing supporting services (electricity, water supply and sewerage) that avoids VERs. Any changes in scope or location of subproject during implementation would be subject to appropriate due diligence as per ADB SPS 2009 requirements. No houses or structures are anticipated to be affected/displaced.

A number of safeguard measures will be implemented in the design and pre-construction stage to ensure the subproject's readiness for implementation. Some of these measures will permanently become part of the infrastructure design, such as: (i) integration of design features for climate resilience, and effective environmental management; and (ii) source of construction materials identified before construction commences with a proposed mitigation measure to procure construction materials from government authorised vendors / permitted quarries, etc.

Other safeguard measures during pre-construction stage include: (i) obtaining permits, approvals and clearances, if any, in a timely manner; (ii) conducting baseline surveys; (iii) conducting information disclosure and meaningful consultations; (iv) ensuring findings of social safeguards due diligence are adhered to (refer to project SSDDR); and (v) preparing COVID-19 health & safety risk mitigation measures. The PIU and a project grievances redress mechanism (GRM) will also manage the subproject implementation.

Impacts during Construction Stage. There will be temporary, localized impacts of moderate significance during peak construction such as increased noise and dust levels, vibration, potential interruption to existing utilities (e.g., power outages), waste generation, disrupted access to adjacent approach roads or properties, presence of workers at construction (workers) camps and workers at work site as well as potential health and safety and COVID19 impacts during construction phase.

Impacts during Operation & Maintenance Stage. There will be impacts of low significance during O&M such as risks to occupational and community health & safety (e.g., COVID-19, other transmittable diseases), water usage for permanent sanitation facilities at the new facility, waste generation and maintenance activities for subproject components, site vegetation management. There will be residual impacts of minor significance due to change in landscape features and visual impacts (since the DV/GBV subproject site is in an area as per the local land use plan) during project lifetime (+50 years); all other residual impacts are of low significance; refer to discussion in Chapter 5 of IEE.

Mitigation Measures. The identified potential adverse environmental impacts can be managed through effective implementation of the subproject EMP, and appropriate measures agreed in the subproject SSDDR. There are no significant residual impacts anticipated due to implementation of the proposed subproject. The main project risk is the low institutional capacity of the PIU and contractors and their failure to implement the EMP effectively during all stages of project implementation. These risks will be mitigated by: (i) hiring NSC through MNPHI to assist PIU; (ii) providing training and capacity building on safeguards⁹ to the PIU and contractors, (iii) developing and implementing site specific / topic specific EMPs (SEMPs) and Standard Operation & Maintenance Plans (SOMPs); (iv) following appropriate subproject implementation, mitigation, monitoring and evaluation, and reporting arrangements; and (vi) adequate site supervision including audits of contractor's Occupational, Health & Safety (OHS) performance. Monitoring and evaluation parameters have been identified in the EMP to check the effectiveness of safeguard measures and to ensure any unidentified impacts can be readily addressed. Additionally, the subproject risks will be mitigated through inclusion of safeguard specifications in contracts, bids and tenders for the contractors.¹⁰

Information Disclosure, Consultation and Participation

Public participation while preparing this IEE included formal discussions with HDC members, local stakeholders at Hulhumalé. Consultations revealed support for the project since there are a large number of users and limited DV/GBV facilities in the wider area. There were no major environmental concerns expressed by the participants. Consultations will continue through the project cycle and if any concerns are raised, measures to address these concerns will be addressed through project GRM and outcome integrated in the subproject detailed design, as appropriate. A project information leaflet will be prepared in the local language (Dhivehi) by the NSC, taking reference from this executive summary and detailed design and include key project information and contact details of local entry points (focal point persons); the leaflet will be distributed in the subproject area of influence.

Grievance Redress Mechanism

The PIU will use the project GRM in accordance with the time frame and requirements specified in the IEE and SSDDR. The GRM will provide multiple entry points for affected persons (APs) / households. The GRM will be coordinated by the PIU with active participation of GRC, PMU MGFSS, contractors and supported by NSC. Project GRM will address concerns and complaints

⁹ Safeguards training imply = EMP and SSDDR implementation; site-wide risk management; task specific hazard management, provision of personal protection equipment (PPE); provision of emergency medical treatment, first aid training and emergency response; safety training for all personnel, system for recording incidents, and COVID-19 health & safety risk mitigation measures at work sites and in workers accommodation.

¹⁰ Contractors imply = MNPHI appointed Design and Build (DB) contractors, and Facility Operators. Note: Safeguards implementation for the subproject during O&M stage will be directly through the MGFSS.

promptly via a transparent process. Complaints and their resolution will be documented and reported in and semi-annual safeguard reports to ADB.

Key Safeguards implementation Responsibilities

The key institution involved in the safeguard implementation under project output 5 is the implementing agency MNPHI and its PIU, PMU MGFSS, construction field supervisor engaged by the PIU and contractors – all assisted by National Safeguards Consultant or NSC.

Project Management Unit. MNPHI will be supported by the Project Management Unit (PMU) of Ministry of Gender, Family and Social Services (MGFSS). The PMU will be headed by a Project Director and will be assisted by a Project Coordinator, along with other personnel such as: Project Officer, Procurement Specialist, Financial Management Specialist, and Project Architect. The PMU will be responsible for overall implementation, including project planning, monitoring and financial management. Specifically, the PMU will: (i) undertake project management, administration, and interagency coordination at the executive level; and (ii) prepare and submit to ADB, as endorsed by MOF, required project reports including safeguards documentation and annual audited project financial statements. The PMU will have overall responsibility of the Project's safeguard compliance with ADB SPS 2009.

Project Implementation Unit. MNPHI will set up a Project Implementation Unit (PIU) for project output 5 in Malè. The PIU will be headed by the Project Lead and assisted by an Engineer, Accounts / Procurement officer and Construction Field Supervisor. The Engineer will have additional charge as a Project Safeguards Officer. The PIU safeguards officer will be supported by NSC and construction field supervisors in the field. The PIU will be responsible for overall supervision and compliance with: (i) safeguards requirements as stipulated in subproject IEEs, EMPs as well as SSDDRs, (ii) coordinate the project GRM, (iii) coordinate with line ministries to ensure smooth implementation of the subproject,¹¹ (iv) supervise the procurement process, contract administration, and tendering process/ bids, (v) assure the technical quality of contractor design, drawings, and construction, etc., (vi) ensure contractor appointed focal point person, and (vii) report to PMU. In particular, the PIU will ensure consistency of safeguards documents with government policy, legal and administrative framework across all jurisdictions – national and local level.

The PIU, construction field supervisor and contractors will be responsible for day-to-day activity and compliance with safeguards during project implementation in the field including engaging in project GRM and meaningful consultations and information disclosure. NSC will assist the PIU, construction field supervisor with the implementation of the subproject IEE and EMP and oversight of the contractors.

Monitoring and Reporting

The PMU will be responsible for safeguards reporting to ADB.¹² The PIU, assisted by the NSC, will conduct monitoring for the subproject in Hulhumale, North Malé atoll and provide the environment input based on site visits, compliance checks and prepare the semi-annual safeguards report for submission to PMU MGFSS; the PMU MGFSS will further verify the

¹¹ The PIU will ensure that subproject activities are synchronized between the SSDDR and EMP implementation.

¹² Safeguards monitoring reports will be required to be submitted to ADB within 30 days from the end of the relevant period

information and submit the reports to ADB semi-annually during construction stage and annually during O&M stage (to be submitted within 30 days from the end of each monitoring period from project effectivity until a project completion report is issued). The environmental / safeguards monitoring reports will be publicly disclosed on the ADB website as well as HDC and PIU websites. Reporting to ADB will continue until project completion report is issued. The environmental / safeguards QPR checklist will be submitted to ADB as part of the project quarterly progress report, refer to **Appendix 10**.

The PIU will be responsible for safeguards monitoring. The PIU, assisted by the NSC, will coordinate and interact with the PMU MGFSS on compliance to ADB safeguards requirements and with relevant government agencies and City / Island / Councils on permits and clearances and national environmental requirements, update and finalize the IEE and EMP as needed.

During construction, the contractor will prepare the monthly progress reports on SEMP/EMP implementation and submit to PIU, this will inform the semi-annual safeguard monitoring reports submission to the PMU MGFSS. The contractor monthly progress reports will include compilation of daily monitoring sheets (that will be prepared for contractor use by NSC) that is duly signed by the PIU safeguards officer.

Conclusion

The DV/GBV Hulhumalé will be a G+2.5 building designed for total 20 units, 20 occupants (residents); procurement type is Design-Build; the administrative area is Northern Male atoll, Hulhumalé. This IEE and EMP are based on preliminary design and will be updated after completion of the detailed engineering design as part of the Design and Build contract; civil works shall commence only after updated IEE and EMP have been cleared by ADB. This IEE shows potential adverse environmental impacts can be reduced to acceptable levels with effective implementation of mitigation, monitoring and evaluation measures. There are no significant residual impacts anticipated due to implementation of the proposed subproject. The EMP has specified mitigation measures to address identified impacts, responsible parties, and monitoring and evaluation across all stages of subproject implementation. This project is expected to have significant benefits impacting women survivors of domestic and gender-based violence and their dependent children and reduce the unpaid care burden on women who are responsible for care of aged family members and young children. The project will also integrate climate resilience measures in design that will ensure long term sustainability of the project (+50 years).

Figure 1(a): All Subproject Locations under Output 5

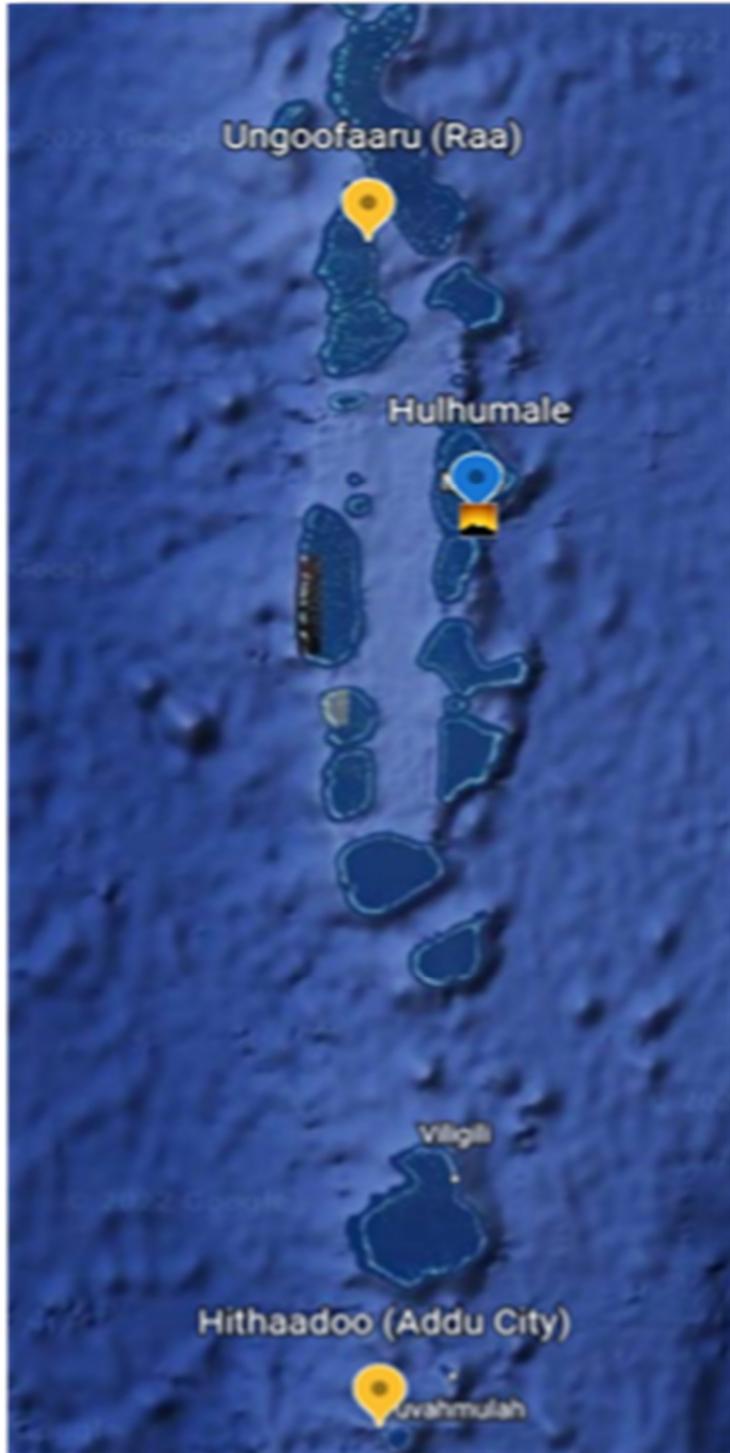


Figure 1(b): Subproject Location – DV/GBV Hulhumalé Phase I development

“[This information has been removed as it falls under the exception to disclosure in ADB’s Access to Information Policy, para. 17.5.(x)]

I. INTRODUCTION

A. Project Scope and Location

1. The Strengthening Gender Inclusive Initiatives Project will strengthen the Government of Maldives' capacity to pursue evidence-based gender equality policies and programs; and support vulnerable women in collaboration with civil society organizations (CSOs). It will heighten the impact of gender-responsive processes, practices, and service provisions at central and decentralized levels. The project supports the government's Sustainable Development Goal 5 (SDG 5) transformative agenda as laid out in the National Gender Equality Act of 2016 and its Strategic Action Plan 2019–2023.¹³ The project supports gender-responsive initiatives by the Ministry of Gender, Family, and Social Services (MGFSS), Family Protection Authority (FPA), and the National Bureau of Statistics (NBS), and complements the support provided by Asian Development Bank (ADB) under its Coronavirus disease (COVID-19) Active Response and Expenditure Support Program (CARES). It also builds on earlier engagements by ADB on gender initiatives in Maldives, such as the Gender Equality Act in 2016.

2. Initial Environmental Examinations (IEEs) and Environmental Management Plans (EMPs) have been prepared for project output 5 – Climate-resilient shelters for gender-based violence survivors established in project areas. This project output 5 will construct climate-resilient shelters or accommodation blocks¹⁴ for survivors and their (including dependents) of domestic violence and gender-based violence (DV/GBV) within Family and Children Services Centres (FCSCs).¹⁵

3. The project – DV/GBV – is located across the atolls in the Maldives as follows (refer to Figure 1 for project location).

- (i) Addu atoll, Hithadhoo;
- (ii) North Malé atoll, Hulhumalé; and
- (iii) Raa atoll, Ungoofaaru.

4. This IEE is specific to project output 5 in North Malé atoll –DV/GBV at Hulhumalé.

B. ADB and Domestic Environmental Due Diligence

5. ADB SPS 2009 and Domestic Requirements. ADB SPS 2009 sets out the environmental safeguard requirements that apply to all ADB-financed, co-financed, technical assistance / managed projects.¹⁶ The due diligence carried out during project preparation confirms the project environment classification as Category B requiring an IEE and EMP.

6. Additionally, in discussion with the Government Environment Protection Agency (EPA) dated March 14, 2022, the project does not require environmental due diligence or environmental clearance as per national regulatory requirements. The PIU will be responsible for applying and obtaining the required construction permit, other approvals from HDC prior to award of contract.

¹³ Government of Maldives. 2019. Strategic Action Plan 2019–2023. Male. Under the Plan, the government seeks to: (i) improve the integration of gender equality indicators in the government's management information system; (ii) integrate gender-responsive budgeting in program planning systems; and (iii) enhance social services that enable women to overcome barriers to equal access to economic opportunities and participation in governance, such as community care centers for children and elderly, and support services for survivors of gender-based violence (GBV).

¹⁴ These shelters will include a living room, kitchen, playroom, space for psychosocial support and skills or livelihood training, and temporary accommodation blocks accessible to women and children with special needs.

¹⁵ Based on a feasibility study to be conducted, ADB will finance a portion of the associated costs.

¹⁶ ADB is providing a partial credit guarantee for the development of this project.

The environmental requirements as per ADB SPS 2009 and national environmental regulations are set out in detail in Chapter 2 of IEE

7. **Site Visits.** As part of the due diligence process, a site visits were conducted in North Malé, Hulhumalé in March and May 2022. The site visit observations are detailed in Chapter 4 of IEE. The objective of the site visits was to collect primary and secondary information and data relevant to the defined subproject area of influence to establish the environment baseline conditions, identify potential adverse impacts and to inform the subproject design.

8. **Consultations.** Meaningful consultations with relevant stakeholders were conducted in March and May 2022. Records of consultations and findings are discussed in Chapter 7 of IEE. Further consultations will be carried out during detailed design and will continue throughout project implementation.

C. Structure of this Report

9. This IEE report follows the format prescribed in ADB SPS 2009. For the purposes of this project, this IEE contains the following:

Part 1

- (i) Chapter–2 - Policy, Legal and Administrative Framework
- (ii) Chapter–3 - Description of the Project
- (iii) Chapter–4 - Description of the Baseline Environment
- (iv) Chapter–5 - Anticipated Environmental Impacts and Mitigation Measures
- (v) Chapter–6 - Analysis of Alternatives
- (vi) Chapter–7 - Information Disclosure, Consultation and Participation
- (vii) Chapter–8 - Grievance Redress Mechanism
- (viii) Chapter–9 - Environmental Management Plan
- (ix) Chapter- 10 - Conclusion

Part 2

- (i) Project EMP tables with mitigation and monitoring measures that are designed to aid the Project Management Unit (PMU), Project Implementation Unit (PIU) and contractors in management of potential adverse environmental impacts. When the final project detailed engineering designs are available, the subproject EMP will be updated and will also include detailed site location maps to support PIU and contractors with preparation of package specific site EMPs (SEMPs) and in environmental monitoring and evaluation.
- (ii) COVID health & safety risk mitigation measures.

II. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

A. Environmental Assessment Requirements

1. Environmental Requirements ADB Safeguard Policy Statement (SPS 2009)

10. Safeguard requirements for all projects funded by ADB are defined in SPS 2009 which establishes an environmental review process to ensure that projects undertaken as part of programs funded through ADB loans or grants are environmentally sound, are designed to operate in compliance with applicable regulatory requirements and are not likely to cause significant environment, health, or safety hazards. The SPS 2009 is underpinned by the ADB Operations Manual, Bank Policy (OM Section F1/BP, October 2013). The SPS (Principle 9) also promotes adoption of International Good Practices as reflected in the International Finance Corporation's (World Bank Group) Environmental, Health and Safety Guidelines - IFC (WBG) EHS Guidelines. This IEE and EMP are intended to meet ADB SPS 2009 requirements.

11. ADB SPS 2009 environmental assessment requirements specify that:

- (i) At an early stage of project preparation, the borrower/client will identify potential direct, indirect, cumulative, and induced environmental impacts on and risks to physical, biological, socioeconomic and cultural resources and determine their significance and scope, in consultation with stakeholders, including affected persons (APs) and concerned non-government organizations (NGOs). If potentially adverse environmental impacts and risks are identified, the borrower/client will undertake an environmental assessment as early as possible in the project cycle.
- (ii) The assessment process will be based on current information, including an accurate project description and appropriate environmental and social baseline data.
- (iii) Impacts and risks will be analyzed in the context of the project's area of influence.
- (iv) Environmental impacts and risks will be analyzed for all relevant stages of the project cycle, including preconstruction, construction, operations, decommissioning, and post-closure activities such as rehabilitation or restoration.
- (v) The assessment will identify potential transboundary effects as well as global impacts.
- (vi) Assessment encompasses associated facilities that are not funded as part of the project (funding may be provided separately by the borrower or by third parties), and whose viability and existence depend exclusively on the project and whose goods or services are essential for successful operation of the project.
- (vii) Assessment encompasses existing facilities and/or business activities that already exist (for which) the borrower will undertake an environment and/or social compliance audit, including on-site assessment to identify past or present concerns related to impacts on the environment, involuntary assessment and indigenous peoples. The objective of the audit is to determine if actions were in accordance with SPS and to identify and address outstanding compliance issues.

12. Other requirements of ADB SPS 2009 included in the IEE include:

- (i) Analysis of Alternatives. There is a requirement to examine alternatives to the project's location, design, technology, components and their potential environmental and social impacts and consider the no project alternative. SPS

2009 states that this is only for projects which have “significant adverse environmental impacts that are irreversible, diverse, or unprecedented” i.e., category A projects. This does not apply to this category B projects but is included for completion.

- (ii) Consultation and participation. The borrower/client will carry out meaningful consultation with APs and other concerned stakeholders, including civil society and facilitate their informed participation. This IEE includes an “activity outline for consultations” to ensure that the APs, other concerned stakeholders and the civil society can provide meaningful consultations into the project detailed design and implementation.
- (iii) Information disclosure. Environmental information on the project will be translated into local language (Dhivehi) and made available in accessible locations (e.g., project construction field offices, HDC office in accordance with ADB’s Access to Information Policy (September 2018)¹⁷ and ADB SPS (2009). The draft IEE will be disclosed on ADB’s project website (www.adb.org) prior to Board approval, and the final IEE after detailed engineering design and safeguards monitoring reports during implementation.
- (iv) Grievance redress mechanism. The borrower/client will establish a mechanism to receive and facilitate resolution of project APs’ concerns, complaints, and grievances about the project’s environmental (and social) performance.
- (v) Monitoring and Reporting. The Borrower/ Client will monitor, measure the progress of implementation of the EMP and safeguards tender requirements for the contractors and report as mandated by the ADB SPS 2009.

13. The Rapid Environmental Assessment (REA) checklist is enclosed as Appendix 8. The IEE covers an area of influence that encompasses: North Malé atoll, Hulhumalé – DV/GBV assessed over 10,000 square feet and the wider area. The IEE and EMP has been prepared based on the preliminary engineering designs and will be updated where necessary to meet the final project detailed engineering designs. The IEE also considers the effects from cumulative impacts from other sources of similar impacts as well as effects from unplanned but predictable developments caused by the project that may occur later or at a different location. Cumulative impacts in this regard are anticipated because of this or similar project in close proximity to the subproject in North Malé atoll; a discussion is included in Chapter 5 of IEE. As a result of these subproject, it is anticipated that the development of the DV/GBV shelter will lead to further gender and socio-economic developments around the wider subproject area.

14. The preliminary engineering design integrates climate resilience measures such as consideration of wind speed, flooding, and increases in temperature in subproject siting and structural design. These will be further assessed and integrated in the final subproject detailed engineering design.

2. Government Environmental Clearance Requirements (Maldives)

15. Responsibilities and procedures for conducting environmental assessments, together with the requirements for environmental monitoring of projects, are set out in the EIA Regulations of

¹⁷ The above has superseded ADB’s Public Communications Policy (2011).

2012 and its amendments in 2013, 2015 and 2016.¹⁸ All projects that may have an impact on the environment are referred to the Minister of Environment Climate Change and Technology or MECCT (EPPA 5(a)). The EIA Regulations assign primary responsibility for undertaking environmental assessment of projects to the project proponent¹⁹ and set out procedures, rights and responsibilities for the preparation and approval of EIAs. The EPA under MECCT undertakes review and approval of environmental assessment reports.

16. The flow chart for applicable stages and steps for environmental assessment is enclosed as Figure 2.

17. The EIA regulation review process starts by assessing whether:

- (i) a project falls under Schedule D: project proponent will apply for an Environmental Decision Statement and carry out an EIA or IEE study as decided by EPA; EPA will issue an Environment Decision Statement.
- (ii) a project does not fall under Schedule D: project proponent will apply for a Screening Decision Statement. EPA will issue a Screening Decision that either grants project approval or requests the project proponent to carry out an IEE study. In some instances, the EPA may issue in its Decision Statement a requirement of preparing an EMP only.

18. Schedule D of EIA regulation 2021 applies for buildings meeting the following criteria:

- (i) Buildings that are higher than 31m or over 10 storeys (excluding the foundation raft)
- (ii) Buildings with foundations structures that cater for more than 10 storeys
- (iii) Buildings with basements
- (iv) Buildings with foundations deeper than 5 feet or a foundation of a unique structure

19. Buildings meeting the above criteria require either an EIA or IEE study (as decided by the EPA). The EMP, following an EIA or IEE study, is prepared on a specified format and reviewed for compliance by EPA; after which the EPA issues the Environment Decision Statement to the project proponent with specific binding requirements for the conduct of the project.

20. For buildings that do not fall under the above criteria, a screening form is prepared and submitted in a specified format and reviewed by EPA, after which the EPA issues the Screening Decision to the project proponent with either a direct project approval or request to carry out an IEE study.

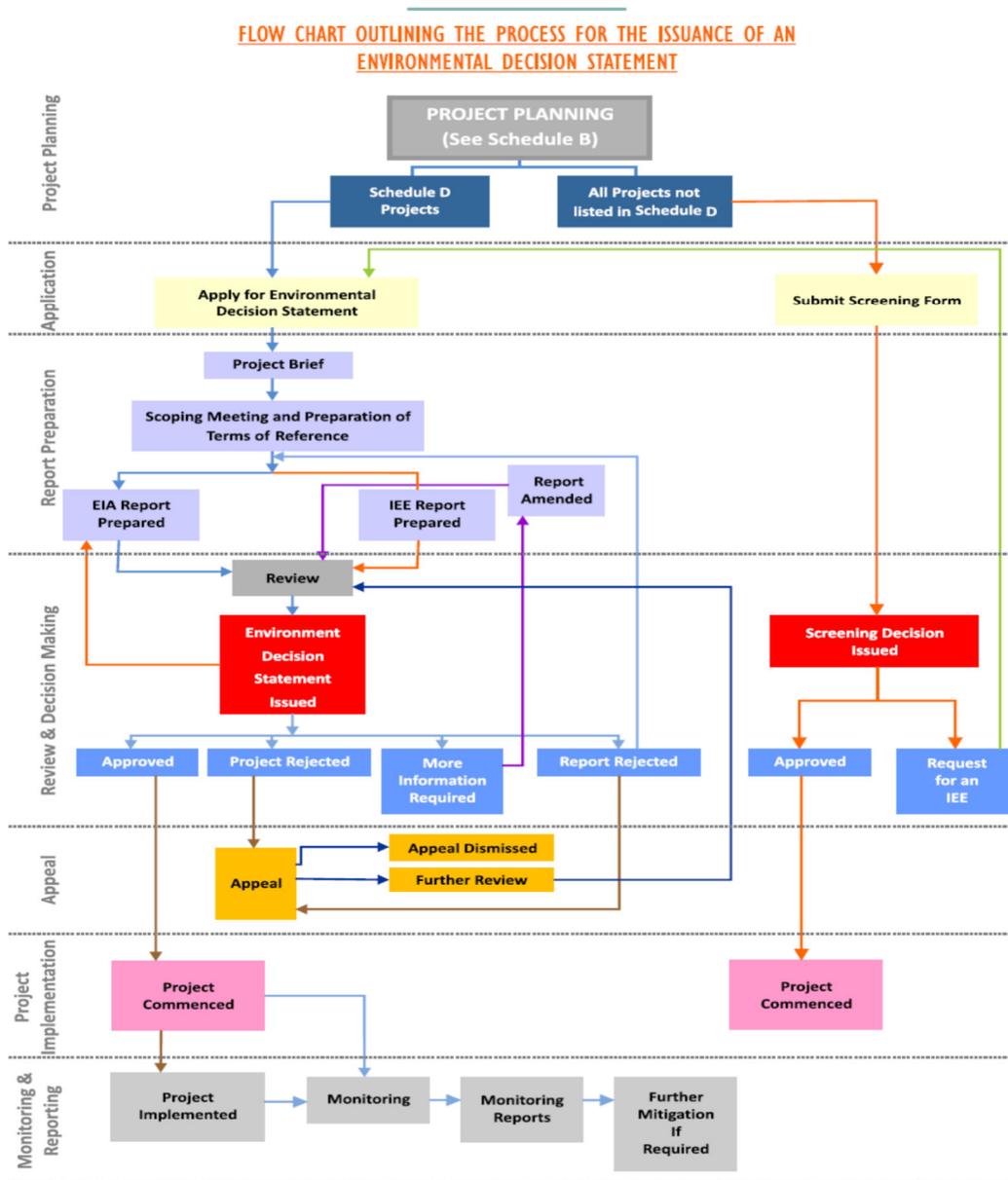
21. As per the discussions with the EPA on 14th March 2022, the subproject in North Malé atoll is not be subject to the Schedule D of the EIA regulations 2012 and its amendments since

¹⁸ These amendments included revision of EIA review period and associated costs, qualification required for monitoring the Environmental Management Plan, revision to the list of projects that requires EIAs, projects that can be undertaken by simply applying mitigation measures defined by EPA such as for dredging of harbours, clearance of vegetation within allocated plots for households and or roads, transferring EIA decision making to Minister of Tourism for tourism related activities; categorization of EIA consultants, point system for consultants to assess performance and license suspension, a code of conduct for consultants, and increment to the fine for non-compliance of regulation and violations.

¹⁹ Project proponents are defined in the EIA regulations as a person, department or agency that is seeking to carry out or proposes to carry out the development proposal.

the building is a G+2.5 structure with normal (pad) foundation and the above criteria do not apply.²⁰ The PIU will submit a screening form to the EPA in a specified format at the time of preliminary design for project approval to ascertain whether an IEE study is required. EPA Decisions / Statements shall be obtained prior to award of work contracts and any specific binding requirements, will be included in detailed design by the Design-Build contractor.

Figure 2: Steps in Determination of an Environment Decision Statement / Screening Decision Statement



²⁰ As per EIA regulation 2015 Amendment (2015/R-174), buildings with footprint equal to or less than 4000 square feet (plinth area) do not require an EIA study.

B. National Environmental Policy and Legislation

1. Legislation for Environmental Management

22. The law governing the protection of the environment is the Environmental Protection and Preservation Act (EPPA) of 1993 (Act No 4/93) enacted on 19 March 1993 which serves as the framework for conducting environment assessments in the Maldives. EPPA Act 4/93 aims at improving the legal and administrative co-ordination of the initiatives in the field of environment with the objective of integrating environmental considerations into the country's overall economic and social development. The authority responsible for the Environment Act is the Environmental Protection Agency (EPA) under the Ministry of Environment, Climate Change and Technology (MECCT). Articles 2, 5, and 6 of the law are relevant to environmental and social impact assessment. The law is brief and sets out the principles for sustaining and extending the benefits of the environment of the Maldives for the people and coming generations. The EPPA confers powers on the MECCT to issue regulations and formulate policies for environmental protection and preservation. Such regulations include:

- (i) Environmental impact assessment (EIA) regulations of 2007, updated in 2012 (Regulation No. 2012/R-27) and amendments in 2013, 2015 and 2016;
- (ii) By-law on Uprooting, Cutting and Transportation of Plants and Trees (2006);
- (iii) Regulation on Stone, Coral and Sand Mining (undated);
- (iv) Regulation for the Protection and Conservation of the Natural Life and character of Old Plants and Trees in the Maldives;
- (v) Dewatering Regulation (213/R-R1697);
- (vi) Environmental Damage Liabilities Regulation (2011/R-9); and
- (vii) Waste Management Regulation (2013-R58).

23. National legislation relevant to the subproject are summarized in Table 1.

Table 1: National Legislation Relevant to the Project

Government of Maldives Legislation	Details	Regulator	Responsibility	Applicability to Output 5 / Remarks
The Land Act (1/2002)	The Land Act (1/2002) governs the allocation of land for different purposes and uses and other issues regarding the issuing of land, and the sale, transfer and lease of Maldivian land. The Act states that: All transactions concerning the issuing, receiving, owning, selling, lease, utilizing and using Maldivian land shall be conducted in compliance with this Act.	MNPHI MLSA Maldives Land Survey Authority	PIU	Yes The land for the subproject have been allocated by MNPHI in consultation with HDC and other relevant stakeholders
The Land Use Planning Regulations and Guidelines (2005)	The Land Use Planning Regulations and Guidelines (2005) include land use instruments such as inclusionary zoning and quotas. Land Use Plans (LUP) are prepared in consultation with relevant stakeholders and has allocations for residential areas as well as for different infrastructure and social needs. LUP for the islands / atolls are already completed and the allocated lands are used for the purposes identified in the LUP	MNPHI / HDC	Contractor / PIU	Yes Subproject site are as per the LUP for Hulhumalé
Construction Act (Act 4/2017)	The Construction Act was published in the government gazette on the 23rd of April 2017. The Act has been formulated to develop a legislative framework which enables the growth and promotion of the construction industry of the Maldives through set guidelines and measures. Main objectives of the Act are as follows: <ul style="list-style-type: none"> • Enable means to ensure that all buildings constructed are safe structures which allows a safe, healthy lifestyle for those who use 	MNPHI	Contractor / PIU	Yes Contractor and project proponent (MNPHI) will ensure construction of the subproject in line with the Construction Act.

Government of Maldives Legislation	Details	Regulator	Responsibility	Applicability to Output 5 / Remarks
	<p>the building</p> <ul style="list-style-type: none"> • Ensure that the construction industry is a safe and environmentally friendly industry which enables development and productivity • Ensure that all personnel involved in the construction industry are trained, qualified and capable professionals • Ensure means to improve the quality of workmanship and equipment and machinery used for the work • Establish “Maldives Building and Construction Board” to advise the MNPHI regarding issues relating to the industry • Develop and promote the industry • Construction industry Implementation and enforcement of the Act is a responsibility of the MNPHI Minister. • Formulation of the different policies which address and achieve the points highlighted in this Act is a responsibility of the MNPHI Minister. 			
Maldives National Building Code Handbook (1st Edition – August 2008)	The handbook recommends best practices to be followed, rather than a regulation to be adhered to in construction work. This handbook covers aspects such as structural stability, fire safety, access, moisture	MNPHI	Contractor / PIU	Contractor and project proponent (MNPHI) will ensure construction of the subproject in line with the National Code Building Handbook.

Government of Maldives Legislation	Details	Regulator	Responsibility	Applicability to Output 5 / Remarks
Waste Management Regulation (R-58/2013)	<p>control, durability, services and facilities, and energy efficiency (MCPI, 2008).²¹</p> <p>This Regulation was gazetted on the 5th of August 2013 and came into effect 6 months from the date, on 5th of February 2014. The main objective of this regulation is to implement the national policy on waste management.</p> <p>As per regulations:</p> <ul style="list-style-type: none"> • construction debris and waste should be disposed off at the allocated areas for the specific authorized waste dump. • As per the regulation, hazardous waste generated during the project will be collected and stored separately. • Transportation should also be carried out in specific vehicles authorized for waste transportation. 	MNPFI	Contractor / PIU	Contractor and project proponent (MNPFI) will ensure compliance with the Waste Management Regulation during construction and O&M
Principle on establishment of a central waste disposal chute or waste collection point in buildings (4th May 2016)	<p>The key aim of this Principle is to establish a healthy and safe environment in all buildings. The principle was published in the gazette on the 4th of May 2016 and came into effect on the same day.</p> <p>As per this Principle, all buildings with 3 storeys or less do not need to establish such a facility, while buildings higher than 3 storeys needed to establish a central waste disposal chute or common waste collection area. Such a waste collection area has to be demarcated on the ground floor of the building.</p>	EPA	Contractor / MNPFI	An area within the building site (on the ground floor) will be allocated to ensure compliance with the principle on establishment of a waste collection point in buildings.

²¹ Ministry of Construction and Public Infrastructure, now renamed as MPFI.

Government of Maldives Legislation	Details	Regulator	Responsibility	Applicability to Output 5 / Remarks
Water and Sewerage Act (8/2020)	<p>The Act mandates sustainable use of water and the development of guidelines and procedures for the protection of water resources, and to enable the establishment of a suitable water sewerage network for all inhabited islands / atolls, along with other relevant guidelines.</p> <p>The National Water and Sewerage Policy (NWSP) has 9 goals to ensure access to safe water supply and adequate sewerage services.</p> <p>Policy objective 9 calls for adopting a holistic approach to water resources protection, conservation, management, and pollution control.</p>	<p>MECCT</p> <p>MECCT</p>	<p>Service Provider –in coordination with PIU</p>	<p>Yes</p>
Desalination Regulation (2002)	<p>Under this regulation all desalination plants operating in the Maldives catering for public water supplies and commercial purposes would have to be registered with EPA.</p>	<p>EPA</p>	<p>PIU</p>	<p>No</p>
National Wastewater Quality guidelines / standards (NWQGS)	<p>The guidelines deal with domestic wastewater quality for discharge into deep sea and provide the maximum concentration of listed components that have to be complied with at all times including coliform, pH and suspended solid levels.</p> <p>The NWQGs also provides maximum concentration levels for domestic and industrial wastewater combined but does not specifically provide guidance on dealing with industrial effluents or leachates of any kind.</p> <p>The NWQGs also stipulate that the guidelines are generic and conservative, the standards state that in the event the capacity of the receiving environment to deal with</p>	<p>URA</p>	<p>MGFSS</p>	<p>Yes</p> <p>Facility operator during O&M</p>

Government of Maldives Legislation	Details	Regulator	Responsibility	Applicability to Output 5 / Remarks
Dewatering Regulation (2013/R-1697) – 31 st January 2014	<p>additional wastewater, has been exceeded or when the activity generating the wastewater is envisioned to produce wastewater at extreme lower or higher levels than the standards set in the NWQGs, an Environmental Impact Assessment (EIA) is required and need to be completed by accredited Assessors approved by EPA. In addition, the producer has to prove to government that best international Clean Production protocols are followed. Based on the recommendations of the EIA report and proof of Clean Production practice, EPA will issue site specific guidelines for the discharge of wastewaters. No exemptions to the Guidelines will be allowed without site specific guidelines from the EPA</p> <p>The Dewatering Regulation has been formulated to introduce measures so as to minimize impact on the environment and ecosystem due to dewatering which may be carried out as part of construction works or during other works. Any development which requires dewatering as part of the project, can only implement the dewatering phase after obtaining the required approval from the Environmental Protection Agency, which is the implementing agency for the regulation. The regulation does not apply to dewatering which may be required for the installation/cleaning of a groundwater well for personal use or use of groundwater for agricultural purposes.</p> <p>Prior to carrying out dewatering the project proponent of such projects will submit an application form to EPA with required</p>	EPA / HDC	Contractor / PIU	No

Government of Maldives Legislation	Details	Regulator	Responsibility	Applicability to Output 5 / Remarks
Maldives Cultural Heritage Act (12/2009)	<p>documents which are detailed in the regulation and application form. It is also the responsibility of the project proponent to inform the relevant Island Councils, if there are residential areas or agricultural lands within 100m radius of the project site where dewatering will be carried out.</p> <p>The regulation further details what should be done with the water extracted during dewatering, and what actions should be taken should dewatering impact resource users within 30m radius of the site.²²</p> <p>The regulation further specifies fines which will be applicable if the regulation is not followed.</p>	Ministry of Arts and Culture	Contractor / PIU	No No PCRs found at the time of subproject site investigations; Chance Find Procedures are set out in the EMP

²² <https://www.ura.gov.mv/downloads/r-202021-dewatering-regulation-for-construction-and-industrial-projects/> (Accessed 17th April 2022) this includes; 1-water should be released to an area specified by the Island council or City Council 2- Water will be allowed to release into the only after checking the quality of the extracted water, 3- if water is released through a pipe system then should get permission from Island/ City Council, 4, if water is released in to the sea then the sedimentation should be controlled and managed prior to release, 5 it water is released through the existing sewer system then special provision should be taken to prevent over flow and get permission from the service provider)

Government of Maldives Legislation	Details	Regulator	Responsibility	Applicability to Output 5 / Remarks
	Cultural heritage found by chance while digging for construction of the link has to be reported to HDC and work has to be ceased until advice is given. Fines charged for deliberate damage of cultural heritage	National Centre for Cultural Heritage		
Cultural Heritage Regulation (R-37 2020)	The Cultural Heritage Regulation (R-37 2020) is formulated under the Maldives Cultural Heritage Act (12/2009) and stipulates the classification, valuation, record keeping and establishing the standards for protection and preservation of cultural heritage. Under this regulation, the cultural heritage is classified into internationally, nationally, city/atoll significant or significant at island/atoll level. EIA has to be shared with the Ministry of Arts and Culture and advice on cultural heritage assessment gained prior to submission of decision note.	Ministry of Arts and Culture EPA	Contractor / PIU	No No PCRs found at the time of subproject site investigations; Chance Find Procedures are set out in the EMP
Conservation of Old Trees Regulation (2007)	Old plants and trees on islands/atolls are protected under the Conservation of Old Trees Regulation (2007). Undertake an assessment to check if there are any old or rare trees in the site that may be impacted by the project	EPA	Contractor / PIU	Yes There are no trees at subproject site.
Plant Protection Act (2011)	According to Article 19 (a) import of any plants, parts of plant and any other related regulated substances into Maldives should have a phytosanitary certificate issued by the National Plant Protection Organisation (NPPO) of the country it was exported from.	Ministry of Agriculture		No
Employment Act (2/2008) and its amendments	Employment Act (2/2008) that was ratified and signed into law in May 2008. To date, six amendments have been brought to the Employment Act (2/2008). The amendments	MED Ministry of Economic	Contractor / PIU	Yes

Government of Maldives Legislation	Details	Regulator	Responsibility	Applicability to Output 5 / Remarks
state care institutions for children (Ministry of Gender and Family 2018)	resources safety and emergency as well as other services and arrangements that has to be provided in such institutions			
Decentralization Act of 2010 (Law 7/2010)	Decentralization Act devolves responsibility to City / Island Councils to carry out key functions related to their mandate to foster the social and economic well-being and development of the community and establish a safe, health and ecologically diverse environment. These functions include preparation of island development plans and implementing development projects planned and assigned by the government in line with the island development plans formulated by the islands.	City / Island Councils	HDC coordination with the MNPHI	Yes Subproject caters to survivors of domestic violence and gender-based violence

2. Applicable Environmental Regulations and Standards

24. Ambient Air Quality Standards, Table 2 shall apply.

Table 2: Air Quality

Parameter	Maldives Air Quality MPC (µg/m ³)	WHO Air Quality Guidelines (µg/m ³)	Applicable Standards as per ADB SPS ²³ (µg/m ³)
Particulate Matter PM10	-	20 (annual) 50 (24-hr)	20 (annual) 50 (24-hr)
Particulate Matter PM2.5	-	10 (annual) 25 (24-hr)	10 (annual) 25 (24-hr)
Nitrogen Dioxide (NO ₂)	-	40 (annual) 200 (1-hr)	40 (annual) 200 (1-hr)
Nitrogen Oxide (NO)	-		
Sulphur Dioxide	-	500 (10 min) 20 (24-hr)	50 (annual) 20 (24-hr) 500 (10 min)
Carbon Monoxide (CO)	-		3000 (annual) 4000 (24-hr)

25. Noise Standard, Table 3 shall apply.

Table 3: Noise limits

Receptor/ Source	Maldives Noise Level Standards		WHO Guidelines Value For Noise Levels		Applicable Per ADB SPS ²⁴	
	Xx LAeq in dBA		(One Hour LAeq in dBA)		(dBA)	
	Day	Night	07:00 – 22:00	22:00 – 07:00	Day time	Night time
Industrial area	-	-	70	70	70	70
Commercial area	-	-	-	-	55	55
Residential Area	-	-	55	45	55	45
Silent Zone	-	-	-	-	-	-

* LAeq- equivalent average sound pressure level

26. The German Standard DIN 4150-3 – Vibration in Buildings – Part 3. Effects on structures provides short term and long-term limits²⁵ for vibration at the foundation for various structures.

²³ As per ADB SPS, the borrower / project proponent shall achieve whichever of the ambient air quality standards is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the implementing agency of the government will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in ADB SPS.

²⁴ As per ADB SPS, the borrower / project proponent shall achieve whichever of the noise standards is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the implementing agency of the government will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in ADB SPS.

²⁵ Short-term vibrations are defined as those that do not occur often enough to cause structural fatigue and do not produce resonance in the structure being evaluated and long-term vibrations are all the other types of vibration. DIN 4150-3 notes that “experience has shown that if these values are complied with, damage that reduces the serviceability of the building will not occur. If damage nevertheless occurs, it is to be assumed that other causes are responsible. Exceeding the value in the table does not necessarily lead to damage”.

These standards are considered international best practice and will be followed as part of the project as shown in Table 4.

Table 4: Guideline Values for Vibration Velocity to be Used When Evaluating the Effects of Short-term and Long-term Vibration on Structures²⁶

S. No	Type of structure	Guideline Values for Velocity (mm/s)				
		Short-term			Long-term	
		At foundation			Uppermost Floor	Uppermost Floor
		Less than 10 Hz	10 Hz to 50 Hz	50 to 100 Hz	All frequencies	All frequencies
1	Buildings used for commercial purposes, industrial buildings and buildings of similar design	20	20 to 40	40 to 50	40	10
2	Residential dwellings and buildings of similar design and/or use	5 (105 dB)	5 to 15	15 to 20	15	5 (105 dB)
3	Structures that because of their particular sensitivity to vibration, do not correspond to those listed in Lines 1 or 2 and have intrinsic value (e.g., buildings that are under a preservation order)	3 (100.5 dB)	2 to 8	8 to 10	8	2.5 (99.0 dB)

27. Water quality, Table 5 shall apply:

Table 5: Wastewater Discharge

Pollutant	Unit	Maldives	WBG Guideline Value for sanitary sewage discharge	Applicable Standards as per ADB SPS 2009
pH	pH	-	6-9	6-9
Biological Oxygen Demand (BOD)	MgO/l	40	30	30
Chemical Oxygen Demand (COD)	Mg/l	150	125	125
Ammonia-N	NH4	15		
Total Nitrogen	Mg/l	30	10	10
Total Phosphorus	Mg/l		2	2
Oil and Grease	Mg/l	10	10	

²⁶ DIN 4150-3, Structural Vibration, Part 3: Effect of vibration on structures.

Pollutant	Unit	Maldives	WBG Guideline Value for sanitary sewage discharge	Applicable Standards as per ADB SPS 2009
Total Suspended Solids	Mg/l	100	50	
Total Bacteria	Coliform MPN ^A / 100 ml	-	400	

28. Waste (all waste streams). As per Waste Management Regulation, effective (5th of February 2014),

- (i) Construction debris and waste will be disposed at the allocated areas for the specific authorized waste dump
- (ii) Hazardous waste generated, if any, during the project will be collected and stored separately.
- (iii) Transportation should also be carried out in specific vehicles authorized for waste transportation.
- (iv) An area within the building site (on the ground floor) will be allocated to ensure compliance with the principle on establishment of a waste collection point in buildings.

C. Maldives Building Code

29. The North Malé atoll subproject will adhere to the Maldives National Building Code 2008 which is a performance-based code aimed at providing flexibility in design and with the possibility for regular change to the compliance documents and standards it refers to, depending on development in the construction industry. The advantage of a performance-based Building Code is the flexibility. It contains no prescriptive requirements stipulating that certain products or designs must be used. This flexibility allows developments and innovation in building design, technology and systems. The purpose is to create the enabling environment to achieve a safe and usable building design rather than aiming for the best building design. The handbook recommends best practices to be followed, rather than a regulation to be adhered to in construction work. This handbook covers aspects such as structural stability, fire safety, access, moisture control, durability, services and facilities, and energy efficiency (MCPI, 2008).²⁷

D. Permits and Licences

30. The required permits and licenses are listed in Table 6.

Table 6: Required permits and Licenses

Permit Required Activity	Permit Title	Issuing Authority	Implementing Law / Regulation	Responsible Party for Obtaining License
Design and Pre-construction				
Drawing approval	Architectural and Engineering	MNPFI / HDC	The Land Use Planning and Regulations (2005)	PIU and contractor

²⁷ Weblink: <https://docplayer.net/27044148-Maldives-national-building-code-handbook-ministry-of-construction-and-public-infrastructure-republic-of-maldives.html> (accessed 6th April 2022)

Permit Required Activity	Permit Title	Issuing Authority	Implementing Law / Regulation	Responsible Party for Obtaining License
	drawing set approval			
Construction				
Construction permit	Construction permit	MNPHI / HDC	Construction Act (Act 4/2017)	PIU / Contractor
Water abstraction / supply	Dewatering permit	HDC and EPA	Dewatering Regulation (2013/R-1697) – 31 st January 2014	PIU / Contractor
Spoil disposal, if required	No Permit required		Waste Management Regulation (R-58/2013)	PIU / Contractor

E. Comparison of ADB SPS 2009 and National Environmental Regulatory Requirements

31. The Government of Maldives national environmental review and clearance procedures generally conforms to the intent of ADB SPS 2009. Comparison of environmental requirements as undertaken by ADB, and the national regulatory authority are shown in Table 7. While ADB SPS, 2009 environmental assessment requirements and Maldives national legal requirements address the same topics, ADB SPS, 2009 requirements are more detailed.

Table 7: Comparison of ADB SPS 2009 and National Environmental Regulatory Requirements

S. No	ADB	Government of Maldives	Gap	Tasks to bridge gaps to meet ADB SPS and the requirements of this IEE (By PIU)
Screening and Categorization	<ul style="list-style-type: none"> • Assigns categories based on potential adverse impacts: <ul style="list-style-type: none"> - Category A – Environmental Impact Assessment (EIA) required (irreversible, diverse or unprecedented adverse environmental impacts) - Category B – Initial Environmental Examination (IEE) required - Category-C – no environmental assessment required but a review of environmental implications is required - Category FI – Environment and Social Management System (ESMS) is required • Checklists prepared and completed by the project proponent to be submitted to ADB for concurrence or approval. 	<ul style="list-style-type: none"> • Thenational environmental impact assessment regulations in Maldives is called Environmental Impact Assessment Regulations 2007 and revised regulations on 2012 • There are no categories of projects but there is a list of projects in schedule D of the regulation that requires EIA : • Under Schedule D of EIA is required for buildings under the following criteria <ul style="list-style-type: none"> - Buildings that have a footprint of over 4000 square feet - Buildings that that are higher than 31m or over 10 storeys - Buildings with foundations that can support over 10 stories - Buildings with basement 	No gap	<ul style="list-style-type: none"> • Sector-specific REA checklist for screening and categorization of project conducted at the earliest stage of project cycle to establish categorization. • Assessment requirements) for categorization of project discussed with EPA on 14th March 2022. • ADB consultants met with EPA director general and discussed • EPA informed that given the subproject do not come under the purview of Schedule D, hence, no environmental clearance required about the need for EIA/IEE or EMP for the project and informed that according to the EIA regulation EIA /IEE/EMP is not required for the activities of the project.

S. No	ADB	Government of Maldives	Gap	Tasks to bridge gaps to meet ADB SPS and the requirements of this IEE (By PIU)
		<ul style="list-style-type: none"> - Buildings with foundations below 5m from ground level or with foundations that is different from normal foundations. 		<ul style="list-style-type: none"> • However, a screening form may be submitted by the PIU at the time of detailed design
Assessment of Potential Impacts				
	<p>For Category A or Category B projects:</p> <ul style="list-style-type: none"> • Identify potential impacts on physical, biological, ecological and human environment in the context of project's area of influence (i.e., primary subproject site and supporting services) and audit of existing facilities 	<ul style="list-style-type: none"> • Undertake assessment of potential impacts for Schedule D projects as per EIA Regulations 2007 and revised regulation 2012 	<ul style="list-style-type: none"> • For the purposes of the IEE, an assessment of potential impacts needs to be carried out. However, Government framework does not prescribe detailed due diligence for the subproject type 	<ul style="list-style-type: none"> • For Category A or Category B type project, as per ADB SPS 2009: <ul style="list-style-type: none"> ○ Define project area of influence ○ Conduct assessment of potential impacts ○ Due diligence or environmental audit will be undertaken for any project Associated Facilities and/ or Existing Facilities
Preparation of Safeguard Plans and Documents and Obtaining Permits and Licenses				
	<ul style="list-style-type: none"> • For Category A or Category B project <ul style="list-style-type: none"> - Draft and final EIA / IEE for project in line with ADB SPS 2009 and National environmental regulatory requirements • Submit to ADB for approval and clearance, prepare EIA 	<ul style="list-style-type: none"> • D Schedule projects and all the other projects that require IEE or EMP are approved by the EPA 	<ul style="list-style-type: none"> • D Schedule have very specific list of projects, determination of the requirement for EIA is a though screening process. Same gap as above 	<ul style="list-style-type: none"> • PIU will submit a Screening Form in a specified format for Screening Decision by the EPA • For Category B project, as per ADB SPS 2009, draft IEE will be prepared based on preliminary design and then submitted to ADB for review and approval. Following the

S. No	ADB	Government of Maldives	Gap	Tasks to bridge gaps to meet ADB SPS and the requirements of this IEE (By PIU)
Analysis of Alternatives				
	<ul style="list-style-type: none"> For projects with potential significant adverse impacts (i.e., Category A) Also considered for Category B projects Examine alternatives to the project's location, design, and technology 	<ul style="list-style-type: none"> For the projects that require EIA and I/E "Identify and describe at least three alternatives, one of which should be the no-development option; define clear criteria to evaluate the alternatives and determine the preferred alternative." In addition, the project proponent must "discuss whether the project be undertaken elsewhere, perhaps an alternative location with less adverse impacts. Regulation, Schedule E (1). 	<ul style="list-style-type: none"> There is no gap it is required for projects in Schedule D and all the projects screened positive for IEE 	<p>detailed design, a final IEE will be prepared and submitted for ADB review and approval prior to any contract award. In both cases, recommendations from the IEE such as key environmental considerations in site layout, design or technical specifications can be integrated into the detailed design.</p> <ul style="list-style-type: none"> Obtain permits and approvals for subproject from relevant local agencies / HDC
Meaningful Consultation				
			<ul style="list-style-type: none"> For ADB s requirement analysis of alternatives including the "no project" scenario will be carried out. 	

S. No	ADB	Government of Maldives	Gap	Tasks to bridge gaps to meet ADB SPS and the requirements of this IEE (By PIU)
	<ul style="list-style-type: none"> Starts early and continues during implementation Undertaken in an atmosphere free of intimidation Gender inclusive and responsive Tailored to the needs of vulnerable groups Allows for the incorporation of all relevant views of stakeholders 	<ul style="list-style-type: none"> For Some projects in Schedule D may be sufficiently controversial or complex to require further public input before an Environment Decision Statement can be issued; in such instances the project proponent will be notified and requested to arrange, and pay for a public meeting or meetings at a location or locations to be determined by the Ministry.” Regulation, sec. 13(g). 	<ul style="list-style-type: none"> The public consultation is limited to specific projects that are sensitive However stakeholder consultation is required for EIA and IEEs while under ADB SPS it starts early in the project cycle and continues throughout project implementation 	<ul style="list-style-type: none"> Initiate meaningful consultations at the earliest stage of the project cycle and continue during implementation. Integrate findings from consultations into subproject detailed design.
	Information Disclosure			
	<p>ADB will post in its website the following:</p> <ul style="list-style-type: none"> Draft EIA / IEE prior to loan appraisal Final or updated EIA / IEE upon receipt (due to change in scope or project detailed design) Corrective action plan prepared during subproject implementation, if any Environmental monitoring reports (quarterly progress / semi-annual / annual monitoring reports submitted by the PMU upon receipt 	<ul style="list-style-type: none"> EIAs will be posted on EPA website for public viewing “The Ministry shall accept comments from the relevant ministries and authorities and the public on the Environmental Impact Assessment Report under review for a period of ten (10) working days after it is available for public viewing.” Regulation, sec. 13(d). In issuing the Environment Decision Statement the Ministry will take in to account the comments received from the general 	<ul style="list-style-type: none"> Public consultations will be carried out with the stakeholders, affected people, NGOs only on specific projects and sensitive issues Public consultations will be carried out with the stakeholders, affected people, CSO for the subproject, in line with the ADB SPS requirements. Questions and concerns raised during public consultations will be reflected in EMP 	<ul style="list-style-type: none"> Follow information disclosure requirements as per ADB SPS 2009

S. No	ADB	Government of Maldives	Gap	Tasks to bridge gaps to meet ADB SPS and the requirements of this IEE (By PIU)
		public for the Initial Environmental Examination or Environmental Impact Assessment under review.” Regulation, sec. 13©	documents. The feedback received from the Public Consultations will be used to finalize and disclose the E&S instruments.	
Grievance Redress Mechanism				
	Establish a mechanism to receive and facilitate resolution of grievances or complaints	<ul style="list-style-type: none"> Grievance Procedures. Is included in most of the EIAs as per the law Where the rights of a person, a group or community has been adversely affected by administrative action, every such person, group or every person who may be directly affected by such action has the right to submit the matter to count." Article 43(c) of the Constitution. Schedule 5 of the Judicature Act of the Maldives vests jurisdiction of these proceedings with Magistrate Courts 	<ul style="list-style-type: none"> There is no existing grievance mechanism for the project may be further strengthened with further supplementary measures 	<ul style="list-style-type: none"> To comply with ADB SPS 2009, a project specific mechanism for redressal will be set as described in chapter on GRM
Use of Environmental Standards				
	<ul style="list-style-type: none"> Refers to IFC (WBG) EHS 2007 If national regulations differ from the above, more stringent standards will be followed If less stringent levels are appropriate in view of specific 	<ul style="list-style-type: none"> The national environmental regulatory standards are followed as per law for all projects. There are no national standards on pollution except for wastewater discharge 	<ul style="list-style-type: none"> There is no national standard on pollution but international standards are followed most of the times. There are limited standards as per Government mandate 	<ul style="list-style-type: none"> For purpose of applicability of environmental standards, relevant international standards will be followed. For purpose of applicability of environmental standards, the most stringent

S. No	ADB	Government of Maldives	Gap	Tasks to bridge gaps to meet ADB SPS and the requirements of this IEE (By PIU)
	project circumstances, provide full and detailed justification		hence gaps in certain situations such as air quality, noise, etc.	<ul style="list-style-type: none"> environmental standards to be followed. The environmental standards that will apply to the project has been set out in Chapter 2 of IEE and EMP
Procurement and Contract Award				
	No contract award until: <ul style="list-style-type: none"> Environmental clearances by the SEIAA have been obtained IEE and EMP has been finalized, cleared by ADB, and disclosed to public IEE and EMP, other safeguard requirements are included in bidding documents and civil works contracts EMP implementation is reflected in the Project Administration Manual. 	-	-	-
Monitoring and Reporting				
	<ul style="list-style-type: none"> Prepare monitoring reports on the progress of EIA/ IEE and EMP implementation Prepare and implement corrective action plan if non-compliance is identified Submit quarterly, semi-annual, and annual monitoring reports to ADB for review and approval. 	There are no requirements on environmental monitoring for this project. There are no requirements on environmental monitoring for the project, specifically with specification of monitoring parameters and location	Gap	<ul style="list-style-type: none"> Follow steps for monitoring and reporting as per ADB SPS 2009

S. No	ADB	Government of Maldives	Gap	Tasks to bridge gaps to meet ADB SPS and the requirements of this IEE (By PIU)
	<ul style="list-style-type: none"> ADB supervision mission to review safeguards implementation 			

F. International Agreements, Best Practices and Standards

1. International Finance Corporation (World Bank Group) Environment, Health and Safety Guidelines

32. Best Practices. ADB SPS 2009 (Principle 9) requires that during the design, construction, and operation of the project, the Borrower/ Client will apply pollution prevention and control technologies and practices consistent with International Best Practice, as reflected in internationally recognized standards of the International Finance Corporation's (World Bank Group) Environmental, Health and Safety Guidelines ("EHS Guidelines") and World Health Organization (WHO) and IFC Performance Standards.²⁸ The relevant IFC (WBG) EHS Guidelines are referenced in the subproject EMP such as Environmental Guidelines on Air Emissions and Ambient Air Quality, Noise Management, Wastewater and Ambient Water Quality, Hazardous Material Management and Waste Management as well as Occupational Health and Safety and Community Health and Safety (2007) and Guidance Note on Workers Accommodation: Processes and Standards, August 2006;²⁹ as such the PIU will ensure application of pollution prevention and control technologies and practices consistent with International Best Practices referenced above or when Government / national regulations differ from these levels and measures the PIU will ensure that whichever is more stringent will be achieved. If less stringent levels or measures are appropriate in view of specific project circumstances, PIU will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in ADB SPS 2009.

33. **Labour Standards.** ADB is committed to due consideration of Core Labour Standards (CLS) in the design and implementation of investment projects. A CLS handbook has been developed by ADB with cooperation of International Labour Organization (ILO). The PMU NEGU and SPV PIU will also ensure compliance to applicable CLS of ADB-ILO and guidance note on managing risks from COVID-19 on construction site and in construction (workers) camps / accommodation (included in Part 2 of IEE) during project implementation including:³⁰

- (i) Freedom of association and the effective recognition of the right to collective bargaining
- (ii) Elimination of all forms of forced or compulsory labor
- (iii) Effective abolition of child labor
- (iv) Elimination of discrimination in respect of employment and occupation

34. The project does not fall within ADB Prohibited Investment Activities List (PIAL) in Appendix 4 of ADB SPS, 2009.

2. International Agreements

35. International Agreements. Maldives is signatory to international agreements and protocols on environment, social, safety and occupational issues that are relevant for the project. The list of the international agreements is provided Table 8.

²⁸ IFC Performance Standards: [Online Link](#)

²⁹ IFC Guidance Note: [Workers Accommodation](#)

³⁰ Asian Development Bank and International Labor Organization. Core Labor Standards, October 2006.

Table 8: International Agreements

S. No	International Conventions and Treaties	Date of ratification
1	Stockholm Convention on Persistent Organic Pollutants	17 October 2006 (Ratified)
2	London Conventions 1972 and its 1996 Protocol	08 October 1997 (Ratified)
3	MARPOL (International Convention for the Prevention of Pollution) from ships, 1973 and the Protocol of 1978)- 20	20 May 2005 (Accession)
4	UNCLOS (United Nations Convention on the Law of the Sea), 1982	07 September 2000 (Ratified)
5	Convention on the International Maritime Organization (MO), 6 March 1948	31 May 1967 (Acceptance)
6	International Convention for the Control and Management of Ships Ballast Water and Sediments, 13 February 2004	22 June 2005 (Ratified)
7	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 22 March 1989	28 April 1992 (Accession)
8	GPA for the Protection of Marine Environment from Land based Activities, 1995	1995 (Adopted)
9	Agenda 21 (Chapter 17) of the UN Conference on Environment and Development, 1992	Adopted
10	Convention on Biological Diversity, 1992	1992 (Ratified)
11	Vienna Convention for the Protection of the Ozone Layer	26-Apr-1988 (Accession)
12	Montreal Protocol on Substances that Deplete the Ozone Layer	16-May-1989
13	Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer	London (31-Jul-1991) Copenhagen (27-Sep-2001), Montreal (27-Sep-2001), Beijing (3-Sep-2002), Kigali (6-Nov-17)
14	United Nations Framework Convention on Climate Change	12-Jun-1992 9(Ratified)
15	Kyoto Protocol to the United Nations Framework Convention on Climate Change	16-Mar-1998 (Ratified)
16	Cartagena Protocol on Biosafety to the Convention on Biological Diversity	3-Sep-2002 (Accession)
17	United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification	3-Sep-2002 (Accession)
18	Stockholm Convention on Persistent Organic Pollutants	17-Oct-2006
19	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International trade	17-Oct-2006 (Accession)
20	UN Convention on International Trade in Endangered Species of Wild Fauna and Flora	12-Dec-2012

S. No	International Conventions and Treaties	Date of ratification
21	Paris Agreement	22-Apr-2016
22	Ban Amendment to the Basel Convention	12-Apr-17 (Ratified)

36. **Regional Agreements.** Maldives is a founding member of the South Asian Association for Regional Cooperation (SAARC) in 1985. Maldives has taken a lead role in negotiations on climate change and environmental protection as a prominent representative of the Small Islands Development States (SIDS) Alliance of Small Island States (AOSIS) and the G77.

37. **Maldives Climate Change Commitments.** As per the National Determined Contribution Document of Maldives, the country is one of the most vulnerable countries to the adverse impacts of climate change. This is mainly due to unique geographical setting such as the small, low lying and dispersed nature of islands, coupled with economic factors such as high import dependency and narrow economic base with very limited diversification. Despite these physical and economic challenges and vulnerabilities, Maldives contribution to GHG emissions stands at only 0.003% in the global share. The country has made ambitious plans to reduce 26% of GHG emissions by 2030 and determined to achieve net zero by 2030,³¹ if adequate international support and assistance is received. Maldives aims to undertake adaptation actions and opportunities and build climate resilient infrastructure to address the current and future impacts of climate change strengthening adaptation actions and building climate resilience as a high national priority. Similar to mitigation efforts, increasing the adaptation resilience is also considered economy wide and targets all the sectors.

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<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Maldives%20First/Maldives%20Nationally%20Determined%20Contribution%202020.pdf> (accessed 6th April 2022)

III. DESCRIPTION OF THE PROJECT

A. Rationale

38. The project will strengthen the Government of Maldives' capacity to pursue evidence-based gender equality policies and programs; and support vulnerable women in collaboration with civil society organizations. It will heighten the impact of gender-responsive processes, practices, and service provisions at central and decentralized levels. The project supports the government's Sustainable Development Goal (SDG) 5 transformative agenda as laid out in the National Gender Equality Act of 2016 and its Strategic Action Plan 2019–2023.¹ The project supports gender-responsive initiatives by the Ministry of Gender, Family, and Social Services (MGFSS), Family Protection Authority (FPA), and the National Bureau of Statistics (NBS), and complements the support provided by Asian Development Bank (ADB) under its Coronavirus disease (COVID-19) Active Response and Expenditure Support Program (CARES). It also builds on earlier engagements by ADB on gender initiatives in Maldives, such as the Gender Equality Act in 2016. Detailed rationale is presented in the Project Concept Paper dated January 2021.

B. Project location

39. The project – DV/GBV – is located across the atolls in the Maldives as follows (refer to Figure 1 for project location).

- (i) Addu atoll, Hithadhoo;
- (ii) b) North Malé atoll, Hulhumalé; and
- (iii) c) Raa atoll, Ungoofaaru.

40. This IEE is specific to subproject under project output 5 in North Malé atoll, Hulhumalé – DV/GBV.

C. Project Impact, Outcomes and Outputs

41. The impact of the project is “gender-based violence minimized and gender-related barriers preventing equal rights, participation, and benefits for women in social and economic spheres eliminated”. The outcome of the project is “increased access to sustainable social services to reduce women’s unpaid care burden and minimize DV/GBV”

42. The project’s expected outputs are:

- (i) Output 1: Availability and use of quality Gender Equality and Social Inclusion (GESI) statistics improved; led by the Maldives National Bureau of Statistics (NBS) and including support to Family Protection Authority (FPA);
- (ii) Output 2: Gender Responsive budgeting integrated into government planning and budgeting systems; led by the Ministry of Finance (MOF);
- (iii) Output 3: Capacity of the social service system strengthened for aged care and early childcare, and delivering and piloting new DV/GBV shelters; led by the Ministry of Gender, Family and Social Services (MGFSS);
- (iv) Output 4: Partnerships to support DV/GBV prevention, access to DV/GBV services and aged care established; delivered through partnerships with civil society organisations (CSOs), local councils, and women development committees; and

- (v) Output 5: Climate-resilient aged shelters for DV/GBV survivors established across project areas; led by the MNPHI and in partnership with the MGFSS, and the City / Island Councils where the infrastructure and services will be built and delivered (note: the ownership and responsibility for operation and maintenance (O&M) of the project assets under project output 5 will lie with the MGFSS. The design and construction of the new pilot facilities in Addu, Hulhumale and Ungoofaaru will increase availability and access to gender responsive social services for DV/GBV survivors. Government will operationalize and maintain the new climate resilient infrastructure including staffing, operation and maintenance costs. These will be integrated into the social service network and linked to local councils, WDCs and communities. The guiding principles, scope of work, staffing structure, governance and operational arrangements for the new facilities are set out in the PAM, and MGFSS and MOF have factored the staffing and recurrent budget implications into future budget requirements

D. Project Activities

43. The subproject is scheduled for completion within 22 months and activities can be divided into: (a) pre-construction and project design stage; (b) construction stage; (c) post construction and O&M stage.

1. Project Design and Pre-Construction Stage³²

44. The procurement type is Design- Build. The contractor will integrate safeguard measures and recommendations as provided in the IEE and EMP in the subproject detailed design. The updated IEE and EMP will be submitted to the PMU and ADB for clearance and approval, after which civil works can commence.

1.1. Site Selection and Design

45. Site Selection and Design of Building Infrastructure. Final selection of the subproject site was conducted after due consideration of site conditions and as per the area land use plans / master plans. The site slope and natural drainage pattern that carry seasonal runoff will be strengthened and maintained during site planning and design. Detailed engineering design will integrate measures based on recommendations of the engineering surveys and results of the climate risk assessment to maximize site resilience and minimize potential impacts; material resource areas will be identified on site maps as part of detailed design. Details on topography, geology and hydrology are provided in Chapter 4 of the IEE.

1.2. Design of the Hulhumalé DV/GBV Infrastructure

46. Salient Features. The approved Design Brief is enclosed as **Appendix 3** and salient features presented in Table 3.1. Building infrastructure will include construction and commissioning of a G+2.5 building for total 20 units, 20 occupants, perimeter wall, drainage, common facilities over 0.092 ha (10,000 square feet). The existing approach road to subproject site will be maintained by Contractor for transportation of the equipment, materials and machinery and by MNPHI/HDC during operation of the subproject. The use of rainwater harvesting tanks

³² The design and planning have been proposed by the consultant on the basis of the information available at the time of the preparation of the report.

(capacity >1000 litres) for gardening, etc and water storage tanks (emergency water supply, 5 days) will be accommodated into the design.

47. **Climate Resilience Measures.** The subproject at Hulhumalé is classified as being at medium to low risk from future climate change impacts. The subproject siting and structural design includes climate proofing measures such as for cyclonic hazard (low risk), sea level rise (low risk), coastal floods (low risk), storm surge (low risk), increase in temperatures (medium risk) and heavy precipitation and flooding (medium risk). Recommendations are provided in Chapter 5 of IEE.; these will be subject to further analysis during the detailed engineering design. Climate proofing measures that will permanently become part of the site design and building infrastructure will be included within the main civil work contract costs.

Table 9: Salient Features – Hulhumalé DV/GBV Subproject Site

Features	Description Hulhumalé DV/GBV
Building	
Plinth Area	to be finalized when concept design is developed
Built-up Area	1822 square meter
Site	
Topography, Drainage, Site slope	Flat land; natural drainage pattern, site slope is flat
Soil Conditions for surface, sub-surface	Fine coral sand
Groundwater table	Water table was observed at 2 m below Natural Ground Level (N.G.L). obtained at medium tide.
Distance from coastline	[REDACTED]
Accessibility to site	[REDACTED]
Sites nearby	[REDACTED]
Health, School facilities	[REDACTED]
Environmental sensitivity	[REDACTED]
	<i>"[This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]"</i>
Overhead or Underground utilities	No overhead / underground utilities within the site
Supporting Services	
	The development of supporting services / associated facilities e.g., lateral connection from new building to main sewerage line, water supply, electricity and waste collection, transport and disposal for the subproject site will be the responsibility of the PIU in close coordination with the area service provider – Malé Water and Sewerage Company (MWSC), State Electric Company Limited (STELCO), and Waste Management Corporation Limited (WAMCO).

Features	Description Hulhumalé DV/GBV
Building	
	These utilities are available in the immediate vicinity of the Hulhumalé DV/GBV subproject site and further described below.
Power (Electricity)	<p>The power requirement during civil works will be sourced by the contractor through STELCO via a temporary connection to a commercial meter.</p> <p>The final electrification to building will be via a distribution board with an end user connection voltage of 240V.</p>
Water supply	<p>Water supply during civil works will be sourced by the contractor through MWSC via a temporary connection to existing nearby network.</p> <ul style="list-style-type: none"> • Site contractor shall include in the construction schedule estimates of anticipated annual water usage for construction stage. <p>Water supply during O&M will be arranged through a pressure pipeline connected to an existing RO plant located at Hulhumalé that provides 24/7 water supply to all areas of Phase I</p> <ul style="list-style-type: none"> • Within 60 days of after the start of commissioning / operations, the facility operator shall provide to PMU reasonable estimates of water usage for purposes of O&M of the new building.
Wastewater / sewage management	Sanitation facilities in the new building will discharge into the main sewerage line, depth at 1m from NGL through a lateral connection.
Sludge waste management	NA
Construction & Demolition (C&D) waste Management	All waste stream collection, transport and final disposal is the responsibility of WAMCO-to-WAMCO operated dump site to Thilafushi daily, located 12 km south-west of Hulhumalé.
Solid (domestic) waste management	Nominal solid waste generation expected on site; onsite compost pits are typically not in practice; Collection, transport, and final disposal by WAMCO-to-WAMCO operated dumpsite (same as above)

1.3. Construction Stage

48. Construction activities will be confined to work site i.e., 0.092 ha for site development including construction material storage facility, construction waste storage facility, and construction (workers) camps.

1.4. Post Construction, Operation and Maintenance (O&M) Stage

49. The list of activities to be carried out during Post Construction in the O&M phase will include:

- (i) Site Rehabilitation and Clean up
- (ii) Monthly cleaning of rainwater harvesting tanks
- (iii) Control of vegetation within the building perimeter and immediate surrounding area
- (iv) Routine inspection of exterior and interiors, including water supply and sanitation facilities
- (v) O&M of fire-fighting equipment
- (vi) Inspection and maintenance of pathway/approach road

E. Resource Requirements

50. **Land take.** There is no land acquisition involved since the land parcel belong to HDC; these will be transferred over to the MGFSS in line with the land use master plans for the area.³³

The development of supporting services / associated facilities, e.g., lateral connection from new building to the main sewerage line, water supply and electricity as well as solid waste collection, transport and collection to the subproject site / new building, etc., will be the responsibility of the area service providers and will be integrated into subproject detailed engineering design. Due diligence confirmed that these networks are available in the immediate vicinity, no VERs are impacted and there is no additional land take. Maintenance of approach road to the subproject site is under the purview of MNPHI. Facilities such as construction staging (unloading, site storage, workshop) areas, construction (workers) camp will be undertaken within the subproject site boundary; therefore, there is no temporary land take associated with the subproject during construction stage except for disposal of spoils that may take up land temporarily; this temporary land take area, if any, will be estimated during detailed engineering design and location determined by the site contractor; siting will take into consideration of avoidance of VERs.

51. **Water usage.** The water usage requirement during civil works will be sourced through MWSC through a temporary connection to RO plant of 7500 tons per day capacity. The contractor shall include in the construction schedule estimates of anticipated annual water usage for construction stage. The PIU and site contractor will review, as applicable, the availability and source of water for usage for the construction and consult with HDC and/or affected communities on water availability, usage and estimated usage for future periods. Within 60 days of after the start of operations the facility operator shall provide to PMU reasonable estimates of water usage for purposes of O&M of the new building. Groundwater abstraction will be prohibited.

52. **Power usage.** The power requirement during civil works will be sourced through STELCO through a temporary connection to a commercial meter by the site contractor. The final electrification to building will be via distribution board / 11/0.4 kV distribution transformer outside the premises with an end user connection voltage of 240V.

53. **Labour requirements.** The labour and staff requirements for construction works and O&M of the project will be ascertained by the PIU and site contractor during subproject detailed design and findings will be included in the updated IEE and EMP. The focal point person is identified in Chapter 9 under Institutional roles and responsibilities.

54. **Sources of Materials.** Significant quantities of bricks, coarse aggregate and fine aggregate will be required for civil works. Site contractor will procure these materials only from MNPHI authorized quarries / vendors. It will be the site contractor's responsibility to verify the suitability and legal status of all material sources and to obtain the approval of relevant agencies, as required. No asbestos containing materials will be used in the construction works.

55. **Approximate estimates for power usage, water usage and solid waste generation during O&M stage** are presented below; these will be confirmed at the time of detailed design and included in the updated IEE and EMP.

³³ Subprojects conform to land use classification and HDC planning regulations and HDC approved master plan.

Table 10: Power Requirement at Site (Operation)

S. no	Particulars	Quantity (No.)	Unit
1	Building		
	No. of units proposed	18	
	Power requirement per unit (in kW)	3.83	kW
2	Street Light		
	No. of street lights	0	Nos.
	Power required for the street lights (in kW)	0	kW
3	Other	0	
Total Power Requirement		~70	kW

Note: above values calculated approximately taking nominal powers for the common items such as (Lights -18W, E. Outlets,13A,16A-200, Other items – 2850W.) Calculated based on the inputs from an Electrical Engineer.

Table 11: Water Requirement at the Site (Operation) per DAY

S. No	Particular	No of Units	Occupancy rate@	Total Occupancy Nos
1	Residential		persons per unit	34
2	Staff & Visitors			19
2	Floating Population of Survivors		% of Residential	
3	Other			
Total				53
Please provide the recommended litre per capita per day (LPCD) for site				53 x 50LCPD = 2.65MLD
Green area / landscaping of area in sqm				
Actual water requirement for Gardening purpose				70L

Table 12: Solid Waste Generation at the Site (Operation) per DAY

S N o	Particulars	Total Occupancy Nos	Per capita Generation (kg/day)	Total Solid waste generation (kg/day)	Total Biodegradable Waste (kg/day)	Total Non-Biodegradable Waste (kg/day)
1	Residential	34	3	1	1	1
2	Staff & Visitors	19	1.5	1	0.5	0
3	Floating Population of Survivors					
4	Other?					
Total				130.5	43.5	34

Note: above values are calculated or obtained based on the inputs from local Environmental consultant.

F. Project Implementation Organization

1. Implementation Schedule

56. Executing Agency. The Ministry of Finance (MOF) is the executive agency for the project.

57. Implementing Agency. The Ministry of National Planning, Housing and Infrastructure (MNPHI) is the implementing agency for project output 5 responsible for all procurement, contract

administration, preparation of concept design, drawings and bid documents and overseeing project implementation.

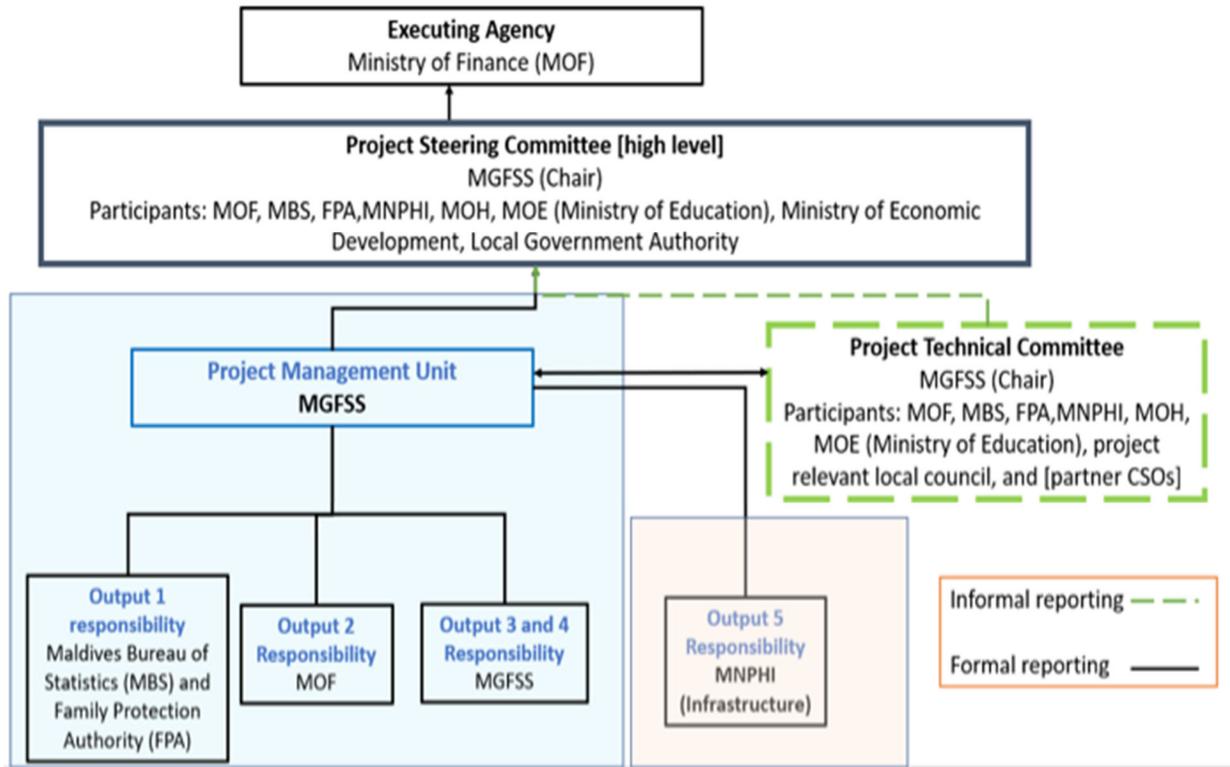
58. Project Management Unit. MNPFI will be supported by the Project Management Unit (PMU) of Ministry of Gender, Family and Social Services (MGFSS). The PMU will be headed by a Project Director and will be assisted by a Project Coordinator, along with other personnel such as: Project Officer, Procurement Specialist, Financial Management Specialist, and Project Architect. The PMU will be responsible for overall implementation, including project planning, monitoring and financial management. Specifically, the PMU will: (i) undertake project management, administration, and interagency coordination at the executive level; and (ii) prepare and submit to ADB, as endorsed by MOF, required project reports including safeguards documentation and annual audited project financial statements. The PMU will have overall responsibility of the Project's safeguard compliance with ADB SPS 2009.

59. Project Implementation Unit. MNPFI will set up a Project Implementation Unit (PIU) for project output 5 in Malè. The PIU will be headed by the Project Lead and assisted by an Engineer, Accounts / Procurement officer and Construction Field Supervisor. The Engineer will have additional charge as a Project Safeguards Officer. The PIU safeguards officer will be supported by NSC and construction field supervisors in the field. The PIU will be responsible for overall supervision and compliance with: (i) safeguards requirements as stipulated in subproject IEEs, EMPs as well as SSDDRs, (ii) coordinate the project GRM, (iii) coordinate with line ministries to ensure smooth implementation of the subproject,³⁴ (iv) supervise the procurement process, contract administration, and tendering process/ bids, (v) assure the technical quality of contractor design, drawings, and construction, etc., (vi) ensure contractor appointed focal point person, and (vii) report to PMU. In particular, the PIU will ensure consistency of safeguards documents with government policy, legal and administrative framework across all jurisdictions – national and local level. Terms of Reference (TOR) has been prepared for National Safeguards Consultant (NSC) and Construction Field Supervisors; refer to the TOR enclosed as Appendix 6a and 6b.

60. The project implementation organizations and key parties is illustrated in Figure 3.

³⁴ The PIU will ensure that subproject activities are synchronized between the SSDDR and EMP implementation.

Figure 3: Project Implementation Organizations



IV. DESCRIPTION OF THE BASELINE ENVIRONMENT

A. Area of Influence

61. For the purposes of establishing the environmental baseline and assessing the potential environmental impacts, the area of influence includes the primary subproject site –Hulhumalé DV/GBV and its surrounding area / periphery.

62. In March, May and June 2022, site visits and due diligence of the primary subproject have been carried out. The due diligence was further supported by desk-based screening, site screening checklists and salient features checklist enclosed as **Appendix 4**. During site visits and due diligence, attention was paid to identify

- (i) sensitive natural environmental receptors such as water bodies, biodiversity, and wildlife habitats;
- (ii) sensitive human receptors such as households, schools;
- (iii) local landscape character
- (iv) location / availability of supporting services / associated facilities (utility networks)
- (v) cultural and heritage sites (such as mosques or other religious sites); and
- (vi) potential health and safety issues.

63. Site due diligence confirmed the location of existing supporting services / associated facilities (utility networks) are available in the immediate vicinity, there is no associated land take and do not impact VERs.

B. Baseline Receptor Summary

64. Key receptors information was obtained and collated based on-site visits, stakeholder consultations, subproject SDR, discussions and interviews with MGFSS representatives, MNPFI engineers, and HDC. A summary table for key receptors is provided in Table 4.1 along with photo documentation.

Table 13: Summary of Valued receptors (Sensitive Natural and Human Receptors)³⁵

Subproject Components		DV/GBV Shelter/ Building
Atoll	→	Hulhumalé
Receptors	↓	
Distance to coastline		[REDACTED]
Land use / land cover and ecology		[REDACTED]
Legally protected area		[REDACTED]
Physical Cultural Resources (heritage sites / cultural or religious places)		[REDACTED]
Tourist areas		[REDACTED]
Human settlements		[REDACTED]
Existing utilities		[REDACTED]

"[This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]"

- Number of guest houses are in the wider area
- Proposed DV/GBV facility subproject is located in a mixed residential and institutional area, some of which were under construction at the time of the site visit in June 2022
- There are existing underground utilities in the vicinity, these will not be affected.

³⁵ The list of valued receptors shall be reviewed on a regular basis as additional baseline on environment and social aspects of the project are ascertained during detailed design.

Figure 4: Photo Documentation of Hulhumalé DV/GBV Site



“[This information has been removed as it falls under the exception to disclosure in ADB’s Access to Information Policy, para. 17.5.(x)]



[This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]

C. Geographical Location

[REDACTED]

³⁶The Phase I of Hulhumalé reclamation, consisting of 188 hectares, began on 16th October 1997 and was completed by June 2002. The first settlement of Hulhumalé was officially inaugurated on the 12th of May 2004 with a resident population of just over 1,000. Hulhumalé Phase II which included reclamation of 240 hectares was completed in 2015, targeted to accommodate a total population of 100,000. The subproject site is located in Phase I.

D. Physical Resources

1. Land Use

66. The following section describes the physical resources in and around the proposed subproject site.

67. Hulhumalé subproject (DV/GBV). The site is [REDACTED] (see footnote 36) under HDC ownership; the land has been allocated to the MGFSS for the development of the proposed subproject. There is no vegetation or trees within the site... The proposed site can be approached via an approach road from north direction. [REDACTED] (see footnote 36).

68. PCRs. No PCRs were found along the walk over survey of the site and the wider surrounding area.

2. Topography, Geology and Soils

69. In common with all the islands of the Maldives, Hulhumalé is a low-lying reef island that has been reclaimed. Average elevation of the island is 2.0 m above the mean sea level and the subsurface content includes poorly sorted unconsolidated mixed coral sand, coral fragments and seashells. The soils have high absorption capacity. The agency responsible for environmental monitoring is called the EPA. This agency does not routinely monitor soil quality and data is not available for the subproject area and/or the subproject site. The soil quality testing for the subproject site, if required, will be conducted as part of the engineering scope and will inform the detailed design and update of the IEE and EMP.

70. The subproject area falls into top classification as flat. Site elevation is 2 m above mean sea level (ASML). The area of influence is covered with soil type: coral sand mixed humus. Site specific geotechnical study has not been conducted; generally, the design bearing capacity for G+2.5 buildings in Maldives is 150 kPa.

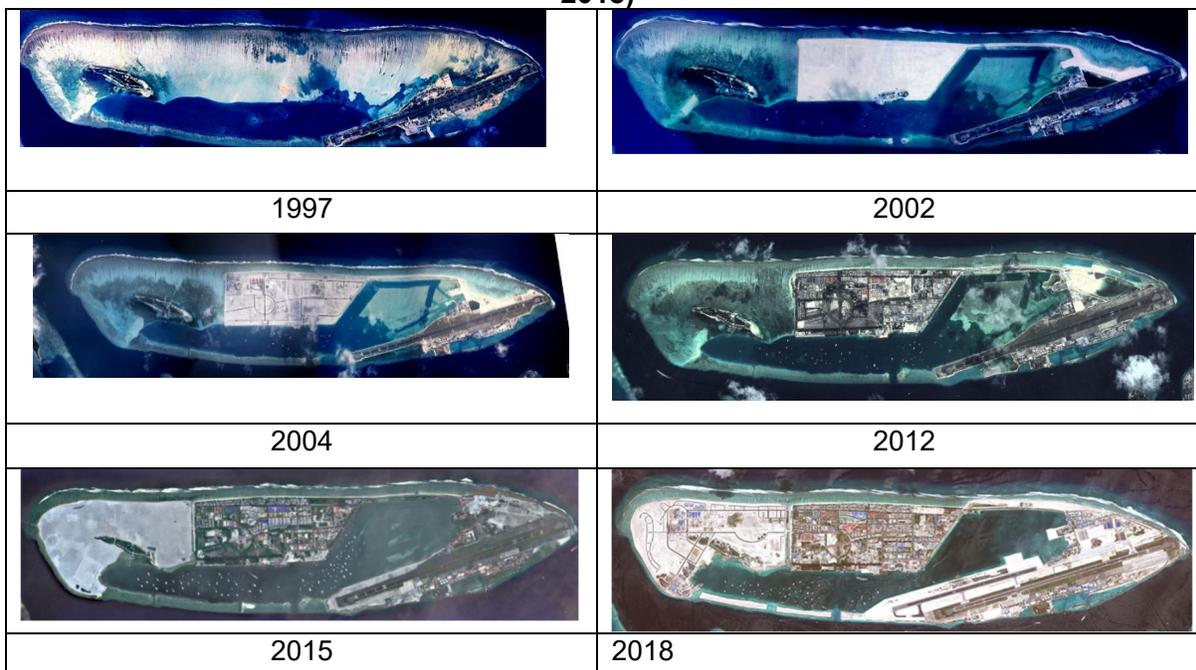
71. Following aerial images show the development of Hulhumalé over past 21 years such as below. Aerial photos of 1997, 2002, 2004, 2012, 2015, and 2018 as presented in Figure 5.

- (i) land reclamation and development of Hulhumale

³⁶ [This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]"

- (ii) Commencement human settlement and subsequent urban development
- (iii) Development Phase II with inclusion of the adjacent resort to the second phase
- (iv) Harbour and coastal protection around the island etc.

Figure 5: Satellite images and aerial photographs of Hulhumalé area between 1997 and 2018)³⁷



3. Meteorology and Climate

72. Maldives has two distinct seasons across atolls - dry season (northeast or NE monsoon runs from December to beginning May) and wet season (southwest or SW monsoon runs from mid-May to November). Strong winds are associated mainly with the southwest monsoon; stormy weather is frequent from May to July. The mean annual temperature is around 28°C and relative humidity from 73 % to 85%. The Central, Southern and Northern parts of the Maldives receive annual average rainfall of 1924.7mm, 2277.8mm, and 1786.4mm, respectively. The highest rainfall ever recorded in the Maldives within 24-hour period was 219.8 mm on 9th July 2002 at Kaadedhdhoo Meteorological Office, at Dgh atoll (123 km from Hulhumalé). Maldives being located at the equator, receives plentiful of sunshine throughout the year; the Southern Atolls (Gan) of receive 2704.07 hours of sunshine each year on average while central Atolls (Hulhule) receive 2784.51 hours of sunshine per year.

4. Air Quality and Noise

73. Typically, in Maldives, outside of main populated area such as Malé, there are few industrial pollution sources and the volume of vehicular traffic is low. An EIA report on development of a 6-storey building in Phase I of Hulhumale³⁸ has reported noise levels exceeding 60dB during daytime; this is higher than the World Bank Standard of 55 dB.³⁹ The EIA report³⁸ also recoded PM10 level within the range of 0.022-0.030, PM2.5 0.009-0.010 and NO2 0.077-

³⁷ <https://hdc.com.mv/hulhumale/>

³⁸ EIA for the Proposed Six-Storey Residential Building at LOT-10444, Hulhumale' www.epa.gov.mv

³⁹ <http://www.ifc.org/ehsguidelines>

0.098. Air quality and noise data is not recorded on regular basis in any part of Hulhumale site. Air quality and noise monitoring will take place to inform the environmental baseline; the collected baseline data will be incorporated into the updated IEE and EMP during detailed design stage.

5. Hydrology, Surface and Groundwater

74. Hydrology. Site elevation of the subproject area is 2 m AMSL, soils have a high absorption capacity and thus Infiltration levels are high. The preliminary design factors in additional site elevation via backfilling (to be estimated during detailed design) and building elevation of 0.6 m for flood risks and strengthening / defining of the natural drainage pattern.

75. Groundwater. Groundwater table at Hulhumalé subproject site is at a depth of 2m NGL. Groundwater quality analysis was not conducted, and it is not required to inform the environmental baseline. The usage of groundwater will not be required, and abstraction prohibited.

76. Surface water. There are no protected surface water bodies within or in close proximity to the subproject site. There is an artificial creek approx. 100 m from the subproject site.

77. Water Usage and Sources. The main source of water for household and drinking purposes in North Malé atoll (Hulhumalé) is from an existing 7500 tons capacity RO plant; ground water wells and the rainwater collection tanks were used previously but these are not used by residents currently.

6. Climate Risks and Natural Hazards

78. Climate Risks. The project has been screened utilizing primary and secondary research of climate baseline data and climate projections for Maldives and a Climate Change and Risk Assessment (CRA) prepared. The overall risk level is classified as moderate to low risk. The assessment finds that the subproject' location (Hulhumalé) does not present a high risk of natural hazards or climate change-induced events that could potentially damage the subproject or harm their users. The main climate change impacts identified in the assessment report are increasing temperatures for the subproject location, creating discomfort for users of the DV/GBV shelter, in particular young children who are more vulnerable to heat and perceived high temperatures. While rising sea levels will pose a significant threat to the Maldives in the future, the risk posed to the subproject is considered to remain low by 2050s, while it is set to increase significantly by 2090s. Following the assessment results, subproject components sensitive to climate risks were identified as listed in Table 14. These risks will be managed through integration of climate proofing / resilience measures into the subproject detailed design (refer to discussion in Chapter 3 of the IEE).

Table 14: Climate Change Impact Building Infrastructure⁴⁰

Climate Change Factor	Risk Level	Subproject components sensitive to climate risks
<ul style="list-style-type: none"> Increase in temperature Extreme heat events 	Medium	<ul style="list-style-type: none"> Heat waves stress on roads, buildings and other subproject infrastructure

⁴⁰ Historical climate data from Maldives Meteorological Service (MMS), incl. SLR; Climate variable and projections data from the [World Bank Climate Change Knowledge Portal \(CMPI5 and CMPI6 data\)](https://climateknowledgeportal.worldbank.org/) <https://climateknowledgeportal.worldbank.org/>; Multi-hazard Risk Atlas of Maldives (2020) for climate and natural hazard risk assessment (maps and analysis of historical climate and future climate projections, maps of geo-physical

Climate Change Factor	Risk Level	Subproject components sensitive to climate risks
<ul style="list-style-type: none"> • Increase in precipitation, • Flooding, 	Medium Low	<ul style="list-style-type: none"> • Heavy rains and flooding can undermine the structures due to erosion and can damage underground cables and associated control systems
<ul style="list-style-type: none"> • Coastal floods, Storm surges 	NA	<ul style="list-style-type: none"> • Subproject site located inland
<ul style="list-style-type: none"> • Increase in wind speed, cyclone hazard 	Low	<ul style="list-style-type: none"> • Strong winds can damage structures

79. Natural Hazards. Maldives' Second National Communication (SNC)⁴¹ notes that the Maldives are highly vulnerable to natural hazards and extreme climatic events; it experiences high frequency but low impact seasonal events including monsoonal flooding, coastal erosion, saltwater intrusion, and sea surge-related flooding due to sea level rise causing disruption to economic activities, education, and medical services in the islands.

7. Flood Hazard

80. According to the SNC, and in terms of spatial distribution, existing studies show that the northern and central regions of Maldives are more prone to extreme flooding, while southern regions are less.⁴² As per the HDC there is an engineered drainage system in Hulhumalé and till date there has been no flooding episodes in the wider area.

8. Storm Surge

81. Within the scope of the CRA, storm surge risk is relevant because, together with sea level rise and tide dynamics, this is a main driver of coastal flooding, inundation and coastal erosion. A storm surge is defined as the abnormal rise in seawater level during a storm, measured as the height of the water above the normal tide level. Analysis and mapping of storm surge risk hazard from ADB⁴³ shows that surge risk is generally low for the subproject locations as shown in Figure 5. The subproject site is located inland, hence this is deemed at low risk.

9. Cyclone Hazard

82. Cyclone hazard for Maldives is classified as low.⁴⁴ According to available information, there is a 1% chance of potentially damaging wind speeds for the Maldives in the next 10 years.⁴⁵ Cyclone hazard risk is highest in Northern Maldives due to the proximity of northern latitudes to

hazard risk, etc.); World Bank, ADB, 2020, Climate Risk Profile of Maldives; Maldives' Second National Communication (SNC) to UNFCCC; Natural hazards information from the National Disaster Management Authority (NDMA): floods, coastal erosion, cyclone episodes (record approx. last 10 years); and Additional site-specific information gathered via land surveys, and from local sources.

⁴¹ Maldives Ministry of Environment and Energy (2016). Second National Communication of Maldives to the United Nations Framework Convention on Climate Change. October 2016. URL:

https://unfccc.int/files/national_reports/non-annex_i_natcom/application/pdf/mlv_2nd_nc_13_oct_2016.pdf

⁴² Zahid (2011). The influence of Asian monsoon variability on precipitation patterns over Maldives. University of Canterbury

⁴³ ADB Multi-Risk Hazard of Maldives, 2020

⁴⁴ GFDRR (2016). Think Hazard! Profile for Maldives. URL <http://thinkhazard.org/en/report/154-maldives>

⁴⁵ Ibid.

the cyclone belt, while it is very low in the south. Existing data shows that, in recent years, there has been a few cyclones that caused flooding and damage to households and properties, although damage has not been extensive.⁴⁶ Analysis of NDMA⁴⁷ tropical cyclone storms data for the past 10 years is consistent with these findings, showing that there were a few episodes that did not cause extensive damage. These findings are also in line with ADB's cyclonic wind risk analysis, whereby hazard risk is high in the north and central part where Hulhumalé is situated and lowest in the south, as shown in Figure 7.

10. Coastal Erosion

83. The Maldives is affected by coastal erosion by varying degrees.⁴⁸ Reported cases of coastal erosion by NDMA⁴⁹ for Hulhumalé suggests no coastal erosion on the west due to planned set back but some erosion on the east side.

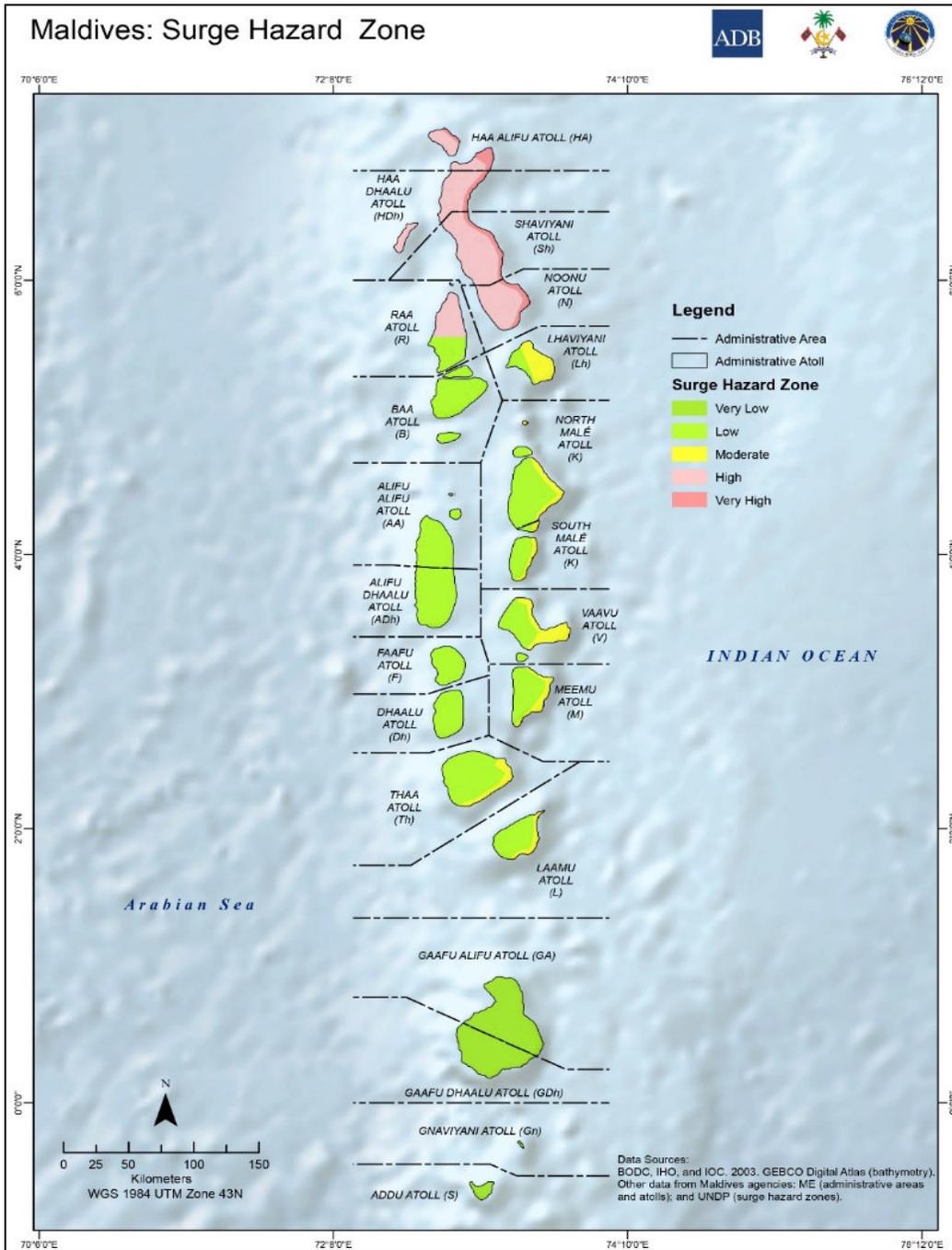
⁴⁶ Maldives Times (2017). Damage to 60 islands after extreme weather. December 3, 2017.

⁴⁷ Reported tropical storms/cyclonic incidents to NDMA-EOC for 2011-2020.

⁴⁸ ADB Multi-Risk Atlas of Maldives, 2020.

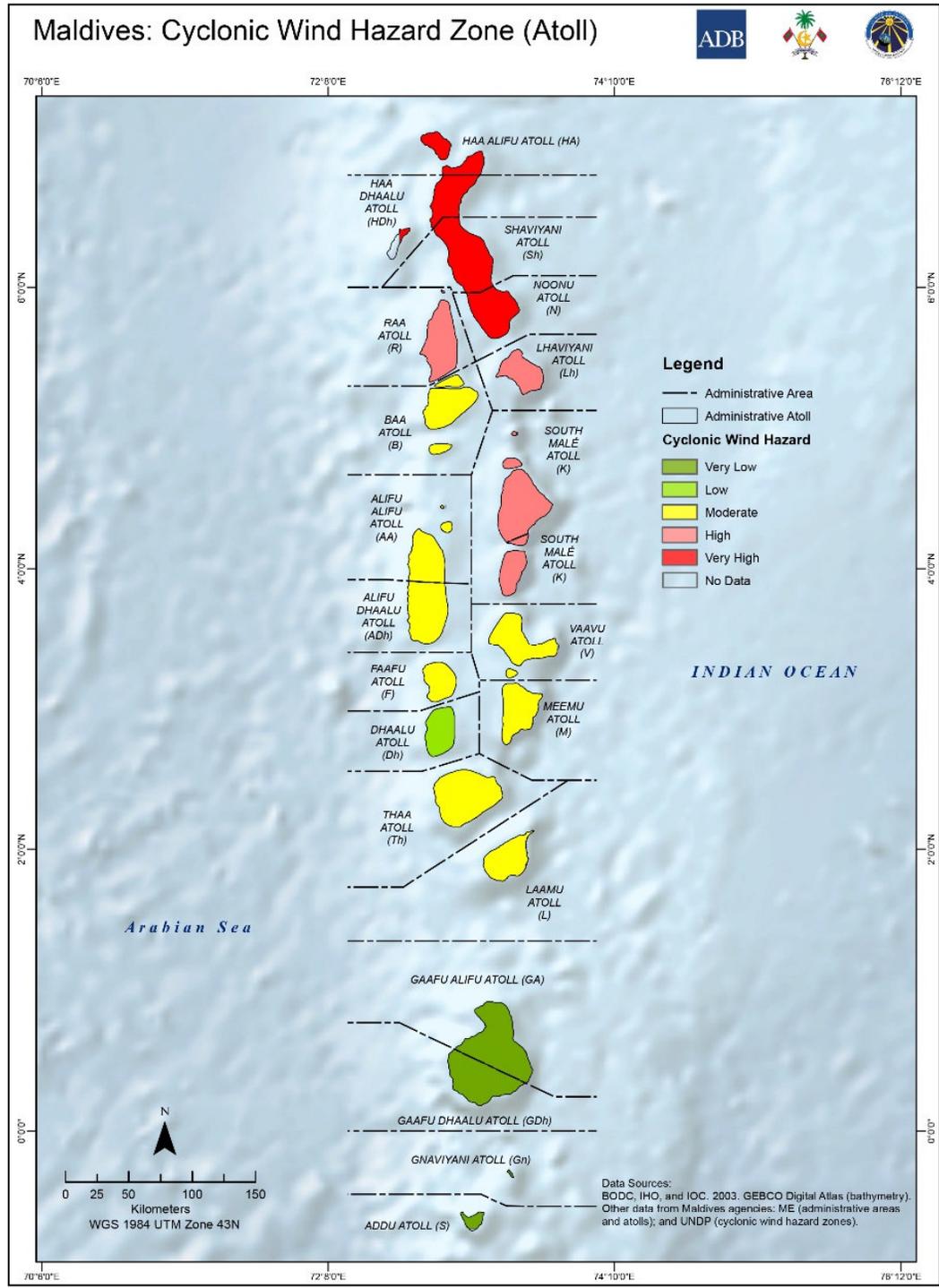
⁴⁹ Data from the National Disaster Management Agency (NDMA) for 2010-2021.

Figure 6: Storm Surge⁵⁰



⁵⁰ Draft Climate Risk Assessment, March 2022.

Figure 7: Cyclonic Wind Hazard



E. Ecological Resources

1. Special or Protected Areas

84. There are no protected areas or environmentally sensitive areas within the Hulhumale island, [REDACTED]

[REDACTED]⁵¹Since the subproject footprint is land based, localized to a small area and as per the approved development master plans for the said area, these protected areas are not anticipated to be impacted by the subproject.

2. Habitat Description

85. The subproject in Hulhumalé is located in a modified environment that is disturbed by human activity, dominated by existing or planned development activity and devoid of any vegetation or trees.

3. Flora

86. The subproject is in an empty plot with no vegetation.

4. Fauna

87. No aves or animals were observed at the time of the walkover survey and due diligence; no protected aves or fauna are anticipated in the subproject areas since it is heavily disturbed by human activity.

5. Social Safeguards Findings

88. The project SSDDR, June 2022 categorizes the project as Category C for social safeguards. There are no directly affected persons or any land acquisition associated with the project. The land plot is in the process of being transferred by the HDC to the MGFSS. [REDACTED]

(see footnote 51)

⁵¹ [This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]"

V. ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

89. This section assesses the manner in which the subproject will interact with the physical, ecological and socio-economic resources in the defined area of influence and produce potential impacts to Valued Environmental (and Social) Receptors (VERs). Impacts were assessed across all stages of subproject lifecycle. Potential cumulative and induced impacts were also considered. Impacts are identified and predicted based on analysis of the available information as detailed in the Chapter–3 - Project Description and Chapter–4 - Description of Baseline Environment of the IEE. This section may be updated once the detailed designs are finalized for the subproject.

A. Impact Assessment Methodology

90. Impact assessment methodology for the project consists of: (a) Identification of VERs: to identify potential interactions between the proposed project and VERs in the defined area of influence; (b) Impact prediction: to determine what could potentially happen to be identified VERs as a consequence of the project activities. (c) Impact evaluation: to evaluate the significance of the predicted impacts by considering their magnitude and the sensitivity of the affected resource/receptor; (d) Mitigation measures: to identify appropriate and justified measures to mitigate negative impacts and enhance positive impacts; (e) Residual impact evaluation: to evaluate the significance of impacts assuming effective implementation of mitigation and enhancement measures. The results are enclosed as Appendix 2 and discussed below.

B. Project Benefits

91. The Project will benefit women survivors of domestic and gender-based violence and their dependent children and reduce the unpaid care burden on women who are responsible for care of aged family members and young children. The project will integrate climate resilience measures in design that will ensure long term sustainability of the project.

C. Design and Pre-Construction Stage

92. Lack of project readiness checks for effective environmental management and integration of safeguards into subproject detailed design at this stage of the project cycle will potentially lead to impact significance that is high. These can be readily mitigated as shown in the following paragraphs; residual impacts will be low. Exception is for land use change that will result in direct and irreversible impact since the establishment of the DV / GBV will convert unused land to temporary care facility / shelter use (+50 years). However, the facility / shelter sit low on the horizon and the land use change is as per the Island Council approved land use master plan. Therefore, the residual impacts in this case will remain moderate.

93. Potential adverse environmental impacts associated with this stage has been avoided or minimized by: (i) careful site selection, as per the approved land use master plan of the Government; (ii) integrating key measures for safeguards that will permanently become part of the subproject infrastructure and will be included in the subproject detailed engineering design; (iii) implementation of environmental mitigation measures as per EMP for identified impacts; and (v) ensuring project environment management readiness. Key measures are discussed below:

D. Key Measures During Site Selection

94. Site Selection.

- (i) Site selection is a critical issue for the management of impacts on identified VERs, particularly: a) households' areas/structures, b) coastline, c) ground water wells, d) road crossings, e) PCRs, f) protected areas, habitats and species of conservation value.
- (ii) The siting of the subproject is in line with the Island Council approved Master Plan and were confirmed to avoid areas prone to high climate risks (e.g., storm surges, cyclonic wind hazard, coastal floods, etc.) as well as VERs to minimize impacts on trees, human health and structures of economic value.
- (iii) For site selection / due diligence:
 - The PMU representative, PIU engineers and ADB consultants undertook site visits and due diligence to assess the subproject site, need assessment for supporting services / associated facilities (e.g., connection to electric power supply, water supply and sewerage) in March and May 2022.
 - VERs (natural and human receptors) corresponding to the subproject site was compiled as shown in Table 4.1.

95. Land Requirements.

- (i) Permanent land-take. The subproject will involve permanent land use for the DV/GBV; however, all land belongs to the Government / HDC and no land acquisition is involved.
- (ii) Temporary land-take. There is no temporary land-take associated with the subproject site; all civil works will be undertaken within the final subproject site acquired area. Any temporary impact outside the corridor of impact will be subject to compensation at the cost of the site contractor and through written agreement with the landowner.
- (iii) There is no permanent land take associated with the supporting services / associated facilities (such as water supply and sewerage connection, electricity connection) since these networks are available underground in immediate vicinity of the subproject site. There will be some minor disturbance on existing approach road to connect existing utility network located underground to the new building.

E. Key Measures during Detailed Design

96. Subproject Site and Infrastructure Design.

- (i) Consider the geological conditions and seismicity as per national guidance on seismic design that calls for identification of a maximum credible earthquake scenario and associated ground acceleration parameters.
- (ii) Integrate and align recommendations from engineering surveys
- (iii) Designate a separate area (away from the facility / building on ground floor) in the layout plan for managing solid waste generated from within the premises
- (iv) Integrate measures for potential climate risk impacts and extreme weather events in subproject detailed design for potential incidences storm surges, coastal floods, inundation and temperature increases as shown:⁵²

⁵² Project Climate Risk Analysis does not find the subproject site to be high risk and therefore a preliminary conclusion is that this site is adequate.

North Malé atoll, Hulhumalé – DV/GBV
DV / GBV Shelter siting and design
<p>Heavy precipitation events.</p> <ul style="list-style-type: none"> • Design elevated site, building above projected flood levels, improve foundation • Define, strengthen natural drainage design that accounts for heavy precipitation projections in the area as well as regular O&M • Mitigate excessive erosion, sediment transport; develop and implement Site Restoration and Clean-up Plan including re-vegetation of the subproject site after completion of civil works. • Site to consider suitable slope and soil <p>Drought</p> <ul style="list-style-type: none"> • Rainwater harvesting and storage for increased likelihood of drought conditions and reduced availability of freshwater due to rising sea levels and saltwater intrusion <p>Water scarcity</p> <ul style="list-style-type: none"> • Integrate rainwater harvesting tank (>1000 liters capacity) for harvested rainwater and use for O&M (e.g., gardening, landscaping) • Design water storage tanks for emergency water supply (5 days) <p>High Winds</p> <ul style="list-style-type: none"> • Optimum building orientation to reduce wind strength • Increase buildings' resilience to strong winds via adequate roof design and roof structure <p>Temperature Increase / Extreme Heat Wave</p> <ul style="list-style-type: none"> • Insulation of roof and external walls • Energy efficient windows • Natural ventilation, while air conditioning could be used in some areas • Reflective tiles for Roof, or roof painted white • External shading devices (windows screens)

97. Supporting supporting services / associated facilities.
- (i) Supporting services / associated facilities e.g., lateral connection from main sewerage line, water supply and electricity to the subproject site as well as solid waste collection, transport and disposal, etc., will be the responsibility of the site contractor in coordination with PIU and area service providers that have been informed of the subproject.
98. Environmental (Baseline) Surveys.
- (i) Undertake key surveys to inform detailed engineering design as follows:
- (a) Air quality monitoring once before start of the civil works
- DV/GBV work site and sensitive receptors downwind of work site
- (b) Noise level measurements once before start of the civil works and monthly during civil works:
- DV/GBV work site and sensitive receptors downwind of work site
- (c) Vibration measurements: not required (see Construction Stage)

F. Key Measures during Pre-Construction

99. Project implementation set up. Contracting of NSC consisting of National Environment (and Social) consultant will be carried out for effective project implementation. Details are provided in Part 2 of 2 of IEE.

100. Training and capacity building. The capacity of PIU and contractors⁵³ responsible for implementation of safeguards measures will be strengthened through periodic training and the following steps:

- (i) The PIU will assign at least one full time person on staff to handle safeguards implementation on the field (PIU safeguards staff).
- (ii) Contractor will appoint at least one environment, health and safety focal point person (C-EHS) within its staff on a full-time basis who will also be responsible for environment and social safeguards and project GRM.

101. The PIU, construction field supervisor and contractor will receive training in EMP and SSDDR implementation, supervision, safeguards monitoring and reporting, project GRM, conducting meaningful consultations and information disclosure and on relevant environmental rules and regulations. Topics such as site-wide risk management; task specific hazard management, provision of personal protection equipment (PPE); provision of emergency medical treatment, first aid training and emergency response; safety training for all personnel, system for recording incidents, and COVID-19 health & safety risk mitigation measures at work site and in workers accommodation will be covered. Training will be facilitated by NSC. In addition, orientation and briefing of project staff, all contractors, hired workers will be conducted prior to mobilization on site during construction stage.

102. Updating the safeguards documents. Mitigation measures defined in this IEE and EMP will be updated based on the final detailed engineering design of the DV/GBV. This will be the responsibility of the NSC with support from PIU. The revised documents will be submitted to ADB and PMU for clearance and disclosure on ADB's website when updated. NSC will develop site-specific checklists for contractors to use in monitoring safeguards and compliance during construction and operation stage.

103. Safeguard Measures in Bidding Documents, Contracts and Tenders.

- (i) Design and Build contractor to work with the NSC to update IEE and EMP during detailed engineering design and submit these to PIU for PMU and ADB review and approval; Design Build Contractor to commence civil works only after approval has been obtained.
- (ii) Updated IEE and EMP to provide a basis for the contractor to coordinate with NSC to finalize and implement site specific EMP (SEMP) during project implementation.
- (iii) Documents will include:
 - (a) A provision for imposition of penalties in case non-compliances to safeguards are encountered repeatedly.
 - (b) A provision to compensate for any temporary or permanent damage and loss or inconvenience as a result of the project during construction outside the assessed Corridor of Impact (work site).

⁵³ Contractors imply – MNPHI appointed Design Build Contractor, and facility operators. Note: Safeguards implementation during O&M stage will be directly through MGFSS.

- (c) A provision for the contractor to appoint focal points persons for safeguards such as: Contractor – Environment, Health and Safety focal point person (C-EHS) within staff on full time basis, who will also be responsible for environment and social safeguards including project GRM.
 - (d) A provision to integrate COVID-19 risk assessment and corresponding management plan for occupational health and safety that are aligned with Republic of Maldives guidelines and measures listed in the EMP.⁵⁴
 - (e) A tender requirement for the contractor to comply with Republic of Maldives’s environmental requirements.
- (iv) This IEE EMP will be attached as an Annex to the bid and contract documents and costs should be allocated for environmental management in any in line with the EMP.

104. Grievance redress mechanism. The PIU will set up a project GRM that is acceptable to ADB and in accordance with the provisions and timeframes specified in the EMP. The GRM will function from construction to operation stage.

105. Information disclosure, consultation and participation. Information disclosure via project information leaflet, meaningful consultation and participation activities will be continued with affected persons/ households / communities and other relevant stakeholders throughout the project implementation period as specified in the project EMP.

106. Permits, approvals and clearances. All necessary permits, approvals from the relevant National and City / Island Council authorities prior to award of work contracts shall be obtained by the PIU. Submission and approval of updated IEE and EMP prior to starting of civil works to the PIU with final approval by PMU and ADB.

107. Physical cultural resources (PCRs). There are no known PCRs within or in close proximity to the subproject site, However, site preparation and civil works during the construction stage have the potential to disturb any unknown PCRs. The following measures will be implemented:

- (i) Consultations will be carried out to ensure sensitive religious periods are taken into consideration prior to the start of civil works.
- (ii) Chance Find Procedures will be established and activated if PCRs are encountered during civil works as follows:
 - (a) Civil works will be immediately suspended if any PCRs are encountered
 - (b) Destroying, damaging, defacing, or concealing PCRs will be strictly prohibited;
 - (c) The relevant Island Council will be promptly informed and consulted
 - (d) Civil works will resume only after thorough investigation and with the permission of relevant Island Council and government ministry.

⁵⁴ (i) <https://covid19.health.gov.mv/wp-content/uploads/2020/07/GUIDELINE-ON-WORK-PLACE-SAFETY-DURING-COVID-19-Version-2.pdf>

(ii) National guidance on Covid-19 is issued by the Government Ministry of Health

(iii) The contractor’s OHS plans will be reviewed by NSC in consultation with public health inspectors of the atoll, local medical officers and other relevant health specialists; with a recommendation forwarded to the PIU for clearance.

G. Construction Stage

108. Potential adverse impacts during the construction stage have been assessed for building construction / all proposed infrastructure at the subproject site. Impacts during this stage are of low magnitude (since these will be confined to the work site / subproject footprint) and the sensitivity of receptors is medium to low (DV/GBV is situated in the middle of an existing residential area). Overall, the impact significance during construction stage is moderate and residual impacts are low with the exception of the land use change/visual impacts for which residual impacts will remain moderate. All subproject activities will be supervised and monitored by the PIU safeguards staff in coordination with NSC and construction field supervisor and implemented by contractor and contractor appointed staff i.e., C-EHS focal point person.

1. Workforce Organization and Orientation

1.1. Orientation for Project Staff, Contractors, Workers

109. Prior to mobilizing on site, the NSC will conduct briefing and orientation for relevant project staff from PIU including safeguards officer, construction field supervisor, contractor appointed staff i.e., C-EHS on the following. These activities will be overall monitored by the PIU.

- (i) Project EMP, GRM, information disclosure and meaningful consultation, safeguards monitoring and reporting requirements
- (ii) ADB and Republic of Maldives labour standards
- (iii) Responsibilities of the PIU and contractors in implementing the site EMPs (SEMPs), and monitoring safeguards compliance with environmental performance indicators and project EMP⁵⁵
- (iv) Responsibility of the PIU and contractors in engaging with affected persons/households for project GRM
- (v) Create awareness of health & safety risks due to transmittable diseases (HIV/AIDs, COVID-19), child labor, bonded labor or forced labor⁵⁶ and implementation of COVID- 19 risk management plan (refer to part 2 of IEE, or EMP part III)
- (vi) Record and maintain briefing and orientation events log with date, location, duration, and list of attendees

110. Under the supervision of the NSC and prior to mobilizing on site, contractors will conduct briefing and orientation (including training and drills) for workers on:

- (i) SEMP implementation (refer to Table 5.1)
- (ii) EHS and hygiene at work site as well as awareness of health & safety risks due to transmittable diseases (HIV/AIDS, COVID-19) to prevent potential incidences
- (iii) Project GRM
- (iv) Record and maintain briefing and orientation events log with date, location, duration and list of attendees

1.2. Hiring of Workers

⁵⁵ NSC will develop checklists for the contractors to use in monitoring safeguards / environmental compliance during construction stage.

⁵⁶ ADB is committed to due consideration of Core Labor Standards (CLS) in the design and implementation of subproject. A CLS handbook has been developed by ADB with cooperation of International Labor Organization (ILO). The PMU and PIU will ensure compliance to applicable CLS of ADB-ILO during project implementation.

111. Subproject implementation will bring opportunities for local employment. While this is beneficial, it may also be a cause of conflict over transparency of hiring particularly if migrant workers are recruited over local people. The contractors will be required to use local labour for manual work and eligible local workforce for technical and administrative jobs. The NSC in coordination with the PIU will monitor the compliance to the priority of local hiring.

1.3. Presence of Workers at Construction Site

112. The presence of project staff and workers at the subproject site may increase demand for services such as food and beverages. The localized demand of services may result in an opportunity for local community to set up temporary small-scale business in providing transport, food and beverages outside the new subproject site. This will be a beneficial impact to the local economy. This may also lead to an increase in transmission of diseases; therefore, occupational health & safety plan and community health & safety plan will be implemented for containment.

1.4. Structural Check

113. Prior to mobilizing on site, the Contractor and PIU will inspect all nearby buildings to assess the likely impacts during the piling operation and based on the result of assessment, suitable mitigation measures e.g., provision of temporary noise and vibration barriers or structural strengthening measures will be provided. For building structures that are weak, appropriate evidence (including video / photograph) will be collected from the site prior to any civil works, for which temporary structural support will be provided till the completion of the piling works.

2. Preparation of Site-Specific Environmental Management Plans / Standard Operating & Maintenance Plans

114. The Site Environmental Management Plans (SEMPs) will help to avoid unplanned activities of the contractor and will guide the smooth implementation of all subproject activities. The NSC in coordination with the contractors will prepare one SEMPs for the key activities such as spills response, spoils disposal, dust control, construction noise, construction wastewater and materials management (including storage / warehouse) and chance find procedures; Separate sub-plans may be prepared with appropriate maps showing where / how activities will take place and corresponding implementation schedule for: waste management, community health and safety, occupational health and safety, emergency response (including evacuation). The NSC will also guide facility operator to prepare Standard Operation & Maintenance Plans (SOMPs) in line with the environmental component likely to be affected.⁵⁷ The list of environmental attributes likely to be affected is provided in Table 15; The SEMPs / Sub-plans will be submitted to PIU for approval.

Table 15: Site Environmental Management Plan (SEMP/SOMP)⁵⁸

Environmental Attribute Likely to be Affected	Key Response in SEMPs
Land and Vegetation	Spills Response Spoils Disposal Site Rehabilitation and Clean-up

⁵⁷ SOMPs will be developed taking reference from the SEMPs where required such as the Waste Management Community Health and Safety, Occupational Health and Safety, Emergency Response.

⁵⁸ The plans will be based on construction program and work method statements; and detailed to include an approach to environmental management via project EMP/SEMP/SOMP.

Environmental Attribute Likely to be Affected	Key Response in SEMP
Air	Dust Control
Noise	Construction Noise
Water	Construction Wastewater
Waste	Materials Management (including warehouse / storage) Sub-plans: <ul style="list-style-type: none"> • Waste Management Plan (for all types of waste streams)
Humans (Communities / Workers)	<ul style="list-style-type: none"> • Community Health and Safety Plan • Occupational Health and Safety Plan (including worker's facilities and work areas, COVID-19 risk mitigation) • Emergency Response Plan (ERP), including evacuation
Physical Cultural Resources	<ul style="list-style-type: none"> • Chance Find Procedures

3. Site Preparation and Civil Works

115. Site preparation and civil works will integrate key measures during detailed engineering design. Construction activities will be scheduled in the dry season, day-time, avoid sensitive periods for religious activities, as possible. Caution will be exercised in planning for safe construction to minimize disturbance to the adjoining existing activities (e.g., nearby buildings).

Impacts on Topography (Land and Vegetation)

116. Disturbance to land and vegetation. Impact on Land and vegetation will result from mobilization of workers, construction equipment and materials; setting up temporary construction (workers) camp; site preparation (vegetation clearance, backfilling /land levelling and grading for laying foundation) and civil works over 10,000 square-feet (0.092 ha) for DV/GBV Hulhumalé. Land backfilling, levelling and grading works may alter drainage patterns at the building site that may result in surface erosion and generation of spoil. Impacts will also result from operating cranes for unloading and installation of equipment. These impacts will be temporary, short-term (during peak construction period) and localized at the work site. The potential impacts on land and vegetation will be mitigated through the following measures set out in the EMP:

- (i) Clear demarcation of work site, no encroachment outside the demarcated zone
- (ii) Vegetation / site clearances will be strictly restricted to the work site
- (iii) Schedule civil works in the dry season and avoid of other sensitive periods (for religious activities,) if possible
- (iv) Use of herbicides/pesticides will be prohibited to prevent soil contamination
- (v) Access to neighboring areas, properties, access roads in the wider project area will be maintained
- (vi) Maximize the re-use of earth cut materials, excess spoils, construction debris / waste from within work site
- (vii) Specify materials that are recycled have recycled content and /or are from sustainable sources
- (viii) Stockpiles to be placed within demarcated work site that are barricaded, dust prone materials to be stored in enclosures and/or covered with tarp

- (ix) Borrow pits for backfilling at building site, if required and spoils disposal sites (if any), utilized as per pre-approved plans from the relevant authority
- (x) Ensure transport vehicles are covered during transportation to avoid spillage
- (xi) Restore loose soil from foundations through ramming if required
- (xii) Minimize erosion:
 - By balancing cuts and fills
- (xiii) Construction (workers) camp set up to be within work site, at least 10 m from any other water sources, water bodies or drainage
- (xiv) Drainage.
 - Backfilling, use / re-use of materials or excess spoils, placement of stockpiles to take due cognizance of, and maintain the natural drainage pattern, slope of the area
 - Excess spoils will be backfilled onsite or spread onsite in a manner that it causes no disturbance to the natural drainage pattern
- (xv) Implement SEMP:
 - Materials Management (including warehouses / storage)
 - Spoils Disposal⁵⁹

117. Waste generation and management. Impacts on resource use and impacts associated with disposal will arise from waste generated during site preparation and civil works. This includes generation of inert wastes e.g., spoils, biodegradable wastes (e.g., cleared vegetation, if any), construction debris, sandpiles, packaging waste, metal scrap, domestic waste. Impacts of disposal and wind-blown litter will be seen at the construction area and construction (workers) camps. The potential adverse impacts will be mitigated through the following measures as set out in the EMP:

- (i) Compliance with National laws and regulations on waste management / IFC (WBG) EHS Guidelines on Waste Management, whichever is stringent
- (ii) All work site, storage areas, disposal sites distanced from water sources, water bodies, drainage at least 10 m e.g., stockpiles, all waste types, recycling & sorting area, etc.; Keep loose soil material and stockpiles out of drains and flow-lines
- (iii) Maximize the re-use of earth cut materials, excess spoils, Construction debris / waste from within work site to reduce waste generation
- (iv) Establish a covered onsite sorting and recycling area within work site, away from coastline / drainage
- (v) Transport of recyclables, scrap, discarded equipment to MNPHI warehouse/depots, dedicated storage yards for resale or auction to authorized dealers
- (vi) Contract licensed waste vendors and/or materials suppliers for collection, transfer, treatment and/or final disposal of waste or materials; identify government depots, scrap yards
- (vii) No final waste disposal on site; contractor to coordinate with relevant local agency / service-provider for final disposal at government approved and licensed dump facilities; these will be marked on site maps
- (viii) Biodegradable waste such as cleared vegetation, if any, may be provided to local communities for use

⁵⁹ Excess spoil will be backfilled onsite or temporary / permanently disposed as per pre-approved plans by a relevant authority on clearly identified disposal sites on site specific map, with corresponding distance and number of trips made will be maintained (this will help avoid disposal of spoil on residential land or within 20 m of coast). Transport vehicles will be covered during transportation to avoid spillage. Spoils disposal sites (if any) will be rehabilitated and re-seeded within 30 days after closure to prevent soil erosion and dust generation.

- (ix) Provide multiple waste containers at construction (workers) camp
- (x) Waste burning will be prohibited
- (xi) Implement SEMP/Sub-plan
 - Materials Management (including warehouse / storage)
 - Waste Management Plan
- (xii) Maintain a record of waste disposal sites with corresponding distance from work site, date, location map and number of trips to be maintained at work site

118. Polluting materials. Inappropriate transportation, storage, usage, polluting materials waste disposal, leakage and spills may result in adverse environmental impacts. A temporary secured material handling and waste storage area will be provided across the work site. The potential adverse impacts will be mitigated through the following measures as set out in the EMP:

- (i) Compliance with National laws and regulations on hazardous materials management / IFC (WBG) EHS guidelines for Hazardous Materials Management, whichever is stringent
- (ii) Temporary secured / controlled area set up for storage and handling polluting materials with a containment tray or area provided with bunds; Secured areas to be sited away from direct sunlight, at least 10 m from water sources, water sources, drainage
- (iii) All work site, storage areas, disposal sites distanced from water sources, water bodies, drainage e.g., stockpiles, all waste types, recycling & sorting area, etc.; Keep loose soil material and stockpiles out of drains and flow-lines
- (iv) Materials to be obtained from government approved vendors
- (v) Delivery and acceptance of all materials/equipment will be accompanied by a Materials Safety Data Sheets (MSDS) and/or be certified that it is polychlorinated biphenyl-free (PCB) free
- (vi) Contract licensed waste vendors and/or materials suppliers for collection, transfer, treatment and/or final disposal of waste or materials; identify government approved depots, scrap yards
- (vii) Implement SEMP:
 - Spills Response
- (viii) The following records will be maintained:
 - Record of equipment and corresponding PCB free certificates
 - Record of MSDS
 - Record of incidents, spills/accidents/near-miss/fatalities
 - Record of materials with corresponding location and distance for final storage / disposal / re-use with date, location maps and number of trips to be maintained at work site

4. Impacts on Human Environment

119. Construction (workers) camp. There will be an influx of workers to the work site and construction (workers) camp set up that may result in adverse impacts due to unhygienic conditions or incidences of transmittable disease. The work site will align with measures provided in the EMP for COVID-19. The work site will be provided with temporary structures to house workers and sanitary facilities. The contractor will ensure that sanitary facilities are in good condition, wash areas are clean, safe drinking water is available, waste container bins provided in designated locations and good housekeeping is observed at all times. Construction (workers) camp will be set up at least 10 m away from any drainage/water bodies.

120. Information disclosure and consultation. Lack of information disclosure and meaningful consultation may result in lack of project acceptance. Information disclosure and consultation with nearby local residents (Community Awareness Program) and relevant local agencies / authorities will be conducted one month prior to commencement of civil works and intermittently during civil works. These activities will be conducted in and around the subproject site by the NSC with support of the PIU safeguards staff. The following measures will be undertaken as set out in the EMP.

- (i) Prepare and distribute project information leaflet in local language (Dhivehi) and make it publicly available during consultations, and at HDC office
- (ii) Record of consultations will be maintained in a logbook
- (iii) Record of incidents/accidents/near-miss/fatalities associated with the project will be maintained
- (iv) Records of issues raised will be maintained in accordance with project GRM

121. Physical cultural resources. There are no unknown PCRS in close proximity to the subproject site. Site preparation and civil works during the construction stage have the potential to disturb as yet unknown PCRs; a Chance Find Procedures will be implemented as necessary.

122. Landscape change, visual impact. Impacts due to landscape change, visual impact is minor. The development of the DV/GBV at Hulhumalé is within a developed area, therefore blending in with its surroundings. The building would sit low in the landscape and from more distant viewpoints would not read strongly in the view during the daylight hours. Steps to reduce visual impacts e.g., installation of security lighting around work site perimeter, planting of native trees, hedges around the fenced work site perimeter will be incorporated during and after completion of civil works.

123. Interruption to existing utilities, interference or disturbance to surrounding areas. Some minor inter-crossing of the proposed utilities with the existing utilities (e.g., water supply line, sewerage, electricity connection) is expected at DV/GBV, Hulhumalé subproject; existing utilities are in the near vicinity. MNPHI are experienced and have the requisite solutions that will be integrated into the detailed engineering design. Additionally, to reduce impacts on existing utilities (such as power outages, water supply), the following steps will be undertaken as set out in the EMP:

- (i) Contractor will:
 - Identify and locate utilities on a site map to prevent unnecessary disruption of services during civil works
 - Prepare a contingency plan in case of unintentional interruption of services
 - Provide a 24-hour advance notice to the affected communities for interference to existing utilities.
- (ii) Civil works will be scheduled in a phased manner such that any interference are no more than 12 hours in duration, and if possible, these will be scheduled during low use times in the 24-hour cycle.
- (iii) Access to properties, access roads that are adjacent to the work site will be maintained or alternative route provided, as necessary.

124. Use of existing access roads. Delivery of equipment, materials and machinery to the work site may lead to temporary increase in traffic to the subproject area. Movement of construction vehicles will also result in moderate air quality impacts (dust and increase in vehicular emissions)

as well as an increase in noise (due to operation of transport vehicles) during peak construction stage (these are discussed under Impact on Air Quality, Noise and Vibration). The potential impacts due to temporary increase in traffic will be mitigated through the following measures as set out in the EMP:

- (i) Follow planned transportation route and delivery schedule
- (ii) HDC, local communities to be made aware and signs to be erected in advance warning of planned detours, timing and duration
- (iii) Any traffic detours to have danger and clearly visible warning signs as well as flag persons
- (iv) Compliance with local speed limits vehicle load carrying capacity and other road regulations
- (v) Access to adjacent roads to be maintained or nearest alternative route to be provided
- (vi) Any damage to roads to be restored to pre-project condition at contractor cost
- (vii) Record of incidents/accidents/near-miss/fatalities/road damage will be maintained

125. Occupational Health and Safety. Lack of occupational health and safety may result in high incidences of fatalities or injuries. Contractors will comply with the relevant health & safety measures required by law, national guidelines and those stipulated in EMP (COVID-19) and the potential impacts to workers will be mitigated through the following measures as set out in the EMP:

- (i) Compliance with National laws and regulations on OHS / IFC (WBG) EHS guidelines on OHS, whichever is stringent
- (ii) Provide adequate workers accommodation in line with IFC (WBG) Guidance Note / Workers Accommodation
- (iii) Provide temporary electricity via connection to nearest commercial meter; Provide and maintain signage as per local laws for warning of electrical hazards, if any
- (iv) Provide and maintain water, portable water and sanitation facilities (situated separately for women and men, as applicable), regular cleaning and disinfection, waste container bins
- (v) Construction (worker) camp to be located at a safe distance upward direction from asphalt, concrete mix work; establish and implement Emergency Response Plans (ERPs)
- (vi) Assess safety risks and safety protocols and implement at work site
- (vii) Strictly enforce the use of PPE as such goggles, gloves, noise reducing mufflers, head lamps, high visibility safety vests with reflective striping (e.g., for night time works if any), respirators (e.g., working on asphalt, concrete / cement concrete / road paving etc.)
- (viii) Provide communication devices to designated site engineers / construction field supervisor / contractor focal point person
- (ix) Periodic training of workers for specific type of work engagement, e.g., occupational HS, materials handling, waste disposal, working at heights, electrical works, and Emergency Response Plan (ERPs) including fire and explosion and evacuation
- (x) Ensure provision of fire hydrants, sand buckets at work site and construction (workers) camp; regularly checked for expiration date, refilled, replaced as required (prior to the expiration date); Any wet sand (if any) in the bucket should be replaced with dry sand

- (xi) Coordinate with nearest hospital / local clinic in case of emergencies and/or work accidents
- (xii) Set up first aid kit within work site
- (xiii) Provide periodic health assessments (health & fitness) to workers once every two months over the construction stage
- (xiv) Undergo orientation in H&S risks, ERPs, transmittable diseases (HIV, AIDs, Covid-19)
- (xv) Implement SEMP /Sub-plan:
 - Occupational Health and Safety (OHS) Plan that will include COVID-19 health & safety risk mitigation measures
- (xvi) Maintain a record of incidents, spills, accidents, near miss, fatalities in a logbook at work site

126. Community Health and Safety. Site preparation and civil works, movement of construction vehicles bringing equipment, materials, supplies and machinery may interfere with local road crossings, and may cause traffic congestion. Access to properties, access roads may be disrupted. These activities may pose safety risks to the communities residing around the work site and to the general public. In addition, the construction (workers) camp and an influx of workers may cause social conflict or even lead to the spread of transmittable diseases. Contractor will obtain permissions from island council / relevant local authority before commencement of activities and inform communities on the schedule on a continuous basis. The potential impacts to communities and public will be mitigated by the following measures as set out in the EMP:

- (i) Compliance with National laws and regulations on community health and safety / IFC (WBG) EHS guidelines on Community Health and Safety
- (ii) Adhere to strict schedule for completion of civil works and avoid prolonged construction and disturbance
 - Construction works time restricted to–6 am - 6 pm
 - Any night time works only after receiving due permission from relevant authority
- (iii) Ensure work site is secure during peak construction; discourage access by public through appropriate fencing, barricades, warning cones (e.g., around work site, excavated foundations, temp access tracks, etc.), warning signage, lighting and assign security personnel to prevent trespassing, vandalism of equipment
- (iv) Maintain access to adjacent properties, access / pedestrian roads or provide nearest alternate route marked on map
- (v) Conduct meaningful consultations with communities to keep them informed on subproject implementation schedule (and changes if any), in particular those that may result in disruption with area access, vehicular movement, utilities, noisy / dust generating activities, night time works, etc.; distribute project information leaflet in local language
- (vi) Conduct community awareness programs, including health & safety risks due to transmittable diseases (HIV, COVID-19)
- (vii) Inform and consult with the community on project GRM
- (viii) Record of incidents/accidents/near-miss/fatalities associated with the project will be maintained
- (ix) Records of issues raised will be maintained in accordance with the project GRM
- (x) Implement SEMP /Sub-plan:
 - Community Health and Safety Plan

5. Impacts on Air Quality, Noise and Vibration

127. Air quality. Moderate temporary or short-term air quality impacts are anticipated at peak construction stage (which will be scheduled in the dry season) such as fugitive dust generation associated with construction works and transport (of materials, equipment and machinery), loading, unloading and haulage of materials and corresponding increase in vehicular (exhaust) emissions and/or mobile generators. This will impact the construction workers at the works site, communities/households in the local area (Hulhumalé subproject site) and downwind of the subproject site. Use of construction machinery and equipment and movement of construction vehicles may also levels of nitrogen oxides (NO_x) and sulphur oxides (SO_x), affecting air quality. Some building works may produce fumes containing small quantities of toxic and hazardous chemicals such as volatile organic compounds (VOC) and poly-aromatic hydrocarbons (PAH). The contractor will conduct air quality monitoring at the work site and at sensitive receptor sites (e.g., households) downwind of the work site bi-monthly during peak civil works and once after completion of the civil works to monitor and mitigate exceedances (if any) with respect to the Ambient Air Quality Standards. The potential adverse impacts on air quality will be mitigated by following measures as set out in the EMP:

- (i) Clear demarcation of work site with barricades, no encroachment outside demarcated work site to prevent dust / fugitive air emissions
- (ii) Periodic watering at work site including staging area, unpaved areas, unpaved roads, temp access tracks, exposed stockpiles (if any)
- (iii) Use of chemical dust suppressants will be prohibited
- (iv) Concrete batch mixing process located at least 10 m downwind of nearest settlement, construction (workers) camp
- (v) Regular inspection (specifically prior to use of) / periodic maintenance of heavy equipment, machinery, construction vehicles to minimize emissions and noise, and reduce OHS risks
- (vi) Compliance with National laws and regulations on air quality / IFC (WBG) EHS guidelines on Air Emissions and Ambient Air Quality, whichever is stringent
- (vii) Conduct air quality monitoring monthly during civil works⁶⁰
 - location: Hulhumalé subproject, DV/GBV work site and sensitive receptors downwind of work site
- (viii) Control vehicle speed to ≤ 8 km/h in unpaved areas including unpaved approach roads Post the speed limit sign in the work areas
- (ix) Vehicles transporting materials that generate dusts will be covered with tarps Construction equipment, and machinery will be maintained to a high standard to minimize emissions
- (x) Implement SEMP:
 - Dust Control
- (xi) Record and maintain log of monitoring/incidences of non-compliance and rectification

128. Noise and vibration. Moderate noise impacts are anticipated during peak construction stage; these will be temporary and localized at work site as construction machinery and equipment, mobile generators and vehicles generate noise as they operate; other noise sources include loading, unloading and haulage of equipment and materials. Construction machinery,

⁶⁰ Air quality monitoring to be undertaken using handheld portable air monitoring devices at select locations for Occupational Health and Safety Purposes

equipment may produce noise levels up to 90 A-weighted decibels (dBA). For the work site only construction workers will be close to the noise generating equipment, machinery and vehicles for extended periods of time. Households/communities residing around work site are likely to be subject to moderate and intermittent noise impacts above the WHO limit of One Hour Equivalent Continuous Level 'A weighting' (LAeq)⁶¹ 55 dBA. Measurement of noise and vibration levels at the work site will be conducted by the contractors bi-monthly during civil works to monitor and mitigate exceedances (if any), with respect to the ambient noise and vibration standards. The potential impacts due to noise and vibration will be mitigated by the following measures as set out in the EMP:

- (i) Compliance with National laws and regulations on noise / IFC (WBG) EHS guidelines on Noise, whichever is stringent
- (ii) Construction activities utilizing heavy machinery work will be restricted between 6 AM – 6 PM; night time works only after receiving due permission from relevant authority
- (iii) Advance warning and sharing of civil works schedule including any night time works to nearby communities will be provided
- (iv) Ensure generators (if any), heavy duty equipment is accompanied with machinery / equipment specifications, are sound insulated (e.g., noise reducing mufflers) and placed in enclosures to minimize ambient noise levels
- (v) Regular inspection (specifically prior to use of) / Periodic maintenance of heavy equipment, machinery, construction vehicles to minimize emissions and noise, and reduce OHS risks
- (vi) Conduct noise and vibration monitoring monthly during civil works⁶²
 - o location: Hulhumalé subproject, DV/GBV work site and sensitive receptors downwind of work site
- (vii) All construction workers / operators will use appropriate PPE including ear defenders when operating machinery and equipment
- (viii) Implement SEMP:
 - Construction Noise
- (ix) Record and maintain log of monitoring/incidences of non-compliance and rectification

6. Impacts on Water Resources and Water Quality

129. There are no water sources / coastline in an around Hulhumalé subproject site; [REDACTED] [REDACTED].⁶³ Any impacts to water quality and resources, will occur during peak construction stage and these will be temporary and localized at the work site will be in terms of increased turbidity, run-off of construction related wastewater and sewage discharge and contamination in case of improper handling of polluting materials. Most of the construction activities will take place in the dry season. The work site will be provided with temporary sanitation facilities for workers, construction wastewater management plan will be implemented by the contractor and a temporary secured area will be established for storage of materials that is sited away from direct sunlight. Moreover, the building site will be designed to

⁶¹ A'-weighting = correction by factors that weight sound to correlate with the sensitivity of the human ear to sounds at different frequencies.

⁶² Monitoring will be conducted utilizing hand-held monitors

⁶³ "[This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]"

define and strength the natural drainage pattern. The potential adverse impacts on water quality and resources during construction stage will be mitigated by the following measures as set out in the EMP.

- (i) Compliance with National laws and regulations on water quality / IFC (WBG) EHS guidelines on Wastewater and Water Quality, whichever is stringent
- (ii) Clear demarcation of construction (workers) camp in pre-designated area (within work site) with vegetation clearance limited to its footprint and at least 10 m from water sources, water bodies, drainage
- (iii) All work site, storage areas, disposal sites distanced from water sources, water bodies, drainage e.g., stockpiles, all waste types, recycling & sorting area, etc.; Keep loose soil material and stockpiles out of drains and flow-lines
- (iv) Maintain temporary secured / controlled area set up for storage and handling of materials with a containment tray or area provided with bunds; secured area to be sited away from direct sunlight, water bodies, water sources
- (v) Maintain an adequate receiving body (bunds, tanks) without causing onsite / offsite adverse impacts for construction related run-off (After collection, process water and muddy runoff and if necessary, employ flocculants such as PAM to facilitate sedimentation or filter to remove silts)
- (vi) Provide temporary sanitary facilities (e.g., portable toilets) at construction (workers) camps and safe drinking water
- (vii) Groundwater abstraction will be prohibited
- (viii) Contractors to include in the construction schedule estimates of anticipated annual water usage and sources of water for construction
- (ix) Implement SEMP:
 - Construction Wastewater

7. Impact on Ecological Resources

130. There are no protected habitats or species of particular conservation value identified within the defined area of influence for the subproject. The potential impacts on ecological resources will be mitigated by the following measures set out in the EMP:

- (i) Minimize shrub clearing, confined to the footprint of the work site
- (ii) No use of chemicals (pesticides/herbicides)
- (iii) Restore temporarily disturbed areas to pre-construction conditions
- (iv) =Bird / bat roosting sites will not be disturbed
- (v) Vegetation planting with native species to stabilize soil
- (vi) Any damage to areas and/or infrastructure outside the agreed work site (Corridor of Impact) will be restored to pre-construction conditions and will be subject to compensation at contractor cost and through written agreement with the land owner, as applicable

H. Post Construction and Operation & Maintenance Stage

131. Potential adverse impacts during this stage have been assessed for all proposed infrastructure. Overall, impact significance is low and residual impacts are low; exception is the resultant land use change/visual impacts for which residual impacts will continue to remain moderate. Post construction activities will be supervised by the PIU safeguards staff in coordination with NSC and construction field supervisor while O&M activities will be implemented and monitored by the facility operators (MGFSS).

1. Workforce Organization and Orientation

1.1. Orientation for Project Staff, Facility Operators

132. The NSC will conduct briefing and orientation for all project staff - PIU, construction field supervisors, contractors, facility operators on the following:

- (i) EMP, GRM, Information disclosure and meaningful consultation, safeguards monitoring and reporting requirements
- (ii) ADB and Republic of Maldives labour standards
- (iii) Responsibilities of the facility operators in implementing SOMP and monitoring safeguards compliance with environmental performance indicators and project EMP
- (iv) Responsibility of the facility operators in engaging with affected persons for project GRM
- (v) Environment, health and safety and hygiene at work site
- (vi) Create awareness of health & safety risks due to transmittable diseases (HIV/AIDs, COVID-19), child labor, bonded labor or forced labor
- (vii) Record and maintain briefing and orientation events log with duration and list of attendees

2. Post Construction Stage

133. The contractor in coordination with NSC will undertake the following activities post completion of civil works:

- (i) Backfill any excavations and trenches with excess excavated materials generated during civil works
- (ii) Implement landscaping along new building boundary (thereby reducing visual and dust impact)
- (iii) Re-seeding work site or any backfilled areas with native plant, tree species / sowing soil binding grass for restoring habitat (and soil stabilization) at least within 30 days of completion of civil works, for activities carried out during periods of hot or extreme weather, ensure adequate aftercare to maximize survival
- (iv) Ensure proper land levelling, grading for soil stabilization, drainage and other erosion-prone working areas and permanent stabilization measures at least within 30 days of completion of civil works
- (v) Design and maintain an onsite compost pit; designated area for sorting, recycling etc., (10 m from water bodies / sources / building)
- (vi) Contractor will be responsible for proper removal and disposal of any significant residual materials and wastes that remain on work site after completion of civil works
- (vii) Biodegradable waste such as cleared vegetation, if any, may be provided to local communities for use
- (viii) Record of waste disposal sites with corresponding distance from work site, date, location map and number of trips to be maintained at work site
- (ix) Any damage to areas or infrastructure outside the agreed work site (corridor of impact) will be restored to pre-construction conditions and will be subject to compensation at contractor cost and through written agreement with the land owner / relevant agency, as applicable.
- (x) Implement the following SEMP /Sub-plan:

- Waste Management Plan
 - Site Rehabilitation and Clean-up:
 - Remove all machinery, tools, equipment, barricades, signs, surplus materials, debris, and rubbish
 - Demolish temporary structures not required for O&M and transport to the MNPHI / FENAKA warehouses/depots
- (xi) Rehabilitate / vegetate spent borrow pits / spoils disposal sites within 30 days of closure (to prevent soil erosion and dust)

3. Operation and Maintenance Stage

134. The facility operator in coordination with the area service provider will undertake O&M at the constructed Hulhumalé DV/GBV. The O&M activities at the new buildings will include:

- (i) Drainage, Rainwater harvesting (RWH) tank maintenance.
 - Regular inspection and cleaning of tank, filters, drainage gutters, and/or tanks to reduce the likelihood of contamination
 - Ensure water from other sources is not be mixed with that in the tank
 - No use of chemicals/detergents for cleaning purposes
- (ii) Vegetation Management.
 - Maintain the re-seeded site; maintain trees, hedges at perimeter margins, maintain vegetation along approach / pedestrian roads to new building
 - Employ manual vegetation maintenance methods such as trimming of grasses and plants within the new building site and employ local labour
 - For landscaped, re-seeded work site, ensure adequate after care to maximize survival, e.g., periodic watering, gardening, etc.
 - No chemicals (herbicides/pesticides) will be used
 - To avoid accumulation of manually trimmed vegetation and branches, these will be allowed for collection by local people for firewood or facility operator will contact the relevant service provider for collection, transport and final disposal
- (iii) Maintenance of Sanitation Facilities
 - Carry out regular maintenance of the sewerage system (including plumbing, pipeline, collection system, etc.)
 - Maintain permanent sanitary facilities
- (iv) Maintenance of Fire-fighting Equipment
 - Ensure firefighting equipment (fire extinguishers, sand buckets) are provided on each floor, regularly checked for expiration date, refilled, replaced as required (prior to the expiration date) maintained;
 - Any wet sand (if any) in the bucket should be replaced with dry sand
- (v) Waste Generation, Handling and Disposal.
 - Compliance with national laws and regulations on waste management/IFC (WBG) EHS Guidelines on Waste Management, whichever is stringent
 - Domestic solid waste will be segregated as organic waste and inorganic waste
 - Maintain an onsite composting pit, if used, for processing organic waste; to be later used as manure for plants, trees and vegetation in the new building

- / local area
 - Inorganic waste shall be collected, transported by WAMCO for final disposal in an approved dumping area
 - Staff collecting the domestic solid waste will be provided with necessary PPE's (including gloves, masks and boots)
 - Contractor will be responsible for proper removal and disposal of any significant residual materials and wastes that remain on work site after completion of civil works
 - Implement SOMP / Sub-plan:
 - Waste Management Plan
- (vi) Water Usage.
 - Groundwater abstraction will continue to be prohibited
 - Within 60 days of after the start of operations, the facility operator to estimate of water usage for purposes of O&M of the new building and submit to PMU
- (vii) Occupational Health and Safety.
 - Compliance to national OHS standards / IFC (WBG) OHS Guidelines, whichever is stringent
 - Provide and maintain signage as per local laws for warning of electrical hazards, if any
 - Appropriate PPE to be used during O&M activities, as necessary
 - Equipment and tools for O&M activities will be inspected before use to ensure proper and safe operation
 - Record of incidents/ accidents/ near-miss/ fatalities will be maintained
 - Implement SOMP/ Sub-plan:
 - Occupational Health and Safety Plan
- (viii) Community Health and Safety.
 - Access to adjacent land, properties shall be maintained
 - Hold informal consultations with local residents on intermittent basis
 - Record of informal consultations will be maintained
 - Records of issues raised will be maintained in accordance with project GRM

I. Cumulative and Induced Impacts

135. Field visit to the subproject site indicate that the wider area is under development in Hulhumalé Phase I. Cumulative impacts can arise from other similar projects in the vicinity of this subproject; consultations with HDC suggest future intention for developing a commercial centre and an educational centre adjacent the proposed subproject; however, no plans have been signed or approved at the time of this draft IEE. A key component of the planned Phase I development in Hulhumalé is residential housing / commercial centres. Information on infrastructure development projects in the wider area of influence are not known at this time. Given the constraints in availability of information, it is only possible to qualitatively assess cumulative impacts.

136. Topography and land-use. Hulhumalé subproject site is on empty plot situated in close proximity to two upcoming residential housing (close to commissioning stage) while the wider area consists of established and functioning institutional buildings / residential homes. While there are empty plots on either side of the proposed subproject site, there is no planned development

information for these and/or the wider area. Cumulative impacts resulting from land use change is expected to be moderate since all building construction will have negative impact on topography and land use.

137. Soils, Water resources. When preparing site for construction, some contractors clear the entire site of vegetation and trees, often levelling and grading the whole extent of the site. This may result in soil compaction, erosion, disturbance to site slope and drainage pattern, and increase the sedimentation of nearby water bodies / coastline. In Hulhumalé, the proposed site has no vegetation or tree cover, and it is situated inland with no nearby water bodies [REDACTED]. While building construction for the subproject will not occupy large area (work site is 10,000 square feet), cumulative impacts could be significant if not managed properly especially since more buildings are under construction in the surrounding plots / wider area. During operation, buildings require water for kitchen use and sanitation. Some facility operators may undertake groundwater abstraction that may affect the groundwater table, and result in excess usage and shortage in water availability for other users in the area; however, this is not anticipated for the subproject. With mitigation measures to avoid disturbance to soils, natural slope, drainage as well as estimating water usage for the new building and avoiding groundwater abstraction, cumulative impacts associated with current and future building development in this regard are expected to be minor.

138. Air, Noise and Vibration: Most civil works for building will have negative impacts on air, noise and vibration during peak construction period, which are temporary and localized in nature. With implementation of mitigation measures and adoption of good engineering practices, the cumulative impacts associated with current and future building development in this regard are expected to be minor. There will be no air quality, noise or vibration issues during operation.

139. Ecology. The site due diligence has confirmed that there are no protected habitats or species of particular conservation value present with the defined area of influence for the subproject and the wider land area. The cumulative impacts in this regard are considered to be minor.

140. Human Environment. Resettlement and rehabilitation of affected persons may have higher relevance in cases of land acquisition. However, with implementation of safeguard measures such as careful site selection that avoids land acquisition, impact on private assets, the cumulative impacts associated with current and future building development in this regard are expected to be minor.

141. Waste. All buildings construction and operation will need to effectively manage their wastes such as biodegradable waste (vegetation clearances), if any, construction and demolition debris, presence of workers and polluting materials, leaks and spills, and solid waste. The area service providers will be utilized for waste collection, transport, and disposal. The cumulative impacts associated with current and future buildings in this regard are expected to be minor, if managed effectively.

142. Visual and Aesthetics. For Hulhumalé, building is only G+2.5 and this will blend in with other existing buildings in the wider area. Building will sit low on the horizon, therefore cumulative impacts associated with current and future buildings in this regard are expected to be minor.

⁶⁴ “[This information has been removed as it falls under the exception to disclosure in ADB’s Access to Information Policy, para. 17.5.(x)]”

143. Induced impacts would include more frequent use of approach roads for the transportation of workers, equipment and machinery to the building site during construction. This may result in traffic nuisance to nearby communities and increase in dust due to movement of vehicles and increase in vehicular emissions affecting air quality. However, with mitigation measures and adoption of good engineering practices, the induced impacts in this regard are expected to be minor.

VI. ANALYSIS OF ALTERNATIVES

A. Site Selection

144. The proposed land plot has been allocated by the HDC upon request of the MFGSS. The allocated site in Hulhumalé is considered appropriate for the proposed DV/GBV due to easy user access from the wider area and close proximity to commercial establishments and other similar institutional facilities.

B. With and Without Project Scenario

145. Table 16 presents a comparison of a “With project” and a “Without project” scenario.

Table 16: “With” and “Without” Project Scenario

No.	Parameter	With Project Scenario	Without Project Scenario
Environment			
1	Effect on protected, sensitive or forest areas	No effect, avoids national protected areas, environmentally sensitive and forest areas	No effect
2	Effect on endangered	No effect avoids Critical Habitats	No effect
3	Tree cutting, looping and trimming	Hulhumalé. Selected land plot has no trees, no vegetation	No effect
4	Air Quality	Minor effect during peak construction period Increase in air emissions and dust due to civil works	No effect
5	Water supply	Minor effect during construction and O&M Increase in water usage /withdrawal compared to without project. Shall comply with project EMP and usage limits as prescribed in permits / licenses obtained from relevant authorities Minor effect during O&M	No effect
Social			

No.	Parameter	With Project Scenario	Without Project Scenario
6	Disturbances to communities	<p>Hulhumalé: Major effect during peak construction period due to close proximity of other functioning establishments in close proximity</p> <p>Site will have temporary and localized impact due to noise and vibration, air emissions and dust due to movement of machinery and construction vehicles, influx of labour</p> <p>Compliance with project EMP including information disclosure, consultation and participation activities with communities</p>	No issue
7	Effect on agriculturally productive land	No issue	No issue
8	Effect of business	Construction and O&M activities will give emphasis to hiring of local workforce generating economic and livelihood generation opportunities; indirect impact of consumed materials and services in the supply chain	No issue
9	Status of living	Major effect, improved access to DV/GBV.	No change
Gender based development			
10	Social development	Major effect; the project enables integration of equal rights, participation, and benefits for women in social and economic spheres as stipulated in the Government Strategic Action Plan 2019-2023. The project option will positively enhance social services that enable women to overcome barriers to equal access to economic opportunities and participation in governance, such as community care centres for children and elderly, and support services for survivors of domestic and gender-based violence.	No change

VII. INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

A. Consultation and Participation

146. Consultations with local stakeholders in the subproject defined area of influence (North Malé - Hulhumalé) were conducted in June 2022 before the commencement of any subproject activities to inform them of the proposed subproject interventions and obtain feedback. Information disclosure and meaningful consultations will continue throughout the project implementation cycle. Consultations with local stakeholders included the HDC that regulates all development aspects undertaken in Hulhumalé including implementation of planning and construction regulations, guidelines and standards for building projects, MFGSS and MNPFI representatives (total 19 persons 11 female and 8 male) as well as local community members (total 12 persons, 9 female and 3 male). Prior to this site visit was carried out by the ADB national consultants along with HDC, MNPFI, MFGSS on 24 May 2022, after finalization of the proposed site. Details of meetings and community discussions are enclosed as **Appendix 5**.

147. During the meeting with HDC, the project architect and HDC discussed building regulations, design parameters and applicable leniencies that may be employed for the subproject. Status and availability of utility network such as water, sewerage, electricity, waste collection as well as ongoing building constructions in the wider area were discussed.

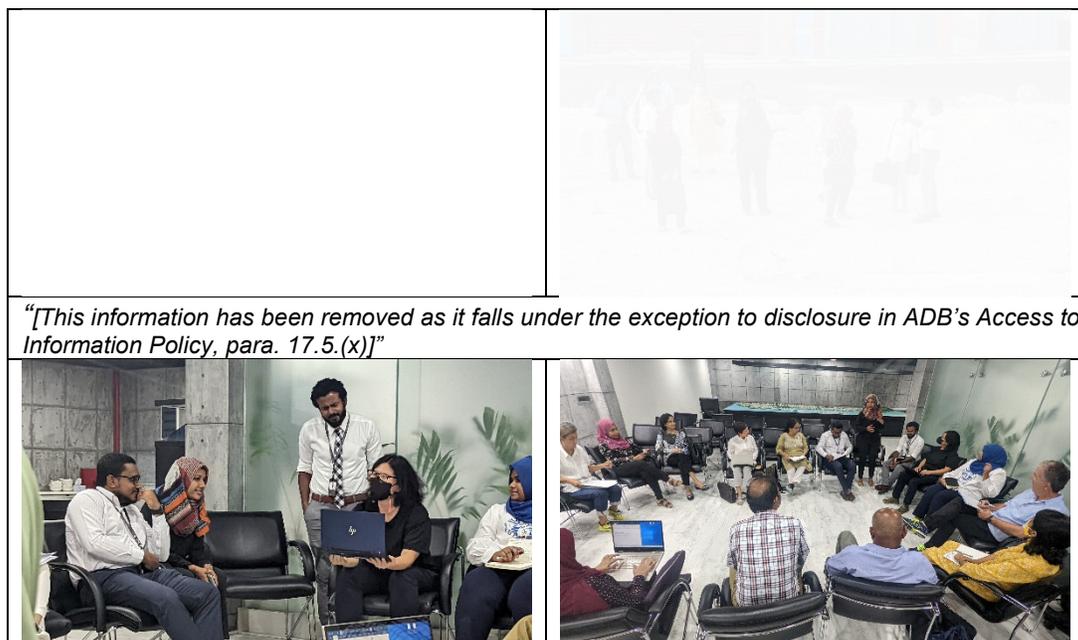
148. Consultations with local community members suggest support for the DV/GBV for the overall development of women in the atoll including opportunities for people via temporary employment during construction / civil works and permanent employment positions for both women and men during operation of the DV/ GBV. While the representatives understood there may be some inconveniences during peak construction / civil works period, no specific questions were raised with respect to environment safeguards.

149. The list of persons met at Hulhumalé are provided in Table 17 followed by consultation photos.

Table 17: List of Persons met at Hulhumalé

Name	Designation	Office
Charlene Liue	Project Manager	ADB
Mahmood Riyaz	Environmental; Safeguard ADB (Local)	ADB
Ruppa	Social Safeguard	ADB
Mateo Mode	Climate Change Specialist	ADB
Sanobar Durani	Environmental Safeguard (international)	ADB
Achyutha Rao	Environmental Safeguard	ADB
Deb Thomas	Gender Consultant	ADB
Seetha Raghupathy	Project Architect	ADB
Ismail Musrshid	Project Architect (local)	MFGSS PMU
Akram Hussain	Director General	MFGSS
Athifa Ibrahim	Gender Specialist (local)	ADB
Mariyam Shiuna	Project Officer	MFGSS/ PMU
Nasira Nasir	Quantity surveyor	MNPHI
Fathimath Leena	Director General	MFGSS
Abdulla Madeeh	Business Development Officer	HDC
Amintha Riuman Wasif	Sen. Business development officer	HDC
Hassan Abdul Muhsin	Sen Env. Analyst	HDC
Ziya Zaki	Urban Planner	HDC

Figure 8: Photo Documentation of Consultations – Hulhumalé



150. Consultation with the Government Environmental Protection Agency (EPA), Malé March 14, 2022. The Director General, EPA confirmed that for subproject that involve small buildings (G+1 or G+2 such as at Hulhumalé), it does not fall under Schedule D of the EIA regulation 2012. However, the PIU will submit a screening form to the EPA in a specified format at the time of preliminary design. The PIU will also be responsible for applying and obtaining the required construction permit from the HDC prior to award of work contract.

B. Information Disclosure and Future Consultations

151. The PIU with support of the PMU will supervise and ensure meaningful information sharing, consultations and active participation of concerned stakeholders. The intention of the meaningful consultation and information disclosure is to prevent misconceptions on subproject impacts, implementation process and doubts or misconceptions on the subproject that may cause delays in project implementation.

152. The PIU, assisted by NSC, will identify various groups of subproject stakeholders and their different roles and interests in the project ensure active engagement of such persons in the defined area of influence. The PIU, assisted by NSC will prepare a detailed schedule, location, invited participants, information to be disseminated and methods of consultation. An overview activity outline is presented in Part 2 of 2 of IEE.

153. The PIU and contractor focal point person (C-EHS), assisted by NSC, will conduct consultations with the identified stakeholders e.g., affected persons, households, communities and these will include information disclosure on the subproject environmental impacts (positive and negative), safeguards measures including community health and safety, training in EPRs, implementation schedule and process, results from environmental baseline surveys, affected

persons right to complain and Project GRM. Consultations with affected persons / aggrieved party, households and communities will provide a two-way information sharing channel, ensuring that the concerns, questions and ideas of the affected persons / aggrieved party, households and communities will be discussed and responded to in an appropriate and gender inclusive way. Appropriate consultation methods will be adapted to suit the prevailing pandemic (COVID-19) conditions and restrictions. PMU/PIU will ensure that consultations are conducted following all applicable COVID-19 protocols. Where necessary, virtual consultations methods will be employed.

154. The PIU and contractor focal point person (C-EHS), assisted by NSC will record all information dissemination and consultation activities and the results from consultations with the affected persons / aggrieved party, households and communities, including how concerns raised and recommendations made are addressed in the updated IEE and EMP. These will be documented and reported to the PMU in the contractor monthly reports and PMU will submit these to the ADB as part of semi-annual environmental / safeguards monitoring reports. Consultations with relevant stakeholders will continue throughout project implementation cycle and will be open and gender inclusive.

155. The updated IEE and EMP as well as Environmental / Safeguards Monitoring Reports will be disclosed on ADB website (www.adb.org) as required by the ADB SPS (2009) and ADB Access to Information Policy (2018); these will also be made available at HDC and PIU websites. A project information leaflet will be made available in an easy-to-understand local language (Dhivehi) for the affected persons / aggrieved party, households and communities during public consultation meetings, at subproject construction field offices and at HDC office / School notice boards. The project information leaflet will contain subproject information including procedures for project GRM and key contact information e.g., PIU safeguards officer, PMU representative contact, HDC representative, NSC, contractor focal point person such as C-EHS.

VIII. GRIEVANCE REDRESS MECHANISM

A. Awareness of Stakeholders

156. Stakeholders such as the HDC, Women Development Committee, etc., were informed of the proposed subproject, potential temporary impacts, project benefits and project GRM at the time of consultations in June 2022.

157. A project information leaflet in local language (Dhivehi) containing details of subproject information and project GRM will be made available at the subproject construction field offices and at the HDC office, local school notice boards local during subsequent consultations. The project GRM information will pertain to procedures for making complaints and key contact information e.g., PIU safeguards officer, PMU representative contact, HDC representative, NSC, contractor focal point person such as C-EHS

B. Need for Grievance Redress Mechanism

158. The project GRM will provide an accessible platform for receiving and facilitating resolution of complaints from affected persons / aggrieved party on subproject implementation. GRM will cover both environment and social safeguard issues such as those raised on environment such as temporary increase in dust, noise or traffic causing inconvenience to local people, access to adjacent properties / land or other relevant issues.

C. Current Scenario

159. There is no established GRM currently at the implementing agency MNPHI; however, the implementing agency has been made aware of the project GRM requirements such as procedures of handling complaints/grievance attributed to environment or social issues. With assistance of NSC, the PIU and contractor focal point person (C-EHS) will proactively engage with affected persons/aggrieved party and other concerned stakeholders via a community awareness program prior to start of civil works. The program will cover the scope of the subproject, schedule of construction activities, identified impacts and mitigation measures, health and safety issues and project GRM. There will be ongoing consultations during the project implementation cycle as described in activity outline presented in Part 2 of 2 of IEE.

D. Project GRM

160. The project GRM is detailed in Part 2 of 2 of IEE. The PIU will ensure that:

- (i) Project GRM acceptable to ADB is established and functioning for the project in accordance with provisions and within timeframes specified in the EMP (upon grant effectiveness or award of contract, whichever is earlier) to consider safeguards related grievances/ complaints; and
- (ii) A GRC / task force is functioning effectively to:
 - Review and document eligible complaints of affected persons / aggrieved party and other relevant stakeholders
 - Proactively address grievances
 - Provide the complainants with notice of the decisions made as per the timeframe stipulated in the project GRM
 - Prepare periodic reports to summarize:

- the number and types of complaints received and resolved at all tiers;
- chosen actions and time required for resolution; and
- final outcomes of the grievances; and
- Make the reports available to PMU for submission to ADB as part of the regular Safeguards Monitoring Reports.
- Eligible complaints will include:
 - those related to the subproject activities,
 - any of the area service providers,
 - complaints on misuse of funds and other irregularities, and
 - grievances due to any safeguards, labour and gender issues.

E. ADB Safeguards Indicator for Project GRM

161. ADB safeguards indicators include assessment of whether the project GRM is functioning effectively, indicators of a functioning GRM, include:

- (i) Implementing agency MNPFI provided a formal letter that confirms that the GRM has been established and is operational with a list of GRC committee members, PMU representatives and PIU safeguards officer / project lead and Contractor focal point person -C-EHS
- (ii) The project information leaflet has the GRM steps explained and focal point person contact information and has been handed out to all households, communities and available at Island Council office / school notice boards
- (iii) Evidence of consultation/verbal dissemination of the project GRM to households, communities and public consultation (this can be shown through presentation materials, minutes of meetings, photos and attendance sheet)
- (iv) Evidence of project signage within the wider subproject site and at construction field site with GRM focal point person contact information
- (v) GRM focal point persons are mobilized and functioning in their role
- (vi) GRM record-keeping system is established and functioning
- (vii) Complaints and resolutions included in semi-annual environmental / safeguards monitoring reports.

IX. ENVIRONMENTAL MANAGEMENT PLAN

A. Introduction

162. Part 2 of 2 covers the EMP which covers the defined area of influence of the subproject and consists of three components: (i) project readiness checks for effective environmental management during design and pre-construction stage and environmental mitigation measures during construction, post construction and operation stage; and (ii) environmental monitoring measures during all stages of project implementation. It also establishes the institutional arrangements, roles and responsibilities of stakeholders involved in implementing mitigation and monitoring measures and reporting, training and capacity building requirements and cost estimates for implementation of the EMP. The EMP is based on preliminary design and inputs from the PIU and project team for the subproject as of March, April, May and June 2022.

B. Mitigation and Monitoring Plan

163. This EMP covers the defined area of influence for the subproject and consists of three sections: (i) project readiness checks for effective environmental management during design and pre-construction stage; (ii) environmental measures during construction, post-construction and operation stage; and (ii) environmental monitoring measures during all stages of project implementation.

164. The mitigation and monitoring measures for the corresponding identified adverse environmental impacts are enclosed as Part 2 of 2 of IEE. The EMP will be updated during detailed engineering design and/or prior to civil works, as needed, to cover any change in site conditions, after the contractor / check surveys, performance of contractors and/or feedback from local people or other concerned stakeholders.⁶⁵

165. During the construction stage, safeguards monitoring will be a daily, weekly or monthly process to ensure that non-compliance to the EMP by the contractors if any will be avoided and/or immediately addressed. Monitoring and maintenance of the project assets during operation will ensure the integrity and safety of the structures and associated components, thus, minimizing safety risks to the public and damage to adjacent properties.

166. EMP Cost estimates are enclosed in Part 2 of 2 of IEE; templates for monitoring and sample GRM form are enclosed as Appendix 7.

C. Institutional Arrangements and Implementation Responsibilities for Safeguards

167. Institutional arrangements and implementation responsibilities are detailed in Part 2 of 2 of IEE.

D. Safeguard Contract Clauses for Inclusion into Bid Documents and Civil Works Contracts

168. **Bid Documents.** The Bid Documents for the contractors will contain two sections relating to environmental issues: Firstly, the IEE and EMP (based on preliminary design) will be repeated in its entirety as Annexures to the bid documents so as the bidder is aware of their safeguards requirements under the subproject and help them in putting environmental costs to their proposal. Secondly, a clause indicating that the contractors will be responsible for commencing civil works only after review and approval of updated IEE and EMP based on detailed engineering design; the review and approval will be conducted by PIU and later by PMU and ADB; that following the requirements of the EMP and that the contractors will prepare their own SEMP for the subproject.

169. **Contract Documents.** The contract documents will follow a broadly similar pattern to the bid documents. It is not considered necessary to repeat the mitigation measures verbatim in a list of environmental contract provisions, rather the contract will specify that the contractors are responsible for implementation of the subproject IEE and EMP, its updation based on detailed engineering design, implementation of SEMP. Again, the IEE and EMP will be included as Annexures to the contracts so the contractors will be liable for any non-conformances with the safeguard requirements specified in subproject IEE.

⁶⁵ Detailed engineering designs will be finalized by the Design-Build Contractor; the PIU will provide the detailed designs to PMU for ADB review to determine if the EMP requires revision. The draft and final EMP will be disclosed on the MNPHI and ADB public websites and included in the Project Administration Manual (PAM). The contractors will be informed of their obligations to implement the EMP and to include EMP implementation costs in their bids for subproject works.

X. CONCLUSION

170. The project is confirmed as environment category B as per ADB SPS 2009; a draft IEE and EMP have been prepared for the subproject at Hulhumalé. The subproject will comply with the national environmental requirements and ADB SPS 2009.

171. This project is expected to have significant benefits impacting women survivors of domestic and gender-based violence and their dependent children and reduce the unpaid care burden on women who are responsible for care of aged family members and young children. The project will also integrate climate resilience measures in design that will ensure long term sustainability of the project (+50 years).

172. The North Malé atoll – DV/GBV Hulhumalé subproject will be a G+2.5 building designed for total 20 units, 22 occupants (residents); procurement type is Design-Build; the administrative area is North Malé / HDC. This IEE and EMP are based on preliminary design and will be updated after completion of the detailed engineering design as part of the Design and Build contract; civil works shall commence only after updated IEE and EMP have been cleared by ADB.

173. The subproject involves permanent land take of 10,000 square feet (0.092 ha) that is situated in on empty land with no trees or vegetation. [REDACTED]

[REDACTED]⁶⁶ There is no land acquisition involved since the land parcels belong to the HDC; these will be transferred over to the MNPHI in line with the land use master plans for the area.⁶⁷ The development of supporting services / associated facilities, e.g., lateral connection from new building to main sewerage line, water supply, electricity connection as well as waste collection, transport and disposal to the subproject site, etc., will be the responsibility of the area service providers. These utilities are available in the immediate vicinity of Hulhumalé subproject site, VERs are not impacted and no further due diligence is required. Supporting services / associated facilities will be integrated into subproject detailed engineering design; operating charges will be the responsibility of the facility operator. Maintenance of existing approach road to the subproject site will be the responsibility of MNPHI.

174. The potential adverse environment impacts associated with the subproject have been avoided or minimized through careful site selection in line with the area approved land use plan. While climate change impacts are not anticipated to be significant over the design life of the subproject (+50 years), the preliminary design integrates climate resilience measures and measures in subproject siting and structural design as well as consideration of extreme weather events; These will be integrated in the final detailed engineering design.

175. Overall, the identified adverse impacts can be managed through effective implementation of the mitigation measures specified in the IEE and EMP as well as appropriate social safeguard measures agreed in the subproject SSDDR and through inclusion of safeguards specification in tender documents for contractors. There are no significant residual impacts anticipated; there will be impacts of moderate significance due to change in landscape / visual features during subproject lifetime (+50 years) while the remaining residual impacts are of low significance.

⁶⁶ “[This information has been removed as it falls under the exception to disclosure in ADB’s Access to Information Policy, para. 17.5.(x)]”

⁶⁷ Subproject conform to land use classification and HDC planning regulations and HDC approved master plan for Phase I and Phase II Hulhumalé.

Monitoring and evaluation parameters have been identified to check the effectiveness of EMP measures and to ensure any unidentified impacts can be readily addressed. Project risks such as low institutional capacity of the PIU and contractors / facility operators and their failure to implement the EMP effectively during construction and O&M stages, will be mitigated by providing periodic training on safeguards and appointment of full-time dedicated safeguards officer on staff at PIU.

176. The PIU will utilize the proposed GRM that is acceptable to ADB as soon as the project commences to deal with environment and social issues that may be raised by affected persons / aggrieved party during subproject implementation. The GRM will be coordinated and implemented by the PIU, construction field supervisor and contractors and assisted by NSC. GRM will address concerns and complaints promptly via transparent process.

177. Meaningful consultations with local stakeholders were conducted in June 2022. Consultations with local stakeholders will continue during detailed design and project implementation. Measures to address concerns raised during the consultations will be integrated in the detailed design and EMP. Overall, all stakeholders were made aware of the proposed subproject and were supportive due to expected benefits such as local employment and access to DV/GBV.

Environmental Management Plan to Initial Environmental Examination

October 2022

Proposed Grant
Republic of Maldives: Strengthening Gender
Inclusive Initiatives Project

Part 2 of 2

Prepared by the Ministry of National, Planning, Housing and Infrastructure of the Republic of Maldives for the Asian Development Bank.

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Part I

Safeguards Implementation Responsibility

Environmental Management Plans

- (i) Table 1. EMP: Design and Pre-Construction
- (ii) Table 2. EMP: Activities Prior to Mobilization On-Site
- (iii) Table 3. EMP: Construction and Operation – New Building

Part II

Applicable Environmental Quality Standards

Part III

Guidance on managing risk from COVID-19 on construction sites and in worker ' s accommodation

A. Introduction

1. This EMP draws on the findings of the IEE report prepared for subproject at North Malé atoll - Domestic Violence / Gender Based Violence shelter (DV/GBV) at Hulhumalé and discussions and agreements with the implementing agency MNPFI, PMU MGFSS, PIU and ADB. The EMP defines mitigation and monitoring requirements and will ensure environmental safeguard activities during all stages of the subproject implementation in order to prevent, reduce or mitigate adverse environmental impacts and risks. It also defines the institutional arrangements, roles and responsibilities of stakeholders involved and cost estimates for implementation of the EMP.

2. This EMP is based on preliminary design and inputs from the PIU and project team for the subproject as of March, April and May 2022. Since works will be undertaken under a Design - Build (DB) contract, the draft IEE and EMP, based on preliminary design, will be included as a separate annexure in all bidding, tender and contract documents. Detailed engineering designs will be finalized by the Design-Build Contractor. The contractor will provide recommendations for the detailed designs to PIU for review and these will be further submitted to PMU MGFSS and ADB for review and approval and the IEE and EMP will be updated. The draft and final IEE and EMP will be disclosed on the ADB public website (www.adb.org), MNPFI website (<https://planning.gov.mv/dv>) and included in the ADB Project Administration Manual (PAM). The PIU and contractors will be informed of their obligations to implement the EMP and to include EMP cost estimates in their bids for subproject works.

B. Mitigation and Monitoring Plan

3. This EMP covers the defined area of influence for the subproject at North Malé atoll and consists of three sections: (i) project readiness checks for effective environmental management during design and pre-construction stage; (ii) environmental measures during construction, post-construction and operation stage; and (ii) environmental monitoring measures during all stages of project implementation.

C. Institutional Arrangements and Implementation Responsibilities for Safeguards

4. The key institution involved in the safeguard implementation under project output 5 (the subproject) will be the MNHPI and its PIU, PMU MGFSS, and contractors – all assisted by a National Safeguards Consultant or NSC, that will be engaged under this project by the ADB.

5. MHNPI. The implementing agency MNPFI for project output 5 will be responsible for overall supervision and compliance with: (i) safeguards requirements, (ii) coordinate the project GRM, (iii) coordinate with line ministries to ensure smooth implementation of the project,⁶⁸ (iv) engage NSC, (v) supervise the procurement process, contract administration, preparation of design, drawings, bids, and (vi) report to the PMU MGFSS. In particular, the MNPFI will ensure consistency of safeguards documents with government policy, legal and administrative framework across all jurisdictions – national and local level. It will also ensure that safeguards requirements are included in all bids, contracts and tender documents including the provision to apply penalties in case non-compliances to safeguards are encountered repeatedly.

⁶⁸ The PIU will ensure that subproject activities are synchronized between the SSDDR and EMP implementation.

6. **Project Management Unit.** The implementing agency MNPFI will be supported by the PMU of MGFSS. The PMU MGFSS will be headed by a Project Director and will be assisted by a Project Coordinator, along with other personnel such as: Project Officer, Procurement Specialist, Financial Management Specialist, and Project Architect. The PMU will be responsible for overall project oversight and implementation, including planning, monitoring and financial management. Specifically, the PMU will: (i) undertake project management, administration, and inter-agency coordination at the executive level; and (ii) prepare and submit to ADB, as endorsed by MOF, required project reports including safeguards documentation and annual audited project financial statements. The PMU will have overall responsibility of the Project's safeguard compliance with ADB SPS 2009.

7. **Project Implementation Unit.** The MNPFI will set up a PIU for project output 5 in Malè. The PIU will be headed by the Project Lead and assisted by an Engineer, Accounts / Procurement officer and Construction Field Supervisor. The Engineer will have additional charge as a Project Safeguards Officer. The PIU will manage the tendering of contracts, appoint the Design-Build contractors, assure the technical quality of design and construction, supervise the construction / commissioning process. The project safeguards officer, supported by the NSC and construction field supervisor, will ensure compliance with and implementation of IEEs and EMPs and SSSDDRs across all subprojects as well as grant covenants and specifically be responsible for the following environmental safeguards activities:

- Ensure subproject compliance to Government of Maldives, City/Island Council statutory and legal environmental requirements, ADB SPS 2009, subproject IEEs and EMPs, and safeguard covenants (if any);
- Check whether all relevant clearances, permits are obtained in a timely manner; include standards/conditions, if any, stipulated in clearances, permits in the subproject detailed design;
- Work closely with design team to include environmental and climate resilience considerations in subproject design and technical specifications;
- Review and ensure that updated subproject IEEs and EMPs reflect final subproject detailed design and submit to ADB for review and approval; update subproject IEEs and EMPs to reflect any changes shall also be updated in case of any unanticipated impacts;
- Ensure that full / final subproject IEEs and EMPs approved by ADB are included in bidding documents, contract clauses and civil works;
- Ensure an efficient subproject implementation in line with subproject IEEs and EMPs with adequate budget for safeguard activities;
- Review and approval of contractor's monthly report on SEMP implementation
- Prepare and submit environmental safeguards checklist as part of the project quarterly progress report (project QPR),
- Prepare and submit semi-annual and annual environmental / safeguards monitoring reports and submit to PMU who will then submit these to the ADB; ensure disclosure of subproject IEEs and EMPs, and safeguards monitoring documents;
- Ensure effective grievance redress mechanism (GRM) set up, coordinate grievance redress process, registration, records, information dissemination, etc., and ensure timely actions by all parties; report to PMU;
- Ensure adequate awareness campaigns, information disclosure is held within affected communities / host communities at each subproject sites;
- Periodical review of safeguards related safeguard covenants, and the compliance in subproject implementation;

- Organize periodic training and capacity building activities for subproject staff, workers, contractors, City/Island Council, as required, for safeguards in line with EMPs;
- Ensure that subproject activities are synchronized between SSDDR and EMPs implementation, as needed;
- Ensure that any damage to areas and infrastructure outside the agreed work sites (Corridor of Impact) will be restored to pre- construction conditions and will be subject to compensation at contractor cost and through written agreement with the land owner, as applicable;
- Conduct regular site visits for overseeing compliance with safeguards;
- Ensure environmental baseline surveys are conducted by the contractor in line with subproject EMPs;
- Conduct meaningful consultation in compliance with the subproject IEEs and EMPs throughout project implementation cycle; disclose relevant information on safeguards to stakeholders, affected people etc.;
- Review and approval of contractor's site specific EMP / SOMPs; ensure implementation of contractor's site specific EMP / SOMPs.

8. National Safeguards Consultant (Environment and Social). **National Safeguards Consultant (Environment and Social)**. A NSC will be engaged by the MNPFI to assist PIU in all environmental and social safeguards related tasks and will support the PIU project safeguards officer in the implementation of the subproject IEE, EMP and oversight of the contractors.; engagement will be for 3 years on full time basis. . Detailed Terms of Reference (TOR) is enclosed as Appendix 6a.⁶⁹ At the end of NSC service contract, the PIU will be directly responsible for ensuring compliance with safeguards during construction. The NSC will support the PIU in safeguards tasks detailed above and the following activities:

- Update, as necessary, the subproject IEEs, EMPS, SSDDR), and after obtaining PIU, PMU MGFSS and ADB's approval, oversee its implementation
- Work and coordinate with PIU and PIU appointed contractors, construction field supervisor to develop and finalize site EMPs (SEMPs), and after obtaining PIU's approval, oversee SEMP implementation onsite
- Work and coordinate with PIU and contractors to supervise the integration of safeguard measures into the detailed engineering design, civil works and post construction works of all proposed infrastructure under each subproject by the PIU / PIU appointed site contractors
- Assist PIU and PIU appointed site contractors with compliance to ADB SPS 2009 requirements including handling complaints and grievances filed through the project GRM
- Be responsible for building capacity of implementing agencies (PMU MGFSS and PIU) and contractors in safeguards monitoring and reporting
- Assist the PIU in coordination activities with relevant line ministries and City / Island Councils on clearances, permits, and compliance with relevant national and local regulatory requirements
- Assist PIU appointed contractors in conducting project level COVID-19 risk assessment; ensure that the all OHS plans integrate measures to mitigate COVID-19 health risks that are aligned with Government guidelines and measures
- Monitor SEMP / EMP implementation; conduct random checks / audits of PIU appointed contractor's OHS performance

⁶⁹ Detailed tasks are listed in the Terms of Reference (TOR) prepared for National Safeguards Consultant (NSC).

- Assist PIU and contractors in preparation of environmental safeguards QPR checklist and semi-annual environmental / safeguards monitoring reports
- Assist facility operator in developing and implementing the SOMPs during O&M stage
- Assist facility operator to regularly co-ordinate with the relevant stakeholders to provide up to date information on subproject activities and address any issues that arise during operation stage, as needed.

9. Construction Field Supervisor. A construction field supervisor will be contracted by the implementing agency MNPHI to oversee and supervise day to day activities of contractor works in coordination with the NSC and PIU. Detailed TOR is enclosed as Appendix 6b. ⁷⁰

10. PIU appointed Contractors. Design-Build Contractors will be responsible for implementing the mitigation measures during construction stage and will be supervised and monitored by construction field supervisor, the NSC and overall supervision of the PIU. To ensure that the contractors comply with the EMP provisions, the PIU will ensure that the safeguards requirements are included in all bids, contracts and tender documents including the provision to apply penalties in case non-compliances to safeguards are encountered repeatedly. Contractors will appoint their own Contractor Environment, Health and Safety (C-EHS) focal point person who will be also responsible for safeguards implementation as per subproject IEEs and EMPs and Grievance Redressal as per project GRM. Contractors will be required to prepare a site-specific EMP (SEMP). The contractors will bear the costs of preparing the SEMP; these will help to avoid unplanned activities of contractors and will guide the smooth implementation of all subproject activities. The contractors will not commence any civil works until the EPA Environment Decision Statement / Screening Decision and building construction permit has been granted by the EPA and City / Island Council to PIU and ADB has approved the full / final subproject IEEs and EMPs based on detailed engineering design. Contractors shall:

- Work with the construction field supervisor, NSC to finalize site specific SEMP during construction⁷¹
- Appoint focal point person C-EHS within its staff on full time basis;
- Attend training and capacity building sessions;
- Conduct orientation and daily briefing sessions to workers on EHS, GRM;
- Submit site specific EMP (SEMP) for construction to PIU for review and approval
- Submit monthly progress reports on the implementation of the site SEMP / EMP
- Integrate COVID-19 health & safety risk mitigation measures in their OHS plans
- Engage in project GRM and regularly co-ordinate with NSC and relevant stakeholders such as affected persons, households to provide up to date information on subproject activities and address any issues that arise during subproject implementation during construction stage.
- Ensure that appropriate worker facilities (workers accommodation / camps) are provided at the work site in line with the subproject EMP;
- Register and maintain records of all work-related accidents, and undertake remedial actions to mitigate/minimize recurrence;
- Implement EMP measures and report to PIU if any new impacts are surfaced; seek guidance from NSC and PIU as required for SEMP / EMP implementation;
- Conduct environmental monitoring (air, noise, etc.) as per the monitoring plan;
- Prepare monthly EMP monitoring reports and submit to PIU; and

⁷⁰ Detailed tasks are listed in the Terms of Reference (TOR) prepared for the Construction Field Supervisor.

⁷¹ The SEMP will need to be fully compliant with the EMP and will need to be prepared within 30 days of contract award and approved 10 days prior to access to the site.

- Address any grievances effectively and in timely manner.

11. The PIU will ensure that the contractors are aware of their obligations including specific provisions requiring contractors to comply with: (i) all applicable labour laws and core labour standards on (a) prohibition of child labour as defined in national legislation for construction and maintenance activities; construction site should not hire any child below 18 years of age, (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste including no discrimination against pregnant women, and (c) prohibition of forced labour; and with (ii) the requirement to disseminate information on health & safety risks due to transmittable diseases, including HIV/AIDS and coronavirus disease (COVID-19) to employees.

D. Monitoring and Reporting Procedures

12. **The PMU will be responsible for safeguards reporting to ADB.**⁷² The PIU, assisted by the NSC, will conduct monitoring for the subproject in North Maléatoll and provide the environment input based on site visits, compliance checks and prepare the semi-annual safeguards report for submission to PMU MGFSS; the PMU MGFSS will further verify the information and submit the reports to ADB semi-annually during construction stage and annually during O&M stage (to be submitted within 30 days from the end of each monitoring period from project effectivity until a project completion report is issued). The safeguards / environmental monitoring reports will be publicly disclosed on the ADB website, as well as HDC and PIU websites. Reporting to ADB will continue until project completion report is issued. The environmental safeguards QPR checklist will be submitted to ADB as part of the project quarterly progress report, refer to Appendix 10.

13. **The PIU will be responsible for safeguards monitoring.** The PIU, assisted by the NSC, will coordinate and interact with the PMU MGFSS on compliance to ADB safeguards requirements and with relevant government agencies and City / Island / Councils on permits and clearances and national regulatory requirements, update and finalize the IEE and EMP as needed.

14. The NSC will assist PIU and contractor focal point person (C-EHS) in handling complaints and/or grievances filed through the project GRM, if any.

15. The NSC will oversee three types of subproject monitoring conducted under the EMP:

- Project readiness monitoring. To be conducted by the PIU with assistance of the NSC (Refer to project readiness checklist, provided below).
- Environmental monitoring. To be conducted by the contractor with assistance of the NSC and construction field supervisor, across all stages of subproject implementation as stipulated in the EMP and assessing compliance with applicable national laws and IFC (WBG) EHS guidelines (Refer to environmental surveys in EMP tables).
- Compliance monitoring. To be conducted by the PIU with assistance of NSC to verify SEMP implementation, EMP mitigation and monitoring compliance during all stages of subproject implementation, including random checks / audits of contractor's OHS performance

⁷² Safeguards monitoring reports will be required to be submitted to ADB within 30 days from the end of the relevant period.

16. During construction, the contractor will prepare the monthly progress reports on SEMP/EMP implementation and submit to PIU, this will inform the semi-annual safeguard monitoring reports submission to the PMU MGFSS. The contractor monthly progress reports will include compilation of daily monitoring sheets (that will be prepared for contractor use by NSC) that is duly signed by the PIU safeguards officer.

17. After completion of the construction stage, the facility operator will continue to prepare and submit annual environmental / safeguards monitoring reports till the project completion report is issued.

18. ADB will oversee project compliance on the basis of the project QPRs, and semi-annual and annual monitoring reports provided by the PMU MGFSS ((to be submitted within 30 days from the end of each monitoring period from project effectivity until a project completion report is issued) and site visits (generally, one to two times per year). For any non-compliance, ADB will make suitable recommendations for undertaking remedial measures for mid-term correction and improvement, if required. ADB's monitoring and supervision activities are carried out on an on-going basis until a project completion report is completed.

19. Monitoring template and sample GRM form is enclosed as Appendix 7 of IEE.

Project Readiness Checklist

S. No	Indicator ⁷³	Criteria	Assessment
1	Subproject IEE and EMP update	Subproject IEE and EMP aligned and updated in line with final detailed engineering design and approved by PIU, PMU MGFSS and ADB	Yes No
2	Compliance with safeguards covenants	PIU complies with safeguards covenants related to subproject design, commencement of civil works and environmental management planning, including ensuring IEE and EMP is updated before commencing any civil works by the DB contractor	Yes No
3	Climate risk measures / extreme weather events	Climate resilience measures and measures for extreme weather events integrated into final detailed engineering design	Yes No
4	Design Features for Environmental Impact Mitigation	Features integrated into final detailed engineering design including mitigation measures and recommendations as per subproject IEE and EMP	Yes No
5	Environmental Decision Statement/Screening Decision Domestic construction permit and approvals	Environment Decision Statement / Screening Decision obtained from EPA Domestic construction permit applied and obtained from relevant local agencies / City / Island Council by DB contractor	Yes No Yes No
6	Implementation Set up	NSC hired Construction Field Supervisor hired	Yes No Yes No

⁷³ SSDDR = Social Safeguards Due Diligence Report; SEMP = Site Environmental Management Plan; SOMP = Standard Operation & Maintenance Plan; GRM = Grievance Redress Mechanism.

S. No	Indicator ⁷³	Criteria	Assessment
		PIU set up – staff appointed, including safeguards officer (staff engineer with additional charge)	Yes No
7	Training and Capacity Building	Training and capacity building conducted for PMU MGFSS, PIU staff, workers, and PIU appointed contractors	Yes No
8	Public involvement effectiveness	Information Disclosure, Meaningful consultations completed	Yes No
		GRM / GRC established with entry points	Yes No
		Contractor I focal point person for environment, health and safety (C-EHS) appointed within staff on full time basis; also responsible for safeguards and GRM	Yes No
9	SSDDR documents	SSDDR updated	Yes No
10	SEMP / SOMP	Site specific SEMP prepared by the NSC in coordination with contractor / construction field supervisor, containing site maps with receptor information, reviewed and approved by PIU Site specific SOMP prepared by NSC in coordination with facility operator / MGFSS	Yes No
11	COVID-19 health & safety risk mitigation measures	COVID-19 health & safety risk mitigation measures integrated into subproject planning	Yes No
12	Chance Find Procedures for PCRs	Identification of sensitive periods (e.g., religious festivals) conducted Ocular inspection/ transect survey completed Chance Find Procedures established for PCRs	Yes No
13	Baseline monitoring / environmental surveys	Baseline monitoring / environmental surveys conducted by contractors, findings and recommendations shared with PIU and PMU MGFSS and integrated in detailed engineering design by contractors	Yes No
14	Bidding documents and contracts with environmental safeguards	Bidding documents and contracts incorporating the draft subproject IEE and EMP based on preliminary design	Yes No
15	EMP / safeguards financial support	PIU / Contractors set aside the required funds for EMP / safeguards implementation	Yes No
16	Project information leaflet prepared for dissemination	Project Information Leaflet in local language (Dhivehi) prepared by PIU with subproject information and key contact information including C-EHS, focal point person contact, Information disclosure and consultation conducted	Yes No Yes No

E. Training and Capacity Building

20. The capacity of PMU MGFSS, PIU and construction field supervisor, site contractor staff responsible for IEE and EMP implementation, GRM and supervision, monitoring and reporting will be strengthened through appointment of trained project officer at the PMU MGFSS and PIU as well as ensuring appointment of contractor's focal point persons (as discussed under Institutional arrangements and implementation responsibilities).

21. The PMU MGFSS, PIU and contractors will receive training in EMP and GRM implementation, site inspections, supervision, monitoring and reporting, conducting meaningful consultations, information disclosure, handling complaints / dispute resolution, as well as on the relevant environmental rules and regulations applicable to the subprojects. Training will be facilitated by the NSC. In addition, orientation and briefing of project staff, contractors, hired workers will be conducted prior to mobilization on site by NSC during construction and O&M stages

22. Cost estimates for training and capacity building plan are provided below.

Training and Capacity Building Plan, Preliminary Cost Estimates ⁷⁴

Training	Attendees	Content	Schedule	Period (days)*	Frequency	No of persons	Cost (USD /person/day)	Total
EMP implementation, Project GRM	PIU safeguards officer, Contractors / Focal Point Persons	ADB SPS (2009)	Once prior to start of civil works	1	1	10	100	1,000
		Maldives's relevant environment, health and safety laws, environmental regulations and policies, including domestic permits and approvals						
		IFC (WBG) EHS Guidelines						
		EMP - environmental management, monitoring and reporting						
Orientation and Briefing on Safeguards	PIU Contractors / Focal Point Persons, Works, Participating City / Island Council	Requirements for information disclosure, meaningful stakeholder consultation, community awareness program	Once prior to mobilization on site for construction and two more times during construction	1	3	20	50	3,000
		SSDDR						
		Roles, Responsibilities and Procedures						
	Facility Operator	Same content as above	Once before start of O&M	1	1	6	50	300
Total estimated cost per subproject site								4,300

EMP = Environmental Management and Monitoring Plan; **PMU** = Project Management Unit; **PIU** = Project Implementation Unit; **IFC (WBG) EHS** = International Finance Corporation (World Bank Group) Environment, Health and Safety; **GRM** - Grievance Redress Mechanism; **SSDDR** = Social Safeguards Due Diligence Report

⁷⁴ Subproject Contractor = DV/GBV shelter Design and Build Contractor; Facility Operators = PMU MGFSS.

F. Information Disclosure, Consultation and Participation

23. Consultations during design and pre-construction. Chapter 7 of IEE describes the public consultations, information disclosure and participation activities carried out during subproject preparation at North Malé atoll.

24. Future Consultations. The NSC will assist PIU in preparing a Consultation and Participation Plan for affected persons, relevant stakeholders such as households, communities, City / Island Council in the subproject area of influence in North Malé atoll with schedule, location, invited participants, information to be disseminated and methods of consultation. An overview of activity outline for a Consultation and Participation Plan is shown below. Consultations with affected persons / relevant stakeholders will include dissemination of project information leaflet in local Dhivehi language. The leaflet will include subproject information such as on subproject specific environmental impacts (positive and negative), safeguards measures including community health and safety, health & safety risks due to transmittable diseases (HIV/AIDs, COVID-19), training in ERPs including safety and evacuation, construction activities / implementation schedule, results from baseline environmental monitoring surveys, social safeguard issues as per SSDDR, affected persons right to complain and the project GRM. The leaflet will also include the contact information PMU MGFSS, PIU, NSC, construction field supervisor and contractor address and telephone numbers for focal point persons / entry points e.g., C-EHS as well as of the City / Island Council representative.

25. Consultations with the affected persons / relevant stakeholders will provide a two-way information-sharing channel, ensuring that the concerns, questions and ideas of the affected persons / relevant stakeholders will be discussed and responded to in an appropriate and gender inclusive way. The PIU, NSC and contractors will record all information dissemination and consultation activities and the results from consultations with the affected persons and relevant stakeholders. The PIU and NSC will also record how concerns raised and recommendations made are addressed in the updated subproject IEE and EMP. Consultations will be supported and supervised by implementing agency MNPFI. Consultations with affected persons / relevant stakeholders will continue throughout subproject implementation and will be open and gender inclusive.

The updated subproject IEE and EMP as well as EMRs will be disclosed on ADB website as required by the ADB SPS 2009 and Access to Information Policy (September 2018).⁷⁵ These will also be made available on HDC and PIU websites.

Activity Outline for Consultation and Participation Plan and Information Disclosure⁷⁶

Project Implementation Schedule	Activity	Stakeholders
Detail design phase: Detailed Walkover Survey and once prior to construction	Public information meetings Informal meetings on subproject design for aligning people's responses in detailed design Dissemination of project information leaflet Community awareness program on environment and social safeguards one (1) month prior to civil works, including informal meetings for information updates on subproject schedule and activities through City / Island Council	Affected persons Affected Households Relevant local organizations City / Island Council

⁷⁵ <https://www.adb.org/documents/access-information-policy>

⁷⁶ All consultations and information disclosure material will be made available in the local language.

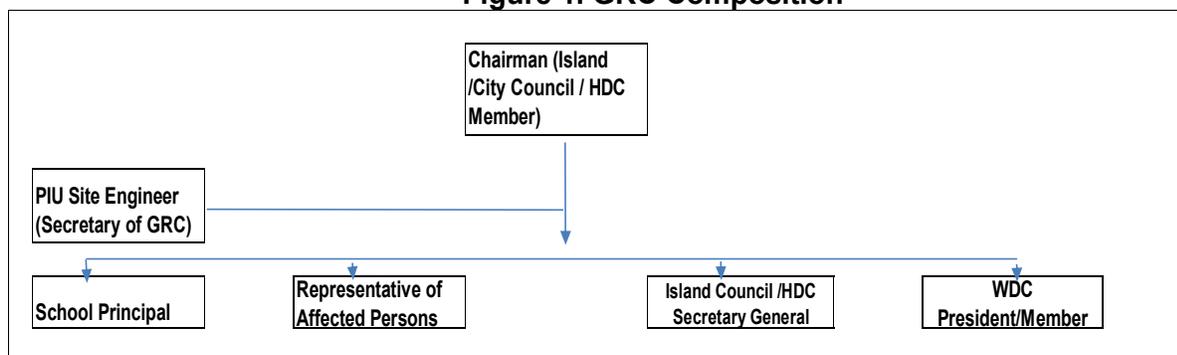
Project Implementation Schedule	Activity	Stakeholders
Civil construction works	Informal meetings for information updates on subproject schedule and activities through City / Island Council Public information meetings, as needed Community awareness program on environment and social safeguards one (1) time during civil works Information leaflet made available at public information meetings, subproject field offices and City / Island Council Office	
O&M	Informal meetings for information updates and concerns, as needed	

G. Project GRM

26. A project specific GRM will be used as part of this EMP to receive and manage any public concerns, issues or grievances that may arise due to the subprojects at North Malé atoll. The GRM comprises: (i) a set of clear procedures developed by the PIU to receive, record and address any concerns which are raised by affected stakeholders; and (ii) specific contact details for individuals at the PIU, PMU, Island Council and contractor level that serve as focal point person (C-EHS) for access to the project GRM. The GRM will be implemented immediately upon grant effectiveness or award of contract, whichever is earlier.

27. Composition and Area of Jurisdiction. The PIU will set up a project specific Grievance Redress Committee (GRC) as soon as the project commences. GRC will function from construction to O&M stage and will be applicable at the second tier (see "Procedures" below). The GRC will be established across the defined area of influence where the subprojects will be implemented. The GRC composition is enclosed as Figure 1.

Figure 1. GRC Composition

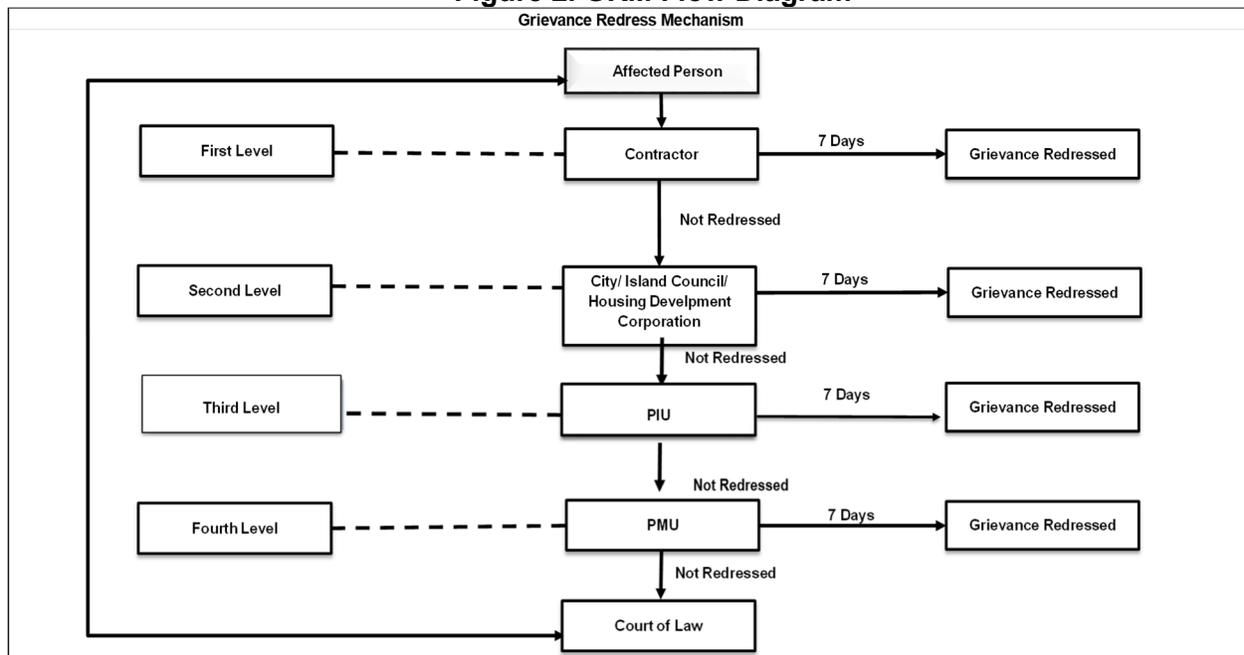


28. Responsibilities. The GRM / GRC is expected to: (i) resolve issues on dust, noise, vibration, construction related nuisances to affected persons, households or public; (ii) resolve issues on negotiated / voluntary land donation or involuntary land acquisition, relocation, income restoration, compensation to temporary damages to trees and other use of land such as temporary staging area for civil works, if any; (iii) convene once a month to review complaints lodged (if any); (iv) record the grievances and resolve the issues within the stipulated time from the date the grievance

was filed; and (v) report to the affected persons, households or public upon the status of grievance resolution and the decisions made or action taken and receive feedback. Contractors including contractor focal point persons (C-EHS) and work staff will be briefed by the NSC on project GRM.

29. Procedures. The GRM flow diagram is enclosed as Figure 2. The key contacts for the contractor and GRC will be included in the project information leaflet for dissemination in the defined subproject area of influence in North Malé atoll and also posted at subproject field construction site, field office, and City / Island Council, School notice boards in affected area in local language (Dhivehi). There are multiple entry points to the project GRM, including face-to-face meetings, written complaints, anonymous drop-boxes for written comments, and/or e-mail. All concerns received will be treated confidentially and professionally. The identity of individuals will not be circulated among project agencies or staff and will only be shared with senior staff and then only when there is clear justification. The GRM will consist of the following steps of conflict resolution:

Figure 2. GRM Flow Diagram



First tier (Construction Field Supervisor / Contractor)

- At field level, Grievances will be registered formally by contacting the Construction Field Supervisor or Contractor (C-EHS). If the grievance cannot be resolved at first tier, then the contractor can assist affected persons / aggrieved party to take forward the registered complaint to second tier. The contractor must keep records of all grievances received. The contractor will be responsible to resolve the complaint within 7 days and communicate the decision to the affected persons / aggrieved party formally in writing.

Second Tier (GRC)

- If or when the affected person / aggrieved party is not satisfied with the action or decision of the contractor, the affected person / aggrieved party will take the issue to GRC consisting of area representatives and PIU site engineer. The GRC will screen the received grievance to determine whether the concerns raised in the

grievance are within the scope of the subproject. The GRC will determine solutions to the issues either by (i) discussing internally, or (ii) joint problem solving with affected person / aggrieved party, or (iii) a combination of both options. If the complaint is resolved within 7 days, the GRC must communicate the decision to the affected person /aggrieved party formally in writing. Should matter be unresolved and/or the affected persons / aggrieved party are not satisfied with the resolution, the complaint will be referred by the GRC to the third tier.

Third Tier (PIU Level)

- If the issue/complaint cannot be resolved in a way that is satisfactory to all parties, the GRC will bring the issue to the PIU level safeguards officer (staff engineer with additional charge), project lead). The PIU will meet the affected person / aggrieved party and GRC and try to resolve the issue/ grievance. Within 7 days of the submission of the complaint to the PIU level, it has to take a decision and inform in writing to the affected person / aggrieved party and GRC of the decision.

Fourth Tier (PMU Level)

- If the issue / complaint cannot be resolved in a way that is satisfactory to all parties, the PIU safeguards officer (staff engineer with additional charge, project lead) and PMU (project coordinator, project director) will hold discussions on the matter internally and if necessary: (i) arrange visit to the subproject site and hold on-site discussions with the affected person / aggrieved party, GRC and contractor; (ii) refer to matter to the project steering committee. Within seven days of the submission of the complaint to the PMU, it has to take a decision and inform in writing both the affected person / aggrieved party and GRC of the decision.

30. Access to ADB. If efforts to resolve disputes using the project GRM remain unresolved or unsatisfactory, the affected person / aggrieved party have the right to directly discuss their concerns or problems with the ADB project officer at ADB HQ. The complaint may be submitted in any of the official languages of ADB DMC. This may be done at any time sending the written complaint to the following address. If affected person / aggrieved party is still not satisfied with the responses of the ADB project officer, they can directly contact the ADB Office of the Special Project Facilitator. The Office of the Special Project Facilitator procedure can proceed based on the accountability mechanism⁷⁷ in parallel with the project implementation.

Project Officer – Strengthening Gender Inclusive Initiatives Project
South Asia Urban Development and Water Division
South Asia Regional
Department Asian
Development Bank
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines

31. Country Legal System. The GRM notwithstanding, an affected person / aggrieved party shall have access to the country's legal system at any stage through the Maldives judicial or appropriate administrative system. This can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM.

⁷⁷ <https://www.adb.org/site/accountability-mechanism/main>

32. **GRC Recordkeeping and Reporting.** The PIU will keep a record of all the grievances received including contact details of complainant, date the complaint was received, nature of grievance, agreed corrective actions, the date these were affected and the final outcome. Documentation of the grievances filed and resolved will be summarized, submitted to the PMU and reported in the project QPRs and semi-annual safeguard reports during construction stage.

33. **Disclosure of Information.** Under the direction of the PIU, the NSC with assistance of the contractors will disseminate project information leaflet and also inform affected persons / aggrieved party / relevant stakeholders on grievance redress procedure, who to contact and when, where and how to file a grievance, time likely to be taken for redressal of minor and major grievances, etc. It will be made known that affected persons / aggrieved party are not charged any fee under project GRM. It is a good practice to provide the affected person /aggrieved party with transport facilities to the GRC hearings. Grievances received and responses provided will be documented and provided to affected persons / aggrieved party during the process. The number of grievances recorded and resolved and the outcomes will be displayed/disclosed in the subproject construction field offices, City / Island Council office.

34. **Review of the Process.** The PIU will periodically review the implementation of the project GRM and record information on the effectiveness of the mechanism, especially on the project's ability to prevent and address grievances.

H. Mechanisms for Feedback and Adjustment

35. The EMP is a living document. The need to update and adjust the IEE and/or EMP will be reviewed during final subproject detailed engineering design or when there are design changes, changes in construction methods and program, unfavourable environmental monitoring results or inappropriate monitoring locations and ineffective or inadequate mitigation measures. Based on environmental monitoring and reporting systems in place, the PIU with the support of the NSC and/or construction field supervisor shall assess whether further mitigation measures are required as corrective action, or improvement in environmental management practices are required. The PIU will inform PMU MGFSS and ADB promptly on any changes to the subproject and needed adjustments to the EMP. The updated EMP will be submitted to ADB for review and approval and will be disclosed on the ADB website.

I. Cost Estimates

36. There are three types of mitigation measures and corresponding costs:

- (i) Human resources for EMP support are part of the NSC costs that will be funded by the project; the project will also fund the procurement of monitoring equipment that will be the property of the PIU.
- (ii) Measures that will permanently become part of the infrastructure such as landscaping, re-seeding of subproject site, hedge planting, maintenance of perimeter margins, perimeter wall, building / road signage, , detailed engineering measures for preventing soil erosion, installation of rain water harvesting tanks for gardening and other outdoor purposes, defining and strengthening natural drainage pattern / storm-water drainage), climate resilience measures will be included within the main civil works contract cost and not double-counted as part of the EMP costs.
- (iii) Training and capacity building activities can be counted as part of the EMP costs and will be funded by the project.

- (iv) Measures during pre-construction (such as conducting environmental baseline surveys) will be included in the tender documents to ensure that all contractors budget these as a specific line item in their bids.
- (v) Measures during the construction stage (e.g., periodic watering for dust suppression, use of hand-held portable air and noise / vibration monitoring devices, quiet / low noise machinery and equipment, PPE, etc.) as well as measures to mitigate unforeseen impacts due to construction activities will need to be included in the tender documents to ensure that all contractors budget these as a specific line item in their bids.
- (vi) Information disclosure, developing project information leaflet, project GRM related costs involved in resolving the complaints (meetings, consultations, communication and reporting/information dissemination) will be borne by the PIU.
- (vii) Facility Operators / MGFSS will bear all Environmental monitoring costs during the O&M stage.

Safeguards Implementation, Preliminary Cost Estimates

S.No	Item	Number	Cost per Unit (USD)	Total Cost (USD)	Sources of Fund / Responsibility
A Environmental Management Costs					
A.1	Training and Capacity building PMU, PIU and Contractors; Orientation of Project Staff and Facility Operator			4,300.00	
	Sub-total for subproject site			4,300.00	EMP costs
	A. TOTAL			4,300.00	
B Administrative Costs, GRM, Consultations, Surveys					
B.1	Human resources for safeguards (safeguards officer, PIU position)		3 years at 25,000 p.a	75,000.00	c/o project funds
B.2	Procurement of monitoring equipment (hand held noise, air quality measuring devices)			8,000.00	
B.3	Public consultations and Information Disclosure		lumpsum	3,000.00	c/o of implementing agency MNPHI (travel costs for safeguards officer at PIU will be borne MNPHI)
B.4	GRM implementation		lumpsum	3,000.00	
B.5	Permits and Approvals		lumpsum	1,000.00	
	Subtotal for subproject site			90,000.00	
	B. TOTAL			90,000.00	
C Pre-Construction, Constuction, Post Construction and O&M					
C.1	PPE, baseline monitoring, periodic monitoring as per EMP		lumpsum	6,000	
C.2	Focal point person appointment (C-EHS also trained in GRM and safeguards)		total of 1 focal point persons for 22 months and 22 work days	24,200	c/o by Contractor (to be included in contractor costs)
C.3	Preparation and Implementation of SEMP / SOMP will take reference from the subproject IEE and EMPs.			1,500	
	Subtotal for subproject site			31,700	
	C. TOTAL			31,700	
	GRAND TOTAL (A+B+C)			1,26,000	

1. Human resources for safeguards and procurement of monitoring equipment will be covered under project funds.
2. Information Disclosure, Consultation and Participation and GRM costs will be borne by the Implementing Agency MNPHI / PIU
3. Measures that will permanently become part of the infrastructure (such as design features for adverse environmental impact mitigation, climate risks, landscaping, hedge planting, detailed engineering measures for preventing soil erosion, defining and strengthening natural/ stormwater drainage, connection to supporting facilities, etc., will be included within the main civil works contract costs and not double-counted as part of the EMP costs.
4. Measures to establish baseline and during the construction stage (e.g. developing SEMP, periodic watering for dust control, use of hand held portable air and noise monitoring devices, quiet / low noise machinery and equipment, PPE, etc.) as well as measures to mitigate unforeseen impacts due to construction activities will need to be included in the tender documents to ensure that all contractors budget these items in their bids. Facility operators will bear all environmental monitoring costs, if any during the operation stage.
5. Costs borne by the contractor will be included as a specific line item in the provisional sum of the tender documents.

PART I

Table 1. Safeguards Implementation Responsibility

Project Stage and Environmental Responsibility					
Responsible Entity	Project Preparation	Engineering Detailed Design	Tendering & Pre-construction	Construction	O&M
MOF	The Ministry of Finance (MOF) is the executive agency for the project; reporting to the executing agency will be through a ministerial project steering committee chaired by MGFSS with representation from relevant Ministries. This ministerial steering committee for the project will lead and provide direction to the PMU which will be established by MGFSS				
MGFSS	The Ministry of Gender, Family and Social Services (MGFSS) will set up the Project Management Unit (PMU) that will incorporate four focal divisions: (i) project administration unit (ii) output 1 lead; (iii) output 2 lead; (iv) output 3 and 4 lead.				
PMU	<ul style="list-style-type: none"> Engage in project GRM as need 	<ul style="list-style-type: none"> Review and approve updated IEE / EMP / SDDDR before submission to ADB 		<ul style="list-style-type: none"> Engage in project GRM as need Prepare project QPRs Verify and use semi-annual environmental / safeguards monitoring reports prepared by PIU and submit these to ADB 	<ul style="list-style-type: none"> Conduct information disclosure, consultation and participation activities, as needed Verify and use annual environmental / safeguards monitoring reports prepared by PIU and submit these to ADB until a Project Completion Report is issued Manage EMP implementation on the ground to ensure effectiveness

Project Stage and Environmental Responsibility					
Responsible Entity	Project Preparation	Engineering Detailed Design	Tendering & Pre-construction	Construction	O&M
					<ul style="list-style-type: none"> Responsible for project assets during O&M, implementation of SOMPs
MNPHI	<p>The Implementing Agency will set up a Project Implementation Unit (PIU) supported by one (1) engineer on staff with additional charge of safeguards on full time basis, supported by Project Lead</p> <p>The PIU will be responsible for overall supervision, coordination and implementation of output 5; the PIU will also be responsible for all procurement, contract administration, preparation of design, drawings and bid documents.</p> <p>The PIU will ensure consistency of all safeguards documents with government policy, legal and administrative framework across all jurisdiction and will assist with project GRM, and in conducting information disclosure, meaningful consultation and participation as well as be responsible for day-to-day project implementation and ensuring compliance with safeguards and oversight of contractors.</p>				
PIU	<ul style="list-style-type: none"> Designate one (1) engineer on staff with additional charge of safeguards (PIU safeguards officer) Engage with consultants on IEE, EMP, SSDDR Engage national (environment and social) consultant or NSC Engage construction field supervisor Conduct due diligence for supporting facilities, if required Apply and obtain permits, clearances, 	<ul style="list-style-type: none"> Confirm climate change resilience measures have been included in the final engineering design Confirm due diligence for supporting facilities included in the final engineering design, if required Confirm that key design features for effective environmental management and mitigation measures have been included in final engineering detail design Update subproject IEEs / EMPs / SSDDRs before submission to PMU 	<ul style="list-style-type: none"> Review bidding documents to ensure that the IEE/EMP clauses are incorporated Manage the procurement process Approve contractor appointed focal point persons within contractor staff (C-EHS) 	<ul style="list-style-type: none"> Supervise EMP implementation to ensure effectiveness Operate and coordinate the project GRM records and reporting Inspect implementation of mitigation measures Manage EMP implementation on the ground to ensure effectiveness Oversight of contractors / guide construction field supervisor Engage in resolving grievances or complaints as per project GRM Engage in information disclosure, consultation and participation activities 	<ul style="list-style-type: none"> Prepare inputs for annual environmental / safeguards monitoring report and submit them to PMU for verification and use until a Project Completion Report is issued

Project Stage and Environmental Responsibility					
Responsible Entity	Project Preparation	Engineering Detailed Design	Tendering & Pre-construction	Construction	O&M
	<ul style="list-style-type: none"> approvals from relevant government agencies / Island Council Provides a formal letter to ADB that confirms that the GRM has been established and is operational with a list of GRC committee members at each level 			<ul style="list-style-type: none"> Prepare inputs for environmental safeguards QPR checklist ⁷⁸ and semi-annual environmental / safeguards monitoring report and submit these to PMU for verification and use 	
NSC ⁷⁹	<ul style="list-style-type: none"> National Safeguards Consultant (NSC) for project output 5 will be responsible for compliance assurance with safeguards through supervision and monitoring of EMP, site SEMP/SOMPs and all contractors across all stages of subproject implementation. NSC will work in close coordination with Construction Field Supervisor employed by the PIU and will also be responsible for guiding PIU in the preparation of safeguards documents, progress reports and monitoring reports. The NSC will be engaged up to completion of civil work and commissioning stage. Assist PIU in / to: <ul style="list-style-type: none"> Prepare project information leaflet for dissemination Conduct information disclosure, consultation and participation activities Conduct training and capacity building for PMU, PIU and contractors Obtaining permits and clearances / approvals 	<ul style="list-style-type: none"> Assist PIU in / to: <ul style="list-style-type: none"> Update IEE /EMP / SSDDR as needed Engage with contractor and coordinate environmental baseline surveys as per the monitoring plan in the approved EMP Confirm that mitigation measures have been included in final engineering detail design including climate 	<ul style="list-style-type: none"> Assist PIU in / to: <ul style="list-style-type: none"> Incorporate EMP in tender documents, bids and contracts Engage with construction field supervisor / contractors to develop site specific EMP (SEMP) with site maps and receptor information Integrate COVID-19 risk mitigation measures in contractor OHS plans 	<ul style="list-style-type: none"> Assist PIU in / to: <ul style="list-style-type: none"> Conduct orientation and briefing of project staff, workers, contractors on safeguard requirements for civil works Work with PIU and contractors in information disclosure, consultation and participation activities Advise on EMP compliance Preparation of SEMP Compliance monitoring in line with EMP 	<ul style="list-style-type: none"> Assist PIU post construction in / to: <ul style="list-style-type: none"> Conduct orientation / briefing of project staff, workers, facility operator on safeguard requirements for O&M Information disclosure, consultation and participation activities, as needed

⁷⁸ Checklist is enclosed as Appendix 10 of IEE.

⁷⁹ Terms of Reference for NSC are enclosed in **Appendix 6a** of IEE.

Project Stage and Environmental Responsibility					
Responsible Entity	Project Preparation	Engineering Detailed Design	Tendering & Pre-construction	Construction	O&M
	<ul style="list-style-type: none"> Integrate project-level COVID-19 risk measures in project planning 	<ul style="list-style-type: none"> resilience measures, results of the baseline surveys, key design features for environmental management Assist PIU in obtaining permits and clearances / approvals 	<ul style="list-style-type: none"> Work with contractors in project readiness with respect to EMP implementation 	<ul style="list-style-type: none"> Assist PIU in conducting random checks / audits of contractor's OHS performance Engage with contractors and coordinate environmental surveys as per the environmental monitoring plan in the approved EMP Assist with project GRM Review monthly progress reports on SEMP implementation by contractors Prepare inputs for project QPR and submit them to PIU for verification and use 	<ul style="list-style-type: none"> Provide technical support to facility operator in preparing and implementing SOMPs
City / Island Council	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Review and approve the domestic construction permit application 		<ul style="list-style-type: none"> Conduct inspection and monitoring of subprojects as per their mandate 	<ul style="list-style-type: none"> Conduct inspection and monitoring of subprojects as per their mandate
Construction Field Supervisor ⁸⁰	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 		<ul style="list-style-type: none"> Oversight of contractors in the field 	
Contractors ⁸¹		<ul style="list-style-type: none"> Conduct baseline surveys as per approved EMP Prepare report of findings and submit to PIU and NSC 	<ul style="list-style-type: none"> Coordinate with NSC / construction field supervisor to finalize site specific SEMP's containing site 	<ul style="list-style-type: none"> Appoint focal point persons within staff (C-EHS) Conduct environmental monitoring as per approved EMP 	

⁸⁰ Terms of Reference for Construction Field Supervisor are enclosed as **Appendix 6b** of IEE.

⁸¹ Contractors imply = MNPHI appointed Design and Build (DB) contractors. Note: EMP implementation during O&M stage will be directly through MGFSS Project Management Unit (PMU).

Project Stage and Environmental Responsibility					
Responsible Entity	Project Preparation	Engineering Detailed Design	Tendering & Pre-construction	Construction	O&M
			<ul style="list-style-type: none"> maps with receptor information Ensure sufficient funding and human resources for proper and timely implementation of required mitigation and monitoring measures as per the approved the EMP throughout the construction stage 	<ul style="list-style-type: none"> Report results of the monitoring data to PIU and NSC Conduct orientation and briefing of hired workers Conduct information disclosure, consultation and participation activities Prepare and submit monthly progress reports on site SEMP implementation to PIU and NSC 	
ADB	<ul style="list-style-type: none"> Review and approve the subproject IEEs, EMPs, SSDDRs and disclose on ADB website 	<ul style="list-style-type: none"> Approve updated subproject IEEs, EMPs and SSDDRs and disclose on ADB website 	<ul style="list-style-type: none"> Review bidding documents Confirm project's readiness 	<ul style="list-style-type: none"> Review project QPRs, semi-annual safeguards monitoring reports (SEMRs) and disclose on ADB website Undertake review missions Advise on compliance issues, as required Review and disclose semi-annual safeguards report on ADB website 	<ul style="list-style-type: none"> Review and approve annual safeguards report and disclose on ADB website Undertake project completion review mission and prepare Project Completion Report for approval by Board and disclose on ADB website
<p>ADB = Asian Development Bank; C-EHS = Contractor Environment, Health and Safety focal point person; C EMP = Environmental management plan; GRM = Grievance redress mechanism; IEE = Initial environmental examination; SSDDR = Social safeguards due diligence report; OHS = Occupational Health & Safety; NSC = National safeguards consultant; PMU = Project management unit; PIU = Project implementation unit; QPR = Quarterly progress report; O&M = Operation and maintenance; SEMP = Site environmental management plan; SOMP = Standard operation and maintenance plan</p>					

ENVIRONMENTAL MANAGEMENT PLANS (EMP)

Table 1. EMP – Design and Pre-Construction

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
A.		Project Implementation Set up								
A.1	D&Pr e-Const r		Non-compliance with ADB SPS 2009 and the national regulatory framework of Republic of Maldives	PIU set up with trained safeguards officer on staff	area of influence	Project Implementation on Set up	Safeguards staff appointed at PIU	Once	PIU	PMU
A.2				Contracting of Safeguards (Environment and Social); National Consultant and Social); Construction Field Supervisor	area of influence	Project Implementation on Set up	NSC, construction field supervisor appointed	Once	PIU	PMU
B.		Site Selection								
B.1	D&Pr e-Const r	Siting of project (new building)	Non-compliance with local land use / master plan	Siting of new building in line with approved land use / master plan by Island Council	work site	Site selection as approved land use /master plan	Site selection completed	Once	PIU	PMU
B.2			Impact on habitats or species of significant	Site selection avoids habitats or species of significant conservation value	area of influence	Site selected avoids habitats / species of significant	Site selection completed	Once	PIU	PMU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Safeguards	Measures and	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT											
B.3			conservation value Impacts on VERs such as households / structures, PCRs, coast line, groundwater wells, pedestrian crossings, trees	Site selected for new building avoids VERs (DV/GBV shelter to retain tree cluster in design and on margins)		area of influence	VERs avoided	Site due diligence / ocular inspection	Once	PIU	PIU
B.4			Land acquisition / resettlement	No land acquisition / resettlement required, subprojects will be implemented in government owned land (with no legacy issues)		work site	Land ownership documentation, revenue records check	Land acquisition avoided	Once	PIU	PIU
C.		Climate risks and extreme weather / natural events consideration in detailed design									
C.1	D&Pr e-Const r	New building detailed design	Subproject vulnerability to climate risks, extreme weather /	Integrate measures for climate risks, extreme weather / natural events impacts in detailed design /as per Climate Change Assessment Report;		new building	Recommendations of CRA report highlighted in detailed designs	DPR and designs approved from PIU	Once	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
			natural events							
C.2			Seismicity / earthquakes	Detailed design to integrate seismicity considerations as per national guidance on seismic design that calls for identification of a max. credible earthquake scenario and associated ground acceleration parameters	new building	Seismicity considerations and recommendations highlighted in detailed design	DPR and designs approved from PIU	Once	Contractor / NSC	PIU
D.		Design features for effective environmental management in detailed design								
D.1	D&Pr e-Const r	new building	Lack of sufficient design and planning to ensure long term sustainability of project and protection of assets created	Detailed design to integrate recommendations from relevant detailed site investigations and include provisions for ensuring effective O&M	new building	Detailed site investigations conducted, recommendations highlighted in detailed designs	DPR and designs approved from PIU; Work plans prepared and approved by PIU	Once	Contractor / NSC / PIU	PIU
D.2				Integrate findings into detailed engineering design from key	new building	Surveys completed and results	DPR and designs	Once	Contractor / NSC / PIU	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Safeguards	Measures and	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT											
				environmental surveys (see TABLE 1, S. No. E)			integrated into detailed design	approved from PIU			
D.3			Selection of materials, constr tech	New building detailed design brief to conform to MNPHI requirements; const tech; selection of materials to address positive visual appeal of new building		new building	MNPHI requirements inclusion in design brief; list of materials included as part of the procurement package	DPR and vendors approved from PIU	Once	Contractor / NSC/ PIU	PMU
D.4			Source of constr materials	Identify sources, vendors of constr materials; specify materials that are recycled, have recycled content or are from sustainable sources; materials to be obtained from government approved vendors		area of influence	List of sources, vendors,	Sources, vendors contracted	Once	Contractor / NSC	PIU
D.5			Integration of energy efficiency / energy conservation measures in new building design	New buildings design to conform to energy efficiency / energy conservation measures		new building	Use of EE measures and certified equipment in building works	DPR and designs approved from PIU	Once	Contractor	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
D.6		Permanent Supporting Services for O&M	Water supply pipeline, Sewerage connection, electric power supply, solid waste collection and disposal	Conduct walkover survey to avoid VERTs (trees, PCRs, existing structures, pipe laying in any private land, disturbance to public or business etc.)	new building	Walkover survey undertaken	DPR and designs approved from PIU	Once	Contractor / Service Provider	PIU
D.7				Obtain prior consent from land owners (e.g. If pipe laying is required in private land) and No Objection Certificate (NOC) from concerned departments (e.g. for pipe laying along access roads) prior to start of construction works	area of influence	Consultation with private land owner, concerned department conducted	Permission obtained, NOC obtained	Once	Contractor / Service Provider	PIU
D.8				Obtain project specific commitment letter that states that Service Provider will provide access to supporting services / network connection to new building within a stipulated timeframe (before new building occupancy)	new building	MOU between PIU and service provider	Subproject specific commitment letter obtained	Once	Contractor / Service Provider	PIU
D.9				Design an onsite compost pit for O&M; designated area for sorting, recycling etc (10m from water bodies / sources / buildings)	new building	feature integrated into design	DPR and designs approved from PIU	Once	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
D.10			Source of water for civil works / new building O&M	Bulk water to be drawn from existing water supply source; Contractors to include in the Construction Schedule estimates of anticipated annual water usage for construction and in consultation with water supply service provider to obtain a subproject specific commitment letter that ensures supply.	work site	MOU between contractor and service provider	Subproject specific commitment letter obtained	Once	Contractor / Service Provider	PIU
D.11			Change in topography (land, vegetation, drainage pattern due to planned construction works)	Undertake site surveys of land area for selected site	work site	Site surveys completed and recommendations highlighted in detailed design	DPR and designs approved from PIU	Once	Contractor / NSC	PIU
D.12				Design of new building will enable efficient drainage of site and maintain natural drainage pattern; or planned drainage works (if any) designed to utilize and maintain natural drainage patterns and to blend in the environment; avoid work in the monsoon season	work site	Site drainage evaluation and integration into detailed design	DPR and designs approved from PIU	Once	Contractor / NSC	PIU
D.13			Change in landscape, visual impact (tree cutting)	Design of new building to avoid cutting of trees; If, however, under unavoidable conditions if tree cutting is required, then prior	new building	Tree type + count information / compensation ratio	Tree cutting avoided or prior permission	Once	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
				permission to be obtained from the competent authority			for cutting obtained			
D.14				Demarcate subproject area or land, clearance restricted to work site	work site	Clear identification of land for clearance / land take	Work site demarcated and cleared	Once	Contractor / NSC	PIU
D.15			Impact on community health & safety	Design to include provision for adequate fencing/barricade and lights around work site	work site	Design feature as impact mitigation in planning	Demarcated work site fenced / barricaded	Once	Contractor / NSC	PIU
D.16			Accidental spillage / leakage, polluting materials	Design temporary secured / controlled area set up for storage and handling of materials with a containment tray or area provided with bunds; secured area to be sited away from direct sunlight, at least 10 m from water bodies, water sources, drainage	work site	Design feature as impact mitigation in planning	Temporary secured area identified and selected	Once	Contractor / NSC	PIU
D.17			Run-off from general construction activities, spills, stockpiles	Design an adequate receiving body (bunds, tanks) without causing onsite / offsite adverse impacts for construction related run-off	work site	Design feature as impact mitigation in planning	Adequate receiving body designed	Once	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
D.18			Lack of identification of borrow areas, spoils area	Identify and use borrow areas / spoils areas licensed by the relevant local authority; obtain prior permission for use	area of influence	Design feature impact mitigation in planning	Borrow area / spoils site identified and due approval for use obtained	Once	Contractor / NSC	PIU
D.19			Improper disposal of polluting materials	Contract licensed waste vendors and/or materials suppliers for collection, transfer, treatment and/or final disposal of polluting materials; identify government depots, scrap yards	area of influence	Identify licensed waste vendors; depots, scrap yards	Contracts signed with vendors, MOU with government depots, scrap yards	Once	Contractor / NSC	PIU
D.20			Sanitation wastewater discharge, odour	Provision for temp sanitation facilities (portable toilets)	work site	Provision for temp sanitary facilities made	Portable toilets setup for construction stage	Once	Contractor / NSC	PIU
D.21			Noise and vibration	Design the siting of any permanent noise making equipment, pumps, etc. away from new building	new building	Design feature impact mitigation in planning	DPR and designs approved from PIU	Once	Contractor / NSC	PIU
E		Environmental (baseline)	Surveys							

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
E.1			Air quality and increase in fugitive dust	Air quality monitoring once before the start of civil works to establish baseline	work site (and sensitive receptors downwind of work site)	PM10, PM2.5	Hand held / portable devices	Once prior to start of civil works	Contractor / NSC	PIU
E.2			Noise and vibration	Noise (and vibration) level measurements once before the start of civil works to establish baseline	work site and at sensitive receptors downwind of work site	Noise (dB) and vibration level measurements	Hand held / portable devices	Once prior to start of civil works	Contractor / NSC	PIU
F		Physical Resources (PCRs)	Cultural							
F.1	D&Pr e-Const r		Loss of places of worship, scared sites	PCR sites avoided	area of influence	Ocular inspection / transect or drone survey completed	PCRs avoided	Once	Contractor / NSC	PIU
F.2				Consult with relevant stakeholders for sensitive periods for religious / spiritual activities		Identification of sensitive periods conducted	Consultation log book	Once	Contractor / NSC	PIU
F.3				Establish "Chance Find Procedures"			Chance find procedures established	Once	Contractor / NSC	PIU
G		IEE and EMP updating								
G.1	D&Pr e-		Non-compliance with ADB	Update IEE and EMP based on final project detailed engineering	area of influence	Updating IEE and EMP	Incorporate final detailed	Once	PIU / NSC with support of Contractor	PMU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
G.2	Constructor		SPS 2009 and the National regulatory framework	design including supporting services			design in IEE and EMP			
H		Permits and Clearances		Submit revised documents to ADB / PMU for approval and disclosure on ADB website if updated			Obtain approval from PMU, ADB and disclosure	Once	PIU / NSC	PMU /ADB
H.1	D&Pr e-Constructor		Potential delays in project implementation	Obtain permits, clearances, NOC from relevant authority / Island Council prior to award of civil works contract	area of influence	Application submissions	Domestic documentation / NOC obtained	Once	PIU / NSC	PIU
I		Information Disclosure								
I.1	D&Pr e-Constructor		Limited outreach and consultation	Schedule activities throughout subproject implementation to engage with stakeholders on topics related to safeguards such as (but not limited to): subproject design, implementation schedule, key construction activities (in particular that results in disturbance or nuisance), community health and safety issues, project GRM, social safeguards. A project information leaflet in local language to be prepared and made publicly available in	communities in and around work site	Announcement to the communities of civil works schedule; distribution of project information leaflet	Consultation log book	One month prior to start of civil works	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Safeguards and Measures	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
J				construction field offices / school notice boards at least one (1) month prior to commencement of civil works						
J.1	D&Pr e-Const r	Project GRM	Smooth project implementation affected due to lack of stakeholder engagement	Establish and operate an efficient and functional GRM / GRC	area of influence	Project GRM / GRC	GRM / GRC set up	Once	Contractor NSC	PIU / PMU
J.2			Interference to existing utilities such as existing pedestrian roads, water pumps, water supply pipelines,	Identify and locate utilities on a site map to prevent unnecessary disruption of services during civil works Prepare a contingency plan in case of interruption to services Provide a 24 hours advance notice to affected communities Resolve queries, conflicts and complaints, if any, in a timely manner.	area of influence		GRM book log	One month prior to start of civil works	Contractor NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
J.3			groundwater wells, electricity outages	Issue public notices, project information leaflets to inform the public within subproject area of influence of the GRM procedures and contact information	project area of influence	Distribution of project information leaflets, public notice	public notice issued, project information leaflet distributed	One month prior to start of civil works	Contractor / NSC	PIU
K		Project social safeguards documentation								
K.1	D&Pr Constructor		Economic loss of affected communities due to loss of land, structure, etc., if any	No economic loss since the land plots are empty	area of influence	Clear land ownership records	NA	Once	PIU	PIU
L		Training and Building Capacity								
L.1	D&Pr Constructor		Effects of unplanned activities, smooth project implementation, strengthening institutional	Conduct training and capacity building for implementing agencies / units, contractors, focus on: ADB SPS 2009, EMP, Contractual obligations and provisions, National regulatory laws, regulations and policies	area of influence	Training and capacity building workshops conducted	Training and capacity building completed with log of date, time, duration / length and list of	Once	NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
M			capacity of implementing agencies / units and increasing safeguards knowledge base				attendees with signature			
M.1	D&Pr e-Const r	Safeguard measures in Contracts, Bids and Tenders	Non-compliance with ADB SPS 2009 and the national regulatory framework	Include updated IEE and EMP in the contractor bidding documents and construction contracts (to coordinate with NSC) to provide basis for the contractors to finalize site SEMP's for construction works	area of influence	Safeguards requirements, EMP in tender, bidding and contract documents	Updated and approved project IEE and EMP for contractors	Once	NSC	PIU
M.2				Contracts to include a provision for:	area of influence	Focal point persons nomination; drafting of provisions	Focal point persons appointed; provisions included	Once	NSC	PIU
M.2.1				Appointing focal point person for: Environment, Health and Safety, also responsible for Safeguards and GRM (C-EHS)			same as above	Once	NSC	PIU
M.2.2				Any damage to areas and infrastructure outside the agreed work site (Corridor of Impact) will be restored to pre-construction		areas or infrastructure damage outside	same as above	Once	NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
PROJECT READINESS CHECK FOR EFFECTIVE ENVIRONMENTAL MANAGEMENT										
				conditions and will be subject to compensation at contractor cost and through written agreement with the land owner, as applicable		corridor of impact; Provision included as a contract clause				
M.2.3				Imposition of penalties in case non-compliances to safeguards are encountered repeatedly			same as above	Once	NSC	PIU
M.2.4				Integration of project level COVID-19 measures in OHS Plans (OHSP) in line with national government guidelines and/or ADB issued Guidelines, whichever is more stringent			same as above	Once	NSC	PIU
M.2.5				Groundwater abstraction will be prohibited.			same as above	Once	NSC	PIU

Table 2. EMP – Activities Prior to Mobilization On-Site

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
ACTIVITIES PRIOR TO MOBILIZATION ON SITE										
A.										
A.1	Constr / O&M	Orientation for project staff, contractor and workers	Awareness of project staff, contractor and hired workers on the safeguard requirements and their responsibility	NSC to conduct briefing and orientation of contractor on:	area of influence	Workers orientation	orientation log book with participants , duration and orientation exercise	Once prior to mobilisation on site	NSC	PIU
A.2	Constr / O&M			EMP, GRM, Information disclosure, participation and meaningful consultation, environmental monitoring and reporting requirements; ADB and Republic of Maldives labour standards; Developing and implementing SEMP's / SOMPs and monitoring compliance to the EMP / SEMP/SOMP (a); Developing and maintaining site specific maps (b); Create awareness of health & safety risks due to transmittable diseases (HIV / AIDs / Covid-19), child labour, bonded labour or forced labour	area of influence	Workers orientation	orientation log book with participants , duration and orientation exercise	Once prior to mobilisation on site	NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
ACTIVITIES PRIOR TO MOBILIZATION ON SITE										
A.3	Constr		Awareness of hired workers on safeguards requirements and their responsibilities	NSC /Contractor to conduct briefing of workers on SEMP implementation, use of PPE, measures for Covid-19, training in EPRs, briefing on EHS and hygiene at work site, socially transmittable diseases to prevent potential incidences	area of influence	Hired workers orientation	orientation log book with list participants, duration and orientation exercise	Once prior to mobilisation on site	Contractor /NSC	PIU
A.4	Constr	Hiring of Workers	Avoid conflict due to workers migration; lack of local support to the project; dispute over transparency of hiring	Contractor required to use local labour for manual work and eligible local workforce for clerical / technical / office jobs; increase in local employment opportunities	area of influence	local recruitment drive	Maintain a record of number of local workers and staff recruited	Once prior to mobilisation on site	Contractor /NSC	PIU
A.5	Constr	Presence of constr workers camp and workers at work site	Loss of habitat; impact on water quality	Clear demarcation of constr (workers) camp in pre-designated area (within work site) with vegetation clearance, if any, limited to its footprint and at least 10 m from water sources, water bodies, drainage	work site	work site demarcation	work site clearly demarcated and enclosed by fenced perimeter	Once prior to mobilisation on site	Contractor /NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
ACTIVITIES PRIOR TO MOBILIZATION ON SITE										
B.1		Prepare and develop SEMP / SOMP	Avoid effects of contractor / facility operator (service providers) unplanned activities; smooth safeguards implementation	Develop site specific SEMP SOMP with maps with clearly identified areas :	area of influence	SEMP / SOMP prepared and submitted to PIU for approval	Approved SEMP /SOMP	Once prior to mobilisation on site	Contractor /NSC	PIU
B.1.1	Constr		land and vegetation	Spills Response						
B.1.2	Constr		land and vegetation	Spoils Disposal						
B.1.3	Post- Constr		land and vegetation	Site Rehabilitation and Clean-up						
B.1.4	Constr		Air	Dust Control						
B.1.5	Constr		Noise	Construction Noise						
B.1.6	Constr		Water	Construction Wastewater						
B.1.7	Constr		resources	Materials Management (including warehouse / storage)						
B.1.8	Constr / O&M		Waste	Waste Management (all waste streams)						
B.1.9	Constr / O&M		humans and communities	Community Health and Safety						

S. No	Project Stage	Project Activity	Potential Impacts / Issues	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
ACTIVITIES PRIOR TO MOBILIZATION ON SITE										
B.1.10	Constr / O&M		humans and communities	Occupational Health and Safety						
B.1.11	Constr / O&M		humans and communities	Emergency Response Plan, including evacuation						
B.1.12	Constr		PCRs	Chance Find Procedures for PCRs						
C.										
C.1	Constr	Ecology	Impacts on ecological resources, species	Bird / bat roosting sites will be marked and not disturbed at work site	work site	Mitigation measures established	Ocular inspection, walk over survey	Once prior to mobilisation on site	Contractor / NSC	PIU
D.										
D.1	Constr / O&M	Site specific checklists for Contractors to use in environmental monitoring	NA	NA	work site	Checklists prepared and submitted to PIU for approval	Approved checklists	Once prior to mobilisation on site	Contractor / NSC	PIU
E.										
E.1	Constr / O&M	Information Disclosure, Consultation and Participation	Lack of outreach and consultation	Inform and consult with local residents (e.g. community awareness program) and authorities one (1) month prior to commencement of civil works; and again seven (7) days prior to mobilization on site	communities in and around work site	Consultations conducted, project information distributed	Consultation log book	Once prior to mobilisation on site	Contractor / PIC	PIU

Note: Constr = Constuction

Table 3. EMP – Construction, Post Construction and Operation & Maintenance – New Building

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
A.		LAND AND VEGETATION MANAGEMENT								
A.1	Constr	Site prep & civil works	Loss of habitat	Clear demarcation of work site with barricades, no encroachment outside demarcated work site	work site	loss of habitat	ocular inspection / checks	once before start of site prep and civil works	Contractor / NSC	PIU
A.2	Constr			Vegetation clearance, if any, in demarcated work site ; hedges and perimeter margins will be retained as appropriate	work site	same above	ocular inspection / checks	same as above	Contractor / NSC	PIU
A.3	Constr			Record of tree loss, if any, within work site to be maintained in line with subproject SSDDR	work site	same above	ocular inspection / checks	same as above	Contractor / NSC	PIU
A.4	Constr			Schedule activities in dry season and avoid sensitive periods (breeding periods for aves)	area of influence	same above	ocular inspection / checks	same as above	Contractor / NSC	PIU
A.5	Constr		Use of pesticides and herbicides	Use of pesticides / herbicides will be prohibited	work site	same above	ocular inspection / checks	same as above	Contractor / NSC	PIU
A.6	Constr		Lack of access to adjacent land and/or properties	Access to adjacent land and/or properties shall be maintained	area of influence	same above	ocular inspection / checks	same as above	Contractor / NSC	PIU
A.7	Constr		Sources of materials / Stockpiling	Maximize the re-use of earth cut materials, excess spoils, Constr debris / waste from within work site	work site	Materials sources / stocks	ocular inspection / log sheet or book	same as above	Contractor / NSC	PIU
A.8	Constr		Sources of materials / Stockpiling	Specify materials that are recycled, have recycled	area of influence	same above	ocular inspection /	same as above	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
A.9	Constr		Sources of materials / Stockpiling	content and/or are from sustainable sources Stockpiles to be placed within demarcated work site that are barricaded; dust prone materials to be stored in enclosures and/or covered with tarp	work site	Stockpiles storage area	ocular inspection	weekly	Contractor / NSC	PIU
A.10	Constr		Sources of materials / Stockpiling	Implement SEMP:	work site	SEMP implementation	log-sheet	weekly	Contractor / NSC	PIU
A.10.1	Constr			Materials Management (including storage/ warehouses) / see TABLE 2, B.1.7 (double checked)					Contractor / NSC	
A.11	Constr		Borrow pits / spoils	Integrate and maintain measures as per TABLE 1, S.No. D.18 (double checked)	area of influence	use of authorized areas / sites	copy of license or permission to use / authorization paper onsite	Once	Contractor / NSC	PIU
A.12	Constr		Borrow pits / spoils	Ensure transport vehicles are covered during transportation to avoid spillage	area of influence	provision for vehicle / boat-cover	ocular inspection	during transportation	Contractor / NSC	PIU
A.13	Constr		Borrow pits / spoils	Implement SEMP	project area of influence	SEMP implementation	log-sheet	weekly	Contractor / NSC	PIU
				Spills Disposal / see TABLE 2, B.1.2 (double checked)					Contractor / NSC	
A.14	Constr		Soil erosion	Restore loose soil from foundations through ramming if required; minimise erosion through balancing cuts and fills	work site	erosion control	ocular inspection	weekly	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
A.15	Constr		Hazard related to ground subsidence caused by excessive groundwater pumping	Integrate and maintain measures as per TABLE 1, S. No. M.2.5 (No groundwater abstraction for construction purposes) (double checked)	area of influence and wider area	Provision included as a contract clause	copy of contract	Once	Contractor / NSC	PIU
A.16	Constr		Presence of construction (workers) camps	Integrate and maintain measures as per TABLE 2, S.No. A.5. (double checked)	work site	construction (workers) camps	ocular inspection	Once	Contractor / NSC	PIU
A.17	Post Constr	After completion of civil works	Loss of habitat,	Backfill any excavations and trenches with excess excavated materials generated during civil works	work site	habitat restoration	ocular inspection	Once	Contractor / NSC	PIU
A.18	Post Constr			Implement landscaping along new building boundary, maintain hedges and perimeter margins (thereby reducing visual and dust impact)					Contractor / NSC	PIU
A.19	Post Constr			Re-seeding work site or any backfilled areas with native plant species / sowing soil binding grass for restoring habitat (and soil stabilization) at least within 30 days of completion of civil works; for activities carried out during periods of hot or extreme weather, ensure adequate after care to maximize survival	work site	erosion control	ocular inspection	weekly and once after completion of civil works	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
A.20	Post Constr		Soil erosion	Ensure proper land levelling, grading for soil stabilization, drainage and other erosion prone areas including permanent stabilization measures at least within 30 days of completion of civil works	work site	erosion control	ocular inspection	once after completion of civil works	Contractor / NSC	PIU
A.21	Post Constr		humans receptors	Any damage to areas or infrastructure outside the agreed work site (corridor of impact) will be restored to pre-construction conditions and will be subject to compensation at contractor cost and through written agreement with the land owner / relevant agency, as applicable. Implement SEMP:	area of influence	areas or infrastructure damage outside corridor of impact; Provision included as a contract clause	ocular inspection	Once after completion of civil works	Contractor / NSC	PIU
A.22					work site	SEMP implementation	log-sheet / ocular inspection	Once after completion of civil works	Contractor / NSC	PIU
A.22.1				Site Rehabilitation and Clean-up plan / see TABLE 2, S.No. B.1.3 (double checked)					Contractor / NSC	
A.22a				Remove all machinery, tools, equipment, barricades, signs, surplus materials, debris, and rubbish						
A.22b				Demolish temporary structures not required for O&M and transport to the MNPHI / FENAKA warehouses/depots						

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
A.23	Post Constr		borrow pits / spoils disposal sites	Rehabilitate / vegetate spent borrow pits / spoils disposal sites within 30 days of closure (to prevent soil erosion and dust)	borrow area/ spoils disposal sites	rehabilitated sites	same as above	within 30 days of closure	Contractor / NSC	PIU
A.24	O&M		loss of habitat	Maintain the re-seeded site; plant native tree species, hedges at perimeter margins, maintain vegetation along approach / pedestrian roads to new building	area of influence	vegetation maintenance along approach roads	same as above	weekly or as required	Facility operator	PIU
A.25	O&M			Employ manual vegetation maintenance methods such as trimming of grasses and plants within the new building site and employ local labour	new building	vegetation maintenance at new building	same as above	weekly or as required	Facility operator	PIU
A.26	O&M			For landscaped, re-seeded work site, ensure adequate after care to maximize survival, e.g. periodic watering , gardening, etc.	new building	vegetation maintenance at new building	same as above	weekly or as required	Facility operator	PIU
A.27	O&M			To avoid accumulation of manually trimmed vegetation and branches, these will be allowed for collection by local people for firewood or facility operator will contact the relevant service provider for collection, transport and final disposal	new building	vegetation maintenance at new building	same as above	monthly or as required	Facility operator	PIU
A.28	O&M		Use of pesticides and herbicides	Continued prohibition of the use of pesticides / herbicides	new building	vegetation maintenance at new building	ocular inspection / maintenance log-book	once before commencement of O&M	Facility operator	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
B.		STORMWATER, DRAINAGE MANAGEMENT								
B.1	Constr / Post- Constr	Site prep & civil works	Disturbance to natural drainage pattern	Backfilling, use / re-use of materials or excess spoils, placement of stockpiles to take due cognizance of, and maintain the natural drainage pattern, slope	work site	natural drainage pattern maintained	ocular inspection	weekly and once after completion of civil works	Contractor / NSC	PIU
B.2			Excess spoils will be backfilled onsite or spread onsite in a manner that it causes no disturbance to the natural drainage pattern		work site	natural drainage pattern maintained	ocular inspection	weekly and once after completion of civil works	Contractor / NSC	PIU
B.3	O&M		Maintain the natural drainage pattern; maintain and clean drains, if any, periodically		new building	drainage O&M	ocular inspection / spot-checks	monthly	Facility operator	PIU
C.		WATER RESOURCES , WATER QUALITY								
C.1	Constr	Site prep & civil works	Impact on groundwater source sustainability	Integrate and maintain measures as per TABLE 1, S. No. M.2.5 / No groundwater abstraction (double checked)	area of influence	Provision included as a contract clause	Copy of contract	Once	Contractor / NSC	PIU
C.2	Constr / Post- Constr		water pollution due to runoff from general constr activities, spills, stockpiles etc	Compliance with relevant national standards on water quality / IFC (WBG) EHS environmental guidelines on wastewater and water quality	any close by water sources, water bodies	compliance with national standards or guidelines, whichever is stringent	Record and maintain log of monitoring / incidences of non-compliance and rectification	log-sheet	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
C.3	Constr		Siltation of water sources / water bodies due to spillage of slurry, wastes, constr debris	All work site, storage areas, disposal sites distanced from water sources, water bodies, drainage e.g. stockpiles, all waste types, recycling & sorting area, etc; Keep loose soil material and stockpiles out of drains and flow-lines	work site	10 m distance maintained	ocular inspection	weekly	Contractor / NSC	PIU
C.4	Constr			Integrate and maintain measures as per TABLE 1, S.No. D.16 (double checked)	work site	provision for a temporary area set up for polluting materials as per design	ocular inspection	Once	Contractor / NSC	PIU
C.5	Constr			Integrate and maintain measures as per TABLE 1, S. No D.17 (double checked) / After collection, process water and muddy runoff and if necessary, employ flocculants such as PAM to facilitate sedimentation or filter to remove silts)	work site	provision of an adequate receiving body (bunds, tanks) for construction run-off as per design	ocular inspection	Once	Contractor / NSC	PIU
C.6	Constr			Integrate and maintain measures as per TABLE 1, S.No. D.16 (double checked)	area of influence	maintenance of temporary / secured / controlled area set up for storage and handling of polluting materials	ocular inspection	Once	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
C.7	Constr			Integrate and maintain measures as per TABLE 1, S.No. D.20 (double checked)	work site	provision of temp sanitary facilities (portable toilets)	ocular inspection / spot-checks	Once	Contractor / NSC	PIU
C.8	Constr		Presence of Constr (workers) camp	Measures as per TABLE 2, S.No. A5. (double checked)	work site	10 m distance maintained	ocular inspection	Once	Contractor / NSC	PIU
C.9	Constr		excess water usage	Contractors to include in the construction schedule estimates of anticipated annual water usage and sources of water for construction	work site	water usage estimate	Copy of constr schedule with usage estimate	Once	Contractor / NSC	PIU
C.10	Constr			Implement SEMP:	work site	SEMP implementation	log-sheet	daily during constr	Contractor / NSC	PIU
C.10.1				Construction Wastewater / see TABLE 2, S.No. B.1.6 (double checked)					Contractor / NSC	
C.11	O&M		excess water usage, potential contamination to water sources	Integrate and maintain measures as per TABLE 1, S.No. M.2.5 / No groundwater abstraction (double checked)	in and around work site	Provision included as a Contract clause	Copy of contract	Once	Facility operator	PIU
C.12	O&M			Within 60 days of after the start of operations, the PIU to estimate of water usage for purposes of O&M of the new building and in consultation with the water supply service provider obtain a subproject	new building	MOU between PIU and service provider	Subproject specific commitment letter obtained	Once	Service provider / PIU	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
D.1	Constr	Site prep & civil works	Increase in air emissions (including fugitive dust) due to movement of heavy equipment, machinery, constr vehicles, constr works (levelling, grading, back-filling, etc)	Clear demarcation of work site with barricades, no encroachment outside demarcated work site	work site	air quality and fugitive dust	ocular inspection	once	Contractor / NSC	PIU
D.2	Constr			Periodic watering at work site including staging area, unpaved areas, unpaved roads, temp access tracks, exposed stockpiles (if any)	work site	spraying of water	ocular inspection / spot-checks	spraying of water every-day during dry season and weekly during wet season if required	Contractor / NSC	PIU
D.3	Constr			Prohibit the use of chemical dust suppressants	work site	chemical dust suppressants	same as above	ocular inspection / spot check weekly	Contractor / NSC	PIU
D.4	Constr			Concrete batch mixing process located at least 10 m downwind of nearest settlement, constr (workers)	work site	air quality and fugitive dust	ocular inspection	weekly	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
				camp for OHS and CHS purposes						
D.5	Constr			Regular inspection (specifically prior to use of) / Periodic maintenance of heavy equipment, machinery, constr vehicles to minimise emissions and noise, and reduce OHS risks Conduct air quality monitoring during civil works	area of influence	smoke belching constr vehicles	ocular inspection / spot checks	daily	Contractor / NSC	PIU
D.7	Constr				location: DV/GBV work site and sensitive receptor downstream of DV/GBV work site	PM10, PM2.5	hand held / portable air monitoring devices	Monthly during constr	Contractor / NSC	PIU
D.8	Constr			Compliance with relevant national standards on air quality / IFC (WBG) EHS Environmental Guidelines	work site	compliance with national standards and/or guidelines, whichever is stringent	record and maintain log of monitoring / incidences of non-compliance and rectification	Monthly during constr	Contractor / NSC	PIU
D.9	Constr			Control vehicle speed to ≤ 8 km/h in unpaved areas including unpaved approach roads; Post the speed limit sign in the project work areas	area of influence	speed limit signage	ocular inspection / spot checks	weekly	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
D.10	Constr			Vehicles transporting materials that generate dusts will be covered with tarps	area of influence		ocular inspection / spot checks	Daily	Contractor / NSC	PIU
D.11	Constr			Construction equipment, and machinery will be maintained to a high standard to minimize emissions	area of influence		ocular inspection / spot checks	weekly	Contractor / NSC	PIU
D.12	Constr			Implement SEMP:	work site	SEMP implementation	log-sheet	Daily during constr; once after completion of civil works	Contractor / NSC	PIU
D.12.1	Constr			Dust Control / see TABLE 2, S.No. B.1.4 (double checked)						
D.13	O&M			Negligible air emissions or air quality impact anticipated during O&M					Contractor / NSC	
E.										
E.1	Constr	Site prep & civil works	Increase in noise and vibration due to movement of heavy equipment, machinery, constr vehicles, constr works (levelling, grading,	Compliance with relevant national standards on noise, vibration / IFC (WBG) EHS Guidelines, German Standards for Vibration	work site	compliance with national standards and/or guidelines, whichever is stringent	Record and maintain log of monitoring / incidences of non-compliance and rectification	Monthly during constr	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
			back-filling, etc)							
E.2	Constr			Constr works time restricted to 6 am - 6 pm	work site	Constr timings	log-sheet	Daily during constr	Contractor / NSC	PIU
E.3	Constr			Any night time works only after receiving due permission from relevant authority	work site	permission copy for night time works	work log-sheet	Once prior to scheduled project activity	Contractor / NSC	PIU
E.4	Constr			Advance warning and sharing of civil works schedule including night time works to nearby communities	work site	consultations. Information dissemination	consultations log-book	Once prior to scheduled project activity	Contractor / NSC	PIU
E.5	Constr			Ensure all generators, heavy duty equipment are accompanied with machinery / equipment specifications, are sound insulated and placed in enclosures to minimise ambient noise levels	work site	guaranteed noise level of corresponding equipment, machinery	equipment/machinery specifications		Contractor / NSC	PIU
E.7	Constr			Regular inspection (specifically prior to use of) / Periodic maintenance of heavy equipment, machinery, constr vehicles to minimise emissions and noise, and reduce OHS risks	work site	constr vehicles, equipment	ocular inspection / spot checks	weekly	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
E.8	Constr			Conduct noise/vibration monitoring monthly during civil works	location: DV/GBV work site and sensitive receptor downstream of DV/GBV work site	day time / night time / noise / vibration levels	hand held / portable noise / vibration monitoring devices	monthly during constr	Contractor / NSC	PIU
E.9	Constr			Implement SEMP:	work site	SEMP implementation	log-sheet	daily during constr	Contractor / NSC	PIU
E.9.1	Constr			Construction Noise and Vibration / see TABLE 2, S.No. B.1.5 (double checked)					Contractor / NSC	
E.10	O&M			Negligible noise and vibration during O&M					Contractor / NSC	
F.		POLLUTING MATERIALS AND POLLUTION MANAGEMENT								
F.1	Constr /Post Constr	Site prep & civil works	Pollution due to oil, lubricant, fuel spillage	Compliance with relevant national standards in hazardous and polluting materials / IFC (WBG) EHS guidelines for hazardous materials management	work site	compliance with national standards and/or guidelines, whichever is stringent	Record and maintain log of monitoring / incidences of non-compliance and rectification	Monthly during constr and once after completion of civil works	Contractor / NSC	PIU
F.2	Constr			Integrate and maintain measures as per TABLE 1, S.No. D.16 / temporary / secure area (double checked)	work site	temporary / secure area in place	ocular inspection / spot checks / log sheet	weekly	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
F.3	Constr			Integrate and maintain measures as per TABLE 3, S.No. C.3 (double checked)	work site	10 m distance maintained	ocular inspection	Once	Contractor / NSC	PIU
F.4				Integrate and maintain measures as per TABLE 1, S.No. D.4 and D.19 (double checked)	work site	vendor, supplier list	inventory log sheet	daily	Contractor / NSC	PIU
F.5	Constr		Inappropriate handling, storage, disposal	Delivery and acceptance of all potentially polluting materials, equipment to be accompanied by a Materials Safety Data Sheet (MSDS) and /or to be certified that it is Polychlorinated Bi-phenyl (PCB) free	work site	Record of equipment and corresponding PCB free certificate; Record of MSDS	log-sheet, record of MSDS onsite, certification checks	bi-annually	Contractor / NSC	PIU
F.6	Constr			Record of incidents, spills, fatalities to be maintained	work site	incidents, spills	ocular inspection	daily	Contractor / NSC	PIU
F.7	Constr			Record of materials with corresponding location and distance for final storage / disposal / re-use with date, location maps and number of trips to be maintained at work site	work site	materials inventory	ocular inspection	daily	Contractor / NSC	PIU
F.8	Constr			Implement SEMP :	work site	SEMP implementation	log-sheet	weekly	Contractor / NSC	PIU
F.8.1	Constr			Spills Response / see TABLE 2. S.No. B.1.1 (double checked)					Contractor / NSC	
F.9	O&M		pollution due to oil,	Not anticipated during O&M					Contractor / NSC	

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
			lubricant, fuel spillage							
G.		WASTE MANAGEMENT (all waste streams)								
G.1	Constr	Site prep & civil works	Improper waste management, handling and disposal	Compliance with relevant national standards on waste management / IFC (WBG) EHS Waste Management Guidelines	work site	compliance with national standards and/or guidelines, whichever is stringent	Record and maintain log of monitoring / incidences of non-compliance and rectification	weekly during constr	Contractor / NSC	PIU
G.2	Constr			Integrate as per TABLE 3, S.No. C.3 / 10 m away from water sources, bodies and drainage (checked)	work site	10 m distance maintained	ocular inspection	weekly	Contractor / NSC	PIU
G.3	Constr		Generate excavated materials and constr waste, cut vegetation from clearance, civil works	Integrate and maintain measures as per TABLE 3, S.No. A.7 (double checked)	work site	materials / sources stockpiles	ocular inspection / log sheet or book	monthly	Contractor / NSC	PIU
G.4				Establish a covered onsite sorting and recycling area within work site, away from coast line / drainage	work site	sorting area established, 10 m distance maintained	ocular inspection	weekly	Contractor / NSC	PIU
G.5	Constr			Transport of recyclables, scrap to depots, dedicated scrap yards for resale or auction to authorized dealers	work site	Identified depots, scrap yards	Inventory / record of trips made	monthly	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
G.6	Constr		Generation of polluting materials / hazardous waste	Use of licensed vendors as per measures in TABLE 1, S. No. D.19 (double checked)	work site	use of contracted waste vendors	Inventory / record of trips made	monthly	Contractor / NSC	PIU
G.7	Constr		Generation of domestic waste	Prohibit waste burning	work site	waste management	ocular inspection	weekly	Contractor / NSC	PIU
G.8	Constr / O&M			Provide multiple waste containers	work site	waste management	ocular inspection	weekly	Contractor / NSC	PIU
G.9	Constr			Implement SEMP :	work site	SEMP implementation	log-sheet	weekly	Contractor / NSC	PIU
G.9.1				Waste Management / see TABLE 2, S.No. B.1.8 (double checked)	work site				Contractor / NSC	
G.10	Post Constr			Biodegradable waste such as cleared vegetation, if any, may be provided to local communities for use	work site	waste management	ocular inspection	weekly	Contractor / NSC	PIU
G.11	Post Constr			Ensure proper removal and disposal of any significant residual materials and wastes that remain onsite after completion of civil works; no final disposal on site	work site	waste management	Record of waste disposal sites with corresponding distance from work site, date, location map and number of trips to be	monthly	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
G.13	O&M		Improper waste management, handling and disposal, generation of domestic waste	Integrate and maintain measures as per TABLE 3, S.No. G.7 through G.9	new building	waste management	ocular inspection	monthly	Facility operator	PIU
G.14	O&M			Integrate and maintain measures as per TABLE 1, S.No. D.9 (double checked)	work site	compost pit usage for organic waste and maintenance	ocular inspection / spot checks	weekly	Contractor / NSC	PIU
G.15	O&M			Implement SOMP:	new building	SOMP implementation	ocular inspection	monthly	Facility operator	PIU
G.15.1				Waste Management Plan / see TABLE 2, S.No. B. 1.9 (double checked)						
H.		ECOLOGICAL RESOURCES								
	Constr	Site prep & civil works		Bird / bat roosting sites will not be disturbed	work site	loss of habitat	ocular inspection / spot checks	once before start of site prep and civil works	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
I.		OCCUPATIONAL HEALTH AND SAFETY								
I.1	Constr		OHS risks	Compliance with relevant national standards on OHS / IFC (WBG) OHS Guidelines	work site	compliance with relevant regulations, whichever is stringent	record and maintain log of monitoring / incidences of non-compliance and rectification	Monthly during constr	Contractor / NSC	PIU
I.2	Constr		Provision of constr (workers) camp	Provide adequate workers accommodation in line with IFC (WBG) Guidance Note / Workers Accommodation	work site	provision of accommodation	ocular inspection	Once during constr	Contractor / NSC	PIU
I.3	Constr		Unhygienic conditions at constr (workers) camp	Provide and maintain water, portable water and sanitation facilities (situated separately for women and men, as applicable), regular cleaning and disinfection, waste container bins	work site	provision of adequate water and sanitation facilities	ocular inspection / spot-checks	Once	Contractor / NSC	PIU
I.4	Constr / O&M			Provide temporary electricity connection; Provide and maintain signage as per local laws for warning of electrical hazards, if any	work site	provision of electricity connection	ocular inspection	Once	Contractor / NSC	PIU
I.5	Constr		Exposure to hazards for workers working on asphalt, mixing, concrete mixing,	Constr (worker) camp to be located at a safe distance upward direction from asphalt, concrete mix work; establish and implement ERPs	work site	safe distance maintained	ocular inspection	Once	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
			cement, working at heights, etc							
I.6	Constr			Assess safety risks and safety protocols and implement at work site	work site	safety risks / protocols assessment for OHS	safety check	weekly	Contractor / NSC	PIU
I.7	Constr / O&M as applicable			Strictly enforce the use of PPE as such goggles, gloves, noise reducing mufflers, head lamps, high visibility safety vests with reflective striping (e.g. for night time works if any), respirators (e.g. working on asphalt, concrete / cement concrete / road paving etc)	work site	provision of PPE	inventory, PPE check, ocular inspection	weekly	Contractor / NSC	PIU
I.8	Constr			Provide communication devices to designated site engineers / construction field supervisor / contractor focal point person	work site	provision of communication devices	inventory check	Once during civil works	Contractor / NSC	PIU
I.9	Constr		Fire, explosion and other incidences / accidents	Periodic training of workers for specific type of work engagement, e.g., occupational HS, materials handling, waste disposal, working at heights, electrical works, and Emergency Response (EPRs) including fire and explosion, evacuation	work site	OHS training	OHS training log book	monthly during civil works	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
I.10	Constr			Ensure provision of fire hydrants, sand buckets at work site and constr (workers) camp; regularly checked for expiration date, refilled, replaced as required (prior to the expiration date); Any wet sand (if any) in the bucket should be replaced with dry sand	work site	provision of fire hydrants	ocular inspection / spot-checks	Once	Contractor / NSC	PIU
I.11	Constr		Health incidences	Coordinate with nearest hospital / local clinic in case of emergencies and/or work accidents	work site	clinic / hospital list	log-sheet	Once	Contractor / NSC	PIU
I.12	Constr			Set up first aid kit within work site	work site	provision of first aid kits	inventory check	Once	Contractor / NSC	PIU
I.13	Constr			Provide periodic health assessments (health & fitness) to workers	work site	health check-ups	Record of health assessments	Once every 2 months	Contractor / NSC	PIU
I.14	Constr			Undergo orientation in H&S, ERPs (including safety and evacuation), transmittable diseases (HIV, AIDs, Covid-19)	work site	orientation in H&S	Record of orientation	Once every 2 months	Contractor / NSC	PIU
I.15	Constr			Maintain a record of incidents, spills, accidents, near miss, fatalities in a log book at work site	work site	incidents, spills, accidents, near miss, fatalities	Record of incidences	Once every 2 months	Contractor / NSC	PIU
I.16	Constr			Implement SEMP :	work site	SEMP implementation	log-sheet	weekly or as required	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
I.16.1				Occupational Health and Safety / see TABLE 2, S. No. B.1.10 (double checked)					Contractor / NSC	
I.16.2				Emergency Response Plan / see TABLE 2, S. No. B.1.11 (double checked)						
I.17	O&M			Regular O&M of measures as per TABLE 3, S. No. 1.10 through S. No. 1.15, S.No.1.16.2 (double checked)	new building	OHS	log-sheet	bi-annually	Facility operator	PIU
J.										
J.1	Constr		Excessive disturbances to communities due to civil works, increase in vehicular / equipment / machinery traffic	Compliance with National laws and regulations on community health and safety / IFC (WBG) EHS guidelines on Community Health and Safety	work site	compliance with relevant regulations, whichever is stringent	record and maintain log of monitoring / incidences of non-compliance and rectification	Monthly during constr	Contractor / NSC	PIU
J.1	Constr			Conduct meaningful consultations with communities to keep them informed on subproject implementation schedule (and changes if any), in particular those that may result in disruption wrt area access,	community in and around work site	information disclosure, participation and consultation including distribution of project information leaflet, GRM, community	consultations, programs in a log-book onsite	monthly during civil works	Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
				vehicular movement, utilities, ⁸² noisy / dust generating activities, night time works, etc; distribute project information leaflet in local language		awareness programs, etc				
J.2	Constr			Conduct community awareness programs, including health & safety risks due to transmittable diseases (HIV, COVID-19)	same as above	same as above	same as above	same as above	Contractor / NSC	PIU
J.3	Constr			Inform and consult with the community on project GRM	same as above	Grievances received, resolution if any	Maintain a record of grievances raised in a log book at work site, records to be maintained in line with project GRM	monthly during civil works	Contractor / NSC	PIU
J.4	Constr			Adhere to measures as per TABLE 3, S.No. E.2 and E.3 / Constr time schedule + night time works (double checked)	work site	same as TABLE 3, S. No. E.2 and E.3	same as TABLE 3, S. No. E.2 and E.3	once prior to scheduled project activity	Contractor / NSC	PIU

⁸² Civil works will be scheduled in a phased manner such that any interference are no more than 12 hours in duration, and if possible, these will be scheduled during low use times in the 24-hour cycle.

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
J.5	Constr / O&M		Lack of access to nearby areas	Maintain access to adjacent properties, access/pedestrian roads or provide nearest alternate route marked on map	work site	access maintained	ocular inspection/ spot checks	weekly during constr and once before commencement of O&M	Contractor / NSC	PIU
J.6	Constr		Accidents due to access to work site	Ensure all work site are secure during peak Constr; discourage access by public through appropriate fencing, barricades, warning cones (e.g. around work site, excavated foundations, temporary access tracks, etc), warning signage, lighting and assign security personnel to prevent trespassing, vandalism of equipment	work site	perimeter fencing installed, lighting installed, danger and warning signs for safety of community, security personnel deployed	ocular inspection/ spot checks	weekly	Contractor / NSC	PIU
J.7	Constr			Implement SEMP :	community in and around work site	SEMP implementation	log-sheet	weekly or as required	Contractor / NSC	PIU
J.7.1	Constr			Community Health and Safety / see TABLE 2, S.No.B.1.9 (double checked)					Contractor / NSC	
J.8	Constr		Temporary disturbances due to movement of construction vehicles, heavy equipment	Issue advance warning to communities including erection of signage of planned route, detours, work timing, duration at appropriate places along road and at work site; deploy workers to direct traffic in case of lane closure	community in and around work site	danger and warning signs, workers deployed	log-sheet		Contractor / NSC	PIU

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
J.9	Constr / Post Constr		Disruption to utilities	Any damage or hindrance, disadvantage to local communities, businesses, persons etc., caused by the premature removal or insufficient replacement of public utilities is subject to full compensation, at full liability of the Contractor who caused the problem	in and around work site	Damage, disadvantage to local communities, businesses, persons	ocular inspection / spot-checks	once after completion of civil works	Contractor / NSC	PIU
J.10	O&M			Conduct meaningful consultations with communities to keep them informed on O&M activities, in particular those that may result in disruption wrt area access, equipment movement, utilities, etc	new building	information disclosure, participation and consultation including O&M	consultations, programs in a log-book onsite	Once at commencement of O&M	Facility operator	PIU
J.11	O&M			Measures as per TABLE 3, S.No. J.3 (double checked)	new building	Grievances received, resolution if any	same as TABLE 3, S. No. J.3	Once at commencement of O&M	Facility operator	PIU
K.		PHYSICAL CULTURAL RESOURCES (PCRs)								
K.1	Constr		Chance find of PCRs	Implement SEMP Sub-plan:	in and around work site	PCRs	ocular inspection / spot-checks	Once	Contractor / NSC	PIU
K.1.1				Chance Find Procedures for PCRs as follows / see TABLE 2, S.No. B.1.12 (double checked) such as: Civil works suspended immediately if PCRs						

S. No	Project Stage	Project Activity	Potential Impacts	Mitigation Measures and Safeguards	Monitoring Location	Monitoring Parameter	Method of Measurement	Frequency	Implementation	Supervision
K.1.2				encountered and Contractor supervisor to be informed						
K.1.3				Prohibit destroying, damaging, defacing or concealing PCR's						
K.1.4				Inform and consult with the provincial / main office of the relevant agency / ministry Civil works to resume only after thorough investigation and permission from provisional / main office of the relevant agency / ministry						
K.5	O&M			Not anticipated during O&M						

Note: Constr = Constuction

Part II

Applicable Environmental Quality Standards⁸³

178. Ambient Air Quality Standards.

Air Quality

Parameter	Maldives Air Quality MPC (µg/m ³)	WHO Air Quality Guidelines (µg/m ³)	Applicable Standards as per ADB SPS ⁸⁴ (µg/m ³)
Particulate Matter PM10	-	20 (annual) 50 (24-hr)	20 (annual) 50 (24-hr)
Particulate Matter PM2.5	-	10 (annual) 25 (24-hr)	10 (annual) 25 (24-hr)
Nitrogen Dioxide (NO ₂)	-	40 (annual) 200 (1-hr)	40 (annual) 200 (1-hr)
Nitrogen Oxide (NO)	-		
Sulphur Dioxide	-	500 (10 min) 20 (24-hr)	50 (annual) 20 (24-hr) 500 (10 min)
Carbon Monoxide (CO)	-		3000 (annual) 4000 (24-hr)

179. Noise Limits.

Noise limits

Receptor/ Source	Maldives Noise Level Standards		WHO Guidelines Value For Noise Levels		Applicable Per ADB SPS ⁸⁵	
	XX LAeq in dBA		(One Hour LAeq in dBA)		(dBA)	
	Day	Night	07:00 – 22:00	22:00 – 07:00	Day time	Night time
Industrial area	-	-	70	70	70	70
Commercial area	-	-	-	-	55	55
Residential Area	-	-	55	45	55	45
Silent Zone	-	-	-	-	-	-

* LAeq- equivalent average sound pressure level

⁸³ The most stringent standards shall apply.

⁸⁴ As per ADB SPS, the borrower / project proponent shall achieve whichever of the ambient air quality standards is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the implementing agency of the government will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in ADB SPS.

⁸⁵ As per ADB SPS, the borrower / project proponent shall achieve whichever of the noise standards is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the implementing agency of the government will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in ADB SPS.

180. The German Standard DIN 4150-3 – Vibration in Buildings – Part 3. Effects on structures provides short term and long-term limits⁸⁶ for vibration at the foundation for various structures. These standards are considered international best practice and will be followed as part of the project as shown below.

Guideline Values for Vibration Velocity to be Used When Evaluating the Effects of Short-term and Long-term Vibration on Structures⁸⁷

S. No	Type of structure	Guideline Values for Velocity (mm/s)				
		Short-term			Long-term	
		At foundation			Uppermost Floor	Uppermost Floor
		Less than 10 Hz	10 Hz to 50 Hz	50 to 100 Hz	All frequencies	All frequencies
1	Buildings used for commercial purposes, industrial buildings and buildings of similar design	20	20 to 40	40 to 50	40	10
2	Residential dwellings and buildings of similar design and/or use	5 (105 dB)	5 to 15	15 to 20	15	5 (105 dB)
3	Structures that because of their particular sensitivity to vibration, do not correspond to those listed in Lines 1 or 2 and have intrinsic value (e.g., buildings that are under a preservation order)	3 (100.5 dB)	2 to 8	8 to 10	8	2.5 (99.0 dB)

181. Water quality:

⁸⁶ Short-term vibrations are defined as those that do not occur often enough to cause structural fatigue and do not produce resonance in the structure being evaluated and long-term vibrations are all the other types of vibration. DIN 4150-3 notes that “experience has shown that if these values are complied with, damage that reduces the serviceability of the building will not occur. If damage nevertheless occurs, it is to be assumed that other causes are responsible. Exceeding the value in the table does not necessarily lead to damage”.

⁸⁷ DIN 4150-3, Structural Vibration, Part 3: Effect of vibration on structures.

Waste Water Discharge

Pollutant	Unit	Maldives	WBG Guideline Value for sanitary sewage discharge	Applicable Standards as per ADB SPS 2009
pH	pH	-	6-9	6-9
Biological Oxygen Demand (BOD)	MgO/l	40	30	30
Chemical Oxygen Demand (COD)	Mg/l	150	125	125
Ammonia-N	NH4	15		
Total Nitrogen	Mg/l	30	10	10
Total Phosphorus	Mg/l		2	2
Oil and Grease	Mg/l	10	10	
Total Suspended Solids	Mg/l	100	50	
Total Coliform Bacteria	MPN ^A / 100 ml	-	400	

182. Waste (all waste streams). As per Waste Management Regulation, effective (5th of February 2014),

- Construction debris and waste will be disposed at the allocated areas for the specific authorized waste dump
- Hazardous waste, if any, generated during the project will be collected and stored separately.
- Transportation should also be carried out in specific vehicles authorized for waste transportation.
- An area within the building site (on the ground floor) will be allocated to ensure compliance with the principle on establishment of a waste collection point in buildings.

Part III**Guidance on managing risk from COVID-19 on construction sites and in worker's accommodation****INTRODUCTION:**

37. The COVID-19 outbreak represents significant health and safety risks that were not anticipated during the project appraisal stage and are not reflected in any projects safeguards documents, most importantly the Environmental Management Plan which includes Health and Safety.

38. In accordance with the ADB Safeguard Policy Statement, the Borrower is required to assess implications of unanticipated risks and impacts and to identify and implement necessary risk mitigation measures.

39. This guidance document sets out a series of recommended measures that can be implemented to manage the risk on construction sites from COVID-19. It also includes a specific set of measures for construction work camp management which relate to both the management of COVID-19 risk as well as general Health and Safety.

SOURCES OF INFORMATION:

40. Guidance is being updated regularly as knowledge of COVID-19 improves. This document is based on good international practice, using guidance from World Health Organization (WHO), International Labor Organization (ILO) and national guidance from the UK and Canada and a review of other national government public information on COVID-19.

QUARANTINE OR ISOLATION FOR COVID-19:

41. WHO⁸⁸ defines 'quarantine' as the separation of a person who is not ill but who may have been exposed to an infectious person, with the objective of monitoring their symptoms and ensuring the early detection of cases. 'Isolation' is the separation of a person who is showing symptoms or has confirmed COVID-19 to prevent the spread of infection or contamination.

42. Contractors must ensure the safe quarantine or isolation of workers and that this does not impact on their employment status.

⁸⁸WHO (19 March 2020) Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19) https://apps.who.int/iris/bitstream/handle/10665/331497/WHO-2019-nCoV-IHR_Quarantine-2020.2-eng.pdf

Construction site working conditions Mitigation measures for COVID-19	
1. Form a joint team to plan and organize return to work	<ul style="list-style-type: none"> • Develop or convene a joint occupational safety and health committee with members representing the employer and workers. • Train team members on the basic principles for the formulation and implementation of occupational safety and health preventive and control measures. • Develop and communicate a work plan on safe working for COVID-19. Such plan should be fully aligned with any government regulations and guidelines on COVID-19 prevention and control, or in the absence thereof, with international good practice guidelines as may be updated from time to time.
2. Risk assessment to decide when to work, who works and how	<ul style="list-style-type: none"> • Undertake a risk assessment to determine the preventive and control measures. • Ensure preventative measures are in place before resuming or beginning construction work.
3. Adopt engineering, organizational and administrative measures	<ul style="list-style-type: none"> • Avoid physical interaction and maintain physical distancing requirements as prescribed by national policy, or in the absence thereof, international good practice. • Ventilate enclosed workplaces including work camps and communal spaces. • Avoid concentration of workers - limit the capacity of common areas such as work camp dining rooms and changing rooms to allow the minimum separation of 2 meters and organize one-way systems. This includes sleeping areas which must be a minimum of 2 meters between beds. • Put in place training and information on COVID-19 and measures required for its management. • The construction site is to be segregated to the extent possible in zones or other methods to keep different crews physically separated at all time. • Stagger break and lunch schedules to minimize the number of people in close proximity to one another.
4. Regularly clean and disinfect	<ul style="list-style-type: none"> • Increase the frequency of cleaning and disinfection, in particular heavily trafficked areas and common areas, including work camps. • All door handles, railings, ladders, switches, controls, eating surfaces, shared tools and equipment, taps, toilets, and personal areas are wiped down at least twice a day with a disinfectant. • Discourage the sharing of items such as cups, glasses, plates, tools.
5. Promote personal hygiene	<ul style="list-style-type: none"> • Provide workers with the conditions and means necessary for frequent hand washing (soap, water or alcohol gel) with a posted hand washing protocol at site entries, exits, bathrooms, communal areas, offices, and any other areas with commonly touched surfaces. • Inform workers of the need to avoid physical contact when greeting, and avoid touching eyes, nose and mouth. • Inform workers of the need to cover the mouth and nose with a disposable handkerchief when coughing or sneezing or the crook of their arm. • Dispose of tissues in a lined and covered waste bin and wash hands afterwards.
6. Provide personal protective equipment (PPE) and inform	<ul style="list-style-type: none"> • Identify appropriate PPE related to the tasks and health and safety risks faced by workers according to the results of risk assessment and the level of risk, and

workers of its correct use	<p>provide it to workers free of charge and in sufficient number, along with instructions, procedures, training and supervision.</p> <ul style="list-style-type: none"> • Non-medical face-coverings (such as homemade cloth masks) should be worn as mitigation for catching and transmitting the virus, but are not to be treated as substitutes for proper handwashing.
7. Health surveillance and insurance	<ul style="list-style-type: none"> • Before entering the site, staff and visitors must confirm that they are not currently exhibiting flu-like symptoms. • Monitor the health status of workers, develop protocols for cases of suspected and confirmed COVID-19. The protocol will state that: <ul style="list-style-type: none"> ○ workers with symptoms or confirmed cases must be isolated within the construction camp or stay at home for 7 days after symptoms started. ○ If symptoms persist after 7 days the person must isolate until the symptoms stop. ○ People who have been in close contact with the person with confirmed COVID-19 be quarantined for 14 days. • All workers in quarantine or isolation must be provided with adequate food, water, medical assistance and sanitation. • Identify workers who have had close contact with people infected with COVID-19 and follow national medical guidance. • Communicate confirmed cases of COVID-19 infection to the appropriate authorities. • All workers should be provided with health insurance that includes COVID-19 treatment
8. Consider other hazards, including psychosocial	<ul style="list-style-type: none"> • Promote a safe and healthy working environment free from violence and harassment. • Encourage health promotion and wellbeing in the workplace through enough rest, balance of physical and mental activity and adequate work-life balance. • Implement prevention and control measures for the use and storage of chemicals, particularly those used for disinfection during COVID-19.
9. Review emergency preparedness plans	<ul style="list-style-type: none"> • Develop an emergency plan adapted to COVID-19 and regularly review it.
10. Review and update preventive and control measures as the situation evolves	<ul style="list-style-type: none"> • Periodically monitor prevention and control measures to determine whether they have been adequate to avoid or minimize risk and identify and implement corrective actions for continuous improvement. • Establish and maintain records related to work-related injuries, illnesses and incidents, worker exposures, monitoring of the work environment and workers' health.
Source: Adapted from: ILO, ⁸⁹ WHO, ⁹⁰ Canada Construction Association, ⁹¹ and UK Government. ⁹²	

⁸⁹ILO (May 2020) Practical Guidance: Safe Return to Work. Ten Action Points.

⁹⁰ (i) WHO (19 March 2020) Getting your workplace ready for COVID-19.

(ii) WHO (17 March 2020) Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts.

(iii) WHO (16 April 2020) considerations in adjusting public health and social measures in the context of COVID-19.

⁹¹ Canada Construction Association (April 2020, version 4) COVID-19 Standardized protocols for all Canadian construction sites.

⁹² www.gov.uk (19 May 2020) Working safely during coronavirus COVID-19: Construction and other outdoor work.

Worker Camp Siting and Management Mitigation Measures for Health and Safety and COVID-19	
1. Siting	<ul style="list-style-type: none"> • Not in area liable to flooding, landslide or other natural disaster • Not in area affected by construction dust, noise, sewage or other pollution • Not in a residential area
2. Minimum housing standards	<ul style="list-style-type: none"> • a separate bed for each worker • beds should not be arranged in tiers of more than two; • separate accommodation of the sexes or to accommodate couples • adequate natural light during the daytime and adequate artificial light • adequate ventilation to ensure sufficient movement of air • adequate supply of safe potable water • adequate sanitary facilities (see below); • adequate drainage • adequate furniture for each worker to secure his or her belongings, such as a locker. • common dining rooms, canteens or mess rooms, located away from the sleeping areas • appropriately situated and furnished laundry facilities • reasonable access to plug sockets for charging telephones and other devices • rest and recreation rooms and health facilities, where not available in the community.
3. Minimum accommodation sizes	<p>Sleeping space</p> <ul style="list-style-type: none"> • inside dimensions over 198 centimetres by 80 centimetres; <p>Sleeping room:</p> <ul style="list-style-type: none"> • headroom of over 203 centimetres allowing full free movement • Beds minimum 2m apart for COVID-19 risk management
4. Sanitation Facilities	<ul style="list-style-type: none"> • One toilet, one tap / basin, one toilet for every 6 people • Convenient location to accommodation • Provision of soap • Separate facilities for men and women • Ventilation to open air • Fresh cold running water • Clean and hygienic • Septic tank / sewage treatment facility, or pit latrines located at least 200m from surface waters, and in areas of suitable soil profiles and above the groundwater levels
5. Health and Safety within worker accommodation	<ul style="list-style-type: none"> • Separate area for sick workers to prevent transmission of disease • Smoke detector in sleeping area • Fire safety throughout accommodation such as fire extinguishers, fire alarms, fire blankets • Worker training in fire prevention and procedures • Fire exit sign, adequate means of escape and clearly maintained exit

	<ul style="list-style-type: none">• Security lighting within camp and for sanitation block and lighting for route from sleeping area to sanitation block.• Electrical cables to be in safe condition, elevated and not in areas liable to flood
6. Inspection	<ul style="list-style-type: none">• 2 weekly inspection to inspect for cleanliness, state of repair of building, accommodation and fire equipment.• Record inspection results and retain for review
Source: Adapted from ILO Workers' Housing Factsheet No.6. ⁹³	

⁹³ ILO (2009) Workers' housing. ILO Helpdesk Factsheet No. 6

Appendix 1: Service Provider Letter – place holder

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HDC(161)-BDT/459/2022/9

30th June 2022

To whom it may concern,

Subject: Utility Service Providers for Developments in Hulhumalé

Greetings from Housing Development Corporation.

This is to confirm that the service providers of Hulhumalé for the listed services are as follows:

- 1. **Water & Sewerage:** Maldives Water and Sewerage Company
- 2. **Electricity:** State Electric Company Ltd
- 3. **Waste Management:** Waste Management Corporation Limited

If you require any assistance or have other queries, please contact Aishath Ashgaha (Assistant Business Development Officer) phone number 3355604.

Yours Sincerely,

Handwritten signature of Ahmed Shaam

Ahmed Shaam
Chief Financial Officer

Appendix 2: Impact Assessment

MLD SG II

Impact Assessment Environmental Safeguards

1. **Predication of impacts.** Predication of impacts is an objective exercise to determine the potential interactions between the project and the baseline environment. For type of impacts refer to **Box 1**.

BOX 1. Type of Impacts
<ul style="list-style-type: none"> • Positive or beneficial, when impact is considered to represent improvement to baseline or to have introduced a new desirable factor
<ul style="list-style-type: none"> • Negative, when impact is considered to represent adverse change from the baseline or to have introduced a new undesirable factor
<ul style="list-style-type: none"> • Direct, impacts that result from a direct interaction between the project and a resource/ receptor
<ul style="list-style-type: none"> • Indirect, impacts that follow on from the direct interactions between the project and its environment as a result of subsequent interactions with the environment
<ul style="list-style-type: none"> • Induced, impacts that may be considered as special form of indirect impacts, having no direct links with the project activities being assessed but are a result of the changes caused by the project
<ul style="list-style-type: none"> • Cumulative, impacts from further planned development of the project, other sources of similar impacts in the geographical area, any existing project or condition, and other project-related developments that are realistically defined at the time the assessment is undertaken

2. **Evaluation of potential impacts.** The evaluation of impacts was considered in the context of the: (i) VERs, (ii) magnitude of size of the potential impact, and (iii) sensitivity of the valued receptor to change; these are detailed as follows:
 - i. "VERs": the resource/receptor that is potentially going to receive and have to cope with an impact
 - ii. "Magnitude" or the size of the potential impact: Impacts may be short term and considered of small magnitude (e.g., noise, dust or vibration) or long term and considered of large magnitude (e.g. change to the local hydrology); it is a function of one or more of the following characteristics:
 - a. Scale: refers to the degree of change that may be caused to the VERs⁹⁴
 - b. Extent: refers to spatial / geographical extent of the impact due to the project⁹⁵
 - c. Duration: refers to temporal duration of the impact due to the project⁹⁶

The magnitude of impact is further elaborated in **Box 2**

⁹⁴ Medium/Reversible damage to natural environment but likely to easily revert back to earlier stage with mitigation (Perceptible change from baseline conditions but well within acceptable norms); High/Irreversible damage to natural environment and/or difficult or may not to revert back to earlier stage with mitigation (Major changes in comparison to baseline conditions and/or likely to regularly or continually exceed the standard.

⁹⁵ Local: Project area of influence and identified buffer; Regional: Project area of influence and the wider surrounding area; National/ Global: Project area of influence and beyond geographical boundaries.

⁹⁶ Short-term: Only during particular activities or phase of the project lifecycle; Medium-term: spread across several phases of the project lifecycle; Long term: Spread beyond the lifecycle of the project.

Box 2. Magnitude of Impact			
Criteria	Physical/ecological receptors	Socioeconomic receptors	Ranking
Low magnitude of impact Temporary, short-term and localized which irreversible, likely to occur during peak project activity	Minor reversible impacts on physical resources limited to project area of influence Minor short-term disturbance or damage to small area of limited significance Temporary disturbance of habitats which are limited; areas not declared as legally protected habitats Localized displacement of vegetation, fauna habitats	Reversible impairment and/or medical treatment injuries not needing hospitalization Potential land use conflict may arise which could be discussed and readily resolved	Small
Medium magnitude of impact Temporary, medium term and local / regional, which is reversible	Moderate reversible, medium- term, widespread impacts existing over projects area of influence and surrounding area due to project development Temporary or localized ad/or regional change in ecological environment	Reversible impairment requiring some hospitalization Irreversible impacts on households, livelihood activities and food sources but acceptable to communities	Moderate
High magnitude of impact, permanent and irreversible	Major impacts associated with irreversible effects due to project development	Irreversible impairment Land use conflicts, livelihood impacts that may be resolved through serious of negotiations	Large

- iii. "Sensitivity": ability to cope with an impact and/or its importance to Maldives. It is generally accepted that human health is always a high sensitivity receptor, however in terms of natural resources/receptors, the sensitivity varies according to the receptor e.g. scrubland with no significant biodiversity is considered less sensitive than a water body which may support aquatic ecosystems / local biodiversity or livelihoods through fishing and/or tourism; refer to **Box 3**.

3. Where an impact may occur, if there is no receptor to potentially receive the impact, then mitigating actions will not be required. This follows the source-pathway-receptor model, whereby in order for there to be an impact, the pollutant or issue (source) needs to be present, the pathway to a receptor is needed (such as water for human consumption) and a receptor must be present to receive the impact, such as humans, flora or fauna.

Box 3. Establishing Sensitivity Criteria			
Establishing Sensitivity Criteria	Definitions for Natural resources / receptors	Definitions for Socioeconomic receptors	Ranking
Sensitive receptor has a high natural resilience to imposed stresses	Existing physical environment quality is good Modified habitat that supports ecological resources that are not sensitive to disturbance	Human receptors are located away from project activities and will not be affected	Low

Box 3. Establishing Sensitivity Criteria			
Establishing Sensitivity Criteria	Definitions for Natural resources / receptors	Definitions for Socioeconomic receptors	Ranking
Sensitive receptor has a moderate natural resilience to imposed stresses	Existing physical environment quality shows some signs of stress Habitat supports ecological resources that could be sensitive to change in quality or physical disturbance	Human receptors are located adjacent to project activities and likely to be affected yet still retaining an ability to at least in part adapt to change brought by the project and opportunities associated with it	Medium
Sensitive receptor with little resilience to imposed stresses	Existing physical environment quality is already under stress Habitat supports ecological resources that are sensitive to change (includes protected areas, habitat or species of significant conservation value (national / global))	Human receptors are located within the project footprint and directly affected by project	High

4. **Level of impact / impact significance.** Once, the magnitude of impact and sensitivity are characterized, the level of impact was assessed which is typically designated using the matrix enclosed in **Box 4**. With category A excluded, the magnitude of impacts is predictable will be relatively low for project activities. However, to maintain the integrity of the assessment process, the results of impact assessment are enclosed in **Table 1**. with identified mitigation measures which will be detailed in the project EMP and residual impact evaluation.

Box 4. Level of Impact / Impact Significance				
Level of Impact		Sensitivity to Impact		
		Low	Medium	High
Magnitude of Impact	Small	Negligible / Low	Low	Medium / Moderate
	Moderate	Low	Medium / Moderate	High
	Large	Medium / Moderate	High	Catastrophic

Table 1. Results of Impact Assessment

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
A. Physical Resources										
1	Climate Risks	Subproject vulnerability due to climate risks	H	Indirect/ Irreversible	X			<ul style="list-style-type: none"> Integrate climate proofing measures into detailed engineering design 	L	PIU / PMU to monitor implementation as per EMP
2	Topography and Vegetation)	Potential adverse impact on valued receptors	H	Direct/Local / Irreversible	X	X		<ul style="list-style-type: none"> Project site selected to avoid valued sensitive natural and human receptors; located on vacant lot For any associated activity outside new building development, undertake the following: <ul style="list-style-type: none"> Conduct detailed survey after finalization of alignment e.g. water supply, grid connection to assess the feasibility of the alignment and any need of any tree cutting, demolition of any structure, road crossings, pole/pipe laying in any private land, presence of any sensitive receptor along alignment, disturbance to public, business etc. 	L	PIU / PMU to monitor implementation as per EMP

⁹⁷ With Category A excluded, the magnitude of impacts is predictable and will be relatively low for all project activities. However, to maintain the integrity of the impact assessment process, the "level of Impact" has been categorized as Low, Medium, High (L/M/H) prior to application of mitigation measures while type and nature of impact is described as Direct / Indirect, Local/Regional, Reversible / Irreversible.

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact L/M/H ⁹⁷	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
								<ul style="list-style-type: none"> ○ Obtain prior consent from land owners (if pole/pipe laying is required in private land) and No Objection Certificate (NOC) from concerned departments (prior to start of construction works, is required) 		
		Change in landscape / visual impacts	H	Direct/Local / Irreversible	X	X	X	<ul style="list-style-type: none"> ● New building situated on vacant lot ● Finalize conceptual and design plan and optimize land area, clearance restricted to work site ● Installation of movement sensors to reduce light effect at work site ● Existing trees to be retained, plant new trees and re-vegetate site immediately after completion of civil works 	M to L	Approval for land use/completed land transfer
		Lack of sufficient design and planning to ensure long term sustainability of subproject and protection of assets created	H	Direct/Local / Irreversible	X	X	X	<ul style="list-style-type: none"> ● Detailed design to integrate code for buildings ● Design an energy efficient layout ● Detailed design to integrate recommendations from geo-tech / topo /hydrological investigations Integrate provisions for extreme weather events in design and provisions for ensuring effective	L	PIU / PMU to monitor implementation as per EMP

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
								<ul style="list-style-type: none"> maintenance and protection of assets created O&M manuals for building as per recommendations of MNPHI 		
		Change in the natural physical features and current aesthetics due to the construction and operation of the project	H	Direct/Local / Irreversible	X	X	X	<ul style="list-style-type: none"> Minimize permanent and temporary land take for civil works; clearances restricted to works site Maintain natural site drainage pattern; civil works designed to utilize and maintain natural drainage patterns and to blend in the environment 	M to L	Site rehabilitation and clean-up after completion of civil works Standard O&M during operation
		Stockpiling of materials	M	Direct/Local / Reversible		X	X	<ul style="list-style-type: none"> Storage of (construction) material confined to work site Implement – Materials Management Plan (including warehouses / storage) 	L	PIU / PMU to monitor implementation as per EMP
		Borrow pits / Spoils re-use / disposal	M	Direct/Local / Reversible	X		X	<ul style="list-style-type: none"> Maximize the re-use of earth-cut materials, spoils, and construction debris / wastes for backfilling at site, as needed Implement –Spoils Re-use / Disposal Plan 	L	PIU / PMU to monitor implementation as per EMP
		Resource materials	M	Direct/Local / Reversible	X		X	<ul style="list-style-type: none"> Maximize the re-use of earth-cut materials, spoils, and construction debris / wastes Specify materials that are recycled, have recycled content or are from sustainable sources 	L	PIU / PMU to monitor implementation as per EMP

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact L/M/H ⁹⁷	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
		Hazardous materials	M	Direct/Local / Reversible		X		<ul style="list-style-type: none"> In case required, use borrow pits licensed by the relevant authority, if the re-use options are not feasible Temporary secured area designed / set up for storage and handling of hazardous and polluting materials Licensed vendors to collect transport and dispose used / unused hazardous materials / wastes Implement – Hazardous Materials Control Plan 	L	PIU / PMU to monitor implementation as per EMP
		Waste generation (including construction debris / waste) and improper disposal of solid waste	M/L	Direct/Local / Reversible		X (M)	X (L)	<ul style="list-style-type: none"> Use of pre-defined area within the new building for temporary safe repository of solid waste / maintenance of compost pit Implement - Waste Management Plan (for all types of waste streams) Hazardous Waste Disposal Plan 	L	PIU / PMU to monitor implementation as per EMP
3	Physical Cultural Resources (PCRs)	Potential impact on archaeological, historical or cultural important site	H	Direct/Local / Irreversible	X	X		<ul style="list-style-type: none"> Avoid sensitive receptors such as PCRs Implement ‘Chance Find Procedures’ Consult with relevant stakeholders for sensitive periods for religious / spiritual activities 	L	PIU / PMU to monitor implementation as per EMP
B. Biological / Environmental Resources										

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact L/M/H ⁹⁷	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
1	Air Quality	Impact on air quality during general project activities due to increase in dust emissions and vehicular emissions	M	Direct/Local / Reversible			X	<ul style="list-style-type: none"> Work site to be enclosed / barricaded Periodic air quality monitoring at work site Mitigate fumes and particulate matter from concrete batching units as follows: <ul style="list-style-type: none"> Locations for hot mix/concrete batching stations must be placed downwind of the nearest existing household Confined within work sites Equip hot mix/concrete batching stations with fabric filters and/or wet scrubbers to reduce the level of dust emissions Implement - Dust Control and Management Plan 	L	PIU / PMU to monitor implementation as per EMP
2	Noise	Noise/ vibration due to general construction activities and vehicular movement	M	Direct/Local / Reversible			x (M)	<ul style="list-style-type: none"> Work site to be enclosed / barricaded Periodic noise level measurements at work site Restriction of noise generating activities at night except with permission from relevant local authority 	L	PIU / PMU to monitor implementation as per EMP Inform communities close to work site of

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact L/M/H ⁹⁷	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
3	Water Quality / Resources	Pollution due to runoff from general construction activities, slurry, spills – fuel, lubricant	M	Direct/Local / Reversible	X	X	X	<ul style="list-style-type: none"> • Deploy low noise equipment with sound insulation / sound proof structures • Use of Personal Protective Equipment (PPE) like ear plugs, mufflers, etc. • Implement – <ul style="list-style-type: none"> ○ Construction Noise and Vibration Management Plan ○ OHS Plan ○ Community & Health Safety Plan 	L	PIU / PMU to monitor implementation as per EMP

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact L/M/H ⁹⁷	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
		Competition in local water resources / supply	M	Direct/Local / Reversible	X	X	X	<ul style="list-style-type: none"> PIU / Contractor to forecast water demand during construction and operation Avoidance of groundwater abstraction 	L	PIU / PMU to monitor implementation as per EMP
4	Soil and Geology	Damage due to seismic activity	M	Direct/ Regional/ Irreversible	X			<ul style="list-style-type: none"> Site selection and design considering the geological conditions and seismicity as per national guidance on seismic design that calls for identification of a maximum credible earthquake scenario and associated ground acceleration parameters 	NA	NA
		Soil erosion	M	Direct/Local / Reversible	X	X	X	<ul style="list-style-type: none"> Detailed design to integrate recommendations from geo-tech / topo / hydrological investigations Soil quality testing as part of the detailed engineering design scope Consideration of suitable slope and soil type Proper land levelling and grading for stabilization and other erosion-prone working areas, at spoils disposal site and permanent stabilization measures 	L	PIU / PMU to monitor implementation as per EMP
C. Ecological Resources										
1	Terrestrial Ecology	Loss of ecology, change in landscape	M	Direct/Local / Irreversible	X	X	X	<ul style="list-style-type: none"> No use of chemicals (pesticides / herbicides) Minimize vegetation clearing confined to the footprint of work 	L	Site rehabilitation and clean-up after completion of civil works

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact L/M/H ⁹⁷	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
2	Terrestrial Fauna	Species vulnerability to anticipated change in habitat	L	Direct/Local / Irreversible				(construction / construction staging) site <ul style="list-style-type: none"> Existing trees to be retained, plant new trees and re-vegetate site immediately after completion of civil works including maintenance of perimeter margins Restoring temporarily disturbed areas / land take to pre-construction conditions None anticipated since new building development located in residential area with access to economic services / activities; but will be re-assessed at time of ground survey 	L	Standard O&M during operation
3	Avifauna	disturbance to local avifauna	L	Direct/Regional Irreversible				Same as above	L	
4	Aquatic / Marine Ecology	Impact to aquatic ecology	L	Direct/Local / Irreversible				None anticipated since new building development located X m from shoreline	L	
D. Human Environment										
1	Occupational Health and Safety	Exposure to hazards for workers working at work site, on asphalt mixing, concrete mixing, cement, etc.	M	Direct/Local / Reversible	X	X		<ul style="list-style-type: none"> Implement – Occupational Health and Safety Plan (including worker’s facilities and work areas, COVID-19 risk mitigation) Strictly enforce the use of PPE Employment of trained workers; additional training of workers for specific type of work engagement, 	L	PIU / PMU to monitor implementation as per EMP

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
		Fires, explosion and other accidents	M	Direct / Local / Irreversible		X	X	e.g. electrical works, transformer O&M, septic + soak pit O&M, Diesel genset O&M, etc. <ul style="list-style-type: none"> Same as above 	L	PIU / PMU to monitor implementation as per EMP
		Provision of construction (workers) accommodation	M	Direct/Local / Reversible		X		<ul style="list-style-type: none"> Provide adequate workers accommodation in line with IFC (WBG) guidelines IFC Guidance Note/Workers Accommodation 	L	PIU / PMU to monitor implementation as per EMP
		Unhygienic conditions at construction workers camps	M	Direct/Local / Reversible		X		<ul style="list-style-type: none"> Provide water and sanitation facilities (situated separately for men and women); regular cleaning and disinfection of camps Provide portable water / storage tanks Provide health check-up / access to medical care Provide waste bins and collection, no final disposal onsite Discharge construction (workers) camp sewage / wastewater into onsite portable toilet / receiving tank 	L	PIU / PMU to monitor implementation as per EMP
2	Community Health and Safety	Excessive disturbance to communities due to prolonged construction / civil works	M	Direct/Local / Reversible		X	X	<ul style="list-style-type: none"> Meaningful consultations with communities to keep them informed of anticipated activities, Identify and adhere to strict construction schedule 	L	Continued consultations with relevant stakeholders and affected communities

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
								<ul style="list-style-type: none"> Ensure communities are aware of Grievance Redress Mechanism (GRM) entry points set up for project Create awareness of health & safety risks of transmittable diseases (HIV/AIDs / COVID-19), child labour, bonded labour or forced labour Implement – Community Health and Safety Plan 		PIU / PMU to monitor implementation as per EMP
		Temporary traffic management, if required	L	Direct/Local / Reversible		X		<ul style="list-style-type: none"> Implement - Traffic and Road Management Plan 	L	PIU / PMU to monitor implementation as per EMP
		Access to construction site	M	Direct/Local / Reversible		X		<ul style="list-style-type: none"> Make all site secure, and discourage access by members of the public through appropriate fencing, signage and/or security personnel, as appropriate 	L	PIU / PMU to monitor implementation as per EMP
		Utility services interruptions	M	Direct/Local / Reversible	X			<ul style="list-style-type: none"> Assess work site in advance and identify potential for disruption to utility services and risks before starting civil works If temporary disruption is unavoidable, develop a plan in collaboration with relevant local authorities and communicate the dates and duration in advance to affected communities / persons / businesses 	L	PIU / PMU to monitor implementation as per EMP

S. No	Environmental Parameter	Potential Environmental Impacts	Level of Impact	Nature of impact	Project Stage			Mitigation Measures Identified in project EMP	Residual Impacts	Additional Mitigation Measures
					Design & Pre-C	C	O&M			
ALL INFRASTRUCTURE										
		Information disclosure	H	Direct/Local	X	X		<ul style="list-style-type: none"> Conduct meaningful consultations Dissemination of project information booklet (PIB) 	L	PIU / PMU to monitor Implementation as per EMP
		Issues to land use and acquisition not anticipated	L	Direct/Local / Irreversible	x	X		<ul style="list-style-type: none"> Gain additional consent and compensation for land owners as per SSSDDR / LARP if applicable 	L	PIU / PMU to monitor Implementation as per EMP / SSSDDR / LARP
4	Socio-economics	Beneficial impacts / job opportunities Influx of migrant workers	H	Direct/Regional		X	X	<ul style="list-style-type: none"> Hiring for temporary construction jobs; emphasis to local hiring to avoid social conflict Overall economic growth of the region 		

Appendix 3: Design Brief Hulhumalé – place holder



ADDU DV DESIGN BRIEF SUMMARY

Reference document: - *Addu Brief_Design Brief_DRAFT PPT_SR_2021201_AS PRESENTED+SENT.pdf*

Overall information:

- Site Area: 1938.93 SQM 20870.46 SQFT
- Number of Storeys: G+1
- Number of Survivors: 20 survivors, 10 adolescents, 14 children (as per ADB Design Brief presentation: *Addu Brief_Design Brief_DRAFT PPT_SR_2021201_AS PRESENTED+SENT.pdf*(slide no.09))
- Construction method: In-situ,
- Procurement method: Design & Build

Vision and Design Principles:

- Design Principles: (as per ADB Design Brief presentation: *Addu Brief_Design Brief_DRAFT PPT_SR_2021201_AS PRESENTED+SENT.pdf*)

Program:

- Area Breakdown: *Addu Brief_Design Brief_DRAFT PPT_SR_2021201_AS PRESENTED+SENT.pdf*(slide no.18-21))
- Staffing requirements: (as per shelter staffing operational costing document: *Shelter staff and OpCostings.xls*)

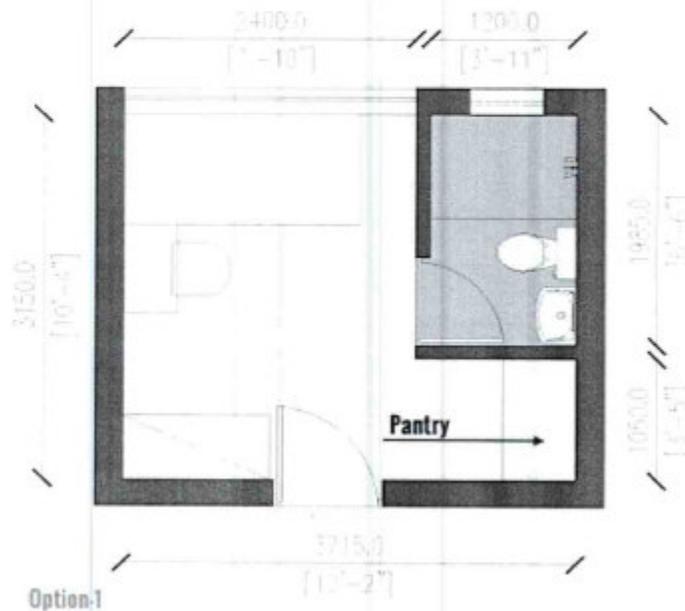




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Accommodation Units:

- **Design:** illustrative ideas for layout and furniture presented are agreeable, subject to modifications/ refinements based on site constraints (as per ADB Design Brief presentation: *Addu Brief_Design Brief_DRAFT PPT_SR_2021201_AS PRESENTED+SENT.pdf*(slide no.24-28))
- **Proportion of single vs. family:** a mix is agreeable based on site constraints, ensuring both options are present for maximum flexibility (agreed during consultations between MGFSS & ADB)
- **Type:** 1 Single Accommodation chosen unit type:-



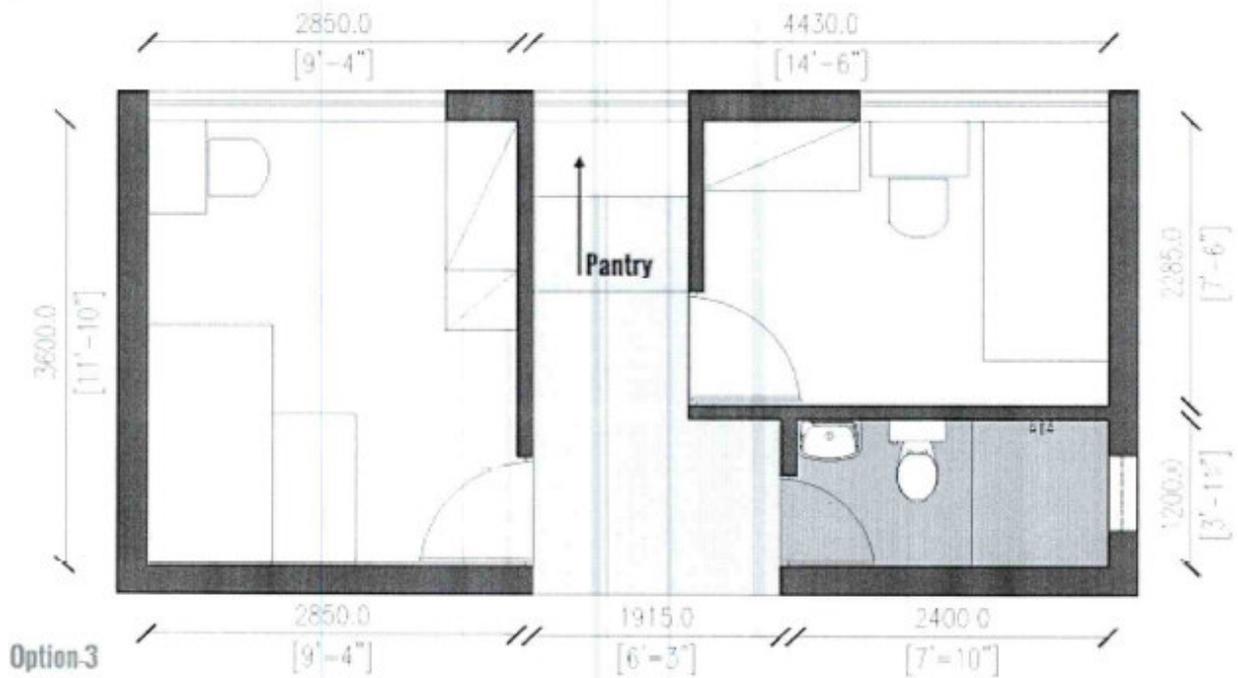
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Type: 2 Family/Double Accomodation chosen unit type:-



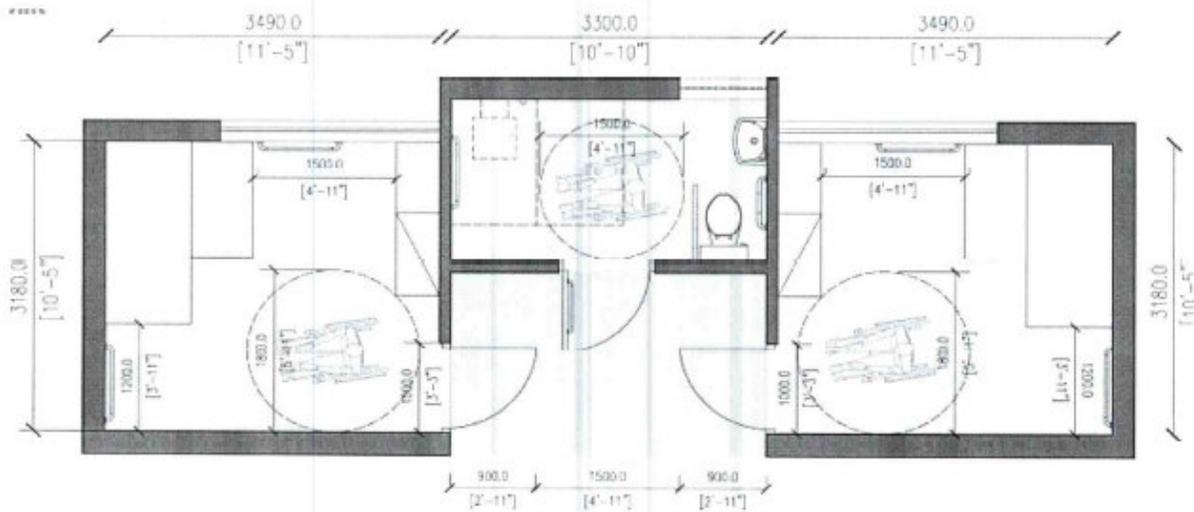
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- Type: 3 Universal Accomodation chosen unit type:-



as per ADB Design Brief presentation: *Addu Brief_Design Brief_DRAFT PPT_SR_2021201_AS PRESENTED + SENT.pdf(slide no.24+28)*





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Details:

Overall Design requirements

- Number of staff (with any requirements for overnight accommodation) refer to dv shelters staffing documents
- Vocational training: All clients will be provided with basic administrative management skills, reading / writing, computer literacy, basic computer skills, financial management. vocational training will be provided at the shelter in partnership with BCC, polytechnic . All these training on need basis
- Need for computers and number of computers. 20 computers
- Type of empowerment activities and spaces required: activities will depend on need basis. Activities will be carried out in partnership with DCC, Polytechnic and other collaborative organizations. examples: develop income generating skillset, aid in development of own business proposals.

Accommodation Units Design

- Alignment on the number of accommodation units
- Alignment on the number and location of "Universally Accessible" accommodation units
- Broad agreement on design approach for the units and interior considerations

Minimum:

1. Universal accessibility room (double occupancy) – Nos: 2
2. Single Occupancy: – Nos: 6
3. Family room / Double Occupancy: – Nos: 6

Design approach and interior considerations:

-no balconies, no latches on doors, no ceiling fans or any interior features that could compromise client's safety.

Miscellaneous

- AC for ventilation in all indoor spaces? Other feasible mechanical ventilation modes:- AC needed for accommodation and rooms with electronic equipment for minimum.
- Financial feasibility of integrating renewable energy sources (such as solar PV panels) in Project (discuss to provide provision for PV with ADB, that the building can accommodate pv in the futurc)
- Rainwater harvesting (planning ministry advised it is not required, MGFSS to confirm)





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Construction materials/ details/ local preferences for design

- Concrete/ Aluminum frames.
- Naturally occurring colors/ Finishes that reflect the surrounding environment.
- Gardens, Ponds, lifts etc.
- The boundary wall to be more porous, not to depict a jail like feeling.
- Materials that not susceptible to corrosion easily (due to high salinity in Maldives air)

Note by ADB design team: The design brief has a caveat that the actual areas may change based on site constraints etc. The spirit of this is not about significant changes, but minor and justifiable adjustments to sqft assumptions/ unit layouts etc. as the design takes shape.

Prepared by:

Ismail Murushid,
Architectural Consultant,
Project Management Unit – MGFSS

Checked by:

Akram Husaain,
Deputy Director General,
PPMRD – MGFSS

Approved by:

Zaufishan Abdullah Kamaaluddeen,
Permanent Secretary - MGFSS

Appendix 4: Salient Features Checklist Hulhumalé

Environment safeguards – Project screening Checklist / Hulhumalé' DV/GBV Shelter

Maldives SGII project

Checklist: site-specific information, climate events and hazards

Geographical	Notes
Location place / lat, long	[Redacted]
Distance from already developed areas	[Redacted] “[This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]”
Photos and maps	Obtained
Drainage (existing, planned)	Rainwater from the roof can be infiltrated into the soil within the plot. Drainage of roof rainwater not required to be connected to road storm-water management system.
Roads in proximity	Paved approach road to site from North side.
Other notable features	No vegetation on the site. Sandpiles onsite.
Geomorphological	
Site elevation (AMSL)	~+2m MSL
Distance from shoreline	[Redacted] “[This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]”
Coastal barriers (existing y/n)	None existing
Hazards (current climate)	Very low, low, moderate, high, very high
Rainfall episodes	Medium frequency, very Low severity
Flood episodes / risk	Very low Frequency, low severity
Coastal inundation episodes	Low frequency, Low severity

Surge / Storm surge episodes / risk	Low frequency, severity mid-high
Cyclonic wind hazard risk	Low frequency, high severity
Coastal erosion	Level of erosion (no, slight, severe, very severe): NA, site situated inland

Salient Features Checklist

Features	Description
Plinth Area / Depth	NA
Built-up Area	NA
Total Housing Units	18
Total Occupancy	~34 persons at a given time, 19 staff
Administrative area	Hulhumale' Development Cooperation
Topography, Drainage, Site slope	Natural drainage pattern needs to be retained, site slope is flat
Soil Conditions for surface, sub-surface	Fine Coral sand (reclaimed sand)
Groundwater table	In Hulhumale', the water table was observed at -2 m below Natural Ground Level (N.G.L.) obtained at medium tide.
Accessibility to site	Site is easily accessible by paved main roads,, ROW ~8 to 15 m
(Describe in terms of road width (m) Right of Way on all sides of the plot, paved or unpaved)	
Sites nearby	
Health, School facilities	
(Describe, provide distance and direction w.r.t site)	<p>[This information has been removed as it falls under the exception to disclosure in ADB's Access to Information Policy, para. 17.5.(x)]</p>

Features	Description
<p>Environmental sensitivity</p>	<p>No sensitive natural receptors within site or in close proximity to the proposed site.</p>
<p>Overhead or Underground utilities (describe, provide distance and direction w.r.t site)</p>	<p>No overhead / underground utilities within the site Lateral connection to water supply and sewerage to be provided by the Utility operators</p>
<p>Power (Electricity) (describe source, requirement or demand in kW for construction stage and operation stage, including information on any backup units in case of power outage) Note: acknowledgement from relevant power supply agency is required</p>	<p>Electricity for construction and O&M to be provided by STELCO (an state owned enterprise). Construction stage typically requires 3 kW Request for acknowledgement letter from the to be initiated by PMU / PIU</p>
<p>Water supply (describe source, requirement or demand in KLD for construction stage and operation stage) (if source from groundwater well, describe type of treatment proposed for potable usage) Note: acknowledgement from relevant water supply agency is required</p>	<p>Water supply is managed by the MWSC (an state owned enterprise); supply 24/7 and O&M Request for acknowledgement letter from Council to be initiated by PMU /PIU</p>
<p>Wastewater / sewage management (describe estimated generation in KLD, treatment type, capacity, site placement, depth, distance from sensitive receptors, building, existing Underground / Overground utilities) and provide the process flow diagram)</p>	<p>Sewerage network is managed by the MWSC; lateral connection from main sewerage line to site to be provided by the MWSC. Hulhumale' does not have an STP.</p>
<p>Sludge waste management (describe generation in kg per expected clearing cycle, collection and disposal including disposal location marked on map and distance from site) Note: acknowledgement from relevant agency is</p>	<p>~90-110kg expected per cycle. Collection will be carried out by the WAMCO (an state owned enterprise) and disposed to a collection site. This</p>

Features	Description
<p>Construction and Demolition / hazardous waste management (describe generation in tons/day, collection, transport and disposal location marked on map and distance from site) Note: acknowledgement from relevant agency is required</p>	<p>is later transported to Thilafushi via LCTs daily.</p>
<p>Solid (domestic) waste management (describe per capita generation (kg/day) bio-degradable and non-bio-degradable or mixed waste ratio, collection, management and disposal location marked on map and distance from site) Note: acknowledgement from relevant agency is required</p>	<p>C&D / hazardous waste / debris not segregated; collection and transported by the WAMCO operated collection site</p> <p>Onsite compost pits are typically not in practice</p> <p>Domestic solid waste will be collected and transported by WAMCO to WAMCO operated collection site (same as above)</p>
<p>Rainwater harvesting structures / trenches, if any proposed (describe width and depth, and collection in m3)</p>	<p>Request for acknowledgement letter from WAMCO to be initiated by PMU /PIU</p> <p>Rainwater harvesting is to be carried out using rainwater harvesting PVC tanks.</p>

Power Requirement at Site (Operation)

S. no	Particulars	Quantity (No.)	Unit
1	Building		
	No. of units proposed	18	
	Power requirement per unit (in kW)	3.83	kW
2	Street Light		
	No. of street lights	0	Nos.
	Power required for the street lights (in kW)	0	kW
3	Other?	0	
Total Power Requirement		~70	kW

Note: above values calculated approximately taking nominal powers for the common items such as (Lights -18W, E.Outlets,13A,16A-200, Other items – 2850W.) Calculated based on the inputs from an Electrical Engineer.

Water Requirement at the Site (Operation) per DAY

S. No	Particular	No of Units	Occupancy rate@	Total Occupancy Nos
1	Residential		? persons per unit	34
2	Staff & Visitors			19
2	Floating Population of Survivors		? % of Residential	
3	Other ?			
Total				53
Please provide the recommended litre per capita per day (LPCD) for site				53 x 50LPCD = 2.65MLD
Green area / landscaping of area in sqm				
Actual water requirement for Gardening purpose				70L

Solid Waste Generation at the Site (Operation) per DAY

S No	Particulars	Total Occupancy Nos	Per capita Generation (kg/day)	Total Solid waste generation (kg/day)	Total Bio Degradable Waste (kg/day)	Total Non-Bio Degradable Waste (kg/day)
1	Residential	34	3	1	1	1
2	Staff & Visitors	19	1.5	1	0.5	0
3	Floating Population of Survivors					
4	Other?					
Total				130.5	43.5	34

Note: above values are calculated or obtained based on the inputs from local Environmental consultant.

Safeguards System Assessment

The main purpose of conducting safeguards system assessment (SSA) is to:

- identify the level of environment related risks of ADB-funded subproject(s) to be implemented by Executing Agency (EA) and Implementing Agency (IA), specifically subprojects under output 5⁹⁸
- identify the current implementation capacity of EA and IAs with respect to managing the risks
- identify good practices as well as gaps between Country safeguards system and the ADB Safeguard Policy Statement (SPS) 2009
- recommend actions to strengthen EA and IAs capacity and address gaps through gap-filling measures

Project Implementation Unit at Ministry of National Planning, Housing Infrastructure.

S. No	Questions	Remarks
1	How long has the project management unit (PIU) functioning since its inception at the Ministry?	Has not been established yet
2	Has the PIU been set up dedicated for overall project management of the aforementioned Grant (project) or does the PIU oversee other externally financed projects as well?	Has not been established yet. Once established will be dedicated to the aforementioned project
3	Provide the current institutional setup, including an organigram (The organigram should indicate where the PIU is situated)	Ministry of National Planning, Housing and Infrastructure → Infrastructure department → Project Implementation unit
4	Provide the current and/or proposed staffing list of the PIU. (Do ensure the staffing list has the name, designation, number and function of personnel)	Has not been established yet Construction field supervisor Construction Management Engineer Finance/Procurement officer Environmental and social safeguard specialist
5	Please indicate whether the members within the current staffing list of the PIU have direct, indirect, or no experience with ADB funded projects.	PIU not established
6	Does the Ministry and/or the PIU oversee, supervise directly or indirectly the construction of projects e.g., building of safe homes, children's shelters, etc.	MNPHI is mainly involved with infrastructure such as roads, water and sewerage network construction, harbours, reclamation and coastal protection. Construction building supervision
7	Does the PIU have direct or indirect understanding of government environment regulations, and the compliance requirements thereof (e.g., for construction	PIU not established

⁹⁸ Climate-resilient shelters for child- and elderly care and gender-based violence survivors established in project areas. (Source: Project Concept Paper, January 2021).

	of buildings and corresponding supporting facilities e.g., water, sewerage, etc.)	
8	Describe the type of and steps followed by the Ministry and/or the PIU (as applicable) to obtain environmental clearances, permits and approvals from the relevant agencies.	Ministry involves environmental consultants to obtain environmental clearances
9	Please list the current (and proposed, if applicable) internal policies, procedures and/or good practices for environment related safeguards at the Ministry and/or the PIU ? (Do ensure the relevant policies, procedures for environmental safeguards are shared as Attachments along with the response to these questions)	MNPHI reviews environmental related documents submitted by consultant before submission to EPA Ministry has close communication and coordination with EPA and does regular follow ups. Ministry ensures that the Contractor follows the environmental regulations
10	What are the current (and proposed, if applicable) the coordination mechanisms between the PMU and PIU for project output 5 to ensure smooth project implementation?	Propose to conduct monthly progress site visits in which the PMU can participate PMU to be updated regarding the construction progress
11	Does the Ministry and/or PIU have an existing grievance redressal mechanism (GRM) in place? If Yes, describe in detail it's function, steps undertaken to address grievances and composition. If No, describe how does the PIU envision the GRM set up	In past ADB projects by MNPHI had mechanism established. Will proceed according the PAM of the project.

Appendix 5: Minutes of Meeting

Minutes and discussion points of Meeting with HDC, Hulhumalé

Venue: HDC office Hulhumale

Date 5th June 2022

Time 15:30-17:00

Meeting Attendees

Name	Designation	Office
Charlene Liue	Project Manager	ADB
Mahmood Riyaz	Environmental; Safeguard ADB (Local)	ADB
Ruppa	Social Safeguard	ADB
MateoMode	Climate Change Specialist	ADB
Sanober Durani	Environmental Safeguard (international)	ADB
Achyutha Rao	Environmental Safeguard	ADB
Deb Thimas	Gender Consultant	ADB
Seethaa Rajupathy	Project Architect	ADB
Ismail Musrshid	Project Architect (local)	MFGSS PMU
Akram Hussain	Director General	MFGSS
Athifa Ibrahim	Gender Specialist (local)	ADB
Mariyam Shiuna	Project Officer	MFGSS/ PMU
Nasira Nasir	Quantity surveyor	MPHI
Fathimath Leena	Director General	MFGSS
Abdulla Madeeh	Bussiness Development Officer	HDC
Amintha Riuman Wasif	Sen. Bussiness development officer	HDC
Hassan Abdul Muhsin	Sen Env. Analyst	HDC
Ziya Zaki	Urban Planner	HDC

Discussion points

After a brief introduction of the participants, Charlene gave a brief account about the outputs of the project

Matteo Explained the over all climate resilient component of the project and how the building is going to be energy efficient, disaster risk resilient in the face climate change. The proposed building will be designed to take into impacts of climate change such as rainfall increase, temperature rise and sea level rise. And ADB wanted to show how they are going contribute to climate change.

Achyutha Asked Mr. Hassan about his role in HDC as a senior environmental analyst He said that his job is make sure that the development in Hulhumale area climate change resilient, sustainable the development will have less impact on the environment as well as social impacts of the project. His section can develop EIAs as he can flag projects and development that requires EIA, IEE.

ADB team expressed that they are proposing to have G +2 depending on the availability of financial resources.

Most of the clarification on the design were asked by Seetha from ADB team based on the site-specific planning document HDC has provided

She clarified about the roof extending beyond the set backline towards the road? Asked for the exception to utilize the empty space.

HDC asked to send the comments and they will look into possible exemptions for the government.

Asked about the boundary walls if it can be transparent, made of porous blocks and requested the minimum height required asked to provide a range?

Asked for the leniency in parking space regulations

With regard to utilities request a letter from HDC saying that the utility services will be provided

According the rules of HGC service pipelines in the building cannot be exposed

With regard to water during construction, HDC said special construction lines will be provided and contractor has to apply for it, the water is sourced from RO plants

The building will also have adequate water harvesting the storage must be sufficient for 5 days (20 litre/person/day) is the minimum rate of water consumption estimated.

Fire fighting requirement regulations needs to be provided to Seetha

For garbage collection chutes can be constructed

There is a current regulation /directive⁹⁹ from WAMCO on segregation of waste

Seetha also asked about the minimum slope of the disabled people ramp, PWD access width, motor bike parking and disability access etc

HDC will check on the Minimal plinth level empty plot relaxation possibilities, railing height duct size etc and exemptions.

At the end of the meeting Seetha gave a presentation on the designed DB/GBV shelter in North Male Atoll.

⁹⁹ <https://www.facebook.com/WAMCOMaldives/photos/pcb.3175281052687453/3175280956020796/>
<https://www.wamco.com.mv/download/20220525-wamco-waste-segregation-guidelines-english.pdf>

Photos

“[This information has been removed as it falls under the exception to disclosure in ADB’s Access to Information Policy, para. 17.5.(x)]”

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Consultations with Hulhumalé residents

Location: Hulhumalé

Date: 5th June 2022

Facilitators: Fatima Leena, Director General MGFSS, Mariyam Shiuna, Project Officer PMU/MGFSS.

Consultations were held with individual residents in and around the Hulhumalé site. The persons were briefed about the project, its objectives and scope of works. Everyone consulted acknowledged there is a problem of DV/GBV in the community. They expressed that though DV/GBV was not happening in their homes, they knew of cases. All the respondents agreed there was an urgent need of the project.

One participant runs a Children’s Awareness Program through the Child Abuse Prevention Society. It is involved in advocacy and awareness program for parents and children. He mentioned 3-4 case are reported every month. The Society has a Hotline through which counselling is provided. All cases have to be directed to the MGFSS.

Photographs of Meeting with residents





Solih



Hamid



Rizva & Aminath



Iffa & Shazi



Mariam



Aisha & Rizna

Appendix 6a: TOR National Safeguards Consultant

Date: xx

Advertisement Reference: xx

**STRENGTHENING GENDER INCLUSIVE INITIATIVE PROJECT
NATIONAL (ENVIRONMENTAL AND SOCIAL) SAFEGUARDS CONSULTANT
TERMS OF REFERENCE**

A. PURPOSE

The Government of the Republic of Maldives through Ministry of National Planning Housing and Infrastructure is implementing “Output 5 of the Strengthening Gender Inclusive Initiative Project or MLD SG II ” financed by Asian Development Bank (ADB) and the Government of Maldives (GOM) and intends to apply part of the proceeds for the selection of a national (Environment and Social) Safeguards Consultant .

B. BACKGROUND

The GOM and ADB are designing a new project together called, Strengthening Gender Inclusive Initiatives (SGII). The project will support the Government of Maldives to implement gender equality actions in its Strategic Action Plan. The project will contribute to the reduction of violence against women and strengthen women’s participation and benefits from economic and social development. It will achieve this by increasing access to sustainable services that women and families need to protect and respond to domestic violence, and to reduce the unpaid burden of caring for young children and the elderly. These services are essential if women are to access their equal rights in society, and take up education and employment opportunities that will benefit themselves, their families and the country. The project will work with multiple government agencies, civil society organizations and community groups. The lead implementing agency is the Ministry of Gender, Family and Social Services (MGFSS). In addition, the project will work with the Ministry of Finance (MOF), the Maldives Bureau of Statistics, the Family Protection Authority and the Ministry of National Planning, Housing and Infrastructure (MNPHI) who will lead the implementation of project Output 5 that will establish three climate-resilient domestic and gender-based violence (DV/GBV) shelters in Raa, Addu and Male’ and establish one climate-resilient Aged Community Centre (ACC) in Addu.

C. OBJECTIVE

The national safeguards consultant (environment and social) will be engaged by the MNPHI to assist in the implementation of the project output 5 and safeguards requirements as per ADB SPS 2009.

D. SCOPE OF SERVICES

The NSC will be responsible for, but not limited to, the following activities for Output 5:

General

- Update, as necessary, the subproject Initial Environmental Examination (IEEs), Environmental Management Plan (EMPs) and Social Safeguards Due Diligence Report (SSDDRs), and after obtaining PIU and ADB's approval, oversee its implementation
- Work and coordinate with service providers to complete due diligence for supporting facilities to each subproject site
- Work and coordinate with PIU and PIU appointed site contractors to develop and finalize site EMPs (SEMPs), and after obtaining PIU's approval, oversee SEMP implementation
- Work and coordinate with PIU to supervise the integration of safeguard measures into the detailed engineering design, civil works and post construction works of all proposed infrastructure under each subproject by the PIU / PIU appointed site contractors
- Assist PIU and PIU appointed site contractors with compliance to ADB SPS 2009 requirements including handling complaints and grievances filed through the project GRM
- Be responsible for building implementing agencies capacity in safeguards monitoring and reporting
- Assist the PIU in coordination activities with relevant line ministries and City / Island Councils on permits, approvals and/or clearances and compliance with relevant national and local regulatory requirements
- Assist PIU appointed contractors in conducting project level COVID-19 risk assessment; ensure that the all OHS plans integrate measures to mitigate COVID-19 health risks that are aligned with Government's guidelines and measures
- Conduct random checks / audits of contractor's OHS performance
- Assist facility operator in developing and implementing the SOMPs during O&M stage
- Assist facility operator to regularly co-ordinate with the relevant stakeholders to provide up to date information on subproject activities and address any issues that arise during operation stage

Detailed Tasks

Pre-construction Stage

(i) Task 1. Preparation of application for domestic permit / approval

The NSC will assist PIU to work with local environmental agencies / Island Council to prepare and submit an appropriate domestic permit documentation for the subprojects under project output 5, as required, prior to any civil works / contract award to contractors.

(ii) Task 2. Project Readiness Compliance

- a) Assist PIU in project readiness monitoring against checklist and indicators set out in the EMP, in particular:
- b) Update the IEE and EMP, to take account of detailed engineering designs of the subproject components, factoring any new details and developments into the mitigation and monitoring plans including finalized supporting facilities, budget and capacity development needs of PIU and contractor staff
- c) Ensure that all relevant requirements of the EMP including any updates, are adequately addressed and included in the EPC bidding documents and civil work contracts
- d) Ensure implementation of the environment safeguards documents is compliant with safeguard requirements as per ADB SPS 2009

- e) Implement and monitor meaningful consultations throughout project implementation cycle
- f) Obtain ADB approval for the updated IEE and EMP
- g) Implement the updated IEE and EMP
- h) Organize and conduct a training and capacity development program for the PMU, PIU and PIU appointed key contractors on topics as set out in EMP (including SEMP implementation), compliance monitoring of construction activities and preparation of periodic monitoring reports, supervision responsibilities and interaction with contractors and communities, documentation, resolution and reporting of non-compliances and complaints, provide on job trainings throughout the subproject implementation period ¹⁰⁰
- i) Ensure that a practicable Grievance Redress Mechanism (GRM) is in place and that affected persons / households, institutions and other relevant stakeholders are informed about it and procedures to place a complaint for any environment and social issues. Assist PIU with: (a) building capacity of the grievance redress committee (GRC) members; (b) maintaining adequate recording of the complaints (grievance logs and forms); (c) responses to complaints from affected persons/ households and institutions and ensure their resolution in a timely manner; (d) ensure follow-ups with affected persons / households to check that issues have been resolved satisfactorily; and (e) establishing and regularly updating a database of complaints received and status of their resolution and any bottlenecks, and summarizing the status of the GRM in the periodic and safeguards monitoring reports to be submitted to ADB.
- j) Assist with information disclosure, distribution of Project Information Leaflet, ¹⁰¹ consultations, and participation with the public, ensuring at least 30% women's participation overall and conducting separate consultations with women, on an ongoing basis throughout project implementation.
- k) Assist Site Contractors, PIU in preparing monitoring reports for submission to the PMU.

Implementation Stage

(iii) Task 3. Implementation of IEE and EMP, SDDDR

- a) Assist PIU in compliance assurance with relevant government laws and regulations and ADB SPS 2009 requirements.
- b) Assist PIU in implementing IEE, EMP, and GRM. Ensure construction mitigation measures as set out in EMP are implemented.
- c) Assist PIU in drafting and/or updating the Public Information leaflet that will include subproject information including grievance redress committee (GRC), key focal point person contacts and any other details as relevant.
- d) Provide training to PIU and PIU appointed key contractors, relevant PMU staff and facility operators on EMP implementation, provide training and checklists for monitoring parameters and responsibilities; on conducting consultations with affected people / households and communities on ongoing basis during project implementation.
- e) In coordination with PIU appointed site contractors, prepare site environmental management plans (SEMPs) based on the updated EMP and on actual site conditions

¹⁰⁰ The NSC will be responsible for building PIU capacity in safeguards monitoring / evaluation and reporting. The NSC will also assist the PIU and PIU appointed site contractors in conducting subproject level COVID-19 risk assessment. The NSC will ensure that the site contractor's Occupational Health & Safety plans integrate measures to mitigate COVID-19 health risks that are aligned with Government guidelines and measures listed in the EMP.

¹⁰¹ A Project Information Leaflet in local language will be prepared (to be distributed and made available to affected persons / households in public consultation meetings, subproject construction field offices and at locations prescribed in the IEE. This will include the contact information including implementing agency MNPFI website address, PIU, PMU, NSC, Island council office and site contractors address and telephone number for local focal point persons.

- prior to mobilizing; take reference from SEMP, and prepare Standard Operation & Maintenance Plans (SOMPs) for the O&M stage, as applicable.
- f) Coordinate with the local agencies / authorities on all relevant environmental regulatory compliance issues.
 - g) Coordinate with site contractors to conduct environmental baseline (monitoring) surveys as set out in the EMP.¹⁰²
 - h) Assist PIU with the information disclosure, meaningful consultation and participation on an ongoing basis throughout project implementation including dissemination of project information e.g., results of baseline surveys, environmental safeguards, emergency response plans (ERPs), community health and safety measures and GRM; and integrate public views in project planning.
 - i) Obtain monthly information from the PIU appointed site contractors in a simple report template to report on mitigation activities, environmental issues and corresponding corrective actions proposed or taken, including grievances reported and status of resolution.
 - j) Assist PIU appointed site contractors and PIU staff in compliance monitoring, preparation of environment and social related information for submission to PMU for the project quarterly progress report (QPRs) and semi-annual and annual safeguard reporting during construction and O&M stage, respectively.
 - k) Assist the PIU and PIU appointed site contractors in conducting subproject level COVID-19 risk assessment; ensure that the contractor's Occupational Health & Safety plans (OHSP) integrate measures to mitigate COVID-19 health risks that are aligned with government guidelines and measures listed in the EMP.¹⁰³
 - l) Oversee implementation of post construction activities as per EMP

(iv) Task 4. Construction Supervision of PIU appointed Site Contractors

Work in close coordination with **Construction Field Supervisor** and undertake the following:

- a) Conduct regular site visits and monitor civil works; identify any safeguards issues / problems during subproject implementation; propose remedial / corrective actions and report outstanding issues.
- b) Ensure appointment of trained key focal persons on site contractor staff (C-ES, C-HS, C-GRM)¹⁰⁴ prior to civil works commencing.
- c) Coordinate with PIU appointed site contractors to finalize Site Environmental Management Plans (SEMPs) prior to civil works commencing and obtain approval from PIU, supervise and regularly monitor implementation of EMP/ SEMP, community and occupational environment, health and safety (EHS) measures and GRM by all parties on the site.
- d) Supervise all environmental monitoring (air quality, noise) monitoring conducted by PIU appointed site contractors
- e) Monitor compliance with applicable national labor laws and core labor standards, including but not limited to equal pay for equal work regardless of gender, race or ethnicity, and exclusion of child labor.
- f) Oversee implementation of post construction activities as per EMP

¹⁰² The contract may include a specific line item allowing site contractor to sub-contract consultancy services for conducting environmental baseline surveys across defined area of influence, if required.

¹⁰³ The NSC will work with the site contractor to develop the OHSP and consult with public health inspectors of the area, local medical officers and other relevant health specialists; with a recommendation forwarded to the implementing agency for clearance.

¹⁰⁴ C-ES = Contractor – Environment and Social; C-HS = Contractor Health and Safety; C-GRM = Contractor Grievance Redress Mechanism

All Phases**(v) Task 5. Project Administration and Reporting**

- a) Set up a project performance monitoring and document management system for safeguards documentation; maintain records of communications between PMU, other government agencies, PIU, PIU appointed site contractors, construction field supervisor and ADB.
- b) Monitor safeguards implementation against the subproject's time schedules and work programs provided by the PIU and PIU appointed site contractor
- c) Undertake other subproject-related tasks as can be reasonably inferred for the successful completion of the project.
- d) Oversee and follow the reporting schedule:

Responsibility	Reporting Requirements	Reporting to
Site Contractors	Weekly inspection and monitoring reports	PIU
NSC	Monthly inspection and monitoring reports	PIU
	Environment input for Quarterly Progress Reports (QPRs) during construction stage	PIU

E. REQUIRED QUALIFICATION AND EXPERIENCE

The applicant should possess following educational background and experience:

- Undergraduate Degree in Environmental Management or related sciences
- Minimum three (3) years of work experience in the area of environmental and social management or a related position is preferred; relevant experience in donor funded projects specifically ADB will be preferred; understanding of ADBs SPS will be added advantage.
- Must be result oriented and proactive with excellent written and oral communication skills in Dhivehi and English.
- Sound understanding of principles underlying environmental and social management and international best practices in the field; understanding and familiarity with Government regulations on environmental management and conservation.
- Must be computer literate in the use of basic applications.
- The successful candidate must understand the objectives and delivery mechanisms of the project portfolio.
- He/she must be willing to work in a team, be flexible to emerging or changing conditions, and undertake initiative in his/her broad field of actions.

F. REPORTING REQUIREMENT

1. Report directly to the PIU / Project Lead on all aspects of Project Management throughout the duration of the contract unless otherwise advised by the Client.
2. The National (Environmental and Social) Safeguards Consultant shall ensure that all the required reports for the project are prepared on time, in accordance with the requirements of Client.

G. SCHEDULE FOR THE ASSIGNMENT

Duration of the assignment is xx months from the commencement of the works with potential extension based on performance and need.

H. SELECTION CRITERIA

The Candidate will be selected based on the following criteria.

Rating Criteria	
Criterion	Rate
Experience in Environmental Social Safeguard Issues and familiar with Environment and Social Assessments (ESA) and ADB safeguards requirements or equivalent	30 points
Experience in working in similar projects (both PSIP and Donor Funded)	30 points
Minimum undergraduate degree in related field	20 points
Interview	20 points

I. REMUNERATIONS

Successful Candidate will be paid an all-inclusive monthly fee in the range of MVR xx to MVR xx depending on their qualifications and experience.

J. SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT

1. Office space and other facilities such as computers will be provided as required.
2. Local transport for official travel between Male', inter-Atolls and inter-islands and allowances to cover food and accommodation for the trips will be provided from the projects.
3. Leave Entitlement:
 - Unplanned Leave:
 - a. The Consultant may take up to ten (10) working days of paid leave per annum or pro rata as may be agreed by the client for medical reasons or emergencies. If the duration is more than two consecutive days, a medical certificate specifying the nature of the consultant's illness and recommended duration of leave issued by a licensed medical practitioner must be submitted on the first day back at work.
 - b. The Consultant may take up to ten (10) working days of paid leave per annum or pro rata as may be agreed by the client for Family Responsibility reasons or emergencies.

Planned Leave: The consultant may take up to thirty (30) working days of paid leave per annum or pro rata as may be agreed by the Client.

K. APPLICATION

Interested applicants may submit their proposal in a sealed envelope indicating the following:

1. Letter of Expression of Interest (EOI)
2. Copy of National Identification Card
3. Attested copies of Educational Certificates (copies taken from with original accredited certificates)

4. A CV that demonstrates that the applicant is qualified to perform the services (including a description of similar assignments, experience in similar conditions, availability of appropriate skills etc.)

L. SUBMISSION

Interested candidates may submit their proposals on or before the time provided in the advertisement to the following address:

Infrastructure Department,
Ministry of National Planning Housing and Infrastructure,
Ameenee Magu, Maafannu Male', 20392,
Republic of Maldives.
Email: tenders@planning.gov.mv

Appendix 6b: TOR Construction Field Supervisor – draft

STRENGTHENING GENDER INCLUSIVE INITIATIVE PROJECT (ADB FUNDED)

I. CONSTRUCTION FIELD SUPERVISOR

TERMS OF REFERENCE

1. PURPOSE

The Government of the Republic of Maldives through Ministry of National Planning and Infrastructure (MNPI) is implementing “Output 5 of the Strengthening Gender Inclusive Initiative Project” financed by Asian Development Bank (ADB) and the Government of Maldives (GOM) and intends to apply part of the proceeds for the selection of a **CONSTRUCTION FIELD SUPERVISOR** for the implementation of this project by Ministry of National Planning and Infrastructure.

2. BACKGROUND

The Government of Maldives and the Asian Development Bank are designing a new project together called, Strengthening Gender Inclusive Initiatives (SGII).

The project will support the Government to implement gender equality actions in the Strategic Action Plan. It will contribute to the reduction of violence against women and strengthen women’s participation and benefits from economic and social development. It will achieve this by increasing access to sustainable services that women and families need to protect and respond to domestic violence, and to reduce the unpaid burden of caring for young children and the elderly. These services are essential if women are to access their equal rights in society, and take up education and employment opportunities that will benefit themselves, their families and the country.

The project will work with multiple government agencies, civil society organizations and community groups. The lead implementing agency is the Ministry of Gender, Family and Social Services. In addition, the project will work with the Ministry of Finance, the Maldives Bureau of Statistics, the Family Protection Authority and the Ministry of National Planning, Housing and Infrastructure.

The project Output 5 is to be implemented by Ministry of National Planning, Housing and Infrastructure.

- **Output 5:** Establish three climate-resilient domestic and Gender based violence shelters in Ungoofaaru, Addu and Hulhumale. Establish one climate-resilient Aged Community Centre in Addu.

3. SCOPE OF SERVICES

The Construction Field Supervisor will be required to work closely with the National Safeguards Consultant (NSC) – Environment and Social, PIU and MNPHI Infrastructure department team.

His/her responsibilities shall include but not be limited to:

- a) Ensuring integrity of concept design during the execution stage; maintaining clear and constant communication with the contractor to enable this
- b) Approve the construction methods, coordinate with NSC to oversee preparation of Site Environmental Management Plans. Propose modifications, if necessary.
- c) Maintain constant coordination between the contractor and their representatives (architects, engineers and surveyors, key focal point persons¹⁰⁵), including attending regular meetings. Prepare a communication protocol (for written documents as well as drawings)
- d) Review and approve contractor's work program, implementation schedule, methodology, and safety plan, and supervise the progress of construction works in line with requirements as described in subproject Initial Environmental Examination (IEE), Environmental Management Plan (EMP) and Social Safeguards Due Diligence Report (SSDDR). Inform the MNPHI Focal point / PIU (safeguards staff of any delay or potential delays in the work schedule of the contract and take necessary actions to prevent potential delays.
- e) Issue notices to the contractor on any non-compliance with safeguards requirements, including occupational health & safety plan, community health & safety plan, environmental mitigation measures, and social safeguards, as set out in the contract documents.
- f) Issue notices to contractors for defects or deficiencies, and issue instruction for the removal, corrective actions, or submission of improper works
- g) Ensure that all materials used and works performed are in accordance with the specifications indicated in the contract documents.
- h) Oversee quality control health and safety matters, including Covid-19 risk mitigation measures of workers / workers camps on construction sites.
- i) Review, approve within his competency, and issue variation orders (scope, cost, materials, time).
- j) Inspect project sites for work progress and quality.
- k) Inspect jointly with the Client the completed works and assist in formal taking over and review and approve or prepare as-built drawings and plans and provide reports confirming satisfactory completion of the works.
- l) Managing, supervising contractors on site and advising on civil engineering issues
- m) Reviewing, checking and approving reports and drawings
- n) To assist in evaluation of specifications and in quality assurance. Develop a snag list at key stages and work with the contractor to rectify issues
- o) Resolve technical issues with employer's representatives, suppliers, subcontractors and statutory authorities; participate in grievance resolution in the field as per project GRM
- p) Performance of field activities such as observe and record existing field conditions, take and verify measurements within project area

¹⁰⁵ C-HS = Contractor Health & Safety focal point person; C-ES = Contractor Environment and Social focal point person; C-GRM = Contractor Grievance Redress focal point person

- q) Advise the client with the day-to-day coordination and supervision of civil works, including implementation status and issues, and preparation of regular progress reports.

It is not the intention of this document to completely specify all detailed services required during engineering, procurement and renovation phases of the project, however any additional services which are not specifically mentioned here, but which are required to complete the project in every respect and in accordance with the intent, technical specification for safe use and guaranteed performance, shall be deemed to be covered under the scope of work.

4. QUALIFICATION AND EXPERIENCE

The Construction Field Supervisor will be responsible to deliver and accomplish the renovation of the office building in compliance with the project's goals and objectives. The Construction Field Supervisor should be a duly qualified building industry professional and one who specializes in structural and building engineering.

- a) The candidate should have a Bachelor's Degree in Civil / Structural Engineering and/ or in related field, and should possess at least 2 years of work experience as a Civil Engineer.
- b) The engineer shall have at least 2 years site experience and knowledge in the various fields of civil engineering expertise required for design and supervision of all related construction works.

5. SELECTION CRITERIA

The Construction Field Supervisor will be selected based on the following criteria.

Rating Criteria	
Criterion	Rate
Educational Qualification - Bachelor's Degree in Civil / Structural Engineering and/ or in related field	20 points
Experience in related field - at least 2 years of work experience as a Civil Engineer	30 points
Site experience and knowledge in the field related to construction - at least 2 years site experience and knowledge in the various fields of civil engineering expertise required for design and supervision of all related construction works.	30 points
Interpersonal Skills and Presentation (will be assessed during personal interview) - Experience in the field - Experience working on similar assignments (working in site) - Interpersonal Skills and Hard skills	20 points 08 points 08 points 04 points

6. REPORTING REQUIREMENT

- a) The Construction Field Supervisor will report directly to the MNPHI throughout the duration of the contract unless otherwise advised by the Employer.
- b) The Construction Field Supervisor shall ensure that all the contractual requirements are met and reporting obligations such as required financial reports for the project are prepared on time, in accordance with the requirements of the Employer and funding agency.
- c) The Construction Field Supervisor is expected to report to work on weekdays from 0800-1400 hours other than public holidays and provide services to the Client for an average of xx hours a week. Remuneration for less than 8 hours work per day will be on a pro-rate basis.
- d) Be available on a full-time basis during the consultancy period and whenever inspection is required after normal working hours.
- e) The Construction Field Supervisor is required to report to work in official attire or smart casual for site inspections.

7. PROJECT DURATION

The estimated duration of this consultancy (individual) is **xx calendar months** with option of renewing the contract as per project needs and contracted staff's performance and need.

8. IMPLEMENTING AGENCY AND LOCATION OF THE PROJECT

On behalf of the Government of Maldives, the Ministry of National Planning, Housing and Infrastructure (MNPHI) will act as the Implementing Agency for the project output 5. The project is located in xx

9. REMUNERATION, SERVICES AND FACILITIES TO BE PROVIDED BY IMPLEMENTATION AGENCY

- a) Successful individual will be paid an all-inclusive monthly salary in the range of MVR xx to xx depending on their qualifications and experience.
- b) The Implementation Agency will:
 - o Furnish all available and related data, maps and information required for the execution of the services.
 - o Assign counterpart personnel for the purpose of liaison with other Government agencies.
- c) Leave Entitlement
 - i. All the national/public holidays that is observed by the Government of Maldives.
 - ii. Annual leaves: 30 days leave per calendar year.
 - iii. Any other absence or leave from input days apart from mentioned above will have deduction of 1/22 of the monthly salary per day.

10. APPLICATION

Interested applicants may submit their proposal in a sealed envelope indicating the following:

5. Letter of Expression of Interest (EOI)
6. Copy of National Identification Card
7. Attested copies of Educational Certificates (copies taken from with original accredited certificates)
8. A CV that demonstrates that the applicant is qualified to perform the services (including a description of similar assignments, experience in similar conditions, availability of appropriate skills etc.)

11. SUBMISSION

Interested candidates may submit their proposals on or before the time provided in the advertisement to the following address:

Infrastructure Department,
Ministry of National Planning, Housing and Infrastructure,
Ameenee Magu, Maafannu Male', 20392,
Republic of Maldives.
Email: tenders@planning.gov.mv

Appendix 7: Template for Monitoring and GRM

Sample Grievance Form (To be made available in Dhivehi)

The Proposed Republic of Maldives: Strengthening Gender Inclusive Initiatives Project welcomes complaints, suggestions, queries, and comments regarding project implementation. We encourage persons with a grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback.

In case you want to include your personal details but want information to remain confidential, please type

CONFIDENTIAL above your name.

Date	Place of Registration		
Contact Information/Personal Details			
Name:	Gender: Male Female	Age:	
Home Address			
Village/Town			
District			
Phone no.			
E-mail			
Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your Grievance below: If included as an attachment/note/letter, please mention here:			
FOR OFFICIAL USE ONLY			
How do you want us to reach you for feedback on your comment/grievance?			

Registered by: (Name of Official registering grievance)			
Verified through:	Note/Letter	E-mail	Verbal/Telephonic
Reviewed by: (Names/Position of Official(s) reviewing grievance)			
Action Taken:			
Whether Action Taken Disclosed:		Yes	No
Means of Disclosure:			

Sample Environmental Site Inspection Report¹⁰⁶

Sub-Project Name: _____
 Contract Number: _____

NAME: _____ DATE: _____
 TITLE: _____
 LOCATION: _____

WEATHER CONDITION: _____

INITIAL SITE CONDITION: _____

CONCLUDING SITE CONDITION:

Satisfactory _____ Unsatisfactory _____ Incident _____ Resolved _____ Unresolved _____

INCIDENT:
 Nature of incident: _____

Intervention Steps: _____

Incident Issues

Resolution

Project Activity Stage	Survey	
	Design	
	Implementation	
	Pre-Commissioning	
	Commissioning	

Inspection

Parameters	Waste Generation / Minimization
Air quality	Reuse and Recycling
Noise / Vibration	Dust and Litter Control
Materials Handling	Trees and Vegetation
PPE usage	

Site Restored to Pre-Construction / Original Condition Yes No

Signature _____

Sign off

¹⁰⁶ This is sample form; inspection items will be updated by the NSC in coordination with construction field supervisor and contractor.

Name
Position

Name
Position

Semi-Annual Environmental Monitoring Report

Introduction

- Overall project description and objectives

PIU Safeguards Team

- Identify the role/s of Safeguards Team including schedule of on-site verification of reports submitted by consultants and contractors.

Name	Designation/Office	Email Address	Contact Number	Roles
1. PIU				
Construction Field 2. Supervisor				
3. NSC				

Overall Project and Subproject/Package Progress and Status

- Description of sub-projects and Indicate
 - Status of design – preliminary design or final design,
 - Status of implementation - under bidding, contract awarded but no civil works yet, contract awarded with works (on-going construction), civil works completed / post-construction, commissioning, and /or Operation & Maintenance (O&M)

Contract / Package Number	Subproject Name / List of Works	Type of Contract (DB)	Status of Design: specify if Preliminary Design, Final Detailed Design	Status of Contract: specify if under bidding or contract awarded	Status of Implementation: specify if Contract awarded with civil works (On-going Construction), Completed Works/ Post Construction, Commissioning, or O&M)	If On-going Construction	
						%Physical Progress	Expected Completion Date

- For Contract / package with “Contract Awarded”, provide name/s and contact details of contractor’s focal point person for environmental safeguards.

Contract / Package-wise Contractor/s’ Nodal Persons for Environmental Safeguards

Package Name	IEE Cleared by ADB (provide date)	Contractor	C-EHS Focal Point Person	Email Address	Contact Number

Status of IEE per Contract t/Package

- Provide status of updated/final IEE¹⁰⁷ per contract / package.

Package-wise Implementation Status

Contract / Package Number	Final IEE based on Detailed Design			Site-specific EMP approved by PIU ¹⁰⁸ (Yes/No)	Remarks
	Not yet due (detailed design not yet completed)	Submitted to ADB (Provide date of submission)	Disclosed on project website (Provide link)		

Compliance Status with National/State/Local Statutory Environmental Requirements¹⁰⁹

Package Number	Statutory Environmental Requirements ¹¹⁰	Status of Compliance (Specify if obtained, submitted and awaiting approval, application not yet submitted)	Validity Date(s) (if already obtained)	Action Required	Specific Conditions that will require environmental monitoring as per environmental clearance, consent / permit to establish ¹¹¹

Compliance Status with Grant Covenants

Schedule No. and Item (see Project Grant Agreement and list provisions / paragraph relevant to environmental safeguards, core labour standards, occupational EHS, community health and safety)	Covenant	Status of Compliance	Action Required

¹⁰⁷ IEE prepared based on preliminary design and cleared by ADB with condition that updated/Final IEE based on detailed design will be submitted by the contractor to PIU for ADB clearance.

¹⁰⁸ Works will not be allowed until S-EMP is approved by the PIU.

¹⁰⁹ All statutory no-objection certificates, permit/s, etc. should be obtained prior to award of contracts. However, since this is a DO contract / package; the contractor will obtain the construction permit from the Island Council at the time of detailed design with assistance of the PIU. No civil works shall commence prior to obtaining the permit. Attach as Appendix all permits obtained during the reporting period. If already reported, specify in the "remarks" column.

¹¹⁰ Specify statutory requirements: environmental clearance? Permit/consent to establish? Forest clearance? Workers/Labour permit, Dewatering Permit? etc.

¹¹¹ Example: Environmental Clearance requires ambient air quality monitoring, Forest Clearance/Tree-cutting Permit requires 2 trees for every tree, etc.

Compliance Status with the Environmental Management Plan (refer to final EMP tables in approved subproject IEE/s)

- Confirm in IEEs if contractors are required to submit site specific -EMPs (S-EMP). If not, describe the methodology of monitoring each package under implementation.
- Provide over-all compliance of the contractors with S-EMP. This should be supported by contractors' monthly safeguards monitoring reports to PIU and/or verification reports of PIU and/or to the NSC. Include as an Appendix supporting documents such as "signed" monthly site inspection reports prepared by NSC and/or contractors.

Overall Compliance with S-EMP

Contract Package Number /	Status of S-EMP Implementation (Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfactory)	Action Proposed and Additional Measures Required

- Provide description based on site observations and records for the following but not limited to: ¹¹²
 - Confirm if any dust was noted to escape the site boundaries and identify dust suppression techniques followed for site/s.
 - Identify muddy water was escaping site boundaries or muddy tracks were seen on adjacent roads.
 - Identify type of erosion and sediment control measures installed on site/s, condition of erosion and sediment control measures including if these were intact following heavy rain.
 - Identify designated areas for concrete works, temporary materials (chemical) storage, construction materials, etc.; provide / attach photographs of each area.
 - Confirm spill kits on site and site procedure for handling emergencies.
 - Identify any chemical stored on site and provide information on storage condition; provide / attach photographs.
 - Describe management of stockpiles in each work site (construction materials, excavated soils, spoils, etc.); provide / attach photographs.
 - Describe management of solid and liquid wastes on-site (quantity generated, transport, storage and disposal). Provide photographs.
 - Provide information on barricades, signages, and on-site boards; provide / attach photographs.
 - Provide information on construction / workers camp(s); provide / attach photographs.
 - Provide information on work-related accidents and incidents; describe actions implemented.
 - Provide information on if there are any activities being under taken out of working hours and how that is being managed.
- Provide list of trainings on environmental safeguards, core labour standards, national regulations, Occupational health and safety conducted during the reporting period.

Trainings Conducted

Date	Topic	Conducted by	No. of Participants (Total)	No. of Participants (Female)	Remarks

- Provide the monitoring results as per the parameters outlined in the approved S-EMP/EMP

¹¹² List to be updated based on updated EMP by the PIU with support of the NSC.

Summary of Environmental Monitoring Activities (for the Reporting Period)¹¹³

Impacts (List from S-EMP)	Mitigation Measures (List from S-EMP)	Parameters Monitored (As identified in the S-EMP)	Method of Monitoring (Visual, Actual Sampling, etc.)	Location of Monitoring (Provide GPS Coordinates) ¹¹⁴	Date of Monitoring Conducted	Person Who Conducted the Monitoring
Design						
Pre-Construction						
Construction						
Post-Construction						
O&M						

Monitoring of Environmental Impacts on Project Surroundings

- Confirm records of pre-work condition of roads, or other infrastructure prior to starting to transport materials and construction.

Contract / Package Number.	Status of Pre-Work Conditions (Recorded / Not Recorded)	Baseline Environmental Conditions (air, water, noise) Documented (Yes / No)	Action Proposed and Additional Measures Required

- Provide information on monitoring activities conducted during reporting period. If not conducted, provide justification. Compare results with baseline and internationally recognized standards.¹¹⁵

Air Quality Monitoring Results

Site No.	Date of Testing	Site Location (Provide GPS Coordinates) ¹¹⁶	Parameters (as required by statutory clearances or as mentioned in the IEE)	Remarks

¹¹³ Attach Sampling Map/Locations

¹¹⁴ If GPS coordinate is not available, provide landmark(s) and/or chainage.

¹¹⁵ ADB Safeguard Policy Statement (SPS), para 33: During the design, construction, and operation of the project the borrower/client will apply pollution prevention and control technologies and practices consistent with international good practice, as reflected in internationally recognized standards such as the World Bank Group's Environment, Health and Safety Guidelines. These standards contain performance levels and measures that are normally acceptable and applicable to projects. When host country regulations differ from these levels and measures, the borrower/client will achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the borrower/client will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in the SPS.

¹¹⁶ If GPS coordinate is not available, provide landmark(s) and/or chainage.

			PM ₁₀ µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	

Noise Quality Monitoring Results

Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (as required by statutory clearances or as mentioned in the IEE)		Remarks
			Day Time	Night Time	

Information Disclosure, Participation and Consultations

- Confirm PIU /contractors provide project-related information to stakeholders, communities and/or affected people before and during construction works.¹¹⁷
- Provide information on consultations conducted during reporting period such dates, topics discussed, type of consultation, issues/concerns raised, safeguards team member present; Attach minutes of meetings (ensure English translation is provided), attendance sheet, and photos.

Date of Consultation	Location	Number of Participants (specify total, male and female)	Issues/Concerns Raised	Response to issues/concerns

Grievance Redress Mechanism

- Grievance Redress Mechanism. Provide information on establishment of grievance redress mechanism and capacity of grievance redress committee to address project-related issues/complaints. Include as an Appendix Notification of the GRM (contract / package-wise if applicable).
- Complaints Received during the Reporting Period. Provide information on number, nature, and resolution of complaints received during reporting period; attach records as per GRM in the approved IEE. Identify safeguards team member/s involved in the GRM process. Attach minutes of meetings (ensure English translation is provided).

Summary of Key issues/concerns identified during the Reporting Period and Remedial Actions

- Provide corrective action plan which should include all issues/concerns, actions required to be implemented, responsible entities, and target dates.

Status of Corrective Actions from Previous Monitoring Reports

- Provide information on corrective actions to be implemented as reported in the previous Monitoring Report(s). Include status of implementation of feedbacks/comments/suggestions as provided by ADB, if any.

Corrective Action Plan Status

Issues/Concerns	Corrective Action	Status	Remarks

¹¹⁷ Check EMP requirement on information disclosure / activity outline. At a minimum, PIU through the contractor should notify communities/affected persons/sensitive receptors 7 days and again 1 day before start of civil works.

Appendices

- Photos
- Records of consultations
- Copies of environmental clearances and permits (if not provided in the previous Monitoring Reports)
- Environmental site inspection report (if not provided in the previous Monitoring Reports)
- Other

**Outline of Daily Monitoring Sheet for Contractors
Contractor Monitoring Sheet**

Name of Subproject:
 Location of Subproject:
 Contractor:
 Contractor EHS Focal Point Person (C-EHS):
 Date of monitoring:

Summary of Findings

Monitoring Item	Status	Remarks
1. Compliance with Local Permit Requirements		
	(Secured / Application Submitted / Not Applicable)	
Location/ Construction permit		
Dewatering permit		
Transport / hauling permits, if any		
2. Compliance with IEE Requirements		
	(Approved / Under Preparation / Submitted to PIU for Approval)	
Site EMP (S-EMP)		
Corrective Action Plan, if any		
3. Compliance with S-EMP		
Construction Site		
	(Satisfactory / Needs Improvement / Not Implemented)	
- Conduct of toolbox talk		
- Use of PPE		
- Rest areas for male and female workers		
- Toilets for male and female workers		
- Medical kits		
- Drinking water supply		
- Dust control		
- Noise / vibration control		
- Solid waste management		
- Construction wastewater management		
- Temporary Chemicals storage (fuel, oil, etc.)		
- Siltation or erosion control		
- Heavy equipment staging / parking area		
- Barricades around excavation sites		
- Access to residential houses/adjacent properties		
- Traffic routing signages		
- Lightings at night		
Construction Workers' Camp Site		
	(Available / Needs Improvement / Not Available)	

Quarters for male and female workers

Monitoring Item	Status	Remarks
- Sleeping utilities (e.g. beds, pillows, blankets, mosquito nets, etc.)		
- Power/Electricity supply		
- Drinking water supply		
- Toilets for male and female workers		
- General purpose water supply (cooking, washing, bathing)		
- Cooking facilities and areas		
- Solid waste management		
- Wastewater management		
- Pest control		
4. Implementation of GRM	(Yes / No or None / Under Resolution)	
Complaints		
Complaints resolution		
5. Environmental Quality Measurement	(Passed / Failed / Not Applicable)	
Ambient air quality sampling		
Noise level measurement		

Other Issues: _____

Attachments:

1. Copies of permits secured, if any.
2. Photos taken at worksites, if any.

(Photos attached in previous monitoring sheets should not be used again).

Prepared by: _____

Name, Designation and Signature

Appendix 8: Rapid Environmental Assessment REA Checklist

Rapid Environmental Assessment (REA) Checklist

Instructions:

- (i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (RSES) for endorsement by Director, RSES and for approval by the Chief Compliance Officer.
- (ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.
- (iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title:

Strengthening Gender Inclusive Initiatives Project in the Maldives

Sector Division:

SARD/SAUW

Screening Questions	Yes	No	Remarks
A. PROJECT SITING¹¹⁸ IS THE PROJECT AREA ADJACENT TO OR WITHIN ANY OF THE FOLLOWING AREAS:			The subproject site is situated in the middle of developed residential / commercial area on an empty plot of approx. 10,000 square feet with no trees or vegetation except from some scattered sandpiles onsite.
▪ UNDERGROUND UTILITIES	X		There are no underground utilities network within the subproject site; these are however, available in the immediate vicinity. Utility network connections (such as for electricity, water supply, waste collection and sewerage) will be provided to the subproject site by the area Service Provider – Malè Water and Sewerage Company (MWSC) and State Electric Company Limited (STELCO), state owned enterprises and Waste Management Corporation Limited (WAMCO), a service provider.
▪ CULTURAL HERITAGE SITE		X	Ocular inspection of the proposed subproject area showed no physical cultural heritage sites within or adjacent to the proposed subproject site.
▪ PROTECTED AREA		X	There are no legally protected areas within the near vicinity of the proposed subproject site.

¹¹⁸ Construction of a Domestic Violence / Gender Based Violence (DV/GBV) shelter under project output 5, Hulumalè.

Screening Questions	Yes	No	Remarks
▪ WETLAND		X	
▪ MANGROVE		X	
▪ ESTUARINE		X	
▪ BUFFER ZONE OF PROTECTED AREA		X	
▪ SPECIAL AREA FOR PROTECTING BIODIVERSITY		X	
▪ BAY		X	The subproject site is located inland; ~440m closest shoreline to the East.
B. POTENTIAL ENVIRONMENTAL IMPACTS WILL THE PROJECT CAUSE...			
▪ Encroachment on historical/cultural areas?		X	Ocular inspection of the proposed subproject area showed no physical cultural heritage sites within or adjacent to the proposed subproject site. EMP will specify Chance Find Procedures.
▪ Encroachment on precious ecology (e.g. sensitive or protected areas)?		X	~ 100m North of the subproject site there is a narrow artificial creek; this will not be impacted.

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> ▪ Impacts on the sustainability of associated sanitation and solid waste disposal systems? 	X		<p>The construction and O&M of DV/GBV shelter will result in minor impact on the existing sewerage, sanitation and solid waste disposal systems since the shelter will service up to approx. 22 occupants at any given time.</p> <p>During construction stage, temporary sanitation (portable toilets), electricity connection to the nearest commercial meter, and waste collection area will be established by the contractor within the work site. The Contractor in coordination with area service provider – WAMCO and under the purview of Housing Development Corporation (HDC), Maldives will be responsible for waste collection, transportation and final disposal during construction stage.</p> <p>During O&M, the DV/GBV shelter will be serviced by the existing utility network (sewerage, water supply and electricity) in the wider area established by MWSC and STELCO. During O&M, the service provider - WAMCO will be responsible for waste collection, transport and final disposal; disposal will be in an existing waste management area located in Hulumalè, approx. 400 m distance west from the proposed subproject site, and later transported to Thilafushi on daily basis. These provisions will be specified in the EMP.</p> <p>The Project Implementation Unit (PIU) will obtain official acknowledgement letters from the service providers for provision of services with implementable timeline to the subproject site.</p>
<ul style="list-style-type: none"> ▪ Dislocation or involuntary resettlement of people? 		X	
<ul style="list-style-type: none"> ▪ Disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups? 		X	

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> Accident risks associated with increased vehicular traffic, leading to loss of life? 		X	<p>The proposed subproject site is located in a developed and populated area with suitable access to site via paved approach road from the north. Increase in vehicular traffic is expected to peak during the construction stage and appropriate mitigation measures will be developed and implemented by the contractor to avoid potential accident risks. Traffic management measures will be specified in the EMP.</p> <p>No major risks are anticipated during O&M since the road network is well developed in the area.</p>
<ul style="list-style-type: none"> Increased noise and air pollution resulting from increased traffic volume? 		X	<p>There will be short term localized impacts on air, noise and dust during the construction stage; these can be effectively managed through good engineering construction practices and mitigation measures specified in the EMP.</p>
<ul style="list-style-type: none"> Occupational and community health and safety risks? 	X		<p>Occupational health and safety will be a concern in particular: working at heights (G+2.5 building), work with construction materials, utilities, fuels, during construction. Appropriate safety measures will be specified in the EMP including only trained workers assigned to such works and provision of PPE.</p> <p>Residential / working communities residing in and around the subproject site will be consulted throughout the project cycle and informed on community health and safety risks through community awareness programs, information disclosure / disclosure processes. The Community health and safety plan will be developed and implemented by the contractor and this will be specified in the EMP.</p>
<ul style="list-style-type: none"> Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation? 	X		<p>Occupational health and safety will be a concern in particular: working at heights (G+2.5 building), work with construction materials, work on utilities, fuels during construction phase. Appropriate safety measures will be specified in the EMP including only trained workers assigned to such works and provision of PPE.</p> <p>At the DV/GBV shelter during O&M stage, for fire accidents, a fire extinguisher and dry sand buckets will be provided. This provision will be specified in the EMP.</p>
<ul style="list-style-type: none"> Generation of dust in sensitive areas during construction? 	X		<p>There will be short term localized impacts on air and increase in dust during construction phase; these can be effectively managed through good engineering construction practices and mitigation measures specified in the EMP.</p>

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> ▪ Requirements for disposal of fill, excavation, and/or spoil materials? 	X		The water table in the area is approx. 2 m below Natural Ground Level (N.G.L). obtained at medium tide. Site may be backfilled / levelled to increase site elevation as well as the building elevation. Disposal of spoils will be undertaken as per Site specific EMP for Spoils Disposal developed and implemented by the contractor in coordination with the HDC and this provision will be specified in the EMP.
<ul style="list-style-type: none"> ▪ Noise and vibration due to blasting and other civil works? 	X		Blasting is not anticipated. There will be short-term and site-specific noise and vibration impacts from construction activities. Construction activities will be prohibited at night and appropriate noise monitoring will be implemented. The nearby residential houses will be inspected (structural check) and site condition report will be developed by the contractor before civil works and based on the analysis/ observations temporary structural support may be provided to mitigate vibration related impacts.
<ul style="list-style-type: none"> ▪ Long-term impacts on groundwater flows as result of needing to drain the project site prior to construction? 		X	Drainage of project site prior to construction is not anticipated.
<ul style="list-style-type: none"> ▪ Long-term impacts on local hydrology as a result of building hard surfaces in or near the building? 	X		As per local stakeholder consultations including HDC, there are no issues with flooding in the area. The HDC is implementing stormwater drainage network in the area. Natural drainage pattern and site slope will be defined and maintained. The contractor / facility operator will also identify available water resources for construction and O&M of the DV/GBV shelter and usage will be estimated, approvals obtained from the relevant agencies, as required. During O&M stage, water usage will be minimal (for gardening, kitchens and toilets).
<ul style="list-style-type: none"> ▪ Large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)? 		X	The construction workforce is likely to come from the local area and local hiring will be given preference. The contractor will ensure adequate temporary infrastructure in the construction (workers) camp such that there is no burden on existing social infrastructure and services in the subproject area. These provisions will be specified in the EMP.
<ul style="list-style-type: none"> ▪ Social conflicts if workers from other regions or countries are hired? 	X		Social conflicts are possible but unlikely as there will be a limited number of workers from other regions. Moreover, proper planning and management can avoid such social conflicts; worker staff will be sensitized with the local cultural norms to avoid any potential conflicts.

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> ▪ Risks to community safety caused by fire, electric shock, or failure of the buildings safety features during operation? 	X		At the DV/GBV shelter during O&M stage, for fire accidents, a fire extinguisher, dry sand buckets and appropriate electrical signage will be provided. These provisions will be specified in the EMP
<ul style="list-style-type: none"> ▪ Risks to community health and safety caused by management and disposal of waste? 		X	<p>During construction stage, there will be provision of temporary waste collection area within the work site that will be developed and implemented by the contractor. The Contractor in coordination with the area service provider and under the purview of the HDC will be responsible for waste collection, transportation and final disposal during construction stage. During O&M, the service provider - WAMCO will be responsible for waste collection, transport and disposal. Waste disposal will be in an existing waste management area located approx. 400 m distance from the proposed subproject site and this will be further transported to Thilafushi on daily basis. These provisions will be specified in the EMP.</p> <p>Sewerage waste will be discharged via a lateral connection from the new DV/GBV collection chamber to a main sewerage pipeline operated and maintained by service provider – MWSC.</p> <p>The Project Implementation Unit (PIU) will obtain official acknowledgement letters from the service providers for provision of services with implementable timeline to the subproject site.</p>
<ul style="list-style-type: none"> ▪ Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning? 	X		Residential communities residing close to the subproject area will be consulted throughout the project cycle and informed on community health and safety risks. The Community health and safety plan will be developed and implemented by the contractor and this provision will be specified in the EMP.

A Checklist for Preliminary Climate Risk Screening

Country/Project Title: Strengthening Gender Inclusive Initiatives Project in the Maldives

Sector: Public Sector Management

Subsector: Social Protection Initiatives

Division/Department: SARD/SAUW

Screening Questions		Score	Remarks ¹¹⁹
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather-related events such as floods, droughts, storms, landslides?	1	Medium risk of potential for damage to building and harm to its users due to heavy precipitation and potential flooding. Detailed design to ensure proper drainage and site slope
	Would the project design (e.g., the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc.)?	1	Heavy precipitation has to be taken into account
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g., prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g., construction material)?	1	Sea Level Rise SLR and flood mitigation has to be considered and design has to be adjusted to this Increasing temperature and humidity will affect the living conditions in the proposed building. Recommended mitigation measures should take into consideration insulation of roof and external walls,

¹¹⁹ If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

Screening Questions		Score	Remarks ¹¹⁹
			energy efficient windows, reflective tiles for roof, or roof painted white, preserve existing trees, plant additional ones and vegetation for shading and cooling of site area
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s)?	0	Flexibility in scheduling is proposed
Performance of project outputs	Would weather/climate conditions, and related extreme events likely affect the performance (e.g., annual power production) of project output(s) (e.g., hydro-power generation facilities) throughout their design life time?	0	Not relevant

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high-risk project.

Result of Initial Screening (Low, Medium, High): Medium

Other Comments: _____

Prepared by: Mahmood Riyaz
Environmental Safeguard (Local)

Appendix 10: Environmental Safeguards QPR Checklist

Environment Safeguards QPR checklist¹²⁰

Activity	Yes / No	Remarks (If Answer Is No)
<i>A. For subproject under bidding</i>		
1. IEEs / EMPs cleared by ADB?		
2. IEEs/EMPs included in the bidding documents?		
3. Are there changes in the scope of work of the cleared IEEs?		
4. Core labor standards and environment, health and safety (EHS) incorporated in Section 8 of the bid documents?		
5. BOQ line item includes EMP requirements, as applicable?		
6. IEE disclosed in form and language understood by stakeholders and affected persons ?		
<i>For subproject s with contracts awarded (no works yet)</i>		
1. All statutory clearances/permits obtained?		
2. Each contractor has an appointed EHS and/or safety officer? (C-EHS)		
3. Baseline regarding condition of roads, agricultural land and other infrastructure, as applicable, prior to start of transportation of materials and construction has been recorded? Structural check of nearby buildings has been conducted?		
4. Contractor has established tie-ups with local hospitals/clinics for emergencies onsite?		
5. For DB, detailed design completed and updated IEE submitted to ADB?		
6. Site-specific EMP (SEMP) submitted to ADB?		
<i>For subproject with contracts awarded and works on-going</i>		
1. Contractors have appointed EHS and/or safety officer onsite per subproject ? (C-EHS)		
2. Site-specific EMP posted onsite?		
3. Contractors' records of accidents / incidents submitted to PMU on a monthly basis?		
4. Contractors provided PMU with a notification/incident report of any accident(s) within 24 hours of its occurrence?		
5. Reports of complaints/grievances reported monthly to PMU?		

¹²⁰ This checklist should provide the Project's general compliance to environment safeguards during the reporting period. The indicators are aligned with project grant agreement, PAM, IEEs and ADB's Sustainable Development Safeguards Division Safeguards project performance rating. The detailed environmental safeguards compliance status should be provided in the semi-annual environmental monitoring report.

Activity	Yes / No	Remarks (If Answer Is No)
6. Records of information disclosure/consultations submitted by PIUs to PMU monthly?		
7. Records of site inspection by PIU submitted to PMU monthly?		