WBG Restore Project, Malawi

**TERMS OF REFERENCE (TOR) FOR THE ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) FOR THE UPGRADING OF THE THABWA - CHITSEKO - SEVENI S152** **ROAD)**

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Abbreviations

| Abbreviation | Definition |
| --- | --- |
| AoI | Area of Influence |
| BMP | Biodiversity Management Plan |
| CBO | Community Based Organization |
| DC | District Council |
| ESF | Environmental and Social Framework |
| ESIA | Environmental and Social Impact Assessment |
| ESMP | Environmental and Social Management Plan |
| FGD | Focus Group Discussion |
| GIIP | Good International Industry Practice  |
| GBV | Gender based Violence |
| GRM | Grievance Redressal Mechanism |
| HH | Household |
| IRL | Information Request List |
| KII | Key Informant Interview |
| KIPs | Key Performance Indicators |
| MC | Market Committee |
| MoTPW | (Malawian) Ministry of Transport and Public Works |
| MWK | Malawian Kwacha |
| OSC | (District) One Stop Center |
| OHS | Occupational Health and Safety  |
| PAP | Project Affected People |
| PIU | Project Implementation Unit |
| RA | (Malawian) Road Authority |
| RFA | Roads Fund Administration |
| RoW | Right of Way (also called Road Reserve) |
| SEP | Stakeholder Engagement Plan |
| SH | Sexual Harassment |
| SEA | Sexual Exploitation and Abuse |
| STD | Sexual Transmitted Diseses |
| TA | Traditional Authority |
| ToR | Terms of Reference |
| VA | Vulnerability Assessment |

# INTRODUCTION

Key elements of the WBG RESTORE project include:

* the rehabilitation of a selected section of Road M1 (90km), including selected improvements of markets along the road;
* the rehabilitation of connecting feeder roads including rehabilitation of S152 (59km), and
* the preparation of Feasibility Studies for the rehabilitation of roads S136 and S151.

In the framework of the Project, Consultant was asked to prepare the Terms of Reference (“ToR”) for the ESIA of the Project components, which will be used by the national Road Authority to hire a “Consultant” for ESIA preparation.

This report is the ToR for the ESIA, Stakeholder Engagement Plan and annexed special studies and E&S sub-management plans for the S152 road rehabilitation works.

## Project Brief

The Secondary Road S152 extends for approximately 59 km, within Chikwawa and Nsanje Districts: the road mostly runs in the North West to South East direction for the entire Project section, subparallel to the feet of topographic reliefs that raise to the Eastern side of the road. In a limited number of places (i.e, at the norther part of the road, for approximately 1.5 km, and then in a couple of places each one no longer than 200-300 meters) the road actually borders reliefs. For almost the whole road length, between the road and the reliefs there is a stripe of almost flat terrain, few hundred meters wide, mostly occupied by urban areas or isolated buildings (in some cases also with sparse vegetation). Only close to Thekerani (approximately at km 40), this almost flat stripe of terrain is covered by seminatural vegetation only (with no buildings). The path of the road is clearly designed with the aim to provide a connection among villages that develop at the foot of the mountains.

To the West of the road, most areas are cultivated, in the form of fields for the production of goods for market and subsistence agriculture. Sugar cane plantations and seminatural vegetation are present in localized areas. To the East side, the stripe of terrain between the road and the mountains is mostly occupied – as already mentioned- by urban areas with spare vegetation. The mountains further to the East, once afforested, have been intensively deforested in the past decades, and reportedly this increased the intensity of the periodic flooding and runoff, and the solid/sediment transportation by the river.

Synanthropic or semi-natural riparian vegetations (including trees) can be found close to urban areas, in orphan lands and close to rivers.

The road crosses several urban areas, but a sparse urbanization is present almost along the whole length of the road. Only close to Thekerani, as mentioned, is an area with limited presence of residential buildings. The following markets are localized along the road:

1. Mapelera (Chikwawa)
2. ⁠Nkhate (Chikwawa)
3. ⁠Livunzu (Chikwawa)
4. ⁠Mitondo (Chikwawa)
5. ⁠Masenjere (Chikwawa).

In relation to markets, it is important to highlight that in addition to stable markets, there are also special market days where traders travel from other areas to sell their goods. These markets are located in most case very close to the road. Most relevant Temporary/Mobile Markets include:

1. Dembo
2. ⁠Fela.

The road is not paved in all its length.

The first approximately 35 km (from the North to approximately Chakanza) the road embankment has been already partially upgraded during the development of a previous project (called “Upgrading of Thabwa-Chitseko-Seven Road (S152) in Chikwawa District”), which works have been halted before completion. In this section, the road embankment runs mainly at the general ground level, without tunnels and trenches typically used for drainage. The elevation of the current road embankment is limited and only in a few sections the road level is up to approximately 1.5 meter above the general ground level, designed to limit the risk of flooding. The main road features are numerous bridges and culverts (some of them were not yet completed when the works were halted and thus they are still uncomplete), being the bridge over a river approximately 1.5 km to the South of road beginning in Thabwa the most important one. In this leg, the road cross section is approximately 8 m wide with shoulders originally approximately 1.5 m wide. All the junctions with other roads are side junctions, without elevated ramps or roundabouts.

The works of the previous rehabilitation project were halted before the actual rehabilitation of the southern part of the road, and in this section the road is mostly a typical dirt road, between 4 and 8 meter wide in different locations, with minor embankment and river crossing directly on the river bed (without bridges or culverts/drains) or culverts completely damaged and destroyed by runoff.

Aside junctions with other Project roads (M001 and S151), the S152 is not linked to other Main, Secondary or Tertiary roads. Numerous private houses, schools, religious and public buildings have a direct dedicated access to the road. Also rural roads/paths are directly linked to the road.

In all its length, the road, is affected by significant damages due to soil erosion triggered by runoff, that affects both the already upgraded and the remaining sections of the road. Landslide risk is not a direct major/generalized risk, thanks to the presence of the stripe of flat terrain between the road and mountains. However, the increased intensity of the runoff due to the deforestation is a risk factor that affects almost the whole length of the road. Damages due to soil erosion are mostly localized close to river crossings, in places where the maximum water flow considered in phase of road design was clearly exceeded, especially during extreme weather events like the Ana Cyclone in 2022. In that occasion, the deck of the bridge 1.5 km to the south of Thabwa was moved approximately 30 cm downstream from its original position by the pressure of water on it, and it is now not well positioned on the pillars.

The project design envisages the completion of the rehabilitation works on the Northern section and the implementation of rehabilitation in the Southern section, improving the climate resilience and avoiding future damages due to the runoff in all rod length.

Based on available information the RoW in the northern section has been already expropriated during the development of the previous rehabilitation project, and previous landowners compensated according to the rules and practices of the national regulation. However, several encroachments and isolated properties, buildings and facilities (including market facilities and water pumps) have been observed within the RoW, which presence (and relocation, if necessary) shall be properly managed. Along the Southern section, that was not addressed by the previous round of rehabilitation works, further isolated properties, buildings and facilities (again including market facilities and water pumps) have been observed within the envisaged RoW.

A quarry site for stone and gravel is present along the road, close to Thabwa.

## The Requirements for the ESIA

As part of the approval process for project financing and National Regulations, it is a WBG requirement that the assessment of the Project risks and impacts for the Project of concern shall be prepared in the form of a full Environmental and Social Impact Assessment, under the direction of the National Road Authority.

An Environmental and Social Impact Assessment is also requested by the national regulation: based on the national regulation (namely the *Environmental Management Act* issued in 2017 that repeals the previous Act issued in 1996), and the related *Guidelines for ESIA* (issued in 1997 and still in force), the permitting of the Project requires the completion of an Environmental and Social Impact assessment because the project falls under the listed project categories that mandatory require the ESIA, as it shall be categorized “*Construction of new highways and feeder roads or expansion of existing highways and feeder roads*”. Arguably, the Project may also fall in the category of “*Projects in proximity to or which have the potential to affect: 1. …; 2. National parks, game reserves and protected areas; 3. Wetlands; 4. Water bodies; 5. Flood zones; 6. …; 7. Cemeteries or ancestral shrines; and 8. Residential, school and hospital areas, as designed in local planning documents*”.

An international ESIA is also required, based on the WBG ESS1, Paragraph 23, where it is said that *“The Borrower will carry out an environmental and social assessment of the project to assess the environmental and social risks and impacts of the project throughout the project life cycle. The assessment will be proportionate to the potential risks and impacts of the project, and will assess, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts…”.*

In preparing this ToR, Consultant considered the requirements of both the WBG (i.e. ESF) and National regulation, in order to allow for the preparation of a single report that complies with both national and international requirements.

The required contents of the national ESIA reports are indicated in the *Guidelines for ESIA* (1997) and also in the *Environmental and Social Management Guidelines in the Road Sector* (2017).

It should be highlighted that this ToR is not intended to regulate the whole national permitting process for the Project. This ToR it is only related to the contents of the national ESIA and international ESIA.

The ToR for additional documents/documentations that are required by the national regulation (such as the Project Brief and EIA ToR) are not addressed in this document, even if such documents. are necessary for the national ESIA processes and they will prepared by the Consultant engaged for the preparation of the national ESIA.

## Objectives of the ESIA

The main objectives of the ESIA includes:

* Identify and evaluate environmental, health and safety and social risks and impacts;
* Develop measures to address risk and impacts aligned with the mitigation hierarchy;
* Ensure compliance with ESSs and other applicable standards and local legislation;
* Engage stakeholders meaningfully.

This ToR is prepared in to ensure compliance of the ESIA with both national regulations and WBG standards, namely:

* National requirements relevant to the ESIA for the national permitting and certificate;
* World Bank Group’s Environmental & Social Framework (ESF);
* World Bank Group’s General and sector specific EHS Guidelines;
* Any other relevant Good International Industry Practice (GIIP) standards or requirements.

This ToR provides further details on minimum requirements for the ESIA and it was prepared by competent personnel with proper diligence. Nevertheless, the he compliance of ESIA studies with requirements shall be guarantee by the author of the ESIA report. In case the Consultant engaged for ESIA preparation detects errors or omissions in this ToR, this shall be communicated to WBG and to RA and corrective actions identified and agreed. Non compliances of the ESIA by bidders cannot be attributed to errors and omissions included in this ToR.

## Objectives of the Assignment

The Objectives of the assignment includes:

* conduct a Comprehensive Environmental and Social Impact Assessment (ESIA) study for the rehabilitation works of the S152 road in Malawi in consistent and compliant with the relevant laws and policies of the Government of Malawi (GoM) and the applicable Environmental and Social Standards (ESS) of the [Environmental and Social Framework(ESF)](https://www.worldbank.org/en/projects-operations/environmental-and-social-framework) of the World Bank;
* prepare an Environmental and Social Management Plan (ESMP), a Stakeholder Engagement Plan (SEP), a Resettlement Policy Framework and a Biodiversity Management Plan (BMP), for their implementation during the project phases.

## Scope of Work

For the achievement of the expected Objectives, the following activities are envisaged (non exhaustive list):

* Baseline Data Collection
	+ Physical environment;
	+ Biological environment;
	+ Social environment;
	+ Disasters and natural threats.
* Impact Assessment
	+ Identify and assess potential direct, indirect, and cumulative impacts;
	+ Analyze alternatives, including the “no project” scenario;
	+ Evaluate potential risks to vulnerable groups and critical habitats.
* Mitigation Measures
	+ Develop an Environmental and Social Management Plan (ESMP);
	+ Address project-specific ESSs.
* Stakeholder Engagement
	+ Conduct stakeholder analysis and consultations;
	+ Establish a grievance redress mechanism (GRM).
* Reporting
	+ Preparation of an ESIA report, including executive summary, findings, and recommendations.

## Deliverables

Deliverables will include:

* Inception report with methodology and work plan;
* Draft ESIA report for review;
* Final ESIA report, incorporating feedback;
* Environmental and Social Management Plan (ESMP), Stakeholder Engagement Plan (SEP), a Resettlement Policy Framework and a Biodiversity Management Plan (BMP);
* Non-technical summary for public disclosure.

Roles and Responsibilities

The consultant team is responsible for conducting the ESIA study and ensuring compliance with both national and international environmental and social standards. Their key responsibilities typically include:

**1. Environmental and Social Impact Assessment (ESIA) Preparation**

* Conduct baseline data collection on environmental, social, and economic conditions.
* Identify potential direct, indirect, and cumulative impacts of the project.
* Prepare an Environmental and Social Management Plan (ESMP).

**2. Stakeholder Engagement & Consultation**

* Conduct meaningful consultations with affected communities and stakeholders.

**3. Compliance with Legal and Institutional Frameworks**

* Ensure adherence to **national regulations** and **international standards** (e.g., World Bank Environmental & Social Framework).

**4. Reporting and Documentation**

* Prepare and submit reports.

**5. Risk Management and Monitoring**

* Identify environmental and social risks during project phases.

**Responsibilities of the Project Proponent**

The Project Proponent the **Road Authority** plays a key role in ensuring that the ESIA is successfully implemented and that all compliance requirements are met.

**1. Project Oversight and Coordination**

* Ensure that the ESIA aligns with project objectives and financing conditions.
* Coordinate between stakeholders, including the World Bank, government agencies, and local authorities.

**2. Regulatory Compliance & Permitting**

* Secure necessary permits and approvals from regulatory bodies.

**3. Budget and Resource Allocation**

* Ensure that financial resources are available for compensations, stakeholder engagement, and monitoring programs.

**4. Implementation of ESMP & Mitigation Measures**

* Ensure that Environmental & Social Management Plans (ESMPs) are incorporated into project design and construction contracts.

**5. Monitoring & Enforcement**

* Monitor compliance with ESMP, including air and water quality, noise, biodiversity conservation, and worker safety.
* Enforce penalties for non-compliance among contractors and sub-contractors.

Timeline

The services are anticipated to be completed within fifteen (15) weeks, inclusive of the time allocated for the client and the World Bank (WB) to review and approve submissions. The consultant is required to propose their own time schedule but must account for the review and approval periods needed by RA and WB before subsequent project tasks can proceed. The timing outlined in the schedule below is intended to serve as a reference guide.

|  |  |  |
| --- | --- | --- |
| **Activity**  | **Timing**  | **Expected deliverable**  |
| **Inception Report** | 2 weeks | **Inception Report** |
| Draft ESIA/ report preparation  | 7 weeks from effective date | Draft ESIA  |
| RA review of drafts reports and comments addressing by consultant  | 2 weeks | First revised report |
| Submission of draft reports to Bank for review  | 2 weeks | Report with bank comments  |
| Consultant addressing Bank Comments and resubmission for bank clearance | 2 weeks  | Second revised report cleared by bank |
| Final ESIA report | 15 weeks from effective date | Final report |

The consultant shall commence the services within seven (7) calendar days after the effective date of the contract.

The Consultant shall give a prior notice to the Client on commencement of the services.

## Submission Requirements

Interested firms are requested to submit the following:

* A technical proposal detailing the methodology and work plan;
* Relevant qualifications and experience of the firm and proposed team members;
* References and examples of similar assignments conducted.

## Available Documentation

This ToR is developed taking into account that the following preliminary documentation will be made available to the selected Consultant for ESIA preparation, in addition to Project documentation, such as:

* The Vulnerability Assessment Report, a document with the analysis of the vulnerability of the infrastructure to different environmental risks, mainly extreme meteorological events and climate change;
* The E&S Scoping Report, prepared by Consultant with a preliminary risk and impact identification;
* A Preliminary SEP, ESMP and Biodiversity Management Plan;
* The Bank’s ESF[[1]](#footnote-2) and EHS guidelines[[2]](#footnote-3);
* A preliminary list of applicable National legal and policy documents.

Access to available design reports and drawings, the Resettlement Action Plan and the compensation scheme of the latest road rehabilitation works completed on the section of concern of the M1 will be granted to the Consultant.

## Preliminary Risk Identification

The ToR takes into consideration the information included in the E&S Scoping Report, available to the Consultant engaged for ESIA preparation. The scoping exercise included the following:

* Two days of site reconnaissance of the M1 segment in scope;
* Engagement of:
	+ Nsanje District Council, for which a group interview was performed involving the Director of Planning (“DP”), the Community Developer Officer, the Land officer, and the Environmental Officer);
	+ Engagement of Chikwawa District Council, for which a group interview was performed involving the District Economist and the Land officer;
	+ Representatives of Bangula Market;
	+ Representatives of Sorgin Market;
	+ Representatives of the Djeratu Market;
	+ Representatives of the Nchalo Market
	+ Key Informant Interview of WB GBV Specialist;
	+ Group interview of representatives of the RA;
	+ Women’s groups , for which a focus group interview was performed involving 11 women;
* Focus Group Discussion (“FGD”) and Key Informant Interviews (KIIs) were conducted, with involvement of:
	+ A teachers’ group, for which a group interview was performed involving primary school teachers and the Head of Zone (territorial unit within the District);
	+ Representatives of local Traditional Authorities and community leaders; faith-based organization representatives; and representatives of Civil Society Organizations (CSOs) addressing Gender-Based Violence (GBV) and promoting women’s empowerment;
	+ Engagement with representatives of the Catholic Commission for Justice and Peace (CCJP);
	+ Clinic Officer and GBV Service Manager at the Nsanje One-Stop-Center (OSC);
	+ Local Traditional Authority (Senior Chief);
	+ Representative of the Pentecostal Assembly of Malawi;
	+ Representatives of National Park Authorities, the Elephant Marsh, and Local Conservation Authorities;
	+ Representatives of Mwavi National Park and Fisheries authorities..

Based on mentioned activities, Consultant initially identified a set of EHSS risks and impacts, both potential and actual, associated with the RESTORE Project detailed in the Scoping Report and hereafter briefly reminded; the ESIA shall ensure that each risk is duly treated within the final ESIA:

* Conflicting Road Uses;
* Road Safety in Construction and Operation;
* Displacement and Compensation;
* Contractors’ Management;
* Emissions into Air and Water and Noise Emissions during Construction;
* Waste Management during Construction;
* Traffic Management during Construction;
* Storm Water in Construction and Operation;
* Raw Materials and Supply Chain Management;
* Borrow Pits and Excavation Works;
* Gender-Based Violence, Sexual Harassment and Sexual Exploitation and Abuse;
* Potential Discrimination and Vulnerable Groups;
* Biodiversity Related Impacts in Construction and Operation;
* Cultural Heritage Conservation;
* Flooding and Soil Erosion;
* Peculiar Point Features Conservation;
* Project Additionalities;
* Indirect and Cumulative Impacts;
* Risk of Work Interruption and Emergency Situations;
* Financial Aspect related to macroeconomic challenges of the country.

## Instructions to the Consultant

The ToR is structured according to an indicative Table of Contents of the ESIA. Indications on the contents of each section and subsection is provided under each title and subtitle. The Consultant can propose adjustments to the indicative Table of Contents, providing that the required minimum level of information is presented. The executive summary of the scoping report contains the summary of the significant risks and impacts identified during the scoping exercise, that are to be assessed in detail during the ESIA studies.

# PROPOSED TABLE OF CONTENTS OF THE ESIA

The proposed Table of Contents of the ESIA is shown in the following pages.

# EXECUTIVE SUMMARY

# Summary of the ESIA focusing on key findings and conclusions; summary of impacts, risks, and proposed mitigation measures; Overview of stakeholder engagement and recommendations. INTRODUCTION

## 2.1 Background

Description of the project background, with identification of the project scope, main project components, role of most relevant involved parties.

## 2.2 Project Motivations

The section describes the overarching motivations of the RESTORE Project and how the Project is linked to the National Strategies and Plans for the development of the Transportation sector, in Malawi and in the relevant Districts.

The section shall also highlight the motivations that conducted to include this specific road in the Project.

## 2.3 Purpose of the ESIA Study

This section shall include the identification of the purposes of the ESIA. The identified purposes shall include the purposes required by the national permitting for EIA studies, the WBG requirements for ESIAs and relevant Good International Industry Practice.

# APPROACH AND METHODOLOGY

This section of the ESIA shall include the description of the methodology adopted to prepare the ESIA in compliance with requirements. This shall include the description of the specific methodologies:

* To collate information on:
	+ the regulatory and institutional framework of the project
	+ the existing conditions of the road, including on the existing Right of Way;
	+ environmental and social baseline.
* Methods used to engage stakeholders and gather information on their opinions and views;
* Methods adopted to identify and assess the risks and impacts, including direct, indirect and cumulative impacts;
* Methods to identify and design the potential mitigations, that will be also listed in the project ESMP; and methods used to preliminary cost proposed mitigation and management measures.

# PROJECT DESCRIPTION

## 4.1 Current Situation

### *General Road Conditions*

This section shall describe (through narrative sections and graphic elaborations) the existing road conditions (in terms of routing, embankment, paving, presence of culverts and bridges, erosion phenomena). The description will start at the northernmost point of the Project section and proceed Southward, with identification of the road mileage.

It is expected that the ESIA will include a detailed survey and specific data sheets of any “critical point” encountered along the road. The critical points shall include at least:

* Main junctions with feeder roads;
* Main bridges;
* Main rived bed crossings;
* Areas with significant erosion phenomena.

### *Right of Way and Compensations*

The existing Right of Way (also called Road Reserve), shall be clearly mapped and the presence in the field of RoW demarcations/signs shall be documented. This section shall clearly identify when such RoW was established and identify the relevant road approval/permit/licence that established such RoW and the relevant regulatory reference.

The presence of economic activities, obstacles and buildings within the RoW shall be documented. At least the presence of the following features shall be addressed:

* Mature Trees (i.e., trees with the trunk exceeding 50 cm in diameter at 1.5 m above ground);
* Agricultural activities (either subsistence agriculture or cultivation for market);
* Temporary or permanent stall for commercial activities (either in wood or concrete);
* Water pumps;
* Buildings.

Please make reference to section 11 of the E&S Scoping Report for more information on the Compensation Process already completed and project requirements.

### *Graphical Information*

The support graphical documentation shall include the following longitudinal maps:

* ***General maps:*** longitudinal maps indicatively at 1:100,000 – 1:50,000 nominal scale shall be provided, as well as separate sheets in nominal A3 size, indicatively at 1:25,000 nominal scale, each one dedicated to road legs approximately 8-12 km long. Aerial photos will serve as base layer and indicatively an area of 200 m on each side of the road will be shown. Photos and notes with the main characteristics of the road (presence of bridges, drains, interferences, etc) will be reported on one side of the map and the main environmental features of the road (buildings, obstacles in the RoW, etc) on the other side of the map, with respect to the road).
* ***Critical Point mapping***: for each “critical point”, a specific datasheet (ideally at 1:10,000-1:5,000 or 1:1,000 scale), each one dedicated to road legs approximately 2-3 km long, shall be prepared.
* ***Compensation mapping:*** at least 6 samples legs approximately 2 km long each will be mapped in detail, with identification of the economic activities that develops within the RoW. The sample legs shall be representative of different situations in place along the road, in order to make feasible a (statistical) assessment of the number of RoW occupants in different situations that are present all along the road.

The support graphical documentation shall include as well the mapping at 1:1,000-1:200 scale, of the existing road cross sections in proximity of:

* the main urban and market areas, listed in the section “Project Brief” above and Section 8 of the E&S Scoping Report;
* low density urban development (in different places as necessary, at least in 5 different situations), with descriptions of typical “private/dedicated” access roads (e.g., access to areas characterized by the presence of schools, isolated residential clusters, etc).

### *Interferences with Utilities*

Description (through narrative sections and graphic elaborations) of utilities within or close the RoW (with specific reference to the presence of water piping, power lines, irrigation channels, if any).

Mapping at 1:10,000-1:5,000 or 1:1,000 scale, based on needs, shall be also adopted to describe:

* Examples on presence of water pipes;
* Examples on presence of power lines.

### *Quarries and Borrow Pits*

Description (through narrative sections and graphic elaborations) on the presence of existing quarries and areas utilized for the abstraction of construction materials. This shall include the description of both areas utilized during the construction of M1 and areas currently utilized by other users.

Mapping of quarries and abstraction sites at 1:10’000-1:5’000 or 1:1’000 scale, shall be also adopted.

Please make also reference to section 9.7 of the E&S Scoping Report for more information on the availability of quarrying sites.

### *Traffic*

The outcomes of the survey on the current traffic levels shall be summarized.

It is expected that available data will include counts of motorized and non-motorized traffic, including pedestrians and cattle. The counts of motorized traffic shall also take into consideration the different vehicle categories.

As part of the ESIA, a detailed traffic assessment of motorized and not motorized traffic shall be also carried out:

* At least at two markets, in the market day;
* At least close to 2 schools, during school day.

The detailed traffic assessment shall include narrative and photographic description of situations that may be relevant to assess the road safety.

Please make reference to section 13.7 of the E&S Scoping Report for more information on traffic issues.

### *Incident Rates*

Official data, provided by relevant authorities (i.e., police) on the frequency and severity of car incidents shall be reported.

## 4.2 The Project

This section shall introduce the general conceptual design of the Project.

### *Project Alternatives*

Analysis of the alternatives considered, including information on the use of the mitigation hierarchy to avoid, minimize and mitigate potential project negative E&S impacts. The section presents all types of alternatives related to the overall approach to the project design, including the “no action” alternative. Factors to address include at least:

* ***Project Conceptual Design***: the conceptual road design shall be based on a feasibility study for the identification of the medium- and long-term purposes of the road and the forecast of the trends in people’s needs. Project purposes and targeted road users shall be documented, i.e., if the project is mostly intended to facilitate truck/motorized long-distance traffic, light-vehicle/motorcycle local traffic, pedestrian traffic, etc; The selection of the design alternatives (in terms of typical cross sections, design traffic speed, design traffic intensity etc) should consider the outcomes of such analysis. Please make reference to section 13.1 of the E&S Scoping Report for more information on traffic issues.
* ***Road Safety Issues***: design alternatives assessed to address road safety at high level perspective (considering the different users of the road and establishing clear overarching principles for project design and implementation, such as typical cross sections, the need of separate lanes for different categories of users and number and types of allowed junctions) and detailed design alternatives adopted in urban areas and market areas. The alternative analysis shall include the selection of typical solution to be adopted to ensure safety close to junctions with “private/dedicated” access roads, especially for schools, clinics and hospitals. Please make reference to section 13.1 of the E&S Scoping Report for more information on traffic issues.
* ***Climate and Climate-Change Resilience***: The design alternatives considered to ensure the resilience of the road to the effects of extreme meteorological events shall be documented. These alternatives must aim to:
	+ Mitigate erosion of hillsides and ensure resilience to potential landslides;
	+ Provide adequate bridge designs that prevent upstream flooding and riverbed erosion, including considerations for bridge height, pillars, and/or transversal drainage through culverts, in accordance with a return period aligned with Malawi’s requirements and/or regional standards;
	+ Ensure an adequate longitudinal drainage system that prevents linear flooding along the road, also in line with Malawi’s requirements and regional standards;
	+ Promote the sustainable use of construction materials, including materials for paving.

Please make reference to section 13.15 of the E&S Scoping Report for more information on the potential risk linked to the effects of the Climate Change.

* ***Biodiversity Conservation***: alternatives considered to limit the impacts to protected areas, key biodiversity areas, valuable ecosystems, protected or endangered species. Please make reference to section 13.13 of the E&S Scoping Report for more information on biodiversity conservation.
* ***Construction Phases***: general criteria for traffic management during construction (design of diversions etc) with specific focus on the solutions adopted to manage the construction phase of bridges and related traffic diversion. Please make reference to section 13.7 of the E&S Scoping Report for further information on this topic.
* ***Construction Material Supply***: alternatives considered to limit the need of abstraction of construction materials and the impacts of quarries and borrow pits. Analyses of the methodologies adopted for the siting of quarries and borrow pits. Please make reference to section 13.9 of the E&S Scoping Report for more information on the risks in the supply chain.
* ***Power water supply and waste management in construction:*** analysis of available public utilities/services (i.e.: potable and raw water availability, power connection, solid and hazardous waste treatment/disposal facilities) and alternative analysis for water/power supply and waste/wastewater management). Please make reference to section 13.6 and 13.8 of the E&S Scoping Report for more information on relevant aspects.
* ***Contractor Management***: design alternatives considered to reduce the impacts of the worker influx. This may include criteria adopted to limit the number of workers influx, the siting of the worker base camp, etc. Please make reference to section 13.4 for further information.
* ***Operation and Maintenance***: this shall include the analysis on how the design takes into consideration the need to facilitate road maintenance.
* ***Market improvements***: alternative analysis to select the Market(s) that will be addressed by renovation/upgrading activities and alternative analysis of the activities to be completed at each selected market including safety of traders during project activities. Please make reference to sections 10 and 3.21 of the E&S Scoping Report for information on the markets.
* ***Project Additionalities***: main alternatives for fixing the most relevant interference with infrastructures (mainly water supply pipes and power lines) and analysis of potential refurbishment shall be documented. Please make again reference to sections 10 and 3.21 of the E&S Scoping Report.

### *Project Design*

**Traffic**

The outcomes of the traffic forecasts shall be summarized.

It is expected that the forecasts (carried out for a period of at least 20 years) will include assessments of the expected motorized and non-motorized traffic, including pedestrians and cattle.

**Road Design and Graphical Information**

This section shall include general information on the road design. The description shall include:

* Technical Guidelines of reference and applicable/adopted technical standards;
* Typical road cross sections adopted in different areas;
* Construction materials;
* Height of the road embankment in different areas.

The description shall explain the modalities adopted for the management of stormwater, including the presence of water de-oil systems in dedicated areas, if any, will be also described.

Drawings and graphical information shall be included, as necessary for a comprehensive description of the project. For each “critical point” defined in section 4.1 “Current Situation” here above (including bridges and culverts), a detailed analysis of the project design shall be included, with relevant road drawings.

The support graphical documentation shall include the mapping at 1:1,000-1:200 scale, of the ***design road cross sections*** in proximity of:

* The main urban and market areas, listed in Section “Project Brief” above;
* Low density urban development (in different places as necessary, at least in 5 different situations), with descriptions of typical design solution to ensure the connection with “private/dedicated” access roads (e.g., areas characterized by the presence of schools, isolated residential clusters, etc).

### *Construction Phase*

The construction activities shall be described, focusing among other aspects:

* General description of construction activities, including modalities for traffic management during construction (traffic diversions, bypass roads etc.), with provisions of preliminary timelines, yard layouts, and identification of lay down areas for raw materials and goods, temporary warehouses, temporary storage areas for rock and sediment from road works, and workshops, cement/bitumen preparation and pre-casting facilities (if any), lighting;
* Description of the worker base camp(s), if any:
	+ Envisaged number of workers,
	+ General camp layout,
	+ Modalities adopted for power and water supply and wastewater and waste management,
	+ Methods used to comply with the IFC/EBRD guidance on worker accommodation;
* Description of the quarries and borrow pits, if any:
	+ Envisaged number,
	+ Siting and general layout,
	+ Modalities adopted for material excavations and transportation,
	+ Modalities adopted to avoid unintended access to the quarry by community members (with associate risk) and to rehabilitate borrow pits once construction works are completed, in order to avoid steep sides and any further potential hydrogeological instability, stagnant water ponds and any physical and disease risk for the population.
* Modalities adopted for power and water supply and wastewater and waste management, as well as options for efficiency.

The ESIA shall report the most relevant indicators, that include:

* Description of the machinery that will be necessary for construction;
* Forecasted number of workers, with the breakdown by position and competences, as well as with the expected breakdown of expatriates, migrants, national and “local” (i.e., without need of dedicated accommodations);
* Overall fuels’ consumption and expected modalities for sourcing;
* Construction materials’ consumption (gravel, sand, cement, bitumen, etc), and expected modalities of sourcing;
* Overall potable and raw water demand and expected modalities of sourcing and distribution;
* Construction waste’s production and description of modalities for collection and management (covering construction waste, base camp waste; general waste; solid, liquid, hazardous and non-hazardous);
* Point-source air emissions from combustion sources (if any, as a matter of example for batching plants) and guarantee pollutant concentrations at the stack;
* Identification of the main sources of:
	+ Dust emissions,
	+ Noise,
	+ Vibration,
	+ Lights.
* Work Planning.

## 4.3 Markets, Associated Facilities and Additionalities

### *Market Improvements*

**Current Situation**

The current layout and general characteristics of the permanent and temporary markets located along the road shall be described, with specific focus on:

* Market land ownership;
* Availability and ownership of land, for potential market development or partial relocation;
* Presence of stable structures within the RoW (Road Reserve);
* Presence of temporary vendors within the RoW;
* Water availability and wastewater and waste management at the market place.
* Socio economic information: number of vendors, type of business, fares applied to vendors, statistics on vendors income, gender and discrimination issues, amy other relevant information;
* Road safety aspects ands security.

**The Project**

Description of the activities envisaged at each selected market. In case of need of vendors’ stalls/structures relocation, a detailed mapping of the current situation and envisaged relocation shall be included.

### *Associated Facilities*

It shall be highlighted that at this stage of project development, no Associated Facilities are envisaged. However, in case the final project design will include such Facilities, please insert in this section the relevant project descriptions.

### *Additionalities*

Consider the need to include a section (if necessary) to describe modalities adopted for fixing the most relevant interferences with infrastructures (mainly water supply pipes and power lines) and improve the quality of the services provided by such infrastructures.

# LEGAL FRAMEWORK

## 5.1 National Standards

This section shall include and not limited to:

* Description of the national regulation on land planning, including the Physical Planning Act (2016);
* Description of the national regulation on road construction and road safety, including the Public Roads Act (1962) and the Public Roads Amendment Act (2017);
* Relevant environmental regulation focusing on permitting, including the Environment Management Act issued in 2017 and related *Guidelines for ESIA* (1997) and *Environmental and Social Management Guidelines in the Road Sector* (2017);
* Relevant regulation on land acquisition and compensations of affected people, including the *Land Act* (2016), the *Lands Acquisition Act* (1979), the *Lands Acquisition (Amendment) Act* (2017) and the *Customary Land Act* (2016);
* Relevant regulation on the prevention and treatment of Gender Based Violence (“GBV”) and gender discrimination, including the *National Gender Policy* (2000), the P*revention of Domestic Violence Act* (2014), *the Gender Equality Act* (2013), and the *Marriage, Divorce and Family Relations Act* (2015);
* Description of the national labour, safety and security regulations and requirements for the implementation and operation of the project components and works, including the *Occupational Safety, Health and Welfare Act* (1997);
* The sectoral regulation on quarrying, including the Mines and Minerals Act, 2019, updated in 2023 and other relevant sectorial regulations on the management of sand, water, hazardous substances, fuel;
* The sectoral regulation on waste management (non-hazardous and hazardous waste);
* Description of the national standard of references related to the conservation of protected areas and endangered/valuable species, including the *National Parks and Wildlife Act* (2000).

## 5.2 International Standards

This section shall provide a commentary of the WBG’s ESF requirements, relevant WBG EHS applicable to the project, including necessary references to ILO and UN Conventions, Recommendations and Guidelines. It should be highlighted that potentially, the Project triggers all the WBG ESSs, with the exception of ESS9. A preliminary list of potentially applicable guidelines includes:

* IFC Environmental, Health, and Safety General Guidelines;
* IFC Environmental, Health, and Safety Guidelines for Toll Roads;
* IFC Environmental, Health, and Safety Guidelines for Construction Materials Extraction.

Additional documents of reference include:

* WBG Guide to Integrating Safety into Road Design;
* IFC EBRD Workers' Accommodation: Processes and Standards;
* IFC Good Practice Handbook: Use of Security Forces: Assessing and Managing Risks and Impacts;
* IFC: Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets;
* IFC’s Good Practice Handbook Cumulative Impact Assessment and Management.

## 5.3 Gap Analysis

A section with:

* Identification of gaps between national legislation and international standards;
* Details on how the full ESIA and Project will bridge identified gaps.

Please make reference to section 5 of the E&S Scoping Report for more information on the Regulatory Framework and for a preliminary gap analysis.

# PROJECT AREA OF INFLUENCE

This section shall include the preliminary identification of the Direct and Indirect Area of Influence (AoI):

* The direct AoI can be defined as the area in which direct project impacts on the environment or communities/people occur. The direct Area of Influence may be different for environmental and social considerations;
* The indirect AoI includes the area affected by changes in economic, social, and environmental dynamics induced indirectly by the implementation of a project. Areas, individuals and communities beyond the footprint of the project or activity are also included, along with aspects that are affected by cumulative impacts from further planned developments in proximity to the project.

# BASELINE CONDITIONS

This section shall include the analysis and interpretation of all data identified from reviewing existing documentation and gathering of first-hand information to describe the existing environmental and social conditions including for the biophysical and socio-economic and cultural context.

Map of sufficient detail showing the project site and the area that may be affected by the project’s direct, indirect, and cumulative impacts (i.e. area of influence) shall be provided.

Socio-economic and environmental characterization, which includes presenting concise information on the main socio-environmental factors that will be affected by the project. This information, whenever possible, should be based on qualitative and quantitative data.

Details on the minimum requirements related to baseline data are reported in the following paragraphs.

## 7.1 Environmental Regional Conditions

For preliminary information on the environmental baseline at regional level, please make also reference to section 6 of the E&S Scoping Report.

### *Land Use*

The section will include:

* Analysis of the land use planning tools in Malawi and in the region;
* Contents of the Land Use plans and current trends in land use modifications.

### *Topography and Geology*

With analysis of general topographic and geological features that are relevant to road design.

### *Climate and Meteorology*

Analysis of meteorological data with statistics and trends of precipitations.

### *Hydrology and Surface Water*

This section shall include the description of the existing water bodies in the Project area, with identification of main hydrological parameters. The ESIA shall describes the main characteristics of the water bodies including:

* Average annual rainfall in the hydrographic basin;
* Distribution of the monthly average rainfall along the year in the hydrographic basin;
* Sediment mass balance;
* Sediment transportation and trends in sediment transportation also linked to the climate change and trend in deforestation and afforestation of the upstream regions;
* Soil erosion and river bank shifting;
* Quality assessment of the water bodies, especially in terms of turbidity, dissolved and suspended matter, bacteriological/biological contamination.

This section will be also based on the outcome of the Vulnerability Assessment.

### *Biodiversity*

The presence of protected areas, Key Biodiversity Areas, valuable ecosystems in the Project area will be investigated, as well as the presence of protected or endangered species.

### *Natural Disasters Risks*

The likelihood and magnitude of natural risks shall be assessed. At a minimum, the following hazards shall be described in detail, including their historical occurrences and potential impacts:

* Earthquake;
* Flooding and Cyclones;
* Landslides;
* Banks erosion;
* Sediment transport;
* Wild fire.

This section will be also based on the outcome of the Vulnerability Assessment and the medium and long term effects of the Climate Change. Specifically, them main source of information on the risks of flooding, landslides, river bank erosion and sediment transport will be the Project Vulnerability Assessment report that includes the description of the methodological approach and outcomes of the assessment of both the hazard (i.e., the frequency an magnitude of events) and risk (i.e., the assessment of the damages that may occur as consequence of natural events).

### *Graphical Information*

Thematic maps at 1:100,000-1:50,000 scale shall be prepared at least with reference to:

* Land use and Ecosystems;
* Protected areas and Key Biodiversity Areas.

Thematic maps, at a suitable spatial scale, shall be prepared at least with reference to:

* Flooding risk;
* Areas subjects to deforestation (if relevant) which soil erosion may affect the project.

The latter two maps can be re-elaborated on the basis of information that will be included in the Vulnerability Assessment.

## 7.2 Social Regional Conditions

For preliminary information on the social baseline at regional level, please make also reference to section 7 of the E&S Scoping Report.

### *Demographics*

Description of the demographic trends in the relevant Districts.

### *Livelihoods and Income*

Economic data referred to the Districts shall include (with separate gender analysis, when applicable):

* General overview of livelihoods;
* Average income levels from all sources including formal and informal employment;
* Expenditure patterns;
* Description of poverty within the District and any support measures provided at the local level.

### *Health and Education*

Description of the education level, education system and overview of available public and private institutions in the Districts.

Analysis of the public heath, health care system and overview of available public and private institutions in the Districts.

### *Infrastructure and Utilities*

Description of the infrastructures in or serving settlements in the AoI, including the following information: transportation infrastructure, roads, pipelines, drinking water supplies and treatment, wastewater treatment, locations of transmission and distribution lines (if applicable), locations of microwave towers and/or antennae (if applicable), energy infrastructure, fuel storage facilities etc.

### *Religious and Cultural Heritage*

Description of religious sites (incl. churches, mosques, burial sites, etc.) as well as of the tangible and intangible cultural heritage in the Area of Influence.

### *Gender Gap analysis*

Description of the necessary data and information to integrate a gender perspective into the project. As a starting point, the analysis will identify and report on the differences between and among women and men in terms of their relative position in society and the distribution of resources and assets’ control, opportunities, constraints as well as levels of participation, power and decision-making in the project context, with the aim of identifying targeted interventions that will address gender inequalities and meet the different needs of women and men.

Information on Gender Based Violence shall be analyzed in details, with comments on violence within families at the workplace and schools, early marriages, traditional practices.

Information on cases of harassment and prostitution (also involving minors) reported in connection to large development projects shall be commented.

## 7.3 Local Conditions

For preliminary information on the local context, please make also reference to section 8 of the E&S Scoping Report.

### *Land Use, Vegetation and Biodiversity*

The section will include the mapping of the land use and vegetation in the indirect AoI. Population centres, markets/commercial areas, agricultural lands, forested lands, protected areas and environmentally sensitive areas, water bodies, and other land uses as appropriate will be mapped and commented.

The land use and vegetation will also describe the different types of agricultural uses, with differentiation between productions for the market and for food/subsistence.

### *Natural Critical Features*

Point features like big trees and potentially critical wetlands/river banks shall be mapped.

### *Air Quality and Noise*

Notwithstanding Air quality and Noise Levels are not considered among crucial aspects within the environmental context, the Project envisages the rehabilitation of a road, a type of work that may entail in both the construction and operation phase emission of pollutants into air and noise emissions. Thus the ESIA shall include the analysis of the baseline environmental air quality and noise levels, carried out with a balanced approach, aimed to provide at least basic information related to the project area. This analysis will involve:

* Measurement and presentation of ambient air quality levels, including key pollutants (e.g., particulate matter, nitrogen dioxide, sulfur dioxide), as well as noise levels, in accordance with WBG and national relevant regulatory standards The use of speditive methods is considered adequate (i.e., for the measurement of noise levels, 3-4 measurements 20-minute long carried out a different time of the day at representative receptors and locations; for the assessment of air quality, the use of passive adsorbent tubes can be considered).;
* Identification of sensitive receptors (e.g., residential areas, schools, hospitals, ecologically sensitive zones) that may be affected by changes in air quality and noise levels;
* Comparison of the baseline levels with regulatory requirements to assess compliance or potential exceedances. This will ensure adherence to environmental quality standards and inform the implementation of mitigation measures, if necessary.

### *Demographics and Socio Economic Conditions*

Description of the settlements within the social area of influence will be provided, including the following information for each significant settlement: population size, cultural characteristics, religion, ethnicity and language.

Detailed representative household surveys in significant settlements will be completed, in order to obtain quantitative indicators in all mentioned demographic and socio economic aspects, including general overview of livelihoods in the area of influence, average income levels from all sources including formal employment, expenditure patterns, description of poverty within the area of influence and any support measures provided at the local level. It is expected that 7 communities will be addressed.

### *Health, Education and Religious Places, Cultural Heritage Sites*

The presence of:

* Schools,
* Health care facilities,
* Religious places including Churches, Mosques, Synagogues and traditional religion shrines (if any),
* Cemetery and graves,
* Recreation areas and facilities,
* Culturally sensitive areas,
* Public water pumps,

within the AoI shall be mapped in detail.

### *Socio-Economic Vulnerability Assessment*

The ESIA shall include an analysis of socio-economic vulnerability within the project’s area of influence, with a specific focus on:

* Identification of socio-economic groups most vulnerable to the potential impacts of the project, such as impoverished communities, women, children, and marginalized groups;
* Analysis of local economic conditions, including income disparities, employment opportunities, and dependency on natural resources, and how these factors contribute to vulnerability
* Evaluation of the access to essential services such as healthcare, education, water, and sanitation, and how the project may affect these services or exacerbate existing inequalities

The socio-economic vulnerability assessment will need to be prepared by considering both quantitative (e.g., income levels, health indicators, employment rates) and qualitative (e.g., local knowledge, social cohesion) indicators. This methodology will be specifically tailored to the Malawian context, considering regional disparities, cultural factors, and local livelihoods.

The socio-economic vulnerability assessment will involve direct consultations with local communities, stakeholders, and experts, ensuring the results reflect the lived experiences of those most likely to be affected by the project.

### *Graphical Information*

Information on Natural Critical Features and Health, Education and Religious Places, Cultural Heritage Sites will be added/reported in the A3 size maps, elaborated at 1:25,000 scale and in the “Critical Point” maps, mentioned at section “*Project Brief*”, above.

Also, detailed mapping of the land acquisitions occurred din the past, as described in the previous paragraph shall be reported at a suitable spatial scale.

## 7.4 Legacy

The experiences gained in previous WB projects in Malawi, specifically the one related to the previous project for the rehabilitation of the S152 will be summarized, mainly addressing:

* Issues related to drains and soil erosion, with several cases of erosions triggered by the installation of undersized culverts;
* Issues related to the relationship between contractors and communities, with cases of GBV.

# IMPACTS ASSESSMENT AND MITIGATION MEASURES

## 8.1 Assessment Methodology

The ESIA shall provide information on potential impacts (direct, indirect, and cumulative) and the magnitude and frequency of potential impacts on the physical, biological, socio‐economic, and cultural environments resulting from construction, operation and closure of the proposed project and alternatives.

The assessment shall use standardized predictive methods, such as models for example, to determine the specific range of impacts on environmental and socio‐economic resources. A methodology section will describe the methods used to determine the impacts and their significance. The ESIA shall identify which impacts are significant and the criteria used to make this judgment.

The ESIA shall also identify sources of data used in the analysis and the uncertainties associated with the information available, with recommendations on how data gaps can be bridged.

## 8.2 Environmental and Social Impacts

Impacts will be identified in phase of ESIA elaboration. The risks and impacts preliminary analyzed in section 13 of the E&S Scoping Report and reminded in the introduction above shall be specifically addressed.

At least the impacts on the following environmental components shall be considered, for both the construction and operation phase:

* ***GHG emissions:*** emissions caused by the current and future forecasted traffic shall be calculated and commented.
* ***Land Use and Vegetation:*** analysis of the direct and indirect impacts of the project in terms of land use change, due to the actual road rehabilitation and the exploitation of the borrow pits and quarries. The ESIA shall investigate if the rehabilitation of the road may drive a change in the land uses and urban developments within the Area of Influence and trigger potential risks and impacts. The indications included in the existing regulatory acts for land planning (described in the section dedicated to the regulatory framework) shall be considered.
* ***Air Quality:*** the impact on the air emission shall be assessed, including dust emissions in construction phase and traffic emissions in the operation phase.
* ***Surface Water Bodies:*** the impacts induced (in phase of construction and operation) by the modification of the river beds caused by the construction of bridges and culverts to the shall be investigated. Other aspects to be investigated include:
	+ Impacts caused by the water utilization for construction activities;
	+ Impacts caused by the discharge of wastewater in the base camp (sanitary water) and discharge of wastewater utilized to clean the contraction vehicles. Adopted mitigation measures shall be described in the ESIA.
	+ Potential water contamination caused by leakages of oil, fuels and chemicals by the vehicles in transit along the road shall be considered.
* ***Soil and Underground Water:*** The impact to the soil shall be investigated at least with reference to the:
	+ risk of triggering of potential erosion along the road;
	+ risk of triggering of potential erosion at the quarries and borrow pit;
	+ risk of soil contamination, along the road due to oil/fuel/chemical licks.

The ESIA shall demonstrate that proper design criteria have been implemented to ensure the right sizing of bridges and culverts avoiding that these work will trigger soil erosion phenomena, as it occurred in the past in the section of the road already rehabilitated during the previous rehabilitation project. In the assessment of hydrological characteristics of the water bodies, the ESIA shall also consider the effects induced by the changes in solid/sediment transportation of the rivers, caused by the deforestation/afforestation (if relevant). For what related to this matter, the Consultant can also rely on the information included in the Vulnerability Assessment Report.

For what related the assessment of the risk and impacts of the borrow pits and quarries, the Consultant shall consider the risks caused by the extraction activities that have been preliminary identified in section 13 of the E&S Scoping report.

* ***Noise and Vibration Level, Light Emissions at Night:*** the impacts shall be assessed with reference to both the phase of construction and operation, and both natural receptors and anthropic receptors. The use of (simplified) noise modelling is recommended to assess the noise level at different distances from the road, in urban areas.
* ***Biodiversity Conservation***: The ESIA shall include the assessment of the impact of the Project to the Elephant Marsh protected area, as well as impacts on species and habitats under conservation. Notwithstanding at the stage this ToR is prepared, no significant impacts to Key Biodiversity Area are envisaged, the ESIA shall include a critical habitat impact assessment, verifying if high-value biodiversity elements exist and could be impacted by the project.

The ESIA shall also demonstrate that the project design implements proper measures:

* + To avoid the barrier effect to the movement of animals;
	+ The creation of trap area for the fauna (especially small size mammals);
	+ The spreading of alien species;
	+ To limit the vegetation clearing;
	+ To limit/avoid impacts on ecosystems caused by temporary land acquisitions e.g., for constructing bypass roads, which may trigger the degradation of land and water bodies that are extremely difficult to restore to original conditions once the construction phase is over.

Finally, even if no major impacts are envisaged, the ESIA shall assess the presence of impacts to the aquatic ecosystems or the main and secondary rivers, potentially triggered by construction activities (such as water turbidity and pollution) and road operation (potential pollution).

* ***Natural Disasters Risks:***among necessary considerations, the ESIA shall include considerations on:
	+ The potential effects of climate change and natural events to the project, and discuss the resilience of the project. For what related to this matter, the Consultant can also rely on the information included in the Vulnerability Assessment Report. Specific considerations shall address design criteria and maintenance activities of bridges and culverts;
	+ How the project may affects the likelihood or the magnitude or the effects of the natural disasters, with specific reference to the flooding and potential dike effects of the road embankment. The impacts of potential floodings that may occur during the construction works shall be also assessed (examples of potential impacts include difficulties/risks during transportation of workers during flooding events; flooding of work areas with physical risk for workers and environment pollution risk if the flooding impacts the containments of hazardous substances/waste such as (used) oil storage areas);

The following environmental aspect shall be also addressed:

* The solution identified to deal with the ***critical interferences*** within the RoW, including mature trees and water pumps. In general the cut of mature tree shall be compensated by the planting of new plants while the pump shall be relocated.
* ***Power, water supply and waste management in construction:*** analysis of available public utilities/services (i.e.: potable and raw water availability, power connection, solid and hazardous waste treatment/disposal facilities) and alternative analysis for water/power supply and waste/wastewater management). The ESIA shall include the identification of potential alternatives for the reuse of waste. The contractors should be required to make any reasonable effort to ensure that waste is properly managed to minimize potential impacts on the environment and on local communities.

In term of social aspects, the ESIA shall address at least the following aspects:

* ***Livelihoods and Income and Conflicting Road Uses***. Direct and indirect economic impacts of the Project shall be identified. At least the following list of impacts shall be considered:
	+ General benefits, at national, District and local level, of the road rehabilitation;
	+ Local economic and employment opportunities offered by the project;

The analysis shall include the assessment of the effects to different groups, and shall include:

* + Gender considerations with assessment of the different level of impacts;
	+ Tribe and religious consideration with the assessment of the risk of discrimination of different groups/minorities.

It shall be noted that the advantages of the road rehabilitation for the motorized traffic may be in conflict with the needs of not motorize traffic. Potential impacts to non motorized traffic shall be assessed. The ESIA shall demonstrate that the design of the road cross section allow the achievement of the expected benefit to the motorized traffic without negative impacts to the non motorized traffic.

* ***Displacement and Compensations:*** the ESIA shall include a preliminary assessment of the need of compensations for people currently involved in formal or informal commercial activities within the RoW. The activities necessary for such assessment are described in a dedicated paragraph below (“*Resettlement Policy Framework*”).
* ***Public Health.*** The impacts to the wellbeing and health of the resident within the Area of Influence, due to the traffic, noise levels and air quality shall be assessed. In term of road safety, the expected increase of the average vehicle speed after rehabilitation may also increase the risk of incidents. The risk of the spreading of STDs shall be also considered. Proper mitigation measures shall be implemented. The risk and relevant mitigations shall be designed also taking into account the *WBG Good Practice Note – Road Safety*.
* ***Contractor Management***: the ESIA shall include the description of the measures adopted to reduce the impacts of the worker influx. This may include criteria adopted to limit the number of workers, the siting of the worker base camp, etc. The ESIA shall also describe the procedures adopted to limit the impacts of the worker influx, especially in terms of Gender-Based Violence and harassment.
* ***Supply chain:*** the risks of violation of the human rights within the supply chain shall be identified and mapped. The ESIA shall include provisions relevant to the mitigations to be included in the procurement plan.
* ***Labor Related Issues***. The ESIA shall analyze the measured adopted by the project to ensure:
	+ Fair work conditions, including proper worker accommodations;
	+ A safe work place;
	+ The assessment of the need of a retrenchment plan to be implemented at the end of the construction phase.
* ***Cultural Heritage***. Potential impacts to the cultural heritage and specifically to the graves located along the M1 within the RoW shall be identified and mapped. Mitigations measures (including grave relocation) shall be described.
* ***Temporary impacts to the traffic in construction phase:*** The ESIA shall describe the general criteria for traffic management during construction (design of diversions etc) with specific focus on the solutions adopted to manage the construction phase of bridges and related traffic diversion.

## 8.3 Markets, Associated Facilities and Additionalities

The ESIA shall describe the modalities adopted to manage potential interferences with a proactive approach. Depending on the final project design, potential Project additionalities may include:

* ***The refurbishment of the infrastructures interfered by the project***, mainly power lines and water supply pipes. Specifically, the piping of the existing aqueduct is currently located in several areas affected by soil erosion. During the rehabilitation of the road, the affected sections of the aqueducts located within or close the RoW can be refurbished, even where not strictly required by the rehabilitation works.
* ***The improvement of the markets along the road***. Based on the outcomes of the E&S Scoping, most markets are in the need of toilets, and facilities for water supply and waste management. The improvement of the market can be considered in ESIA phase as a measure to compensate the impacts to the market caused by the road enlargement that may cause the need for some vendors to relocate their activities.

# ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING PLANS

## 9.1 General Requirements

An Environmental and Social Management Plan (ESMP) for both construction and operational phases shall be prepared to identify:

* The set of mitigation responses to potentially adverse impacts;
* The institutional structure and strengthening required to ensure that mitigation measures are taken; and
* The monitoring program to implement to verify compliance with the recommended mitigation, and measure the level of impacts produced by the proposed project.

Mitigation measures must be identified in accordance with the Mitigation Hierarchy. Specifically, these should include the following:

* Avoidance measures;
* Minimization measures;
* Restoration measures;
* Compensation/offset measures.

This section of the ESIA must include measures designed to mitigate potential adverse impacts to physical, biological, and social‐economic‐cultural resources from construction, operation and closure of the proposed project and alternatives. These shall include measures to avoid and prevent, and if needed, to reduce or minimize adverse impacts and, where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment, according to the mitigation hierarchy. The project proponent must include measures considered to be “best practices” in the design of all alternatives.

Proposed mitigations shall be described in auditable terms and at a level of detail sufficient to demonstrate its effectiveness in addressing the concern or performance criterion, including its anticipated level of effectiveness and/or measurable performance, and design specifications.

The Monitoring Plan shall include a short-term and long-term environmental monitoring program for the pre-construction and construction and operation phase. This will include:

* a specific description, and technical details, of monitoring measures required, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions in line with the standards which are applicable; and
* monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures, and furnish information on the progress and results of mitigation;
* Cost estimates of the proposed monitoring measures, the key parties/institutions that are proposed to be responsible to undertake the monitoring as well as the oversight responsibilities for correct implementation of the monitoring function and implementation of the mitigation measures. The monitoring plan will be based on applicable Project requirements.

The monitoring plan must confirm the effectiveness of mitigation measures and support contingency plans to provide assurance that the project, at the site preparation, construction, operation, expansion, and closure stages will meet applicable environmental and legal requirements and fall within the limits of impacts deemed acceptable by relevant national stakeholders, along with GIIP.

The capacity development section of the ESMP will:

* Recommend management arrangements for the project, including structure, roles, responsibilities, and authorities;
* Designate specific personnel, including management representative(s), with well-defined and clearly communicated lines of responsibility and authority;
* Require sufficient oversight and human and financial resources be provided on an ongoing basis to achieve effective and continuous environmental and social management throughout the life of the proposed project.

The ESMP will present estimated costs affiliated with the proposed mitigation and monitoring actions as well as the parties/institutions responsible for each item of the ESMP implementation.

The ESMP shall include a main summary table and Annexes in the form of Management Plans. The number and the topics addressed by the Management Plans shall be decided in phase of ESIA preparation, based on the outcomes of the impacts assessments and identified needs for mitigations.

The ESIA shall identify the responsible parties for ESMP implementation. The Project ESMP (the one included in the in the ESIA) shall be implemented by the PIU. Contractors are requested to prepare their subordinate ESMPs in alignment with the Project ESMP.

## 9.2 Proposed Table of Contents of the ESMP

The proposed Table of Contest of the ESMP is hereafter reported. Within the E&S Scoping report a preliminary ESMP is already made available for reference.

***Introduction***

Project description and ESMP objectives

Linkage to the ESIA findings

***Institutional Arrangements***

Roles and responsibilities for ESMP implementation (PIU, contractors, supervision consultants)

Capacity-building needs

***Mitigation Plan***

Tables summarizing:

Identified impacts and risks

Mitigation measures

Responsible parties

Timeline

Cost estimates

E&S technical specifications based on the project ESMP to be included in the tender documents

***Monitoring Plan***

Indicators to track environmental and social performance

Frequency, methods, and responsible entities for monitoring

Reporting requirements

***Grievance Redress Mechanism (GRM)***

Cross link with the SEP

***Emergency Preparedness and Response Plan***

Procedures for emergencies (spills, accidents, natural disasters)

Coordination mechanisms with local authorities and communities

***Training and Capacity Building***

Training programs for staff and contractors on E&S management

Topics covered (e.g., occupational health and safety, community engagement)

***Budget***

Detailed cost breakdown for ESMP implementation, monitoring, and capacity building

***Annexes***

This should include:

Detailed Management and Monitoring Plans

Templates for monitoring reports

Checklists for mitigation compliance

Details of consultation and disclosure activities.

It is highlighted that the preliminary ESMP included in the E&S Scoping Report has separate Tables for:

* Section A: ESMP management. This section includes provisions for the management of the ESMP itself, the team established at PIU level for such activity and general management procedures;
* Section B: E&S management in design phase. This section mainly deals with the mitigations of risks that can be mainly managed through the application of proper criteria in phase of concept and intermediate design. This section is aimed to control potential risks that may occur both during construction and operation;
* Section C: E&S management in procurement. This section mainly deals with the mitigations of risks that can be mainly managed by the PIU through the application of proper criteria in phase of procurement (engagement with suppliers and contractors);
* Section D: Environmental issues in Construction. Mitigations applicable in phase of detailed design and actual construction works are addressed in this section;
* Section E: Labor, OHS and security issues in Construction. As per section D, but related to Labor, OHS and security issues;
* Section F: Social Community issues. As per sections D, but related to Social Community issues;
* Section G: Recommendations for Operation and Maintenance.

## 9.3 Detailed Management and Monitoring Plans

The Project Management and Monitoring Plans shall at least include the following:

* **Air Quality Management Plan**: the Plan shall include the measures adopted in construction and operation to reduce emissions and impacts.
* **Water Management Plan**: the Plan shall include the measures adopted in construction and operation to manage:
	+ Potable water;
	+ Water utilized for construction activities.

The amounts of water utilized shall be recorded and consumption trend monthly analyzed. In case the potable water is supplied through truck, the quality of the distribute water shall be monitored every months, with the screening of microbiological contamination (the analysis in not necessary in case only bottled water is used to drink).

* **Wastewater Management Plan:** the Plan shall include the measures adopted in construction and operation to manage:
	+ Wastewater and sanitary waters of the worker base camp;
	+ Water utilized to clean the vehicles and construction equipment;
	+ The rain water that fall on the road, during the operation.
* **Noise Management Plan:** the Plan shall include the measures adopted to reduce emissions (i.e., use of silent equipment) and to reduce the impacts (i.e., no night work, installation of noise screens, etc).
* **Waste Management Plan:** the Plan shall include the measures adopted to manage:
	+ Solid waste generated at the base camp;
	+ Packaging waste (including plastic bottles) generated at the workplaces/yard;
	+ Solid construction waste (i.e, concrete);
	+ Construction scrubs (i.e., iron, wood);
	+ Rubble and sediment from construction works;
	+ Hazardous waste (used oil, oil filters, used chemicals, empty drums contaminated by chemicals, etc).
* **Soil erosion control**: the plan shall include:
	+ Details on how management procedures will complement design measures to limit and control soil erosion. The plan shall address procedures adopted both in the construction phase by Contractors and in the operation phase, during maintenance carried out by the RA;
	+ Detailed procedures of the soil erosion monitoring plans to be adopted in construction and operation phase. The monitoring plans shall allow an early warning in case that, notwithstanding all the design and management measures, soil erosion phenomena or flooding due to the dike effect of the road will occur;
	+ Preliminary identification of the corrective measures to be adopted in cases the monitoring plans show the presence of risks. The corrective measure shall include:
		- Modalities to be adopted for the implementation of urgent measures aimed to avoid the worsening of the situation in the short period, at the soonest after the identification of each issue;
		- Modalities for the implementation of long term corrective actions aimed to fix definitely the issue.
* **Biodiversity Management Plan**: a biodiversity management plan in alignment with WBG requirements shall be prepared with reference to the potential impacts of the road on the protected area of concern (the Elephant Marsh), as well as on Key Biodiversity Areas (if any), valuable habitats and species, and ecosystem services.

A preliminary BMP is already available as pat of the E&S Scoping report.

The BMP must include, in alignment with the Environmental and Social Standard 6 (ESS6), the following components:

* + Biodiversity Objectives: Clearly defined goals for biodiversity conservation.
	+ Activities: Specific actions to achieve these objectives.
	+ Implementation Schedule: A timeline for carrying out the activities.
	+ Responsibilities: Institutional roles that are gender-inclusive to ensure diverse participation.
	+ Cost and Resource Estimates: A detailed budget for the implementation of the BMP.

For minimum requirements and details, please refer to Appendix A of the Guidance Note on ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

In preparing the BPM, also considering that the road does not directly affect the area, the Plan shall mainly focus on:

* + Measures to be adopted to limit the barrier effect of the road that may impede the movement/migration of certain species (and more generally, measures to ensure that the new road will not limit the connectivity between the ecosystems);
	+ Measure to be adopted to control the land use of the areas in the road nearby, to limit the impact of the new (residential, agricultural or industrial) developments that can be triggered by the road rehabilitation. This section shall take into consideration the current land planning regulation adopted by the District Councils;
* Measures to be adopted to avoid the propagation of alien species triggered by the construction works. **Monitoring of Labor and OHS Performances**: A Labour Management Procedure (LMP) will be developed for the project. Also a complete OHS Plan shall be developed as well as an Emergency Preparedness and Management Plan. The Monitoring Plan shall include provisions (and auditing processes) to measure OHS statistics, the respect of human rights and fair work conditions among direct employees and contractors, and the absence of discriminations.
* **Contractor Monitoring and Auditing in Construction Phase**: Detailed procedures for the monitoring and auditing of EHS performances of the contractors shall be adopted. The plan shall include:
	+ Criteria to be adopted in bidding phase with:
		- The definition of minimum requirements for bidders (Contractor qualification criteria);
		- The definition of the minimum contents of the preliminary EHS plans to be included in the Contractor bid (Contractor selection criteria). The preliminary EHS plan shall specifically focus on: 1. Fair work conditions of employees (addressing both migrants and unskilled locally hired workers). Details on the recruitment process and modalities implemented to avoid discrimination and bribes in recruitment shall be detailed; 2. OHS aspects; 3. Respect of human rights in the supply chain; 4. Relationships with local communities, specifically addressing the modalities adopted to ensure the absence of abuses of the project-hired security forces, sexual harassment perpetrated by workers and prostitution, with specific reference to prostitution of minors; 5 Biodiversity management.
	+ Criteria to be adopted at project start, with the definition of the minimum contents of the final Contractor EHS plans;
	+ Modalities for Contractor monitoring and auditing during project implementations;
	+ The process to activate in case of non compliances, for the identification and implementation of the corrective measures.
* **Social impacts, including GBV and sexual harassment:** The PIU shall implement an independent monitoring plan for the monitoring of the social positive and negative impacts of the Project. These plans shall be coordinated with the Stakeholder Engagement plan, described separately within this ToR.[[3]](#footnote-4)
	+ ***Construction phase:*** The plan shall monitor the social effects at least in terms of: 1. Induced economic benefits to communities in terms of employment opportunities. Statistics on hired workers shall be presented. As part of the SEP, satisfaction surveys shall be carried among communities. Meetings with local communities, Traditional Authorities, market committees and/or interviews with road users shall be arranged in order to assess the level of satisfactions of different groups and confirm the absence of discrimination and bribe in recruiting, including events of employment in change of sex. The outcomes of the surveys shall be used for both the identification of potential corrective measures and to inform future similar projects; 2. Impact to the traffic induced by traffic diversions; 3. Trends induced by construction works in the availability and costs of resources (water, food, public transportation, etc.); 4. Impacts in terms of risk of sexual harassment and gender based violence, in all the diverse modalities it may occur. The Project shall implement the measures suggested in the E&S Scoping Report in order to allow the potential victims to refer immediately, easily -and when necessary also in anonyms modalities- to offices in charge to manage the Project Grievance Mechanism and the GVB Experts/referees, either to the One Stop Centers and Police. It is understood that the difficulties to open claims by the victim is one of the reasons that limits the efficiency of actions aimed to control GBV acts. The Project shall implement measures to facilitate the reporting. Facilitate reporting does not only allow the monitoring of the situation and the implementation of corrective actions, but it also supports prevention.

GVB can be also addressed in a separate GBV Action Plan aimed to mitigate, among others risks, the risks of discrimination and family violence associated with compensations.

* + ***Operation phase:*** The plan shall monitor the social effect of the project in the medium-long term (at least during 5 year after the end of the construction works. The Plan shall address: 1. The monitoring of the economic and social modification to the current socio economic context induced by the rehabilitation of the road. Example of parameters to measure include: effects on urban or industrial developments along the road; trends of the average cost of the land and residential building along the road; development of the markets along the road; trends in the average level of scholarship, that may be modified by a more favorable transportation system; trends in the reduction of gender gaps, that also may be modified by a more favorable transportation system; 2. traffic trends (traffic surveys shall be carried out in order to assess modifications in the motorized and non motorized traffic. Meetings with local communities, Traditional Authorities, market committees and/or interviews with road users shall be arranged in order to assess the level of satisfactions of different groups of users. The outcomes of the surveys shall be used for both the identification of potential corrective measures and to inform future similar projects); 3. Road Safety (this shall include statistic on incidents and analysis of causes. The outcomes shall be used for both the identification of potential corrective measures and to inform future similar projects).
* **Traffic Management Plan**: the Plan shall include the measures adopted in construction to manage the traffic, with specific reference to the management of the necessary traffic diversions.
* **Community Health and Safety Plan**
* **Chance Find Procedure.**

# 10. STAKEHOLDER ENGAGEMENT

This section will provide information on:

* The engagement activities conducted for the E&S Scoping report;
* The engagement activities conducted for the ESIA report;
* The suggested activities scheduled during the phases of project implementation.

The section will include details on:

* Description of what stakeholder engagement means and the requirements of the WBG ESF and other relevant GIIP, along with national requirements.
* The preliminary identification of stakeholders and the mapping of their level of interest and influence.
* Suggestion on the planning of future activities, with engagement aimed to inform the interested parties in progress achieved in project development and get feedback, with description of mechanisms and instruments for:
	+ Community participation, including procedures for consultation and participation of project affected persons/groups and beneficiaries, and mechanisms for complaints from the population directly using the services,
	+ Grievance mechanism, with a range of methods to lodge complaints and a clearly defined system of reporting and responding to grievances, including roles and responsibilities within the PIU and any relevant government institutions,
	+ The specific plan for the engagement of workers and the worker grievance mechanism, with information on anonymous reporting, reporting, and management of worker related complaints.
	+ The management of a website, in Chichewa and English, for the disclosure of information and the gathering of opinions/grievances.

The ToR for the SEP is here reported in Annex A. Please, make also reference to section 15 and Annex IV of the E6S Scoping Report for further details on the SEP.

### *GBV and Gender Gaps*

The description of the Demographics and Socio Economic Conditions will be complemented with a section specifically dedicated to gender issues, mainly based on the outcomes of the engagement completed for the E&S Scoping report and additional meetings and engagement that will be arranged in phase of ESIA preparation.

To complement the information available in the E&S Scoping report, in phase of ESIA preparation, at least the following activities will be completed:

* additional women-only focus groups to allow for the collection of gender sensitive data;
* additional meetings with teachers of the schools located along the road, in order to capture specific issues relevant to minors and minor girls.

It is expected that 7 focus groups will be organized.

# 11. INSTITUTIONAL FRAMEWORK

This section shall include the description of the:

* Administrative Divisions of Malawi and their overall role (Central Government Districts, Wards, Traditional Authorities);
* Institutions with direct responsibilities in the construction and operation phase (i.e., permitting, financing, etc.), including:
	+ WBG;
	+ the authorities that are part of the PIU;
	+ The Ministry of Natural Resources, Energy & Mining and the Malawi Environment Protection Authority;
* Institutions with a role in the management of resettlement and compensations, primarily the Ministry of Land;
* Institutions with direct or indirect responsibilities in project monitoring. These also include (in addition to the relevant authorities/entities already mentioned above) entities involved in the management of issues related to the Gender Based Violence, including:
	+ The Gender-based Violence (GBV) and Harassment (GBVH), Sexual Exploitation and Abuse (SEA), and Child Protection Service Providers;
	+ The One-Stop-Centers.

A description (in tabular format) of the role and responsibilities of each stakeholder shall be included.

Please make also reference to section 4 of the E&S Scoping report.

# 12. EMERGENCY PREPAREDNESS AND RESPONSE

The ESIA shall include a preliminary Emergency Preparedness and Response Plan, with procedures to be adopted for the management of major unexpected situations during the rehabilitation works and operation phase. These shall include at least: 1. Anticipated Interruption of works due to any potential cause, including political or financial crises or any cases mentioned in following point of this list; 2. Natural disasters, including flooding; 3. Civil unrests and other security issues; 4. Contractors incapacity to complete the works for any reasons including incapacity to respect the contractual terms and bankrupting.

# 13. RESETTLEMENT POLICY FRAMEWORK

The rehabilitation of the road requires the assessment of the need to compensate the users of the land within the existing RoW. The E&S Scoping Report includes, in section 11, the preliminary identification of the needs of land acquisitions and assessment of the number of economic displaced persons. It shall be highlighted that at this stage of project development, no physical displacement (i.e., need of relocation of residential houses) is envisaged.

As part of the ESIA, a Resettlement Policy Framework (“RPF”) shall be prepared, that will guide the PIU in further developing the project Resettlement Action Plan (aimed to compensate economic displacement) and Livelihood Restoration Plan (“LRP”), which will be prepared, on completion of the detailed engineering designs, based on a detailed census of the Project Affected Persons (“PAPs”) and socio-economic survey of PAPs. The RPF should be designed in tight collaboration between different government entities (in particular the Ministry of Land and District Councils) and Traditional Authorities that play a role within local resettlement processes. Please see also section 13.3 of the E&S Scoping report for details.

A template Entitlement Matrix will be developed, to summarize the types of losses and the corresponding nature and scope of entitlements. The PIU will be responsible for carrying out the necessary activities to further detail the Entitlement Matrix under the RAP’s development activities. The entitlement to be compensated and the amount of compensation for each PAP shall be decided based on the stricter requirement that applies to each land plot and land owner/users, based on the national and the WBG standard of reference. It shall be highlighted that based on the outcomes of the E&S Scoping phase, there is no need to relocate residential buildings.

The RPF shall include (also building up on information already included in Sections 11 and 13. 3 of the E&S Scoping Report):

* The preliminary assessment of the number of PAPs to be compensated for each category of affected people (i.e., type of economic activities carried out in the RoW; presence of structures in wood or concrete; etc.).
* The preliminary assessment of the costs for compensations (either the extension of the land to be transferred to the owner in change of the acquisition).

The assessment of the socio-economic impacts of road rehabilitation shall also consider the users that conduct informal and/or temporary economic activities within and also outside the market areas that develops along the road.

# 14. CONCURRENT PROJECTS

Other projects recently developed, under development or planned in the indirect AoI will be identified and mapped. These shall include the irrigation scheme projects.

A preliminary list of concurrent projects is reported in section 12 of the E&S Scoping report.

# 15. CUMULATIVE IMPACTS

This ESIA shall include the assessment of the cumulated impacts with the other projects in the Area of Influence as identified in the baseline section, especially in terms of:

* use of resources such as construction materials; and
* management of worker influx and related impacts.

The VEC (Valued Environmental and Social Component) methodology should be of reference to assess cumulative impacts, in compliance with the IFC’s Good Practice Handbook Cumulative Impact Assessment and Management.

Please make also reference to section 12 of the E&S Scoping report.

# 16. EXPERT TEAM

As required by the national regulation, the qualifications and profile of the experts of the team that prepared the ESIA shall be briefly summarized in this section. As a reference, the team should include at minimum the following proposed qualifications and expertise.

| **Position** | **Relevant Experience** |
| --- | --- |
| **Team Leader / Project Manager** | The Team Leader / Project Manager with at least a MSc in Environmental Engineering or Environmental Science or its equivalent and must have at least 10 years of working experience, and should have undertaken at least 5 feasibility study and detailed design projects ESIA projects, preferably in road/infrastructure construction and/or rehabilitation, with demonstrated expertise in conducting ESIAs in accordance with International Financial Institutions' (IFI) requirements (e.g., WB, IFC, EBRD, etc.).as an Environmental Expert. The Expert must be one registered or recognized with Malawi Environment Protection Authority (MEPA)  |
| **Environmental Specialist** | The Environmental Specialist with at least a MSc in Environmental Engineering or Environmental Science or its equivalent and must have at least 5 years of working experience, and should have undertaken at least 2 feasibility study and detailed design projects ESIA projects, preferably in road/infrastructure construction and/or rehabilitation, with demonstrated expertise in conducting ESIAs in accordance with International Financial Institutions' (IFI) requirements (e.g., WB, IFC, EBRD, etc.).as an Environmental Specialist. The Specialist must be one registered or recognized with Malawi Environment Protection Authority (MEPA |
| **Social Specialist****SEA/SH Specialist** | The Social Specialist with a Masters in social management/ Social Development Studies or related social science degree or Community Development. The Expert shall have at least 5 years’ experience working on social management in infrastructure development with sound knowledge of social issues, initiatives and managing mitigation measures. Experience in preparation and implementation of Resettlement Action Plans (RAPs) including experience in stakeholder engagement, grievance mechanism, GBV/SEA, community health and safety, Livelihoods Restoration Programs, cultural assessment and socio- economic preferably in Malawi or other nearby countries. Fluency in both written and spoken English is essential. The expert should be fluent in Chichewa. Experience in social management issues in construction projects will be an added advantage. The Social Specialist will also lead the socio-economic baseline study. SEA/SH |
|  | The SEA/SH Specialist must have a Masters in Gender/ Development studies or any related fields with at least 5 years of working experience in SEA/SH risk assessment, implementation of SEA/SH prevention and management in construction projects, stakeholder engagement, grievance mechanism, case management, etc Plus understanding of World Bank’s ESF and SEA/SH incidents reporting and handling procedures. Fluency in both written and spoken English is essential. The expert should be fluent in Chichewa. |
| **OHS Specialist** | Occupational Health and Safety Expert with at least a MSc in disciplines such as engineering (Civil, Electrical, Mechanical, Environmental, Quality and Safety) Health and Safety or closely related field. A minimum of 5 years of demonstrable project experience in developing, implementing and/or supervising OHS and Traffic Management in construction, with experience in transport infrastructure, and or extractives sectors at similar or senior level. Have thorough working knowledge of World Bank Environmental and Social Standards, especially Labour and Working Conditions (ESS2), Community Health and Safety (ESS4) and World Bank Environmental, Health and Safety Guidelines. Knowledge of OHS management systems, including experience auditing/ assessing health and safety programs and systems. Demonstrated ability to address technical issues of occupational health and safety and to effect a cultural change to create a culture of safety across a workplace or organization. Have a working knowledge of Malawi’s legal framework on occupational health and workers welfare. |
| **Geologyst/Hydrologist** | The Geologist / Hydrologist shall be a qualified and competent chartered or registered professional civil engineer with a degree in civil engineering or equivalent qualification and with a minimum of 10 years’ general experience, and shall have undertaken at least 5 projects as a Hydrologist. The Specialist shall have experience in geological and hydrological assessments, including flood analysis. Fluency in written and spoken English is mandatory.. |
| **Ecologist / Biodiversity Expert** | Ecologist / Biodiversity Expert with at least a MSc in Biology or its equivalent and must have at least 10 years of working experience, and should have undertaken at least 2 feasibility study and detailed design projects as a Biodiversity Expert. He / She must have proven expertise in preparing at least five ESIAs studies for large infrastructure developments and knowledge of World Bank ESF requirements with relevant experience in Southern Africa Ecosystems. Demonstrated expertise in conducting biodiversity assessments in compliance with the Environmental and Social (E&S) Standards of International Financial Institutions (IFIs), including the World Bank (WB), International Finance Corporation (IFC), etc. |
| **Climate Change Expert**  | The Expert with at least Master’s degree or higher qualification in climate change adaptation, disaster risk reduction, engineering, environmental sciences as well as additional project/financial management designations or a related field. Minimum of 15 years’ experience in climate change. Practical experience in planning, managing and implementing climate change adaptation and resilience activities. Proven capacity to translate complex climate change information for non-technical professional users. Contemporary knowledge of climate change in the Sub – Saharan Africa and a broad understanding of international developments in climate change, including climate change financing. Outstanding verbal and written communication skills, particularly within a diverse cultural and linguistic context. |

17. REPORTING REQUIREMENTS

The Consultant shall prepare and submit the following reports and documents, in English, in an approved format to the Client. The comments of the Client shall be incorporated in the final version of the reports and documentation. The Consultant shall also present to the client in power point the ESIA Reports at meetings to be arranged in consultation with the WBG and RA.

In addition to the standard deliverables, the consultant shall submit a monthly progress report on the services within the first ten (10) days of the preceding month and any other interim reports as required by the WBG and RA.

The Consultant will attend monthly progress meetings organised by WBG and RA to review progress and status of his / her obligations and discuss any challenges and difficulties affecting the Consultant in the projects affected areas.

* 1. Inception report

An Inception Report covering all the elements shall be submitted, the report shall include details of the services carried out and the outlined outcomes.

The Inception Report shall be submitted within two (2) weeks of the commencement date of the assignment. It shall contain as a minimum:

* Status of the Consultant Mobilization
* Current status of the roads and the existing environmental conditions
* Scope Modifications / Variations if required or necessary to complement the ESIA
* A revised implementation program for the Consultancy Activities
* The Consultant shall show the internal quality assurance system that will ensure, both completeness and quality of the assignment

17.2 Draft ESIA Report

A draft Preliminary ESIA Report covering all the elements shall be submitted, the report shall include details of the services carried out and the outcomes of the preliminary ESIA with emphasis on the objectives, the scope of services, findings and observations. The Report should present the complete diagnosis of the M1 road and discuss all elements of the entire ESIA study outlined.

17.3 Final ESIA Report

A Final ESIA Report covering all the elements shall be submitted, the report shall include details of the services carried out and the outcomes. The Report should present the complete diagnosis of the M1 road and discuss all elements of the entire ESIA study, investigations and outcomes.

The Consultant shall submit Ten (10) hard copies and one (1) electronic copy of the ESIA report in PDFs and Editable formats (Word, Excel, AutoCAD, GIS shape file or other similar files) used in compiling the reports to the Client.

The Consultant shall refer and make use of the E&S Scoping Report. The Consultant shall use the E&S Scoping Report findings and recommendations.

18. Data, Services and Facilities to be provided by the Client

The Client shall only provide the consultant with available data as requested. The Client will also assist in the facilitation for the co-operation of other government ministries and agencies, departments and other agencies as required for carrying out the services and in liaison as necessary for the same purpose. The Client will give the Consultant assistance to gain access to all available information required for the proper conduct and completion of the ESIA. Refer to Annex B.

19. Obligations of the Consultant

The consultant’s obligations shall include, but not be limited to the following:

* The Consultant shall employ well qualified and competent professional staff at all times in the execution of these services. The Client reserves the right to investigate and remove any individual(s) involved in the provision of services if their conduct or performance is deemed questionable or incompetent.
* The Consultant shall make his own arrangements for all necessary office and living accommodations, transportation, office and other supplies, computers, computer software, printing of reports and drawings etc. in connection with the services to be provided. All costs have to be included in the Financial Proposal.
* Prior to commencement of the actual services, the Consultant shall formulate a quality management system and procedures acceptable by the Client for implementation of these services in accordance with these Terms of Reference and accepted professional practice.
* The Consultant shall be responsible for the registration, of all foreign Key Experts employed to provide services with the Malawi Environmental Protection Authority (MEPA) and Malawi Engineering Institution (MEI) or any other regulatory body prior to practicing in Malawi.

20. Payment Schedule

The services will be executed on a Lump Sum Contract basis and the payment schedule shall be as follows:-

(a) 20% of the Contract Price shall be paid upon acceptance of the Inception Report by the client

(b) 35% of the Contract Price shall be paid upon acceptance of Draft ESIA Report by the client.

(c) 45% of the Contract Price shall be paid upon acceptance of the Final ESIA Report by the client.

# 17. REFERENCES AND APPENDIXES

As necessary.

# 18. NON TECHNICAL SUMMARY

A non-technical summary – that can be understood by different stakeholders – should be prepared and also published in the project web site to facilitate and encourage engagement and comments.

# ANNEX A - STAKEHOLDER ENGAGEMENT PLAN

A Stakeholder Engagement Plan (SEP) shall be prepared, according to the Preliminary SEP that is included in the E&S Scoping Report, which is aligned with the WBG Stakeholder Engagement Plan Template for Substantial Risk and High Risk Projects. Below we include some further instructions and recommendations to be considered in developing the SEP:

## Regulations and Requirements

In developing the SEP, the following regulation shall be taken into account:

* National regulation relevant to the SEP, including provisions related to the Worker Grievance Mechanism for the public and private sector;
* Relevant WBG requirements, as per ESF and relevant Guidelines;
* Relevant ILO Conventions and Recommendations and other Good Practice guidelines of reference,

## Institutional Framework

The SEP should be developed also considering:

* the institutions with direct responsibilities in the construction and operation phase (i.e., permitting, financing, etc.);
* the institutions with direct responsibilities in project monitoring (for detail, see the ToR for the *Institutional Framework* Section of the ESIA).

## Project Stakeholders

### *Stakeholder Identification*

According to the WBG SEP template , the stakeholder process involves the identification and analysis of the following stakeholder groups related to the project, namely:

* Affected parties: Stakeholders which include local communities, community members and other parties that may be subject to direct impacts from the Project.
* Other interested parties: Other stakeholders that include parties other than directly affected communities
* Disadvantaged / vulnerable individuals or groups within the communities affected by the Project

Within the framework of this Project, Stakeholders that deserves specific attention -because potentially most affected by the project or currently in a critical situation- include:

* Vendors of the markets located along the road;
* Students and teachers of the schools located along the road;
* More generally commuters that are frequently users of the road.

## Stakeholder Engagement Program

Description of the objectives that are expected to be achieved through the stakeholder engagement and the SEP, and activities envisaged to achieve such objectives.

The Engagement process shall include information on:

* Project Stage: Identify the phase of the project, distinguishing between the preparation stage and the implementation stage.
* Target Stakeholders: Identify the categories of stakeholders involved, such as the general public, Indigenous Peoples, Sub-Saharan African Historically Underserved Traditional Communities, and persons with disabilities.
* Topic of Consultation/Message: Define the consultation topics or messages to be communicated, which may include presenting the project, receiving feedback on activities, informing on project progress, consulting on key risks, disseminating results of public events, and providing information on grievance mechanisms.
* Method Used: Specify the methods used for engagement, including focus group meetings, community consultations, formal meetings, virtual discussions, surveys, one-on-one interviews, and site visits.
* Responsibilities: Assign responsibility for the implementation of engagement activities to the relevant agency or ministry in charge.
* Frequency/Timeline: Establish the frequency or timeline for engagement activities, with specific dates or indicative frequencies such as monthly, quarterly, or twice a year
* Vulnerable groups should be identified and methods of their engagement should be addressed, including measures to remove obstacles to full and enabling participation.

## Resources and Responsibilities

The SEP template include a section on the identification of responsibilities in implementing and monitoring the SEP, with a preliminary assessment of the human resources necessary from each party to ensure a successful engagement of all the relevant stakeholders. The template specify that the overall responsibility for the SEP implementation lies with the PIU director.

The SEP shall at least identifies entities responsible for the stakeholder engagement:

* WBG and other funding entities, if any;
* The PIU, that id the entity responsible for the SEP implementation and maintenance;
* Relevant Government agencies and authorities.

## This section must outline the following:

* SEP Implementation Arrangements: including clearly specify the provisions for mobilizing technical expertise to facilitate safe consultations with vulnerable groups and address sensitive topics as needed.
* Documentation Modalities: Detail the methods and formats that will be used to document stakeholder engagement activities throughout the project.
* Budget Estimate: Provide an estimate of the budget required for the preparation and implementation of the Stakeholder Engagement Plan (SEP) as outlined in Annex 2 of the SEP template.

## Grievance Redress Mechanism (GRM)

Description of the Project Redress Mechanism for workers and communities. It is suggested that in the description will be included how the Mechanism is linked to (or rely on) on the more general RA and District Conseil Grievance Redress Mechanism. A Grievance Redress Mechanism Chart (that shows the workstream and expected timeframe for grievance treatment) shall be included. Detailed table for this aspects is provided in the SEP template and include all GRM Steps. The GRM shall be established before the commencement of any rehabilitation work and made available to local communities as well as to workers.

The GRM shall comply with the national regulation, WBG standards and with the IFC Good Practice Note on Addressing Grievances from Project Affected Communities. The Mechanism shall include special provisions and separate modalities for the treatment of Gender Based Violence and Sexual Harassment allegations/complaints. Kindly refer to the Good Practice Notes on Addressing SEA/SH in Investment Project Financing.

## Monitoring and Reporting

The SEP shall include the identification of the modalities that the PIU shall adopt for the periodic reporting to WBG and Government agencies on engagement activities. Periodic reporting shall include:

* Progress reporting aligned with the ESS10
* Cumulative qualitative reporting including (i) issues that can be addressed though changes in the scope design (ii) issues manageable during the implementation phase (iii) issues requiring alternative soluition (iv) unresolvable issues
* Quantitative reporting based on indicators included in the SEP

In addition the reporting should include mechanisms to be used to report back to the stakeholder groups consulted, including its timeline.

The reporting will additionally include:

* Analysis of the received grievances and treatment/resolutions;
* Proposed corrective actions to address difficulties in SEP implementation, received comments, observations, suggestions and recommendations and grievances;
* Any necessary update of the SEP.

## Annexes

The SEP shall be complemented by relevant annexes, as prescribed by the SEP template, and could include the proposed Code of Conduct for Contractors and Suppliers.

**ANNEX B - Existing Data to be collected**

| ID | Data | Source |
| --- | --- | --- |
| 1. Data Availability/ Accuracy Guaranteed by the Client |
| 1.1 | None |  |
| 2. Data Availability/ Accuracy not Guaranteed by the Client |
| 2.1 | Historical Traffic Data from departmental count stations | Roads Authority |
| 2.2 | Hydrological/precipitation data and flood mapping information | Department of Climate Change and Meteorological Services |
| 2.3 | Other historical data from any Roads Authority Database that may exist | Roads Authority |
| 2.4 | Standard traffic count categories | Roads Authority |
| 2.5 | List of National Survey Control Beacons with co-ordinates | Surveyor General’s Department |
| 2.6 | 1:250,000 and 1:50,000 scale national topographic maps | Surveyor General’s Department |
| 2.7 | Aerial photography | Surveyor General’s Department |
| 2.8 | Geological Mapping | Geological Surveys Department |
| 2.9 | Location of other utility crossings | Malawi Telecommunications Limited, and Electricity Supply Corporation of Malawi Limited, Southern Region Water Board |
| 2.10 | Historical Construction Rates and Prices | Roads Authority |
| 2.11 | Standard Formats for Reports | Roads Authority |
| 2.12 | Mapping of protected land, National Parks, Forests etc. | Department of National Parks and Wildlife |
| 2.13 | Water and risk assessment | DWR, DoDMA |

1. [The World Bank Environmental and Social Framework](https://thedocs.worldbank.org/en/doc/837721522762050108-0290022018/original/ESFFramework.pdf) [↑](#footnote-ref-2)
2. [The World Bank Environmental, Health, and Safety General Guidelines](https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf) [↑](#footnote-ref-3)
3. An independent monitoring plan refers to a plan directly implemented by the PIU, without the involvement of the Contractor [↑](#footnote-ref-4)