MALAWI WATER AND SANITATION PROJECT – 1

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR PROPOSED CONSTRUCTION OF PUBLIC SANITATION FACILITIES IN MARKETS AND GOVERNMENT HEALTH CENTRES/ CLINICS IN BLANTYRE CITY AS CHOLERA EMERGENCY PREPAREDNESS AND RESPONSE

PROJECT PROPONENT:

BLANTYRE WATER BOARD,
OFF MAKATA ROAD,
Private Bag 30369,
BLANTYRE 3,
Malawi

Phone : +265 1 872 000
Email:

FEBRUARY 2024

EXECUTIVE SUMMARY

1. Introduction

This ESMP is for the proposed construction of 10 Public Sanitation Facilities (PSFs) in five markets and 5 health centres located in cholera hotspots in Blantyre metropolitan area.
Blantyre Water Board (BWB) is a Statutory Corporation under the Ministry of Water and Sanitation, established in 1929 and incorporated under the Water Works Act No. 17 of 1995 with a purpose of supplying wholesome water to residents of the City of Blantyre and its surrounding peri-urban areas as directed by the Ministry of Water and Sanitation (MOWS) in accordance with the provisions of the Act.

In an effort to improve water supply and sanitation service delivery to residents of Blantyre City and surrounding areas, the Government of Malawi (GoM), through BWB and Blantyre City Council (BCC), with financial support from World Bank`s International Development Association (IDA), is implementing the Malawi Water and Sanitation Project-1 (MWSP-1). The Project Development Objective (PDO) is to increase access to improved water supply and safely managed sanitation services in Blantyre metropolitan area and to enhance the operational and financial efficiency of the Blantyre Water Board. The PDO will be achieved through implementation of the following components: 1) Water supply improvements; 2) Priority sanitation investments; 3) Institutional capacity strengthening; 4) Technical Assistance and Project Management Support; and 5) Contingency Emergency Response. The project duration is five years, running from March 2023 to March 2029.

Following the emergency event of cholera which hit most parts of Malawi including Blantyre City, Malawi Water and Sanitation Project (MWSP) will increase access to safely managed sanitation services through construction of 10 (5 in markets and 5 in health centres) public sanitation facilities (toilets). The facilities will benefit over 100,000 people including those that will be directly employed by the project and those that will use the Public Sanitation Facilities (PSFs) during operation phase. The construction works of the PSFs will take 120 calendar days and will create employment opportunities for more than 250 local people of which at least 40% will be females.

2. Nature and Scope of the Project

The nature and scope of works for the project include the construction 10 PSFs with cement whole blocks. The PSF will have disability friendly structures, urine diversion unit, rain water harvesting structure and septic tank. Specific construction works will include land clearing and earthworks, excavations, construction of sub structure and superstructure roofing and finishing works.

3. Rationale of the Study

The construction and operation of the proposed project activity requires an Environmental and Social (ES) assessment to be carried out in compliance with Environmental Management Act of 2017. Blantyre Water Board was therefore asked to prepare an Environmental and Social Management Plan to integrate environmental and social issues into the project.

4. Justification of the Project

This project will greatly contribute to the achievement of the country's goals as outlined in the ***Malawi 2063***. The provision of potable safely managed sanitation services in cholera prone areas in Blantyre shall improve health and reduce occurrence of diseases emergency due to poor human excreta disposal which will result in reducing financial resources being spent for hospital treatment. In addition, it will respond to Sustainable Development Goals (SDG) target 6.2 that seeks to ensure sanitation for all by 2030.

5. Project Objectives

The main objective of the intervention is **to increase access** to improved sanitation services by communities in targeted cholera hotspots. Other objectives include but not limited to the following: 1) **To promote hygiene** through utilization of the facilities to educate people about hygiene practices by posting Information, Education and Communication Materials (IEC) on hand washing, and proper disposal of waste, just to mention a few; 2) **To reduce Cholera transmission** through utilization of the facilities by the general public that will ensure safe disposal of human excreta thereby reduce open defecation and consequently contribute in reduction of cholera transmission; 3) **To support health care system** through reduction in cholera cases which will alleviate the burden on local healthcare facilities – for instance, the prevention of new cholera cases will enable healthcare providers to use the time and resources (that could have been spent on cholera) on other critical medical emergencies; 4) **To promote community resilience** against cholera and other diseases related to poor sanitation and hygiene through continued access and utilization of the PSFs by the communities in the targeted communities

6. Objectives of environmental and social assessment/ study

The objective of this assessment was mainly to: 1) Outline the nature and scope of the proposed project area; 2) Outline the policy and legal framework governing the proposed activities; 3) Describe the existing biophysical and socio-economic environment; 4) Identify key environmental and social impacts and recommend measures to enhance positive impacts and reduce, mitigate or eliminate negative impacts; and 5)Propose an environmental and social management plan and monitoring plan to deal with the identified key environmental and social impacts.

7. Methodology

Initial desk and field investigations, including public consultations, were conducted prior to detailed field data collection. The team reviewed relevant literature pertaining to the proposed project. Field observation for physical parameters including geology, drainage, topography amongst others, was conducted within the project sites. The study also engaged immediate surrounding communities and local government authority to get an in depth understanding of the current sanitation problems and relate to the proposed solution through the construction of the public sanitation facilities.

8. Summary of identified impacts

This ESMP focuses on identifying both positive and adverse impacts of the proposed construction and operation of public sanitation facilities. For positive impacts, the ESMP has

provided enhancement measures and mitigation measures for negative impacts. Below is the summary of the anticipated impacts and measures to be undertaken

8.1. Positive impacts

8.1.1. Access to improved sanitation facilities and services by the communities

Proposed enhancement measures

- Proper operation and maintenance of the sanitation facilities;
- Conduct regular inspection of the facilities detect overflows of septic tanks and repair them;
- Employ adequate staff and ensure that they provide appropriate work inputs (cleaning) through proper work schedules; and

8.1.2. Increase in trade opportunities

Proposed enhancement measures

- Purchase materials from local suppliers and pay them within the agreed times;
- Source materials from licensed suppliers;
- Support and promote local entrepreneurship skills amongst the communities and business people in the project area by engaging them where appropriate; and

8.1.3. Creation of employment opportunities

Proposed enhancement measures

- Inform local communities of employment opportunities;
- Prioritize employment of local persons that qualify; Pay workers above the minimum wage and timely pay overtime; and
- Sensitize workers to save and invest during project implementation

8.1.4. Improved sanitation, hygiene and health – reduction in cholera cases

Proposed enhancement measures

- Carry out maintenance of the facilities
- Good housekeeping to promote general sanitation and hygiene around the facilities
- Conduct trainings aimed at building the capacity of PSF operators in market so they are able to do minor repair and maintenance;
- Continuous monitoring and evaluation of the facility to potential health risk, such as overflowing of sewage and report for action.

8.1.5. Increase in revenue generation

Proposed enhancement measures

- Carrying out regular maintenance of the sanitation facilities and
- Conduct regular inspection of the facilities to detect overflows of septic tanks and repair them.

8.2. Negative impacts

8.2.1. Loss of vegetation

Proposed mitigation measures

- Limit vegetation clearance to demarcated areas only; and
- Plant trees to replace the affected ones.

8.2.2. Increased risk of Soil erosion and sedimentation

Proposed mitigation measures:

- Avoid excavations during rainy season
- Stockpile excavated soil away from water courses;
- Install sediment traps on natural drainage paths at construction site;
- Restrict land clearing only to the proposed site for construction activities; and
- Compact and spray water on loose soil in all disturbed areas during construction phase

8.2.3. Increased solid waste generation

Proposed Mitigation Measures

- Sell or recycle metal waste to tinsmiths or vendors for reuse or re-sale;
- Provide solid waste storage bins and prevent overfilling;
- Dispose collected waste in an approved disposal site; and
- Implement sensitization campaigns on consequences of indiscriminate waste disposal.

8.2.4. Disturbance of proper solid waste disposal due to relocation of waste skip bins to free space for construction works

Proposed Mitigation Measures:

- Put a sign post to indicate the new location of the bin
- Sensitize the users of the waste skip bin about the new location
- Introduce street bins in the project sites where the skip bin is shifted from one site to the other within the project site.

8.2.5. Increased dust generation

Proposed mitigation measures

- Apply water to suppress dust being generated;
- Provide protective gear (dust masks) to workers and ensure that they wear them;
- Erect a barrier around the work sites where construction activities are taking place to break or reduce wind and dust movement; and
- Store and handle sand and cement properly to limit dust generation.

8.2.6. Increased risk of injuries and accidents to workers and the public

Proposed mitigation measures

- Develop a workplace safety policy
- Induct workers on OHS requirements and repeat reminders on the same;
- Inform and sensitise the public about all open pits and trenches;
- Provide appropriate Personal Protective Equipment (PPEs) to construction workers and cleaners during operation and ensure that it is always used;
- Train First Aiders and provide fully stocked first aid kit; and
- Report accidents of people to the Department of Labour.
- Ensure contractor has insurance for its workers

8.2.7. Increased noise generation

Proposed Mitigation Measures

- Confine construction works to daylight hours unless permission is obtained from Supervision Committee; and
- Use well serviced machinery and equipment.

8.2.8. Increased risk of noise pollution and vibrations

Proposed mitigation measures

- Regularly service and maintain equipment;
- Provide ear muffs for the workers in noisy areas;
- Reduce noise by using plastic or rubber liners, noise control covers, and dampening plates and pads on large sheet metal surfaces;
- Limit the number of days of operation; restrict hours of operation and schedule noisy tasks for periods of low occupancy; and
- Notify the public of upcoming loud events.

8.2.9. Increase in spread of Sexually Transmitted Infections (STIs), HIV and AIDS, unplanned pregnancies and breaking up of families

Proposed mitigation measures

- Sensitize workers and surrounding communities on the risks of indulging in casual sex;
- Sensitize girls on the dangers of getting involved in pre-marital sex;
- Provide both male and female condoms to workers;
- Develop and implement a workplace policy on HIV and AIDs; and
- Implement and follow-up on Grievance Redress Mechanisms.

8.2.10. Gender Based Violence (GVB), Sexual Exploitation and Abuse (SEA), Sexual Harassment (SH) and Violence Against Children (VAC)

Proposed Mitigation Measures

- Sensitize workers and nearby communities to desist from GBV, SEA, SH and VAC
- Provide appropriate signage on GBV/SEA/SH/VAC in local language
- Conduct sensitization and awareness campaigns to encourage communities report cases of GBV/SEA SH and VAC and publicize GRM in place.
- Create a good work environment to allow workers to report cases of sexual harassment;
- Ensure that Code of Conduct is GBV/SEA/SH/VAC responsive signed, understood and applied by all contractor's staff;
- Enforce punitive and disciplinary measures, including dismissal from employment on any project workers involved in sexual abuse and harassment;
- Collaborate and network with GBV Service providers in the project area
- e.g Gender and Social Welfare Office and Non-Governmental Organizations in the implementation of on-going projects aimed at promoting gender equality, ending sexual harassment and empowering women to be financially independent;
- Ensure Grievance Redress Mechanisms is GBV/SEA/SH responsive.
- Ensure the contractor is responsible and to take necessary measures so his employees do not commit acts of sexual exploitation and abuse..
- Provide tip-off anonymous boxes for complaints on sexual exploitation abuse and sexual harassment
- Provide separate sanitary facilities for men and women workers;
- Provide tip-off anonymous boxes for complaints on GBV, SEA, SH and VAC

8.2.11. Child labour and trafficking

Proposed Mitigation Measures

- Employ people who have genuine identification to prove that they are 18 years old and above;
- Employ workers through established recruitment agencies; and if they are from other districts make sure the office of District Commissioner is informed.
- Maintain an accurate staff register against which employee presence must be checked every day.
- Collaborate and network with District labor office in implementation of Labor Management plan.

8.2.13. Disruption of livelihood

Proposed Mitigation Measures

- Conduct an assessment to establish specific quantities of the affected properties/ business/ persons
- Develop a mini RAP in line with RPF;
- Implement the developed mini RAP in line RPF
- Compensate/ relocate the PAP in line with the RPF

9. Conclusion

The environmental and social impact assessment of the project shows that, overall, this project does not pose serious long-term impacts on the geology, topography, soils, water resources, biological resources and the social environment of the area. The general negative impact of the project in the area is moderate negative, amenable to mitigation and is insufficient by itself to prevent the implementation of the project whose positive spin offs far much outweigh the short-term negatives.

10. Recommendations

The Environmental and Social Management Plan (ESMP) in this report describes the environmental and social impacts of the project and outlines corresponding management measures that should be implemented to mitigate the potential adverse environmental impacts that have been identified. The project should therefore comply with all local laws and regulations, which seek to ensure that the project is implemented in an environmentally sound manner while safeguarding the safety and health of the workers and the surrounding community. In this regard, it is recommended that:

- The project should adopt the recommendations advanced in this report;
- The Project must ensure that safety and health issues are given the necessary attention;
- The developer should implement the recommendations and mitigation measures advanced in the Environmental Management and Monitoring Plan.

Table of Contents

List of Figures

List of Tables

List of Acronyms and abbreviations

AIDS	Acquired Immunodeficiency Syndrome
BCC	Blantyre City Council
BWB	Blantyre Water Board
CoC	Code of Conduct
CDSS	Community Day Secondary School
CESC	City Environmental Subcommittee
DODMA	Department of Disaster and Management Affairs
EAD	Environmental Affairs Department
EDO	Environmental District Officer
ESCOM	Electricity Supply Corporation of Malawi
EMA	Environment Management Act
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
ESMF	Environmental and Social Management Framework
GBV	Gender Based Violence
GIS	Geographical Information Systems
GoM	Government of Malawi
GRM	Grievance Redress Mechanism
HIV	Human Immunodeficiency Virus
IEC	Information, Education and communication
IDA	International Development Association
IWRM	Integrated Water Resources Management
MEPA	Malawi Environmental Protection Agency
MWSP	Malawi Water and Sanitation Project
MoWS	Ministry of Water and Sanitation
NEAP	National Environment Action Plan
NEP	National Environmental Policy
NRM	Natural Resources Management
NWRA	National Water Resources Authority
OHS	Occupational Health and Safety
OSHWA	Occupation Safety Health and Welfare Act
PAP	Project Affected People/ Properties
PDO	Project Development Objective
PIU	Project Management Unit
PPE	Personal Protective Equipment
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
STIs	Sexually Transmitted Infections
TOR	Terms of Reference
VEC	Valued Environmental Component
VAC	Violence Against Children
WASH	Water, Sanitation and Hygiene

CHAPTER 1: INTRODUCTION

This is an Environmental and Social Management Plan (ESMP) for the construction and operation of 10 Public Sanitation Facilities (PSFs)) in 10 locations/ sites in Blantyre City. The specific names of sites earmarked for the construction of PSFs starting with the markets and then health centres are: 1) markets sites include Limbe Flee Market, Limbe Bus Deport, Bangwe Market, Chirimba Market, Mbayani Market; and 2) health centres include Limbe Health Centre, Bangwe Health Centre, South Lunzu Health Centre, Makhetha Health centre and Chirimba Health Centre.

This chapter provides background information on the proposed project locations, details of the project developer, objectives of the ESMP and the approach and methodology for the development of the ESMP.

1.1 Background Information

Blantyre Water Board (BWB) is a Statutory Corporation under the Ministry of Water and Sanitation. It was established in 1929 and was incorporated under the Water Works Act No. 17 of 1995 with a purpose of supplying wholesome water to residents of the City of Blantyre and its surrounding peri-urban areas as directed by the Ministry of Water and Sanitation (MOWS) in accordance with the provisions of the Act.

In an effort to improve water supply and sanitation service delivery to residents of the city of Blantyre and surrounding areas, the Government of Malawi (GoM), through BWB and Blantyre City Council (BCC), with financial support from World Bank`s International Development Association (IDA), is implementing the Malawi Water and Sanitation Project-1 (MWSP-1) with a total of USD 148.5 million (3.5 million from GoM and 145 million from IDA) and will run from March 2023 to March 2029. The Project Development Objective (PDO) is to increase access to improved water supply and safely managed sanitation services in Blantyre metropolitan area and to enhance the operational and financial efficiency of the Blantyre Water Board. The PDO will be achieved through implementation of the following components: 1) Water supply improvements; 2) Priority sanitation investments; 3) Institutional capacity strengthening; 4) Technical Assistance and Project Management Support; and 5) Contingency Emergency Response.

Following the emergency event of cholera which hit most parts of Malawi including Blantyre City, Malawi Water and Sanitation Project (MWSP) in consultation with WB allocated a financing of USD 750 thousand as a provisional package for cholera emergency preparedness and response. The package will assist in increasing access to safely managed sanitation services through construction of 10 (5 in markets and 5 in health cantres) public sanitation facilities (toilets). The facilities will benefit over 100,000 people. The construction works of the PSFs will take 120 calendar days and will create employment opportunities for more than 250 local people of which 40% will be females.

1.2 Nature and scope of the proposed project

The objectives of the proposed construction of public sanitation facilities include but not limited to the following: 1) to improve provision of sanitation services in public markets and clinics within Blantyre City; 2) to promote hygiene through utilization of the facilities 3) to reduce Cholera transmission through safer disposal of human excreta; 4) to support health care system – reduction of cholera cases and this will alleviate the burden on local healthcare facilities by preventing new cholera cases, thereby enabling healthcare providers to focus on treating existing cases and other critical medical emergencies; and 5) to foster community long-term resilience against cholera and diseases that spread through poor disposal of human excreta.

The proposed facilities construction works will involve activities such as mobilization, site clearing and earthworks, excavation of trenches and column bases, casting concrete for strip foundation and column bases, construction of substructure walls and erection of stub columns, wet works for superstructure, roofing, carpentry and joinery (installation of doors, windows), plumbing and electrical installation, finishes (plastering, painting, glazing, ceilings, tiling), external works, foul water and drainage, and demobilization (good housekeeping).

In light of the proposed civil works at the mentioned sites, the MWSP recognises the need to conduct an environmental and social assessment in order to identify anticipated positive and negative impacts and propose measures for managing these impacts. This will also assist the project to have social acceptance through the involvement of all relevant stakeholders. The report is a basis for managing, mitigating and monitoring the environmental and social impacts associated with the planning, construction, demobilisation, operation and maintenance phases of the proposed project.

1.3. Project proponent

The project proponent details are provided below.

Blantyre Water Board,
Off Makata Road,
Private Bag 30369,
Blantyre 3,
MALAWI

Stainley Bakolo
Phone : +265 1 895 000
Email : bwb@bwb.mw
piu@bwb.mw

1.4. Objectives of Environmental and Social Management Plan

The main objectives of the ESMP are as follows:

1) To determine the compatibility of the proposed project and evaluate the local environmental and social conditions of the areas;
2) To examine, in detail, likely adverse environmental and social aspects and associated impacts;
3) To provide appropriate enhancement and mitigation measures for the significant positive and negative impacts respectively; and
4) To develop an ESMP with mechanisms for monitoring and evaluating compliance and environmental performance.

1.5.Rationale of the Study

The operation of the proposed project activity requires an Environmental and Social Management Plan to be carried out in compliance with the regulatory requirements of the Environment Management Act (EMA) of 2017 that proposed development projects should be implemented in an environmentally and sustainable manner. EMA requires that an environmental assessment should be carried out for such projects. Blantyre Water Board was therefore asked to prepare an Environmental and Social Management Plan to integrate environmental and social issues into the project and also received Terms of Reference (Annex 1) from MEPA to guide the ESMP preparation. The need for ESMP was also triggered by environmental and social screening which was carried out at each and every site earmarked for construction of PSFs, refer to Annex 2a and 2b for some of the completed environmental and social screening forms i.e. for Bangwe Market and Chilimba Health Centre.

1.6.Justification of the Project

This project will greatly contribute to the achievement of the country's goals as outlined in the ***Malawi 2063***. The provision of sanitation facilities in cholera prone areas in Blantyre shall improve health and reduce occurrence of diseases that emerge due to poor sanitation and hygiene in the targeted areas which will result in reducing financial resources being spent for hospital treatment. In addition, the construction of the public sanitation facilities is in line with Sustainable Development Goal (SDG) target 6.2 that calls for adequate and equitable sanitation and hygiene for all and end open defecation by 2030 (WHO, 2018)

1.7 Spatial Location and Size of Land

There are 10 (5 markets and 5 health centres) sites in Blantyre City that have been earmarked for construction of PSFs. The name of each site is provided in the introduction section. In all the earmarked locations, the land size for the construction of the facilities range from 5m x 11m to 16m x 24m. All the sites are located in Blantyre City. Figure 1 shows the map of the sites earmarked for the construction of the PSFs.

Figure 1: Map of sites earmarked for the construction of PSFs

The land earmarked for the construction of PSFs (both in the targeted markets and health centres) belongs Blantyre City Council (BCC). BCC has freely and willfully donated the land to the project for the construction of the facilities to benefit the general public.

1.8. Approach and Methodology in the development of the ESMP

The general steps followed during the assessment were desk studies, physical inspection of the sites and surrounding areas, stakeholder consultations, reporting and documentation.

1.8.1 Desk Study

The sources of information included Environmental and Social Impact Assessment (ESIA) reports for similar projects and some selected national documents, policies, and pieces of legislation. Among the documents, the desk study looked at relevant project documents that include the Environmental and Social Screening (ESS) report, the project's Environmental and Social Management Framework (ESMF), BWB and BCC Geographical Information System (GIS) Database, and the World Bank Environmental and Social Framework (ESF).

1.8.2 Field Visits

The study team conducted field surveys in the project sites between 21st to 25th August 2023 to observe and capture baseline data on the existing environment. During this period, studies were done to capture various information about the landscape and visual ecology (flora and fauna) and

socio-economic environment, among others. These visits assisted in identifying and assessing environmental and social impacts that might occur because of the project implementation.

1.8.3 Stakeholder Consultations

Stakeholder participation involved engaging key stakeholders within the project impact area and selected community-based structures such as market committees, Health Centre Management Committees (HCMC) and local leadership such as Councilors and block leaders responsible for the areas targeted with the PSFs who expressed their views on the proposed projects. The stakeholder participation process tried to ensure that due consideration is given to stakeholder values, concerns and preferences when decisions regarding the project are made. The purpose of stakeholder involvement was to: (i) inform the stakeholders about the proposed activity and its likely effects; (ii) canvass their inputs, views and concerns; and (iii) take account of the information and views of the stakeholders in the environmental and social assessment and decision-making. Some of the issues that were raised by stakeholders include but not limited to the following: 1) vendors were concerned that some contractors do not properly manage recruitment and condition of service especially for labourers and other unskilled workers. They therefore requested for better pay (above minimum wage) and good condition of services i.e. normal working hours, observance of public holidays, pay for overtime work in line with Employment Act of Malawi; 2) The vendors further expressed concern that most of construction tends to be sub-standard and unreliable, leading to poor infrastructure and wastage of resources. They therefore requested that the project and all other players involved in the activity to ensure all quality parameters for the proposed project are taken on board during construction; 3) some stakeholders raised concern based on previous projects that usually project construction materials are prone to theft and even the constructed structures are prone to vandalism; and 4) construction projects of this nature are associated with GBV, SEA, SH and spread of Sexually Transmitted Infections (STIs) including HIV and AIDS, victims being women and girls who are attracted to migrant construction workers. Additional concerns/ issues and their responses are contained in Annex 3.

1.9. Potential users of the ESMP

The ESMP shall be used by various stakeholders who are involved in planning, implementation, management and monitoring of project activities such as contractors, BWB, BCC, MEPA, Blantyre District Councils, National Water Resources Authority, Health Centre management committee (HCMC) and the public. The plan contains policies and procedure to be adhered to, analysis of potential environmental and social impacts and suggested mitigation measures at various stage of implementing the project activities.

CHAPTER 2: PROJECT DESCRIPTION

This chapter provides an overview of the project's specifics, focusing on the project phases, to enhance comprehension of the level of detail and the planning or design choices at hand. Additionally, it describes the tasks and actions involved in executing the project.

2.1. Nature and scope of the project

The proposed project is the construction and operation of 10 public sanitation facilities; five (5) in markets and the other five (5) in health centers/clinics. Each sanitation facility will have systems installed for rain water harvesting, urine diversion (to collect the urine) and biogas harvesting. The design system of the biogas structure is in a way that it will be impermeable. This will be achieved by using strong concrete made of a mixture of 1 part water proofing additive and 20 parts cement for every bag of cement used (which are added in the BoQ of the PSFs). The harvested biogas will be sold to certified local gas distributors who are registered with relevant authorities. The project is expected to directly benefit over 100,000 people. Table 1 provides approximate area in square metres of each site and Annex 4 gives technical drawings of the toilet design:

Table 1: Approximate area of each proposed site (m^2)

Markets		
	Name	**Approximate area (m^2)**
1	Bangwe	123.03
2	Chirimba	98.72
3	Limbe Produce	312.08
4	Limbe Flea	249.42
5	Mbayani	593.03
Health Centres		
1	Bangwe	367.46
2	Chirimba	75.69
3	Limbe	119.93
4	Makhetha	133.8
5	South Lunzu	383.85

The proposed sites vary in sizes; therefore, the designs will be adjusted to fit the available land. The primary construction materials will include cement, river sand, hollow blocks measuring 400mm x 200mm x 200mm, and steel reinforcement bars with diameters ranging from 16mm to 32mm.

2.2 Main activities of the project

The project execution has been divided into five primary segments, which are planning and design, construction, demobilization, operation, and maintenance stages. The activities to be carried out within each of these phases are detailed as follows.

2.2.1 Planning and design phase

This marks the initial phase of the project, where we will comprehensively outline various project components. These include activities like land surveying, technical feasibility assessments, environmental impact studies, the development of technical drawings, resource procurement, and the initiation of tendering processes for the project. In addition, this phase encompasses the development of construction designs, the acquisition of necessary authorizations and approvals from relevant authorities, initial consultations, and land use planning.

It's essential to acknowledge that the design drawings were adopted from Lilongwe Water and Sanitation Project which are believed to have been already approved by World Bank. However, a few changes/ modifications were done to accommodate World Bank`s advice/ comments made on the Environmental and Social screening report in which the design drawings were also shared. One of the modifications involved reorienting the male and female restroom access points.

All the 10 proposed sites for the new sanitation facilities have been carefully selected. The criteria for selection include; 1) being cholera hotspot; and 2) subpar sanitation situation (absence of clean water and insufficient sanitary structures).

2.2.2 Construction phase

The main activities of this phase of the project are contractor mobilization, site clearing and earthworks, excavation of trenches and column bases, casting concrete for strip foundation and column bases, construction of substructure walls and erection of stub columns, wet works for superstructure including concrete tank, roofing over tank, carpentry and joinery (installation of doors, windows), plumbing and electrical installation, finishes (plastering, painting, glazing, ceilings, tiling), external works, foul water and drainage, and demobilization (good housekeeping). The following sections provide insight on some of the activities that shall occur in the construction phase:

Contractor Mobilization: The initial phase of construction involves contractor mobilization, which serves as the first step before commencing any work on the site. During this phase, the contractor will undertake various tasks, which may include the following and any additional activities they find necessary:

- Locating and setting up secure storage facilities or buildings for construction materials.
- Identifying and establishing restroom facilities for the workers.
- Acquiring health, safety, social, and environmental resources, including Personal Protective Equipment (PPE), first aid kits, fire extinguishers, flashlights, and other relevant items.
- Identifying a water supply source for both the contractor's staff and construction purposes, encompassing drinking water, construction needs, and dust control.
- Locating sources for construction materials, particularly river sand and coarse aggregate.

Site clearing and earthworks: The first step in preparing the proposed project sites for construction is site clearing, marking the initial groundwork phase. This will involve manual labor and is intended to prepare the site for construction activities. The tasks planned for site preparation include:

- Demolition of toilets at Bangwe Market, Limbe and Bangwe Health centre to free space for the new structure and because the existing toilets are almost full and the structures pose a risk of falling on people
- Clearing the site of any existing vegetation within the area designated for the structure's construction.
- Leveling and shaping the land to meet the required specifications, which will involve removing some topsoil.
- If necessary, removing excess soil, stones, and rocks from the site.
- Installing temporary fencing, serving as a protective barrier, around each construction site during the building phase.

Casting concrete for strip foundation and column bases: The construction activities planned encompass, but are not limited to, the following:

- Casting concrete for strip foundations.
- Fixing steel reinforcement for column bases.
- Casting concrete for column bases.

Construction of substructure walls and erection of stub columns: Tasks related to the construction of substructure walls and the erection of stub columns will include:

- Laying block work for substructure walls.
- Setting up formwork for the substructure stub columns.
- Casting and curing the concrete for stub columns.
- Ensuring proper alignment and levelness during construction.
- Installing required reinforcements, such as rebar or mesh, within the concrete.
- Allowing for the necessary curing period to achieve structural strength.
- Backfilling and compacting the area around the substructure walls.
- Checking and ensuring that the stub columns are securely erected and properly aligned with the rest of the structure.

Wet works for superstructure: The "wet works" for the superstructure typically refer to tasks involving concrete and masonry in the construction of the upper parts of a building. These activities will include:

- Setting up molds or forms to shape the concrete for columns and other structural elements in the superstructure.
- Fixing steel rebar or mesh within the formwork of the concrete.
- Casting concrete into the formwork, ensuring it is well-distributed and vibrated.
- Allowing the concrete to cure and gain strength over time, typically by maintaining the right moisture and temperature conditions.
- Laying block work for superstructure walls.

Roof installation: Roof installation shall involve assembling and fixing of the roof onto the structure of the sanitation facility buildings to provide protection against weather elements, such as sunlight, wind and rainfall. These activities will include:

- Constructing the roof's supporting framework, which will include rafters, trusses, and sheathing, to create a stable base for the roofing materials.
- Fixing the ridge and hip sections of the roof where two sloping sections meet.

- Fixing fascia boards along the roof's edge and installing gutters and downspouts for proper drainage.

***Metal work, Carpentry and joinery (installation of doors, windows)*:** The works during this stage shall involve all timber and metal fixtures of the buildings including doors, windows and more. Here are some of the key works that shall be undertaken during this stage:

- Fixing metal and timber door frames to door openings.
- Fixing doors to door frames.

Plumbing and electrical installation: The works during this stage shall involve installation of plumbing pipes and electrical conduits as well as installation of plumbing and electrical fixtures. Here are some of the key works that shall be undertaken during this stage:

- Installation of PVC pipes for water supply, drainage and foul water.
- Installation of plumbing fixtures like sinks, faucets, water closets and showers.
- Installation of PVC conduits for electrical cables.
- Installation of electric cables.
- Installation of circuit breakers, fuses and electrical panels and connecting them to the main power supply from ESCOM.
- Installation of light fixtures, switches and sockets.

***Finishes (plastering, painting, glazing, ceilings, tiling)*:** This shall involve all final touches to the building's interior and exterior. Here are the key aspects of building finishes:

- Interior and exterior plaster shall be applied to walls and concrete (including tank) to create a smooth and even surface.
- Suspended ceilings shall be hung below the main structural ceiling (concrete slab).
- Interior and exteriors walls shall be primed and painted with appropriate paint and finishes.
- Internal walls of the concrete tank shall be rendered with approved waterproofing material.
- Glasses shall be installed in window frames.
- Tiles shall be fitted to the floor and walls and shall be properly grouted and sealed to prevent water damage and ensure durability.

External works, foul water and drainage: This shall involve:

- Planting trees, shrubs, and grass.
- Installing outdoor lighting fixtures for safety and ambiance including security lighting.
- Establishing connections for water supply and electricity.
- Implementing systems to manage storm water runoff, which may include but not limited to drainage channels.
- Construction of septic tanks and soak away pits ensuring proper filtration and drainage of effluent into the soil.

- Managing surface water runoff from roofs and other surfaces to prevent water accumulation and erosion. This will involve installation of gutters, down. pipes and drainage channels.

***Demobilization (good housekeeping)*:** Demobilization refers to the stage at which the construction works of the project shall be wound down with the contactor readying to leave the site. This shall involve the removal of equipment, personnel and temporary facilities. Here are some of the activities that shall be undertaken during this stage:

- Removal of construction equipment, machinery, and tools form the site.
- Demobilization of temporary staff, sub-contractors and workers.
- Disassembly of temporary structures like site offices and storage units.
- Cleaning and Organizing the site, ensuring that the site is free of debris and any loose tool.
- Disposal of construction waste and ensuring that hazardous materials are disposed of properly following environmental guidelines.

Construction materials and equipment: The main raw materials for construction are cement hollow blocks (400mm x 200mm x 200mm), coarse aggregate, river sand, timber, and steel. A summary of construction materials and equipment for the construction phase is provided in Table 2.

Table 2: Construction materials and equipment

Item #	Raw Material	Source	Mode of Delivery
1	Sand	Nearby rivers or streams approved by local authorities	Road Transport
2	General building materials such as cement hollow blocks, cement and aggregates	Local approved suppliers	Road Transport
3	Diesel (for the operation of the generator and machinery)	Local approved suppliers	Road Transport
4	Construction Water	Existing water from nearby sources stored in tanks.	Tanks
5	Equipment (Tippers, scaffolding materials, light passenger vehicles, Engine generator and hand tools**)**	Contractor	Road Transport

2.2.3. Operation and maintenance phase

After the construction work is finished, it is anticipated that the markets patrons and health centres clients and staff will utilize the newly built sanitation facilities and enjoy the benefits of modern sanitation amenities. During this phase, awareness campaigns will be conducted to encourage community engagement in safeguarding these sanitation facilities, ensuring their sustainable operation. This phase is crucial for achieving the project's main goal: enhancing sanitation services in public markets, health centers, and clinics within Blantyre City. The operational phase will adhere to the Project Implementation Manual, addressing minor issues promptly and reporting any unusual occurrences, such as faults or leaks. The existing Grievance Redress Mechanism (GRM) and established GRCs for ongoing projects will remain active, providing project participants and beneficiaries with a platform to voice their concerns.

During this phase the client will develop operation and maintenance manual that will be used to train private operators of the facilities so as to ensure sustainability of the infrastructures.

2.4.Environmental Planning and Design

The Environmental Planning and Design segment emphasizes the environmental and social factors that must be taken into account in the detailed project design phase. Integrating these factors into the detailed designs is essential to minimize identified negative effects and enhance positive outcomes. Environmental planning and design are necessary for addressing concerns related to natural hazards, including earthworks, floods, sourcing and handling construction materials, safety, public health, labor, and rehabilitation/revegetation aspects.

2.4.1 Safety and Risk Reduction Measures

Standard precautions related to environmental health and safety procedures must be taken seriously. The contractor will be responsible for ensuring these precautions are followed diligently to prevent accidents. Before commencing work, the chosen contractor shall be required to submit a Contractors Environmental and Social Management Plan to the project proponent for approval.

Through public consultations with key stakeholders in the project areas, it was revealed that vandalism poses a significant risk to the smooth operation of these facilities. To curb this vandalism, the following risk reduction measures will be employed:

- The selection of proposed sites was done in collaboration with community-based structures such as market committees, health centre management committees, community development committee and local leadership e.g. Councillors, District Health Office, and block leaders. This ensures ownership of the project during both construction and operation/maintenance phases.
- Some of the facilities especially in markets will be let out to private operators who shall be responsible for security, repair and maintenance of the facilities.
- The facilities in health centres will be under the care of the DHO and health centre In-Charges including the health centre management committees and their respective leaderships.

2.4.2 Labour management

The proposed project is anticipated to generate employment opportunities within the project areas. This could serve as a learning platform for the local residents, enabling them to acquire specific construction skills related to building sanitation facilities. It is advised that the contractor employs local labor from within the surrounding communities of the proposed sites. For less complicated

assignments, unskilled local labor should be provided with brief on-the-job training. In addition, all employees should have a dully signed contract with the employer and a Code of Conduct before commencement of the work. The contractor shall ensure that local community, the District Labour Office and local/ block leaders are involved in the recruitment of workers. Please refer to the generic Labour Management (LMP) in Annex 5 which the contractor will use when developing specific LMP that will suit the nature, scope and delivery method of this PSF project.

2.4.3 Water Supply

The contractor shall have to carefully assess the water supply needed for construction to prevent any disruption to the water requirements of the local residents and animals in the area when necessary. The main water sources in the project sites include piped water, boreholes, wells, and streams. The contractor will adhere to all appropriate procedures to obtain water from these sources for construction purposes. For instance, water abstraction from rivers and groundwater need to be permitted. If the water is obtained from community water supply (community borehole or tap), there has to be a formal agreement with the community in terms of payment of bills for the water or contribution for repair and maintenance of the water inflastructure.

2.4.4 Energy

Throughout the project's construction phase, energy requirements will be satisfied by utilizing generators in regions without access to the electrical grid. In areas where grid power is accessible, the contractor can arrange for its use, provided that all required safety measures and approvals are in place. The contractor will liaise with the owners of existing energy sources or provide their own sources based on the prevailing circumstances, all while ensuring that the decision doesn't compromise or present any environmental or social risks.

2.4.5 Waste Management

The main points of the proposed strategy for managing solid waste are outlined below:

- During the construction phase, waste will be segregated into biodegradable and non-biodegradable categories.
- Waste like empty cement bags will be recycled for others uses such as making mats
- Material waste like bricks and cement will be repurposed as fill material, and concrete will be recycled and reused on-site when necessary.
- Adequate on-site storage facilities will be provided for these waste materials.
- Solid waste generated during both the construction and operational phases, if any, will be managed in a way that minimizes environmental and social impacts. This includes proper collection, transportation, and disposal methods.
- Reusable and recyclable waste will be sold to scrap dealers and private contractors for reuse.
- Non-biodegradable and non-reusable waste will be transported to Blantyre City Council's solid waste management facilities for safe disposal.

2.4.6 Tree Planting

It is advisable for the project to include tree planting initiatives across all beneficiary locations. BWB and BCC conduct annual tree planting activities within its catchment area, and a deliberate effort will be made to supply seedlings for planting in these regions. The tree planting process will

be conducted under the guidance of the District/ City Forestry Office. This office will educate community members on tree planting techniques, management practices, and the selection of appropriate tree species.

CHAPTER 3: POLICY AND LEGAL FRAMEWORK

3.1 Applicable Policy Frameworks

3.1.1 Malawi Vison 2063

Malawi Government published Malawi Vision 2063 in 2020 as a successor of Vision 2020 as a long-term development strategy. The Malawi Vision 2063 aims to transform Malawi into a wealthy and self-reliant industrialized upper middle-income country by the year 2063.

There are three pillars of Malawi Vision 2063. These are: Pillar 1-Agricultural productivity and commercialization; Pillar 2- Industrialization, and Pillar 3-Urbanization. The Vision has seven enablers. Enabler 1: Mindset change; Enabler 2: Effective governance systems and institutions; Enabler 3: Enhanced public sector performance; Enabler 4: Private sector dynamism; Enabler 5: Human capital development; and Enabler 6: Economic infrastructure; and 7: environmental sustainability.

Environmental Sustainability is one of the six enablers of the Malawi Vision 2063. The First Implementation Plan (MIP-1) is the country's first 10-year implementation plan and the new medium-term development strategy under Vision 2063, aimed at helping Malawi to graduate into a middle-income economy and achieve most of the Sustainable Development Goals by the year

2030. The construction of public sanitation facilities in Markets and Health centers of the project is aligned to enabler 7 which talks about environmental sustainability of the Malawi Vision 2063 with an objective of promoting sustainable development with clean and secure environment. Focus area (2) of enabler No. 7 talks about Waste Management and green economy which focuses on adequate waste disposal, treatment and recycling. The proposed construction of public sanitation facilities (PSFs) with urine diversion intervention and treatment system provides an ecosystem conservation and environmental management that embrace ecosystem-based approaches in managing the environment.

The sanitation project falls under Pillar 5 (Human Capital Development) where the objective is to have globally competitive and highly motivated human resources. Pillar number 5 has the following focus areas that include: Education and skills development; Science, Technology and Innovation; Health and Nutrition; Managing population growth; Water, Sanitation and Hygiene (WASH); Sports and creative arts; and Gender equality & equity and social welfare. Water Sanitation and Hygiene (WASH) envision that the Government shall take the lead and rally partners and communities in promoting the adoption of safe water and sanitation practices at the individual and household level. This shall include the provision and promotion of the use of improved and accessible sanitation facilities.

This ESMP generates the potential and actual impacts of improving access to sanitation and implementation activities on issues highlighted in the Vision 2063 including inadequate liquid waste disposal, treatment and recycling, deforestation, land degradation, diversity loss, increased dust generation, poverty and other issues. The report further recommends specific measures to mitigate the negative impacts and enhance the positive impacts through the project.

3.1.2 National Environmental Policy, 2004

The Policy was adopted by the Government in June 2004. The mandate of the policy is derived from Section 13 of the Malawi Constitution. In the policy, it is noted that Malawi has a diversified natural resource base and if properly utilized, the resources may provide the basis for sustainable socio-economic development of the country. The policy also takes note of the fact that the resources are subject to increasing pressure and there is serious degradation of the environment.

There are strategies on environmental planning and environmental impact assessment, audits and monitoring, among others. On environmental planning, the objective is to ensure that national and district development plans integrate environmental concerns in order to improve environmental management and ensure sensitivity to local concerns and needs. On ESIAs, the objective is to regularly review and administer the guidelines for ESIAs, audits, monitoring and evaluation so that adverse environmental impacts can be eliminated or mitigated and environmental and social benefits enhanced.

In line with the environmental policy (on planning and ESIAs, ESMPs, among others), the Blantyre Water Board (BWB) and Blantyre City Council (BCC) must integrate environmental and social concerns during the whole cycle of the project i.e. planning, construction, demobilization,

operation and maintenance. This will ensure that the construction of public sanitation facilities is not only environmentally friendly but also socially acceptable by the project beneficiaries and surrounding communities.

3.1.3 National Sanitation Policy, 2008

The overall policy goal is to promote improved sanitation and safe hygiene practices for improved health and socio-economic development for the people of Malawi. The contractor for this project will have waste management plan to manage his waste.

The National Sanitation Policy provides a vehicle to transform the hygiene and sanitation situation in Malawi. The policy mission is to ensure that all people in Malawi own and have access to improved sanitation facilities, practice safe hygiene, and practice safe recycling of liquid and solid waste for sustainable environmental management and socio-economic development.Section 1.2 of the policy provides for both guidelines and an action plan where, by 2020, all the people of Malawi were supposed to have access to improved sanitation, safe hygienic behavior will be the norm and recycling of solid and liquid waste will be widely practiced. This will alternatively lead to healthier living conditions, a better environment and a new way for sustainable wealth creation. One of the policy objectives as highlighted in section 3.1.1 is the improvement of hygiene, sanitation and recycling of waste in the country. As such, the proposed project will ensure that liquid and solid waste management encourages the reduction, recycling and reuse of waste before final disposal hence complying with the provisions of the policy.

In this regard, the contractor will need to have good toilet facilities, waste bins, safe drinking water source and changing rooms among others. The contractor shall ensure provision of toilets are separate for men and women and that they are safe and user friendly for those physically challenged. In addition, the public sanitation facilities should contribute towards having a safe working environment for employees.

3.1.4 National Forest Policy, 2016

The goal of the National Forest Policy is to improve provision of forest goods and services to contribute towards sustainable development of Malawi through protection and conservation of forest resources. The policy aspires to control deforestation and forest degradation. The policy promotes strategies that will contribute to increased forest cover by 2% from the current 28% to 30%, and sustainable management of existing forest resources.

The policy aims at promoting sustainable contribution of national forests, woodlands and trees towards the improvement of the quality of life in the country by conserving the resources for the benefit of the nation and to the satisfaction of diverse and changing needs of Malawi population, particularly rural smallholders. The policy prevents unnecessary changes in land-use that promote deforestation or endanger the protection of the forests which have cultural, biodiversity or water catchment values. It also discourages development activities in gazetted forests unless proven to be environmentally friendly for which suitable inter-sectoral and local consultations will be conducted. Above all, the policy advocates for carrying out of environmental and social impact assessment where actions are likely to have significant adverse impacts on important forests and

other resources. This ESMP is in line with provisions of the policy. The Ministry of Water and Sanitation will therefore be required to take advantage of provisions under this policy to prevent unnecessary destruction of forest resources and related resources in the project area. In line with this policy, the project can promote environmental conservation through planting of trees and other vegetative covers around the construction sites in order to prevent environmental degradation in the targeted sites.

The proposed sites for the construction of these sanitation facilities will be in places where there are trees and related resources, and therefore, the contractor and BWB and BCC will take full advantage of provisions under this policy to minimize destruction of forests and related resources. In addition, BWB and BCC in collaboration with will support Ward Natural Resources Management Committees (WNRMCs) to manage trees and forest resources.

3.1.5 National Land Policy, 2002

The National Land Policy is the principal policy that guides land management and administration in Malawi. The policy introduces major reforms intended for land planning, use, management and tenure. It provides clear definition of land ownership categories (Section 4), and addresses issues of compensation payment for land (Sub section 4.6).

The proposed project will likely not have an impact on land, as land ownership in the proposed sites is public land. The project will not displace people in the impact areas. The design has been made in the manner that there will be non-existent displacement of people. In addition, a proper grievance redress system is already in place at the community and City level. From history, the main land disputes occurring in the impact areas are encroachments into each other's plots or public land, unavailability of clear boundaries, and unavailability of detailed layout plans. The project will also work closely with the city and district land offices where there are grievances regarding land issues. This will assist in resolving potential grievances which are likely to arise during the implementation of the project.

3.1.6 National Gender Policy, 2015

Gender mainstreaming into the social economic development plans is one of the enablers for the sustainable development worldwide. The Malawi Vision 2063 (M63) recognizes the importance of gender and women empowerment in socio-economic development.

The National Gender Policy, which is currently undergoing review, calls for integration of gender responsiveness in planning and implementation of development projects and programmes. It is understood that consideration of gender needs and benefits enhance poverty reduction in both rural and urban environments. This project has to integrate consideration of needs of both males, females and other vulnerable groups in project activities. The potential considerations could be equal employment opportunities to both male and female during Construction Phase of the public sanitation facilities in order to enhance income for both. In addition, it advocates for 50% membership for both sexes in various committees, such as market committees, and health committees, to ensure that concerns of all sexes are taken into consideration.

The Government of Malawi has made efforts to improve gender equality, for instance in 2002 the Ministry of Gender, Child Welfare and Community Services created a Multi-Sector Country Gender Profile in order to identify the areas of society that need the most attention in regard to

gender equality. Despite governmental efforts, women in Malawi face many challenges when it comes to household and everyday decision-making.
In line with this policy the proposed construction of PSFs with have compartment for males separate from females.

3.1.7 National HIV and AIDS Policy, 2005

The goal of the Policy is to, prevent the further spread of HIV infection, promote access to treatment for People Living with HIV (PLHIV) and mitigate the health, social-economic and psychosocial impacts of HIV and AIDS on individuals, families, communities and the nation.

The Policy highlights that HIV and AIDS impact on the country is quite significant and affects a range of socio-economic activities be it in agriculture, fisheries, public sector, private sector, tourism, urban areas, rural areas, among others. HIV and AIDS prevalence in the country varies from one region to the other and from rural to urban areas. The highest rate is in the Southern Region and the lowest in the Northern Region. Prevalence rate is high in urban areas as compared to the rural areas.

National HIV and AIDS Policy identifies migrant workers and women among highly vulnerable people to transmission of HIV and AIDS and other sexually transmitted diseases. In addition, increased disposal of income from migrant workers may enhance some workers to indulge in extra-marital affairs within the surrounding villages. These sexual activities would enhance the spread of HIV and AIDS among workers and local people.

Blantyre being one with high prevalence rate of 17.6% compared to 8.8% of national coverage, the developer will have to develop and implement its workplace HIV and AIDS programme such as provision of condoms to prevent spread and possibly mitigate its impact in the project impact area. It is further proposed that during implementation of construction activities of the sanitation facilities, BWB and BCC should ensure that the Contractor liaises with the stakeholders such as the City AIDS Coordinators for Blantyre city to sensitize workers as well as surrounding communities on the dangers of HIV and AIDS. Further, Information, Education and Communication (IEC) materials on HIV and AIDS should be distributed. It is also recommended that during construction phase, much of the labour force should be sourced from the surrounding communities to reduce the influx of migrant workers who may exacerbate the situation.

3.1.8 National Decentralization Policy, 1998

The Decentralization Policy, developed in 1998, devolves administrative and political authority to the district level to promote popular participation. It assigns certain responsibilities to councils. One of the key responsibilities is to assist the government in the management and preservation of the environment and natural resources. This policy is useful for the implementation of this project as it supports stakeholder involvement of decentralized structures to work together with private toilet operators in managing conflicts between users and the operators of the toilets.

3.1.9 National Water Policy, 2004

The Government of Malawi has a National Water Policy with the aim of providing a comprehensive and integrated water resource conservation and management within the country. The National Water Policy of 2005 is one of the administrative tools in the natural resources

management (NRM) sector. The overall goal of this policy is to ensure "sustainable management and utilization of water resources, in order to provide water of acceptable quality and of sufficient quantities and ensure availability of efficient and effective water and sanitation services that satisfy the basic requirements of every Malawian and for the enhancement of the country's natural ecosystems". The policy is aimed at addressing all aspects of water including resource management, development and service delivery by means of an integrated approach to the integrated management of water resources in the country.

There are a number of implications of National Water Policy and Water Resources Act (2013) related to the activities to be undertaken during construction of the sanitation facilities. The overall policy goal is sustainable management and utilization of water resources in order to provide water of acceptable quality and of sufficient quantities, and ensure availability of efficient and effective water and sanitation services that satisfy the basic requirements of every Malawian and for the enhancement of the country's natural ecosystems.

The Policy comprehensively covers areas of water resource conservation, management and development, water quality and pollution control, water utilization, disaster management and institutional roles and linkages. The Policy, among other issues, focuses on:

- Achieving sustainable provision of water supply and sanitation services that are equitably accessible and used by individuals and entrepreneurs for socio-economic development at affordable cost;
- Promoting efficient and effective utilization, conservation and protection of water resources for sustainable agriculture and irrigation, fisheries, navigation, eco-tourism, forestry, hydropower and disaster management and environmental protection;

One of the Policy objectives is promoting public and private sector participation in water resources management, development, supply and conservation. The protection and use of water resources has been accorded the highest priority over other uses by this policy. The construction of sanitation facilities in markets and clinics will involve abstraction of water for construction purpose and water use during operation. Septic tanks will also be construction and BCC will ensure that surface and ground water are protected from pollution. 3.2 Relevant Legal Framework

3.2.1 Constitution of the Republic of Malawi, 1995

Legislation, policies and instruments exist to support environmental management in Malawi. Section 13 (d) of the Malawi constitution sets a broad framework for sustainable environmental management at various levels in Malawi and supports the enforcement of the Environment Management Act (EMA); and the environmental policy. In accordance with the provisions of the Constitution, the primary aim is to ensure that development activities of the country including the proposed project do not jeopardize the full rights of the future generation with regard to the environment. The Malawi Constitution therefore calls for sustainable management of natural resources and prevention of environmental degradation. The Environment Management Act sets the national legal framework. A few sectoral policies, acts, regulations and requirements, embracing transversely the environmental issues, support this document.

The Constitution of the Republic of Malawi is the supreme law of the land. As such, any statute which is inconsistent with it is automatically rendered invalid. The Constitution of the Republic of Malawi provides a foundation for environmental management in Malawi. Section 13 (d) of the Malawi Constitution lays down what are termed principles of National Policy. It outlines the principles of sustainable development. This section outlines that Malawians have the responsibilities of promoting their welfare and development by progressively adopting and implementing policies and legislation aimed at preventing the degradation of the environment, providing a healthy living and working environment for the people of Malawi, according full recognition of the right of future generation by means of environmental protection and sustainable development of natural resources and conserving and enhancing biological diversity of Malawi

The Malawi constitution recognizes the crucial role which the environment and natural resources play in sustaining human livelihood and emphasizes the need for managing the environment responsibly. It aims to prevent the degradation of the environment, provide healthy living and working environment for the people of Malawi, accord full recognition to the rights of future generation by means of environmental protection and the sustainable development of natural resources, and conserve and enhance the biodiversity of Malawi. This implies that all activities involving this sanitation facility construction project will have to integrate the principles outlined in the Constitution.

3.2.2 The Environment Management Act, 2017

The Environment Management Act makes provision for the protection and management of the environment and the conservation and sustainable utilization of natural resources. The Act is the principal piece of legislation on the protection and management of the environment. Under Section 6, the Act states that 'subject to the constitution, where a written law on the protection and management of the environment or the conservation and sustainable utilization of natural resources is inconsistent with any provision of the Act, the written law shall be invalid to the extent of the inconsistency.'

In order to integrate environmental and social considerations in projects, the Act provides for environmental planning and the need for Environmental and Social Impact Assessment (ESIA). The environmental planning is required to be done both at national and district levels. Section 31 of the Act is on environmental and social impact assessments. The Act stipulates that the Minister may, on the recommendation of the Malawi Environment Protection Authority (MEPA), specify by notice published in the Gazette, the type and size of project which shall not be implemented unless an Environmental and Social Impact Assessment is carried out. It also specifies that a person shall not undertake any project for which an Environmental and Social Impact Assessment is required without the written approval of the Authority, and except in accordance with any conditions imposed in that approval.

Section 26 (3) of the Act provides that a Licensing Authority shall not issue any license with respect to a project for which an ESIA is required under the Act unless the Director has certified in writing that the project has been approved by the Minister or that an ESIA is not required under the Act. In line with provisions of this Act, BWB and BCC have initiated the development of this

ESMP to ensure that all environmental and social concerns are incorporated in the project activities. Additionally, the ESMP has been prepared in order to ensure that the project activities, such as water abstraction and mining of construction materials (sand and quarry stones), that threatens the environment fully adhere to these provisions.

3.2.3 The Land Act, 2016

The Land Act, 2016 is the revised and recent piece of legislation for management and administration of land issues in Malawi from the previous Land Act of 1965. Land Act, 2016 makes provision for land in Malawi and all matters connected to it.

The Land Act, 2016 defines land types including private and public land. The land to which all the proposed projects will be implemented and operated, is basically public land. The Land Act, 2016 defines public land as all land which is held, occupied or used by the government or local authority. The Act indicates that it does not compensate anyone who is illegally occupying or use public land. i. The implication of this Act is that in some of sites earmarked for the PSFs, there are people who are illegally occupying or using the land which belongs to BCC. In such a situation, the Land Act: 1) Does not require the preparation of RAP; 2) Does not provide compensation or assistance to those who do not have formal legal claim to the land; 3) Does not provide transitional allowances for restoration of livelihoods for informal settlers; 4) Does not provide or give special attention to the vulnerable groups; and 5) does Valuation of lost asset is not based on "replacement cost' standard. However, the World Bank`s ESS5 considers and compensates those who have no recognizable rights or claim to the land or assets they occupy or use. Therefore, the ESS5 will apply in line with the “rule of thumb”, that advises that where there is mismatch between the local laws and World Bank`s ESF the most stringent one applies. Therefore, BCC and BWB will consider the affected persons/ properties in line with ESS5 by: 1) carry out an assessment to establish who is affected and in what ways; 2) prepare an Abbreviated Resettlement Action Plan (ARAP); and 3) implement the ARAP in line with the project`s RPF

3.2.5 The Forest Act as amendment in 2017

The Forestry Act, (as amended in 2017) provides for participatory forestry, forest management, forestry research, forestry education, and forestry industries. Protection and rehabilitation of environmentally fragile areas and international cooperation in forestry and for matters incidental thereto or connected therewith.

Section 34 of the Act states that any person who or community which protects a tree or forest, whether planted or naturally growing in any land which that person or community is entitled to use, shall acquire and retain the ownership of the tree and forest with the right to sustainable harvest and dispose of the produce.

In this regard, the project shall ensure that naturally growing trees and planted ones are protected during the implementation of project activities. The contractor for the project construction works shall also be advised to minimize cutting trees by limiting land clearance to the project sites.

Part VI of the Act is on afforestation. Section 35 of the Act provides for the promotion of tree growing in forest reserve, public land, customary land and private land by the Government, Non-Governmental Organizations and the community. In line with the Section, BWB and BCC will ensure that the contractor plants trees in all sites to assist in holding the soil structure intact

3.2.6 Local Government Act, 1998

The Local Government Act provides legal mandate for local councils in the planning, administration and implementation of various issues and development programs in their respective geographical districts. One main function of the councils is that of local environmental planning and management. Some of the environmental management functions are provided in Section 2 of the second schedule of Local Government Act (additional functions of the council). These include town planning, building control, local afforestation programs, control of soil erosion, and appropriate management of solid and liquid waste. The Local Government Act, as read with Section 146 of the Republican Constitution, provides the mandate to the local councils in planning, administration, and implementation of various development programs in their areas. It further provides for environmental functions, which include urban management, local planning, local afforestation programs, and control of soil erosion, among others.

The City Environmental Sub-committee (CESC) looks at all environmental issues in the City. During the development of ESMP for this project, Blantyre CESCs were engaged to ensure that environmental and social issues are incorporated during project planning and implementation.

The implication of this Act is that the CESC will be responsible to advise the project on the best ways to implement the project in a sustainable manner. In addition, the CESC will monitor the implementation of mitigation measures for the anticipated negative impacts of the project. The Act mandates local governments to regulate planning and development within their jurisdiction and also empowers them to have by-laws that specify among other issues, how development projects should minimize or avoid environmental degradation. The implementation of this project will have to fulfil the planning requirements of the Blantyre City Council.

3.2.7 Occupational Safety, Health and Welfare Act, 1997

The Occupational Safety, Health and Welfare Act (OSHWA) of 1997 emphasizes the need of ensuring that a place of work is safe and free of risks to health with respect to the use of plant and machinery, and encourages an immediate stop of any operations where there is an eminent and serious danger to safety and health and evacuation of all persons employed. It further provides for the protection of people other than people at work from hazards arising out of or in connection with the activities from people at work. Overall, the Act is a pro-active attempt by government to prevent and avoid work related injuries and illness. The Act regulates work conditions with respect to safety, health, and welfare of workers. The duty of ensuring safety, health, and welfare of workers rests with the employer. However, every employee is required to take reasonable care for his/her own safety and that of other workers.

The Act governs the health and safety for the diverse industry of Malawi. The Act provides regulatory mechanisms to ensure safe and secure work places in Malawi. General safety facilities stipulated for most work places include the following: adequate ventilation, cleaning materials and cleanliness of workplaces, lighting, washing facilities, change rooms for some workers, sanitary conveniences and first aid kits. Both employers and employees are sensitized on basic procedures for proper use and operations of the welfare and safety facilities within work places. Non – compliance or negligence on use of work safety facilities is an offence under Sections 82 and 83

of the Act. Sections 56 and 57 provide guidelines for prevention of fire out breaks, and control of incidences of fire outbreaks within work places. Section 57 stipulates some recommended means of fire escapes from work places such as offices. These have to be properly labelled with red letters and kept free of obstruction at all times. Examples are emergency escape door and emergency assembly points. Section 58 stipulates the provisions of protective clothing (such as gloves, foot wear, screens and goggles, ear muffles and head covering) to protect workers from excessive exposure to nuisances with some work activities.

In compliance with the requirements of the Act, the contractor that will be hired to do construction works for the project will develop an Occupational Safety, Health and Welfare plan. Furthermore, according to Section 58 (Part VI) all workers for the construction works will be provided with appropriate Personal Protective Equipment (PPE) and these will include work suits, industrial boots, hard helmets and gloves during the construction and appropriate PPE during operation period. The employees will have the responsibility to use the PPE and take a good care of it. The employer will have to enforce the use of the PPE during working.

In addition, the Contractor shall ensure that a well-stocked First Aid Box is made available at the construction site for use by workers as provided for under Section 33 (Part IV) of the Act. The First Aid Box shall be under the charge of a well-qualified person. In line with Part II, Section 6 of the Occupation Safety, Health and Welfare Act, the contractor shall also apply for the workplace certificate registration.

3.2.8 HIV and AIDS (Prevention and Management) Act, 2018

The HIV and AIDS (Prevention and Management) Act makes provision for the prevention and management of HIV and AIDS; provisions for the rights and obligations of persons living with HIV or affected by HIV and AIDS; provisions for the establishment of the National AIDS Commission; and provisions for matters incidental thereto or connected therewith. Part 4, Section 6 (1) states that discrimination on a basis related to HIV or AIDS is prohibited. Part 5, Section 9 (1) states that a person living with HIV has the right to privacy and confidentiality regarding information concerning their status. Part 8 of this Act gives provisions to employers by stipulating requirements in several sections quoted as follows:

- Section 26 states that an employer shall not require any person to undergo HIV testing as a pre-condition for recruitment;
- Section 27 (1) states that an employer shall not terminate the employment of an employee solely on the ground that the employee is living with HIV or is perceived to be living with HIV;
- Section 28 (1) states that an employee shall not be discriminated against or be subjected to unfair treatment solely on the ground that he is perceived to be or is living with HIV; and
- Section 32 (1) states that the State shall ensure that employers adopt and implement an HIV and AIDS policy at the workplace.

The implications to the proposed project is that BWB and BCC will ensure that HIV and AIDS intervention measures are put in place to respond to the requirements of the Act. The project will

use already existing Government of Malawi's HIV and AIDS policy in all workplaces and during operation of the project.

3.2.9 Public Health Act, 1948

The Act provides legal framework on planning and management of a wide range of health-related issues including environmental health, occupational health and solid wastes management. Section 79 (a) and (b) provide legal powers for the local authority to enforce the provision of sewage works for large scale development projects. Section 80 stipulates the requirements for preparation of detailed plans for planned sewage works for implementation. Section 82 outlines some activities which can limit the free flow of wastes into sewage works and which must be avoided as much as possible. These activities include disposal of solid wastes in oxidation ponds, disposal of chemical refuse, waste stream, and petroleum spirit or carbon calcium. Section 88 stipulates the requirements for separate toilets for both female and male persons in public buildings or buildings, which would be used by both male and female employees.

The implication of the Act on the proposed project is that developer should ensure that there are appropriate and adequate waste disposal facilities, hand washing facilities and provision of sanitary toilets during construction. The toilets will need to be demarcated according to sexual category

3.2.10 Gender Equality Act, 2013

There is a general misconception among girls and women that technical jobs are for men resulting into the gender imbalance in the industry. The Gender Equality Act's purpose is to take action and address the inequalities that exist between men and women in many aspects of daily life in Malawi. The Act seeks to promote gender equality, equal integration, influence, empowerment, dignity and opportunities for men and women in all functions of society; to prohibit and provide redress for sex discrimination, harmful practices and sexual harassment; to provide public awareness on promotion of gender equality. The Act applies to all persons and to all matters. This means it will apply to private and public institutions, including religious settings and chiefs. It also applies to the Government. It affects all aspects of life in Malawi. The Act in Part 2 prohibits sex discrimination and harmful social or cultural practices; Section 7 calls for a workplace policy to ensure that sexual harassment is avoided. The developer of the proposed project is therefore obliged to ensure that these principles are included in all its activities specifically in relation to membership and providing a conducive environment without sexual harassment and any other types of gender discrimination.

The proposed project developer is therefore mandated to incorporate these principles in all activities, ensuring fair representation and creating a conducive environment free from sexual harassment and gender discrimination, with a targeted employment distribution of 40% for women and 60% for men.

3.2.11 Malawi Employment Act, 2000

The legal framework for child labour in Malawi is contained in the Employment Act of 2000 (CAP 55:01). The Act sets the minimum age for admission of a child to employment at 14 years. The Act further prohibits children between the ages of 14 and 18 to work in hazardous work.

The employment (amendment), 2021 has redefined "industrial undertaking" as (a) mine, quarry and other works for the extraction of minerals from the earth, (b) an industry in which articles are manufactured, altered, or demolished, or in which materials are transformed including ship building and the generation, transformation and transmission of electricity or power of any kind; (c) construction, maintenance, or demolition works of any infrastructure; and (d) transport of passenger or goods by road, rail, sea or inland waterway, including the handling of goods at docks, quays, wharves and warehouses. . Section 22 (1) states that no person between the age of fourteen and eighteen years shall work or be employed in any occupation or activity that is likely to be (a) harmful to the health, safety, education, morals or development of such a person; or (b) prejudicial to his attendance at school or any other vocational or training programme.

In line with provisions of this Act, the contractor for the construction activities of this project will ensure that under-aged people (less than 18 years old) are not employed in the construction works

3.2.12 Mines and Mineral Act, 2000

The objective of this Act is to regulate the development of the mineral resources of Malawi through adherence to sustainable development principles in order to benefit the economy and promote the economic growth of Malawi; protect and improve the welfare of the present and future citizens of Malawi; provide an attractive and conducive environment for investment in the mining sector; minimize or prevent economic declines related to decreased mining activity by creating through training and other means a foundation for the future, social economic empowerment, uplifting and development of local communities and regions affected by mining; and manage environmental impacts for the benefit of all present and future generations of Malawians. Section 33 of this Act states the types of licesce that can be obtained with reference to size of mining. The contractor will therefore need to get construction materials such sand and quarry stones from licesced suppliers.

3.2.13 Water Resources Act, 2000

The Water Resources Act (2013) provides for the management, conservation, use and control of water resources; for the acquisition and regulation of rights to use water; and for matters connected therewith or incidental thereto.

Part VIII, Section 89 (1) prohibits any person who owns, controls, occupies or uses land on which an activity or process is or was performed to pollute water resources and which, unless authorized under this Part, causes, has caused or is likely to cause pollution of a water resource. The Act tasks all occupiers of a land to prevent pollution from occurring, continuing or recurring. As such it is an offence to alter the flow of or pollute or foul any public water. The Act defines pollution or fouling of public water to mean the discharge into or in the vicinity of public water or in a place where public water is likely to flow, of any matter or substance likely to cause injury whether directly to public health, livestock, animal life, fish, crops, orchards or gardens to which such water is used or which occasions, or which is likely to occasion a nuisance.

The Act further, in Part V Section 39(1) prohibits abstraction of water without a Permit from National Water Resources Authority. In compliance with the provisions of the Act, the contractor will have to obtain water abstraction permit from relevant authorities before abstracting water for

construction activities from any nearby river or a stream. The design of the facilities will also ensure that surface and ground water are protected from sewerage pollution.

3.3 Regulatory Licenses and Permits

Based on the consultations with key regulatory authorities and review of the requirements of the above policies and legislation, a list of relevant statutory and regulatory approvals and licenses to be obtained in course of implementing the proposed project, has been developed and are shown in Table 3.

Table 3: Regulatory approvals relevant for the project

No	Regulations/ Approvals	Description	Reference	Issuing Institution	Status
1	Approval Letter (ESMP approval)	The approval letter will be provided after approval of the ESMP report	EMA, 2017	MEPA	Not done
2	Development project approval	Development project approval	Physical planning act 2016	Blantyre City Council	Not done
3	Water Abstraction Rights	Abstraction of surface water for construction works	Water Resources Act (2013)	National Water Resources Authority	Not done
4	Registration of Workplace Certificate	Protect health and safety of workers	Occupational Safety, Health and Welfare Act (OSHW) (1997)	Ministry of Labour	Not done

3.4 World Bank Environmental and Social Standards

World Bank Environmental and Social Standards (ESSs) are used during the implementation of projects or activities funded by the Bank to protect the interest of beneficiaries, clients, shareholders and the Bank. The ESSs also provides a comprehensive framework for enhancing positive impacts, avoiding negative impacts and promoting sustainability. Below is the summary of ESSs identified as relevant to the proposed public sanitation facility project;

- ESS1: Assessment & Management of Environmental & Social Risks and Impacts
- ESS 2: Labour and Working Conditions
- ESS 3: Resource Efficiency and Pollution Prevention and Management
- ESS4: Community Health and Safety
- ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

- ESS 8: Cultural Heritage
- ESS10: Stakeholder Engagement and Information Disclosure

3.4.1.ESS1: Assessment & Management of Environmental & Social Risks and Impacts

ESS1 sets out responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs). The ESSs are designed to help in managing the risks and impact of a project, and improve their environmental and social performance, through risk and outcomes-based approach.

The preparation and subsequent adoption and implementation of this ESMP complies with this standard. The development of this Environmental and Social Management Plan for construction of public sanitation facilities will ensure that environmental and social impacts are identified and managed in an environmentally and socially sound and sustainable manner. In line with ESS1 an environmental and social screening of the proposed project was undertaken and it was found that they will be of low to moderate severity. Hence, the PSF works were classified as Moderate Risk; which triggered further environmental and social assessments, stakeholder engagements and the preparation of the Environmental and Social Management Plan. During project implementation there will be need for adequate monitoring and reporting on the environmental and social performance of the project works against the ESS 1.

The environmental and social management will be proportionate to the risks and impacts of the project. The assessment will inform the design of the project and will be used to identify mitigation measures and actions and to improve decision making. Management of environmental and social risks and impacts of the project will be throughout the project life cycle in a systematic manner, proportionate to the nature and scale of the project and potential risks and impacts.

3.4.2.ESS 2: Labour and Working Conditions

The ESS 2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. The project implementers can promote sound worker management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions.

The project will use recommended Labour Management Procedures, including guidelines on health, safety and welfare of the workers in accordance with the requirements of national laws and ESS2.

As per this ESS, a worker-specific Grievance Redress Mechanism will be put in place to support implementation of program activities. To ensure safety of the workers from hazards, measures relating to occupational health and safety risks guided by the WB General Environmental Health and Safety Guidelines, and Occupational Safety Health and Welfare Act, 1997 will be adopted during project implementation. Measures will be put in place to avoid the impact associated with influx of migrant workers. Procedures have been set out in the way in which project workers will be managed, in accordance with the requirements of national law and this ESS. The procedures

address the way in which this ESS will apply to different categories of project workers including direct workers and the way in which the project requires third parties to manage their workers. The project will ensure that the workers and communities abide by the code of conduct to minimize and mitigate environmental and social impacts. No child shall be employed during implementation of the program.

3.4.3.ESS 3: Resource Efficiency and Pollution Prevention and Management

ESS 3 recognizes that economic activity and urbanization often generate pollution to air, water, land, and consume finite resources that may threaten people, ecosystem services and the environment at local, regional and global level. The nature of the proposed project activities is expected to cause significant water and energy use; and the associated handling and storage of construction material could raise the potential for waste production. Inappropriate disposal of wastewater might pollute the environment, and burning of wastes generated in construction activities may contribute to air pollution. Building materials such as sand, quarry and gravel will also have to be obtained from sustainable sources to avoid impacts on natural resources. To comply with this ESS, the contractor will be required to apply technically and financially feasible resource efficiency and pollution prevention measures in accordance with the mitigation hierarchy (anticipate, avoid, reduce or minimize and compensate or offset).

It is also important to mention that all the PSFs will initially operate with an onsite septic tank system bearing in mind that this subproject is responding to an emergency cholera event and may not wait until the waste water treatment plants are upgraded in 2025-2026. However, where feasible, some of the PSFs will be connected to the existing sewer line once it is upgrade. For instance, PSFs at Limbe Flea Market, Limbe Produce Market and Limbe Health Centre will be connected to Limbe Waste Water Treatment Plant as they are within its catmint`s area. The rest of the PSFs will continue to operate using the on-site septic tank system because they are not within catchment area of any of the waste water treatment plans. Another reason for not being connected is that they are topographically challenged in term of gravitational flow of the sewer from the PSF to the treatment plant.

All the onsite septic tank system will be provided with a soak away pit and French Drains that distribute the effluent evenly over a large area of the underground soil, allowing for natural filtration, absorption and breaking of remaining pollutant by beneficial microorganisms.

Air pollution (odor) during operation will be prevented by the designs of the PSFs which is in such a way that their squat pans are provided with integral flushing rim to allow for complete flushing of human excreta. In addition, the squat pans will be fitted with a P or S Trap that will prevent odorous air in the septic tank from escaping back into the toilet rooms.

3.4.4.ESS4: Community Health and Safety

ESS 4 recognizes that program activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project

activities. ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of proponent to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable. The Malawi Water and Sanitation Project (MWSP) is aware of the fact that the proposed project activities will take place in congested areas of existing functional markets and health centres hence community health and safety risk is high.

To satisfy the requirements of ESS4, the Environmental and Social Assessment of the project works considered the risks and impacts of the project on the health and safety of the communities. Measures have been provided in the ESMP to avoid road safety concerns/ impacts or reduce their effects in the case that they still occur.

3.4.5. ESS5: Land Acquisition, Restriction on Land use and Involuntary Resettlemet

The ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

It is obvious that physical and economic displacement, if not mitigated, may give rise to severe economic, social and environmental risks: production systems may be dismantled; people face impoverishment if their productive resources or other income sources are lost; people may be relocated to environments where their productive skills are less applicable and the competition for resources greater; community institutions and social networks may be weakened; kin groups may be dispersed; and cultural identity, traditional authority, and the potential for mutual help may be diminished or lost. For these reasons, involuntary resettlement should be avoided. Where involuntary resettlement is unavoidable, it will be minimized and appropriate measures to mitigate adverse impacts on displaced persons (and on host communities receiving displaced persons) will be carefully planned and implemented.

In this project, there are vendors who illegally occupying land belonging to BCC and these will be relocated to free space for the the PSFs In line with ESS5, a abbreviated Resettlement Action Plan will be developed in line with Resettlement Policy Framework (RPF) for the project to manage the relocation of the vendors. The construction works will not commence until the mini-RAP is reviewed and approved by WB and the relocation/compensation is paid.

3.4.6.ESS 8: Cultural Heritage

The term 'cultural heritage' encompasses tangible and intangible heritage, which may be recognized and valued at a local, regional, national or global level. Tangible cultural heritage, may include movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water;

Intangible cultural heritage, which includes practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artifacts and cultural spaces associated therewith— that communities and groups recognize as part.
The construction of 10 Public Sanitation Facilities (PSFs) in markets and health centres in this project may not adversely affects cultural heritage in the earmarked site. However, since the construction of the PSFs involves excavation of trenches for foundation of the facilities, it is probable that a physical cultural resource can be found in the course of undertaking the excavation works, hence the need to have a chance find procedure in place to manage such accidental encounters.
Refer to Annex 6 for details about the procedure.

3.4.5.ESS10: Stakeholder Engagement and Information Disclosure

ESS 10 recognizes the importance of open and transparent engagement between the project proponent and program stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of program activities, enhance program acceptance, and make a significant contribution to successful program design and implementation.

Stakeholder engagement and information is an integral part of the implementation of the project. During the ESMP preparation, all relevant stakeholders were met and consulted. Importantly, to apply the requirements of ESS10, the Proponent will continue to engage and disclose information to allow stakeholders to understand the risks and impacts of the project, and potential opportunities and solicit ideas that will help improve implementation of the PSF activities.

CHAPTER 4: ENVIRONMENTAL AND SOCIAL SETTING

This chapter shall provide description of the biophysical and socio-economic characteristics of the proposed project sites.

4.1.Bio - Physical environment

4.1.1General location of the sites

The proposed sites for construction of 10 Public Sanitation Facilities (PSFs) are all located in six wards within Blantyre city. Table 4 gives location of each proposed site.

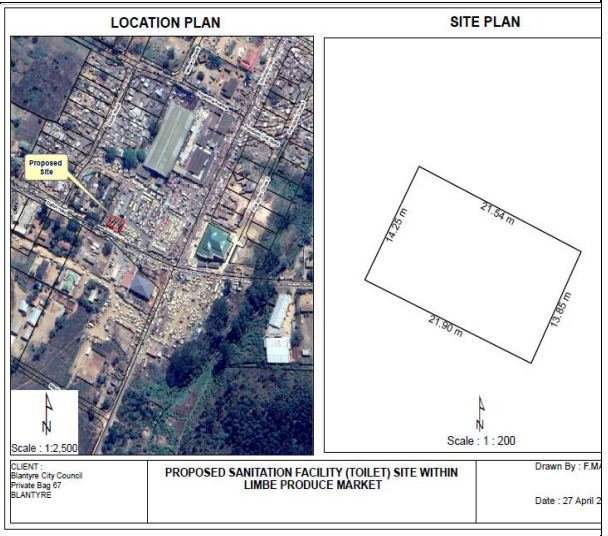
Table 4: Location of proposed sites for PSFs

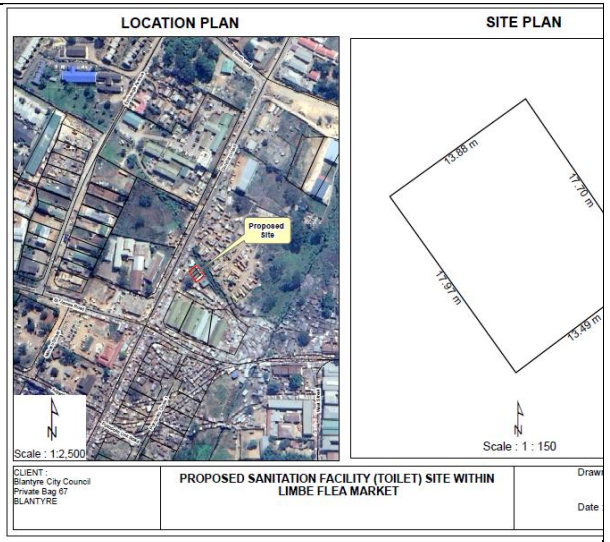
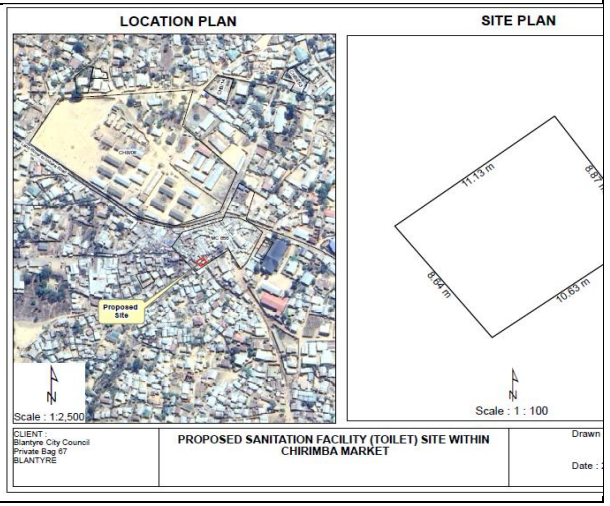
No.	Facility	Location	Ward
1.	Makhetha Health Centre	Makhetha	Nkolokoti
2.	South Lunzu Health Centre	South Lunzu	South Lunzu
3.	Chirimba Health Centre	Chirimba	Michiru
4.	Limbe Health Centre	Limbe	Limbe Central
5.	Bangwe Health Centre	Mthandizi	Mthandizi
6.	Bangwe Market	Bangwe	Bangwe
7.	Limbe Flea Market	Limbe	Limbe Central
8.	Limbe Depot	Limbe	Limbe Central
9.	Mbayani Market	Mbayani	Mbayani
10.	Chirimba Market	Chirimba	Michiru

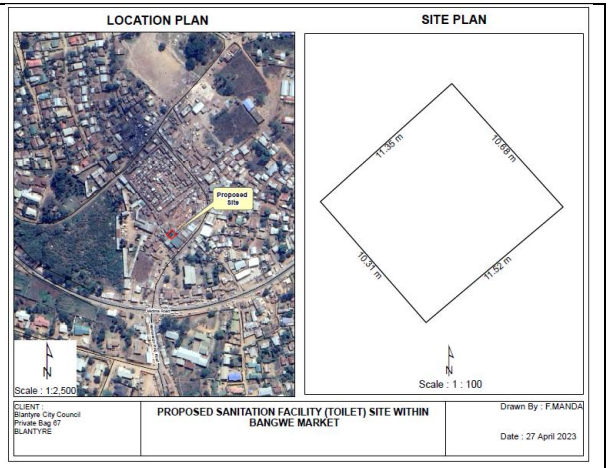
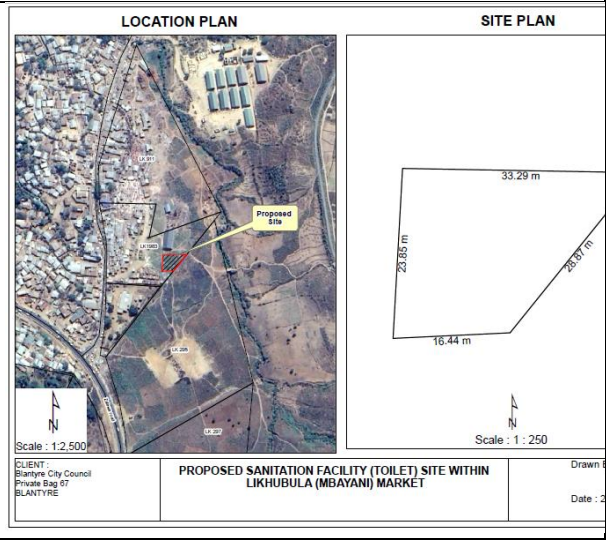
4.1.2.Specific description of each site

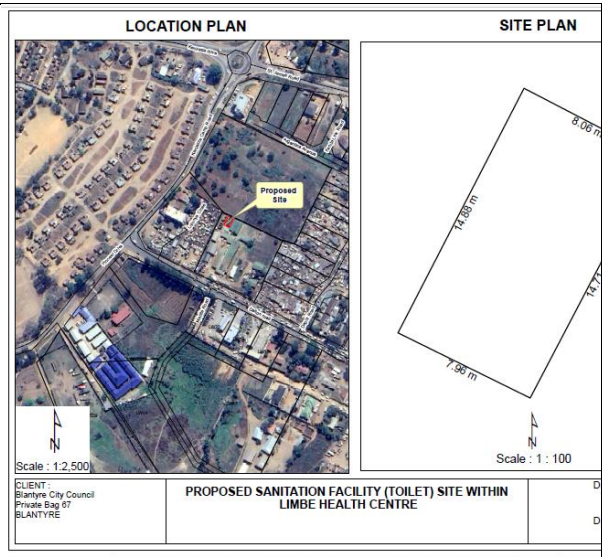
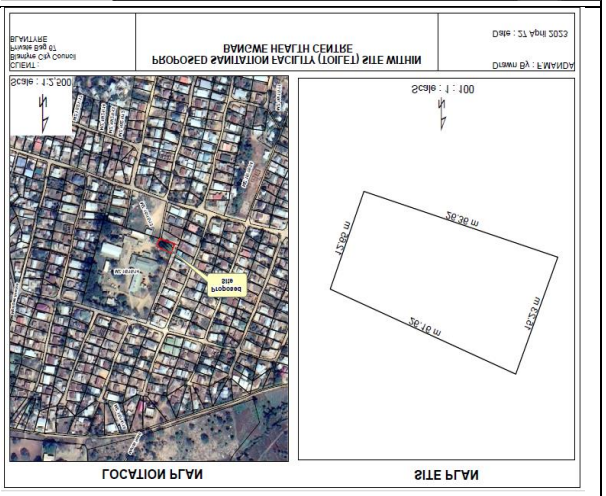
Table 5 highlights specific description of each site in terms of topography, type of soil, photo, GPS Coordinates, topography, proximity to amenities such as school and affected properties/ parties.

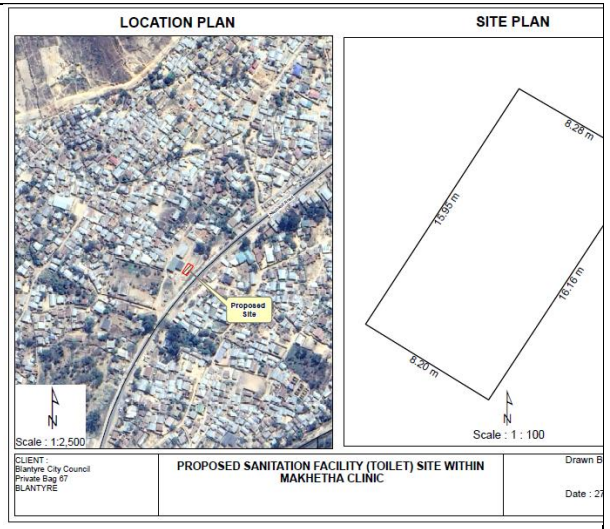
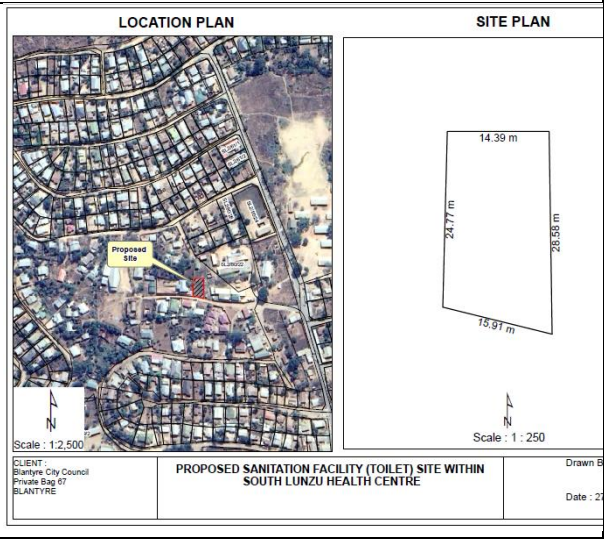
Table 5: Specific description of sites earmarked for construction of PSFs

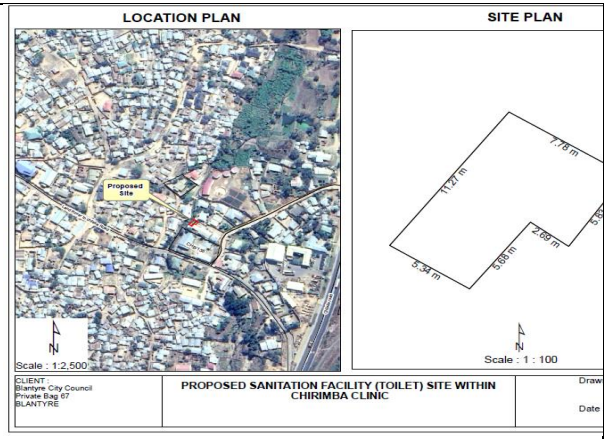
SITE NAME & COORDINATES	DESCRIPTION	PHOTO	SITE PLAN
Limbe Depot: -15.817, 35.0536	The proposed site for construction belongs to BCC and area is dominated with sandy loam soil. In terms of terrain is slightly flat. When it comes to vegetative cover, the site is almost bear with one mango tree close by which will not be cut because there is enough space for the PSF. However, there is no evidence of fauna on the site. School premises and water sources such as a river are far from the site. There are also temporary structures made of ply wood, iron sheet and bricks on the site which are used as restaurant which need to be demolished. Eight vendors need to be relocated as a result of this demolition. There is evidence of open defecation and urination at the site and its surrounding and the site is a hot spot for cholera.		

Limbe Flea Market: -15.813, 35.058	The proposed site for the construction of the PSF belongs to BCC. The area is dominated with sandy loam soil and has a steep terrain. In terms of terrain is steep slope. There is no vegetative cover on the site as seen in the photo and no evidence of fauna. There is no school nearby but a stream which is drained by Limbe River. There are also temporary shades made from iron sheets serving as cloths shops which need to be demolished. Thirteen vendors need to be relocated as a result of this demolition. The site is a cholera hotspot with evidence of open defecation and urination.		
Chirimba Market: -15.7456, 35.0186	The proposed land for the construction of PSFs belongs to BCC and the area is dominated with sandy loam soil. The site has steep terrain. Part of the site has vegetative cover (grasses) and there is no evidence of fauna on the site. There is no nearby river or school. There are already existing toilets in good condition and they will not be removed as they are not affecting the project in any way. The site is a cholera hotspot with evidence of open defecation and urination		

Bangwe Market: -15.8344, 35.0878	The land earmarked for the construction of the PSF belongs to BCC. The site has a steep terrain and sandy loam soil. The site is bare, without any vegetative cover and there is no evidence of fauna. It is not close to any school or river. The site is located near a refuse bunker and two skip bins that have to be removed to free space for the PSF. There is a block of toilets on site to be demolished, also to free space for the PSF. Access road to the site is restricted by vendors selling wood hence need for relocation. Seven vendors are affected by this temporary relocation.		
Mbayani Market: -15.7765, 35.0079	The land earmarked for the construction of the PSF belongs to BCC. The site has a steep terrain and dominated by sandy loam soil. The site has no vegetative cover and no evidence of any fauna. It is close to Mbayani a stream which is drained by Mbayani River. There is no school nearby. The area is spacious and adequate for construction of the PSF hence no need of demolishing any existing latrines The site is a cholera hotspot with evidence of open defecation and urination.		

Limbe Health Centre: -15.7269, 35.0544	The proposed land for the construction of the PSF belongs to BCC. The area has a flat terrain and it is dominated with sandy loam soil. The site is bare, no vegetative cover and there is no evidence of fauna. There is no river or any school premise nearby. There are existing toilet block and one of the will be demolished to free space for the PSF. This toilet is full and no longer in use. The site is within a fenced premise of the Limbe Health Centre.		
Bangwe Health Centre: -15.8197, 35.0792	The proposed land for the construction of the PSF belongs to BCC. The area is dominated with sandy loam soil and has a flat terrain. The site has vegetative cover, grass and one big tree close by which will not be cut because there is enough space for the PSF construction. There is no evidence of fauna on the site and it close to any school premise or river/ stream. They are old toilet structures made of iron sheet and bricks on the site which need to be demolished to free space for the PSF and because the toilet is full and not in use. The site is a cholera hotspot with evidence of open defecation and urination.		

Makheta Health Centre: -15.7836, 35.0694	The land earmarked for the construction of PSF belongs to BCC. The area has a steep terrain with sandy loam. The site is covered with grasses and shrubs. There are three newly planted trees. No fauna is noticed on the site. There is no river or school premise nearby. No structure to be demolished. There is an ESCOM pole at the proposed site and this will have to be relocated to free space for the PSF. ESCOM is already contacted for the relocation There is no any structure that may require demolition. The site is a cholera hotspot with evidence of open defecation and urination		
South Lunzu Health Centre: -15.7269, 35.0544	The proposed land for the construction of the PSF belongs to BCC. The site is dominated with sandy loam soil and has steep terrain. It is covered with grasses and shrubs, and there is no evidence of fauna at the site. There is no school premise or river/ stream nearby. The site has enough space for the construction of PSF hence no need for demolition of any structure. The site is a cholera hotspot with evidence of open defecation and urination		

Chirimba Health Centre: -15.7464, 35.0228	The proposed land for the construction of the PSF belongs to BCC. The area is dominated with sandy loam soil and has a flat terrain. It has some vegetative cover (grasses) and there is no noticeable fauna. There is no school premises or river/ stream nearby. Part of the proposed site was used as a refuse disposal pit which is currently not in use because it is full. There is a toilet which is working and will not be demolished as it is not affected by the project. The site is a cholera hotspot with evidence of open defecation and urination		

4.1.3.Climate characteristics

The climate for Blantyre city which also covers all the sites proposed for the construction of PSFs is classified as tropical wet and dry savanna influenced by specific location in the tropical zone and altitude. The rainy season run from November to April while end May commences continuing light cold showers locally known as Chiperoni. The annual precipitation averages 834mm which is equivalent to 834L/m^3, of which 80% is experienced within 3.5 months from November to March. Temperatures range from 19^{0}C in May to July and 26^{0}C during hot season in September to November. The temperatures vary by 7^{0}C which is an indication that continentally type is hyperoceanic (Source of this data). Figure 2 shows temperature, rainfall and humidity in a year.

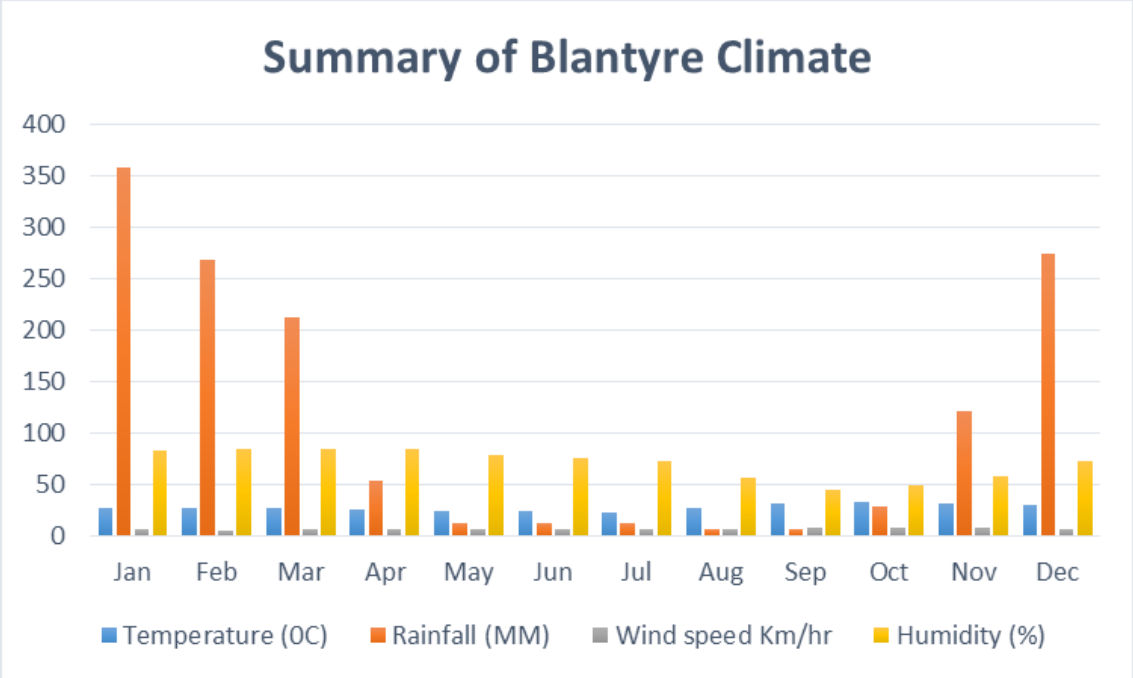


Figure 2: Blantyre Climate

Precipitation is the lowest in August, with an average of 10 mm | 0.4 inch. On average, the highest amount of rainfall occurs during January with a mean value of 321 mm | 12.6 inch as shown in Figure 2, sourced from Climatic Data ORG

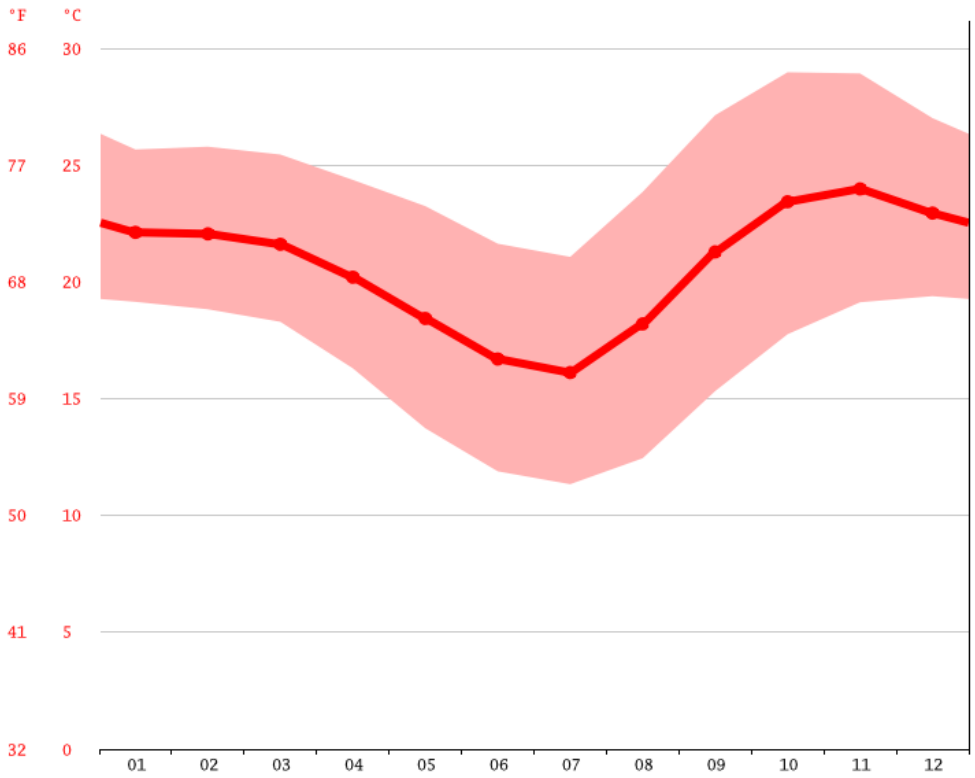


Figure 3: Hottest and coldest months in Blantyre

With an average temperature of 24.0 °C | 75.2 °F, November is the hottest month of the year. On average, the month of July is considered to be the coldest time of year with temperatures averaging at around 16.1 °C | 61.0 °F. (1999 to 2019) as indicated in Figure 3.

4.1.4.Air Quality

The air quality in Blantyre City is within acceptable levels. Nevertheless, it is expected that construction works will trigger air pollution following emissions from fueled vehicles and machinery to be used within the project construction sites. Furthermore, air quality will also be affected by dust generated by the movement of vehicles and machine operation but periodical sprinkling of water will help to reduce the levels of impact. Use of machinery will generate some noise but since the size of the project is small, this is expected not to last long.

4.1.5. Disaster Management

Disaster management refers to the systematic approach of preparing for, mitigating, responding to, and recovering from natural disasters. In Blantyre city due to illegal settlement in hilly, mountains and river banks most houses are prone to natural disasters. Recently the city was affected with cyclone Freddy which claimed over 1000 lives and displaced many households especially those that illegally constructed houses in hilly areas and close to waterways. As one way of preparedness, the council formulated Ward Civil Protection Committees (WCPC) represented by various sectors within the ward and City Civil Protection Committees (CCPC) as an umbrella

agency within the city. These committees were trained by Department of Disaster Management Affairs (DODMA) on their roles and responsibilities, and were equipped with relevant knowledge on disaster issues. However, there is need to have strategies in place to mitigate natural disaster, encompass thorough risk assessments, integrating climate-resilient designs and construction standards within the city, establishing emergency response plans, defining roles and responsibilities, and engaging local communities in preparedness efforts. Furthermore, they involve partnerships with local authorities and NGOs, data-driven early warning systems, capacity-building initiatives, and contingency budgeting. Integrated seamlessly with environmental and social considerations, these measures not only mitigate risks but also foster community resilience and ensure sustainable development goals. Maintaining detailed records, transparent reporting, enabling adaptive responses and fostering a culture of preparedness, ongoing evaluation form essential aspects and accountability within the project framework.

The project site has potential to disasters like mud slide and flooding. Terrain of some sites, featured by none vegetative cover accelerates run-off hence heavy rains easily lead to collapsing of buildings and loss of essential infrastructures such as roads.

4.2.Social-economic Environment

4.2.1.Population and settlement pattern

The City of Blantyre, which is part of Blantyre District, is not only one of the largest cities but also the commercial capital of Malawi. Blantyre was declared a planning area in 1897 by the Scottish missionaries and has experienced high population growth, with the population increasing from 109,461 in 1966 to 661,256 in 2008. The 2018 census showed that the Blantyre City had a population of 879,000 with 50.13% being males and 49.87% being females. The 2022 projections indicate that Blantyre City will have a population of about 995, Table 6 highlights population and projection for Blantyre.

Table 6: Population and projection figures for Blantyre, 2012 – 2022

Year	Population	Growth Rate
2022	995,000	3.43%
2021	962,000	3.22%
2020	932,000	2.98%
2019	905,000	2.96%
2018	879,000	2.81%
2017	855,000	2.89%
2016	831,000	2.85%
2015	808,000	2.93%
2014	785,000	2.88%
2013	763,000	2.83%
2012	742,000	2.91%

Source: NSO 2018

The growth rate is estimated at 3.4 percent between 2018 and 2022. The population of Blantyre represents 5.1 percent of the national population. The average population density is 3,509.93 persons per square kilometre (National Statistical Office, 2018). There are 14 unplanned settlements (aggregated) within the city and five planned low-income housing areas. Over 70 percent of the urban population live in unplanned areas, which occupy up to 23 percent of the land in the city.

Table 7 shows population distribution in the proposed project locations as recorded during 2018 census.

Table 7: Population Disstribution 2018

No.	Facility	Location	Ward	Population in Ward
1.	Makhetha HC/Clinic	Makhetha	Nkolokoti	37, 763
2.	South Lunzu HC/ Clinic	South Lunzu	South Lunzu	53, 831
3.	Chirimba HC/ Clinic	Chirimba	Michiru	83, 987
4.	Chirimba Market	Chirimba	Michiru	
5.	Bangwe HC/ Clinic	Mthandizi	Mthandizi	19, 815
6.	Bangwe Market	Bangwe	Bangwe	18, 815
7.	Limbe Flea Market	Limbe	Limbe Central	7, 438
8.	Limbe Depot	Limbe	Limbe Central	
9.	Limbe HC/ Clinic	Limbe	Limbe Central	
10	Mbayani Market	Mbayani	Mbayani	69,660

Source: National Statistics Office, 2018

4.2.2.Health facilities and health care services

Blantyre City Council is mandated by the Local Government Act of 1998 to provide health services. Health care services in Blantyre are mainly provided by Queen Elizabeth Central Hospital, which is the largest referral hospital in the city and is run by the government and it is also the main health care service provider for the entire city. Some of the health facilities operating in Blantyre are Limbe, Zingwangwa, South Lunzu, Chilomoni, Makhetha, Bangwe, Ndirande Health Centers, Chirimba ,Makata Health Centres and Gateway clinics just to mention but a few. These health facilities are run by both District Health Office (DHO) and Blantyre City Council. The city also has private health facilities and clinics run by individuals and Churches.

Blantyre registers a number of diseases including cholera, typhoid, tuberculosis (TB), measles, infectious hepatitis, malaria, and HIV and AIDS. Malaria is the leading cause of morbidity and mortality in the City, especially among children under five years old. Malaria accounts for 40 percent of all outpatient visits to health facilities. Pneumonia and diarrhea are the other leading causes of death in children under five years old. Despite the continuing presence of these diseases, overall, Malawi's health conditions appear to be improving. The common condition/ deaseses available the areas proposed the construction of PSFs are mainly cholera, malaria, pneumonia,

diarrhea, common injuries, chicken pox outbreaks and HIV and AIDS. Malaria is still the biggest health challenge reported in the city and most of the malaria cases were reported in the low-income areas and the informal settlements (MWSP ESMF, 2023)

4.2.3.Land Administration

Land in the city is managed by three major landlords, namely: The Commissioner for Lands, Malawi Housing Corporation, and Blantyre City Council. The Commissioner for Lands is responsible for public land which has been subdivided and offered for development under leasehold titles that are usually for 99 years or shorter terms. The Malawi Housing Corporation owns public freehold land for purpose of subdivisions in residential and commercial development in the city. The Blantyre City Council has assumed the administration of Traditional Housing Areas (THAs) in the City.

4.2.4. Main economic activities

Some of the key industrial/ economic sites include but not limited to Makata, Ginnery Corner, Maselema, Limbe, Chirimba, South Lunzu, Maone and Chitawira. These industrial areas are located along the banks of the main rivers or streams, with notable ones being Mudi, Naperi, Limbe, Nasolo, Lunzu and Chirimba. It is estimated that Blantyre City offers 33% of the employment opportunities in general, 19% in Blantyre Central Business District (CBD) and 14% in Limbe CBD. The private sector provides about 45% of employment opportunities, with the public sector at 12% and 36% in self-employment with over 500,000 informal traders/vendors. In unplanned areas, 10% are in professional jobs, 4% in clerical, 13% drivers with 18% employed in the informal sector. Poverty stands at about 24% for the poor and about 5% for the ultra-poor. Poverty is accelerated by the absence of credit and steady increase in prices of basic requirements and unemployment. About 50% access microfinance credit prompting the city to provide investment land with incentives to encourage business investment and job creation. Blantyre City has a strong solid economic base for sustained economic growth and a diversified modern economy offers a wide range of employment opportunities.

The most important economic sectors are retail trade, construction, food, textile manufacturing, motor vehicle sales and maintenance and the informal sector. However, the sector lacks adequate regulation and support. Economic growth is crippled by poor infrastructure, limited or lack of basic urban services, no access to credit and lack of competitive entrepreneurial skills

4.3.5. Health situation and HIV and AIDs prevalence

Some of the major hospitals, health centers and clinics operating in Blantyre are Queen Elizabeth Central Hospital, Limbe, Zingwangwa, Chilomoni, and Ndirande Health Centres and Gateway, Chirimba and Makata Clinics just to mention but a few. These health facilities are run by both government and Blantyre City Council. The city also has private health facilities and clinics run by private sector, and churches. Blantyre has the full range of diseases including cholera, typhoid, tuberculosis (TB), measles, infectious hepatitis, malaria, and HIV and AIDS. Malaria is the leading cause of morbidity and mortality in the City, especially among children under five years old.

Pneumonia and diarrhea are the other leading causes of death in children under five years old. Despite the continuing presence of these diseases, overall, Malawi's health conditions appear to be improving. The project impact areas are mainly affected by malaria, pneumonia, diarrhea, common injuries, chicken pox outbreaks and HIV and AIDS. Most of the malaria cases were reported in the low-income areas and the informal settlements (MWSP ESMF, 2023).

Blantyre has a lot of people from different areas with diverse interests and health concerns. Most of these people go to the city with different types of diseases, others are referred from Blantyre rural health centres to Blantyre urban main hospitals such as Queen Elizabeth Central Hospital, Mwaiwathu Private Hospital and Blantyre Adventist Hospital.

Among the cities, Blantyre has the 2nd highest HIV prevalence rate (15.2%), the first being Zomba City (19.6%). The city has about 89,639 people living with HIV, of which 93% know their status Blantyre has about 2,055 new annual infections, of which 75% are occurring within the city boundaries. Key HIV drivers include poverty, overcrowding, migration, and concentration of key and vulnerable populations among others. The city was highly hit by COVID-19 and cyclone Freddy, interrupting HIV service provision and displacing people. ART coverage is at 91% in Blantyre ans still facing a greatest challenge of identifying the new HIV positives, retaining care recipients on ART, and increasing viral load monitoring coverage. The Blantyre City Strategic Plan produced under the Fast Track Cities Project by the UNAIDS and IPAC is a blueprint to tackle these challenges.

4.2.5. Education

Literacy is defined as the ability to read and write. Specifically, this analysis classifies all those who can read and write in Chichewa or English or any other language as being literate. Among males, almost 76 percent are literate while half of females are literate. Education services are provided by the government. Blantyre Urban Education is part of Blantyre City Council and provides quality and relevant education to its learners to enable them acquire relevant knowledge, skills, expertise and competencies to perform effectively as citizens of Malawi. Blantyre City has 62 full public government primary schools, and 219 private primary schools. There is a total of 1,133 classrooms in the 62 public primary schools. The district has a total of 2,397 teachers of which 2,107 are female and 290 are male and there are 76,149 boys and 77,202 girls making an enrolment of 153,351 of which translate into a pupil: teacher ratio of 64:1. There are 29 public secondary schools. Out of these, 21 are Community Day Secondary Schools (CDSSs). Out of the five conventional secondary schools, one is a girls' national boarding secondary school, three are double shift day secondary schools and the remaining is a day secondary school. The combined enrolment for public secondary schools is 27,553 of which 13,555 are boys and 13,998 are girls.

4.2.6. Energy

Energy sources in Blantyre include electricity, fuel wood and paraffin. The Electricity Supply Corporation of Malawi (ESCOM) supplies electricity in most parts of the city. In Blantyre, only 26 percent of residents are connected to electricity. The electricity supply infrastructure is old and worn out resulting in frequent power outages and high maintenance costs. Further, the cost of

electricity supply is high and inaccessible to the poor. The high reliance on charcoal and firewood for cooking and lighting, mainly by the urban poor, is the major cause of deforestation. The majority of the population cannot access electricity; hence they use fuel wood for heating and cooking; there is also a high demand for firewood for brick curing. Almost 80% of the population in the city use fuel wood in form of charcoal and firewood. Solar power is not a popular alternative only small populous use it and most commonly in medium to affluent residential areas (MWSP ESMF, 2023).

However, all the sites are connected to electricity except Mbayani Market which is at about 150m from the ESCOM grid where electricity can be tapped.

4.2.7. Transport

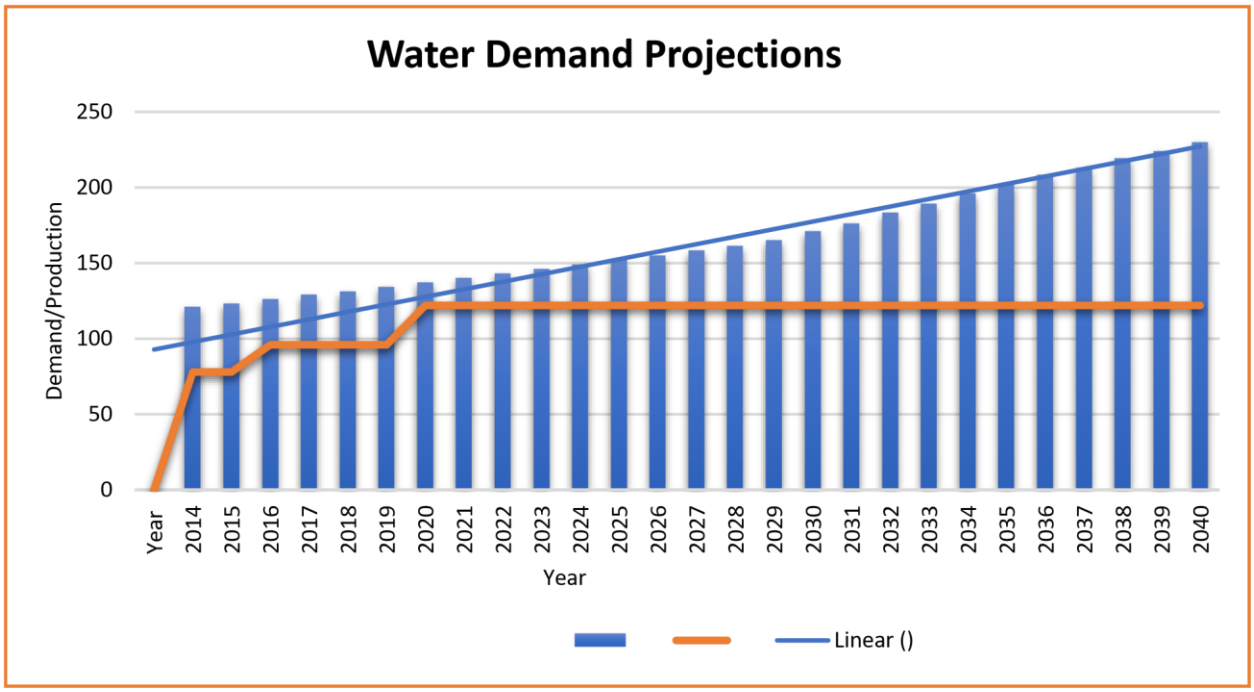
The most common means of public transport in Blantyre are minibuses, motor cycles and taxis. Buses operate on long and inter-city routes. In an attempt to mainstream the transport sector in Blantyre, there are minibus terminals in Mibawa and Limbe managed by BCC in collaboration with Minibus Owners Association of Malawi (MOAM). Blantyre city experiences high amounts of traffic congestion following increased number of motor vehicles in the city. Motor cycles are preferred in short distances and fastness especially to escape from motor vehicle congestion. Improvements required in the transport network include provision of pedestrian and cyclists pathways, construction of adequate bypass roads, construction of three highway roads, improve on train transport service and provision of bus lay-bys.

4.2.8.Water Supply

BWB is mandated to supply potable water to Blantyre City and surrounding areas with an estimated population of 1,400,000 (projected based on 2018 population census). This population is expected to continue growing at a high rate due to rural-urban influx, expansion of the city to the peripherals, high birth rate and reduced mortality rate due to improved health services among others. The current production capacity has increased to 122 million litres with Mudi Treatment Works and Likhubula contributing an average of 6 million litres and 20 million litres per day respectively. A total of four new water storage reservoirs that were constructed increased the Board's storage capacity from 77.5 million litres to 97.5 million litres.

The increased production has resulted in more water within the supply area and the storage reservoirs. As a result, some pipes that were not transporting water before, are now conveying water almost all the time. However, the condition of the pipes has worsened with the fact that most pipes are very old with the largest proportion being comprised of AC pipes that were laid over 50 years ago. These pipes are currently not able to withstand high variations of water pressures experienced in the network resulting in high water losses. Figure 4 show a graph of water demand projections.

All the earmarked sites for the construction of the PSFs have water supply from BWB within the sites.



Key		Actual production		Ideal production

Figure 4: Water demand projections

4.2.9. Waste management and Sanitation

BCC oversees waste management in the city. The Cleansing Services within the BCC's Department of Health and Social Services is responsible for waste collection and disposal. Waste management is largely focused towards planned areas. The informal urban areas, which include over 70 percent of the urban population, have little access to waste management services provided by the BCC, mostly serving the markets. Solid Waste Management in Blantyre City mainly involves primary collection, secondary collection and final disposal. Apart from the conventional system in managing solid waste stated above, there are some efforts to manage solid waste through resource recovery initiatives such as recycling, composting and waste to energy. Primary collection includes street and market cleansing, solid waste capture and containment. While secondary collection involves emptying and transportation of the solid waste from the containment sites to the final disposal site. At the final disposal site, solid waste is mostly disposed of unsegregated and thereafter it is periodically spread and compacted using machinery particularly the bulldozer. On daily activities the council base its planning on the fact that 70% of the residents in the city live-in high-density areas and that the waste generation rate is pegged at 475 tons/day. Primary solid waste collection is a labour-intensive activity. The Council has an average of 800 employees responsible for solid waste management distributed in four (4) cleansing depots (zones), namely Blantyre, Limbe, Ginnery Corner and Soche. Tools provided for the primary collection of solid waste include local brooms, rakes, shovels, digging forks and wheelbarrows.

Apart from the working tools, the employees are also provided with protective wear for their safety while carrying out their duties. Figure 5 shows the city's routine waste management activities.

Figure 5: Refuse Collectors clearing refuse

Prior to its subsequent disposal, solid waste is contained in litter bins (street or household), skip bins in markets and open spaces in low income areas and bunkers in markets and some private institutions. Secondary collection includes emptying of the refuse storage facilities and transportation to the final disposal site. Solid waste collection in the City of Blantyre is mainly done using a fleet of 14 refuse collection vehicles. These vehicles are coordinated by a daily collection schedule guiding which routes to be collected on a particular day. Solid waste collection is done once a week for each residential area and every day in the Central Business District (Blantyre and Limbe) and in some markets. Some private companies also provide refuse collection and transportation services for their institutional customers.

Collected solid waste is finally disposed of at Mzedi Dumpsite which is located some 5.5 km north of Limbe town, along the Blantyre Zomba road soon after Kachere Township. Mzedi dumpsite has a total area of about 23 hectares (including the buffer zone). It was established around 1992 and

was designed as an open dumpsite where there are no mechanisms for the treatment of leachate and gaseous waste produced from the solid waste decomposition processes. Spreading and compaction of refuse at the dumpsite is done periodically by hired machinery in an effort to manage the available dumping space.

In the sites earmarked for the construction of PSFs e.g. health centres manage their waste by having waste bins that collect all solid waste and when they are full they are emptied into a refuse pit and burned.

In markets, BCC provides skip bins where everyone throws in refuse indiscriminately and when they are full, BCC collects and empty them at the designated waste disposal site (Mzedi Dumpsites)

During construction of the PSFs the contractor will have waste bins clearly labelled to facilitate waste segregation, and when they are full they will emptied at Mzedi Dumpsite.

4.2.10.Security

Blantyre City, like many urban areas around the world, face various security challenges. While Malawi is generally considered one of the peaceful countries in the region, urban areas, including Blantyre, had concerns related to petty crimes such as theft, vandalism, pickpocketing, and occasionally more serious crimes. Law enforcement agencies in Blantyre includes police, private security agencies, community policing and occasional military which at times is involved in ensuring public safety. However, due to the fact that resources are sometimes limited, there are still challenges in maintaining law and order, especially in densely populated urban areas.

The communities living around the proposed sites for the project rely both on community police forums as well as police offices/officers that are designated within the area for provision of security services. The proposed sites are also within brick fenced premises except for Chirimba Market, Mbayani Market and Makheta Health Centre. There is a security concern in proposed project areas. There have been various reports and evidence of theft and vandalism of the facilities.

4.2.11. Affected exisiting structures/ properties in the proposed sites for PSFs

There are a number of affected existing structures/ properties on some of the proposed sites earmarked for the construction of Public Sanitation Facilities. For instance, at Bangwe Market, Limbe and Bangwe health centres there are old toilet buildings which will be demolished to free space for the PSFs. The other reasons for the demolishing the toilets are because they are full (not being used) and toilet structures (buildings) are not in good state to an extent that they pose safety risk. The demolition works will be done by machine (back and front loader) and the waste will be used for filling road potholes and backfilling the foundation of the PSF structure.

The project will affect properties/ spaces/ structures for 28 people as follows: 1) Limbe Flea Market, 13 cloth shops owned by 13 vendors will be demolished to free space for the PSFs; 2); Limbe Produce Market, 8 shops serving as restaurants owned by 8 vendors will be permanently displaced and 3) Bangwe Market seven (7) timber vendors will be temporarily relocated from the

site because this place is very close to the site earmarked for the construction of the PSFs and its risky to let them continue operating their businesses during construction phase.

Demolition of these shops and relocation of the vendors will definitely cause disruption of livelihood. BCC and BWB will prepare and implement an abbreviated Resettlement Action Plan (ARAP) in line with the project RPF in order to mitigate the impacts that may rise as result of this disruption.

In addition, at Makhetha Health Centre there is ESCOM Pole on the site for the PSFs. The pole will have to be relocated to provide enough room for the PSFs. ESCOM is already notified about this. Bangwe Market has a waste skip placed at the site for the PSFs where people throw in garbage/ refuse. This will be replaced with waste bins that will serve the same purpose as the waste skip

CHAPTER 5: IMPACT IDENTIFICATION AND THEIR MANAGEMENT MEASURES

This chapter outlines the project's anticipated positive and negative effects, encompassing both direct and indirect impacts on each environmental and social aspects within the project site. It examines the methods employed for impact prediction and the criteria applied to assess the severity

and significance of these impacts. The chapter summarizes the most significant impacts and presents proposed measures to prevent, diminish, and/or control them.

5.1.Impact identification

The assessment considered the potential environmental effects of physical works and activities, including environmental changes that may result from the proposed undertaking. Specifically, the assessment started by identifying the issues through scoping and selecting of Valued Environmental Components (VECs) on which to focus the assessment. VECs are components of the environment that the society values, and upon which the assessment is focused. Thereafter, the assessment identified environmental effects of project activities, by project phase, including those resulting from the interaction of the project with the environmental effects identified for past, present, and future projects that will be carried out, and the changes to the project caused by the environment.

The VECs for this project were identified through a process whereby the features and activities (both planned and unplanned) associated with planning and designing, construction and operation phases of the project have been considered with respect to their potential impact with resources or receptors. This method identifies VECs and activities that could reasonably act as a source of impact and the vertical axis of a Potential Interaction Matrix (refer to Table 8) lists them.

Table 8: Potential impact interaction matrix

Receptor Component		Anticipated Environmental and Social Impacts																									
		Occupational Safety and Health	Risk of infectious and communicable	Risk of Forced Labour	Risk of Child Labour	Impact on Economy & Livelihood	HIV and AIDS	Risk of GBV, SEA and SH	Resource Consumption	Soil contamination	Air Quality & Fugitive Emissions	Noise and Vibration	Water Contamination	Land Degradation	Increased Waste Generation	Provision of Education Services	Conflict on use of Amenities	Traffic & Road Safety Risks	Increase in theft and vandalism	Community Health and Safety	Forced Eviction	Involuntary Resettlement	Impact on Flora	Impact on Fauna	PAP awareness of project	Community Grievance Redress
SN	**Project activity/Hazard**																									
1	**Planning Phase**																									
1.1	Design of Proposed Structures																									
2	**Construction Phase**																									
2.1	Land Take and Land Clearance																									
2.2	Excavation and Civil Construction																									
2.3	Equipment/Material/ Worker Transport																									
2.4	Waste Storage and Disposal																									
2.5	Construction Workers Presence																									
3	**Operational Phase**																									

Receptor Component		Anticipated Environmental and Social Impacts																								
		Occupational Safety and Health	Risk of infectious and communicable	Risk of Forced Labour	Risk of Child Labour	Impact on Economy & Livelihood	HIV and AIDS	Risk of GBV, SEA and SH	Resource Consumption	Soil contamination	Air Quality & Fugitive Emissions	Noise and Vibration	Water Contamination	Land Degradation	Increased Waste Generation	Provision of Education Services	Conflict on use of Amenities	Traffic & Road Safety Risks	Increase in theft and vandalism	Community Health and Safety	Forced Eviction	Involuntary Resettlement	Impact on Flora	Impact on Fauna	PAP awareness of project	Community Grievance Redress
SN	**Project activity/Hazard**																									
3.1	Operation of Facility																									
3.2	Waste Storage and Disposal																									
KEY											Scoped In										Positive Impacts					
											Scoped Out										Scoped Out with Justification					

5.1.1 Site specific Risks/ Impacts Analysis

The risks/ impacts in Table 8 above are general because they are almost common in all the sites. However, there are some sites that have specific/ unique risks/ impacts which are not existent in the other sites due to features like terrain or closeness to stream and rivers. The notable sites are Makhetha, South Lunzu and Mbayani Health Centres. These have steep terrain that may pose a risk of erosion. At Makhetha Health Centre there is a risk of disrupting electricity supply to surrounding premises because there is an ESCOM Pole that have to be relocated to free space for the PSF. Other risks will be posed by demolition works and demolition waste to be generated at Bangwe Market, Limbe and Bangwe Health Centres. In addition, Mbayani and Limbe Flea Market are close to the streams that are drained by Mbayani and Limbe rivers respectively. These two rivers are at risk of being affected by siltation and sedimentation due to construction works.

The construction of the PSFs will pose social risks such as disruption of livelihood at the following sites: 1) Limbe Produce Market 8 shops serving as restaurants (owned by vendors) will be removed and 3) Bangwe Market seven (7) people will be temporarily moved from the place they use to display merchandises (such as firewood and timber poles) because this place is very close to the site earmarked for the construction of the PSFs and its risky to let them continue operating their businesses during construction phase. Table 9 provides mitigation measures for the specific risks discussed above.

5.2.Environmental and social impacts arising from project activities

5.2.1.Positive impacts

Planning and design phase

a) Creation of temporary employment opportunities (architects, engineers, and other experts)

During the planning phase, the developer will employ people to undertake various studies for the planning of the project, develop detailed project designs and carry out an environmental and social assessment of the proposed site.

Enhancement measures:

i. Maximise employment of professionals registered with relevant Malawian institutions and authorities;
ii. Give equal employment opportunities to both men and women (60% and 40%) respectively; and
iii. Provision of terms and conditions which are in line with the employment Act of 2000.

Construction phase

a) Creation of temporary employment opportunities

The construction phase will provide employment (both skilled and unskilled) to people in the proposed sites including men, women, youth and the vulnerable from the surrounding communities.

Enhancement measures:

i. Prioritize the employment of people (including the youth) from respective project areas;
ii. Give equal employment to both men and women (60% and 40%) respectively;
iii. Ensure salaries and wages to be paid to the local employees are above the minimum stipulated Government wages.

b) Creation of temporary market for goods and services

The project will be buying construction materials from the local market and will provide business for the local businesses. The people in the project area of impact will be selling food to construction workers, which will improve their incomes hence improved livelihood.

Enhancement measures:

i. Promote the procurement of construction materials and supplies from approved small-scale businessmen and entrepreneurs within the projects area, while not compromising the quality;
ii. Where practically possible ensure that locally produced materials are given priority over imported materials; and
iii. Purchase construction materials and supplies at competitive prices to ensure local businesses and entrepreneurs are making profits.

c) Skill transfer to local communities

Employment of local people from within the projects area of impact will facilitate capacity enhancement and the acquisition of specific skill sets through on the job and formal training. These skill sets may then be readily replicated after employment termination in other construction related projects.

Enhancement measures:

i. Maximise employment of local people particularly for the unskilled labour force;
ii. Make deliberate effort to pair skilled and unskilled workers during various construction assignments; and
iii. Formalise on-the-job trainings for local unskilled labour from within the project surrounding areas and also includes learning targets and performance monitoring.

Operation phase

a. Access to improved sanitation facilities by the communities

The project will increase availability of improved sanitation facilities in the cholera prone area. This is expected to result in easy access to sanitation facilities and safe disposal of human excreta which in turn will lead to reduced incidences of cholera.

Enhancement measures:

i. Proper maintenance of the sanitation facilities including proper management of urine collection, biogas harvesting units;
ii. Conduct regular inspection of the facilities detect overflows of septic tanks and repair them;
iii. Employ adequate staff and ensure that they provide appropriate work inputs (cleaning) through proper work schedules; and
iv. Sensitize the toilet users on proper and hygienic use of the facilities through IEC materials.

b. Improved sanitation, hygiene and health

Increased availability of improved sanitation facilities is expected to result in improved hygienic disposal of human excreta that will result in reduced incidences of diseases that emerge due to poor sanitation and hygiene, consequently this will translate into financial saving through reduced cost for medical treatment.

Enhancement measures:

i. Continuous monitoring and evaluation will be vital on this phase as it will help to identify potential health risk, such as malfunctioning toilets or inadequate waste management.
ii. Educate the public on important health issues, information and awareness campaigns can be carried out to promote proper hygiene practices, disease prevention and the importance of using the sanitation facility correctly.

c. Source of BWB and BCC Revenue

The construction of public sanitation facilities will help BWB and BCC to generate revenue from private operator who will run the toilets as business.

Enhancement measures:

i. Carrying out regular maintenance of the sanitation facilities and
ii. Conduct regular inspection of the facilities detect overflows of septic tanks and repair them.

d. Reduced incidences of water borne diseases such as Cholera

By constructing the PSF, the beneficiaries will have unrestricted/unlimited access to improved sanitation facilities which will reduce open defecation thereby reduce incidence of emergencies like cholera.

Enhancement measures:

i. Carrying out regular maintenance of the sanitation facilities;
ii. Educate the public on important health issues, information and awareness campaigns can be carried out to promote proper hygiene practices, disease prevention and the importance of using the sanitation facility correctly.

e. Improved standards of living of people running the PSFs

The PSFs in markets will be run by private individuals who will employ sale agents (toilet user fee collector) who will receive some income on monthly based on their agreements. These agents will be able to support their families financially.

Enhancement measures:

i. Employ toilet user fee collectors from surrounding communities including and vulnerable groups;
ii. Carrying out regular maintenance of the of the sanitation facilities; and
iii. Conduct regular inspection of the facilities detect overflows of septic tanks and repair them.

5.2.2.Negative impacts

Design and planning phase

a) Increased risk of accidents and exposure to hazardous material

During design and planning phase, it is very important to keep in mind that accidents may occur during implementation stage and that there might be a need to compensate the injured persons or damaged properties. Injuries can also occur to design experts when visiting the sites. Properties

Mitigation measures:

i. Develop Occupational Safety and Health (OSH) plan, which will aim to avoid, minimize, and mitigate the risk of workplace accidents;
ii. Ensure that the contractor has insurance for its workers
iii. Provide OSH orientation training and hazard specific training;
iv. Make available first aid kits during field and site inspections;
v. Put appropriate measures to prevent field investigations during periods of harsh weather conditions.

i.

Construction phase

a) Loss of vegetation

Most sites identified are bare grounds and the project is not expected to have any negative impacts on vegetation. In cases where the construction activities will result into removal of vegetation, contractors are required to revegetate the sites on a ratio of 1:10 trees space permitting.

Mitigation measures:

i. Limit vegetation clearance to demarcated areas only; and
ii. Plant some trees to replace the affected ones.
iii. For existing bare grounds, plant grasses to control run off

b) Increased risk of Soil erosion and sedimentation of water courses

Soil erosion will be induced by soil disturbing activities such as excavations, land clearing and grabbing, vehicle movement, open piling of materials.

Mitigation measures:

i. Stockpile excavated soil away from water courses;
ii. Install sediment traps on natural drainage paths at construction site;
iii. Restrict land clearing only to the proposed site for construction activities; and
iv. Compact and spray water on loose soil in all disturbed areas during construction phase
v. Do not excavate during rainy season
vi. Plant vegetative cover (grasses and trees) in all sites after completion of construction works

c) Increased generation of solid waste

Various construction activities are expected to generate many types and varying quantities of wastes that include construction rubble from demolition and general waste.

Mitigation measures:

i. Provide adequate on-site waste receptacles such as bins for waste storage;
ii. Use the 3Rs (Reduce, Reuse and Recycle) principle, which should also be advocated to construction workers and operators of the facility; e.g. waste such as empty cement bags will be recycled/ reused for making mats
iii. Dispose waste at the dumpsite designated by BCC.

d) Increased generation of sanitary waste

Presence of construction workers at the project sites will increase generation of sanitary waste. It is anticipated that mobile toilets will be used in both the markets and health centre sites throughout the construction period or alternatively the constructor will arrange with owners of private toilets available in the markets. Potential impacts associated with the mismanagement of the sanitary waste will be transmission of diseases associated with poor sanitation and hygiene that will have adverse impacts on health of general public.

Mitigation measures:

i. Train the workers on proper use of the toilets
ii. Provision of adequate mobile toilets to workers;
iii. Periodic emptying and cleaning of mobile toilets;
iv. Provide appropriate bins for other sanitary wastes and
v. Conduct routine monitoring of the mobile toilets to ensure that they are clean at all times.

e) Increased noise generation

A significant increase in noise will be generated through the use of machinery and equipment as well as the presence workers.

Mitigation measures:

i. Use of modern machines fitted with noise silencers or use of less noisy machine.
ii. Use well serviced machinery and equipment.
iii. All sites will have a hoarding fence will reduce the noise emitted from the work site.
iv. In case of high noise activity, surrounding communities will be notified in advance

f) Increased incidences of child labour

The impact of child labour exploitation in the project area is expected to be medium-term during this phase. Child labour may not necessarily be in the form of full-time employees, but may involve the seasonal workers, who are difficult to account for. This calls for the proposed project to take serious measures to control and monitor that this does not happen in the proposed project areas.

Mitigation measures:

i. Sensitize local leaders, children and the community at large on prohibition of any forms of child labour at the project sites;
ii. Display posters at the project sites that warn and inform community members against child labour; and
iii. Put in place proper procedures for preventing child labour..
iv. The contractors should verify age of workers through National identification card

v. Collaborate and network with District labor office in implementation of Labor Management plan and in response to child labor incidents.

vi.

g) iv. Increase in other labour related risks such as labour disputes and employment condition (i.e. paying workers below minimum wage) and influx of people to the sites looking for employment.

Mitigation measures

i. Sensitize workers about their labour rights.
ii. Have in place a worker's grievance redress committee at each site or for each contractor as the case may be
iii. Presence of grievance boxes at each site
iv. Paying workers above minimum wage.
v. Employ people from within the area.
vi. Provide suitable working conditions ie. Safe drinking water and sanitary facilities
vii. Ensure all workers have duly signed contracts

h) Increased dust emissions

Construction works produce dust because of material and vehicle movements, excavation works, land clearing and other activities.

Mitigation measures

i. Control vehicle speed to reduce generation of dust;
ii. Install speed limit signs and humps in strategic areas, and
iii. Sprinkle water to earth roads to suppress dust.

i) Increased risk to community health and safety

The construction works will involve the movement of vehicles carrying various construction materials, this will increase traffic in the project area that may lead to high probability of accidents occurring.

Mitigation measures:

i. Introduce speed limit to construction vehicles;
ii. Develop and enforce use of Traffic Management Plan (refer to the generic Traffic Management Plan (TMP) in Annex 7 which will guide preparation of specific TMP by contractor)); and
iii. Barricade and provide signage around the construction site.

j) Increased Occupational Safety and Health Risks

Workers involved in construction works will be exposed to various occupational risks as the project activities will bring about hazards such as machinery and equipment.

Mitigation measures

i. Develop and enforce the use/ implementation of Occupation Health and Safety Plan (refer to generic Occupational Health and Safety Plan in Annex 8 and OHS measures outlined in Section 3 of Labour Management Plan contained in Annex 5 which will be shared with the contractor to use when developing specific OHS plan that will suit the nature, scope and delivery method of the PSF Project. The contractor will also be shared the environmental rules contained in Annex 3 of the project`s ESMF[1])
ii. Training of workers in all relevant risks including lifting and materials handling techniques in construction and decommissioning projects, including the placement of weight limits above which mechanical assists or two-person lifts are necessary
iii. Implementing good house-keeping practices, such as the sorting and placing loose construction materials or demolition debris in established areas away from foot paths
iv. Training and use of temporary fall prevention devices such as rails or other barriers able to support a weight of 200 pounds (91kgs) or fall arrest systems such full body harnesses and energy absorbing lanyards able to support 5000 pounds (2268kg), when working at heights equal or greater than two meters or at any height if the risk includes falling into operating machinery, into water or other liquid, into hazardous substances, or through an opening in a work surface
v.
vi. Provide workers with PPE and enforce its use;
vii. Put warning signs (written in English and local languages) at strategic sites; and
viii. Ensure availability of a fully stocked First-Aid Kit.

k) Increased risk of cases of SEA, sexual harassment and Gender Based Violence

Construction workers will have extra disposable income that may lead to Gender Based Violence/SEA/SH.

Mitigation measures:

i. Develop and implement code of conduct for workers that integrates GBV/SEA/SH and should be part of contract and signed by all members and should include consequences for committing GBV/ SEA and SHDevelop and implement GBV and SEA plan;
ii. Encourage employees to report any GBV, SEA and Sexual Harassment in the project area.
iii. Employ over 80% of unskilled labour force from surrounding communities; and
iv. Training of workers through on board training and toolbox talk on GBV/SEA/SH and reporting.

[1]https://www.bwb.mw/Downloads/Environmental_and_Social_Management%20Framework_ESMF_Malawi_Water_and_Sanitation_Project_1_P178954.pdf

v. Train GRCs in issues of GBV/SEA and SH and reporting
vi. Implement Grievance Redress Mechanism (GRM) contained in Annex 9 and ensure that the GRM is GBV/SEA/SH is responsive to both workers and the communities
vii. Ensure GRM is functional at all times.
viii. Community sensitization on GBV/SEA/SH
ix. Collaborate and network with District Social Welfare, District Gender Office and NGOs during implementation of GBV Action plan.
x. Display of IEC material at all the sites related to GBV/SEA/SH
xi.

l) Increased risk of communicable diseases

Interactions between workers and the communities and even amongst themselves can increase the likelihood of spreading HIV and AIDS and other communicable disease such as Cholera, typhoid, dysentery, .

Mitigation measures:

i. Conduct HIV and AIDS sensitization and awareness meetings and campaigns;
ii. Use HIV and AIDS Information, Education and Communication materials on site;
iii. Distribution of condoms to workers.

Demobilization phase

a) Loss of employment

At the end of construction works, temporary employment of workers will have to be terminated and this will result in loss of jobs.

Mitigation measures

i. Give adequate notice to workers on the duration of the construction works; and
ii. Provide terminal benefits to workers.

b) Increased generation of waste

At the end of construction and rehabilitation works some of the temporary structures will be demolished as such there will be an increase in solid wastes such as rubble.

Mitigation measures

i. Disposal of waste at designated site; and
ii. Use rubble to rehabilitate access roads and degraded areas in the project area.

Operation and maintenance phase

a) Increased risk of vandalism

There is potential risk of vandalism of PSFs by surrounding communities.

Mitigation measures

i. Sensitise community members against vandalism; and
ii. Develop bylaws to curb vandalism of PSF.
iii. Put security guards where possible.
iv. Installation of protectors in entrance points (doors, windows, etc)

b) Increased generation of solid waste

Operation and maintenance phase activities will generate waste comprising mainly food waste, plastic, and wastepaper. Waste requiring treatment or disposal could include organic waste, domestic wastes that contain chemicals or other solid wastes which cannot be reused.

Mitigation measures:

i. Provide bins for disposal of waste;
ii. Train the user fee collectors on solid waste management; and
iii. Proper disposal of waste in consultation with Blantyre City Council.

c) Increased risk of spread of communicable diseases such Cholera, typhoid, STIs including HIV and AIDS

It is anticipated that the operation of the PSFs will increase interaction of people in the area which could result in sexual encounters that can increase the likelihood of spreading HIV and AIDS.

Mitigation measures:

i. Develop and implement an HIV and AIDS policy and a prevention, treatment, care and support program;
ii. Sensitisations on HIV and AIDS prevention;
iii. Free distribution of condoms.
iv. Distribution of Information, Education and Communication (IEC) materials on STIs including HIV and AIDS.

5.2.2.1. Site specific risks/ impacts and their mitigation measures

As indicated in Section 5.1.1 some sites have specific risks/ impacts because of their geographical position/ locations, being at or close to a sensitive receptor such a river or affecting existing structures/ business spaces thereby disrupting livelihood. Table 9 highlights the sites, risks and their mitigation measures.

Table 9: Site specific risks/ impact and mitigation measures

#	Name of site	Risk	Mitigation

1	Makhetha, South Lunzu and Mbayani Health Centre	Steep terrain	Plant grasses on steep terrain Build terraces and plant grasses where the terrain is very steep
2	Bangwe Market, Limbe and Bangwe Health Centres	Rubbles from demolition/ demolition waste	Filling road potholes Use the rubbles as hardcore for substructure
3	Limbe Flea Market and Mbayani Market	Siltation and sedimentation of nearby stream/ rivers	Keep excavated soil away from water courses
4	Limbe Produce Market, Limbe Flea Market and Bangwe Market	Disruption of livelihood	Preparation of a mini RAP in line with RPF to manage the 28 project affected persons Compensate and relocate the 28 PAP in line with RPF
5	Makhetha Health Centre	Disruption of electricity services as ESCOM relocates a pole from the health centre	Work together with ESCOM to notify affected people in advance
6	Bangwe Market	Disturbance of proper solid waste disposal due to relocation of waste skip bin	-Put a sign post to indicate the new location of the bin -Sensitize the users of the waste skip bin about the new location -Introduce street bins -Ensure relocation is not very far from waste generation sources

CHAPTER 6: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN AND MONITORING PLAN

6.1.Environmental and Social Management and Monitoring Plan

The ESMP serves as a guide for addressing and managing environmental and social impacts throughout the project's lifecycle. It lays out practical measures to mitigate identified impacts and specifies the monitoring activities necessary. Covering environmental impacts, mitigation strategies, monitoring plans, and institutional measures, the ESMP aims to prevent, minimize, or eliminate adverse effects during project implementation and operation. The collaboration of various stakeholders is crucial for the success of the ESMP, as they play a key role in implementing the outlined measures. As a dynamic document, the ESMP can be updated as needed during project implementation to ensure the proposed measures remain both feasible and effective.

Table 10. offers a clear and organized presentation of the proposed environmental management plan. It establishes a transparent connection between predicted negative impacts and the corresponding mitigation measures. Simultaneously, it illustrates the correlation between recommended mitigation actions, the allocated budget for these activities, and the stakeholders responsible for their implementation. Furthermore, the plan outlines the recommended timeline for executing these mitigation measures throughout the project cycle.

Table 10: Environmental and Social Management Plan for construction of PSFs

No.	Impact	Enhancement/ Mitigation Measure	Output indicators	target	Time frame	Responsibility for implementation of Enhancement/ Mitigation Measures	I
Positive Impacts							
Planning and design phase							
1	Creation of temporary employment opportunities	Maximise employment of professionals registered with relevant Malawian institutions and authorities.	Percentage of Malawians employed	100	Planning & design phase	PIU BCC	C
		Give equal employment opportunities to both men and women	Percentage of women employed	40			
		Provision of terms and conditions which are in line with the employment Act of 2000	Records of terms and conditions	All			
Construction Phase							
1	Creation of temporary employment	Prioritize the employment of people (including the youth)	Percentage of youth and women in workforce	60	During Construction Phase	Contractor	I

		from respective project areas				
		Give equal employment to both men and women;				
		Ensure salaries and wages to be paid to the local employees are above the minimum stipulated Government wages.	Percentage of workers paid above the minimum wage	100		
2	Creation of temporary market for goods and services	Promote the procurement of construction materials and supplies from approved small-scale businessmen and entrepreneurs within the projects area, while not compromising the quality	Percentage of construction materials purchased from local suppliers	80	During Construction Phase	Contractor
		Where practically possible ensure that locally produced materials are given priority over imported materials	Procurement records	80		

		Purchase construction materials and supplies at competitive prices to ensure local businesses and entrepreneurs are making profits					
3	Skills transfer to local communities	Maximise employment of local people particularly for the unskilled labour force;	Percentage of locals in workforce	NA	During Construction Phase	Contractor	1
		Make deliberate effort to pair skilled and unskilled workers during various construction assignments; and	Percentage of unskilled workers being trained				
		Formalise on-the-job trainings for local unskilled labour that also includes learning targets and performance monitoring					
Operation and Maintenance Phase							
1	Access to improved sanitation facilities by the communities	Proper maintenance of the sanitation facilities;	Records of maintenance	NA	During operation and Maintenance Phase	Contractor BCC	
		Conduct regular inspection of the facilities detect	Inspection records	4 per annum			

		overflows of septic tanks and repair them				
		Employ adequate staff and ensure that they provide appropriate work inputs (cleaning) through proper work schedules	Sensitisation records	4 per annum		
		Sensitize the toilet users on hygienic use of the facilities through IEC materials	Number of employees	5 per site		
2	Improved sanitation, hygiene and health	Continuous monitoring and evaluation to identify potential health risk, such as malfunctioning toilets or inadequate waste management.	monitoring records	4 per annum	During operation and Maintenance Phase	Contractor BCC
		Promote general sanitation practices amongst communities in the project area	Hygienic State of the facilities	NA		
		Conduct trainings aimed at building the capacity of PSF committee and health centre management committees	Training records	4 per annum		
		Educate the public on important health issues,	Monitoring records	4 per annum		

		information and awareness campaigns can be carried out to promote proper hygiene practices, disease prevention and the importance of using the sanitation facility correctly.					
					During operation and Maintenance Phase	Contractor BCC	
3	Source of BCC revenue	Carrying out regular maintenance of the sanitation facilities	Frequency of maintenance	NA	During operation and Maintenance Phase	BCC,	
		Conduct regular inspection of the facilities detect overflows of septic tanks and repair them.	Inspection records	4 per annum			
4	Reduced incidences of water borne diseases such as Cholera	Carrying out regular maintenance of the sanitation facilities	Frequency of maintenance	NA	During operation and Maintenance Phase	BCC	3
		Educate the public on important health issues, information and awareness campaigns can be carried out to	Sensitisation records	4 per annum			

		promote proper hygiene practices, disease prevention and the importance of using the sanitation facility correctly					
5	Improved standards of living of people running the PSFs	Employ Contractors from surrounding communities including and vulnerable groups	Number of sales agents employed	NA	During operation and Maintenance Phase		
		Carrying out regular maintenance of the of the sanitation facilities	Maintenance records	NA			
		Conduct regular inspection of the facilities detect overflows of septic tanks and repair them.	Inspection records	4 per annum	During operation and Maintenance Phase	BCC	
Construction Phase							
1	Loss of vegetation cover due to land clearing	Limit vegetation clearance to demarcated areas only	Number of planted in all sites	100	During Construction Phase	Contractor	1
		Plant some trees to assist in holding the soil intact					
2	Increased risk of soil erosion and sedimentation	Install sediment traps on natural drainage paths at construction site;	Presence of sediment traps	3 sites with slopes	During Construction Phase	Contractor	

		Restrict land clearing only to the proposed site for construction activities	Area of land cleared	2457.01m^2	During Construction Phase	Contractor	
		Plant vegetative cover (grasses and trees) in all sites after completion of construction works	Presence of grass and trees in all sites after construction works				
		Compact and spray water on loose soil in all disturbed areas during construction	Area compacted	NA			
		Stockpile excavated soil away from water courses	Distance from water courses	NA			
3	Increased Generation of solid waste	Provide adequate on-site waste receptacles such as bins for waste storage	Number of bins provided on each site	2 per site	Construction Phase	Contractor	
		Waste such as empty cement bags will be recycled/ reused for making mats					
		Dispose waste at Designated disposal site	Disposal records	NA			

		Use some construction rubble to rehabilitate degraded areas	State of the degraded area	NA	Construction Phase	Contractor
3b	Hazardous waste such as oil leak, fuel spill from gen set or fuelling vehicles	Regularly services project vehicles and static machines to avoid leakages. Have spill kits to take care of spills	Presence of service records Availability of spill kits		Construction phase	Contractor
4	Increased generation of sanitary waste	Provide mobile toilets for the workers.	Number of mobile toilets	1 per site	Construction Phase	Contractor
		Periodic emptying and cleaning of mobile toilets	State of the toilets	NA		
		Provide appropriate bins for other sanitary wastes	Availability of bin	1 per site		
		Train workers on proper use of the toilets	State of the toilets	NA		
5	Increased noise generation	Use of modern machines fitted with noise silencers or use of less noisy machine.	Number of noise complaints	0	Construction Phase	Contractor
		Use well serviced machinery and equipment.				

6	Increased incidences of child labour	Sensitize local leaders, children and the community at large on prohibition of any forms of child labour at the project site	20 sensitization meetings on child labour	2 per sites	Construction Phase	Contractor	9
		Display posters at the project site that warn and inform community members against child labour	Number of posters displayed	4 posters per site			
		Put in place proper procedures for reporting and addressing child labour	Records of incident on child labour	0 incidents on child labour			
6b	Increase in other labour related risks such as labour disputes and employment condition (i.e. paying workers below minimum wage) and influx of people to the sites looking for employment.	Sensitize workers about their labour rights. Have in place a worker's grievance redress committee Paying workers above minimum wage. Employ people from within the area. Provision of grievance boxes at each site	Sensitization on labour rights presence of Workers GRC Number of people employed from within the area Percentage of of workers using Workers Grievance Mechanism	100	Construction phase	Contractor	

		Provide suitable working conditions ie. safe drinking water and sanitary facilities Ensure all workers have duly signed contracts					
7							
8	Increased dust emissions	Sprinkle water to earth roads to suppress dust	Frequency of water application per day	3	During Construction Phase	Contractor	
		Control vehicle speed to reduce generation of dust through speed humps and installation of vehicle tracker, drivers sign Code of Conduct to comply with speed limit	Availability of speed signage, per site	At least 4 per site			
		Install speed limit humps in strategic areas	Availability of speed limit humps in the access roads	At least 2 humps			
9	Increased risk to community health and safety	Introduce speed limit to construction vehicles. Barricade the construction site	Availability of speed limits signage per site	4	During Construction Phase	Contractor	

		Hoarding of construction sites to prevent access by community. Awareness of community to avoid access to construction sites	Presence of the hoarding fence	All sites			
		Enforce the use of Traffic Management Plan	Traffic management plan available	1			
10	Increased Occupational Safety and Health Risks	Develop and enforce use of OHS annexed to the ESMP -Train workers in all relevant risks including lifting and materials handling techniques -Implementing good house-keeping practices -Provide and train workers in use of temporary fall prevention devices (rails) and body harnesses -Provide workers with PPE and enforce its use; -Put warning signs (written in English and local languages) at strategic sites;	-Raining records Presence of body harness for workers working at height -Presence and use of PPE by all workers	All sites All workers working at height All workers	During Construction Phase	Contractor	9

11	Increased risk of cases of sexual harassment and Gender Based Violence	Codes of conduct that integrates issues of GBV/SEA/SH should be made part of the contract both in English and vernacular language and be signed	-Availability of code of conduct -Percentage of workers oriented in and signed for CoC	100%	During Construction Phase	Contractor	6
		Contractual clause should be presented that explains the consequences of any of sexual harassment, and sexual exploitation and abuse cases	Availability of the clause	100%			
				100%			
		Develop GBV and SEA Prevention Plan;	GBV and SEA prevention plan available	1			
		Conduct on-board training/ sensitization and public awareness meetings on GBV/ SEA/SH	Number of people trained Number of meetings conducted	All contract workers Surrounding community			
		Prioritize employment of unskilled and skill labour force from surrounding communities;	Percentage of local workers employed from communities	At least 80%			
12	Increased risk of spread of communicable diseases	Conduct HIV and AIDS awareness meetings;	Number of awareness meeting conducted	2 per site	During Construction Phase	Contractor	4

		Distribution of condoms to workers	Number of condoms distributed	1000 per month			
		Orient workers on Cholera prevention through handwashing after latrine use, before eating any food, etc	Number of workers trained	All workers			
		Purchase and place water buckets and soap for handwashing in strategic position for workers use	Number buckets and soap bottles/ tablets available	All sites			
		Use HIV and AIDS Information, Education and Communication materials on site;	Number of IEC materials distributed	2 per site			
Demobilization phase							
1	Loss of employment	Give adequate notice to workers on the duration of the construction works	Percentage of workers warned/ notified	100	During demobilisation Phase	Contractor	
		Provide terminal benefits to workers	Percentage of workers paid terminal benefits	100			

2	Increased generation of waste	Disposal of waste at designated and approved site	Area free of rubble	NA	During demobilisation Phase	Contractor	2
		Use rubble to rehabilitate access and surrounding roads					
Operation phase							
1	Increased risk of vandalism	Sensitize community members against vandalism	Number of sensitization meetings per site	4 per annum	During operation Phase	BCC	1
		Develop bylaws to curb vandalism of PSF	Bylaws available	1			
2	Increased generation of solid waste	Provide bins for disposal of waste	Number of bins per site	1	During operation Phase	BCC	
		Train the user fee collectors on solid waste management; a	Percentage of user fee collectors trained	100			
		Contractor on solid waste management	Number of contractors per site	1			
3	Increased risk of spread of communicable diseases	Conduct HIV and AIDS awareness meetings;	Number of awareness meeting conducted	4 per annum	During Construction Phase	BCC	
		Distribution of condoms to workers	Number of condoms distributed per facility per month	500			
		Use HIV and AIDS Information, Education and Communication materials on site;	Number of IEC materials pasted on each facility	4	During Construction Phase	BCC	

		Sensitize staff and user fee collectors on HIV and AIDS prevention	Percentage of user collectors sensitized	100			
Total							

6.1.1. Incidents management

All incidents/ accidents must be recorded and reported. An accident is an event that has unintentionally happened, that results in damage, injury or harm. An incident is an event that has unintentionally happed, but this may not result in damage, harm or injury. Therefore, every accident can be an incident. However not all incidents can be termed as an accident.

When an incident or accident occurs, it must be reported within 24 hours using the reporting forms contained in Annex 10a and 10b. Immediately the accident/incident investigation must start to identify the cause and measures that when implemented will prevent the incident/accident from recurring.

6.2.Institutional roles and responsibilities

Implementation Arrangements

The successful implementation of this ESMP lies on the concerted efforts from various key stakeholders and these include MEPA, Blantyre Water Board (BWB), MWSP- PIU, Blantyre District Council, Blantyre City Council (BWB), Contractor and Private operators of the public sanitation facilities in markets and Health Cantre Management committees who will oversee operation and maintenance of the facilities in health centres.

BWB and BCC with MWSP-PIU will be responsible for coordinating, planning, implementing and monitoring environmental and social issues. In addition, the PIU will ensure that financial resources for capacity building and implementation of the ESMP are allocated. Further, BCC will, through the MWSP-1s Environmental and Social Safeguards team oversee the following:

- Disseminating the content and requirements of the ESMP to the contractors and all key stakeholders and assisting with the implementation of the ESMP;
- Monitoring and evaluating the Contractor's implementation of the ESMP;
- Monitoring key indicators of the Project's environmental impacts and performance;
- Reviewing plans, designs and strategies in relation to environmental, social and health considerations;
- Maintaining appropriate management systems and documentation;
- Preparing and submitting environmental and social documentation to government agencies and lenders/ donors as required;
- Following-up non-conformance situations to ensure they are successfully addressed;
- Taking corrective action or stopping works in the event of breaches of ESMP conditions that have the potential for serious impacts on local communities or the project's reputation;
- Adapting management policies and strategies through lessons learnt.
- Disseminating the content and requirements of the ESMP to the contractors and all key stakeholders and assisting with the implementation of the ESMP;

- Taking corrective action or stopping works in the event of breaches of ESMP conditions that have the potential for serious impacts on local communities or the project's reputation;

Supervising Engineer will ensure the following: 1) timeline management; 2) budget management; 3) contractor management; 4) quality control; 5) regulatory compliance by contractor; 6) design reviews; 7) risk management; 8) safety oversight; 9) documentation and reporting and final inspection and handover

Contractors will develop Contractors ESMP (CESMP) and associated auxiliary management plans and ensure their implementation and compliance. In addition, the contractor will ensure that all workers have signed *'Code of Conduct'* and are compliant to it. The contractor will be responsible for the orientation of the facilities caretakers in operation and maintenance flowing completion of the construction works. The contractor will also be responsible for reporting all incidents/accidents using reporting forms contained in Annex 10a and 10b and, prepare and submit a monthly report using the reporting template contained in Annex 11

The contractor will also be responsible for the following:

- Adherence to local labour regulations
- Preparation and implementation of the Waste Management Plan;
- Implementation of the Occupational Health and Safety Plan securing workplace registration certificate;
- Ensuring that all construction personnel and subcontractors are informed of the intent of the ESMP and are made aware of the required measures for environmental and social compliance and performance;
- Developing and implementing the Traffic Management Plan, with special emphasis on high trafficked areas.
- Complying with all mitigation measure requirements as provided in this ESMP and other safeguards instruments such as ESMF
- Ensuring that contracts and construction plans for the project meet all design requirements identified in the mitigation measures; and
- Engaging a Social and Gender officer as well as an Environmental and Safety Health officer to oversee compliance with mitigation measures on site.

Blantyre District Council will work with PIU to monitor the implementation of the CESMP and auxiliary plans. Therefore, Blantyre District Council's Environmental Officer will work with the MWSP-PIU Safeguards Team in monitoring the implementation of the ESMP.

Private toilet operators and Health Centre management Team will be responsible for carrying out regular maintenance of the public sanitation facilities in accordance with the operational and maintenance (O & M) manual. In addition, they will:

- Participate in inspection of the PSFs alongside with BWB and BCC
- Participate in sensitizing toilet users in the proper and hygienic use of the facility

Malawi Environmental Protection Authority (MEPA) will conduct inspections and monitor compliance with the implementation of the ESMP during the construction and operation phase of the project.

Capacity Building

The successful implementation of the environmental and social safeguards depends on the capacity of the implementing stakeholders. The following training requirements have been planned to facilitate capacity building of the implementing stakeholders in order for them to effectively execute the roles and functions they have been assigned under this project. Table 11 provides areas that require training and target audience including time frame and responsible institution to deliver.

Table 11: Required training on Environmental and Social Safeguards

#	**Type of Training**	**Targeted Stakeholder**	**Responsible Institution**	**Time Frame**
1	ESMP and Auxiliary Management Plans	Contractor; Blantyre City Council	PIU/ BWB & BCC	Planning, Construction Phase
2	Occupational Safety and Health	Contractor; Blantyre City Council	PIU/ BWB & BCC	Construction; Operation and Maintenance Phases
3	Grievance Redress Mechanism (Annex 9)	Contractor; Blantyre City Council	PIU/ BWB & BCC	Construction; Operation and Maintenance Phases
4	Operational and Maintenance of the PSF		Contractor PIU/ BWB & BCC	Construction; Operation and Maintenance Phases
5	Code of Conduct, labour rights and awareness on STI including HIV and AIDS	Contractor	PIU/ BWB & BCC	Construction; Operation and Maintenance Phases
7	GBV, SEA, SH and Child Labour	Contractor, Blantyre City Council	PIU/ BWB & BCC	Construction; Operation and Maintenance Phases

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1.Conclusion

The ESMP has identified the measures to manage the identified impacts that will arise during the project implementation in various identified cholera prone areas in Blantyre City. The ESMP is aimed at ensuring proper management of the environment and socio-economic components throughout the project cycle.

As stated in the ESMP, negative impacts associated with the proposed project activities can be suitably managed and mitigated through the implementation of the recommended measures. It is recommended that the developer will be responsible for monitoring activities that will be carried out during project preparation, construction, operation and maintenance and demobilization phases to ensure that the mitigation and rehabilitation measures described in this report are adhered to.

7.2.Recommendations

The Environmental and Social Management Plan (ESMP) in this report describes the environmental and social impacts of the project and outlines corresponding management measures that should be implemented to mitigate the potential adverse environmental impacts that have been identified. The project should therefore comply with all local laws and regulations, which seek to ensure that the project is implemented in an environmentally sound manner while safeguarding the safety and health of the workers and the surrounding community. In this regard, it is recommended that:

- The project should adopt the recommendations advanced in this report;
- The Project must ensure that safety and health issues are given the necessary attention;
- The developer should implement the recommendations and mitigation measures advanced in the Environmental Management and Monitoring Plans and
- The developer is required to obtain a permit from MEPA

REFERENCES

Government of Malawi (1948), **Public Health Act,** Ministry of Health;

Government of Malawi (1967), **Registered Land Act,** Ministry of Lands, Housing and Urban Development;

Government of Malawi (1970), **Lands Acquisition Act,** Ministry of Lands, Housing and Urban Development;

Government of Malawi (1996), **Environment Management Act,** Ministry of Natural Resources, Energy and Mining;

Government of Malawi (1997), **Occupational Safety, Health, and Welfare Act,** Ministry of Labour, Youth, Sports, and Manpower Development;

Government of Malawi (1998) **National Decentralization Policy,** Ministry of Local Government and Rural Development;

Government of Malawi (1998), **Local Government Act,** Ministry of Local Government, Lilongwe;

Government of Malawi (2002), **Malawi National Land Policy**, Ministry of Lands, Housing and Urban Development;

Government of Malawi (2004), **National Environment Policy**, Ministry of Natural Resources, Energy and Mining;

Government of Malawi (2007), **Forestry Act,** Ministry of Natural Resources, Energy and Mining;

Government of Malawi (2012), **Gender Equality Act,** Ministry of Gender, Children, Disability and Social Welfare;

Government of Malawi (2013) Water **Resources Act,** Ministry of Water Development;

Government of Malawi (2016), **Customary Lands Act,** Ministry of Lands, Housing and Urban Development;

Government of Malawi (2016), **Land Act,** Ministry of Lands, Housing and Urban Development;

Government of Malawi (2016), **Physical Planning Act,** Ministry of Lands, Housing and Urban Development;

Government of Malawi (2016), **The Constitution of the Republic of Malawi,** Office of President and Cabinet;

Government of Malawi (2017), **Forestry (Amendment) Act,** Ministry of Natural Resources, Energy and Mining;

Government of Malawi (2017), **Land Survey Act,** Ministry of Lands, Housing and Urban Development;

Government of Malawi (2017), **Lands Acquisition (Amendment) Act,** Ministry of Lands, Housing and Urban Development;

Government of Malawi (2017), **Local Government (Amendment) Act,** Ministry of Local Government, Lilongwe;

Government of Malawi (2017), **Public Roads (Amendment) Act,** Ministry of Lands, Housing and Urban Development;

Government of Malawi (2017), **Registered Land (Amendment) Act,** Ministry of Lands, Housing and Urban Development;
Government of Malawi (2020) **Malawi 2063**, National Planning Commission, Capital City Lilongwe.
National Statistical Office, 2008. Population and Household Survey

World Bank (2017) Environmental and Social Framework;
Climatic Data ORG, Climatic Data for Cities Worldwide, https://en.climatic-data.org

ANNEXES

Annex 1: Terms of reference for the ESMP

TERMS OF REFERENCE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR THE CONSTRUCTION OF PUBLIC SANITATION FACILITIES AT 5 MARKETS AND 5 CLINICS WITHIN BLANTYRE CITY

1. Provide a brief description of the nature and location of the proposed project with respect to the name of the proponent, postal address, aim and objectives of the project, the spatial location of the site with aid of appropriate topographical maps of the area (at least at a scale 1:50,000); the estimated cost of the project, the size of land for the project sites, expected inputs and outputs, the number of people to work on the project during construction and operation of the facility (provide a breakdown of males and females).

2. Provide a site-specific visible map of the area (scale 1: 50,000) showing the proposed site and (1:10,000) showing existing establishments in the area and surrounding areas including natural endowments like rivers and streams. A site plan for the project should be provided. All maps should be in colour to portray the themes clearly and must be printed on A3 paper.

3. Provide a brief description of the existing biophysical characteristics and the socio-economic environmental status of the proposed area.

4. Briefly review the legal framework pertaining to the proposed project and indicate their impacts on the project. Reference should at least be made to Environment Management Act, New Land Acts, Gender Equality Act, Gender Policy, Water Resources Act, National Water Policy, Malawi National Land Policy, Public Health Act, Occupational Safety, Health and Welfare Act, Mines and Minerals Act, Public Roads Act and other policies and pieces of legislations.

5. Briefly describe main activities to be undertaken for the project. In the description include description on project activities in all the phases of the project, the type of machinery to be used, land acquisition and ownership, nature and estimated quantity of wastes (both solid and liquid) that will be generated, circularity to waste management i.e. state the means of reducing waste to a minimum by reusing and recycling of waste, facilities for appropriate waste disposal that cannot be recycle or reused, including estimated costs for the activities.

6. Propose an Environmental and Social Management Plan (ESMP) for the project. The ESMP should be in tabular form and should specify the predicted impacts, mitigation measures/enhancement measures. Also indicate the budget for the recommended

mitigation measures, specifications of who will be responsible for these measures and the schedule when these measures will take place.

7. Propose an Environmental and Social Management and Monitoring Plan by which all mitigation measures recommended in Environmental and Social Management Plan will be monitored. The Environmental and Social Monitoring Plan should include the activities, frequency of monitoring, the key monitoring indicators, resources required and the authorities responsible for monitoring the exercises.

8. Undertake stakeholder consultation to ensure key interested and affected stakeholders are involved in coming up with the ESMP including Government Departments. Incorporate their views in the report and indicate a record of consultations in the appendices as part of the report.

9. Submit 5 hard copies and a soft copy of the ESMP to the Acting Director General of Malawi Environment Protection Authority. Submit a copy of the ESMP to the District to Blantyre District council

10. Provide the details of the consultant in the appendices part of the report

Annex 2a: Completed E & S Screening form for Bangwe Market

ANNEX 4: ENVIRONMENTAL AND SOCIAL SCREENING FORM (ESSF)

Environmental and Social Screening Form for the Screening of Potential Environmental and Social Impacts of MWSP-1 Activities

1. Introduction

This Environmental and Social Screening Form (ESSF) has been designed to assist in the evaluation of planned construction, rehabilitation and expansion activities under MWSP-1. The form will assist in the identification of any environmental and social impacts and their mitigation measures. It will also assist in the determination of requirements for further environmental and social work as needed.

The form helps to determine the characteristics of the prevailing local bio-physical and social environment with the aim of assessing the potential impacts of the construction and rehabilitation activities on the environment by the activity.

The ESSF will also assist in identifying potential socio-economic impacts that will require mitigation measures and/or resettlement and compensation.

2. Guidelines for Screening

The evaluator should undertake the assignment after:

1. Gaining adequate knowledge of baseline information of the area.
2. Gaining knowledge of proposed project activities for the area.
3. Having been briefed / trained in environmental and social screening

The form is to be completed by the PIU Environmental and Social Specialists.

PART A: GENERAL INFORMATION

Sub project Name	MALAWI WATER SANITATION PROJECT - 1
Estimated Cost (MK)	MK 75,000,000
Sub project Site	BANGWE MARKET
Sub project Objectives	PROVIDE SANITATION SERVICES TO MARKET WITHIN BLANTYRE CITY
Proposed Main Activities:	CONSTRUCT OF NEW SANITATION FACILITY

Name of Evaluator/s	1. CHIPO MATONI (EH&S) 2. PAMECA BORIS (S&G) 3. INNOCENT NDUWA (~~EH&S~~)(C. ENGINEER) 4. WILLIAM CHINDINGA (EH&S) 5. JASCO NDOVI (CD 20)
Date of Field Appraisal	16 JUNE 2023

PART B: BRIEF DESCRIPTION OF THE PROPOSED ACTIVITIES

Provide information on the type and scale of the construction/rehabilitation activity (e.g. area, land required and approximate size of structures)

DIMENSIONS:

11.35m x 10.65m x 10.31m x 11.52m

Provide information on the construction activities including support/ancillary structures and activities required to build them, e.g. need to quarry or excavate borrow materials, water source, access roads, etc.

- 2no. Lime storage tank
- Biogas harvesting units
- Septic tank
- ABR with infiltration trench
- Main building
- Rainwater harvest tank

Describe how the construction/rehabilitation activities will be carried out. Include description of support/activities and resources required for the construction/rehabilitation.

- The land will require landscape
- Cement blocks will be used.

PART C: ENVIRONMENTAL AND SOCIAL BASELINE INFORMATION OF THE SUB PROJECT SITE BRIEF DESCRIPTION

Category of Baseline Information	Brief Description
GEOGRAPHICAL LOCATION * Name of the Area (District, T/A, Village) * Proposed location of the sub project (Include a site map of at least 1:10,000 scale/or coordinates from GPS)	- Blantyre Machinisiri - Bangwe - latitude : -15.5344 - longitude: 35.0875
LAND RESOURCES * Topography and Geology of the area * Soils of the area * Main land uses and economic activities	- Flat - loam sandy soil - waste collection
WATER RESOURCES * Surface water resources (e.g. rivers, lakes, etc.) quantity and quality * Ground water resources quantity and quality	- N/O - N/O
BIOLOGICAL RESOURCES * Flora (include threatened/endangered/endemic species) * Fauna (include threatened/endangered/endemic species) * Sensitive habitats including protected areas e.g. nature reserves and forest reserves	- N/O - N/O
CLIMATE * Temperature * Rainfall	2022 - 2023 - 15°C - 27°C - 1483m per Annum
SOCIAL * Number of people potentially impacted * Type and magnitude of impacts (i.e. impact on land, structures, crops, standard of living) * Socio-economic overview of persons impacted	- ~ 500 - medium - middle to low income status

PART D: SCREENING CRITERIA FOR IMPACTS DURING SUB-PROJECT IMPLEMENTATION, AREAS OF IMPACTS AND IMPACTS EVALUATION AND POTENTIAL MITIGATION MEASURES

Screening Criteria for Social and Environmental Impacts

Item	Areas of Impacts	Impacts Evaluation							Potential Mitigation Measures
	Is this subproject site/activity within and/or will it affect the following environmentally sensitive areas?		Extent or coverage (on site, within 3-5km or beyond 5km)			Significance (Low, Medium, High)			
		No Yes	On Site	Within 3-5km	Beyond 5 km	Low	Medium	High	
1.0	Screening Criteria for Social and Environmental Impacts								
1.1	National parks or game reserve	No							
1.2	Wetlands	No							
1.3	Productive traditional agricultural /grazing lands	No							
1.4	Areas with rare, endangered or other interest flora or fauna	No							
1.5	Areas with outstanding scenery/tourist site	No							
1.6	Within steep slopes	No							

	Forested or near forest or will impact forest	No				
	Along lakes, beach or river	No				
	Near industrial activities	No				
0	Near human settlements	No				
1	Near cultural heritage sites	No				
2	Within prime surface run off	No				
3	Will the subproject discharge to or otherwise impact water bodies?	No				
	Screening Criteria for Impacts during Implementation and Operation					
	Will the implementation and operation of the subproject within the selected site generate the following externalities/ costs/impacts?					
	Deforestation	NO				
	Soil erosion and siltation	Yes	✓		✓	- AVOID UNNECESSARY SOIL DISTURBANCE - Limit vegetation clearing to the site only

Siltation of watercourses, dams	No							
Environmental degradation arising from mining of construction materials		Yes			✓	✓		- Reclamation of borrow Pits
Damage to wildlife species and habitat	No							
Increased exposure of communities to agrochemical pollutants	No							
Hazardous wastes, (pipes, etc.), PCB's, pollution from unspent PV batteries		Yes	✓			✓		- PROPER CONTAINMENT OF WASTE - PROVISION OF PPE -
Nuisance - smell or noise		Yes	✓	✓			✓	- PROVISION OF PPE - Ensure construction work are done dur the day
Reduced water quality	No							
Increase in costs of water treatment	No							

2.11	Soil contamination	yes	✓	✓			✓		– Control oil spillage – provide interceptor to avoid spillage – dispose polluted soil is designated areas
2.12	Loss of soil fertility	No							
2.13	Salinization or alkalinisation of soils	No							
2.14	Reduced flow and availability of water	No							
2.15	Long term depletion of water resources	No							
2.16	Incidence of flooding	No							
	Will the implementation and operation of the subproject activities within the selected site generate the following socio-economic costs/impacts?									

3.0 Screening Criteria for Social and Economic Impacts

Loss of land/land acquisition for human settlement, farming, grazing	NO								
Loss of assets, property, houses, agricultural produce, etc.		YES	✓				✓		- RELOCATION WITHIN THE MARKET AREA - compensation
Loss of livelihood		YES	✓				✓		- RELOCATION INTO DESIGNATED MARKET SITE - compensation
Require a RAP or ARAP		YES		✓			✓		- RELOCATION TO DESIGNATED MARKET SITE

Loss of cultural sites, graveyards, monuments	No								
Disruption of social fabric		YES	✓			✓			compensation
Interference in marriages for local people by workers		YES		✓	✓	✓			- AWARENESS CAMPAIGN - ENFORCEMENT ON USE OF CODE OF CONDUCT - Establish confidential reporting mechanis for community members
Spread of STIs and HIV and AIDS, due to migrant workers		YES			✓		✓		- AWARENESS CAMPAIGN - PROVISION OF CONDOMS - Distribution of IEC material

3.9	Increased incidence of communicable diseases		YES		✓			✓		- AWARENESS CAMPAIGN - PROVIDE CONDOMS - Provision of IEC material
3.10	Health hazards to workers and communities		YES	✓			✓			- PROVISION OF PPE - Train workers on occupation health and safety measures - provision of clear signage
3.11	Changes in human settlement patterns	NO								
3.12	Conflicts over use of natural resources e.g. water, land, etc.	NO								
3.13	Conflicts on land ownership	NO								
3.14	Disruption of important pathways, roads	NO								
3.15	Increased population influx		YES	✓			✓			- EMPLOY LOCAL LABOUR - CONTROL PEOPLE ON THE SITE
3.16	Loss of cultural identity	NO								
3.17	Loss of income generating capacity		YES	✓			✓			- RELOCATION TO DESIGNATED MARKET SITE - Compensation

4.0	Consultation (comments from beneficiaries and other project affected peoples)	- VENDORS WILLING TO WORK WITH CONTRACTORS - THIS PROJECT WILL HELP SANITATION PROBLEMS - COMPLAINED OF SUBSTANDARD WORK	

PART E: OVERALL EVALUATION OF THE SCREENING PROCESS ON THE SITE AND PROJECT ACTIVITY

The screening aims at categorizing the sub-projects into one of the following environmental and social categories. The Environmental Specialist in charge of the screening will propose the environmental category in consultation with the Social Specialist as necessary. Screening will also help to propose whether a proposed sub program will further require a full-fledged Resettlement Action Plan (RAP), per procedures outlined in the Resettlement Policy Framework.

Category A: A UWSP sub-project would be categorized as A if it would likely result in one or more major adverse environmental impacts. Category A projects require a full ESIA. However, the UWSP is not expected to have any Category A subprojects.

Category B: UWSP Category B subprojects have potential environmental impacts that are less severe than under Category A and can readily be mitigated as follows:

Category B1: For UWSP Category B1 subprojects, no further environmental assessment work is required; however, the subproject must fully apply the relevant, generic mitigation measures specified in the ESMF, including the Environmental Rules for Contractors and Chance Finds Procedures. Examples of UWSP subproject types that are likely to be classified as Category B1 include:

- Installation of new household water connections
- Construction of communal water points(kiosk)
- Installation of new sewerage connections
- Construction of public toilets

Category B2: For UWSP Category B2 subprojects, further environmental assessment work is required, specifically the preparation of a separate Environmental and Social Management Plan with tailored, site-specific environmental mitigation measures (not just the generic ones).

It is possible that for a few UWSP Category B2 subprojects--where in-depth, site specific fact-finding would be needed to ascertain the likely environmental (including social) impacts--a subproject-specific ESIA would also be required. The scope of such an ESIA would be limited to the environmental and related social issues of specific concern, as identified in the screening process. For any Category B2 subprojects with their own ESIA, the ESMP will comprise a portion of the ESIA.

o Examples of UWSP subproject types that are likely to be classified as Category B2 include:

- Replacement/upgrading of existing water and sewer pipelines with larger diameter pipelines
- Construction of water transmission mains
- Construction of solar PVs for Blantyre pumping stations
- Construction of storage reservoirs (tanks)

- Rehabilitation and upgrading of sewage treatment plants
- Construction of solid waste management landfill

Category C: UWSP activities are classified as Category C if they do not involve civil works and if no significant environmental issue has been identified and no specific mitigation measures are required. In such cases, subproject implementation can proceed without reference to additional environmental requirements.

- Examples of UWSP Category C activities include:
- Water loss reduction measures
- City-wide sanitation marketing campaign
- Institutional capacity strengthening activities

The PIU Environmental and Social Specialists will be responsible for assigning the appropriate environmental category to the subprojects consistent with the requirements of ESSF, and based on the criteria provided in this ESMF.
If Resettlement Action Plans (RAPs) are prepared, these would be reviewed and approved by the Commissioner for Lands, consistent with the Resettlement Policy Framework as well as the World Bank, prior to initiating compensation and commencement of project activities

Completion by PIU	
Is This Project Likely To Need An ESIA	YES/NO
List A/B Paragraph Numbers	
Date Exempted	
Date Forwarded To MEPA	
Name & Signature of Environmental and/or Social Specialist/s	

Completion by MEPA	
Date Received from District Assembly:	
Dated Reviewed:	
Date of Submission of Project Brief	
Date of Submission of ESIA Reports	
Date of Approval/Rejection	

NOTES:

- Once the Environmental and Social Screening Form is completed it is analyzed by the Environmental and Social Specialist/s from the PIU who will

Annex 2b: Completed E & S Screening form for Chilimba Health Centre

ANNEX 4: ENVIRONMENTAL AND SOCIAL SCREENING FORM (ESSF)

Environmental and Social Screening Form for the Screening of Potential Environmental and Social Impacts of MWSP-1 Activities

1. Introduction

This Environmental and Social Screening Form (ESSF) has been designed to assist in the evaluation of planned construction, rehabilitation and expansion activities under MWSP-1. The form will assist in the identification of any environmental and social impacts and their mitigation measures. It will also assist in the determination of requirements for further environmental and social work as needed.

The form helps to determine the characteristics of the prevailing local bio-physical and social environment with the aim of assessing the potential impacts of the construction and rehabilitation activities on the environment by the activity.

The ESSF will also assist in identifying potential socio-economic impacts that will require mitigation measures and/or resettlement and compensation.

2. Guidelines for Screening

The evaluator should undertake the assignment after:

1. Gaining adequate knowledge of baseline information of the area.
2. Gaining knowledge of proposed project activities for the area.
3. Having been briefed / trained in environmental and social screening

The form is to be completed by the PIU Environmental and Social Specialists.

PART A: GENERAL INFORMATION

Sub project Name	MALAWI WATER SANITATION PROJECT 1
Estimated Cost (MK)	MK 75,000,000
Sub project Site	CHILIMBA CLINIC
Sub project Objectives	- TO IMPROVE SANITATION SERVICES IN PUBLIC CLINICS WITHIN BLANTYRE CITY
Proposed Main Activities:	- CONSTRUCTION OF A NEW TOILET

Name of Evaluator/s	1. CHIPPO MASOKI (EH&S OFFICER) 2. PAMELA BORIS (S&G OFFICER) 3. INNOCENT NDUNA (CIVIL ENG.) 4. WILLIAM CHIMZIRIGA (EH&S OFFICER) 5. JASCO NDOVI (CDC OFFICER)
Date of Field Appraisal	21/06/2023

PART B: BRIEF DESCRIPTION OF THE PROPOSED ACTIVITIES

Provide information on the type and scale of the construction/rehabilitation activity (e.g. area, land required and approximate size of structures)

AREA AVAILABLE DIMENSIONS:
11.27m x 7.78m x 5.83m x 2.69m x 5.68m x 5.34m

Provide information on the construction activities including support/ancillary structures and activities required to build them, e.g. need to quarry or excavate borrow materials, water source, access roads, etc.

1. 2no urine storage tanks
2. Biogas harvesting units
3. Septic tank
4. ABR with infiltration trench
5. Main building
6. Rainwater harvesting tank

Describe how the construction/rehabilitation activities will be carried out. Include description of support/activities and resources required for the construction/rehabilitation.

- use of cement blocks
- landscaping of the area
- Bare ground area
- Has an open solid waste burning site need to be relocated
- No trees since the place has limited space to plant trees
- Is within the brick constructed perimeter fence

PART C: ENVIRONMENTAL AND SOCIAL BASELINE INFORMATION OF THE SUB PROJECT SITE BRIEF DESCRIPTION

Category of Baseline Information	Brief Description
GEOGRAPHICAL LOCATION * Name of the Area (District, T/A, Village) * Proposed location of the sub project (Include a site map of at least 1:10,000 scale/or coordinates from GPS)	- Blantyre, Machinga - latitude - longitude
LAND RESOURCES * Topography and Geology of the area * Soils of the area * Main land uses and economic activities	- Flat - loam sandy soil - Idle land
WATER RESOURCES * Surface water resources (e.g. rivers, lakes, etc.) quantity and quality * Ground water resources quantity and quality	- No - No
BIOLOGICAL RESOURCES * Flora (include threatened/endangered/endemic species) * Fauna (include threatened/endangered/endemic species) * Sensitive habitats including protected areas e.g. nature reserves and forest reserves	- No - No
CLIMATE * Temperature * Rainfall	2022 - 2023 - 15°c - 27°c - 1433mm Per Annu
SOCIAL * Number of people potentially impacted * Type and magnitude of impacts (i.e. impact on land, structures, crops, standard of living) * Socio-economic overview of persons impacted	- None - Medium - None

PART D: SCREENING CRITERIA FOR IMPACTS DURING SUB-PROJECT IMPLEMENTATION, AREAS OF IMPACTS AND IMPACTS EVALUATION AND POTENTIAL MITIGATION MEASURES

Screening Criteria for Social and Environmental Impacts

Item	Areas of Impacts	Impacts Evaluation							Potential Mitigation Measures
	Is this subproject site/activity within and/or will it affect the following environmentally sensitive areas?		Extent or coverage (on site, within 3-5km or beyond 5km)			Significance (Low, Medium, High)			
		No Yes	On Site	Within 3-5km	Beyond 5 km	Low	Medium	High	
1.0	Screening Criteria for Social and Environmental Impacts								
1.1	National parks or game reserve	XO							
1.2	Wetlands	XO							
1.3	Productive traditional agricultural /grazing lands	XO							
1.4	Areas with rare, endangered or other interest flora or fauna	XO							
1.5	Areas with outstanding scenery/tourist site	XO							
1.6	Within steep slopes	XO							

1.7	Forested or near forest or will impact forest	No						
1.8	Along lakes, beach or river	No						
1.9	Near industrial activities	No						
1.10	Near human settlements	No						
1.11	Near cultural heritage sites	No						
1.12	Within prime surface run off	No						

1.13	Will the subproject discharge to or otherwise impact water bodies?							
2.0	Screening Criteria for Impacts during Implementation and Operation							
	Will the implementation and operation of the subproject within the selected site generate the following externalities/ costs/impacts?							
2.1	Deforestation	No						
2.2	Soil erosion and siltation	YES	✓		✓			- AVOID UNNECESSARY EXCAVATION WORKS - LIMIT VEGETATION CLEARING - CONTRO EXCAVATION TO DRY SEASON

2.3	Siltation of watercourses, dams	NO							
2.4	Environmental degradation arising from mining of construction materials		YES	✓		✓			- Reclamation of borrowpits
2.5	Damage to wildlife species and habitat	NO							
2.6	Increased exposure of communities to agrochemical pollutants	NO							
2.7	Hazardous wastes, (pipes, etc.), PCB's, pollution from unspent PV batteries		YES	✓	✓		✓		-PROVISION OF PPE -CONTAINMENT OF HAZARDOUS WASTE -
2.8	Nuisance - smell or noise	?	YES						- PROVISION OF PPE - LIMIT CONSTRUCTION TO DAY TIME
2.9	Reduced water quality	NO							
2.10	Increase in costs of water treatment	NO							

2.11	Soil contamination	YES	✓			✓				– CONTROLLING LEAKS FROM HAZARDOUS WASTE – CHECK ~~VEHICLES~~ VEHICLE & MACHINES FREQUENTLY
2.12	Loss of soil fertility	NO								
2.13	Salinization or alkalinisation of soils	NO								
2.14	Reduced flow and availability of water	NO								
2.15	Long term depletion of water resources	NO								
2.16	Incidence of flooding	NO								
	Will the implementation and operation of the subproject activities within the selected site generate the following socio-economic costs/impacts?									
3.0 Screening Criteria for Social and Economic Impacts										

3.1	Loss of land/land acquisition for human settlement, farming, grazing	X								
3.2	Loss of assets, property, houses, agricultural produce, etc.	X								
3.3	Loss of livelihood	NO								
3.4	Require a RAP or ARAP	X								

3.5	Loss of cultural sites, graveyards, monuments	X								
3.6	Disruption of social fabric	X								
3.7	Interference in marriages for local people by workers	X								
3.8	Spread of STIs and HIV and AIDS, due to migrant workers		✓		✓		✓			- AWARENESS CAMPAIGN - PROVISION OF CONDOMS - PROVISION OF IEC MATERIALS

3.9	Increased incidence of communicable diseases		YES		✓		✓			- AWARENESS CAMPAIGNS - PROVISION OF CONDOMS - PROVISION OF IEC MATERIALS
3.10	Health hazards to workers and communities		YES		✓		✓			- TRAIN WORKERS ON OCCUPATIONAL HEALTH AND SAFETY - PROVISION OF CLEAR SIGNAGE - PROVISION OF PPE
3.11	Changes in human settlement patterns	NO								
3.12	Conflicts over use of natural resources e.g. water, land, etc.	NO								
3.13	Conflicts on land ownership	NO								
3.14	Disruption of important pathways, roads	NO								
3.15	Increased population influx		YES							- EMPLOYMENT OF LOCAL LABOUR - CONTROL ENTERY TO THE SITE
3.16	Loss of cultural identity	NO								
3.17	Loss of income generating capacity	NO								

4.0	Consultation (comments from beneficiaries and other project affected peoples)	THE PROJECT WILL HELP TO REDUCE SANITATION PROBLEMS IN THE AREA	

PART E: OVERALL EVALUATION OF THE SCREENING PROCESS ON THE SITE AND PROJECT ACTIVITY

The screening aims at categorizing the sub-projects into one of the following environmental and social categories. The Environmental Specialist in charge of the screening will propose the environmental category in consultation with the Social Specialist as necessary. Screening will also help to propose whether a proposed sub program will further require a full-fledged Resettlement Action Plan (RAP), per procedures outlined in the Resettlement Policy Framework.

Category A: A UWSP sub-project would be categorized as A if it would likely result in one or more major adverse environmental impacts. Category A projects require a full ESIA. However, the UWSP is not expected to have any Category A subprojects.

Category B: UWSP Category B subprojects have potential environmental impacts that are less severe than under Category A and can readily be mitigated as follows:

Category B1: For UWSP Category B1 subprojects, no further environmental assessment work is required; however, the subproject must fully apply the relevant, generic mitigation measures specified in the ESMF, including the Environmental Rules for Contractors and Chance Finds Procedures. Examples of UWSP subproject types that are likely to be classified as Category B1 include:

- Installation of new household water connections
- Construction of communal water points(kiosk)
- Installation of new sewerage connections
- Construction of public toilets

Category B2: For UWSP Category B2 subprojects, further environmental assessment work is required, specifically the preparation of a separate Environmental and Social Management Plan with tailored, site-specific environmental mitigation measures (not just the generic ones).

It is possible that for a few UWSP Category B2 subprojects--where in-depth, site specific fact-finding would be needed to ascertain the likely environmental (including social) impacts--a subproject-specific ESIA would also be required. The scope of such an ESIA would be limited to the environmental and related social issues of specific concern, as identified in the screening process. For any Category B2 subprojects with their own ESIA, the ESMP will comprise a portion of the ESIA.

o Examples of UWSP subproject types that are likely to be classified as Category B2 include:

- Replacement/upgrading of existing water and sewer pipelines with larger diameter pipelines
- Construction of water transmission mains
- Construction of solar PVs for Blantyre pumping stations
- Construction of storage reservoirs (tanks)

- Rehabilitation and upgrading of sewage treatment plants
- Construction of solid waste management landfill

Category C: UWSP activities are classified as Category C if they do not involve civil works and if no significant environmental issue has been identified and no specific mitigation measures are required. In such cases, subproject implementation can proceed without reference to additional environmental requirements.

- Examples of UWSP Category C activities include:
- Water loss reduction measures
- City-wide sanitation marketing campaign
- Institutional capacity strengthening activities

The PIU Environmental and Social Specialists will be responsible for assigning the appropriate environmental category to the subprojects consistent with the requirements of ESSF, and based on the criteria provided in this ESMF.
If Resettlement Action Plans (RAPs) are prepared, these would be reviewed and approved by the Commissioner for Lands, consistent with the Resettlement Policy Framework as well as the World Bank, prior to initiating compensation and commencement of project activities

Completion by PIU	
Is This Project Likely To Need An ESIA	YES NO
List A/B Paragraph Numbers	
Date Exempted	
Date Forwarded To MEPA	
Name & Signature of Environmental and/or Social Specialist/s	

Completion by MEPA	
Date Received from District Assembly:	
Dated Reviewed:	
Date of Submission of Project Brief	
Date of Submission of ESIA Reports	
Date of Approval/Rejection	

NOTES:

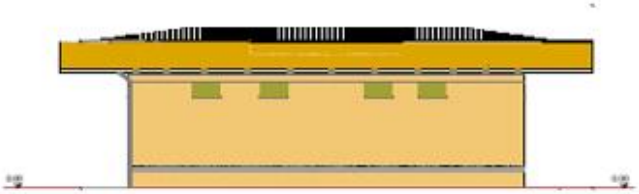
- Once the Environmental and Social Screening Form is completed it is analyzed by the Environmental and Social Specialist/s from the PIU who will

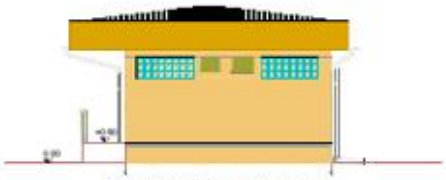
Annex 3: Issues/ concerns raised by stakeholders and responses provided

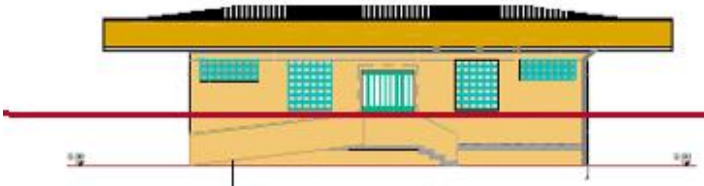
No	COMMENT RAISED	RESPONSE GIVEN
1	**Project delay.** Market stakeholders expressed concern that the initiative is delayed because rainy season is around the corner. They requested BCC to expedite the process and have the facilities constructed as soon as possible.	The Project secretariat will ensure that the construction works stick to the project duration for the construction of PSF. In additional, regular inspection will be scheduled in order to monitor work progress and GRM will help to handle issues that may hinder progress as soon as possible.
2	**Fear of substandard work:** Vendors further argued that most of construction tends to be sub-standard and unreliable, leading to poor infrastructure and wastage of resources. They therefore requested to BCC and all players involved in the activity to ensure that all quality parameters for the proposed project are taken on board during construction.	The Project secretariat will ensure that the construction works abide to the TOR's for the construction of PSF. In additional, regular inspection by the engineers will be scheduled in order to monitor work progress based on the plans and specification outlines during the design and planning phase.
3	**Local employment:** The Consulted local leaders and members of various committees (community Development committee (CDC), Health Centre Management Committees and Market Committee expressed concern that some contractors bring with them people from other places to work on the project while people especially youths from within the area are just staying during construction period.	BCC assured the stakeholders that at least 20 people will be employed per site and employment of people from within the project sites is one of the prerequisites to be observed by the contract. BCC will ensure that the contract adheres to engaging people from within the area and will be emphasized during hiring process
4	**Spread of sexually transmitted infectious (STIs) including HIV & AIDS:** The community mostly pointed out that construction workers come to their areas without their families which results in them engaging in sexual relationships with the locals.	The project will put in place mitigation measures to sensitize the workers and surrounding community members. The construction workers will also be provided with appropriate PPE.
5	**Unplanned pregnancies and child marriages among female students:** The communities at all sites raised up the concern attributing it to the high poverty levels in the selected locations/ sites that would see females including young girls easily enticed by construction workers into sexual affair/ early marriage because of their high incomes.	The project will develop an induction program including a code of conduct for all workers to sign prior to starting work. The code of conduct will address issues which will include (i) zero tolerance of illegal activities such as child labour, sexual exploitation, defilement, child prostitution, harassment of women, gender-based violence, purchase or use of illegal drugs, fighting;(ii) Disciplinary measures and sanctions (e.g. dismissal) for infringement of the code of conduct and/or

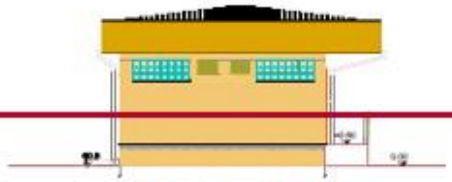
		company rules; and (iii) Commitment / policy to cooperate with law enforcement agencies investigating perpetrators of SEA, defilement, GBV and others.
6	**Accidents to workers:** The community at all sites expressed concern that when people get injured at the construction sites, they are left to seek treatment on their own and don't get any support from the contractors.	The project will develop an Occupational Health and Safety plan, which aims to avoid, minimize, and mitigate the risk of workplace accidents. This would include training construction workers on safety, using safe machinery and equipment, and providing necessary personal protective equipment (PPE). It was also mentioned that it is a requirement that all contractors have insurance to cover for injuries according to the laws of the country. Furthermore, the project will set up a GRM so that people can raise any complaints such as these.
7	**Waste management on construction site.** Waste generated from construction works should be properly managed, contained in a waste receptacle and disposed of to the designated dumpsite	The project will train workers in proper waste disposal and provide waste receptacles in designated place to contain waste and practice waste recycling especially with the empty cement sacks/bags which can be used for making mats.
8	**Theft of building materials:** The communities at all the sites pointed out that theft of building materials had been experienced in previous similar public projects	The contract will work in close collaboration with the existing community security structures and the Police to ensure construction materials are protected

Annex 4: Design drawings for the Public Sanitation Facility


Back view scale 1:100

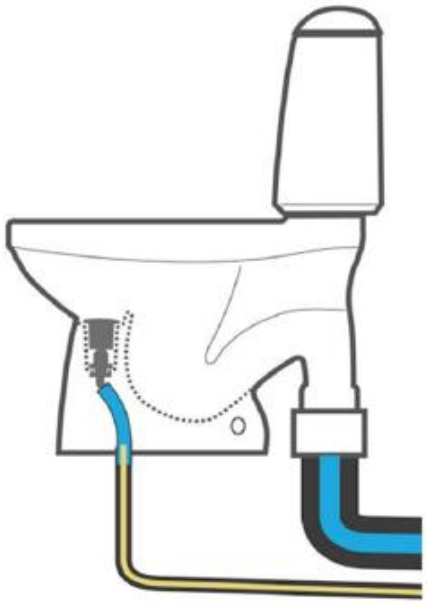

Side 1 view scale 1:100


Front view scale 1:100


Side 2 view scale 1:100

URINE DIVERTING WATER CLOSET

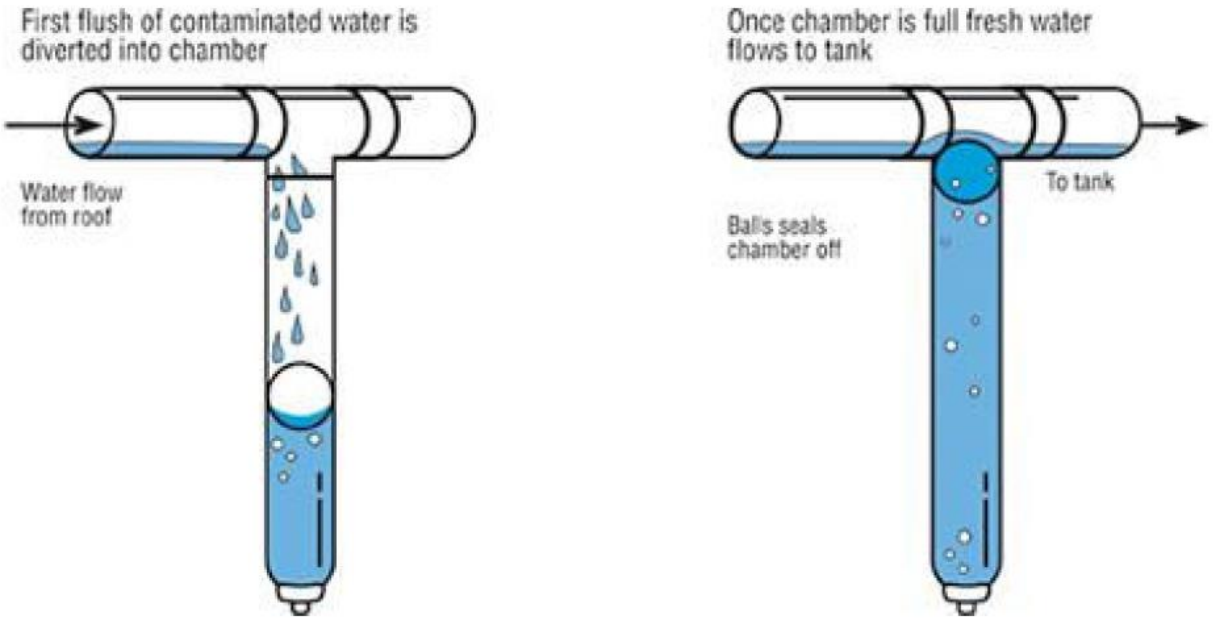
SECTION - URINE DIVERTING WATER CLOSET



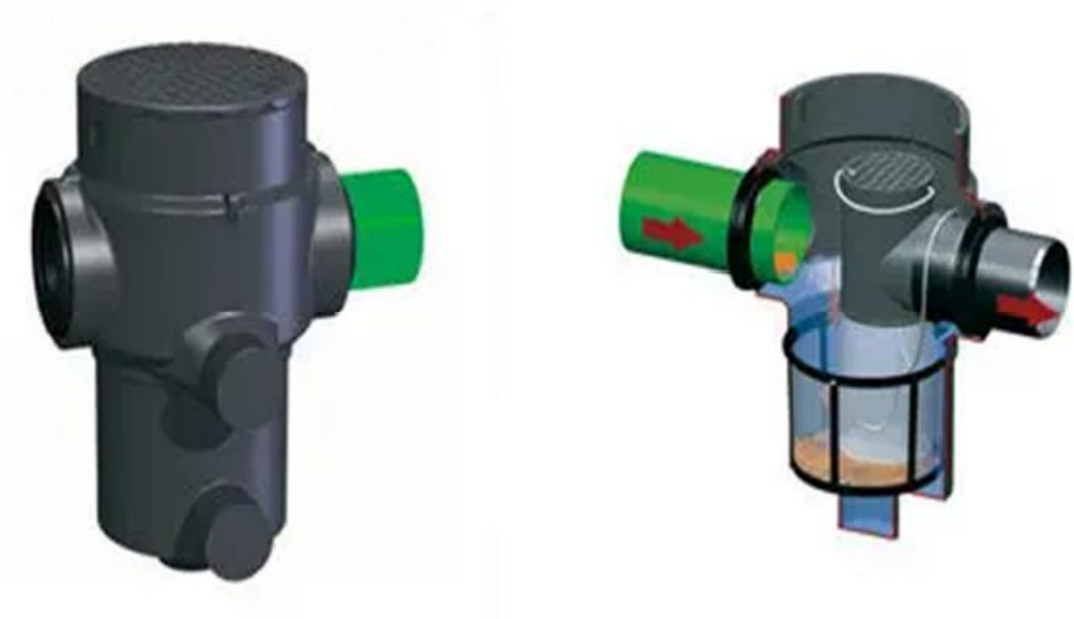
Urine Diverting

SURINE DIVERTING SQUAT PAN

RAINWATER HARVESTING – FIRST FLUSH DIVERTER



RAINWATER HARVESTING – FILTER



LADIES – PHYSICALLY CHALLENGED TOILET AND STORES

PHYSICALLY CHALLENGED – GRAB RAILS, WC, FLUSH VALVE AND TISSUE HOLDER

PHYSICALLY CHALLENGED – MIRROR, HAND WASH BASIN AND FAUCET

LADIES - HAND WASH BASINS AND FAUCETS

SQUAT PAN, FLUSH VALVE AND TISSUE HOLDER

GENTS - URINALS AND URINAL SCREENS

Annex 5: Labour Management Plan

1.0. Introduction

MWSP is expected to utilize hired labour force during construction/ rehabilitation of Public Sanitation Facilities (PSFs) in markets and health centres across Blantyre City.. The Project recognizes that sound worker-management relationships, fair treatment of workers, promotion of gender equality and protection from Gender Based Violence/Sexual Exploitation and Abuse/Sexual Harassment (GBV/SEA/SH) and provision of safe and healthy working conditions enhances development benefits of a project. This generic Labour Management Plan (LMP) for the construction of the PSFs Project is developed in order to guide/ help the contractor in preparation of specific LMP that will suit the nature, scope and methodology to be used in delivering the project.

The objectives of this labour management plan are to:

- To promote safety, health, and welfare of workers at workplace.
- To promote the fair treatment, non-discrimination, and equal opportunity of project workers.
- To protect project workers, including vulnerable workers such as women, persons with disabilities and migrant workers, contracted workers and primary supply workers
- To prevent the use of all forms of forced labour and child labour;
- To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law;
- To provide project workers with accessible means to raise workplace concerns.

This LMP applies to all Project workers whether full-time, part-time, temporary, or migrant workers. The LMP is applicable to the Project in the following manner:

1. People employed or engaged directly by PIU to work specifically in relation to the Project.
2. People employed or engaged by contractors to perform work related to core function of the project, regardless of location.
3. People employed or engaged by the primary suppliers under this project.

2.0 Anticipated Labour Use in the Project

2.1 Characteristics of Project Workers

This project is expected to utilize contractors, consultants and primary supply workers as human resources which are available at national, district and community levels.

a) Contracted Workers and Short-term Consultants

The project will engage contractors and short-term consultants to undertake certain assignments such as assessments, systems designs and construction activities. Both contracted workers and short-term consultants will be guided by specific contractual agreements between them and PIU. The timing of the scheduled works and deliverables will be stipulated in their respective contracts; with short-term consultants, engaged on fixed number of days depending on the type and amount of work. Under contractor, workers from the locality/ area of project impact should be given priority for both skilled and unskilled labour.

b) Migrant Workers

The project shall require the contractors to engage workers from the locality of the project's impact area**.** However, where skilled workers are not available in the locality, it is expected that workers from nearby communities or other parts of the country or other country in case of expatriate labor will be involved.

c) Primary Supply Workers

Primary suppliers are formal businesses who are required to supply procured materials and/or produce materials subject to high standards as stipulated by Project's procurement Unit. As part of the environmental and social assessment, any new supplier will be vetted regarding compliance with taxes, certification, licensing, and Public Liability Certificate. Only primary suppliers that meet the relevant requirements of this LMP including identifying potential risks of child labor to ensure that all workers are at least 18 years old will be involved. Issues of forced labor and safety which may arise in relation to primary suppliers will also be under consideration.

3.0 Assessment of Key Potential Labour Risks

Significant use of labour is mostly expected to arise during construction and operation. However, during operation and maintenance, labour services will also be outsourced by private operators and BCC

The safety and health risks to which the workers, may be exposed from each type of work will therefore be assessed. Even the ability to prevent or eliminate such risks or, if the risk cannot be prevented or eliminated, measures to protect workers, from exposure will be explored. This will be done through conduction of risk assessment.

a) Key Labour Risks

Potential risks that may arise from the nature of activities to be undertaken include:

- Occupational Safety and Health risks during construction and operation;(e.g., Slips and trips; Fall from height; Cuts and bruises from sharp objects; Ergonomic hazards due to lifting of heavy loads).
- Risk of communicable diseases including COVID-19, Malaria and Cholera to workforce.
- Non-compliance with labor laws and regulations by the contractors.
- Influx of migrant workers.
- Gender Based Violence (GBV),Sexual Harassment (SH), Sexual Exploitation and Abuse (SEA).
- Violence against Children; (Child labor, Defilement, Child Marriage).
- Risk of contracting HIV and AIDS and STIs.
- Risk of exposure to hazardous materials and wastes
- Risk of excess exposure to noise and vibrations
- Increased competition over resources due to influx of labor
- Discrimination and exclusion of vulnerable groups.
- Labor conflicts and poor work conditions

The project will address these risks through the site specific risk and hazard assessments that were conducted and incorporation of mitigation measures for the identified risks into the environmental and social management plan. Some of the mitigation measures includes provision of appropriate and adequate Personal Protective Equipment (PPE) to workers. The risk of child labour will be mitigated through certification of workers' age. This will be done by using the legally recognized documents such as National Identification Card. In circumstances where these documents are not available, the Affidavit of Birth will be used. Further, awareness raising sessions will be conducted regularly to the communities to sensitize on prohibition and

negative impact of child and forced labor. The table below presents a summary of the possible mitigation measures for the potential identified risks.

Item	Potential Risks	Mitigation measures
1	**Occupational Safety and Health Risks during construction**	• Provide appropriate Personal Protective Equipment (PPE) to workers; • Provide regular Occupational Health and Safety (OHS) training including safe work practices and emergency procedures to both old and new workers and training on task risk assessment and incident reporting; • Enforce the use of PPE by workers; • Provide appropriately equipped and accessible first-aid stations at the work place • Put appropriate warning signs in areas with high risk of safety; • Use of dust control methods such as covers, water suppression on loose materials and surfaces, or increased moisture content for open materials storage piles, to reduce particulate matter and dust exposure, • Develop Standard Operating Procedures (SOPs) to avoid risks, including putting in place an evacuation plan and drills to practice the procedure and plan. Provide firefighting equipment that is easily accessible and simple to use • Double insulate / grounding all electrical equipment used in environments that are, or may become, wet; to ensure protected circuits • Conduct detailed identification and marking of all buried electrical wiring prior to any excavation work • Manage outdoor work, temperature-related stress by monitoring weather forecasts to provide advance warning of extreme weather, scheduling work accordingly and adjustment of work and rest periods according to temperature stress management procedures and safety awareness during storms e.g. prevention from lightning strike by avoiding shelter under trees among other things • Incorporate rest and stretch breaks into work processes, and conducting job rotation • Put in place fall prevention / protection measures e.g. use of safety belts. • Facilitate the formation of Occupational Safety, Health Welfare Committee at each construction site.

		• Develop OHS Management Plan and ensure its full implementation during construction phase.
2	**Risk of communicable diseases. COVID 19, Cholera and Malaria to workforce,**	• Sensitize workers, on different communicable diseases and ways of preventing them; • Encourage workers and communities to go for voluntary screening/ medical check-up/testing; • Provide Information, Education and Communication materials on different communicable diseases • Provide adequate supplies of potable drinking water • Provide clean eating areas where workers are not exposed to hazardous or noxious substances including germs • Provide adequate lavatory facilities • Eliminate unusable impounded water • Promote use of repellents • Provision of hand washing facilities and soap • Enforce the use of face mask • Encourage social distance
3	**Non-compliance with labor laws and regulations by Contractors**	• All project workers including contractors personnel should sign a Code of Conduct and contract before commencement of construction works, which contains among other issues, labor related laws and regulations; and • Sensitize workers on labor related issues and regulations to ensure that they comply.
4	**Increased risk of influx of migrant workers – Competition over local resources**	• Engage all non-skilled labor force from surrounding communities to minimize the risk of migrant workers and associated negative impacts. In situations that the required skills are found within the surrounding communities these should be given priority.
5	**Gender Based Violence**	• Sensitize workers and surrounding communities on prevention and response to Gender Based Violence; • Put in place GRM that is GBV responsive and popularize it. • Provide equal employment opportunities to men, women, youth and people living with disabilities; • Prepare, adopt and implement worker's code of conduct.
	• Sexual Harassment, • Rape	• Sensitize workers and surrounding communities on issues of Sexual harassment and rape • Put in place robust Grievance redress mechanism that is SEA responsive and make it known to workers and surrounding communities/ implement a Workplace Policy on Sexual Harassment
	• Discrimination	• Provide equal opportunities to men, women, youth and people living with disabilities

6	**Violence against Children–**	• Sensitize surrounding communities on issues of violence against children; • Employ people that are aged 18 and above;
	• Sexual Exploitation and Abuse (SEA)	• Sensitize workers and surrounding communities on issues of SEA • Restrict under-aged to do business on the project site • GRM comprehensively integrate issues of SEA and ensure its responsive • Put in place and make known reporting mechanisms for SEA
	• Child labor	• Sensitize surrounding communities on issues of Child labor • Employ people that are aged 18 and above and ensure national Identity is used during employment to verify the age. • Restrict under-aged to do business on the project site • Restrict workers from buying merchandise from children • Put in place and make known reporting mechanisms for child labour • Display warning signage on child labour at strategic places
7	**Risk of contracting HIV and AIDS and other STIs -Risk extended to both workforce and local community**	• Sensitize workers, and surrounding communities on HIV and AIDS and other STIs; • Provide free condoms to workers; and • Provide Information, Education and Communication materials to workers.
8	**Risk of Contracting COVID-19**	• Raise awareness on COVID-19 best practices for construction sites to workers. Implement COVID-19 best practices for construction sites.
9	**Sexual Exploitation and Abuse – Both for workforce and local communities,**	• Prepare and implement GBV and SEA Action plan; • Carry out community sensitization; • Prepare, adopt and implement workers code of conduct. • All workers to sign a code of conduct • Conduct Tool Box Talks on SEA
10	**Discrimination and exclusion of vulnerable groups;**	• Development of Grievance Redress Mechanism (GRM); • Implement a deliberate policy for gender equality; and • Develop deliberate mechanism to monitor participation of vulnerable groups in all activities
11	**Labor disputes and conditions of employment.**	• Establishment of Workers Grievance Redress Mechanism (WGRM); and • Implementation of this LMP.
12	**Increased competition over resources due to influx of labor**	• Employ more locals • Conduct sensitization of workers on the need to bring along their resources to avoid competition on the existing resource.

13	**Risk of exposure to hazardous materials and wastes**	• Avoiding and minimize the use and release of hazardous materials, for example, non-hazardous materials can substitute asbestos in building materials. • Preventing uncontrolled releases of hazardous materials to the environment e.g. paint, oils etc. Indoor secure storage, and sealed containers rather than loose storage • Hazard communication and training programs to prepare workers to recognize and respond to workplace chemical hazards.
14	**Risk of exposure to excess noise and vibrations**	• Ensure exposure to noise by workers should not exceed 85 dB (A) for a duration of more than 8 hours per day without hearing protection. • Choose equipment that is associated with low vibration and noise production, • Install vibration dampening pads or devices, • Limit duration of exposure of vibration per individual worker

4.0 Brief Overview of Labour Related Legislation

4.1 Occupational Safety Health and Welfare Act (1997)

The Occupational Safety Health and Welfare Act (1997) provides a framework for the conditions of employment in workplaces as regards to safety, health and welfare of workers. The Act directs the prevention of accidents occurring to persons employed or authorised to go into the workplaces or the general public; through implementation of identified mitigation measures for the identified potential hazards to safety and health. General safety facilities stipulated for most work places include the following: adequate ventilation, cleaning materials and cleanliness of workplaces, lighting, washing facilities, change rooms for workers, sanitary conveniences and first aid kits. Both employers and employees are sensitized on basic procedures for proper use and operations of the welfare and safety facilities within workplaces. Non – compliance or negligence on use of work safety facilities is an offence under sections 82 and 83 of the act. Penalties include a fine of up to MK200, 000.00- and 12-months imprisonment of the offenders.

Section 56 and 57 provide guidelines for prevention fire out breaks, and control of incidences of fire outbreaks within work places. Section 57 stipulates some recommended means of fire escapes from work places. Among the means are properly labeled exit points which must be kept free of obstruction at all times, emergency escape door and emergency assembly points. Section 58 stipulates the provisions of protective clothing (such as gloves, foot wear, screens and goggles, ear muff and head covering) to protect workers from excessive exposure to nuisances with some work activities. And section 59 stipulates the provisions for breathing masks to employees against excessive emissions of dust and fumes.

In order, to ensure that the working environment is free of health and safety risks and hazards the project shall ensure that proper mechanisms are put in place such as proper documentation and reporting of accidents and also provision of preventive and protection measures.

4.2 Employment Act (2000)

The employment Act of 2000 reinforces and regulates minimum standards of employment with the purpose of ensuring equity necessary for enhancing industrial peace, accelerated economic growth and social justice; and for matters connected therewith and incidental thereto. Part II of the Act states fundamental principles guiding the Act, and these include:
Section 4(1) - Prohibition against forced labour
Section 5(1) - Anti-discrimination
Section 6(1) - Equal pay
Section 7 - Remedies for infringement of fundamental rights

Part IV of the Employment Act prohibits child labour and provides restrictions on employment of young persons as stated in sections 21(1) and 22(1) as follows:
"*21. (1) subject to subsection (2), no person under the age of fourteen shall be employed or work in any public or private agricultural, industrial or non-industrial undertaking or any branch thereof.*
22. (1) No person between the age of fourteen and eighteen years shall work or be employed in any occupation or activity that is likely to be - (Hazardous work)
(a) harmful to the health, safety, education, morals or development of such a person; or
(b) prejudicial to his attendance at school or any other vocational or training programme."

Therefore, when employing people for the implementation of the project activities, Contractor will have to ensure that that the provisions of this Act are complied with.

4.3 The Labor Relations Act (1996)

The Labour Relations Act promotes sound labour relations through the protection and promotion of freedom of association, encourages effective collective bargaining and promotes orderly and expeditious dispute settlement, conducive to social justice and economic development.
Part V of the Act stipulates dispute settlement procedures by presenting ways and channels of dispute resolution. Furthermore, it encourages the establishment of internal dispute handling machinery as a primary platform to receive and handle workplace matters before the involvement of a third party.
Pertaining to this project, Contractor will utilize the Project's Grievance Redress Mechanism and facilitate the formation of Workers Grievance Redress Management Committees to provide an opportunity for reporting and settlement of grievances from workers. In addition, Occupational Safety, Health and Welfare Committees shall be instituted at each construction site in order to promote contact and dialogue.

4.4 Workers Compensation Act (2000)

The Workers Compensation Act of 2000 provides for compensation for injuries suffered or diseases contracted by workers in the course of their employment or for death resulting from such injuries or diseases. Section 4 (1) states that if an injury, other than the contraction of a scheduled disease, arising out of and in the course of employment is caused to a worker, the employer shall, subject to this Act, be liable to pay compensation in accordance with this Act.

To comply with this Act, Contractor will ensure that all eligible occupationally injured workers are compensated accordingly. Contractor will be required to report to the nearest Labor Office every occupational accident that incapacitates a worker from earning wages for at least 7 days within 21 days of occurrence as stipulated in section 24 of Workers Compensation Act. As a means to check Contractor's compliance on this regulation, workers under the Project and their safety committees will be sensitized on the provisions of the Workers Compensation Act.

4.5 Gender Equality Act (2013)

The Gender Equality Act, 2013, among other things, promotes gender equality, equal integration, influence, empowerment, dignity and opportunities, for men and women in all functions of society, to prohibit and provide redress for sex discrimination, harmful practices and sexual harassment. Section 7 of this Act sets a provision for workplace policy to address issues of sexual harassment. Sexual harassment may be in a form of physical conduct like rape, verbal conduct like comments on a worker's appearance and nonverbal conduct like whistling. The main objective of this section is to eliminate all forms of sexual harassment emanating from work environments. It encourages the formation of grievance redress mechanism where sexual harassment cases are to be reported and through which all perpetrators are disciplined accordingly. Since victims of abuse are at risk of becoming trapped in a cycle of abuse, matters of sexual harassment need to be dealt with seriously, expeditiously, sensitively and confidentially. Employers have a mandate to protect all employees from sexual victimization, vengeance for reporting sexual grievances and false accusations.

To address all sexual harassment issues, Contractor will implement a Workplace Policy on Sexual Harassment as provided under part 7.1 of Gender Equality Act 2013. This Act requires that persons subjected to sexual harassment exhaust internal sexual harassment procedures before commencement of prosecution or civil proceedings in the court of law. In view of this, the project will integrate GBV/ SEA/ SH into its GRM and implement mitigation measures using GBV Action Plan.

4.6 Gender Policy (2015)

The Gender Policy aims at guiding gender mainstreaming and women empowerment initiatives for attainment of gender equity and equality in Malawi. The policy emphasizes on inclusive approach in all developmental matters.

Policy Priority Area 7 talks of Gender Based Violence. The GBV which is especially violence against women, girls and the vulnerable groups, has been recognized by the Malawi Government as a severe impediment to social wellbeing and poverty reduction. If national development is to be achieved, then eradication of GBV is critical. For this reason, the policy statement requires that: laws and policies be formulated and enforced to eliminate GBV and human trafficking; response and access to socio-economic services are improved to address gender-based violence and human trafficking; and knowledge, attitudes and practices on Gender Based Violence are improved.

To mitigate GBV during the implementation of the Project, the contractor shall be tasked to address the risks of GBV through; conducting compulsory training and awareness to workers advising them to refrain from unacceptable conduct toward community members, specifically women. These trainings can be repeated from time to time; enlighten workers about national laws that make sexual harassment and gender-based violence a punishable offence; and adopt a policy to cooperate with law enforcement agencies in investigating complaints about GBV.

Policy Priority Area (PPA) 5 talks of Gender in Governance and Human Rights. This PPA states of women's active participation in politics and decision making positions is a right and ensures good governance, transparency and accountability. Women and men should be equally represented in politics and decision-making positions to fully realize democracy and achieve sound governance and sustainable development in Malawi.

Deliberate actions need to be adopted to make sure that women and youth are included in decision making positions and in economic activities. For this reason, Contractor will give priority to women with

construction skills to take part in civil works activities. In the same scenario, all committees for the project, will have a quota for women inclusion.

4.7 HIV/AIDS (Prevention and Management) Act (2017)

This Act make provision for the prevention and management of HIV and AIDS; to provide for the rights and obligations of persons living with HIV or affected by HIV and AIDS; to provide for the establishment of the National AIDS Commission; and to provide for matters incidental thereto or connected therewith. This Act specifies the following among other issues;

- Responsibilities of Minister with regards to HIV/AIDS issues, prevention and management
- Prohibition of harmful practices that can expose others to contracting HIV/AIDS
- Issues of Subjecting another to a harmful practice(s)
- HIV and AIDS discrimination
- Rights and duties of persons living with or vulnerable to contracting HIV
- Rights of persons affected with HIV
- Right to privacy and confidentiality
- HIV transmission and testing

Subject to section 26, a person who is living with HIV or vulnerable to contracting HIV, has right to (a) dignity, physical integrity, life and health; (b) practice a profession of choice; (c) compensation associated with the restriction of his enjoyment of his rights; and (d) free medication, at a State medical institution, necessary for anti-retroviral therapy or treatment of an HIV related disease. Additionally, the law prohibits discrimination on a basis related to HIV or AIDS**.** This implies that even those living with HIV or vulnerable to HIV infection will be accepted to be employed within the project without discrimination. For those already infected, shall be allowed to access treatment according to law.

Furthermore, this Act, recognized modes of transmission of HIV as through (a) sexual activity; (b) mother to child during pregnancy, labour, delivery or breastfeeding; (c) transfusion of infected blood; (d) transplant of an infected organ; (e) contact of broken skin or mucus membrane with infected blood, blood products or tissue; and (f) contact of broken skin or mucus membrane with contaminated wet objects. Relevant to this project, sexual activity as the main modes of transmission of HIV within the project sites is recognized. The project should therefore engage in sensitization on dangers of engaging in sexual activities and harassment among workers and also with community members surrounding the work sites. This shall include provision of condoms to enable prevention of infections in places where the project will be implemented.

The act also specifies on modes of HIV testing to include (a) Voluntary Counseling and Testing; (b) routine testing; (c) diagnostic testing; (d) compulsory testing; and (e) any other mode of HIV testing that the Minister may prescribe. With regards to this project, efforts should be put in place to enable voluntary counseling and testing and routine testing.

Through this Act, Contractor will ensure that no worker is discriminated or denied to practice a profession of choice due to their HIV status. Additionally, copy of HIV/AIDS workplace policy should be in place in all worksites. This policy will then facilitate actions for prevention and management of HIV/AIDS at workplace.

4.8 Malawi National HIV and AIDS Policy (2003)

The Malawi National HIV and AIDS policy's main goal is to prevent HIV/AIDS infections, to reduce vulnerability to HIV and AIDS, to improve the provision of treatment, care and support for people living

with HIV and AIDS and to mitigate the socio-economic impact of HIV and AIDS on individuals, families, communities and the nation.

Chapter 7 of the Policy observes that in workplaces unfair discrimination against people living with HIV and AIDS has been perpetuated through practices such as pre-employment HIV and AIDS testing, dismissal for being HIV and AIDS positive and the denial of employee benefits if known to be infected. HIV and AIDS affects every workplace. Absenteeism and death impact on productivity, employee benefits, production costs and workplace morale.

The project will have the potential to create job opportunities to the locals that will make them have disposable income and this can lead to sexual interaction between workers and with the surrounding communities which will likely cause spread of HIV and AIDS. As a way of implementing the Malawi National HIV and AIDS policy, Contractor will implement an HIV/AIDS workplace policy and prevention, treatment, care, support and impact mitigation programmes as one way of effectively reducing and managing the impact of HIV and AIDS in the work place

4.9 Malawi Public Health (Coronavirus and Covid-19) Prevention, Containment and Management Rules (2020)

On 7 August 2020, the Government of Malawi gazetted Public Health (COVID-19) prevention, containment and management rules which came into force on Saturday 8 August 2020. The rules contain general preventive measures to contain the escalation of COVID-19 in various sectors including the work place. The measures states in these COVID-19 rules include mandatory wearing of face masks in public places, physical distancing of at least one meter from each other and washing hands with soap. The measures also include restrictions to gatherings of more than fifty people except for national assembly and meetings to discuss COVID-19. Observations have shown that Workplaces are amongst places where COVID-19 spread has thrived and spread of COVID-19 among workers has been common.

During the course of the Project implementation, the COVID-19 guidelines for construction sites have to be strictly followed in all sites, including any other rules and regulations which may be introduced by Government in a bid to prevent and/or contain and manage COVID-19 spread among workers

4.10 International Labour Organization (ILO) and United Nations (UN) Conventions

Malawi is a signatory to International Labor Organization (ILO) and United Nations (UN) Conventions. Such being the case, most of the provisions in the ILO Conventions are incorporated in Malawi's labor related legislation. These include:

- ILO Convention 87 on Freedom of Association and Protection of the Right to Organize;
- ILO Convention 98 on the Right to Organize and Collective Bargaining;
- ILO Convention 29 on Forced Labor;
- ILO Convention 105 on the Abolition of Forced Labor;
- ILO Convention 138 on Minimum Age (of Employment);
- ILO Convention 182 on the Worst Forms of Child Labor;
- ILO Convention 100 on Equal Remuneration;
- ILO Convention 111 on Discrimination (Employment and Occupation).
- ILO Convention 155 on Occupational Safety and Health
- ILO Convention 187 on Promotional Framework on Occupational Safety and Health

4.11 Labour and Working Conditions

This section outlines requirements on occupational safety and health for this project. It emphasizes non-discrimination and equal opportunity; provides for the treatment of direct, contracted, primary supply workers and officials of Contractor participating in the project. It also provides for protection of vulnerable workers such as women, persons with disabilities and children from labour. Additionally, it spells out the need for a grievance mechanism for the project workers as an accessible means to raise workplace concerns.

With regards to Occupational safety and health requirements, employers and supervisors are obliged to implement all reasonable precautions to protect the health and safety of workers. This LMP provides guidance and examples of reasonable precautions to implement in managing principal risks to occupational health and safety; and it is advisable that PPPC should hire contractors that have the technical capability to manage the occupational health and safety issues of their employees, extending the application of the hazard management activities through formal procurement agreements. Preventive and protective measures should be introduced according to the following order of priority: (a) Eliminating the hazard by removing the activity from the work process. Examples include substitution with less hazardous materials, using different processes and ways of doing things, etc; · (b) Controlling the hazard at its source: through use of engineering controls. Examples include local exhaust ventilation, isolation rooms, machine guarding, acoustic insulating, etc; · (c) Minimizing the hazard through design of safe work systems and administrative or institutional control measures. Examples include job rotation, training safe work procedures, lock-out and tag-out, workplace monitoring, limiting exposure or work duration, etc. · (d)Providing appropriate personal protective equipment (PPE) in conjunction with training, use, and maintenance of the PPE. The application of prevention and control measures to occupational hazards should be based on comprehensive job safety or job hazard analyses. Trainings of designated members of project implementation committees responsible for overseeing occupational health and safety issues should therefore be an integral part of project implementation. The training should also include transfer of skills on how to set up OHS management plan/procedures for the project.

To ensure equal opportunity among workers, issues of discrimination based on gender, disabilities and other issues e.g. disease are prohibited while supporting the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.

Work related Grievance mechanism is also an important component. GRM provide a platform of raising workplace concerns and its respective ways of redressing the grievances. A grievance mechanism will have therefore to be provided for all workers under the project implementation. Measures will have to be put in place to make the grievance mechanism easily accessible to all project workers and design ways to address concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned, without any retribution, and carried out in an independent and objective manner. Table below gives highlights of provisions under the national labour related pieces of legislation.

	Provision	**Labour Legislation**
1	Fundamental employee rights, non-discrimination	This is provided for under Part II of the Labour Relations Act (1996)
2	Contractual arrangements, terms and working conditions of workers	This is provided for under Part V and VI of Employment Act (2000)
3	Working hours	This is provided for under Part VI of Employment Act (2000) specifically Sections 36 which is on 'Normal working hours, weekly rest etc"; and Section 37 on 'Maximum daily working hours'.

4	Salaries and wages and frequency of payments	This is provided for under Part VII of Employment Act (2000) specifically on Sections 50 to 55
5	Leave provisions – annual, maternity, sick and holidays	This is covered in Employment Act (2000) specifically under Part VI (sections 40,44,45,46 and 47)
6	Retrenchment/termination of contract arrangements	This is provided for Under Part V Sections 28, to 31 of the Employment Act of 2000, Employment (Amendment) Act 2010
7	Prohibition against all forms of child labour	This is provided for under Part IV of the Employment Act of 2000 on 'Employment on young persons' specifically in sections 21 to 24 and in Child Care, Protection and Justice Act of 2010.
8	Prohibition against forced labour	This is provided for under Part II of Employment Act (2000), specifically on section 4
9	Freedom or association and labor unions;	This is provided for under Part II of the Labour Relations Act (1996)
10	Dispute resolution/grievance management systems	This is provided for under Part V of the Labour Relations Act (1996)
11	Safety provisions	Covered under Part V and VI of the Occupational Safety, Health and Welfare Act of 1997
12	Health and employee welfare provisions	This is provided for under Part IV and VI of the Occupational Safety, Health and Welfare Act of 1997

5.0 Gender Based Violence and Sexual Exploitation and Abuse (GBV and SEA)

Gender-based violence is violence directed against someone on the basis of gender, it is rooted in gender inequality, and it is a human rights violation. It can affect both males and females, but majority of the victims are women and girls. It can involve physical, verbal, emotional, sexual and psychological abuse, threats, coercion and deprivation.

Sexual Abuse

The actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions. It includes sexual slavery, pornography, child abuse and sexual assault.

SEA

The actual or attempted abuse of someone's position of vulnerability (such as a person depending on you for survival, food rations, education, transport, or other services), differential power or trust, to obtain sexual favors, including but not only, by offering money or other social, economic or political advantages. It includes trafficking and prostitution.

The subproject has potential to cause GBV , SEA and SH. SEA and harassment may take place at workplace when individuals who are charged with responsibility of employing or supervising others lure members of opposite sex to have sex with them in exchange for employment or some favors.

Other GBV/SEA incidences may arise especially in situations whereby particular workers have received salaries or wages and are forced to surrender the cash to spouses or cases of forced sexual relationships in

return for employment. The payments may also be used to lure adolescents, students, and children into unsafe sexual practices.

The project will carry out GBV and SEA risk assessment at all specific project impact areas to develop and implement GBV/SEA action plans for mitigating GBV and SEA issues. The mitigation actions shall include regular sessions to create awareness of GBV/ SEA/SH and its negative effects among workers and nearby local communities. In all cases, the incidents of GBV/SEA/SH will be reported and dealt with through a GRM procedure, which has protocols to manage information sharing and confidentiality of the survivors and alleged perpetrators.
Nevertheless, since GBV/SEA/SH cases are substantively different from other complaints that are typically handled through the normal workers or project grievance redress mechanisms, such cases will be managed though other channels within the project GRM depending on whether the offender is a worker or not. All in all, information will have to be treated as confidential. The specially formed GRM committee will be oriented on how to approach and refer GBV/SEA survivors to a safe and ethical GBV/SEA service provider. Consequently, some of the GBV/SEA cases such as those on rape which are criminal in nature will be reported to police directly and immediately. All cases, however, will be reported to the PIU within 48 hours.

6.0 Policies and Procedures

This section outlines the main policies and procedures to be followed during Project implementation especially during construction and operations. When need arises, this section will be updated.

6.1 General Policies and Procedures

The project implementation will be guided by all national labour related laws presented in Chapter 5 including the International Labour Organization (ILO) conventions to which Malawi is a party.

The principles and procedures presented below represent the basic requirements but should not be considered an exhaustive list of requirements. As specified in the legal framework presented in Chapter 5 of this document, employment of project workers will be based on the principles of non-discrimination and equal opportunity. There will be no discrimination with respect to any aspects of the employment relationship, including recruitment, compensation, working conditions and terms of employment, access to training, promotion or termination of employment.

The following minimum requirements shall therefore guide the recruitment and management of project workers:

- Recruitment procedures will be transparent, public, and non-discriminatory, and open with respect to ethnicity, religion, sexuality, disability or gender.
- All vacancies for recruitment of skilled and unskilled workers, security personnel, contractors and consultants, will be advertised through posts and public announcements in all the project impact areas e.g. notice boards, churches/ mosques, online and any other places deemed accessible by people. Clear job descriptions will be provided in advance of recruitment and will explain the skills required for each post.
- All contract workers will have written contracts describing terms and conditions of work and will have the contents explained to them. Workers will sign the employment contract.
- Unskilled labour will be preferentially recruited from the affected communities:
- Where notice of termination of contract is applicable, a party to terminate the contract will give the other party notice prior to date of contract termination in accordance with section 29 of Employment Act, 2000.
- The contracted workers will not be required to pay any hiring fees.
- Depending on the origin of the employer and employee, employment terms and conditions will be communicated in a language that is understandable to both parties.
- In addition to written documentation, an oral explanation of conditions and terms of employment will be provided to workers who may have difficulties in understanding the documentation.
- Interpretation will be provided for workers as necessary. It is noted that language-related problems are not expected; and
- All workers will be at least 18 years old.

A worker's code of conduct will be developed clearly stating penalties for breach of conduct and implemented. The code of conduct aims at preventing and/or mitigating social risks within the context of the project.

6.2 Occupational Health and Safety (OSH) compliance

The requirements of the Occupational Safety, Health, and Welfare Act, 1997 will be complied with through conducting site-specific risk assessments and development of appropriate risk prevention and mitigation measures (OHS management plan/procedures). Where risk is evident, the project will seek to eliminate, control, and minimize the hazard before prevention by provision of personal protective equipment (PPE). This will be coupled with training of workers by contractors, on the use of PPE. The table below provides some of the mandatory PPE for specific workers:

Type of PPE		**Type of workers**
	Hard Hat/helmet	All construction workers
	Gum Boots/safety boots	All construction workers and Security Personnel
	Reflectors	All construction workers and Security Personnel
	Dust Masks	Construction workers particularly those involved in land clearing, trenching and excavation and concrete mixing
	Gloves	All Construction workers
	Earmuffs	Construction workers particularly operating heavy machinery including steel cutters, carpenters, etc.
	Safety Goggles	Construction workers particularly those involved in land clearing, trenching and excavation, concrete mixing and welding
	Cloth or surgical masks	All workers in the Programme for control of spread of COVID-19
	First Aid Kit	Accessible to all workers
	Overalls/ Work suits	All construction workers
	Raincoats	All Security Personnel and other construction workers

During operations and maintenance, measures that deal with and/or prevent OHS risks will also have to be implemented. During this stage, the anticipated risks are mainly those related to natural disasters/events or man-made events (e.g., fires, etc.). It is therefore important to ensure that workplace structures should be designed and constructed to withstand the expected risks and area(s) should be designated for safe refuge, if appropriate. Standard Operating Procedures (SOPs) should also be developed for the project, including an evacuation plan.

6.3 Welfare Facilities on Construction Site

The contractor will be required to always ensure that the following minimum welfare facilities are provided in all the construction sites under the project:

- Constant supply and accessibility of safe drinking water.
- Availability of changing rooms and lockers for men and women.
- Shelter and facilities for rest.

- Sanitary and toilet facilities for men and women.
- Washing facilities.
- Canteen/facility for meals

6.4 Responsibilities and Reporting OHS Incidents and Accidents

Immediate reporting of OSH significant events and accidents is an integral part of the project implementation as per the Occupational Safety, Health, and Welfare Act, 1997 and Bank's ESS 2. The Contractor has the responsibility for reporting incidents and accidents to all PIU and other relevant authorities within 48 hours.

With respect to reporting incidents and accidents, the following procedures have to be followed:

- Promptly notify PIU of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, local communities, the public or workers.
- Provide sufficient detail regarding the incident or accident, indicating immediate measures taken or that are planned to be taken to address it, and any information provided by any contractor and supervising entity, as appropriate.
- Subsequently, as per the developer request, prepare a report on the incident or accident and propose any measures to prevent its recurrence.
- Notify the appropriate authorities within stipulated legislative timeframes after learning of the incident or accident with the submission of any required subsequent report.

Other than incident/accident-based reporting, regular reporting of OHS issues also has to be undertaken. This can be done through preparing and submitting regular monitoring reports to the developer. This should be done in tandem with reporting of other aspects of the project e.g., status of implementation of the project, functioning of the grievance mechanism(s) etc.

7.0 Age of Employment

The Employment Act (2000) sets the minimum age of persons to enter employment in Malawi as 18. This is also stipulated in the International Labour Organization Convention (138) on minimum age. These two legal instruments prohibit the employment of underage children. However, according to Section 21 of the Employment Act, children between the ages of 14 and 18 are allowed to participate in light work so long as it does not interfere with the child's education or harm the child's health or physical, mental, spiritual, moral or social development. Under the Project, children under the age of 18 will **NOT** be employed to work in the project activities because the activities are not regarded as light work. National Identity card will be used to verify the age of workers. The following procedure will be followed if a child is found employed by contractors/suppliers:

- Underage workers identified will be removed; and
- The culprits of child labour shall be reported to relevant authorities where child labour issues are handled e.g.to the Labour Office.

All these conditions will be included in the codes of Conduct which will be signed by Contractors to ensure that the conditions are not only enforceable but are also legally binding. Further, awareness raising sessions will be conducted regularly to the communities to sensitize them on prohibition and negative impact of child and forced labour.

8.0 Contractor Management

The project anticipates contraction of construction service providers to be engaged in the construction. The contractors will have personnel who will be involved in the works in various institutions.

To ensure fair competition and transparency, the selection of contractors will be based on the Government of Malawi's Public Procurement and Disposal of Assets Authority (PPDA) procedures which regulate the engagement of contractors. This includes:

- Competitive bidding through transparent open advertising.
- Short listing and selection of contractors and
- Contractual signing.

Contractors will be required to develop and sign a contractors' ESMP that will also include issues of code of conduct, GBV, SEA, SH, child labour prevention and response, and GRM at contractor's worksite. Similarly, it will ensure that issues concerning subcontracting are done with the consent of the Government. In ensuring that there is compliance with the requirements of this LMP by contractors the project will regularly monitor and evaluate activities of contractors in line with the projects M & E and Environmental and Social Management framework (ESMF). The project will also strengthen awareness among workers to ensure that they are aware of their entitlements

9.0 Code of Conduct

The code of conduct aims at preventing and/ or mitigating social risks within the context of the project. The social risks that may arise include but not limited to GBV/SEA; SH; Discrimination; HIV/AIDS infection and prevention and Occupational Health and Safety.

Contractors who will be engaged under the project will be required to develop and implement a code of conduct that will commit them to create and maintain an environment which prevents social risks. The developed code of conduct will be reviewed by PIU. The contractor will be required to communicate clearly to all those engaged on the project the behaviors which guard against any form of abuse and exploitation to prevent social risks.

Annex 6: Chance Find procedure

Introduction

Chance Find Procedures outline, step by step, what needs to be done when projects come across archaeological sites, historical sites, remains and objects, including graveyards or individual graves during excavations or construction. This procedure responds to Environmental and Social Standard (ESS) 8, Physical Cultural Resources. This ESS addresses physical cultural resources which are defined as movable or immovable objects, sites, structures that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings and may be above or below the ground. The implication this ESS in this project is that the construction of new kiosks will involve excavation of trenches for foundation. Therefore, it is probable that a physical cultural resource can be found, hence the need for a procedure to outline how this can be handled.

In case of any chance finding, the following procedure will be implemented:

a) Stop the construction or excavation activities in the area of the chance find;
b) Delineate the discovered site or area;
c) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities or the Department of Antiquities take over;
d) Notify the Social Specialist of Malawi Water and Sanitation Project Implementation Unit or the Project Manager who in turn will notify the responsible officer in the Departments of Antiquities immediately (within 24 hours or less);
e) Responsible officer from the Department of Antiquities would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
f) Decisions on how to handle the finding shall be taken by the responsible authorities at the Department of Antiquities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
g) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the Department of Antiquities to Blantyre Water Board; and
h) Construction work could resume only after permission is given from the responsible local authorities or department responsible for culture or antiquities concerning safeguard of the heritage.

Annex 7: Traffic Management Plan

Introduction

The construction works of Public Sanitation Facilities relocating in markets and health centres require significant movement of traffic to facilitate haulage of materials, movement of equipment, and deployment of project personnel from one point to the other to undertake various project related tasks and removal of waste from construction sites to designated disposal sites. Project traffic has to utilize public roads, open access routes, and community spaces for movement. In addition, the construction of PSFs will be undertaken in a very busy areas and very close to busy spaces and buildings that are patronized by a lot a people in a day.

Therefore, there is potentially dangerous interaction between project activities and regular traffic (both automobiles and pedestrians), and this call for a need for controlled traffic movements. It also calls for meticulous planning and control of all the project activities and project vehicles that will support the construction activities.

Key information/focus areas

- Purpose of the Traffic Management Plan
- Objectives of the TMP
- Activities
- Traffic and road safety risks
- Risks identification
- Traffic and road safety risk mitigation
- Risk management and control
- Training
- Resources

Purpose

The purpose of this generic Transport Management Plan (TMP) to provide the contractor with reference material for preparation of specific TMP that will suit the nature, scope and methodology to be used in the construction of Public Sanitation Facilities (PSFs) in markets and health centres. The will include an annex in Contractor`s Environmental and Social Management Plan that will provide specific traffic and road safety risk details of each site and provide measures to avoid, prevent, minimize or eliminate the risks.

Objectives

- To protect workers and the general public from traffic hazards that may arise as a result of the project activities.
- To minimize disturbance to the road users (motorist, cyclists and pedestrians) in the course of undertaking the project activities
- To manage potential adverse impacts on traffic flows
- To instill discipline in the project operators and drivers.

- To ensure all project automobiles are in good working order and protect the environment from pollution

Activities

- Project vehicles deliver construction materials such as concrete blocks, cement, timber, etc at the work sites
- Vehicles and heavy machines driving to and from the site, as well as on-site;
- Heavy machines operating on the construction site;
- Heavy machines moving materials to construction sites;
- Pedestrians to and from the site and on-site;
- Individuals riding/cycling to and from the site or within the project perimeter.
- Project vehicles collect rubbles and other refuse/ waste from the work sites
- Project vehicles using the same road used by Pedestrians, cyclists, motorists

Risks

The contractor will have to identified sources of risks, areas of impacts, events, and their causes, and their potential consequences. The following are some of the major hazards/risks and key receptors based on expected project sites, project activities and implementation:

- Cyclist's and Pedestrian's behavior;
- Public transport;
- Populated areas;
- Heavy and overloaded vehicles;
- Operation of heavy plants and vehicles;
- Traffic access into and out of the main roads;
- Unlicensed/inexperienced drivers;
- Poor vehicle condition;
- Absence of or faded or vandalized warning signs;
- Unfamiliar routes (diversions) and

Risk identification

There are so many ways of identifying traffic and road safety. One of the ways to first to look at the nature of work/ activities, the environment the work is to be undertaken and groups of people or properties to be affected at various stages/ phases of the project. The table below provides some of the groups that would be affected and guiding questions to establish the risk.

Table 1: Guiding Questions for Identifying Overall Project Traffic and Road Safety Risk

At Risk Group	During Project Implementation Phase	During Project Operation Phase

Project Workers	- What are the operating speeds and traffic environment at project's constructions areas? - Are the workers protected from traffic by safety barriers? (e.g., if construction workers are near traffic and operating speeds are not managed down to 30km/h, in the absence of safety barriers effectively protecting workers the risk is high). - What is the complexity of civil works? - What is the level of traffic enforcement in the country in general, and the project areas in - particular?	Should be recognized that these issues apply during construction as well as for maintenance work during road operations
Affected Communities	- Who are the affected-communities and where they are located relative to the project road or sites? - How much exposure will affected-communities have to construction traffic, not just at the work site but on haul routes, etc.? - Are there particularly vulnerable sites such as schools and hospitals affected by the construction site or haul routes? - What will be the impact on mobility and accessibility of communities given current usage and mobility needs?	Extent to which infrastructure improvements can mitigate any increase in speeds likely to arise. Provision of facilities to protect vulnerable users. How the mobility and accessibility of communities will be affected during the operation phase
Road Users	- To what extent will construction impact on road users, particularly vulnerable ones (i.e., pedestrians, cyclists, motorcyclists)? - Does the current level of traffic enforcement create a general deterrence atmosphere leading to general compliance to traffic regulations?	- Baseline FSI risk along the project roads-and likely FSI risk from improved facilities Road safety management capacity and institutional framework - Road safety infrastructure facilities - Speed management potential. - Vehicle safety levels - Use of restraint systems by occupants

		- Post-crash care - Traffic growth and composition
Overall Project Traffic and Road Safety Risk	- Summarize the Risks during project Implementation focusing on highest risk areas	- Summarize the Risks during Project Operation focusing on highest risk areas

Risk mitigation measures

To prevent negative interference with the communities, pedestrians, motorists, and others road users the contractor shall implement mitigation measures which include but not limited to the following

a. **Community/public sensitization about the project** – use meetings, sign posts to communicate to the general public about the work being undertaken. A Health and Safety Officer available on every work section shall also communicate to the those who may ask about the work being undertaken.
b. Put hoarding fence, **cones and barrier tapes** to demarcate areas where project employees are working and ensure that no any other persons except project employees access the areas.
c. All project vehicles including those that bring construction materials or collect waste from the work site shall be driven at a speed not more than **40 km/h** in all populated /crowded areas.
d. The contractor shall have **a spotter** to guide vehicles that will bring construction materials and collect waste from the work sites when the access road is very busy/ congested.
e. The contractor shall utilize and put additional **traffic signs especially at the work site** to alert road users of the works being undertaken and at the same time advising them on the need to control the speed of their automobiles
f. Where possible the contractor will put **spotters** to guide and direct traffic especially in places where the construction works has caused creation of single lane to allow traffic passage whilst work is being undertaken.
g. **Traffic, Health and Safety Sign posts** – the contractor will prepare sign posts cautioning workers to observe traffic as they work close to the road. This sign post shall also highlight rules and required PPE and behaviors whilst working.

h. **Safe passage of heavy vehicles** – Project vehicles shall not be allowed to move around or come to the worksite during pick traffic hours (especially when people are going or knock-off from work). All required materials to be used on the worksite shall be delivered during off-hours. When there is an urgent need for a vehicle to come to the worksite during traffic pick hours, the driver shall report to the foreman to arrange for a spotter (in a reflective vest) to guide the vehicle to the required destinations.

Traffic and road Safety Risk management and control During Construction

Construction activities themselves should usually be considered a high-risk. Working close to busy roads or busy roadsides poses significant risks to workers and other road usersbecause of changed roadway conditions, disrupted traffic flow, limited working space, and movement of construction and public vehicles near workers and worksites. Consequently, the safe and effective management of traffic and the process needed to keep road-users safe during construction, is an essential requirement

Table 2: Risk Table for Managing Traffic During Construction

HIERACHY OF SAFETY CONTROLS *Consider the practicability of control measures, from left to right* *Select the most predictable given the circumstances and level of hazard record the reason if a higher-level control measure is not considered practical*			
Safety hazard/ risk factors	Elimination / Substitution	Isolation/ Engineering	Administrative (Behavioural)
• Clearance to traffic • (Clearance between the edge of a lane carrying traffic and the worksite. Roadworks vehicle, equipment and pedestrians	• Road closure • Detour onto other roads • Side track past the works	• barriers • Lane closure adjacent to work area • Vehicle-mounted attenuators	• Speed reduction • Warning signs/ Variable Message Signs (VMS) • Delineation of travel path
• High speed through worksite	• Road closure • Detour onto other roads • Side tracks past the roadworks	• Safety barriers • Lane closure adjacent to work area • Portable traffic signals • Vehicle mounted attenuators	• Speed reduction • Warning signs/ VMS • Traffic controller • Temporary road humps

• Poor advance sight distance to worksite (<200 meters)	• Road closure • Traffic diversion past the works	• Vehicle mounted attenuators • Lead and/ or tail vehicle(s)	• Extra advance warning signs/VMS • Speed reduction • Delineation of travel path
• Poor observation by motorists of directions/ instructions	• Road closure • Traffic diversion past the works	• Lane closure adjacent to work area • Portable traffic signals	• Speed reduction • Police presence • Extra signs/VMS • Temporary road humps • Re-assess information provided
• Narrow pavement width with no escape route (<2.9 meters width)	• Road closure • Traffic diversion past the Works	• Safety barriers	• Speed reduction • Delineation of travel path
Safety hazard/ risk factors	Elimination / Substitution	Isolation/ Engineering	Administrative (Behavioural)
• Presence of workers at the worksite	• Road closure • Traffic diversion past the works	• Safety barriers • Increased separation from vehicular traffic	• Speed reduction • Warning signs • Delineation of travel path and worksite
• Excavation adjacent to traffic	• Road closure • Traffic diversion past works	• Different construction method • Safety barriers	• Speed reduction • Delineation of travel path

Training

a. **A**ll employees including drivers/ operators to be extra careful when working at the project site and travelling to and from the site. Only certified and experienced drivers/ operators to drive/ operate a project vehicle/ machine

b. **Safety training** - all employees including drivers shall attend safety training on weekly basis. Drivers shall on daily basis complete a checklist of their automobiles and report on any deviation/ gap identifies from the checklist for immediate corrective measures. All employees shall have a toolbox

talk daily focusing on various topics including community relations, COVID-19, HIV/AIDS, safety, GBV, SAE, SH, etc. just to mention a few

Resource

The contractor shall ensure that resources are available to implement traffic and road safety risk mitigation measures by incorporating the relevant budget parameters highlighted in this ESMP into the bills of quantity (BoQ).

Annex 8: Occupational Health and Safety Plan

1.Introduction

The Construction of Public Sanitation Facilities (PSFs) in markets and health centres acknowledges the impact of safety on people's lives in various settings, including work, family and society. The project emphasizes the importance of continuously improving working conditions, preventing risks that may lead to accidents or incidents, and effectively managing the work environment. This generic Occupation Health and Safety (OHS) Plan is prepared to guide/ help the contractor in preparation of specific OHS plan that will take into consideration of the nature, scope, and methodology to be used in delivering the project.

2.1. Legal requirements

Occupational Safety, Health, and Welfare Act (1997), places the responsibility for worker safety, health, and welfare on employers, while employees are also expected to take reasonable care for their own and others' safety. BWB and BCChas developed an Occupational Health and Safety Plan for the construction activities of public sanitation facilities in compliance with legal requirements. The plan includes provisions for personal protective equipment (PPE), first aid, and registration of the construction camp as a workplace, as mandated by relevant sections of the Act.

3.0. Measures and Actions for Risk Prevention

3.1. Hazard Identification, Risk Assessment and Determining Controls

The Contractor will carry out hazard and risk assessments for each of the project activities. The results of these assessments will be incorporated into the hazard register of the assessment of hazards and risks for the execution of the project. Hazard and risk assessments will be carried out for a given set of works or work area. Risk assessment reviews are critical processes that must be completed before each activity on site. Project hazard and risk review sessions will be established and included in our planning. These sessions may include some or all of the following methods for managing hazards and risks.

A formal hazard review will be performed on any work that has the potential to affect or create a principal hazard. A principal hazard is associated with catastrophic risk and has the potential to cause multiple fatalities, or significant environmental damage or to adversely affect the plant operation.

3.2. Critical Works

Critical works are those that have high potential of causing serious incidents. The following works fall into the category of critical works:

- Working at height.
- Excavations (≥1.5m)
- Hot works.
- Confined space works;
- Lifting operations.

All critical works will be issued a work permit by the safety officer before commencement, when necessary.

3.3. Hierarchy of Risk Control

A hierarchy of control measures to eliminate or minimise the risk should be followed in the following order of priority:

Firstly, try to eliminate the hazard. If this is not possible, prevent or minimise exposure to the risk by one or a combination of:

- Substituting with a less hazardous material, process or equipment
- Redesigning equipment or work processes
- Isolating the hazard
  (Note: These measures may include engineering methods)

As a last resort, when exposure to the risk is not (or cannot be) minimized by other means:

- Introduce administrative controls
- Use appropriate Personal Protective Equipment (PPE)

3.2. Remedial Action Items

The Hierarchy of Control will be used when deciding upon the action to be taken to eliminate or reduce the risk of a hazard. The most appropriate form of control is elimination with the least effective being the PPE.

3.3. Initial risk assessment

Risk analysis will be required and done for all activities. It is developed with the document risk and opportunities register.

4.0. Implementation and Operation

4.1. Resources, Roles, Responsibility, Accountability and Authority

An organizational chart detailing the management structure for the project shall be compiled as required by the Health and Safety specification. All the activities will be defined, namely; resources, roles and responsibilities on the Method Statements for each activity.

The project leaders shall provide strong, visible leadership and commitment, and ensure that this commitment is translated into the necessary resources; to develop, operate and maintain the Health and Safety Management System and to attain the policy and strategic objectives. Management shall ensure that full account is taken of QHSE Policy requirements and shall provide support for all actions taken to protect health and safety.

All project leaders will create and sustain a project culture that supports the health and safety Management System based on:

- Giving Health and Safety priority status over other primary project objectives. Management through effective leadership shall visibly recognise and reward when and where this is successfully applied. Clear guidelines and supporting behaviours shall be established to enable management to act without hesitation in support of this strategy;
- Belief in the management desire to improve health and safety performance. Targets shall be set for improvement in all areas of Health and Safety. These targets will necessarily include both input (lead) indicators and output (lag) indicators. Some characteristics of the effective performance indicators that fully support and guide the implementation of the Project Health and Safety System are: “measurability”, “trend ability” and “target ability”.
- Acceptance of individual responsibility and accountability for health and safety performance. Health and safety performance shall be included as a factor in the appraisal and reward of staff. Expected health and safety performance and behaviours for individuals shall be established. The consequences of success or failure to achieve these performances and behaviour expectations shall be clearly defined and the application of these outcomes demonstrated.
- Participation and involvement at all levels in the health and safety process development. Employees of both the project and its subcontractors will be involved in the creation and maintenance of such supportive culture;
- All the Subcontractors appointed for the Project shall be compiled on the Project Subcontract Appointment Register and this document shall be the base for the induction planning for subcontractors.

All project leaders shall pursue effective leadership through;

- Ownership
- Planning of tasks and resources within the framework of policy and objectives
- Resource allocation;
- Assignment of responsibilities; authority and accountability (standards, job descriptions);
- Support for innovation (reward for innovation);
- Coordination of planning across the project and agreed delegation of actions (action planning process);
- Ensuring that decisions are followed through and performance assessed against predetermined criteria (Project Management Review Group, close out of actions and Key Project Indicators (KPI’s);
- Determining the effectiveness of the project’s management system (management review – progress reports);
- Identifying, planning and implementing opportunities for improvement (audit schedule, actions plan);
- Communication of the project values and policies unambiguously throughout the organisation and ensuring understanding and acceptance of these (letters and workshops);

- Ensuring that all work is done safely; being prepared to delay or stop activities where controls are not in place to manage identified hazards or unsafe conditions that exist where there is a danger to the persons concerned or others;
- Ensuring that employees identify hazards and plan work before commencement to ensure that it is carried out safely.

Safety Culture and Leadership

- Leadership plays a crucial role in instilling safety culture;
- Visible felt leadership in H&S motivates employees to take part in H&S.

What employees expects from leadership

- If you stop a task for a safety reason, we will back you up;
- If you bring up a safety concern, we will address it promptly. It will not go into a black hole.
- If there is an injury, we will conduct an Incident Investigation in such a way that the person is NOT blamed. We need to learn so that we can eliminate the next injury.

What message should leadership convey to employees

- If it is not safe, do not do it, and do not have your co-worker do it either;
- If you see something that is unsafe, speak up immediately, there and then, to your supervisor, no matter whom - no matter what;
- If you are not sure of something or do not understand something, speak up and ask.

4.2. Competence, Training and Awareness

The health and safety training goal for MWSP-1 is to provide a mechanism for contractors to understand health and safety hazards, and how to protect themselves and others. Safety and health training programs include determining the training needs for employees. All of the training is designed for the type of work and potential hazards employees may be exposed to. All of contractor's employees will be thoroughly trained to perform their jobs safely and productively. Contractor's training will be documented and reviewed as necessary to ensure consistent safe and healthy work practices. All training will be recorded on the Attendance Register. Contractors-workers training will be documented and reviewed as necessary to ensure consistent safe and healthy work practices. Training topics will be changed according to the progress of the work and the relevant safety-related events identified on the work fronts.

4.3. Induction

Induction courses are presented to the individuals who partake in the activities of the project. All individuals will be requested to sign a compliance register on the Attendance Register at the end of the induction course. Course material is presented to the individuals for constant personal repetition and inquiry prevention.

4.4. Safety Meetings

The project safety team is a group that represents the interests of workers throughout the worksite. The team will include the most senior person in each discipline alongside a worker representative. Any day-to-day problems that are reflected in the safety management system must be immediately reported through the responsible persons.

Safety committee meetings will be conducted monthly. The minutes of the meetings will be distributed to all participants as well as to all non-present personnel in order to ensure communication to all personnel on the worksite.

4.8. Toolbox Talks

Each day before the start of a work shift, a Toolbox talk will be held. All site personnel will be involved in these meetings where the issues arising at other management and safety meetings will be communicated. Toolbox meetings will focus on discussion on hazards specific to the relevant area of the Project as well as any recent incidents in the workplace.

The themes will be changed according to the progress of the work and the relevant safety related events identified in the work fronts.

4.9. Communication, Participation and Consultation

In the monthly report, the Safety and Health, Monitoring Report will be presented with all information related to safety and health performance. Communication on issues related to safety management is one of the fundamental elements to promote a safe working environment on the project site. Regular structured meetings are necessary to ensure that effective communications take place between project management and workers.

4.10. Housekeeping

- Site work should be performed during daylight hours.
- Good housekeeping must be maintained at all times in all areas of the project.
- Common paths of travel should be established and kept free from debris or the accumulation of materials.
- Keep access to aisles, exits and emergency equipment free from any obstruction
- Specific areas should be designated for the storage of materials
- Tools, equipment and materials shall be stored in an orderly manner.
- As work progresses, unessential materials must be neatly stored or removed from the work area.
- Waste shall be removed from the site area and disposed of correctly.
- All spills shall be quickly cleaned up.

4.11. Personal Protective Equipment

The project and its subcontractors must provide their workers with PPE in accordance with the client's requirements. The following should form part of the PPE:

- Helmets;
- work suit/ coverall;
- High visibility vests;
- Protective Gloves;
- Dust Masks;
- Ear Protector;
- Boots;
- Eye protectors where drilling or grinding will be done;
- PPE identified in the risk assessment of the activity to be carried out, e.g. use of adequate hearing protection when using vibrating plates.

The distribution of PPE to workers, subcontractors or visitors must be documented in the PPE distribution form, ensuring that the people that received PPE will be informed about the use, maintenance and limitations of the delivered PPE.

4.12. First Aid Management

Contractors will provide possible first aid boxes in or near workplaces. These must be accessible for the provision of first aid to victims in the workplace. The project must ensure that the contents of the first aid boxes are in accordance with the minimum and adequate requirements by local legislation. This must be done in consideration of the type of expected accidents, the nature of the activities carried out, and the number of workers in the places of work.

The place where the first aid box (es) will be located will be clearly marked, as well as the identification of the person responsible for the same. All injuries involving cuts, open wounds or the like occurring in places where dangerous, toxic, corrosive or similar substances and / or preparations are manufactured, processed, used or handled, must be reported and the victim cannot resume before the wound has not been washed at least with water and soap or diluted disinfectant.

4.13 Existing Overhead and Underground Services

Plan and manage work near electric overhead power lines so that risks from accidental contact or close to proximity to the lines are adequately controlled. Safety precautions will depend on the nature of the work and will be essential even when work near the line is of short duration. Safety can be achieved by a combination of measures:

- Planning and preparation
- Eliminating the danger
- Controlling the access
- Controlling the work

Way leaves must be obtained from the electrical department if work is to be performed in the area that has underground electrical cables. Risk assessment must be carried out to identify all potential risks.

4.14 Intoxicated persons

- Subject to Local Legislation, the Contractor, as the case may be, shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.
- Subject to Local Legislation, no person at a workplace shall be under the influence of or have in his or her possession or partake of or offer any other person intoxicating liquor or drugs.
- The Contractor shall, in the case where a person is taking medicines, only allow such person to perform duties at the workplace if the side effects of such medicine do not constitute a threat to the health or safety of the person concerned or other persons at such workplace.
- The consumption of and the possession without permission of any intoxicating substance, excluding prescribed medication and then only when certified by a medical practitioner, is prohibited by the provisions of the company policy.
- When an employee is found to have the substance in their possession, they will be taken to the police station for investigation.
- When an employee is found to be under the influence of substances, he/she will be taken to hospital for medical examination.
- Any employee who is found to have exceeded the company's legal blood concentration levels will be disciplined in line with the company's business code of ethics.

5.0 Emergency and Contingency Plan

As per the Emergency Response, Incident, Investigation and Reporting Procedure; the site accident and incident plan must incorporate the technique of search and rescue and first aid application. The contractor has to ensure that the location and the emergency contact number of the nearest hospital or clinic is defined and communicated.

All employees entering a site shall have completed and hold a valid Induction, in accordance with Attendance Register at the end of the induction course. All people other than project employees entering a site shall complete the Visitors Entry Control. Visitors to any projects-controlled work area must comply with the health and safety requirements as stated to them.

5.1 Public safety

Care will be taken regarding access control of the construction site, which will be maintained during the construction activities. Sufficient hoarding will be placed around the project site with the necessary symbolic safety signs posted. Unauthorized personnel will not be entertained within the area of responsibility during this project.

5.2 Community Safety

There is need to establish and maintain an effective health and safety management system for the communities around the project sites and areas ensuring the following key requirements:

- Maintaining Water Quality and availability;
- Structural Safety of Project Infrastructure;
- Life and Fire Safety (L&FS);
- Traffic Safety;
- Transport of Hazardous Materials;
- Communicable Diseases;
  Community notification shall be sent if a local community may be at risk from a potential emergency arising at the facility with details of the nature of the emergency including protection details.

6.0 Monitoring Program

All employees shall undergo medical fitness assessments for construction work if required by the client or local legislation. These evaluations will be conducted by occupational health practitioners. All substances should be classified according to the severity of the risk(s) they pose. The health and safety indicators will be registered on the Safety Health Status Report.

Contractors shall subject its OHS activities to monitoring by Project management Team, Department of Occupation Safety, Health and Welfare, Malawi Environment Protection Authority (MEPA) to ensure compliance to the relevant national and local legislation and any other requirements.

Contractors shall introduce Safety Health and Environment (SHE) Compliance Register that will be used as a guideline and the compliance status of each requirement will be entered into 'the compliance status column'. Where a non-compliance is reflected, this must be raised as a non-conformance in the Non-conformance System and the procedure for corrective and preventive measures followed.

Incident reporting and investigation will be in accordance with the Emergency Response, Incident, Investigation and Reporting Procedure, and recorded on the incident investigation Report, focusing on:

- A process to review the effectiveness of incident investigation action plans;
- The conducting of first – aid needs and emergency response risk assessments;
- A return-to-work program (restricted duties), rehabilitation program, trauma counselling and; Processes to ensure the appropriate authorities are notified in the event of a reportable incident.

Annex 9: Grievance Redress Mechanism

Introduction

The project's procedures for the redress of grievances and complaints from PAPs are explained in detail here. The grievance and complaints about expropriation, resettlement, construction activities, social issues and any other subjects related to the project from the start of project till the end of the monitoring should be redressed for effective implementation. In this respect, all grievances and complaints will be recorded and processed in all stages of the project implementation.

The Aim of the Grievance Redress Procedure

The aim of Grievance Redress Procedure is to settle or redress any individual grievance or complaint of PAPs promptly, fairly and as much as possible in a manner that is acceptable to all parties. The general approach is to seek a solution to the problem in the earliest stage and avoid taking complaints to courts for redress. The following should be considered in application of this approach:

- Provide straightforward and accessible ways to PAPs for making complaints or resolving any disputes that may arise due to the project,
- Identify and implement appropriate and mutually acceptable actions to address complaints, • Ensure that complainants are satisfied with outcomes of the corrective actions,
- Avoid the tendency to resort to judicial proceedings.

To address Gender Based Violence, SEA/ SH/VAC, the GRM Committee will be required to:

- Protecting the confidentiality of survivors, recognizing them as principle decision-makers in their own care and treating them with agency, dignity and respect for their needs and wishes;
- Adopt risk-based approaches that aim to identify key risks of GBV and to undertake measures to prevent or minimize harm;
- Engage community partners—local leaders, civil society organizations, gender and child advocates— as resources for knowledge on local level risks, effective protective factors and mechanisms for support throughout the project cycle particularly for workers in the vicinity of schools and other places where women and girls would gather (markets, rivers);

- Adapt and adjust mitigation measures to respond to the unique drivers and context in any given setting;
- Ensure operations integrate mechanisms for regular monitoring and feedback to track effectiveness and to build internal knowledge of what works to prevent, mitigate and respond to GBV/SEA/SH/VAC; and
- Assist the GBV/SEA/SH survivors to access support from the victim support unit.

Grievances are useful indicators of a project performance. A high number of grievances may point out a need to adjust work practices or procedures in order to mitigate adverse impacts or conflicts with the PAPs. In this respect, the effectiveness of the related procedures will be evaluated in all stages of implementation.

Duties and Responsibilities

There will be three levels in the grievance management procedure. The first level being the Community Grievance Redress Committee, then the City/District Grievance Redress Committee and the last one will be the Project Grievance Redress Committee after which external remedies will be sought if the complainant is still not satisfied.

The best solutions to conflicts are generally achieved through localized mechanisms that consider specific issues as well as cultural context, local customs and the project conditions. It is therefore in this regard that the project will use existing city/district institutional structures in the management of grievances. The Grievance Redress Mechanism system shall be established at three levels. The Community Grievance Redress Committee (CGRC), the City/District Grievance Redress Committee (C/DGRC), the Project Grievance Redress Committee (PGRC) and then external remedies through the formal courts or other legally accepted preferred options. The PGRC shall be the topmost and last internal tribunal in handling grievances. The public shall be well sensitized to the existence of these structures. However, for every Project workplace where implementation shall be taking place, there shall be an additional committee known as the Workers Grievance Redress Management Committee (WGRMC). This particular committee will manage all issues raised by the workers in the course of their work and it will report directly to the PIU when grievances have not been settled.

Types of Grievances

The anticipated types of grievances likely to include but not limited to:

- Damage to buildings and assets,
- Disruption or damages to local roads,
- Closure of passageways,
- Damages to lands outside the project demarcated working area,
- Reinstatement of immovable assets after temporary use (establishment of easement rights, rental or temporary occupation),
- Nuisance from dust, noise and vibration,
- Disruption or damages to water sources and infrastructures,
- Destruction of wells that are water sources for the local communities,
- Increase in the traffic load,
- Health problems, injuries and accidents,

- Misconduct of project personnel/workers, and
- Unfair selection practice of employees for project-related jobs.
- Gender Based Violence
- Sexual harassment
- Sexual Exploitation and Abuse
- Child labour and Abuse
- Violence Against Children

Procedure for Receiving and Responding to Complaints, Grievances, Appeal and Claiming Process

All types of complaints, appeals and claims related to the project will be received by the GRCs are stipulated in the SEP and as indicated below:

Step 1: Contact and Dialogue between the complainant and the 'respondent'. Where applicable and possible, the first step in the GRM should be contact and dialogue to reach an amicable position before it is formally lodged with a GRC. For example, an aggrieved worker and a contractor can enter into a dialogue to find an amicable solution. Or PAPs can first approach the concerned implementing agency ('accused' office) to try and reach a negotiated position or for guidance on the matter at hand. A third party (e.g., local leaders) can be engaged to mediate the process. Regardless of the outcome, the issue can be reported to relevant committee for record purposes.

Step 2: Lodge a complaint. The PAPs should formally lodge a complaint with the relevant Grievances Redress Committee. For example, if the issue concerns a number of villagers in a village, the complaint should be lodged with Community Grievances Redress Committee. Where the complaint is against Blantyre City Council, for example, the grievances can be lodged with the National Project Grievances Redress Committee. At each level of Grievances Redress Committee, there will be a Grievance Log and Resolution Form to record the complaint. Each grievance will be assigned a number. The Secretary of the Committee will complete the Form or will help the complainant to fill in the Form. Both the Secretary and the Complainant and their witnesses (one for the Committee and one for the Complainant) will sign the Form (Complaint section of the Form) to confirm that what has been recorded is true reflection of the grievance as reported by the Complainant. A copy of the Form shall be forwarded to the Project Implementation Unit for record purposes.

Step 3: Assessment, Response and Closure. Within 7 days of receiving a complaint, the Grievance Redress Committee will meet to consider the grievance and provide a response to the complaint. The Committee shall assess whether the complaint or grievance is related to MWSP activity project or not. For non-MWSP related grievances, the Committee will advise appropriate institutions with which to lodge the complaint. For MWSP complaints or grievances, the Committee shall first of all make necessary follow ups to establish the truth of the matter and to confirm that the complaint is indeed genuine. The outcome of the analysis shall be communicated to the Complainant.

The Committee shall be required to complete Resolution section of the Grievance Log and Resolution Form to provide clear decision that has been arrived at in respect to the complaint. A copy of the Form shall be forwarded to the Project Implementation Unit for record purposes.

Where the grievance involves two parties (e.g., a project contractor and a worker or a community or in case of corruption allegations), a Hearing can be arranged as a matter of natural justice to accord both parties to present their side of the story. The outcome of the analysis of the Hearing by the Committee shall be communicated to both parties (the Complainant and the 'Respondent).

Closure. Within 7 days of receiving response from the Grievance Redress Committee, the complainant, shall be required to sign the Closure section of the Grievance Log and Resolution Form to confirm that the response is satisfactory and that the grievance is resolved and closed. Where the grievance involves two parties (e.g., a project contractor and a worker or a community or in case of corruption allegations), both the Complainant and the Respondent', shall be required to sign the Closure section of the Grievance Log and Resolution Form. A copy of the form shall be forwarded to the Project Implementation Unit for record purposes. An electronic database will be established for this purpose.

Step 4: Appeal. Within 7 days of receiving response from the Grievance Redress Committee, the Complainant or the 'Respondent', shall be required to sign the Appeals section of the Grievance Log and Resolution Form to confirm intention to appeal to the next higher Grievances Redress Committee. The Committee retains a copy while another copy is given to the complainant to present to the appeal Committee (the next higher Committee). A copy of the Form shall be forwarded to the Project Implementation Unit for record purposes.

GRIEVANCE COMPLAINT FORM

SUB PROJECT NAME

…….....……..…….....

CONTACT NUMBER 01895000

1. Complainant's Information		
Names and Titles (Dr/Mr/Ms/Mrs.)	Addresses:	E-mail:
	Contact Tel.	Location:
Please indicate how you prefer to be contacted (e-mail, mobile, etc.):		
2. Description of the problem:		
3. How are you affected:		
(a) What harm do you believe the MWSP/World Bank-financed project caused or is likely to cause to you?		

(b) Why do you believe that the alleged problem resulted from the MWSP activities?		
(c) Do you have any other supporting documents that you would like to share as proof of the alleged problem?		
4. Previous Efforts to Resolve the Complaint **Please tick the relevant box [√]** (a) Have you raised your complaint with any other authorities? No□ Yes □		
i. **If Yes** (Please, provide the following details): When?		
ii. How and with whom were the issues raised?		
iii. Please describe any response received from and/or any actions taken by the project level grievance mechanism. Please also explain why the response or actions taken are not satisfactory.		
(b) **If No**, Why?		
(i) How do you wish to see the complaint resolved?		
5. Name of the person recording the complaint:	**Signature:**	**Date:**

GRIEVANCE RESOLUTION FORM MWSP

SUB PROJECT NAME: …… **CONTACT NUMBER** 01895000

RESPONDENT DETAILS		**COMPLAINANT DETAILS**	
Full name		Full name	
Address:		Address:	
Phone No.		Phone No.	
Email:		Email:	
Date of complaint resolved		Location	
SUMMARY OF RESOULTION			
(a) Brief description of Complaint:			

(b) Brief description of Resolution			
SIGNATURES			
Respondent Signature		**Complainant** Signature	
Name of Respondent		Name of Complainant	
Date		Date	
Designation			
Witness Signature		**Witness** Signature	
Name of Respondent's Witness		Name of Complainant's Witness	
Date		Date	

Annex 10a: Incident Reporting Form

Part B: To be completed by Contractor and submitted to client within 24 hours

B1: Incident Details			
Date of Incident:	**Time:**	**Date Reported to PIU:**	**Date Reported to WB:**
Reported to PIU by:	**Reported to WB by**:	**Notification Type**:	
Full Name of Main Contractor:		**Full Name of Subcontractor**:	

B2: **Type of incident (please check all that apply)**

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

see definitions attached to this form

B3: Description/Narrative of Incident

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

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

II. *Are the basic facts of the incident clear and uncontested, or are there conflicting versions?*

III. *What are those versions?*

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

V. *Have any relevant authorities been informed?*

B4: Actions taken to contain the incident

Short Description of Action	Responsible Party	Expected Date	Status

For incidents involving a contractor: Have the works been suspended (for example, under GCC8.9 of Works Contract)? Yes ☐; No ☐; Trading name of Contractor (if different from B1): Please attach a copy of the instruction suspending the works.

B5: What support has been provided to affected people
•

Definitions of Incident Types

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

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

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

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

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

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

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

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

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

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

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

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

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

Annex 10b: Incident Reporting Form

Part C: To be completed by Contractor (following investigation & submitted to client within 4 days of incident occurrence)

C1: Investigation Findings
Please replace text in italics with findings, noting for example: *I. where and when the incident took place,* *II. who was involved, and how many people/households were affected,* *III. what happened and what conditions and actions influenced the incident,* *IV. what were the expected working procedures and were they followed,* *V. did the organization or arrangement of the work influence the incident,* *VI. were there adequate training/competent persons for the job, and was necessary and suitable equipment available,* *VII. what were the underlying causes; where there any absent risk control measures or any system failures,*

C2: Corrective Actions from the investigation to be implemented (To be fully described in		
Action	**Responsible Party**	**Expected Date**

Part C cont.: To be completed by Contractor (following investigation)

C3a: Fatality/Lost time Injury information

Immediate cause of fatality/injury for worker or member of the public (please check all that apply)

1. Caught in or between objects ☐ 2. Struck by falling objects ☐ 3. Stepping on, striking against, or struck by objects ☐ 4. Drowning ☐ 5. Chemical, biochemical, material exposure ☐ 6. Falls, trips, slips ☐ 7. Fire & explosion ☐ 8. Electrocution ☐ 9. Homicide ☐ 10. Medical Issue ☐ 11. Suicide ☐ 12. Others ☐
***Vehicle Traffic:* 13. Project Vehicle Work Travel ☐ 14. Non-project Vehicle Work Travel ☐**
15. Project Vehicle Commuting ☐ 16. Non-project Vehicle Commuting ☐ 17.Vehicle Traffic Accident (Members of Public Only) ☐

Name	Age/DOB	Date of Death/Injury	Gender	Nationality	Cause of Fatality/Injury	Worker (Employer)/Public

[2]See definitions attached to this form

C3b: Financial Support/Compensation Types (To be fully described in Corrective Action Plan template)

1. Contractor Direct ☐ 2. Contractor Insurance ☐ 3. Workman's Compensation/National Insurance ☐
4. Court Determined Judicial Process ☐ 5. Other ☐ 6. No Compensation Required ☐

Name	Compensation Type	Amount (US$)	Responsible Party

C4: Supplementary Narrative

Definition of fatality/injury immediate causes

1. **Caught in or between objects:** caught in an object; caught between a stationary object and moving object; caught between moving objects (except flying or falling objects).
2. **Struck by falling objects:** slides and cave-ins (earth, rocks, stones, snow, etc.); collapse (buildings, walls, scaffolds, ladders, etc.); struck by falling objects during handling; struck by falling objects.
3. **Stepping on, striking against, or struck by objects:** stepping on objects; striking against stationary objects (except impacts due to a previous fall); Striking against moving objects; Struck by moving objects (including flying fragments and particles) excluding falling objects.
4. **Drowning:** respiratory impartment from submersion/emersion in liquid.
5. **Chemical, biochemical, material exposure:** exposure to or contact with harmful substances or radiations.
6. **Falls, trips, slips:** falls of persons from heights (e.g., trees, buildings, scaffolds, ladders, etc.) and into depths (e.g., wells, ditches, excavations, holes, etc.) or falls of persons on the same level.
7. **Fire & explosion:** exposure to or contact with fires or explosions.
8. **Electrocution:** exposure to or contact with electric current.
9. **Homicide:** a killing of one human being by another.
10. **Medical Issue:** a bodily disorder or chronic disease.
11. **Suicide:** the act or an instance of taking, or attempting to take, one's own life voluntarily and intentionally.
12. **Others:** any other cause that resulted in a fatality or injury to workers or members of the public.

Vehicle Traffic

13. **Project Vehicle Work Travel:** traffic accidents in which project workers, using project vehicles, are involved during working hours and which occur in the course of paid work.
14. **Non-project Vehicle Work Travel:** traffic accidents in which project workers, using non-project vehicles, are involved during working hours and which occur in the course of paid work.
15. **Project Vehicle Commuting:** traffic accidents in which project workers, using project vehicles, are involved while travelling to (i) the worker's principal or secondary residence; (ii) the place where the worker usually takes his or her meals; or (iii) the place where he or she usually receives his or her remuneration.
16. **Non-project Vehicle Commuting:** traffic accidents in which project workers, using non-project vehicles, are involved while travelling to (i) the worker's principal or secondary residence; (ii) the place where the worker usually takes his or her meals; or (iii) the place where he or she usually receives his or her remuneration.

17. **Vehicle Traffic Accident (Members of Public Only):** traffic accidents in which non-project workers/members of the public are involved in an accident while travelling for any purpose.

Annex 11: Contractor`s monthly reporting form

MALAWI WATER AND SANITATION PROJECT (MWSP-1)

Insert photohere

MONTHLY SAFEGUARDS PROGRESS REPORT

Executive Summary
Table of content
List of Figures
List of Tables
Acronyms
Introduction

SAFEGUARDS ACTIVITIES DURING THE REPORTING PERIOD

Sn	All Planned activities	Implemented	Progress
1.			
2.			

Sn	Planned but not implemented	Reason for delay	Actions to be taken	Timeline
1				
2				
3				

CAPACITY BUILDING ACTIVITIES

Date	Target Group	Training Title	Participants		Total
			Male	Female	

COMMUNITY ENGAGEMENT

Activity	Target audience	Number of Participants (M/F)

GRIEVANCE REGISTERED AND HOW THEY WERE RESOLVED

Sn	Stakeholder	Nature of Grievance (s)	Total Grievances	Status	Remarks/ Comment(s)
	(e.g. institution, community members, local leaders, etc.)			Resolved/ unresolved	

INCIDENTS REGISTERED AND HOW THEY WERE RESOLVED

#	Stakeholder involved	Nature of Incident	Cause of incident	Status	Remarks/ Comment(s)
	community members, employee			closed/ opend	

CHALLENGES

Challenge	Mitigation Measures

PLANNED ACTIVITIES FOR THE NEXT IMPLEMENTATION PERIOD

Sn	Activity	Lead	Timelines

PHOTOS TAKEN IN THE REPORTING PERIOD