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<b>CONTRACTORS ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN</b>			

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## LIST OF ACRONYMS AND ABBREVIATIONS

ADMARC	Agriculture Development and Marketing Corporation
AIDS	Acquired Immunodeficiency Syndrome
BCC	Blantyre City Council
CBD	Central Business District
COVID 19	Coronavirus disease
ESCOM	Electricity Supply Corporation of Malawi
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
GBV	Gender based Violence
GRM	Grievance Redress Mechanism
HIV	Human Immunodeficiency Virus
MTL	Malawi Telecommunication Limited
MRDRMP	Malawi Resilience and Disaster Risk Management Project
PDO	Project Development Objective
PMU	Project Management Unit
PPE	Personal Protective Equipment
SH	Sexual Harassment
SEA	Sexual Exploitation and Abuse

# 1. INTRODUCTION

## 1.1 Background Information

This is a Contractors' Environmental and Social Management Plan (C-ESMP) for the upgrading of access road to Mzedi Dumpsite from earth/muddy road to concrete standard road which has been prioritized for implementation under the Malawi Water Sanitation Project 1 (MWSP-1). The MWSP-1 is a Government of Malawi intervention implemented by the Government of Malawi through Blantyre Water Board (BWB) and Blantyre City Council (BCC) with financial support from the World Bank's International Development Association (IDA). 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. This project falls under a component of "Priority Sanitation Investments" in which the Government of Malawi through BCC and BWB would like to construct the access road to the dumpsite.

The C-ESMP presents a detailed plans and analysis of the biophysical and socio-economic conditions of the proposed site, and potential environmental and social risks and impacts associated with the proposed development and most importantly, how the CAS Civil contractors shall prevent, control and mitigate the anticipated negative impacts during the implementation of the project. It will guide the decisions on how CAS Civils shall enhance the anticipated positive impacts in the course of the project implementation.

The upgrading of Mzedi dumpsite access road to concrete standard is expected to provide direct employment to over 27 men and 18 women, enhance skill transfer among workers, create business opportunities for local traders, and revenue for Malawi government. The project will benefit a population of 1,000,000 people, all residents of Blantyre City as waste collected from all corners of the city will pass through this road to Mzedi Dumpsite.

## 1.2 Objectives of the C-ESMP

In anticipation of Environmental and Social impacts of the project implementation, the Contractor's Environmental and Social Management Plan (C-ESMP) has been developed as the primary document for managing potential Environmental, Social, Health, and Safety (ESHS) risks and opportunities during implementation of the Project. It provides the framework for identifying environmental and social aspects and impacts associated with the construction phase. In addition, it provides a framework for managing the environmental and social controls and processes implemented by CAS Civils and L Gravam in carrying out their respective responsibilities in relation to the Project

It is also a requirement by the World Bank for proponents of the project, Construction of the Access road to Mzedi dumpsite, to prepare a C-ESMP for the construction works. Therefore, C-ESMP is to provide a consolidated summary of all the CAS Civil Contractors' ESHS commitments relevant for the construction phase of the project aimed at addressing potential ESHS risks. This C-ESMP also gives an overview of the ESHS Management System that will be adopted to ensure systematic and effective execution of these commitments, including roles and responsibilities between the Client, Consultant and Contractor. The specific objectives of this C-ESMP are as follows:

- Achieving the project's stated environmental and social objectives and targets;
- Ensuring legal and contractual compliance;
- Ensuring compliance with international and local ESHS best practices and management systems;
- Outlining procedures for management of ESHS issues during the construction phase;
- Identifying the personnel who will have clearly defined roles and responsibilities in the implementation of the C-ESMP and the chain of command;
- Identifying the records to be maintained by the Contractor as one way of demonstrating compliance with the C-ESMP and Project's Contract;
- Identifying ESHS training and capacity development requirements during construction period;

## 1.3 Brief Scope and Nature of the Proposed Project

Mzedi dumpsite access road is in Blantyre City in the Southern region of Malawi, at Kachere off Zomba Road. The road covers a total distance of 1.2km. The road is used to access the solid waste

dumpsite in Blantyre City. Currently this is an earth road, and it is hardly passable during the rainy season. This project aims at constructing a concrete access road to ensure the road is passable throughout the year. The scope of the works will involve activities such as site clearing and earthworks, debris excavation, earthworks pavement layer construction, drainage works and concrete pad construction

#### 1.4 Project location

Mzedi dumpsite access road is located in the City of Blantyre, 374m from Kachere Township, Group Village Headman (GVH) Mphepo which falls under the jurisdiction of Traditional Authority (TA) Machinjiri. The project is located at Geographical Coordinate system 724403.27E, 8254226.45N. The access road branches to the right at 5.5 km from Limbe CBD along Blantyre-Zomba road. The land of the entire access road and its boundaries belongs to BCC and in terms of size it covers 14,400m<sup>2</sup>. The area is isolated and there is no human settlement. Figure 1 shows the map of the access road and its surrounding features



Figure 1 Showing Access Road to Mzedi dumpsite

## **2. PROJECT DESCRIPTION**

This chapter gives a detailed description of the project activities that will be undertaken and are likely going to impact on the social, physical and biological environment. The main project activities in the upgrading of Mzedi access road from earth to concrete standard will include site clearing, debris excavation, earthworks pavement layer construction, drainage works and concrete pad construction. The road will have a width of 6 meters, inclusive of a 0.5meter shoulder on both sides for added safety and convenience for pedestrians. Open drainage systems will be integrated on both sides of the road to manage surface water runoff efficiently.

The general project activities will be highlighted followed by activities for specific phases of the project namely Planning Phase, Construction Phase, Demobilization Phase and finally Operation and Maintenance Phase.

### **2.1 Construction phase**

The main activities for this phase are:

#### **2.1.1 Mobilization**

Main activities undertaken during this phase include:

- Mobilisation of plant, equipment and personnel includes preparation of various access roads, preparation of the site and storage areas, maintenance of all the provisional installations during the working period, and all other related work for putting in execution and exploitation during the working period.
- Contractor establishment of site office includes establishment, maintenance, and attendance of temporary site office for the crew of the Engineer on one selected site for the duration of the project, including provision, servicing and maintenance of office furniture and equipment as specified in technical specifications. construction of sanitation facilities for workers and storage facilities

#### **2.1.2 Construction of diversion road**

It is important to note that during the construction works of the access road, the Council's waste collection vehicles and other private waste collection vehicles shall still be using the dumpsite. With this knowledge in mind, diversion road shall be of paramount importance as this will help in accommodating traffic of the waste pickers, so as not to disrupt the solid waste management activities while construction of the road is ongoing. This diversion will be constructed along the

same Mzedi access road after branching from Blantyre Zomba Dual Carriage Road. The land covered by the entire access road and outside the road boundary within the dumpsite on land belonging to BCC.

### 2.1.3 Site preparation, Excavation and Construction Works

The major construction works during this phase are described hereunder:

- Site clearing includes clearing heaps of accumulated waste along the stretch of the access road to be constructed. The operations involve extraction using an excavator, loading, transport, and the off-loading waste down the dumpsite. This shall be followed by the excavation and cutting the existing road to the desired subgrade elevation to prepare the site for roadbed. Roadbed material shall then be filled and compacted to achieve the specified slope, cross-section, and alignment
- Conducting material testing to ensure that the subbase and base layers meet the required specifications for gradation, strength, and durability. Subbase material shall be spread evenly over the prepared subgrade to achieve the desired thickness. Compaction of the subbase material using compaction equipment to achieve the required density and stability. Compaction is crucial to prevent settlement and maintain proper drainage.
- Ensuring that the sub-base and base layers are graded and sloped according to the road design to facilitate proper drainage and surface runoff.
- Setting up formwork along the pavement's edges to define the concrete slab's shape and dimensions.
- Installing welded steel fabric to enhance the pavement's structural integrity.
- Preparing a well-proportioned concrete mix in accordance with the project's mix design, considering factors like strength, durability, and workability.
- Casting the concrete into the prepared formwork, ensuring uniform thickness and proper consolidation using a vibrating poker to minimize the formation of voids and air pockets
- Using a screed to strike off excess concrete and create a level and smooth surface. This process will help to achieve the desired pavement thickness and cross-section of the road.
- Using finishing tools like bull floats and trowels to further smooth and consolidate the concrete surface. This process will improve surface quality and ensure proper texture for skid resistance.

- Creating control joints and expansion joints in the concrete surface as specified by the design to control cracking and accommodate temperature-related expansion and contraction
- The works shall also involve construction of side drains, road marking and installation of signage. Concrete lined side drains shall be excavated to a minimum depth of 1.0m from the finished road level. Precast 600mm and 900mm concrete pipes shall be installed to assist with drainage of rain and ground water.

### Demobilization phase

After the construction works are completed, there shall be demobilization of the structures that are not required for the operation phase of the facility. Some of the activities to be carried are:

- Clearing of debris/ waste from the site.
- Removal of project equipment and machinery from the site and disposing of them.
- Rehabilitating of borrow pit as stipulated in annex 1
- Planting of trees in areas where they were removed
- Demobilization of any excess labor force.

The main plant and equipment to be used during this stage include loaders, and dump trucks, vehicles for ferrying goods and personnel, and handheld tools

### 2.2 Operation and Maintenance Phase

This phase looks at the actual usage of the access road and maintaining it to ensure sustained usage of the road by the Mzedi dumpsite users. CAS Civils shall take in consideration the defect liability period (DLP) of 365days after completion of construction works. After the DLP, BWB and BCC shall take over the responsibility of ensuring that access road is in good and usable condition.

### 2.3 Environmental and Social Planning and Design

This segment emphasizes the environmental and social factors that must be considered in the detailed project design phase. Implementation of the project will require raw materials particularly water, sand, soil, aggregate and cement. Additional requirements include energy for cooking by the construction personnel, and for operation of plant, vehicles and equipment particularly during the construction phase. The nature of construction will also require steel and iron, among other construction items. The possible sources for these materials are presented hereunder.

### 2.3.1 Water sources

The main source of water for construction shall be from Naperi river, near Stella Marris secondary school. The river has clean and free flowing waters. Water shall be collected at Geographical Coordinate system 714099.6000E, 8249142.5400N. CAS Civil contractors applied and paid for water abstraction permit from National Water Resources Authority (Annex 2). Water for human consumption (drinking and cooking) will also be purchased from the nearby shops at Kachere Township.

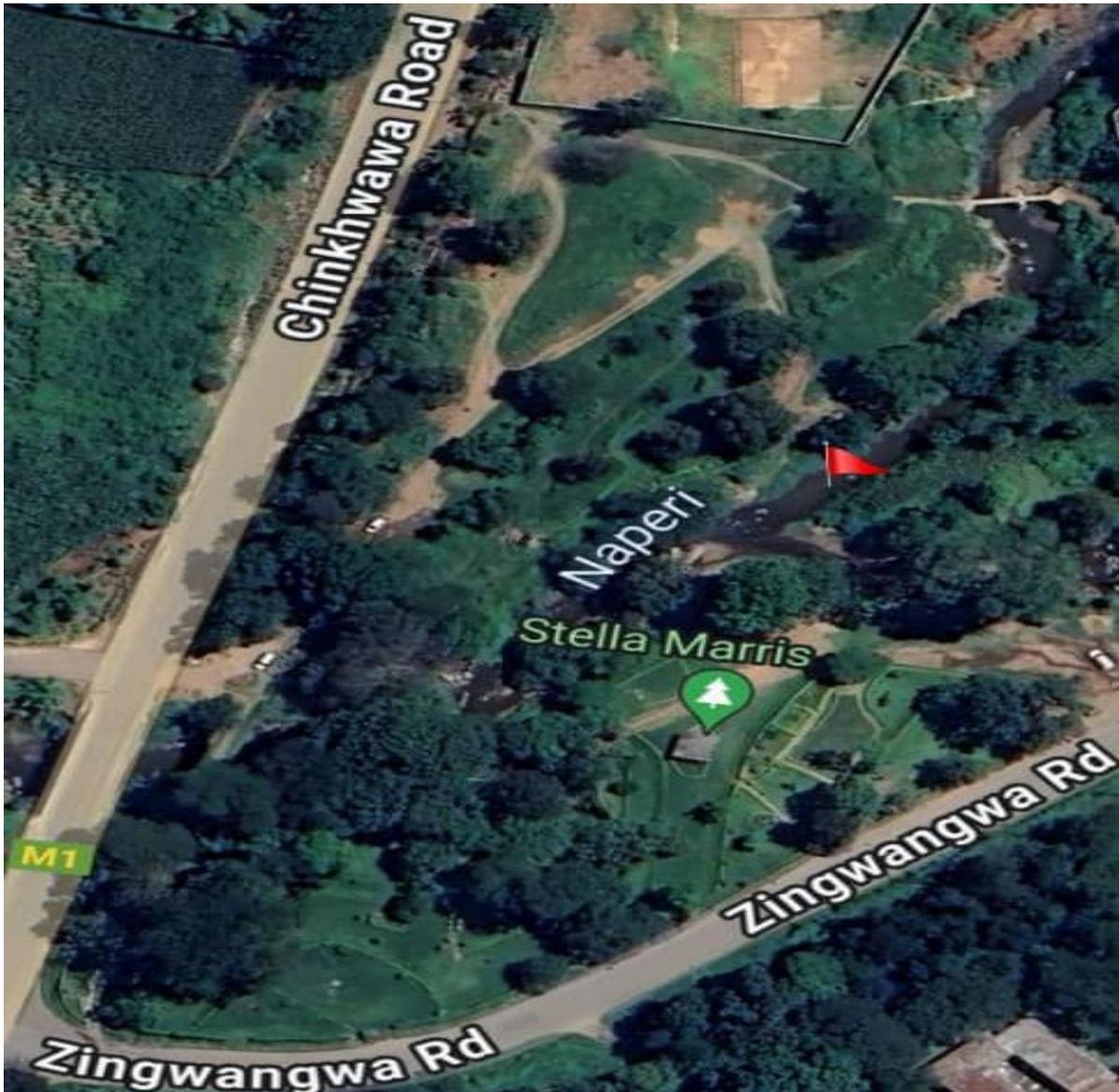


Figure 2 showing location of water source for construction works



**Figure 3 showing free flowing water**

### 2.3.2 Sand, aggregate and boulders

CAS Civils shall source construction material such as sand, aggregate and boulders from local suppliers /artisans within the project sites. Sand shall be sourced from Chisombezi river, in Chiradzulu district. In this regard, CAS Civils shall obtain sand mining permit from Chiradzulu district Council. Aggregates for the construction works shall be procured from well reputable suppliers such as Quarry King. Other sources for material will be identified in consultation with local authority technical personnel and traditional leaders.

### 2.3.3 Cement, steel and iron

CAS Civil contractor shall source cement and cement products, steel and iron from suppliers within the City of Blantyre as a way of promoting local businesses.

#### 2.3.4 Energy sources

During the construction phase, energy will be required for powering plant, vehicles and tools such as water pumps, drilling machines and grinders, and for night lighting. Power tools will be operated using gasoline/diesel powered generators. In addition, the contractor may use solar for lighting

#### 2.3.5 Tree Planting

CAS Civils is committed to protecting the vegetative cover and re-vegetation activities. CAS shall therefore include tree and grass planting initiatives, especially in areas where the soil structure is disturbed. The tree planting process will be conducted under the guidance of the BCC Forestry Office. This office will provide guidance on tree planting techniques, management practices, and the selection of appropriate tree species

#### 2.3.6 Labour management

The construction of access road to Mzedi dumpsite shall employ at least 45 people of which more than 50% of the 45 people to work on this project will come from surrounding areas. CAS Civils shall ensure that 60-40 male-female proportion is achieved. This will be achieved by engaging CGRC's to help in vetting process when selecting labor personnel within the location. This could serve as a learning platform for the residents, enabling them to acquire specific construction skills in relation to the upgrading of access road to Mzedi Dumpsite. The CAS Civils will engage local labourers including waste pickers to undertake less complicated work and provide them with brief on-the-job training. Furthermore, CAS Civils shall ensure that all employees have signed contracts agreements (Annex 3) and Code of Conduct (Annex 4) in languages they fully comprehend, and keep a copy for themselves.

#### 2.3.7 Sanitation Facilities

CAS Civils shall provide two latrines with concrete floor, segregated by gender and maintain them in good sanitary condition. These facilities shall be used by workers during construction of the access road to Mzedi Dumpsite. This will help in containing human excreta and mitigating a risk of open defecation thereby contributing to prevention of spread of communicable diseases such as cholera, dysentery, typhoid, and other diarrheal diseases associated with poor sanitation and hygiene. Once full, CAS Civils shall involve local septic tank emptiers to di-sludge and dump at Blantyre City Council waste water treatment plant (Annex 5).

#### 2.3.8 Waste Management

CAS Civils recognizes the importance and benefits of proper waste management. It is for this reason that we shall at all cost minimize waste generation. However, we also understands that waste generation during construction activities is inevitable, therefore, waste generated from the

construction activities shall be segregated into biodegradable, non-biodegradable, and hazardous categories. CAS Civil Contractors shall promote waste separation at source which will ensure that some waste such as wood/poles/timber are being used as firewood, plastics are sold to plastic recyclers, metals are sold to scrap metal recyclers/collectors, and used-oil used for shatters. Proper waste management will guarantee that small volumes of waste will be dumped at Mzedi dumpsite therefore saving costs. CAS Civils shall engage BCC for collection and disposal for the non-reusable waste to the dumpsite (Annex 5). This is well articulated in the attached Waste Management plan, Annex 6.

### **3. BIOPHYSICAL AND SOCIAL ECONOMIC ENVIRONMENT OF THE PROJECT AREA**

This chapter provides a concise description of the biophysical and socio-economic environment in the project impact area. A study of the existing environment for the project has been carried out on physical, biological and social environment of the project's impact area. The descriptions in this chapter form the basis for the determination of the changes and impacts in the area arising from the operation of the project and implementation of other related activities at the project

#### **3.1 Biophysical Environment**

##### **3.1.1 Topography**

The access road to Mzedi Dumpsite stands on a sloppy terrain at 3 kilometers from Mpingwe hill. The implication of this topography is that the soil structure disturbance due to road upgrading works may risk soil erosion, siltation, and sedimentation of natural water courses in the surrounding areas. Mitigation measures will among other things included but not limited to breaking down the slope into steps to control the speed of run off and consequently soil erosion.

##### **3.1.2 Soil**

The project site is dominated by soils classified as cambisols which are soils at an early stage of formation (FAO, UNDP, and UNEP, 2016). The soil type for the access road is loamy. These are fine faired soils with a mixture of sand, clay and silt hence promotes good soil structure and contains more moisture, nutrients and humus that enhance water holding capacity and infiltration.

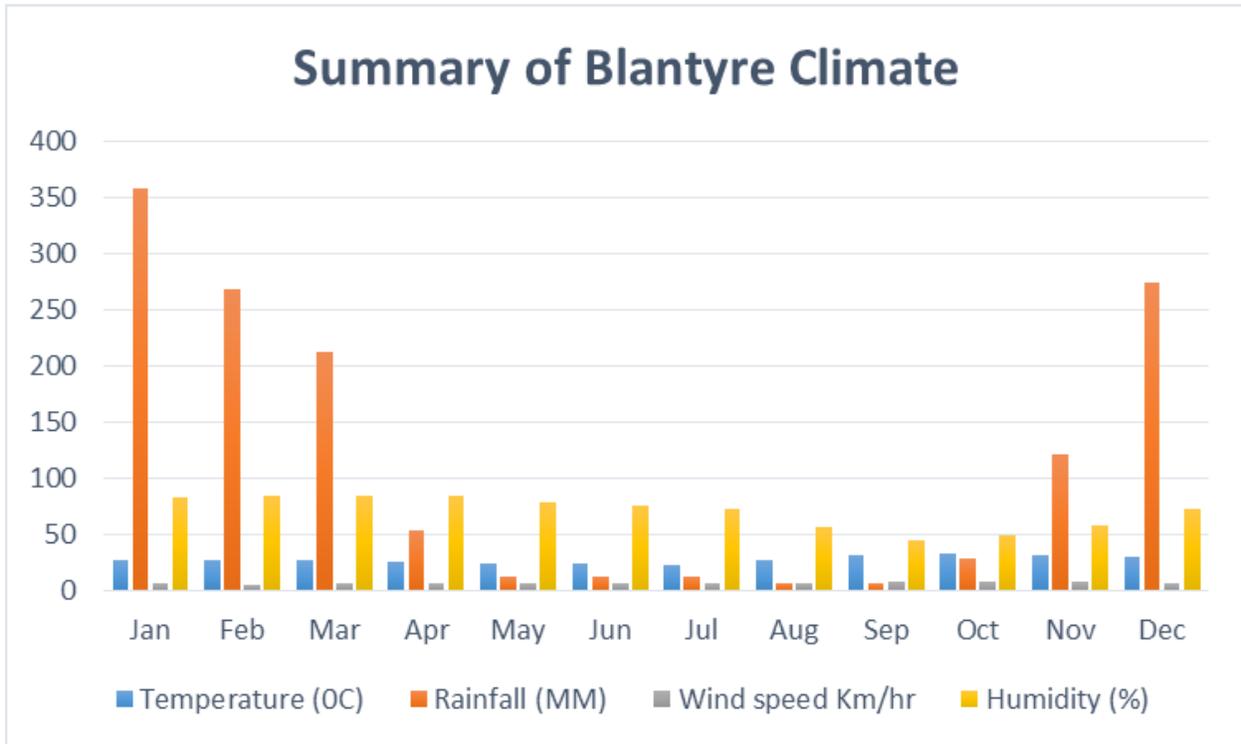
##### **3.1.3 Geology**

The site lies on Precambrian basement complex rocks [Dochartaigh, B. (2021)]. The dominant mafic mineral is biotite, a black, dark brown, or greenish black micaceous mineral, occurring as a constituent of many igneous and metamorphic rocks. The bedrock is sound, and gneiss is visible in the riverbed, dipping towards left abutment. Inside the reservoir there is a protruding Gneiss bedrock. With such bedrock characteristics, the access road shall have a strong roadbed therefore durable.

##### **3.1.4 Climate characteristics**

The climate for Blantyre city, which also covers the site proposed for the upgrading of access road to Mzedi Dumpsite, is classified as tropical wet and dry savanna influenced by specific location in the tropical zone and altitude. The rainy season runs from November to April while end May commences continuing light cold showers locally known as Chiperoni. The annual precipitation averages 834mm (about 2.74 ft) which is equivalent to 834L/m<sup>3</sup>, of which 80% is experienced within 3.5 months from

November to March. Temperatures range from 19°C in May to July and 26°C during the hot season in September to November, 2023). With such climatic characteristics of the project site, CAS Civils understands that time is of essence and the need to speed up activities so as to complete the works before the heavy precipitation commences. Furthermore, climatic characteristics shall help us to prepare when to plant and also types of trees and vegetative cover to be planted.



**Figure 4 Blantyre Climate**

### 3.1.5 Air Quality

CAS Civils will train workers about dangers of air pollution and ensure that the workers keep away from the actual waste dumpsite area and downwind direction during their idle time. In case of need to work close to the actual dumpsite area, appropriate PPE such as masks will be provided to cushion foul smell and minimize inhalation of air pollutants. It is expected that construction works will trigger air pollution following emissions from fueled vehicles and machinery to be used within the project construction site. Furthermore, air quality will also be affected by dust generated by the movement of vehicles and machine operation, therefore periodical sprinkling of water will help to reduce the levels of impact.

### 3.1.6 Fauna

Wildlife is limited as the area is mostly crop fields. Only small mammals like rodents are known to exist. Birds of the area include Red-eyed dove, Khwangwala, and Timba. Insects are mostly grasshoppers, butterflies, beetles and termites while reptiles are mostly lizard, geckos and snakes. There are also a variety of millipedes, centipedes and earth worm. There is little or no fish in the stream, a situation which may be due to pollution through seepage from disposed waste. However, the stream is 0.8km from the access road and will not be affected by the road upgrading works

### 3.1.7 Flora

The entire stretch of the access road and its surroundings is bare (no vegetative cover) hence the upgrading of the road will not affect any flora. However, the contractor and BCC will vegetate the road verge with grasses and trees after completion of the road upgrading works.

### 3.1.8 Disaster Management

The project area has potential to experience disasters like mud slides and flooding but the risk of having floods at this specific road construction site is low considering the sloppy terrain of the site. To mitigate the risk of flooding the design of the road shoulders is provided with drains that are wider enough to convey run off way from the site.

## 3.2 Socio-Economic Environment

### 3.2.1 Population

According to the 2018 Population and Housing Census that was conducted by National Statistical Office of Malawi in 2018, the current population of Blantyre city is estimated at 879,000 with 50.13% being males and 49.87% being females. The population annual growth rate has increased slightly from 2.1% in 2008 to 2.8% in 2018 higher than 2.7% and 2.9% which are the average growth rates of the southern region and the nation respectively. Specifically, the population of the Mzedi Ward is 42, 233. However, the area where the access road is passing through has no human settlements apart from waste pickers who use the same road to access the Mzedi Dumpsite daily.

### 3.2.2 Land administration

The land at the construction site falls in the category of Traditional Housing Area, which is under the jurisdiction of Blantyre City Council.

### 3.2.3 Economic activities

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, there is no notable economic activity taking place along the access road to Mzedi Dumpsite apart from a commercial building that serves as Swoop Security Office. The livelihoods of waste pickers will remain unaffected as waste companies will employ alternative dumping routes, allowing them to continue sorting and collecting waste for profit. Nevertheless, CAS Civils will consider safety measures to prevent them from accessing the construction site. Additionally, they will be encouraged to seek employment as laborers at the site

#### 3.2.4 Education Services

Blantyre City has 62 full public government primary schools, and 219 private 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). There no school premises in the area where the project is going to be undertaken.

#### 3.2.5 Health Services and HIV/AIDS Prevalence

Kachere Health Centre is the nearest health facility in the area where the access road to Mzedi Dumpsite is located. This is where cases or needs for health care services from the project will be refereed. Services offered at Kachere Health Centre include Outpatient Department (OPD), Anti natal Clinic (ANC) Family Planning (FP), etc. In case of need of other services not offered by Kachere Health Centre, then that need/ case will be referred to Queen Elizabeth Centre Hospital.

#### 3.2.6 Water supply

CAS Civil contractors use free flowing water from Naperi river for construction works (annex 2) and purchase drinking water from Kachere Township (Annex 7)

#### 3.2.7 Waste management and Sanitation

The main types of waste generated at the sites shall be general waste, mainly wood, plastics, metals, kitchen waste and human waste. At the construction site and homes, general waste consists of paper, food leftovers, biomass and plastics. General waste shall be separated and reused, recycled, sold to recyclers, and some disposed of through the BCC waste collection and disposal system (Annex 5). Human waste shall be disposed of in pit latrines.

### 3.2.8 Security

The nearest security service provider for public security is the Malawi Police Service, Kachere police unit. However, CAS Civils shall employ four (4) private security guards for the service.

### 3.2.9 Energy sources

The main sources of energy for lighting are torches and solar. Considering the location of the construction site, food shall not be prepared on site but rather ready-made-food procured from the nearby Kachere Township which nearly 300 metres way. This shall ensure that small and medium enterprises are being promoted (Annex 7).

### 3.2.10 Roads and Accessibility

At the proposed project site there is no through road beyond the Dumpsite. The only vehicles that pass through this road are waste collection vehicles that come to dump the waste. To access the road, traffic will have to use Blantyre – Zomba Road and branch to the right just before Chiradzulu turn off. CAS Civils will construct a diversion for waste collection vehicles so that the construction project does not disrupt waste management service delivery

### 3.2.11 Postal and Telecommunication Services

The construction site has no facilities for postal and telecommunication service. The main service providers for telecommunication are Airtel and TNM. The quality of signal for both Airtel and TNM is good.

## 4. POLICY AND LEGAL FRAMEWORK

This section provides background information on Government policy and legal framework which is pertinent to Construction of the access road to Mzedi dumpsite. This chapter has been divided into two main sections with the first providing an outline of the most important sectorial policies and the second, focus on legislations which are relevant in providing technical and legal guidelines/framework. In addition, the chapter reviews applicable World Bank’s Environmental and Social Framework (ESF)/Operational Policies (OPs) applicable to the project. This framework ensures that the project achieves sustainable management, conservation and utilization of natural resources.

### 4.1 Policy framework

#### 4.1.1 Malawi vision 2063

The Malawi 2063 (MW2063) seeks to transform Malawi into a wealthy and self-reliant industrialized “upper middle-income country” by the year 2063. The construction upgrading of the access road to Mzedi Dumpsite from earth road to concrete paved road is aligned to enabler 7 which which advocates for environmental sustainability of the Malawi Vision 2063 with an objective of promoting sustainable development with clean and secure environment. Enabler 7 promotes Waste Management and green economy which focuses on adequate waste disposal, treatment, and recycling. The proposed road upgrading project will promote quick waste collection from Blantyre City, transportation, and disposal of the waste to Mzedi Dumpsite.

Additionally, construction of the Mzedi dumpsite access road falls under enabler 5; (Human Capital Development) where the objective is to have globally competitive and highly motivated human resources. Enabler no. 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. Sanitation and Hygiene envision that the Government shall take the lead and rally partners and communities in promoting the adoption of sanitation practices at the individual and household level. This shall include the provision and use of improved and accessible road to Mzedi Dumpsite that will promote proper solid waste transportation and disposal.

CAS Civil contractors shall therefore commit its resources towards the achievement of Malawi 2063 goals.

#### 4.1.2 The National Environmental Policy (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.

In line with the environmental policy (on planning and ESIA's, among others), CAS Civil Contractors shall ensure that environmental and social considerations are taken on board during the whole cycle of the project i.e. planning, design, and implementation.

#### 4.1.3 National Land Policy (2002)

The National Land Policy of 2002 focuses on land as basic resource common to all people of Malawi. It provides the institutional framework for democratizing the management of land and outlines the procedures for protecting land tenure rights, land-based investments and management of development at all levels.

The Land Act, among other things, deals with issues of ownership, land transfer, use of land, and compensation. It is expected that the gravel or soil for construction activities may be sourced from somebody's land or garden which may trigger compensation. Such being the case, compensation should be done in line with Land Act.

The project will not impact on land, as land ownership in the proposed site is public land. The land covered by the entire access road and its surrounding belongs to BCC. The land is wide enough to accommodate the road shoulders and diversion routes to allow passage of waste collection vehicles and other road users including waste pickers while the road is being constructed the project will not displace people in the impact areas. In addition, a proper grievance redress system is already in place at the community and City level. The project will also work closely with the city and district land offices where there are grievances regarding land issues. This will help resolve potential grievances which are likely to arise during the project's implementation as per highlighted in the GRM plan. Annex 8

#### 4.1.4 National HIV Policy (2012)

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. The prevalence rate is high in urban areas as compared to the rural areas.

During the implementation of the project, vendors, workers as well as surrounding communities will be sensitized on the dangers of HIV and AIDS. Further, Information, Education and Communication (IEC) materials on HIV and AIDS shall be distributed. CAS Civils will also ensure that during construction of Mzedi dumpsite access road project, much of the labour force shall be sourced from the surrounding communities to reduce the influx of migrant workers who may exacerbate the HIV and AIDS situation. In addition, issues of prevention, treatment and management of those affected or infected with HIV and AIDS are well stipulated in our HIV/AIDS workplace policy (Annex 9.)

#### 4.1.5 National Gender Policy (2015)

The National Gender Policy 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 shall 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 the implementation of the project in order to enhance income for both. In adherence with this Policy, the CAS Civils will propagate the advancement of workplace conditions favourable for both males and females considering that females often face bigger economic challenges (Ministry of Gender, Children and Social Welfare, 2015) (Ministry of Gender, Children and Social Welfare, 2015).

#### 4.1.6 National Youth Policy

National Youth Policy defines youth as all persons from age 10 to 35 years regardless of their sex, race, education, culture and religion, economic, marital and physical status. It recognizes that youth is a definitive social entity that has its own specific problems, concerns, needs, and aspirations (GoM, 2013).

In line with this policy, CAS Civils shall commit its resources in ensuring that Youth empowerment be integrated at all stages of the project. CAS Civils shall also see it through that participation of the youth not only through employment, but also as beneficiaries of the other

livelihood support interventions. On this note, CAS Civil contractors shall ensure items for the project are procured from businesses owned by local youths, as a way of promoting small and medium enterprises. Such materials include Personal Protective Equipment, cement, wheelbarrows, shovels, food items, trees and vegetative cover.

#### 4.1.7 National Water Policy (2005)

The policy aims at providing comprehensive and integrated water resources conservation and management. It addresses all aspects of water including resource management, development, and service delivery conforming to the current global and regional trends and the requirements as reflected under the Sustainable Development Goals. In line with this policy, CAS Civils shall uphold the requirements of this policy by obtaining the permits and agreements from the necessary authorities.

#### 4.1.8 Malawi Mines and Minerals Policy (2007)

The goals of the Mines and Minerals Policy are (i) To contribute to economic growth, development and poverty reduction; and (ii) To guide sustainable development of the mineral sector in an orderly manner

The construction of access road to Mzedi dumpsite under the MWSP-1 will require the use of sand and aggregate among the construction materials. Hence, CAS Civils shall support the objectives of this policy by ensuring that such resources are obtained from permissible sources as approved by the Blantyre City Council

#### 4.1.9 The National Sanitation Policy (2008)

This policy aims at promoting the effective coordination and develop the mechanism for the delivery of Sanitation and hygiene promotion at National level. The NSP aims at providing a framework for development of programmes and initiatives that shall address sanitation and hygiene challenges as cited in the policy. In line with the Policy, the CAS Civils will provide sanitary facilities such as toilets to male and female workers so as to minimise incidences of open defecation that can lead to pollution of water sources and the environment. CAS Civils shall also commits its resources towards procurement of refuse receptacles and also provide safe drinking water for its employees.

## 4.2 Legal framework

### 4.2.1 The Constitution of the Republic of Malawi, 1995

The Constitution of the Republic of Malawi, 1995, is the supreme law of the land. It contains, among other things, principles of national policy in section 13 (d) of the Constitution which stipulates that the state shall actively promote the welfare and development of the people of Malawi by progressively adopting and implementing policies and legislation aimed at managing the environment responsibly in order to: -

- Prevent the degradation of the environment;
- Provide a healthy living and working environment for the people of Malawi;
- Accord full recognition to the rights of future generations by means of environmental protection and the sustainable development of natural resources;
- Conserve and enhance the biological diversity of Malawi; and
- Enhance the quality of life in rural communities with the ultimate aim of attaining sustainable development

The Constitution further provides for a framework for the integration of environmental consideration into any development programs. The implication of this provision is that Government, its cooperating partners and the private sector have a responsibility of ensuring that projects are undertaken in an environmentally responsible manner.

In line with the constitution, this C-ESMP has been prepared so as to integrate environmental and social concerns in the planning, construction and operation phases.

### 4.2.2 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).

In line with provisions of this Act, this C-ESMP has been developed to ensure that all environmental and social considerations are incorporated and adhered to in the implementation of construction activities for the Mzedi dumpsite access road project.

#### 4.2.3 Pesticide Act, 2000 and Pesticides (Amendment) Act, 2018

This Act provides for the control and management of the import, export, manufacture, distribution, storage, disposal and use of pesticides; the establishment of a Pesticides Control Board; and related matters. It calls for precautionary measures in the handling of pesticides, including the need to protect the health of employees who are or may be exposed to pesticides. It imposes adequate training of employees who will be involved in handling or applying pesticides in aspects of safe handling and use of pesticides among other prescriptions and proscriptions

Construction of works may require use of pesticides for termite protection. Some chemicals are banned both at international and national levels. CAS Civils will therefore sought up-to-date information and professionalism from the approved stakeholders by the supervising engineer.

#### 4.2.4 Water Resources Act (2013)

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. 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. In compliance with provisions of the Water Resources Act, CAS Civil Contractors will ensure that the construction activities does not pollute water from any water sources in the project area

#### 4.2.5 Land Act (2016)

The Land Act of 2016 makes provision for land in Malawi and for all matters incidental or connected thereto. The Act, among other things, deals with issues of land ownership, land transfer, use of land and compensation. The issues of land tenure and land use are recognized as critical in sustainable environmental management in Malawi.

In line with provisions of the Act, any persons whose land will be affected by Mzedi access road project will get compensated before the project is implemented.

#### 4.2.6 Employment Act, 2000 (As Amended in 2010)

The Malawi Employment Act, 2000 (as amended in 2010) establishes, 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 related matters. It provides guidance on how an employee and employer can work together. It regulates the relationship between workers and managers to ensure everyone is treated fairly and respectfully. It includes how and when an employee can work, what they should be paid, and the minimum conditions that are safe and appropriate to work in. It also determines when someone can be hired or fired and outlines the rights of employees and employers (GoM, 2000)

CAS Civil contractors shall grant its employees every opportunity and necessary facilities for communicating freely with Ministry of Labour personnel (including the District Labour officer), and when so requested, afford every reasonable assistance to the Labour Officer. Furthermore, CAS CIVILS shall orient Human Resources personnel on the provisions of the Employment Act, and always adhere to applicable labour practices, and desist from employing children. Refer to annex 10 for Labour Management Plan.

#### 4.2.7 Child Care, Protection and Justice Act, 2010

The Act prohibits child trafficking, forced marriage or betrothal, and harmful practices against children. Child trafficking includes recruitment, transaction, transfer, harbouring or receipt of a child for the purposes of exploitation (GoM, 2010)

In accordance with this Act, CAS CIVILS will take measures aimed at protecting children, and ensuring that justice is upheld against anyone perpetrating violations against the rights of a child in the project sites. CAS CIVILS will sensitize workers and include clauses in the Code of Conduct to ensure that child rights are upheld.

#### 4.2.8 Local Government Act (1998)

The 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 programmes in their areas. It further provides for environmental functions, which include urban management, local planning, local afforestation programmes, and control of soil erosion, among others.

In this regard, CAS Civils shall collaborate with the BCC in the implementation of the project to ensure continued support and hence sustainability of the intervention. In addition, CAS Civils will also put in place measures for collection, recycling, treatment and disposal of solid wastes from the site.

#### **4.2.9 The Forestry Act, 1997 and Forestry (Amendment) Act of 2020**

The Forestry Act, 1997 provides for participatory forestry, forest management, forestry research, forestry education, forestry industries. Protection and rehabilitation of environmentally fragile areas and international cooperation in forestry and for matters incidental thereto or connected therewith.

CAS Civils shall ensure that naturally growing trees and planted ones are protected during the implementation of project activities.

Furthermore, CAS Civils will ensure that trees are planted not only contribute to improvement of vegetative cover in the project area but will also protect the structure from floods and mud slides.

#### **4.2.10 Occupational Safety, Health and Welfare Act (1997)**

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.

In compliance to the requirements of the Act, CAS Civil Contractor has an Occupational Safety, Health and Welfare Policy and program. Furthermore, according to Section 58 (Part VI) all workers for the construction works will be provided with appropriate personal protective equipment (PPE) and these include work suits, industrial boots, hard helmets and gloves during the construction period.

In addition, CAS Civils shall ensure that a well-stocked First Aid Box is made available at the construction site for use by workers and under the charge of a well-qualified person as stipulated in our Occupational Health and Safety plan; Annex 11. In line with Part II, Section 6 of the Occupation Safety, Health and Welfare Act, CAS Civils has obtained a workplace registration certificate for the construction of Mzedi dumpsite access road project, Refer to annex 12

#### 4.2.11 Gender Equality Act (2013)

An Act 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 for public awareness on promotion of gender equality and to provide for connected matters.

In line with the provisions of this Act, CAS Civils' will promote gender equality when it comes to engagement of labour force

#### 4.2.12 Amended Public Health Act, 1992

Public Health Act of 1992, amends and consolidates the law regarding the preservation of public health. Section 59 of the Act prohibits any person from causing nuisance on any land or premises owned or occupied by him, to provide adequate sanitary and health facilities to avoid harmful effects of waste on public health., disposing of certain matters including petroleum spirit and any substance that may cause injury to public health.

In order to comply with the requirements of the Act, CAS Civil Contractors will ensure that adequate toilets for both men and women are provided during the construction phase of the project, Additionally, CAS Civils will ensure that people do not cause nuisances in environments and to avoid contamination and pollution of water sources.

#### 4.2.13 HIV and AIDS (Management and Prevention) Act, 2018

The HIV and AIDS Management and Prevention Act of 2018 makes a provision for the prevention and Management of HIV and AIDS; provide for the rights and obligations of people living with HIV or affected by HIV and AIDS; and also provides for the establishment of National Commission.

In line with provisions of this Act, the CAS Civils will not tolerate any act of discrimination against people living with HIV. In addition, pre-employment testing by the contractor will not be tolerated as this is prohibited under Section 26 of the Act. CAS Civils will ensure that people living with HIV are given equal employment opportunity.

#### 4.2.14 Mines and Minerals Act, 2019

The Act regulates the searching for and mining of minerals including “building and industrial minerals” such as gravel and sand likely to be used for construction of Mzedi dumpsite access road. The Act proscribes reconnaissance, prospecting, exploration or mining operations, except under and in accordance with a mineral tenement or an artisanal mining permit granted under the Act.

In this regard, CAS Civil contractors tasked to construct the access road to Mzedi dumpsite shall abide by the provisions of the Mines and Minerals Act by consulting and reporting to the relevant local authority on their mining requirements.

#### 4.2.15 Physical Planning Act, 2016

The Physical Planning Act (2016) is a principal act for regulating land use, planning and physical developments in Malawi. The Act promotes orderly spatial physical development to optimize use of and service infrastructure and protect and conserve fragile ecosystems in space.

The Act regulates development by prescribing screening for environmental and socio-economic implications for large-scale development projects before planning permission is granted. In view of the above requirements, the proposed project is a large-scale development and will have to undergo screening before permission is granted. CAS Civils shall therefore take into considerations all the designs, recommendations and guidance from the BCC Town Planning Department.

#### 4.2.16 The Public Roads Act No.11 of 1962 as amended Act of 2017

The Public Roads Act consolidates and amend the law relating to Public Roads and matters connected therewith. The Act makes a provision on roads classification and vesting, compensation, supplementary and transitional, responsibility for construction, maintenance, and rehabilitation of roads in Malawi.

The construction of Mzedi access road is being undertaken for a specific purpose of accessing the dumpsite, hence Mzedi is one of the estate roads. In terms of maintenance, the Act, in section 8 (4) states that the cost of construction, care and maintenance of estate roads shall be done by the person responsible for the development in that area.

CAS Civil contractors shall be responsible maintenance for 365 days DLP as per in the contract. Beyond the DLP, BCC shall take over the responsibility for repairing and maintenance of Mzedi access road

### 4.3 Applicable Guidelines, Regulations and Standards

#### 4.3.1 Public Health (Corona Virus and COVID -19) Prevention, Containment and Management) Rules, 2020

These rules may be cited as the Public Health (Corona Virus and COVID-19) Prevention, Containment and Management Rules, 2020.

Part II of the rules is on general preventative measures on the spread of the Corona Virus. This part of the rules is subdivided into two divisions i.e. Division I and II. Division I covers rules to prevent spread of corona virus by individuals while division II covers measures by Government to prevent, contain and manage the spread of COVID-19.

According to the Fourth Schedule of the rules which is on Workplace Guidelines, CAS Civils shall ensure that workers are provided with protective personal equipment (PPE) including face masks and facilities with which to wash hands and hand sanitizers. We shall also ensure that social distancing, among the workers, is maintained as such there should be enough working space.

#### 4.3.2 Public Health (Cholera) (Prevention, Containment and Management) Guidelines, 2020

The guidelines prescribe measures for cholera prevention and control including water and sanitation, food and hygiene, cholera case management, cholera death and burial. Guidance is provided on the establishment of public health emergency management committees responsible for coordinating all cholera preparedness, prevention and control activities at various administrative and entity levels such as district, town, school and construction site as the case may be.

In the respect of these guidelines, CAS Civils shall commits itself to ensure that;

- The construction site has hand-washing facilities with access hand washing with soap.
- The site should have adequate, functional and well-maintained ablution facilities, like latrines with facilities for hand washing with soap that meet minimum sanitation standards.
- The water drawn from unprotected and unsafe sources, including boreholes shall be disinfected at source or before use.

#### 4.3.3 Water Resources Regulations, 2017

Regulation 65 (1) every person who wishes to construct any works for the purpose of impounding, damming, diverting or conveying any surface water, whether or not on or adjacent to a waterway should obtain authorization.

In line with of these regulations, CAS Civils shall apply for relevant permits or obtain agreements from BWB before undertaking any regulated tasks. In addition, proper measures shall be put in place during the construction phase to ensure that human life and the environment are safeguarded.

#### 4.3.4 Management (Chemicals and Toxic Substances Management) Regulations (2008)

Regulations apply to the handling of toxic substances and chemicals which have the potential to harm human health or the environment. The implementation of the project CAS Civils will ensure that measures for handling and use of toxic substances and chemicals are put in place to protect humans and environment.

#### 4.3.5 Waste Management Regulations (2008)

Waste Management Regulations were developed to provide guidance for the management of waste in Malawi. These regulations were reviewed however the new regulations (Waste Management Regulations, 2020) have not been gazetted by Ministry of Justice as such reference is being made to Waste Management Regulations of 2008.

The Regulations stipulates that any person who generates or collects solid waste shall sort out the waste by separating hazardous waste from the general or municipal solid waste. In line with these regulations the CAS Civils will ensure that waste generated at the facility is sorted out and disposed of in different containers and ensure proper disposal.

It is for this reason that CAS Civils will provide waste management facilities to ensure that waste generated at the construction camp or site is safely stored before its final disposal.

### 4.4 World Bank Environmental and Social Standards

In addition to the review of relevant national policy and legal framework, applicable World Bank Environmental and Social Standards (ESSs) have also been reviewed. These include:

#### 4.4.1 ESS1: Assessment & Management of Environmental & Social Risks and Impacts

The objective of ESS-1 is to ensure that World Bank-financed projects are environmentally sound and socially acceptable and sustainable and that in the event that the project has side negative effects, there must be adequate mitigation measures. This policy comes into force if and when a project is likely to have potential adverse environmental impacts and risks in its area of influence. The Construction of the access road to Mzedi dupsite will lead to provision of improved delivery of sanitation services in the city. With most of the waste being able to reach the dumpsite, the City

and its environment will be clean and health. Furthermore, on assessment, it was proved that the project will have minimal environmental and social impacts.

#### 4.4.2 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. In this accord, CAS Civils shall 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.

Measures will be put in place to avoid the impact associated with the 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 project will ensure that the workers abide by the code of conduct to minimize and mitigate environmental and social impacts. No child shall be employed during implementation of the program

#### 4.4.3 ESS 3: Resource Efficiency and Pollution Prevention and Management

ESS 3 recognizes that economic activity and urbanization often generate pollution of air, water, land, and consume finite resources that may threaten people, ecosystem services and the environment at local, regional, and global level. The proposed project is expected to cause significant water and energy use, and the associated handling and storage of construction material could raise waste production potential. Inappropriate disposal of wastewater might pollute the environment, and burning of waste 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. In line with this ESS, CAS Civil s shall provide train all its personnel in pollution control and prevention. Furthermore, waste receptacles and toilets shall be provided to manage the waste at the site

#### 4.4.4 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 circumstances, may be vulnerable. Although the project is not taking place in community settlement area, CAS Civils is aware that its

employees may settle and associate with people in the nearby communities. The employee interaction with community has both negative and positive impact on the health and safety aspect of the nearby communities. With this in mind, CAS Civil contractor shall commit resources to train its employees on various topics including HIV/AIDS, Cholera, family planning, sexual Exploitation and Abuse, Sexual harassment among others so as to protect themselves and the community. Refer to annex 13 for Community health and Safety Plan

#### 4.4.5 ESS5: Land Acquisition, Restriction on Land use and Involuntary Resettlement

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, economic displacement, or both.

On this project, the entire road stretch is free from human settlement, and no one will be displaced. The land covered by the road and its surrounding including the land covered by the dumpsite belong to BCC. The construction of road shoulders and diversion routes to allow passage of waste collection vehicles and other road users (waste pickers) while the Mzedi access road is being constructed will not trigger impacts such as displacement or land take from other people. The diversion route will be created along the same Mzedi access road.

During construction of the project, CAS Civils shall ensure that soil or gravel materials be sourced from existing and licensed gravel sites. Where affecting people's property is unavoidable, we shall ensure that there is a formal agreement between CAS and land owners. Additionally, CAS Civils shall see it through that project affected persons (PAPs) are properly compensated before completion of construction activities.

#### 4.4.6 ESS8: Cultural Heritage

ESS8 addresses physical cultural resources such as objects, sites, structures, groups of structures and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance. They may be located in urban or rural settings, and may be above or below ground. The procedures to address impacts on physical cultural resources in projects proposed for Bank financing ought to follow the environmental assessment process. The upgrading of the access road to Mzedi Dumpsite may not adversely affect cultural heritage in the earmarked site. However, since the road upgrading works will involve earth works and excavation of debris and trenches for the road drainage system, it is probable that a physical cultural resource can be found while undertaking the excavation works, therefore special attention

will be paid to objects of cultural importance, if discovered the CAS CIVIL Contractors will report to the Department of Antiquities, District Council and Project Management Unit (PMU) for MWS-1 through the Cultural Heritage and Chance find procedure plan. (Annex 14.)

#### 4.4.7 ESS10: Stakeholder Engagement and Information Disclosure

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

CAS Civils shall therefore engage all the stakeholders during the execution of the project activities so as they are well informed of the risks and impacts of the project, and potential opportunities and solicit ideas that will help improve implementation of activities under the upgrading of access road to Mzedi Dumpsite. Such stakeholders include waste pickers, BCC, BWB, Councilors and block leaders, communities around the project site, among others.

### 4.5 Licenses, Permits, Registrations and Agreements

#### 4.5.1 Workplace registration

In line with Part II, Section 6 of the Occupation Safety, Health and Welfare Act, requires that before any person occupies or uses any workplace in Malawi he needs to apply for the registration of such a premises. CAS Civil contractors recognises the need for workplace registration and therefore applied for the same through the Directorate of Occupational Safety and Health. The Directorate is mandated to ensure that workplaces in the country are rendered safe and without risk to health to the workers, the general public and the environment. This is achieved through:

- Inspection of workplaces to identify and cause redress of hazards which threaten the safety of workers, the general public and the environment,
- Investigation of occupational accidents and work-related diseases to identify the causes and recommendations of measures that should be taken to prevent re-occurrence of such cases,
- To conduct awareness campaigns on Occupational Safety and Health information to both employers and employees in workplaces

CAS Civils, was duly registered according the requirements in Section 7 of Occupational Health, Safety and welfare Act.

#### 4.5.2 Quarry, Gravel and Sand Mining permit

Malawi Mines and Minerals Act, part V Section 81 clearly stipulates that the District Commissioner, or a person authorized by the Minister for the purposes of this section, may, on the prescribed fee being paid, issue to any person a mineral permit. Subject to this Act, the holder of a mineral permit may enter upon public land or customary land and mine any prescribed mineral. It was for this reason CAS Civil contractors obtained a sand permit from Chiradzulu district Council. Annex 15

Regarding the quarry permit, CAS Civils opted to procure the materials from Mota Engil Company which is a duly registered and well reputable company (Annex 16). Procuring such materials proved suitable and time efficient for the contractor.

Gravel permit, the CAS Civils obtained a licence from Department of Forestry to obtain gravel from the Ndirande Makhetha forest reserve. Refer to annex 17 for the permit agreement.

#### 4.5.3 Water abstraction rights permit

Water Resources Act, Part V section 39, stipulates that no person shall abstract and use water unless authorized to do so by the Minister, in consultation with the district councils. The Act further states that person who is not a holder of a license under this Act, constructs or employs any works for the abstraction or impoundment of water; commits an offence. It is for this reason that CAS Civils has also applied and paid for water permit abstraction permit (Annex 2)

## **5. IMPACT IDENTIFICATION AND THEIR MANAGEMENT MEASURES**

### **5.1 Impact identification**

The construction activities of Mzedi dumpsite access road are expected to generate a range of impacts some of which will be positive while others negative. The impacts will have a bearing on the biophysical and socio-economic environment. This Chapter therefore, seeks to identify the potential environmental and social impacts associated with the project and propose measures to manage them.

#### **5.1.1 Construction of campsite**

##### **5.1.1.1 Positive impacts**

###### ***Skill transfer***

Employment of local people from within the project area will facilitate capacity enhancement and the acquisition of specific skill sets through on the job and formal training. Such local labour force shall include waste pickers

###### ***Enhancement measures:***

- Maximize employment of local people particularly for the unskilled labor force.
- Make deliberate effort to pair skilled and unskilled workers during various construction assignments; and

###### ***Business opportunities***

During construction of the campsite, CAS Civils will require various types of construction materials such as pole, timber, iron sheets, diamond wire, sand, aggregate, cement, and steel, among others.

###### ***Enhancement Measures***

- Procure construction goods and services from registered local businesses including Small and Medium Enterprises (SMEs);
- Purchase goods and services at reasonable prices to ensure Malawian local businesses offset the costs and expand their businesses.

###### ***Employment opportunities***

The construction of a campsite created temporary employment of about 15 workers, both unskilled and skilled workers.

###### ***Enhancement Measures***

- Engage 80% of labour force from the surrounding communities who shall include both men and women.
- Provide employment contracts with terms and conditions that are in line with the Employment Act; the Labour Relations Act (1996) and the Workers Compensation Act (2000).

#### **5.1.1.2 Negative impacts**

##### ***Land ownership issues***

During construction of the campsite, land owners may be affected negatively and possible grievances maybe lodged against CAS Civils.

##### ***Mitigation Measures:***

- Identify land owners and have signed agreement or authorization before commencement of the construction works
- Develop and implement Grievance Redress Mechanism (GRM) for the project.
- Ensure that all project affected persons are compensated before commencement of construction works.

##### ***Dust emission***

Construction of the campsite shall involve clearing the site, excavations, movement of construction vehicles and other works. Therefore, dust emission during the construction of campsite shall be inevitable.

##### ***Mitigation Measures:***

- Dust suppression by sprinkling of water
- Enforce speed limit to control dust generation
- Provide workers with fit for purpose PPE

##### ***Waste generation***

- Provide waste receptacles such as toilets and bins;
- Allow surrounding communities to collect some waste for re-use; and
- Dispose of non-biodegradable waste at recommended site by BCC

### 5.1.2 Positive Impacts and Recommended Enhancement Measures

The construction of road will generate a number of positive impacts. The main positive impacts that are anticipated during project implementation and their enhancement measures are as follows:

#### **a. Source of Government Revenue through taxes**

Taxes will be collected from the sales of construction materials and services procured for use on the project. The contractor will pay taxes to Government in fulfilment of their tax obligations.

#### **Enhancement Measures**

Remit taxes to Government in full and timely;

#### **b. Creation of temporary informal businesses**

During construction phase, the contractor will require various types of construction materials such as sand, aggregate, cement and steel, among others. Kachere Township will thrive as some of the workers will be buying from them.

#### **Enhancement Measures**

- Procure construction goods and services from registered local businesses including Small and Medium Enterprises (SMEs);
- Purchase goods and services at reasonable prices to ensure Malawian local businesses offset the costs and expand their businesses.

#### **c. Creation of temporary employment**

The contractor is expected to hire some skilled and unskilled labour force and the contractor is expected to employ a minimum of 45 workers over the construction period, and the majority of which are expected to be Malawians.

#### **Enhancement Measures**

- Engage 80% of labour force from the surrounding communities who shall include both men and women;
- Provide employment contracts with terms and conditions that are in line with the Employment Act; the Labour Relations Act (1996) and the Workers Compensation Act (2000); and
- Implement a vibrant Grievance Redress Mechanism (GRM) to address employer-worker and community relations issues.

#### **d. Skills transfer to local communities**

Employment of local people from within the project area 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:**

- Maximize employment of local people particularly for the unskilled labor force.
- Make deliberate effort to pair skilled and unskilled workers during various construction assignments; and
- Formalize on-the-job training for local unskilled labor in the surrounding areas and includes learning targets and performance monitoring

#### **e. Ease access to the dumpsite.**

Upgrading the road will ease access to the dump site for waste collectors, thereby more waste will be collected from the city. During the wet seasons, the road to the dumpsite gets very muddy making it difficult for the waste collection vehicles to reach the designated dumping area hence they end up dumping the waste at the entrance to the dumpsite.

#### **Enhancement measures:**

- Proper maintenance of the access road can ensure uninterrupted access to the dumping site, minimizing any disruptions in waste disposal activities.
- Regular inspections and repair work to address any damages or deterioration of the road, ensuring its smooth and safe operation throughout the project's lifespan.

#### **f. Improved sanitation, hygiene, and health**

The project will help to improve sanitation and hygiene along the access road because vehicles that dumped waste along the road due to poor road access especially during rainy season will proceed to dumping the waste to the actual dump site without any hurdles.

#### **Enhancement measures:**

- Public awareness campaigns and educational programs to promote proper waste management practices and hygiene behaviors.
- Sensitize waste collectors on properly dumping the waste at designated site.
- Periodic monitoring of the entire access road and the dumpsite
- Set up bylaws and punitive measures for improper dumping of waste

**g. Reduced incidences of water borne diseases such as Cholera**

Improved access to the dump site will minimize the potential for contamination of surrounding water sources in the city, thus reducing the risk of waterborne diseases for the local population.

**Enhancement measures:**

- Establish effective waste management systems at the dump site to prevent the spread of waterborne diseases. This includes implementing proper waste segregation, recycling, and disposal practices to minimize the release of contaminated waste materials into the surrounding environment.

**h. Reduce travel time.**

The upgrading of the road to a concrete standard will reduce travel time hence resulting in quick service provision. The time saved from quick service provision can be used for other economic productive activities.

**Enhancement measures:**

- Ensure clear and visible signage to guide drivers and prevent confusion. Well-marked lanes and proper road markings contribute to smoother traffic flow.
- Keep the road in good condition through regular maintenance. Smooth and well-maintained roads allow for faster travel and reduce wear and tear on vehicles.
- Designate separate entry and exit points for vehicles accessing the dumpsite. This can prevent congestion and improve the overall flow of traffic

**5.1.3 Negative impacts and their mitigation measures**

The negative impacts that are anticipated during construction and operation of the project and their proposed mitigation measures are as follows:

**a) Increased risk of soil erosion and sedimentation**

Soil erosion will be induced by soil disturbing activities such as excavations, land clearing and grubbing, vehicle movement, open piling of materials coupled with weather conditions.

**Mitigation measures**

- Re-vegetate areas that have no vegetative cover to minimize erosion.
- Promote soil conservation methods such as terracing
- Use soils from stockpiles to rehabilitate stripped and excavated areas
- Install sediment traps on natural drainage paths at construction site.

#### **b) Increased risk of water pollution**

The project activities will require use of oils, fuels and cement. Poor storage and management of oils, fuels and cement during construction has potential to contaminate surface and ground water through run off and seepage

#### **Mitigation measures**

- Provide appropriate waste containment structures
- Construct toilets for construction workers at least 30 m away from the water body and ensure usage
- Service and maintain vehicles and equipment regularly to minimize leakages
- Mix cement in a designated areas away from surface water and areas of potential runoff.

#### **c) Increased Risk of Noise and Air pollution**

The vibrations, air and noise pollution from the construction vehicles, construction machinery and equipment during excavation and delivery of construction of materials. In addition, workers will be exposed to the noise during construction from vehicles and machinery.

#### **Mitigation measures**

- Retrofit plant and vehicles;
- Regular maintenance of plant and Vehicles;
- Provide protective equipment to workers and ensure usage (e.g. earmuffs);
- In case of high noise activity, surrounding communities (e.g., the Swoop Security Office) should be notified in advance.

#### **d) Increased Risk of Loss of Fauna**

During construction works, vibration and noise from heavy machinery and vehicles can affect a number of subterranean fauna taxa, such as burrowing mammals, reptiles and arthropods. Vibration affects these animals by causing the collapsing of burrows, and result in these animals leaving the area.

#### **Mitigation measures**

- Sensitize the contractor and the community on the importance of preserving wildlife
- Limit the clearing and excavation to area required by the project only

#### **e) Increased risk of road traffic incidents and accidents**

Increased traffic patterns will result from vehicles delivering construction materials and equipment to the site during resource mobilization and construction; and removal of solid waste, equipment

and construction materials from the site during the demobilization phase. As pedestrians and livestock are likely to cross the busy roads during construction phase, the risk for accidents will likely increase. In case of an accident or any incident, an Accident/Incident form (Annex 18) shall be filled and submitted to the MWSP-1-PMU within 24hours.

CAS Civils acknowledges that it is imperative to adopt best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public. Refer to annex 19 for Traffic Management Plan

#### **Mitigation measures**

- Engage qualified drivers with applicable licenses;
- Minimize transport distances by locating associated facilities such as worker camps close to project site and arranging worker bus transport
- Determine and enforce appropriate speed limits for public and work areas;
- Install clear warning signage for both vehicles and pedestrians.
- Regular maintenance of vehicles and use of manufacturer approved parts
- Employing safe traffic control measures, including road signs and flag persons to warn of dangerous conditions

#### **f) Increased risk of Gender Based Violence, Sexual Harassment, and Sexual Exploitation and Abuse**

CAS Civil contractors will employ both men and women from surrounding communities for unskilled labour force increasing the risk of social impacts such as GBV, SH and SEA. The populations at high risk are mostly women and girls since gender-based violence is largely rooted in societal norms that perpetuate power differentials between men and women. This is also hinted in our GBV/SEA/SH and Management plan (Annex 20).

#### **Mitigation measures**

- Use skilled trainers to raise awareness among project workers of the risks, expected behaviors, and consequences of violations, communicated through training, and publicized and contractual codes of conduct.
- Establish Grievance Redress Mechanism

#### **g) Risks associated with influx of migrants' workers**

Risks related to the influx of migrant workers can include; increased risk of spreading of HIV/AIDS and other STIs; potential disruption of marriages and disruption of social fabric and loss cultural values.

#### **Mitigation measures**

- Provide surveillance and active screening of workers through provision of self HIV test kits (OraQuick)
- Sensitize migrant workers on social norms of the surrounding communities including individual protection and protecting others from sexually transmitted infections, testing and condom use

#### **h) Increased risk on spread of Communicable diseases such as COVID 19 and Cholera**

The project will most likely increase the number of people working on the project and this may increase physical contact among workers resulting in increased risk to COVID-19 and Marburg. The large number of workers on the construction site coupled with poor sanitation and hygiene practices may result in spread of cholera, which is becoming a rising concern.

#### **Mitigation measures**

- Promoting collaboration with local authorities to enhance access of workers families and the community to public health services and promote immunization
- Raise awareness of the risks among community members and local health authorities and inform them about communicable diseases such as COVID 19, and Cholera

#### **i) Increased on Occupational Health and Safety Risk**

Accidents and Incidents may result from people being hit by heavy and sharp objects; hit by moving machinery; falling over in slippery conditions, holes and pits; and falling from heights (IFC-World Bank, 2007). Expected impacts are injuries or deaths to workers, traders or visitors

#### **Mitigation measures**

- Recruit well-trained first aiders and provide well-stocked first Aid kits.
- Brief all workers on occupational health and safety issues during toolbox talks.
- Install signage in English and Chichewa in strategic areas
- Orient visitors on workplace safety measures and provide them with PPEs when they tour facilities

#### **j) Increased risk of child labour**

There is potential risk of underage employment of children by contractors as a source of cheap labour.

#### **Mitigation measures**

- Employ only those people over the age of 18 as recommended in the labour laws with National ID Verification.
- Display posters at the project site that warn and inform against child labour
- Put in place proper procedures for reporting and addressing child labour cases.

#### **k) Increased risk of vandalism and theft of construction materials**

Various construction materials such as steel and cement will be stored within the project area mainly at the campsite warehouse. Some ill-character persons (contracted personnel and community members) might end up stealing and/or vandalizing the project materials or assets.

#### **Mitigation measures**

- Strengthen security at construction site.
- Enforce and strengthen laws at the construction site and surrounding communities.

#### **l) Increased risk of social conflicts**

The project will likely induce the influx of people from elsewhere in search of employment at the project locations. Conflicts may arise when these people display contradictory cultures or unwarranted behaviours such as indulgence in violence with the waste pickers at the dumpsite. Additionally, social conflicts may also arise if our workers get involved with spouses of the local population.

#### **Mitigation measure:**

- Raise awareness of the risks among community members.
- Formulation and use of GRMCs to address social conflicts.
- Employing workers from areas around the project site, including waste pickers.

#### **m) Creation of borrow pits and open excavations**

The construction of the Mzedi dumpsite access road will entail excavation of soil and gravel and this will create borrow pits that may not only pose as a safety risk to surrounding communities especially children and livestock but will also create a breeding ground for malaria-causing mosquitoes

**Mitigation Measures:**

- Obtain necessary permits and approvals
- Facilitate signing voluntary land use agreement
- Develop rehabilitation plan to restore the sites
- Barricade/hoard the site to prevent unauthorized access
- Sensitize communities to keep out of borrow pit and gravel areas
- Carryout progressive rehabilitation of all borrow pits; and
- Use excavated soils to rehabilitate borrow pits.

**n) Temporary loss of land**

It is expected that during construction phase, some people may be affected negatively as there is likelihood that some soil and gravel will be sourced from peoples' gardens which will putting their livelihoods at risk.

**Mitigation Measures:**

- Develop and implement Grievance Redress Mechanism (GRM) for the project.
- Source soil and gravel from existing and designated gravel sites.
- Ensure that all project affected persons are compensated before commencement of construction works.

**o) Increased Generation of waste****Mitigation Measures:**

- Provide waste receptacles such as toilets and bins;
- Contain used oils in containers for sale to used oil recycling companies;
- Allow surrounding communities to collect some waste for re-use; and
- Dispose of non-biodegradable waste at recommended site by BCC
- Sensitize surrounding communities on waste management especially on proper disposal of solid waste.

**p) Loss of temporary employment and business**

At the end of the construction works, the contractor will lay off workers involved in construction works. Similarly, demand from local suppliers for different materials and items will cease to occur. This will result in loss of employment and business and therefore, reduced income capacity for the people to be laid off. The impact is negative, will definitely occur and is of low significance.

### **Mitigation Measures:**

- Sensitize workers on when construction works shall cease so that people are well prepared; and
- Pay off terminal benefits to the workers

#### **q) Increased air pollution/ dust emissions**

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

#### **Mitigation measures**

- Control vehicle speed to reduce generation of dust.
- Install speed limit signs and humps in strategic areas, and
- Sprinkle water on earth roads to suppress dust

#### **r) Conflict between contractor and community members e.g., waste picker**

Conflict between contractor and surrounding community members e.g., waste pickers which can have negative effects on the construction phase of the Mzedi dump site access road.

#### **Mitigation measures**

- Conducting awareness campaigns about the project's importance, benefits, and potential disruptions and mitigation measures that have been put in place to minimize the disruptions.
- Enable all affected persons to access the developed Grievance Mechanism (GM)
- Provide employment to some of the waste pickers to work as unskilled personnel.
- Ensure the dumpsite is still being accessed by waste pickers and waste collection vehicles while the access road is being constructed

#### **s) Competition over use of existing resource (water and energy)**

During construction of the access road there shall be need for water and energy to support construction works. For instance, for suppression of dust emission, for concrete mixing, etc. and energy for lighting (the campsite), running generate when needed, etc.

#### **Mitigation measures**

- Secure water abstraction permit from NWRA to use free flowing water.
- Use of solar energy powered appliances
- Use generator as source for running machines like concrete vibrator

**t) Use of materials that are illegally produced or of poor quality.**

During construction of the access road there is a risk of using materials that are illegally produced i.e. quarry stone produced without following proper environmental mitigation measures or use of materials that are of poor quality.

**Mitigation measures**

- Ensure that quarry stone and sand are obtained from licensed suppliers.
- Inspect materials prior to purchase and use on the construction site

## **6. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN AND MONITORING PLAN**

### **6.1 ESMP Framework**

The aim of the ESMP framework is to detail the actions required to effectively implement the mitigation measures identified for each environmental and social impact generated by the project activities on the environment. These actions are required to minimize negative impacts and enhance positive impacts associated with construction and operations of the project. The ESMP actions present the commitments made by CAS Civils for addressing the impacts of the project. In this regard CAS Civils shall be committed to enhance all ESHS positive impacts that may come along with the implementation of the Mzedi dumpsite access road project and also suppress all the negative impacts from the project. The environmental and social management plan presented in table shows the linkages between the predicted positives and negative environmental and social impacts and the recommended enhancement and mitigation measures respectively. It is important to note that a C-ESMP is a living document in that it is to be updated and amended as new information (e.g. environmental data), policies, authority guidelines and technologies develop.

**Table 1: Environmental and Social Management Plan for access road to Mzedi dumpsite**

No.	Environmental/Social Impact	Enhancement/Mitigation Measure	Time frame	Targets	Responsibility for implementation of measures	Cost Estimates
Construction Phase						
Positive Impact						
a	Creation of employment (recruitment process, sensitisations, wages, compensations, etc)	<input type="checkbox"/> Engage 80 percent of the labour force from surrounding communities who shall include both men and women.	During Construction Phase	45 workers for the whole project	CAS	82,000,000
b	Creation of business opportunities	<input type="checkbox"/> Procure most of the building materials such as sand, quarry, wheelbarrows, cement etc from surrounding communities. <input type="checkbox"/> Prioritise locally produced products and offer competitive prices	During Construction Phase	50 beneficiaries	CAS	60,000,000
c	Skills transfer to local communities	<input type="checkbox"/> Engage 80 percent of the labour force from surrounding communities including women. <input type="checkbox"/> deliberate effort to pair skilled and unskilled workers <input type="checkbox"/> On-the job trainings for local unskilled labour	During Construction Phase	40 beneficiaries	CAS	5,000,000
d	Source of Government revenue through taxes,	<input type="checkbox"/> Remit taxes to Government timely	During Construction Phase and on going	All costs paid timely	CAS	135,000,000

	permits, licenses, registrations etc					
	Ease access to the dumpsite	Regular inspections and road maintenance	During DLP and ongoing	N/A	CAS and BCC	4,000,000
	Improved sanitation and hygiene	Training and awareness campaigns for the dumpsite users (Chargehands, Capitaos, waste collectors, private waste collectors, drivers, dumpsite supervisors	During DLP and on going	Access road free from waste	CAS and BCC	1,000,000
	Reduced incidences of waterborne diseases	Community awareness campaigns on waterborne diseases and proper waste management Practice integrated waste management system at the dumpsite ensuring that the dumped waste does not leave the dumpsite Provide a security system at the dumpsite as not to allow unauthorized personnel at the site	During DLP and on going	City residents and BCC security	CAS and BCC	3,500,000
	Reduced travel time	To provide clean and visible signage Provide clear road marking to help the driver maintain in their lanes.	During DLP and on going	BCC	BCC	Project cost
<b>Negative Impact</b>						
a	Loss of property	• Develop and implement Grievance Redress Mechanism (GRM) for the project;	During Construction Phase	Zero loss of property	CAS	20,000,000

		<ul style="list-style-type: none"> <li>• Source gravel from existing and licenced gravel sites; and</li> <li>• Where avoidance is not possible, ensure that all project affected persons are compensated before commencement of construction works.</li> </ul>				
b	Increased generation of waste (procurement of bins, constructions of toilets, waste disposal fees at Council, etc)	<ul style="list-style-type: none"> <li>• Provide waste receptacles such as toilets and bins;</li> <li>• Contain used oils in containers for sale to used oil recycling companies;</li> <li>• Use construction rubble and excavated soils to rehabilitate borrow pits;</li> <li>• Allow surrounding communities to collect some waste for re-use; and</li> <li>• Dispose of non-biodegradable waste at recommended site</li> </ul>	Pre-Construction Phase	4 bins 2 toilets	CAS	3,440,000
c	Increased generation of dust	<ul style="list-style-type: none"> <li>• Spray water to dampen loose soils to reduce dust;</li> <li>• Impose speed limit of construction vehicles to limit dust generation;</li> <li>• Provide dust masks to people</li> </ul>	During Construction Phase	-1 Water bowser -Monthly Sensitization campaigns -10 Speed limit signage -pair of cloth dust masks for each employee	CAS	3,000,000

		working on dusty conditions.				
d	Increased risk of HIV and AIDS and STIs	<input type="checkbox"/> Conduct civic education on HIV and AIDS and Sexually Transmitted Infections (STI); <ul style="list-style-type: none"> <li>• Distribute condoms to the workforce as well as the community to mitigate the problem;</li> <li>• Distribution of Information, Education and Communication (IEC) materials on STIs including HIV and AIDS.</li> </ul>	During Construction Phase and throughout the project life	-3 Employee training on HIV/AIDS and STIs which shall be supplemented by daily toolbox talks -procurement and distribution of condoms - monthly and weekly sensitisation campaigns for community and workers respectively - every 2 months HIV testing and Counselling session for workers from Blantyre DHO	CAS	6,000,000
e	Increased risk of spreading COVID-19.	<ul style="list-style-type: none"> <li>• Sensitize communities on preventative measures of contracting and spreading COVID 19; and</li> <li>• Put in place and enforce Covid-19 prevention strategies for customers and employees.</li> </ul>	throughout the construction phase	-Monthly sensitization campaigns  -Procurement and distribution of face masks	CAS	1,500,000

f	Increased risk of child labour	<ul style="list-style-type: none"> <li>• Employ people age 18 and above;</li> <li>• Sensitize surrounding communities on prohibition of any forms of child labour;</li> <li>• Display posters at the project site that warn and inform against child labour; and</li> <li>• Put in place proper procedures for reporting and addressing child labour cases.</li> </ul>	Throughout Construction Phase	<ul style="list-style-type: none"> <li>-Monthly Community sensitization campaigns</li> <li>-displaying IEC materials on child labour</li> <li>-Safety and employment induction for new employees</li> <li>-Trainings and briefing from Ministry of Labour monthly</li> </ul>	CAS	2,500,000
g	Increased Noise Levels and vibrations	<ul style="list-style-type: none"> <li>• All works will be done during the day</li> <li>• Construction workers will be made aware that they are not to make excessive noise (e.g. shouting, hooting).</li> <li>• Use of modern and well serviced machines and equipment</li> </ul>	During Construction Phase	<ul style="list-style-type: none"> <li>-Monthly service of equipment and plants</li> <li>-Procurement and distribution of ear plugs/muffs</li> <li>-Community sensitization and IEC materials</li> </ul>	CAS	6,000,000
h	Occupational safety and health risks (Community health and Safety)	<ul style="list-style-type: none"> <li>• Determine and enforce appropriate speed limits for public and work areas;</li> <li>• Provide clear warning signage, and use workers to divert or hold traffic during manoeuvres on public roads;</li> <li>• Maintain all vehicles and machines in good condition</li> </ul>	During Construction Phase	<ul style="list-style-type: none"> <li>-All employees in appropriate PPE</li> <li>-availability of well stocked First aid box at all times</li> <li>-Daily toolbox talks</li> <li>- Monthly OHS training and</li> </ul>	CAS	18,000,000

		<p>according to manuals;</p> <ul style="list-style-type: none"> <li>• Train workers in occupational health and safety measures;</li> <li>• Provide workers with appropriate personal protective equipment (PPE) such as work suits, ear protection, hard helmets, heavy duty gloves, and industrial boots;</li> <li>• Ensure availability of First Aid kits at project site; and</li> <li>• demand for different materials and items will cease to occur</li> <li>•</li> </ul>		sensitization campaigns -monthly service for equipment, vehicles and plants		
No.	Environmental/Social Impact	Enhancement/ Mitigation Measure	Time frame		Responsibility for implementation of measures	
i	Risk of water pollution, soil erosion, and sedimentation of water courses	<ul style="list-style-type: none"> <li>• Locate storage areas for fuels and lubricants away from natural slopping areas on site;</li> <li>• Bund and line storage areas and line the floor with concrete; and</li> <li>• Use well maintained plant equipment that is not leaking.</li> </ul>	During Construction Phase	-procurement of 2 storage drums for liquid waste	CAS	2,400,000

		<ul style="list-style-type: none"> <li>• Stock piling of materials away from water courses</li> <li>• Re-vegetation bare grounds</li> <li>• Compacting and sprinkling loose materials</li> </ul>				
j	Labour related risks (labour disputes and working conditions)	<ul style="list-style-type: none"> <li>• Sensitise workers about their rights and responsibilities</li> <li>• Functional workers GRM</li> <li>• Provide suitable working condition in terms of wages, sanitary facilities</li> </ul>	During construction	45	CAS	1,000,000
k	Conflicts between CAS and Community	<ul style="list-style-type: none"> <li>• Awareness campaigns about the project activities, benefits, disruptions and mitigation measures that have been put in place</li> <li>• Ensure accessibility of the dumpsite by the waste pickers and waste collection vehicles</li> <li>• Availability and accessibility of GRM</li> </ul>	During construction	Persons or Communities surrounding the project area	CAS and BCC	2,000,000
l	Risk of poor quality of work	<ul style="list-style-type: none"> <li>• Adherence to the project designs and BoQ</li> <li>• Supervision of the works</li> <li>• Verification of the materials being used</li> </ul>	During construction		Supervising engineer and BCC	Project cost

m	Increased risk of GBV, SEA and SH cases	<ul style="list-style-type: none"> <li>• Code of conduct that integrate GBV, SEA and SH in languages that workers comprehend</li> <li>• Functional GBV plan</li> <li>• Awareness campaigns and training on GBV/SEA/SH</li> <li>• Collaborate and network with District Social welfare, District Gender office, and other NGOs</li> </ul>	During construction	All workers on the project	CAS	2,300,000
n	Increased risk of human trafficking	<ul style="list-style-type: none"> <li>• Sensitize the workers on human trafficking</li> <li>• Human traffic reporting mechanism</li> </ul>	During construction	All workers and surrounding communities	CAS	Project Cost
o	Theft of project materials	<ul style="list-style-type: none"> <li>• Awareness campaigns on theft and its consequences</li> <li>• Employ security personnel</li> <li>• Obtain labour force from the surrounding areas</li> </ul>	During construction	All workers	CAS	4,000,000
p	Disruption of traffic flow, and service utilities	<ul style="list-style-type: none"> <li>• Functional TMP</li> <li>• Provide clear and reflective signage</li> <li>• Provide diversion roads</li> <li>• Sensitise the community about the project and possible disruption and inform them alternative measures put in place</li> </ul>	During construction	1	CAS	5,000,000

q	Competition over the use of available resources (water and energy)	<ul style="list-style-type: none"> <li>• Obtain water abstraction permit and payment evidence from BWB</li> <li>• Use of generator or solar power</li> </ul>	During construction	1	CAS	10,000,000
r	Use of material that are illegally produced or of poor quality	<ul style="list-style-type: none"> <li>• Use of well reputable and licenced suppliers for quarry, sand and other materials</li> <li>• Inspect materials prior to purchase</li> </ul>	During construction	1	CAS	Project cost
Demobilization phase						
Positive impacts						
a	Reduced noise levels	<input type="checkbox"/> Maintain all the construction equipment	During Demobilisation Phase	Monthly service and greasing of machines and equipment	CAS	1,500,000
Negative Impacts						
a	Loss of employment	<ul style="list-style-type: none"> <li>• Sensitize workers on when construction works shall cease so that people are well prepared; and</li> <li>• Pay off terminal benefits to the workers.</li> </ul>	During Demobilisation Phase	Issuing 30day notices to employees	CAS	8,000,000
b	Increased generation of construction waste	<ul style="list-style-type: none"> <li>• Arrange with BCC to have the construction waste safely disposed of at designated waste disposal sites;</li> <li>• Remove scrap metals and sell them off to scrap metal dealers;</li> <li>• Give wood planks that are in good state to surrounding</li> </ul>	During Demobilisation Phase	- Weekly disposal fee from BCC	CAS	1,500,000

		<p>community for reuse while damaged ones can be used as firewood; and</p> <ul style="list-style-type: none"> <li>• Re-vegetate areas that were cleared.</li> </ul>				
c	Loss of business opportunities	<ul style="list-style-type: none"> <li>• Sensitize workers on when construction works shall cease so that people are well prepared; and</li> <li>• Pay off all outstanding bills to suppliers.</li> </ul>	During Demobilisation Phase	-Community sensitization -paying off outstanding invoices	CAS	5,000,000
Operation Phase						
Positive Impact						
a	Reduced travel time	<ul style="list-style-type: none"> <li>• Ensure regular inspections and maintenance of the Mzedi dumpsite access road;</li> <li>• Installation of signage</li> <li>• Road marking to help keep vehicles maintain their respective lanes;</li> </ul>	During Operation Phase	Mzedi dumpsite users	BCC	BCC costs
b	Reduced cases of waterborne diseases	<ul style="list-style-type: none"> <li>• Awareness campaign for the City citizens to execute proper waste management practices</li> </ul>	During Operation Phase	City citizens	BCC	BCC cost
c	Improved sanitation and hygiene	<ul style="list-style-type: none"> <li>• Awareness campaign for the City citizens to execute proper waste management practices</li> </ul>	During operation phase	City citizens	BCC	BCC cost

Negative Impacts						
a	Increased risk of theft and vandalism	<input type="checkbox"/> community sensitization on theft and vandalism and emphasis on importance of road signs <input type="checkbox"/> Enforcement of bylaws to deal with vandalism	During Operation Phase	Surrounding communities	BCC	BCC operation cost
b	Road safety risk	<input type="checkbox"/> sensitise waste pickers on the heavy traffic on the access road <input type="checkbox"/> Install traffic signs and speed control humps	During Operation Phase		BCC	BCC operational cost

## 6.2 Environmental and Social Management and Monitoring plan

The monitoring plan has been designed to cover all the potential impacts, verifiable indicators, frequency of monitoring, responsible organisations/stakeholder for carrying out the monitoring and those for receiving the reports. The environmental and social monitoring plan provides for monitoring to checking implementation of the enhancement and mitigation measures proposed in the ESMP.

The environmental monitoring plan helps to verify the magnitude, duration and scope of the predicted impacts during and after implementing the mitigation measures. It also helps to detect any unforeseen impacts at an early stage so that corrective measures can be taken before significant damage takes place on the society of the environment. Hence monitoring implementation of the ESMP requires dedication and persistent follow up, especially during the construction and operation phases of the project. It requires coordination with professionals from various key stakeholders to verify that all mitigation measures in the ESMP are being implemented on time and as recommended.

SN	IDENTIFIED POTENTIAL RISK	PROPOSED ACTION	MONITORING INDICATOR	MEANS OF VERIFICATION	MONITORING INSTITUTION
1	Increased Temporary employment opportunities	Prioritize employment of Malawians, especially from the local population.	Number of Malawians employed from the local population	Field visits (reports, interviews)	MoL, LGravam and BCC
2	Increased source Government Revenue through tax	-Remit taxes to MRA in full and timely -procure goods and services from taxi compliant businesses	Amount of taxes remitted to MRA	Reports (MRA tax returns)	MRA
3	Improved rural livelihoods and income levels	-Recruit people from within the surrounding project areas -Provide periodic lessons on prudent financial management and	Number of local people recruited from within the surrounding areas	Field visits (records, interviews)	MoL, LGravam and BCC

		investment to workers			
4	Loss of vegetation	Replanting of trees and vegetation	Number of trees replanted compared to cleared trees.	Field visits, observations and reports	LGravam and BCC
5	Increased risk of loss of habitat and soil erosion and sedimentation	Re-vegetate, Construction of drainage channels Remove vegetation only in areas where it is necessary Promote catchment management interventions	Stability of soil and absence of runoff	Visual inspections	LGravam and BCC
6	Increased risk of noise pollution	Rugular servicing of plant and vehicles	Number and types of plant and vehicles retrofitted	Field visits and interviews	MEPA
7	Water pollution	<ul style="list-style-type: none"> <li>• Use of silt traps</li> <li>• Timely servicing of machine, vehicles and equipment to avoid leakages/ oil or fuel spill</li> </ul>	Water quality parameters (e.g., turbidity, pH)	Water quality testing	MEPA
8	Increased risk of occupational health and safety	-Provide and enforce use of PPE to all workers and ensure usage. -Recruit well trained first aiders -conduct task risk assessment -Put of signage on site	number of workers using PPEs	Filed visits and interviews	MoL, LGravam and BCC
9	Increased risk of road traffic incidents and accidents	Traffic management plan implementation	Traffic flow and local disturbance levels	Community feedback, Monthly reports	LGravam and BCC

10	Increased risk of Child labour	Employ only those people over the age of 18 as recommended in the labour laws with National ID Verification and IEC material on site to warn against child labour	Number of people above 18 years employed, and with a National ID verification	Contract signing verification, Field visits (interviews)	MoL, LGravam and BCC
11	Air pollution from dust and emissions	-Site watering and low emission machinery -Retrofit plants and vehicles	Air quality indexes for particulate matter	Air quality monitors	MEPA, LGravam and BCC
12	Disturbance to archaeological sites	Chance find plan	Reports of findings or alterations to site plan	Archaeological survey reports	Blantyre District Council, LGravam and BCC
13	Social conflict from worker influx	Implementation of a code of conduct and community engagement  Employing workers from within the area	Number of grievances reported	Grievance redress mechanism logs	MGCDSW, MoL, LGravam and BCC
14	Increased risk of gender based violence	Use of Social and Gender Officer to monitor compliance and raise awareness among project workers of the risks, expected behaviours, and consequences of violations, communicated through training, and publicized and contractual codes of conduct	Number training sessions conducted  Number of GBV and SEA cases reported	GRM reports and interviews	MGCDSW, MoL, LGravam and BCC
15	Increased risk of vandalism and theft of construction materials	Strengthen security at construction site.	Nature, Quality and quantity of security measures in place	Interviews and observations	MoWS and Police Service, LGravam and BCC

16	HIV and AIDS	Health education programs and medical services	Number of workers accessing health services	Health service usage records	DHO, LGravam and BCC
17	Increased generation of construction waste	Arrange safely disposal of construction waste at designated waste disposal sites Procurement and enforce the use of bin	Number of bins available on site Number of workers sensitized on waste management	Availability of bins Documentation on waste management	MEPA, LGravam and BCC
18	Marriage Disruptions	Community engagement strategies and grievance mechanisms	Number of disruptions reported	Community consultation feedback, GRM logs	MoG, LGravam and BCC
19	Creation of borrow pits and open excavations	Obtain necessary permits and approvals  implement borrow pit rehabilitation plan	Necessary permits obtained	Documentation on site	MEPA, LGravam and BCC
21	Creation of temporary Informal businesses	Procure construction goods and services from registered local businesses including Small and Medium Enterprises (SMEs)	Volume (MWK) of goods and services procured from local but registered businesses.	Reports (receipts check)	MoL, LGravam and BCC
22	Increased risked of biodiversity including loss of fauna	Sensitization campaigns on preservation of wildlife Limit excavation and bush clearing to areas required by the project only	Number of people sensitized Total area cleared and excavated by the project	Field visits and reports	MEPA and Department of Forestry, LGravam and BCC
23	Temporary loss of land	-Formulate GRM for the project -Compensate for loss of temporary loss of land	Availability of GRM Source of soil and gravel	Reports and Visits	MEPA, Department of Lands, LGravam and BCC

		-Source soil and gravel from existing borrow pits			
24	Increased risk of water related diseases	Provision of 2 toilets Provision of waste receptacles Health education and sensitization for the workers and the community	Number of facilities available on site Number of people sensitized	Field visits, interviews and reports	MoL, DHO, LGravam and BCC

## **7. CONCLUSION**

CAS Civil Contractors recognizes the significance of the project to beneficiaries and the Malawi nation as a whole. It also acknowledges that from environmental assessment conducted for the construction of Mzedi dumpsite access road, it is evident that the project potentially has some significant negative impacts which relate to the surrounding environment. The impacts pertain to disruption of livelihood interventions to small business community, risk of spread of HIV and AIDS, COVID 19, Sexual Exploitation and Abuse, Sexual Harassment, Child labour, poor waste management, formation of barrow pits; disruption of traffic during construction, among others.

In spite of the above probable negative impacts, it is possible with adequate design and implementation measures in this C-ESMP to mitigate the environmental effects and reduce them to acceptable levels. CAS Civil contractors shall therefore commit its resources to implement strict measures from both engineering, environmental, social and health standpoints considering the need to protect the environment while achieving economic development. This will ensure that the project adheres to acceptable practices and standards.

## REFERENCES

- Environmental and social management plan for construction of Mzedi dumpsite access road
- Environmental and social management plan for construction of drainage improvement works in various roads of Blantyre City (2024)
- Government of Malawi (2012), Malawi Growth and Development Strategy, 2017 – 2022. Ministry of Economic Planning and Development, Lilongwe
- International Finance Corporation (2007), Environmental, Health and Safety Guidelines, General EHS: Occupational Health and Safety
- Government of Malawi (2002), Malawi National Land Policy, Ministry of Lands, Physical Planning and Surveys, Lilongwe
- Government of Malawi (1998), Local Government Act, Ministry of local Government, Lilongwe
- Government of Malawi (1997), Forestry Act, Ministry of Natural Resources, Energy and Mining, Lilongwe
- Government of Malawi (1966), Public Health Act
- Government of Malawi (1997), Guidelines for Environmental Impact assessment (EIA) in Malawi, Environmental Affairs Department, Lilongwe
- Government of Malawi (2017), Environmental Management Act (EMA), Number 19, Environmental Affairs Department, Lilongwe
- Government of Malawi (1995), Water Works Act, Number 17, Ministry of Water Development, Lilongwe
- Government of Malawi (2005), National Water Policy, Ministry of Agriculture, Irrigation and Water Development, Malawi
- Government of Malawi (2005), National Sanitation Policy, Ministry of Agriculture, Irrigation and Water Development, Malawi
- Government of Malawi (1994), National Environmental Action Plan (NEAP), Volume 1, Department of Research and Environmental Affairs, Lilongwe
- Government of Malawi (1988), Town and Country Planning Act, Number 26, Town and Country Planning Department, Office of President and Cabinet, Lilongwe
- Government of Malawi (1969), Water Resources Act, Ministry of Works and Supplies, Zomba Constitution of the Republic of Malawi, 1995: Malawi Government
- Environmental Affairs Department (1997) Guidelines for Environmental Impact Assessment in Malawi, Lilongwe
- Government of Malawi (2004), National HIV and Aids Policy, Malawi
- Government of Malawi, 2018. Population and Housing Census. National Statistics Office (NSO), Zomba, Malawi

## ANNEXES

### ANNEX 1: BORROWPIT REHABILITATION PLAN

#### Introduction

This is a Borrowpit Rehabilitation Plan for the upgrading of access road to Mzedi Dumpsite from earth/muddy road to concrete standard road under the Malawi Water Sanitation Project 1 (MWSP-1), with the funding from World Bank. Mzedi dumpsite access road is in Blantyre City, at Kachere off Zomba Road. This project aims at constructing a concrete access road to ensure the road is passable throughout the year. The scope of the works will involve debris excavation, earthworks pavement layer construction, drainage works and concrete pad construction. For the road layers, CAS Civils plans to import foreign material (gravel) from an existing borrow pit of Ndirande-Makhetha borrowpit. CAS Civil Contractors obtained a permit from the Department of Forestry to use this pit.

#### Location

Ndirande-Makhetha borrow pit is located in Machinjiri, along Ndirande-Makhetha road, in the City of Blantyre, 523m from Makhetha market, under the jurisdiction of Traditional Authority (TA) Machinjiri. The pit is located at Geographical Coordinate system 720609E, 8254955N. The area is isolated and there is no human settlement around the site. Figure below shows the map of the pit and its surrounding features



Figure 5 aerial view of the borrow pit



**Figure 6 showing the current state of the existing borrow pit**

### **Aim of the Rehabilitation Plan**

The aim of the rehabilitation plan is to:

- Return the disturbed area to an acceptable post mining state;
- Ensure that all areas are stable, and there is not risk of erosion;
- Prevent alien plant invasion on the site until the site is in a stable state; and
- Ensure that all areas are free draining and non-polluting.

### **Management Criteria for the Rehabilitation of the Land**

The following management measures are required:

- Newly planted / seeded areas will be protected against compaction and erosion;
- Traffic will be limited until the vegetation is self-sustaining;
- Vegetation will be watered, if required, and weeded at least once in six months;
- On-going monitoring for pests and diseases will be undertaken at least once in six months and vegetation will be treated in accordance with identified accepted procedures if necessary; and
- Any damage caused by erosion will be rehabilitated and the necessary erosion control measures will be maintained.

## **Rehabilitation Plan**

### ***General requirements***

- a) Rehabilitation will be restricted to areas excavated and used for the purposes of this project
- b) The objective of rehabilitation will be to restore the borrow pit to a condition which is as similar as possible to the natural environment or to the pre-determined end use.
- c) Rehabilitation will take place on completion of the borrow process and shall continue for three months after completion of the project.

### ***Surplus material and topsoil***

- a) On completion of mining, all surplus material in and around the excavations, including any stockpiled gravel or oversized rocks, but excluding topsoil, shall be returned and the sides of the pit shall be graded to recommended slopes.
- b) Stockpiled gravel will be left inside the pit for use on future projects.
- c) The topsoil stockpiled prior to mining shall be spread evenly over designated areas of the borrow pit.
- d) Topsoil from adjacent road clearing activities can also be used to supplement topsoil for mining areas where topsoil is deemed to be inadequate by the engineer.
- e) The topsoil must be keyed into the re-profiled surfaces to ensure that they are not eroded or washed away.
- f) The top-soiled surface shall also be left fairly rough (ie not smoothed down) to enhance seedling establishment, reduce water run-off and increase infiltration.

### ***Landscaping***

- a) All borrow pit slopes shall be finished to produce a smooth rounded concave / convex surface.
- b) Ensure that hard rock slopes are safe. Benching of these slopes is preferred.
- c) The floor of the borrow pit shall be made gently undulating in keeping with the landscape surrounding the excavation.
- d) The rehabilitated land will be visually in keeping with the immediate environment, and any negative visual impact will be rectified to the satisfaction of the supervising engineer.

### ***Re-vegetation***

- a) No seeding of replaced topsoil should be required, unless topsoil has been stored for a period longer than 12 months. Once replaced, the topsoil will be left to revegetate naturally unless the process does not occur unaided or if significant topsoil erosion occurs.
- b) Should the initial approach be deemed insufficient, the problem areas shall be seeded with suitable grass species to provide an initial ground cover and stabilize the soil surface

- c) No alien species shall be planted at any time in this area, and any invasive alien plants that establish during rehabilitation shall be manually removed.

***Drainage works / erosion protection***

- a) Areas where mining is completed shall be rehabilitated immediately to reduce the opportunity for erosion.
- b) The final surface level shall be free draining (unless otherwise indicated) and the necessary measures will be taken to prevent erosion until such time that the vegetation is sufficiently established.
- c) Runnels, erosion channels or wash-aways developing after rehabilitation shall be backfilled and consolidated and the areas restored to a proper stable condition.
- d) Central borrow pit areas are likely to become water traps in the long-term and the rehabilitation procedure should aim to complement this - i.e. the use of locally occurring water tolerant grasses, sedges and reeds would be recommended.

***General site clean-up***

- a) All infrastructure, equipment, plant, fencing, temporary services and foreign materials shall be removed from the site
- b) Waste material of any description, including receptacles, scrap, rubble and tyres will be removed entirely from the mining area and disposed of at a recognised landfill facility. It will not be permitted to be buried or burned on the site.
- c) The borrow pit will be kept in a neat and tidy condition at all times.

***Additional measures***

- a) No construction equipment, vehicles or unauthorised personnel shall be allowed onto areas that have been rehabilitated.
- b) Only persons or equipment required for the preparation of areas, and spreading of top material shall be allowed to operate on these areas.

**End Use**

On completion of the project the owner is to be consulted as to whether the borrow pit will be continued to be utilised for material or is to be rehabilitated and vegetated for other purposes.

**ANNEX 2: WATER ABSTRACTION PERMIT**

 **Standard Bank**  
Cash Deposit Receipt

Date: 2024/06/03 Time: 02:09:13

Deposit Amount  
**MWK 90,000.00**

Account Name  
**M/S NATIONAL WATER RESOURCES AUTHORITY**

Account Number  
**9100003710944**

Reference  
**CAS**

Branch  
**GINNERY CORNER**

Transaction ID  
**1074383**

**Standard Bank Malawi**  
This transaction has been processed electronically and needs no further authentication

**Customer Information**  
*Every effort has been made to ensure the accuracy and completeness of the information contained in this transaction. Please review the details at your earliest convenience and in the unlikely event of any discrepancy please bring this to our attention. We would be happy to clarify any queries you might have.*

Contact Us For any queries please call Customer Contact Centre 247 / +265885920001 / +2659999015001. Our lines are open: Monday to Friday, 8:00 to 18:00. Alternatively please email us. E-mail: [customercare@standardbank.co.mw](mailto:customercare@standardbank.co.mw)

Mal 13/905011A  Standard Bank

**ANNEX 3: EMPLOYMENT CONTRACT**

**CAS CIVIL CONTRACTORS**

**P.O. Box 30508  
BLANTYRE**

**MGWIRIZANO WA NTCHITO**

Mgwirizano umenewu, wapangidwa lero pa \_\_\_\_\_ mwezi wa..... chaka  
cha\_2024\_ pakati pa :

.....CAS CIVIL CONTRACTORS..... (amene ali "Olemba nthito")

ndi

..... ( amene ali "Olembedwa ntchito")

PAMENE olemba ndi olembedwa ntchito akufuna kulowa mu mgwirizano wa ntchito umene utatsogolere ubale wa mbali ziwirizi pa nthawi imeneyi; :

**Ndondomeko wa ntchito**

Olembedwa ntchito azakhala akugwira ntchito ku kampene imeneyi kuyambira tsiku limene walembedwa kufikira atachotsedwa ntchito malingana ndi ndondomeko zimene zakhazikitsidwa mu mgwirizano umenewu.

**Nthawi ya ntchito**

Olemba ndi olembedwa ntchito lero akugwirizana zoti azakhala pa ubale umenewu kwa miyezi itatu (3 months ) monga mwa ndondomeko iyi:

- a. Olemba ntchito azakhala ndi nthawi yomudziwa olemba ntchito mugawo la kagwiridwe ka ntchito, khalidwe lake, luso ndi zina zotero zokhuzana ndi magwiridwe a ntchito;
- b. Olembedwa ntchito azakhala ndi nthawi yodziwana ndi olemba ntchito and udindo umene iye walembedwa ntchito
- c. Olemba ndi olembedwa ntchito atha kutsetsa ubale umenewu nthawi iliyonse mu nyengo imeneyi ya miyezi itatu yoyambilira atapereka chidziwitso cha masiku asanu ndi awiri (7 days) ndi chifukwa chogwirika, kupilira apo sipazakhala udindo uliwonse ku mbali zonse ziwiri.

**Malipiro / Cholowa**

Potengera ndi ntchito imene olembedwa ntchito akugwira, panthawi imene olembedwa ntchito akugwira ntchito, azalandira ndalama zokwana MK \_\_\_\_\_ pa tsiku.

**Ntchito ndi udido wa ogwira ntchito**

Olembedwa ntchito azagwira ntchito ngati \_\_\_\_\_, ndipo azagwira ntchito monga izi:

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_
- d) Ndi zina zomwe olemba ntchito angapereke mwa nthawi ndi nthawi

**Kuthetsa kwa gwirizano wa ntchito**

Olemba ntchito ndi olembedwa ntchito ali ndi ufulu othetsa mgwirizano wa ntchito pa zifikukwa monga izi:

- a. Kuphwanya malamulo dziko kapena a kampani; apa kampani sidzakhala ndi udindo uliwonse opereka chipepeso kanena chidziwitso cha kuchotsedwa ntchito
- b. Kujomba ku ntchito kwa masiku awiri kapena kuposera apo opanda chilorezo kuchokera kwa oyang'anira kapena kupereka chifukwa chomveka bwino.
- c. Kuphwanya malamulo am'gwirizano umenewo komanso malamulo apantchito

Mgwirizano umenewu uzatsatidwa malingana ndi malamulo a za ntchito a m'dziko muno (the Labour and Employment Act and laws of the Malawi)

**Saini ya Olemba Ntchito** \_\_\_\_\_

**Tsiku** \_\_\_\_\_

**Dzina la olembedwa ntchito** \_\_\_\_\_

Saini \_\_\_\_\_

Tsiku \_\_\_\_\_

# CAS CIVIL CONTRACTORS

## CONTRACT OF EMPLOYMENT

This agreement, made on the ..... day of the .....month of the year.....

Between:

.....CAS CIVIL CONTRACTORS..... (hereinafter referred to as "the Employer")

and

..... (hereinafter referred to as "the Employee")

WHEREAS the Employee and the Employer wish to enter into an employment agreement governing the terms and conditions of employment;

THIS AGREEMENT WITNESSETH that in consideration of the premises and mutual covenants and agreements hereinafter contained is hereby acknowledged and agreed by and between the parties hereto as follows:

### **Term of Employment**

The employment of the Employee shall commence from the date hereof and continue for an indefinite term until terminated in accordance with the provisions of this agreement.

### **Period**

The parties hereto agree to three (3) months period of this agreement is in the following respects:

- d. the Employer shall have an opportunity to assess the performance, attitude, skills and other employment-related attributes and characteristics of the Employee;
- e. the Employee shall have an opportunity to learn about both the Employer and the position of employment;
- f. either party may terminate the employment relationship at any time during the initial three month period with advance notice of seven days with justifiable reason, in which case there will be no continuing obligations of the parties to each other, financial or otherwise.

### **Compensation and Benefits**

In consideration of the services to be provided by him hereunder, the Employee, during the term of his employment, shall be paid a wage/salary of MK \_\_\_\_\_ fortnight/month. In addition, the Employee is entitled to receive benefits in accordance with the Employer's standard benefit package, as amended from time to time.

**Duties and Responsibilities**

The Employee shall be employed in the capacity of \_\_\_\_\_, the current duties and responsibilities of which are:

- e) \_\_\_\_\_
- f) \_\_\_\_\_
- g) \_\_\_\_\_
- h) And any other duties as assigned by the employer from time to time

**Termination of Employment**

Subsequent to completion of the probationary term of employment referred to in paragraph 2 herein, the Employer may terminate the employment of the Employee at any time:

- d. for just cause at common law, in which case the Employee is not entitled to any advance notice of termination or compensation in lieu of notice;
- e. absent from work for two (2) days or more without approval from supervisors or giving sound excuse.
- f. breach of employment terms by either parties

The entitlements and termination of services will be governed by the Labour and Employment Act, and its regulations and laws of the Malawi.

**Signed by the employer** \_\_\_\_\_

**Date** \_\_\_\_\_

**Signed by the employee Name** \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

## ANNEX 4: CODE OF CONDUCT

### Environmental, Social, Health and Safety (ESHS)

*The code of conduct shall ensure compliance with the ESHS provisions of the contract, including those as may be more fully described in the works requirements.*

### CODE OF CONDUCT

I, \_\_\_\_\_, acknowledge that preventing any misconduct including gender based violence (GBV), Sexual Harassment (SH), and Sexual Exploitation and Abuse (SEA) are important. Any activity, which constitute acts of gross misconduct are therefore grounds for sanctions, penalties or even termination of employment. All forms of misconduct are unacceptable be it on the work site, the work site surroundings, or at workers' camps. Prosecution of those who commit any such misconduct will be pursued as appropriate.

I agree that while working on this project, I will:

1. Consent to security background check;
2. Treat women and children (persons under the age of 18) with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status;
3. Not use language or behaviour towards women or children that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate;
4. Not participate in sexual activity with children—including grooming or through digital media. Mistaken belief regarding the age of a child and consent from the child is not a defence;
5. Not exchange money, employment, goods, or services for sex, with community members including sexual favours or other forms of humiliating, degrading or exploitative behaviour;
6. Not have sexual interactions with members of the communities surrounding the work place and worker's camps that are not agreed to with full consent by all parties involved in the sexual act (see definition of consent above). This includes relationships involving the withholding, promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex - such sexual activity is considered "non-consensual" within the scope of this Code;
7. Attend training and campaign courses related to HIV/AIDS, GBV, SH and SEA, and occupational health and safety as requested by my employer; and
8. Report to the committee any situation where I may have concerns or suspicions regarding acts misconduct by a fellow worker, whether in my company or not, or any breaches of this code of conduct provided it is done in good faith;

9. With regard to children under the age of 18:

- Wherever possible, ensure that another adult is present when working in the proximity of children.
- Not invite unaccompanied children into my home, unless they are at immediate risk of injury or in physical danger.
- Not sleep close to unsupervised children unless absolutely necessary, in which case I must obtain supervisor's permission, and ensure that another adult is present if possible.
- Refrain from physical punishment or discipline of children.
- Refrain from hiring children for domestic or other labour, which is inappropriate given their age, or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury.
- Comply with all relevant local legislation, including labour laws in relation to child labour.

10. Refrain from any form of theft for assets and facilities including surrounding communities.

11. Remain in designated working area during working hours;

12. Refrain from possession of alcohol and illegal drugs and other controlled substances in the workplace and being under influence of these substances on the job and during work hours;

13. Wear mandatory PPE at all times during work;

14. Channel grievances through the established grievance redress mechanism.

I understand that the onus is on me to use common sense and avoid actions or behaviours that could be construed as misconduct or breach this code of conduct.

I acknowledge that I have read and understand this Code of Conduct, and have been explained the implications with regard to sanctions on-going employment should I not comply.

Signed by: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

FOR THE EMPLOYER

Signed by: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Code of Conduct in Chichewa

# CAS CIVIL CONTRACTORS

### ZOYENERA KUTSATIRA ANTHU OGWIRA NTCHITO (Code of Conduct)

Ine \_\_\_\_\_, ndikuvomereza kuti ndizatsatira malamulo wa komanso kupewa kuchitira nkhanza akulu ndi ana kapena kuwazunza. Mchitidwe uliyonse umene ungachititse kuphwanya malamulowa pamalo antchito ndi malo ozungulira ndi osavomerezeka ndipo pakuyenera kukhala zilango ngakhalenso kuchotsedwa ntchito kumene.

Ndikugwirizana nazo kuti panthawi imene ndikugwira ntchito za WORLD BANK ndikuyenera kuchita izi:

1. Kupereka chiloleza kuti pamalo ogwira ntchito pakhale chitetezo chokwanira;
2. Ndidzapereka ulemu oyenera kwa amayi, ana amene sanafike zaka 18 ndi anthu a ulumali posatengera mtundu, chilankhulo, chipembedzo, chipani cha ndale, dziko limene akuchokera, katundu amene ali naye kapenanso kobadwira ndi zifukwa zina; <sup>[1]</sup><sub>[SEP]</sub>
3. Sindidzagwiritsa ntchito chilankhulo kapena khalidwe lirionse kwa abambo, amayi, ana kapena ana a sukulu zimene sizili zoyenera ndipo sindidzawachitira nkhanza, kuzunza, kunyazitsa ngakhalenso kulimbikitsa mchitidwe ogonana ndi osagwirizana ndi chikhalidwe; <sup>[1]</sup><sub>[SEP]</sub>
4. Sindidzachita mchitidwe ulionse ogonana ndi ana a sukulu kuphatikizaponso kuwaonetsa zolaula kudzera pa kanema, lamyana ndi makina a kompyuta. Kudziikira kumbuyo kuti izi zinachitika chifukwa chakuti sindimadziwa zaka za mwanayo kudzakhala kosamveka; <sup>[1]</sup><sub>[SEP]</sub>
5. Sindidzapereka ndalama kapena mwayi wa ntchito ndi cholinga chofuna kuchita mchitidwe ogonana ndi anthu okhala dera lozungulira malo a ntchito kuphatikizapo khalidwe lina lirilonse losayenera, limene liri lonyazitsa ndi loononga; <sup>[1]</sup><sub>[SEP]</sub>
6. Sindidzachita ubwenzi ulionse ogonana ndi anthu okhala madera ozungulira malo a ntchito, ogwira nawo ntchito popanda kugwirizana ndi kuvomereza kuchokera mbali zonse zokhudzidwa. Izi zikuphatikizaponso maubwenzi onse okudza kulonjeza, kupereka ndalama kapena katundu pofuna kuchita mchitidwe ogonana chifukwa ubwenzi otere ndi osavomerezeka;
7. Ndizaonetsetsa kuti ndikukhala nao pamaphunzira okhudzana ndi kachilombo ka HIV ndi matenda a Edzi, nkhanza zochitira akulu ndi ana, achiteteza cha miyoyo ya anthu ogwira ntchito komanso maphunziro ena alionse amene olembe ntchito angapangitse
8. Ndidzadziwitsa komiti yoyenerera ngati ndikukaikira kapena ndiri ndi nkhwana kuti mzanga ogwira naye ntchito pakampani imodzi kapena kamapani ina waphyanya malamulowa ndikuonetsetsa kuti izi zichitike moona mtima;

9. Pankhani zokhudza ana osaposeza zaka 18;

- Sindidzaitanira kunyumba kwanga mwana payekha opanga umuperekeza pokhapokha ngati ali pachiopsezo chakuti akhoza kuvulala kapena chirichonse
- Sindidzagona pafupi ndi ana amene alibe owayang'anira pokhapokha ngati kuli koyenera kutero ndipo ndidzatenga chilolezo kuchokera kwa kapita ndikuonetsetsa kuti pali munthu wamkulu pafupi.
- Ndizapewa kupereka zilango zazikulu kwa ana pamene alakwanitsa.
- Ndidzapewa kulemba kapena kupatsa ana ntchito yamtundu ulionse yosagwirizana ndi msinkhu wawo kapena imene ikusokoneza nthawi yawo yamaphunziro, ya msangulutso kapena zochitachita zina zili zones zimene zingaike moyo wao pa chiopsezo.
- Ndidzatsatira malamulo onse ovomerezeka a dziku lino okhudza kugwiritsa ntchito ana.

10. Ndidzapewa kuba katundu wina aliyense kuphatikizapo wa kumadera ozungulira malo a ntchito.

11. Ndidzaonetsetsa kuti ndikupezeka pamalo amene ndikugwirapo ntchito panthawi zonse.

12. Ndidzapewa kumwa mowa ndikusunga zoledzeretsa kapena mankhwala ena alionse oletsedwa pamalo a ntchito nthawi yogwira ntchito;

13. Ndidzavala zovala zodzitetezera nthawi zones pamalo a ntchito;

14. Ndidzapereka madandaulo anga kudzera mu ndondomeko zimene zinakhazikitsidwa;

Ndamvetsetsa ndi kuvomereza kuti ndidzapewa khalidwe lina lililonse limene likusemphana ndi zimene malamulowa akunena.

Ndikuvomereza kuti ndawerenga ndipo ndamvetsetsa malamulowa komanso zilango zimene ndingalandire ngati sinditsatira malamulowa pamalo a ntchito.

Dzina la osaina: \_\_\_\_\_

Saini: \_\_\_\_\_

Tsiku: \_\_\_\_\_

**KWA OLEMBA NTCHITO** 

Dzina la osaina: \_\_\_\_\_

Saini: \_\_\_\_\_

Tsiku: \_\_\_\_\_

**ANNEX 5: MEMORANDUM OF UNDERSTANDING OVER WASTE  
MANAGEMENT SERVICES**

DATED THIS 26<sup>th</sup> ..... DAY OF September ..... 2024

**MEMORANDUM OF UNDERSTANDING**

**BETWEEN**

**BLANTYRE CITY COUNCIL**

**-AND-**

**CAS CIVIL CONTRACTORS**

**OVER**

**WASTE MANAGEMENT SERVICES FOR MZEDI DUMPSITE SITE  
ACCESS ROAD PROJECT**

**Prepared by:**  
Blantyre City Council  
Town Hall, Civic Offices  
Private Bag 67  
Blantyre

**THIS AGREEMENT** is made on this..... day of.....2024 between **CAS CIVIL CONTRACTORS** of P.O Box 30580, Blantyre, hereinafter referred to as “the Contractor”) on one part and **BLANTYRE CITY COUNCIL** of Town Hall, Civic Offices P/Bag 67, Blantyre (Hereinafter referred to as “the Council”) of the other part collectively referred to as “the Parties”

**WHEREAS.**

1. The Contractor has requested to use **MZEDI DUMPSITE AND ZINGWANGWA/LIMBE WASTE WATER TREATMENT PLANTS** for disposal of solid and liquid waste generated from the project of upgrading the access road to Mzedi Dumpsite from an earthy/muddy road to a concrete standard road which the Contractor has embarked under the Malawi Water Sanitation Project 1 ( MWSP-1).
2. The Council in consideration of the proposal by the Contractor to use its dumpsites has agreed to offer the Contractor Services requested subject to the terms and conditions stipulated in this Agreement.

**THE PARTIES HEREBY AGREE AS FOLLOWS:**

**1. OBJECTIVE OF THE MOU**

This MoU is meant to act as a binding document that expressly states obligations of the parties in the provision of waste disposal services to the Contractor at Mzedi dumpsite and the Zingwangwa/Limbe waste water treatment plant.

**2. ENTRY INTO FORCE**

This MOU shall enter into force on the date of signatures and shall remain valid for the project implementation period unless terminated in reference to article 7.

**3. OBLIGATIONS OF THE PARTIES**

**3.1 Obligations of Blantyre City Council**

- 3.3.1 The Council shall provide the Contractor with such information, data, documents, instruments and assistance as may be necessary and appropriate for the provision of Services by the Council to the Contractor.

- 3.3.2 The Council shall permit or grant the Contractor access to Mzedi Dumpsite and Zingwangwa/Limbe Waste Water Treatment Plants for the sole purpose of disposing solid and liquid wastes generated or collected from the project herein.
- 3.3.3 The Council shall ensure that there are smooth operations for Contractor whenever they have waste for delivery.

### **3.2 Obligations of the Contractor**

- 3.2.1 The Contractor shall be required to clear wastes on various spots or parcels of land at Mzedi Dumpsite as directed by the Council once every fortnight on such time and day to be affixed by the parties.
- 3.2.2 The contractor shall ensure that the condition/obligation stated in paragraph 3.2.1 of this MoU is fulfilled prior to the disposal of waste at the dumpsites.
- 3.2.3 The Contractor shall ensure that all disposals are done within the working hours (8 am to 4 pm) and during weekdays.
- 3.2.4 The Contractor shall make sure that the Council has inspected and approved the waste being disposed at the dumpsites each time.
- 3.2.5 The Contractor shall always act, in respect of any matter relating to this Agreement or to the Services herein, as an agent of the Council.

## **4. LIABILITIES OF THE PARTIES**

### **4.1 Liabilities of the Council**

- 4.1.1 The Council shall exercise reasonable diligence to prevent loss and shall provide the Services herein in accordance with the provisions of this Agreement.

### **4.2 Liabilities of Cas Civil Contractors**

- 4.2.1 The Contractor shall not dump any hazardous waste to the dump sites without the authorisation and guidance of the Council,
- 4.2.2 The Contractor shall not dump waste at the Council's dumpsites before approval and fulfilling the task mentioned in paragraph 3.2.1 herein.

## **5 MISCELLANEOUS**

- 5.1 The Contractor shall not pay any charges to the Council for disposing wastes generated from the project herein on a condition/obligation stated in paragraph 3.2.1 of this MoU.

5.2 Neither party shall be liable for any failure to perform or any delay in performing under this Memorandum of Understanding to the extent that the cause of such failure or delay is beyond that party's reasonable control (force majeure), provided a written notice claiming suspension of its obligations is given as soon as practicable.

5.3 The parties may mutually determine to suspend or terminate any part, or all of the Memorandum of Understanding in the event of force majeure.

#### **5.4 Force Majeure**

5.4.1 If a Party (hereinafter 'Affected Party') is prevented, hindered or delayed from performing any of its obligations under this Agreement by a force majeure event, the Affected Party's obligations under this Agreement shall be suspended while the force majeure event continues, provided that the affected party shall be obliged to inform the other Party of the event within 48 hours of becoming aware of such event;

5.4.2 The suspension shall be in correlation to the extent of how the affected party is prevented, hindered or delayed in performing any of its obligations under this Agreement; Provided that if the relevant event continues for more than thirty (30) days, the non - affected party may terminate this Agreement by giving seven (7) days written notice of the termination.

5.4.3 In this clause, 'Force majeure event' means any event beyond the reasonable control of the affected party and unknown to the affected party at the date of or during the subsistence of this Agreement including without limitation; strikes, lock out, or labour disputes, acts of God, war, riot, civil commotion, malicious damage (but excluding malicious damage involving employees of the Affected Party), compliance with a law or governmental order, rule, regulation or direction, accident, fire, flood and storm.

#### **6 MONITORING IMPLEMENTATION OF THE MOU**

6.1 Implementation of various provisions in this MoU shall be monitored jointly by the head of the responsible Directorates/lead Sector led by the Director of Health and Director of Engineering together with the partner concerned.

6.2 Where need be, relevant external institutions may be involved in this exercise, subject to a mutual agreement of the matter between Heads of the responsible directorates and the respective partner.

## **7. TERMINATION OF THE MOU**

### **7.1 Termination by the Council**

7.1.1 Without prejudicing the rights of the parties herein, the Council shall be entitled to terminate this Agreement by giving the Contractor one (1) month written notice.

7.1.2 In any event, the Council may give one month written notice of termination to the Contractor on occurrence of, but not limited to, any of events specified below: -

- a) If the Contractor fails to remedy a failure in the performance of their obligations herein within 10 days following receipt of the Council's notice specifying such breach;
- b) If the Contractor fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause 8.3 hereof;

### **7.2 Termination by Cas Civil**

7.2.1 Without prejudicing any rights of the Parties herein, the Contractor shall be entitled to terminate this Agreement by giving the Council one (1) month written notice.

7.2.2 In any event, the Contractor may give one-month notice of termination to the Council on occurrence of any of the events specified below:

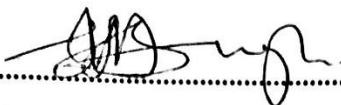
- a) If the Council is in material breach of its obligations pursuant to this Agreement and has not remedied the same within ten (10) days following receipt of notice specifying such breach;
- b) If the Council fails to comply with any final decision reached as a result of arbitration.

7.2.3 Upon termination of this Agreement the Contractor and the Council shall both have five (5) working days after the effective date of termination for clearing purposes.

## **8. DISPUTE RESOLUTION**

8.1 Either party will be deemed in breach of the MoU in the event of its failure to satisfy terms and conditions set out herein, in which case one party will serve the other with a written notice of the same for it to respond and rectify the failure within 5 working days.



SIGNATURE :  .....

ADDRESS: CAS CIVILS .....

P.O. BOX 30580, R13 .....

OCCUPATION: HSSE EXPERT .....

## ANNEX 6: WASTE MANAGEMENT PLAN

This Waste Management Plan (WMP) will deal with waste to be generated as a result of project activities during the construction period. The WMP specify provisions for disposal, re-use or recycling of solid and hazardous waste. It includes actions to be taken by the contractor project personnel for the management and safe disposal of waste materials generated by the construction activities

During the construction period, The Contractor will be responsible for collection, storage, treatment and transport of all types of waste generated during the course of project activities. Where the Contractor is conducting project activities in the field all waste generated will be collected and disposed in the official waste disposal site.

### **Waste Minimization**

The Contractor will promote waste minimization, by waste avoidance, reduction, reuse and recycling to the extent practical. Waste minimization shall generally be accomplished through the "7Rs": Reduce waste generation; Reuse of materials such as wood, used-oil, nails; Recycle by selling waste such as plastics to recycling companies, Recover/Repair items that can be fixed to minimize waste generation; React/Refuse to procure items that we do not need; Rethink or become more conscious on the items being procure for the project and lastly Respect those that manage waste (waste collectors, transporters, recyclers, etc) so as not to generate more waste.

### **Waste identification**

Waste will be identified basing on its characteristics such as degradable, non-degradable, organic waste, chemical as well as hazardous and non-hazardous waste. After identification all waste will be stored. The table below shows some of the wasted that the project anticipate to produce during the construction works;

**Table 2 Types of waste expected to be generated**

<b>Sn</b>	<b>Type of waste</b>	<b>Estimated Volume</b>
1	Timber/wooden poles	3 ton
2	Metal scraps/ cut offs	0.5 ton
3	Oils and fuels	200 litres
4	Clothe, plastic papers, and rubbers	1 ton

5	Human excreta	2m <sup>3</sup>
6	Kitchen waste	3 ton
7	Chemicals (termite treatment )	20 litres

### **Waste storing**

Waste will be stored according to its composition. All waste containers will be labeled to facilitate staff where to store any kind of waste. Containers will keep waste temporarily because after a certain period, all stored waste should be transported to an approved site.

### **Waste disposal**

All waste should be disposed in appropriate site as per BCC bylaws requirements. Both biodegradable and non-biodegradable solid waste shall be disposed in the centralized Council's disposal site for easy of control and further segregation to recyclers and re-users.

In case of hazardous waste, BCC has a Cleansing Section, under the Department of Health and Social Services that has qualified personnel to assess, collect, transport and dispose of the waste properly. CAS Civils shall therefore engage BCC for collection and disposal services and obtain the required documentation (disposal certificate) on the same.

ANNEX 7: KACHERE TOWNSHIP LOCAL TRADERS AGREEMENT

CAS CIVIL CONTRACTORS

MZEDI DUMPSITE ACCESS ROAD PROJECT

Post Office box 30580

BLANTYRE

Cell: +265 888 871 508

C. J. Ligons  
Kachere.  
0888 288 688 / 0997402979.

MGWIRIZANO NDI OGULUTSA MALONDA PA MSIKA WA KACHERE

Ine, Victor Mmanga, ndimachita malonda ma msika wa Kachere ndipo ndimagulitsa katundu osiyanasiyana monga Madzi.

Pa tsiku la lero, 10 Seputembala, 2024, ndalowa mu mgwirizano ndi CAS Civil contractors, kampani imene ikumanga nseu ku Mtaya wa Mzedi, woti ndizigulitsa katundu monga Madzi.

Katundu wanga ndizigulitsa pa kashi (Cash) nthawi zonse  
Oyimila CAS Civils: Prince Nyasulu  
Saini: [Signature]  
Tsiku: 10 Sept. 2024  
Dzina la mwini malonda: Victor Mmanga Jnr  
Saini: [Signature]  
Tsiku: 10/09/24.  
Mboni Ya Francis Lepanga Mwini Malonda:  
Saini: [Signature]  
Tsiku: 10/09/24



## **ANNEX 8: GRIEVANCE REDRESS MECHANISM PLAN**

### **Introduction**

A grievance is a concern or a complaint raised by an individual, a group of individuals or an entire community due to an economic or industrial activity of the Project affecting their daily life, their way of living and/or their culture/belief system. For these concerns and complaints (real, supposed or foreseen) to be considered, GRM committee shall be formulated.

### **Purpose**

The aim of this Grievance Redress Management System is to respond to and settle or redress any individual grievances, complaints, queries or clarification of complaints for affected persons much quickly, fairly and as much as possible in a manner that is acceptable to all parties. Some examples of possible complaints may include: encroachment on private land, theft of properties, loss of land and property, GBV, SH and SEA, corruption cases, and low wages. The objectives of the GRM include

- Identifying grievances related to the implementation of the project;
- Ensuring that grievances, disputes or conflicts arising from implementation of this project are treated separately and as matter of priority;
- Ensuring that project implementation timelines and overall schedules are not compromised due to delays in resolving the grievances, disputes or conflicts; and
- Cutting down on lengthy and expensive alternative litigation that project affected persons (PAPs) might otherwise have to resort to
- Providing a system through which stakeholders can provide feedback on the operations and impacts of the project.
- Providing mechanism for constant and relevant information sharing with all related stakeholders so as to mitigate any possible misunderstandings which may lead to avoidable grievances.

### **Responsibilities**

The Social and Environmental Officer

- Facilitate information meetings;
- Ensure the complaints reception and recording;
- Ensure the first quick assessment of the claims
- Ensure the transcription of the complaints in the appropriate format
- Send the complaints to the complaints committee for examination
- Ensure the transmission of answers (the complaints committee and Project Management) to the complainants
- Evaluate the satisfaction of the complainants;
- Ensure the transmission of the complaint to the Project Management in case the complainant is not satisfied with the answer from the complaints committee
- Fill in the grievance register and the database

## The Project Management and Workers Grievance Committee

### *In case of redress made by worker*

- GRM box onsite
- Workers GRM Committee to handle the matters
- If the worker still dissatisfied, Workers GRM to refer the matter to project/district GRM committee.

### *In case of redress made by a community complainant*

- Analyze the complaint
- Analyze the motivations underlying the answer off the complainant committee;
- Analyze the reasons for the dissatisfaction of the complainant
- Answer the complainant through an official correspondence.

### *In case strategic stakeholder claim*

- Organize a face-to-face meeting
- Prepare an agreement signed by the two parties

## **Principles of an Effective GRM**

Principles of effective Grievance Redress Procedures (GRPs) include:

- **Fairness;** grievances shall be treated confidentially, assessed impartially, and handled transparently.
- **Objectivity and independency;** a GRM system shall operate independent of all interested parties in order to guarantee fair, objective, and impartial treatment to each case. GRM officials shall have adequate means and powers to investigate grievances (e.g., interview witnesses, access records).
- **Simplicity and accessibility;** the procedures to file grievances and seek action shall be simple enough that project beneficiaries can easily understand them. The GRM shall be accessible to all stakeholders, irrespective of the remoteness of the area they live in, the language they speak, and their level of education or income.

## **Procedure**

At the beginning of the project, the grievance mechanism will be disclosed to all stakeholders through meetings with the Project Affected Persons and public notices in print and electronic media. All types of grievances will be received by the Social and Gender officer or through GRM box that shall be placed on site.

The detailed procedure of grievance management shall be as follows:

- The affected person will file the grievance in writing or verbally to the Social and Gender Officer and they will be directed and assisted to complete a grievance log and resolution form. Where the complainant cannot write, a responsible member of the GRM committee

will assist in completing the grievance form. The grievance form shall be signed and dated by the aggrieved person.

- All workers shall report their grievances through the ESHS, GRM box or Workers Grievance Redress Committee
- The Contractors' GRM committee shall comprise of ESHS officer, ESHS from the Engineer, 3 workers including a female, BCC and BWB representatives
- The GRM committee at this level shall record, assess and hear cases as submitted to them by the complainant. The issue will then be resolved and feedback provided accordingly. If the complainant is satisfied with the resolution, the issue will be closed. In the event that the case has not been resolved within 7 days, the grievances shall be referred to a higher grievance committee as advised by the engineer.

### **Mitigation Measures**

As much as grievances cannot be completely eliminated from project implementation, they can be minimized by undertaking some measures to prevent their occurrence. Many grievances arise because of misunderstandings, lack of information, delayed, inconsistent or insufficient information. The following measures will therefore be taken to prevent and minimize the occurrence of grievances during project implementation

- Provision of timely and sufficient information to communities and workers
- Meaningful community and worker consultations
- Trainings

## **ANNEX 9: HIV AND AIDS WORKPLACE POLICY**

### **Purpose and Scope**

CAS CIVILS recognizes the magnitude and severity of the development of HIV/AIDS worldwide. As a global Center, CAS CIVILS is committed to the development of policies and the implementation of programs by its global workplace sites on HIV/AIDS non-discrimination, awareness, prevention, and health support. This policy covers key areas such as legal and regulatory framework, guiding principles, management of human resources, and the implementation of HIV and AIDS programs in the workplace.

### **Rationale**

The negative impact of HIV and AIDS in the workplace challenges CAS CIVILS as an employer to provide a policy framework for the prevention of HIV/AIDS and the treatment, care and support of the infected and affected employees. It has been found necessary to develop a clear, consistent, coherent, and harmonized policy framework on HIV and AIDS in line with each host country's private sector policies on HIV and AIDS. This policy demonstrates CAS CIVILS's concern and commitment in taking concrete steps in the management of the HIV and AIDS pandemic and also provides guidance on the development of global workplace guidelines.

### **Policy Statement**

CAS CIVILS shall provide structures and programs aimed at ensuring non-discrimination and de-stigmatization of the infected and affected employees. The Company shall establish minimum internal requirements (MIRs) for all its employees in a non-discriminatory environment. CAS CIVILS shall promote the roles of HIV/AIDS support organization in providing voluntary services.

### **Non-Discrimination**

CAS Civils strives to provide a work environment for its employees that is free from harassment and/or discrimination. Colleagues who engage in acts of harassment and/or discrimination are subject to corrective action that may include termination of employment. Accordingly, colleague situations related to HIV and AIDS are governed by the following principles:

- CAS CIVILS will not and does not discriminate against employees or applicants having, perceived as having, living with, or otherwise affected by HIV or AIDS.

- CAS CIVILS treats HIV/AIDS the same as other illnesses in terms of all our employee policies and benefits
- All employees and contractors must adhere to our non-discrimination policy.

### **Objectives**

The main objective of the policy is to provide a framework to address HIV and AIDS in the workplace.

Specifically the policy aims to:

- Set MIRs for managing HIV and AIDS in the workplace.
- Prevent HIV infections
- Establish structures and provide programs to ensure non-discrimination and non-stigmatization of the infected and affected.
- Establish Monitoring and Evaluation of HIV and AIDS programs and activities at the workplace.
- Mitigate the impact of HIV/AIDS on individuals, the family and communities
- Guide employees on their rights and obligations regarding HIV and AIDS.
- Provide a framework for development of workplace guidelines.

### **Scope**

This policy sets standards for managing HIV and AIDS for workplace programs. It applies to all Regular Staff and Temporary Staff for CAS CIVILS employees, including policymakers, researchers and administrators and support staff.

### **Legal and Regulatory Framework**

Each country may have a number of statutes for responding to HIV- and AIDS-related issues in the workplace though many current Acts that do not specifically refer to HIV and AIDS.

However, it is recognized that an enabling legal and regulatory environment is imperative in order to create the desired impact in the fight against HIV and AIDS.

### **The Employment Acts/Labor Law**

The Employment Act in most host countries sets out minimum standards applicable for conditions of employment relating to wages, leave, health and contracts of employment, including termination

of the contract. The Acts imply that there shall be no discrimination on grounds of HIV and AID status. Local labor laws of the country regarding HIV/AIDS will prevail.

## **Principles**

The principles that guide this policy are in accordance with international conventions national laws, policies, guidelines and regulations.

These principles are:

- **Recognition of HIV and AIDS as a Workplace Issue**

HIV and AIDS is a workplace issue and shall be treated like any other serious illness/condition in the workplace. This is necessary not only because it affects the workforce, but also the workplace being part of the local community and has a role to play in the wider struggle to limit effects of HIV and AIDS.

- **Gender Equity**

Gender dimensions and equal treatment of males and females who have HIV and AIDS status are supported by CAS CIVILS.

- **Safe and Healthy Work Environment**

The work environment shall be healthy, safe, and adapted to the state of health and capabilities of workers. All Program/Project Leaders, Coordinators, and Managers have a responsibility to minimize the risk of HIV transmission by taking appropriate first aid/universal infection control precautions in the workplace.

- **Social Dialogue**

A successful HIV and AIDS policy requires cooperation, willingness, and trust among the employer, employees, and stakeholders through dialogue.

- **Screening for Purpose of Employment**

HIV and AIDS screening shall not be required of job applicants or persons in employment, and testing for HIV shall not be carried out at the workplace.

- **Confidentiality**

Access to personal data relating to an employee's HIV status shall be bound by rules of confidentiality consistent with existing ILO code of practice and medical ethics. CAS CIVILS has no access to personal medical data.

- **Continuation of Employment Relationship**

HIV infection shall not be a cause for termination of employment. Employees with HIV-related illness will be allowed to work as long as they are medically fit and available for appropriate work.

- **Prevention**

HIV infection is preventable. Prevention of all means of transmission can be achieved through behavior change, knowledge, treatment, and the creation of a non-discriminatory environment. Social partners are in unique position to promote prevention efforts, particularly in relation to changing attitudes, through the provision of information and education and in addressing socioeconomic factors.

- **Care, Treatment and Support**

All infected and affected employees have the right to access care, treatment, and support in line with available resources. CAS CIVILS shall work in partnership with agencies offering support and care.

- **Management Responsibility**

CAS CIVILS shall ensure the highest level of leadership as part of the campaign against HIV and AIDS. Managers/Supervisors should receive basic training and education on HIV/AIDS topics to assist any individual requesting information or help.

- **Fair Labor Practices**

Every employee whether infected or affected has the right to fair labor practices in terms of recruitment, appointment and continued enjoyment of employment, promotion, training, and benefits. HIV testing will not be a requirement for any of the above.

- **Workplace Ethics**

There shall be zero tolerance to sexual harassment, abuse and exploitation.

- **Management of Human Resources**

According to the International Labour Organization (ILO), HIV and AIDS is a major threat to the world of work because it affects the most productive segment of the labor force. It is imposing huge costs on organizations in all sectors through declining productivity and earnings, increasing the cost of employment and loss of skills and experience. It has led to a high turnover, high costs in training and replacement, high health care and employee welfare costs including funeral expenses. Counseling services may initially be obtained from our Human Resources Office. The HRM will then direct the individual to the proper basic services. This policy is the starting point for the management of HIV and AIDS in the workplace as it establishes a coherent approach in addressing the issues associated with HIV and AIDS.

This policy addresses the following human resource management issues:

- **Recruitment**

HIV screening shall not be a requirement for staff recruitment and or promotion.

- **Sick leave**

Sick leave shall be provided for as stipulated in the CAS CIVILS Staff Manual.

- **Working Hours**

Normal working hours, and flextime hours where stipulated, shall continue to apply for all CAS CIVILS employees.

- **Termination of Employment**

The policies and procedures pertaining to termination of employment shall apply to all employees. No employee shall be dismissed or have employment terminated on account of solely perceived or actual HIV status.

- **Medical Benefits**

The normal provision of medical benefits and privileges shall continue to apply.

- **Training and Development**

CAS CIVILS shall:

- Educate and train its employees on HIV- and AIDS-related issues.
- Mainstream HIV and AIDS programs in all its workplaces and undertake regular updates to respond to the dynamics of HIV and AIDS
- **Confidentiality and Disclosure**
  - Disciplinary action, consistent with relevant CAS CIVILS rules and regulations, will be taken against any employee who discloses a fellow employee's HIV sera-status without consent.
  - A climate of awareness about HIV and AIDS shall be encouraged as an effective prevention and care strategy. CAS CIVILS shall strive to create a working environment in which employees can feel safe.

### **Discrimination and Stigma**

- All employees have the same right and obligations as stipulated in the terms and conditions of employment.
- No employee shall be discriminated against in access to continued employment, training, promotion, and employee benefits on account of their actual or perceived HIV status.
- Employees shall not refuse to work or interact with fellow colleagues on the grounds that the latter are infected or perceived to be infected. Such refusal shall constitute misconduct

### **Employee Responsibility**

- It is the responsibility of an employee to take appropriate action on being informed about HIV and AIDS to protect him/herself and the family, to seek guidance and counseling.
- All employees and contractors must comply with the HIV and AIDS workplace policy. In addition, all employees are expected to attend and support to and participate in all activities aimed at combating HIV and AIDS.

It is the moral responsibility of the infected employees to take care of themselves and others to avoid re-infection and infecting others.

### **HIV and AIDS Programs in the Workplace**

The main thrust of this sub-sector policy revolves around initiating and carrying out programs in the workplace. The components of the programs will include but not limited to the following:

- **Prevention and Advocacy**

- The programs will be Center-specific and will involve creation of HIV and AIDS awareness and promotion of positive cultural and behavioral change among employees.

### **Policy Reviews and Development**

This policy will be reviewed from time to time to ensure it remains relevant to the needs of the Center. Individual workplaces will develop guidelines in line with the policy to reflect those unique workplace specific mandates and needs.

## **ANNEX 10: LABOUR MANAGEMENT PLAN**

### **Purpose**

The Purpose of the Labour Management plan (LMP) is to provide guidance on management of labour issues in the construction of Mzedi dumpsite access road project. The plan also ensures that gender imbalances due to labour influx are also offset.

- General impacts of labour influx of migrant labour together with mitigation measures are outlined in the main text of the C-ESMP. The role of the LMP is to clarify the coordinated project efforts, approach and outcomes on labour influx and guide its implementation
- This plan has been prepared by analyzing potential shortfalls in labour planning and recruitment and prescribing international best practice in labour and working conditions and national labour laws.

### **Policy and Legal Frameworks**

- Malawi Employment Act, 2000
- Gender Equality Act, 2013
- Environment Management Act, 2017
- Occupational Safety, Health and Welfare Act, 1997
- HIV and AIDS (Prevention and Management) Act, 2018
- National Construction Industry Act, 1996

### **Project Requirements for Hired Labour (Migrant Labour and Local Labour)**

The project will involve construction of civil works for which the required labour force and associated goods and services cannot be fully supplied locally for a number of reasons including labour unavailability and lack of technical skills and capacity. In such a case, additional labour force will have to be hired from outside the project area and this may be compounded by an influx of other people who follow the incoming workforce with the aim of selling them goods and services, or in pursuit of job or business opportunities.

### **Labour and Working Conditions (Project Obligations)**

Working Conditions recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. CAS Civils working will therefore promote sound worker-management relationships and enhance the development benefits of the project by treating workers in the project fairly and providing safe and healthy working conditions.

This instrument together with national labour law and other international labour instruments set out minimum conditions or obligations for fair treatment of workers, without which impacts of labour influx may not be appropriately managed in a project of this nature.

These conditions will ensure that appropriate actions are taken to minimize the full impacts of labour force in this specific area of the project. It is a known fact that mismanagement of labourforce can have direct or indirect consequences on the host communities

## **Unintended Consequences of Labour Influx**

### ***Increased risk of illicit behavior and crime***

The influx of workers and service providers into the project area may increase the rate of crimes and/or a perception of insecurity by the local community. Such illicit behavior or crimes can include theft, physical assaults, substance abuse, prostitution and human trafficking. In order to ensure that this item is kept in check, community mobilization by the Malawi Police Service and local Community policing will be involved.

### ***Influx of additional population (“followers”):***

People can migrate to the project area in addition to the labour force, thereby exacerbating the problems of labour influx. These can be people who expect to get a job with the project, family members of workers, suppliers and other service providers (including sex workers), particularly in areas where the local capacity to provide goods and services is limited.

### ***Gender-based violence, and sexual, abuse, exploitation and harassments:***

Construction workers are predominantly younger males. Those who are away from home on the construction job are typically separated from their family and act outside their normal sphere of social control. This can lead to inappropriate and criminal behavior, such as sexual harassment of women and girls, exploitative sexual relations, and illicit sexual relations with minors from the local. A large influx of male labour may lead to an increase in exploitative sexual relationships and human trafficking whereby women and girls are forced into sex work.

### ***Child labour and school dropout.***

Increased opportunities for the host community to sell goods and services to the incoming workers can lead to child labour to produce and deliver these goods and services, which in turn can lead to enhanced school dropout.

## **Labour Influx Management**

### ***Increased risk of illicit behavior and crime***

- Paying adequate salaries for workers to reduce incentive for theft; and
- Community mobilization by the Malawi Police Service and local Community police

### ***Influx of additional population***

- Sourcing of local workforce;
- Cooperation with local law enforcement;
- Introduction of sanctions (e.g., dismissal) for workers involved in criminal activities;

- Provision of substance abuse prevention and management programs.

#### ***Gender-based violence, and sexual, abuse, exploitation and harassments***

- Mandatory and regular training for workers on required lawful conduct in host community and legal consequences for failure to comply with laws;
- Coordinating with the community GRM Committee to handle all grievances related to GBV and sexual abuse, exploitation and harassment. If the cases or incidents require immediate involvement of the Police and other stakeholders who deal with these issues, the CAS Civils and community GRM Committees will give room for these institutions to do their job.
- Commitment / policy to cooperate with law enforcement agencies investigating perpetrators of gender-based violence;
- Provision of opportunities for workers to regularly return to their families such as by introducing long weekends during pay weekends;

#### ***Child labour and school dropout***

- Ensuring that children and minors are not employed directly or indirectly on the project.

#### ***Awareness and Training***

- The CAS Civils Management shall be informed of the LIMP requirements in the project and how to achieve its goals
- CAS Civils will train staff and community on existence of LIMP, its contents and goals

#### ***Monitoring, Audits and Inspections***

- The aim of monitoring is to ensure that adequate mitigation measures are established (and modified as needed) and implemented in a timely manner and that the mitigation measures are achieving their objectives of addressing corresponding impacts
- Regularly inspect all work sites to understand how migrant labour relate with local and staff
- Periodic LIMP audits should be undertaken to correct systemic imbalances and enhance relationship between migrant workers and local community
- Conducting regular meetings to give or get updates on employment
- Conducting targeted LIMP orientation for relevant management staff and apply corrective action to improve LIMP performance

#### ***Labour Influx Management Plan Review***

The Labour Influx Management Plan will be reviewed every three months utmost to include new information, lessons, community changes or additional items

## **ANNEX 11: OCCUPATIONAL HEALTH AND SAFETY PLAN**

### **Health Safety Policy Statement**

CAS Civil Contractors strive to work continually toward improving our Health and Safety Policy as well as our health and safety procedures. It is the company's intent to provide a safe and healthy working environment in all areas, for all employees. Controlling the work environment and the actions of employees prevents accidents, injuries and illnesses. Therefore, safety will take precedence over expediency or shortcuts. Every attempt will be made to reduce the possibility of accidents, injuries or illnesses. Protection of employees, the public and company property and operation is paramount. Management considers no phase of the operation more important than the health and safety of the employees.

Employee health and safety is to be the first consideration in the operation of the business. Employees must understand their personal responsibility for the prevention of workplace injuries or illnesses. Injury and illness prevention go hand-in-hand with efficient production.

### **General Safety Guidelines for Employees**

#### ***Access***

It is imperative for all employees to ensure they do not run-on work sites and use appropriate paths. All unsafe or inadequate access ways shall be reported to the manager or immediate supervisor immediately.

#### ***Housekeeping***

Housekeeping is an essential safety requirement for all safe work environments. An untidy work area can cause accidents, inefficiencies, and creates fire and other hazards. Wet floors, spills, and clutter may cause slips, trips and falls. It is important to keep work areas clear of clutter and equipment.

All employees are responsible for keeping their workplace and amenities clean and tidy. Food scraps, drink bottles, empty cartons or cans shall be placed in the refuse receptacle provided.

#### ***Manual Handling and Lifting***

Manual handling is defined as any work activity that requires human force to lift, lower, carry, push, pull, restrain or hold a load. Regulations require employers and employees to identify, assess and control risks involved in manual handling. Many injuries are caused by incorrect methods of lifting and moving awkward and heavy loads.

To avoid injury, workers shall observe the following rules:

- Size up the load- if it is too heavy get help
- Position your feet as close as possible to the load
- Adopt a balance position with your knees bent
- Get a safe, secure grip, diagonally opposite the object with the palms of your hands.
- Keep your upper body erect and as straight as possible

- Tuck your chin in, draw push your shoulders back and use your body weight to take-up load weight
- Use your weight to counter-balance the load weight by leaning slightly backwards as you move. -
- Avoid repetitive lifts from below mid-thigh height and above shoulder height.
- Use team lifts for heavy, long or awkward loads and control and co-ordinate team movements by signals.

### ***Drugs and Alcohol Consumption***

To ensure the ongoing safety of all our employees, the consumption of alcohol or recreational drugs are not permitted in the workplace at any time. All employees reporting to work must be free of alcohol and drugs. Measures to identify whether alcohol or drugs are being taken will include:

- Employee experiencing poor coordination, poor concentration and/or visual disturbance;
- Near miss incidents;
- Violence;
- Habitual lateness or absences; - Neglect of personal grooming.

Appropriate means will be taken to remove the individual from the workplace and ensure actions are not repeated.

### ***Electrical Safety***

This project does not involve any electrical safety risks. We shall use solar powered security bulbs.

### ***Clothing and Personal Protective Equipment (PPE)***

If any activity within the project requires the use of PPE, the PPE must be in accordance with the task being carried out. The OHS manager shall ensure that PPE is provided whenever needed to the concerned personnel.

### **Emergency Procedures**

Prior to commencing work, all employees are briefed on what to do in case of an emergency.

### ***First Aid***

- Selected employees will undergo first aid training, and the identity of these employees, their names and location, shall be displayed on the campsite
- First aid supplies will be placed in the workplace.
- First aid box shall be available. It shall contain all the emergency medicines, bandages, gauze swabs etc. Items removed from the first aid kit will be documented in the First Aid Kit logbook linked to the incident reporting system. The designated OHS Manager will review the logbook and the kits fortnightly and restock with appropriate items. If a significant depletion of the first aid kit resources is made at

one time the stock will be replenished orders will be made immediately after incident.

***Incident reporting***

- ✚ All workplace related accidents where an employee, or visitor is injured shall be reported to MWSP-1-PIU within 24 hours of the incident/accident.
- ✚ Employees are required to report ‘near misses’ when an incident occurs. This is when a serious accident could have occurred had it not been for intervention.

***Fire Emergency Procedure***

- ✚ Fire extinguishers signs shall be included in all the offices, in addition to an office plan clearly showing the exits.
- ✚ The fire emergency procedure shall be shared with all employees and reminded regularly:
- ✚ Where a fire is detected, the person should attempt to extinguish the fire only if it is safe to do so and the fire is containable.
- ✚ The person must notify the project manager/coordinator immediately.
- ✚ If required, the project manager will make an announcement for all employees to evacuate the premises immediately and meet at the “Fire Assembly Point”.
- ✚ Assembly Points and the location of fire extinguishers will be made clear by the senior management to all the employees during regular trainings.
- ✚ All employees must stop work immediately and evacuate.
- ✚ Employees are advised to leave everything onsite and make their way calmly and quickly to the “Assembly Point”.
- ✚ The project manager must notify the Fire Services as soon as practical.
- ✚ The project manager will conduct a headcount to ensure no one is left behind. If anybody is found missing the project manager will inform emergency services.
- ✚ An incident/accident report form will be filled out by the project manager and personnel on the site at the time.
- ✚ A review will be carried out of the effectiveness of the process and any improvements or corrective actions will be recorded for future implementation.

***Emergency Contact Details***

The below table is to be completed, shared with all the employees and also displayed.

<b>EMERGENCY CONTACT NUMBERS</b>	
Ambulance	990
Police	997
Fire Service	175
<b>INTERNAL INFORMATION</b>	
Focal Point for Emergencies	OHS Manager
Contact Details	0888 969 929
Position	Site foreman
Contact Details	0999363402

**ANNEX 12: CERTIFICATE OF WORKPLACE REGISTRATION**

FORM LAB/W/2



**MALAWI GOVERNMENT**

**CERTIFICATE OF REGISTRATION OF WORKPLACE**

**OCCUPATIONAL SAFETY, HEALTH AND WELFARE ACT 1997**

**(Section 7)**

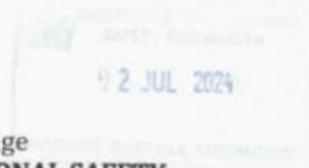
No of Certificate : **SR/BT/873**  
Date of Issue : **2<sup>ND</sup> JULY 2024**  
Date of Expiry : **1<sup>ST</sup> JULY 2025**

I HEREBY CERTIFY that the workplace named below has been duly registered in pursuance of Section 7 of the Occupational Safety, Health and Welfare Act.

Name of Occupier : **CAS CIVIL CONTRACTORS**  
Address of workplace : **P.O. BOX 30580, BLANTYRE 3**  
Location : **MZEDI, BLANTYRE**  
Phone : **0888969929**  
Nature of work carried on : **CONSTRUCTION OF ACCESS ROAD TO MZEDI DUMPSITE**

*Handwritten signature*

Goodluck A. Kayange  
for: **DIRECTOR OF OCCUPATIONAL SAFETY,  
HEALTH AND WELFARE**



## **ANNEX 13: COMMUNITY HEALTH AND SAFETY PLAN**

Although public authorities have a central role in the promotion of the health, safety and security of the public, CAS Civil Contractors also have a responsibility to avoid or minimize risks and impacts that arise from the Mzedi dumpsite access road construction activities during both routine and non-routine circumstances. In this accord, CAS Civils will commit its resources in promoting positive Community health and safety programs while suppressing negative impacts. The plan describes the company's roles and responsibilities, as well as management actions, to mitigate impacts on surrounding communities and protect public health, safety, and security

### **Objectives**

The objectives of this Plan are to:

- Avoid or limit risks to, and impacts on, the health, safety and security of the community during the production phase from both routine and non-routine circumstances. This is achieved through implementing targeted prevention programs to reduce risks, along with the implementation of an effective monitoring and evaluation program
- Ensure that safeguarding of personnel and property is conducted in an appropriate manner that avoids or limits risks to the community's safety and security

### **Action plan**

The control and mitigation measures below have the objective of reducing community health, safety and security impacts and minimizing risks.

#### **Water Quality**

CAS Civils will comply with all applicable regulations pertaining to maintenance of water quality in order eliminate or to minimize any negative effects to local communities.

#### **Traffic Safety**

CAS Civil Contractors' detailed Traffic management measures shall address the risk of accidents occurring during construction that involve communities, people and their animals. CAS shall implement the following commitments:

Temporary traffic control (e.g. flagmen) and signs will be provided where necessary to improve safety and provide directions.

Temporary traffic control measures will be employed at road crossings and junctions (flagmen etc) where a safety risk assessment has identified traffic control measures will reduce the risk of traffic accidents.

Traffic management measures have been developed and implemented with the aim of minimising impact to communities.

### ***Disease Prevention***

Health Impact Assessments (HIAs) and Health Risk Assessments (HRAs) will be conducted to assess the potential health effects on both the workforce and the local community population and other stakeholders who may be impacted by the construction activities at the construction sites.

### ***Worker Health***

The influx of temporary construction workers into the area has the potential for increased transmission of communicable and non-communicable diseases both within the workforce and between the workforce and local communities. CAS Civils shall implement appropriate mitigation measures to prevent or minimize the potential for occurrence and spread of diseases and illnesses. Measures will include:

- Provision of high quality appropriate ablution facilities.
- Implementation of effective food and water hygiene standards.
- Personal health programmes to educate workers in illness and disease prevention to minimise the occurrence or spreading of diseases to the local community.
- Dust generated by the Project activities. Construction Camps.

### ***Emergency Preparedness and Response***

CAS Civil Contractors has an Emergency Response Plans for all identifiable emergency scenarios which address the following aspects of emergency response and preparedness:

- Emergency contacts and communication systems/protocols
- Permanently stationed emergency equipment and facilities (e.g., first aid stations, fire extinguisher, sand bucket etc)
- Evacuation routes and meeting points

In addition, CAS Civils will consider including the local communities and other stakeholders in regular training exercises to familiarize them with proper procedures in the event of an emergency.

### *Security*

CAS Civils recognizes the need to coordinate and collaborate with government and stakeholders to achieve effective security standards and to conduct our activities in a legitimate manner that avoids or minimizes risks to community's security and human rights. Community engagement is a central aspect of the company's security strategy. Where applicable, we will involve local communities in discussions about the security arrangements through the Stakeholder Engagement process.

It is important that the conduct of security personnel when dealing with the public is based on the principle that providing security and respecting human rights must be consistent and proportional. Company has a Grievance Mechanism whereby local communities can express concerns including issues associated with security arrangements and acts of security personnel. The access to sites and camps shall be permanently controlled, with access restricted to employees, authorised and visitors

## ANNEX 14: CULTURAL HERITAGE AND CHANCE FIND PROCEDURE

### Introduction

This plan describes the Chance Find Procedure for construction of access road to Mzedi dumpsite, outlining the procedures that CAS Civil Contractor will follow should potential cultural heritage discoveries occur during the construction activities associated with the project.

The Chance Find Procedure has been developed in alignment with international good practice, including the World Bank Environmental and Social Standards (notably ESS8), and also complies with Malawi requirements as well as internal CAS Civils policies and procedures.

It is a requirement for the projects to have established a provisional Chance Find Procedure before project start. The scope and scale of the Chance Find Procedure will be proportionate to the nature, scale and type of potential risks and impacts to cultural heritage that may arise from the projects' construction activities. In addition, the Chance Find Procedure will be commensurate with the type and scale of the planned construction activities.

Cultural heritage is defined as resources with which people identify as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. Cultural heritage encompasses tangible and intangible heritage, which may be recognised and valued at a local, regional, national or global level, as follows<sup>1</sup>:

- Tangible cultural heritage, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water; and
- Intangible cultural heritage, which includes practices, representations, expressions, knowledge, skills as well as the instruments, objects, artefacts and cultural spaces associated therewith that communities and groups recognise as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

Tangible cultural heritage is the focus of this Chance Find Procedure and in particular, chance finds which are when archaeological, historical, cultural and/or remain material is unexpectedly encountered during project construction or operation.

For this Project, the construction activities include excavation of waste debris, bush clearing at the campsite, grading and levelling, diversion road, masonry works on the drainages, concrete casting, and ring culvert installations.

As such, risks and impacts to tangible cultural heritage, and in particular, archaeological material, that may arise from such project activities like deep excavations, and grading of access road may cause damage to archaeological material owing to earth works and flooding areas.

### **Purpose of the Chance Find Procedure**

A Chance Find Procedure is a project-specific procedure which is to be followed if previously unknown cultural heritage is encountered during project activities. The Chance Find Procedure sets out how chance finds associated with the project will be managed. The procedure includes a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence off the area of finds or sites to avoid further disturbance; to conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of WB ESS8 and national law; and to train project personnel and project workers on chance find procedures.

The Chance Find Procedure aims to:

- Protect physical cultural resources from the adverse impacts of physical investment activities and support their preservation;
- Promote the equitable sharing of benefits from the use of Physical Cultural Resources; and
- Raise awareness of all construction workers and management on site regarding the potential for accidental discovery of cultural heritage resources.

This Chance Find Procedure plan therefore shall help CAS and its workers with an appropriate response in accordance with the relevant national legislation and international good practice.

In this regard, CAS Civils shall ensure that all personnel under Mzedi dumpsite access road project site understand the Chance Find Procedure and the importance of adhering to it if cultural heritage

resources are encountered. In addition, training or induction on cultural heritage resources that might potentially be found on site should be provided by.

### **Procedures for accidental discovery of cultural resources (chance finds)**

This Chance Finds Procedure covers the actions to be taken from the discovering of a heritage site or item to its investigation and assessment by a professional archaeologist or other appropriately qualified person to its rescue or salvage.

If cultural resources (e.g. archaeological sites, historical sites, remains, objects, graveyards or individual graves) are discovered during construction activities, the following procedure will be executed:

1. Halt the construction activities around the chance find to avoid any (or further) damage;
2. Report the discovery to your supervisor or the Environmental Control Officer (or project equivalent) immediately;
3. Delineate and fence the discovered site or area and provide a 25 meter buffer zone around all sides of the find;
4. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard will be arranged until the responsible local authorities or the District Department of Culture, or the local Institute of Archaeology, if available, can take over;
5. Forbid any removal of the objects by the workers or other parties;
6. Note the type of archaeological materials you think you have encountered, their location (GPS) and if possible, the depth below the surface the find occurred;
7. Photograph the exposed materials, preferably with a scale (e.g. a file binder, coin, rules etc.);
8. Notify the responsible local authorities and the relevant Institute of Archaeology immediately (within 24 hours or less);
9. Responsible local authorities shall oversee 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 local Institute of Archaeology. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; these include the aesthetic, historic, scientific or research, social, and economic values;

10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the physical investment layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration, and/or salvage;
11. Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities;
12. The mitigation measures could include the change of proposed Project design/ layout, protection, conservation, restoration, and/or preservation of the sites and/or objects;
  
13. Construction work at the site could resume only after permission is given from the responsible local authorities concerning safeguard of the heritage; and

The physical investment proponent is responsible for cooperating with the relevant local authorities to monitor all construction activities and ensure that the adequate preservation actions are taken and hence the heritage sites protected.

ANNEX 15: SAND MINING PERMIT



MINES AND MINERALS ACT  
(CAP 61:01)

MINERAL PERMIT

Permit No. 002 District Chiradzulu Area Chiradzulu River T/A Shashe

Date of Issue 26/07/2024 Date of Expiry 30/10/2024

Name of holder P.O. Box 32580 Chiradzulu

Address P.O. Box 32580 Chiradzulu

This permit entitles the holder to extract: \* Dambo sand/ River sand/Clay sand/Stone

For the purpose of construction of access road to M2028i dump site

- I. The commissioner may cancel the permit at any time.
- II. The holder shall not mine in a forest reserve, game-reserve, National Park or monument.
- III. The holder shall not pollute streams or damage the environment.
- IV. The holder shall level off excavations in such a manner that the site is well drained, to prevent stagnant water, and plant the site with suitable grass or trees.
- V. This permit is not transferrable.

Quantity to be extracted 150 tonnes

Fee Paid M150 000

Signed [Signature] Designation Zamboni K. Officer

CHIRADZULU DISTRICT OFFICE  
REGISTRY  
04 JUL 2024  
Minerals  
Duplicate to Commissioner for Mines and Minerals, Private Bag 350, Lilongwe 3.  
Triplicate for District Chiradzulu Office

**ANNEX 16: PAYMENT AND DELIVERY NOTE FOR QUARRY**

**DELIVERY NOTE No. 3372**

**Quarry King**  
 For All Your Quarry Products, Concrete & Paving Blocks

P.O BOX 1123 Blantyre  
 Tel: 0212 111 124/0888 211 124  
 0999 931 124  
 E-Mail: rizwanlambat@gmail.com

M/s: CAS Date: 7/3/2024

Qty	Description	K	t
15.00	TONS	300.000	
	<i>(Handwritten scribble)</i>		
	<i>(Handwritten scribble)</i>		
	Trucks: B52406		
	Driver: Adam		
	Time loaded: 13:58 PM		
		300.000	
		<b>TOTAL</b>	

No claims will be entertained after 24 hours delivery. Goods forwarded at buyer's risk.

Received in good order by: *(Signature)*

**DELIVERY**

65

AC No. \_\_\_\_\_ DATE 30 05 24

Mr Ramiz

PLEASE RECEIVE FROM: \_\_\_\_\_ ORDER No. \_\_\_\_\_

Rawat D steel

IN GOOD ORDER AND CONDITION THE UNDERMENTIONED GOODS:

Conc Aggregate  
20.06 TONS

IXA 38,185.62

DEPIA 27  
Ramiz

**ANNEX 17: GRAVEL PERMIT**

**MALAWI GOVERNMENT GENERAL RECEIPT KJ No. 1248877**

Station: 1661 Date: 2-04-24  
 RECEIVED FROM: CAS CONSTRUCTION  
 Address: P.O. BOX 51484 BLANTYRE  
 the sum of: Two thousand Kwacha  
 Paid in Cash/by Cheque No. P.O. No. 0000000000  
 or: Payment of application fee

**DEPARTMENT OF FORESTRY**  
 K PAID  
 VOTE: 08 APR 2024  
 DESCRIPTION: P.O. BOX 30048 LILONGWE 3

N.B. This receipt, to be issued to PAYER, will be a manuscript impression.

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**MALAWI GOVERNMENT GENERAL RECEIPT KJ No. 1248878**

Station: 1661 Date: 2-04-24  
 RECEIVED FROM: CAS CONSTRUCTION  
 Address: P.O. BOX 51484 BLANTYRE  
 the sum of: Five hundred Kwacha  
 Paid in Cash/by Cheque No. P.O. No. 0000000000  
 or: Payment of application fee

**DEPARTMENT OF FORESTRY**  
 K PAID  
 VOTE: 08 APR 2024  
 DESCRIPTION: P.O. BOX 30048 LILONGWE 3

LICENCE NUMBER: 2624/25/05



**DEPARTMENT OF FORESTRY**  
**LAWS OF MALAWI**  
**FORESTRY ACT. (1997) CAP. 63:01**



**LICENCE TO ENTER INTO NDIRANDE MAKHETHA FOREST RESERVE**

**PART A: (To be filled by applicant)**

- NAME OF APPLICANT: (Prof. /Dr. /Rev. / Mr./Mrs./Miss /Others)  
 Contact Person: TUTULE MUKWA
- FULL ADDRESS: P.O. BOX 51484 BLANTYRE  
 Corporate Name: CAS CONSTRUCTION Company No. TMBR 1013347  
 Place & Date of Registration: BLANTYRE 5<sup>th</sup> MAY 2021  
 Business: CONSTRUCTION  
 Physical Address: CHITANDA OPP NTAWA SCHOOLS BT  
 Residential: CHITANDA  
 Type of Identity: CITIZEN IDENTIFICATION  
 Identity No.: NTKBKN15 Expiry Date: 21 JAN 2021  
 Telephone No.: 0988671502 Fax No.:  
 E-mail: tutulemukwa2@gmail.com

3. REASONS FOR RESIDING/OPERATING IN FOREST RESERVE:

- To collect gravel for construction
- LOCATION
    - Name of Forest Reserve: NDIRANDE MAKHETHA FOREST
    - Name of Site: NKOLOKETI
    - Area in hectares: 100 Ha
    - District: BLANTYRE
  - TYPE & NUMBER OF STRUCTURES TO BE ERECTED: 2
  - DESIRED PERIOD: From: 08.04.2024 To: 08.04.2025
  - TOTAL COST OF PROJECT MK: MK 577,473,633.58
  - PREVIOUS BUSINESS EXPERIENCE:
  - OTHER RELEVANT INFORMATION: (E.G. Previous Licenses if any):
  - SIGNATURE OF APPLICANT: [Signature]
  - REMARKS BY LICENSING OFFICER: Approved and is issued
  - SIGNATURE OF LICENSING OFFICER: [Signature]

For Official use only:		Date Stamp
Operational fee	- K50,000.00/year	
Site fee	- K5,000.00/year	
Hut fee	- 1500/hut/year	
GENERAL RECEIPT NO.....		

**ANNEX 18: EMPLOYEE ACCIDENT/INCIDENT/NEARMISS REPORT FORM**

INSTRUCTIONS: Employees shall report all work related accidents, incidents, nearmisses, injuries, illnesses or other unplanned events which could have resulted in an injury or illnesses. Once completed, this form should be submitted the Occupational Health and Safety Manager for the next steps

I AM REPORTING A WORK RELATED	<input type="checkbox"/>	INJURY	<input type="checkbox"/>	ILLNESS	<input type="checkbox"/>	NEARMISS	<input type="checkbox"/>
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EMPLOYEE NAME	CONTACT NUMBER	SUPERVISOR NAME
<input type="text"/>	<input type="text"/>	<input type="text"/>

JOB TITLE	Has your supervisor been made aware of this incident?
<input type="text"/>	<input type="text"/>

LOCATION OF THE INCIDENT/ACCIDENT	DATE OF ANCIDENT	TIME
<input type="text"/>	<input type="text"/>	<input type="text"/>

WITNESS, if any	CONTACT
<input type="text"/>	<input type="text"/>

INCIDENT DESCRIPTION: Describe the tasks being performed, and sequence of events

What could have been done to prevent this accident/incident?

What parts of the body were injured; if a nearmiss, what part of your body could have been hurt

Was First Aid conducted	If yes, what kind?		
<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="text"/>		
Any further medical treatment required	If yes, name of hospital/ physicians		
<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="text"/>		

Has this part of the body been injured before	<input type="checkbox"/> YES <input type="checkbox"/> NO	If yes, when?	<input type="text"/>
---	--	---------------	----------------------

EMPLOYEE SIGNATURE	DATE	SUPERVISOR SIGNAURE	DATE
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

## **ANNEX 19: TRAFFIC MANAGEMENT PLAN**

During construction activities, accidents may be caused by the movement of vehicles, earth moving and excavation machines, and concrete mixers. The increased traffic along the road construction site can largely increase the risk of accidents among workers, road users and the communities along the project area if appropriate traffic safety measures are not implemented.

This plan identifies the traffic management requirements of the Project and describes the general approach and procedures to be adopted to comply with these documents. It contains the guidelines, general requirements, and procedures to be used when activities or areas of work have a potential to impact on local traffic.

### **Purpose**

This plan describes such items as temporary signage requirements, traffic barrier requirements and placement, traffic control crew requirements, delineation devices, temporary speed zones. The following are the objectives

- **Safety:** Ensure the safety of construction workers, the traveling public, and minimize the impact on emergency responders.
- **User Delay Costs:** Minimize traffic delays by scheduling suitable work windows or designing appropriate detours.
- **Access:** Maintain access to key businesses and residential areas.
- **Construction Quality, Cost, Productivity, and Schedule:** Ensure timely completion of roadwork at the lowest practical cost without compromising quality and safety
- **Environmental Sustainability:** Minimize impacts on vehicle fuel economy by ensuring smooth flow of traffic.

### **Scope**

This procedure applies to all activities of CAS Civils for Access road to Mzedi dumpsite.

### **Responsibilities**

The following table lists the personnel and responsibilities for the project as well as emergency contacts. Refer to **annex 21** for key project personnel and detailed responsibilities

Designation	Name	Phone Number	Email Address
<b>CAS CIVILS</b>			
Managing Director	Tutule Msukwa	0888871508	<a href="mailto:tutulemsukwa75@gmail.com">tutulemsukwa75@gmail.com</a>
ESHS Specialist	Prince S. Nyasulu	0888969929	<a href="mailto:princenyasulu@yahoo.com">princenyasulu@yahoo.com</a>
Engineer	Steven Luwemba	0883218235	
<b>L GRAVAM CONSULTING LIMITED</b>			
Resident Engineer	Daniels Kulwa	0993707174	<a href="mailto:badankulwa@gmail.com">badankulwa@gmail.com</a>
Engineer	Judith Phesele	0997560517	<a href="mailto:jphesele@lgravam.com">jphesele@lgravam.com</a>
ESHS specialist	Agatha Sataya	0991145171	<a href="mailto:asataya@lgravam.com">asataya@lgravam.com</a>

### **The Contracts Manager**

The contracts Manager shall principally ensure the requirements of the Project Specification documents are satisfied and maintained throughout the duration of the works and until all obligations are satisfied. In order to achieve this, the contracts Manager shall:

- Ensure adequate project resources are allocated to traffic management;
- Ensure senior management on site supports the plan;
- Ensure safe traffic management has a priority status in terms of project delivery;
- Ensure suitable training is available to all responsible personnel; and

- Ensure trained competent persons are engaged to act in traffic management specific roles and training requirements.

### **ESHS Specialist**

The ESHS expert shall be responsible for the overall management of traffic and road safety on the project. The specialist shall:

- Implement and maintain the Traffic Management Plan;
- Carry out regular inspections and auditing of the traffic control measures to ensure that they are effective and are being followed;
- Identify locations and times where traffic congestion or unsafe conditions for vehicles, cyclists, pedestrians and workers are occurring, and provide recommendations for improvement;
- Provide technical advice to the construction team relating to traffic management and road safety issues;
- Liaise with all key internal and external stakeholders on traffic management and safety issues;
- Facilitating traffic awareness and giving talks to site personnel; and
- Be responsible for the implementation of the traffic management plan and continuously monitor the implementation and operation of temporary roadwork signage on site for their safe operation and use and ensure defects or unsafe installations are amended.

### **Site Foremen**

The Site Foremen shall support the Traffic Management Plan in their execution of day-to day duties and shall take steps to confirm that those duties are performed in compliance with the Project requirement. In addition, to facilitate the compliance with the requirements the Site Foreman shall ensure that:

- The communication between construction requirements and traffic management requirements is efficient and thorough and shall ensure that they are fully coordinated;
- The activities requiring traffic device installations are identified in good time to permit the necessary planning and administration to be undertaken in accordance with the requirements;
- The traffic device installed/placed are not altered or removed during the course of the execution of the works;
- The procedures and site rules associated with traffic devices are monitored and controlled; and

- The construction engineers plan their works with due consideration for the restraints associated with traffic management requirements and constraints.

## **Procedure**

### **Overall Strategy for Achieving the Specified Requirements**

- Reduce speed limit on as necessary to create a safe working and travelling environment.
- Minimize complete road closures in both number and duration during ring culvert installation on Blantyre – Zomba road.
- Minimize driver confusion both during day and night driving during ring culvert installation on Blantyre – Zomba road.
- Provide safe and accessible construction areas

### **Worksite Delineation**

- The work zone and the transition zone shall be clearly delineated with bollards, cones, drums, and barrier boards as required. This will be in addition to the speed limit signs.
- All signage and delineators shall be maintained in good, clean condition and shall be reflective with at least class 1 grade reflective words and symbols on a class 2 grade retro-reflective background.

### **Safe Work Site**

- Dangerous items (such as concrete blocks, tree branches) shall not be used at any work site.
- The road shall be kept clear of sand, mud, and gravel to minimize the risk of vehicle skidding or sliding.
- If an excavation (more than 2m deep and within 3m of the traffic lane) is to exist for more than a day, safety barriers shall be installed to shield the excavation
- Retroreflective materials shall be used on signage to aid drivers at night

### **Vehicles, Cyclists & Pedestrians**

- Access will be maintained for public traffic, and pedestrians.
- Before works commence a plan outlining signage or delineation required shall be prepared.
- Pedestrians or cyclist shall not be allowed within the activity area by means of signage and barricade

### **Traffic Controllers**

- Where traffic in both directions must use a single lane for a limited distance, movements from each end shall be coordinated by Flagmen trained and inducted in accordance with the requirements of document SATCC Standard Specifications for Road and Bridgeworks 1998
- Traffic shall be controlled by a flagger at each end of the activity area. One of the flaggers shall be designated as the coordinator. Flaggers shall communicate with each other orally, electronically, or with manual signals

### **Vehicle Management Plans**

- A Vehicle Management Plan (VMP) shall be prepared and provide detail measures to be implemented for the safe management of construction vehicle movements within the construction site.
- It shall also cover vehicle movements along the construction roads, on construction site - access to and from site

### **Road work Hidden Around Curves/Uphill**

- Where an activity area is hidden around curves/uphill the advance warning zone or another zone shall be extended towards oncoming traffic to a suitable location where drivers can clearly see them, be alerted to the works ahead and to the correct path to take.
- The CAS Civils will ensure that the advance zone begins in a straight section of the road with good visibility.

### **Setting Out and Recovering Signs and Devices**

#### General Requirements

- Before work commence all signage and delineators shall be installed accordingly as required in this traffic management plan. The CAS CIVILS shall
  - Place the advance warning sign and regulatory sign, starting with the signs that are the greatest distance away from the activity area
  - Place signs in advance of the transition zone and/or start of the activity area
  - Install barricade boards required for the work zone
  - Place any other warning and/or regulatory sign including termination and end of temporary speed zone signs
  - Cover any permanent regulatory sign that conflict with this traffic management plan
  - Drive through the site to check the setting up
  - When work is finished all signs shall be removed accordingly and permanent regulatory signs reinstalled

## Types of temporary signs

SIGN	DESCRIPTION
Men at work	 A triangular warning sign with a yellow background and a black border. It depicts a black silhouette of a person digging with a shovel.
Cones	 A standard traffic cone with a white body and a red top, featuring reflective white and red diagonal stripes.
Speed limit	 A circular speed limit sign with a white background, a red border, and the number '40' in black.
White and red tape	 A roll of white and red striped safety tape, with the red stripes alternating with the white.
Stop signs	 A red octagonal stop sign with a white border and the word 'STOP' written in white capital letters.
Traffic diversion	 A rectangular sign with a black background and three yellow chevrons pointing to the left.

## Workers discipline

- All workers who are in the work areas will have and use the PPE, in accordance with the Health and Safety Plan.

## Incidents

- If a traffic accident occurs within the project construction works zone or any other location affected by the works, a report shall be written and submitted to relevant stakeholders within 24 hours.
- This will include recording the signs in place at the accident zone, traffic control devices and location including photograph evidence of the signage and accident.
- Actions arising from the investigation of the accident will be auctioned through the report and immediately corrected for prevention of further incidence.

### **Auditing**

- The CAS Civils HSE team will be conducting daily inspection
- Periodic Traffic audits by DRTS will be undertake, and after every major traffic change.
- All major traffic diversions and staging will be subject to road safety audit
- Any deficiencies or inconsistencies identified in the traffic management safety audits will be rectified as soon as practical and without undue delay.

### **Public and Community Transport**

There may be minor or major impact on the local transport services depending on the bypass created as alternatives, apart from the speed limits implemented for the safety of motorists, cyclists, pedestrian and construction workers. a ESHS will round the households/fields for consultations about the conditions of the project traffic included.

## **ANNEX 20: GENDER BASED VIOLENCE, SEXUAL EXPLOITATION AND ABUSE, AND SEXUAL HARRASSMENT MANAGEMENT PLAN**

The construction of Mzedi dumpsite access road shall likely result in an increased influx of people at the construction site therefore the possibility of GBV, SEA and SH. The project might create a power differential between those who are engaged in civil works and the project-affected communities, which can increase the opportunities for the members of the project-affected communities to be sexually exploited and abused. Such incidences may arise in situations where large numbers of our workers interact with poor communities, where household representatives that receive project benefits are forced to surrender the cash to spouses, where benefits may be used to lure adolescents into unsafe sexual practices, or in cases of forced sexual relationships in return for favors. CAS Civils acknowledges the possibility of physical, sexual, economic, psychological/emotional abuse/violence including threats and coercion, and harmful practices occurring between individuals, within families and in the community at large. These include sexual violence, domestic or intimate partner violence, trafficking, forced and/or early marriage, and other traditional practices that cause harm. CAS civil contractors is committed to end and does not tolerate any form of GBV/SEA/SH amongst its workers

### **Action plan**

This section details the specific measures for mitigating GBV/SEA/SH risks under this project. These include the mitigation measures already in place as well as steps to be undertaken to further mitigate and respond to risks and cases/allegation of GBV/SEA in the project sites. Exacerbate

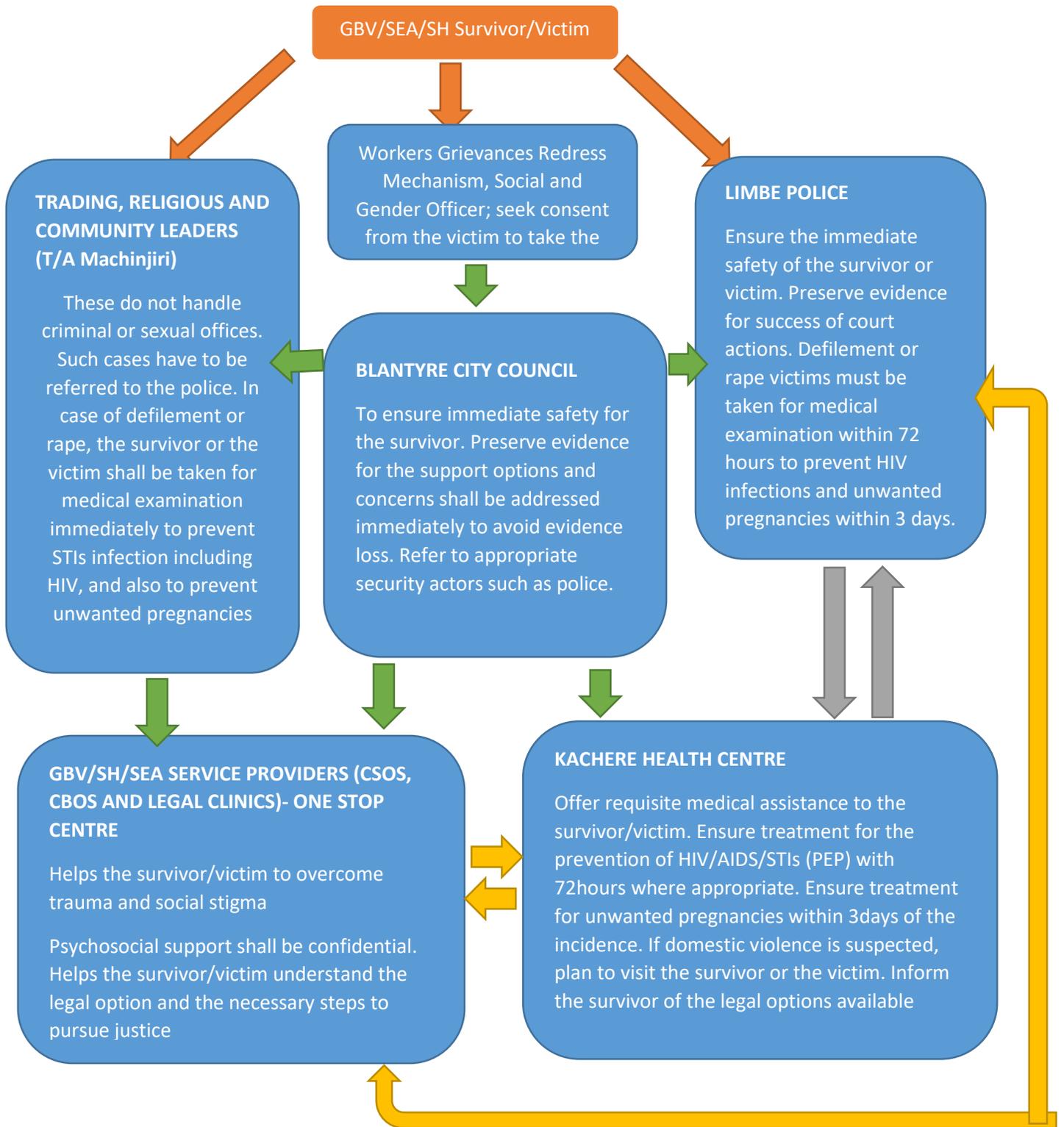
- Mandatory trainings for all the workforce on site on GBV/SEA/SH in the workplace; unacceptable conduct toward local community members, specifically women; and GBV Code of Conduct
- Establishment of GRM committee to receive and respond to GBV incidents
- Erecting GRM box for reporting and responding of GBV incidents
- Introducing a Worker Code of Conduct as part of the employment contract, and including sanctions for non-compliance (e.g. suspension, written warnings, or termination);
- Inclusion of gender based violence in safety induction trainings and orientations

- Provide separate facilities for men and women and display signs, posters and pamphlets around the project site that signal to workers and the community that the project site is an area where GBV/SEA is prohibited

The following procedure will be undertaken using an established standardized report form in line with a survivor centered approach according to their wishes and needs:

- Protecting the confidentiality of survivors, recognizing them as principal 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.
- 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
- Assist the GBV/SEA/SH survivors to access support from the victim support unit

## GBV, HS and SEA referral Pathway



## ANNEX 21: CONTRACTORS IMPLEMENTATION TEAM AND ROLES

NAME	POSITION	ROLES
Tutule Msukwa	Managing Director	<ul style="list-style-type: none"> <li>• Fundraising for the project</li> <li>• Leadership</li> <li>• Oversee the daily operations of the project</li> <li>• Corporate governance</li> <li>• Managing department supervisors</li> </ul>
Stevie Luwemba	Site Agent	<ul style="list-style-type: none"> <li>• Manage department supervisors</li> <li>• Inspect facilities and analyse operational data</li> <li>• Maintain compliance with safety and regulatory requirements</li> <li>• Monitor progress and compile reports</li> <li>• Manage budgets and purchase equipment and materials</li> <li>• Oversee and mentor staff and liaise with stakeholders</li> </ul>
Enock Adyenji	Site Engineer	<ul style="list-style-type: none"> <li>• Control the daily operations of the site activities</li> <li>• Inspect facilities and analyse operational data</li> <li>• Maintain compliance with safety and regulatory requirements</li> <li>• Monitor progress and compile reports</li> <li>• Manage budgets and purchase equipment and materials</li> <li>• Oversee and mentor staff and liaise with stakeholders</li> </ul>
Phillip Katsala	Quantity Surveyor Officer	<ul style="list-style-type: none"> <li>• Pricing/forecasting the cost of the different components needed for a project.</li> <li>• Tracking changes to the design and/or construction work and adjusting budget projections in line with these.</li> <li>• Selecting and/or sourcing construction materials.</li> <li>• Measuring and valuing the work done on site.</li> <li>• Dealing with financial and legal problems.</li> </ul>
Prince Nyasulu	SHSE Officer	<ul style="list-style-type: none"> <li>• Advising the board or senior management on health and safety strategies.</li> <li>• Developing aspects of the health and safety management system, such as risk assessment arrangements.</li> <li>• Implementing and monitoring policies and plans, including investigating and reporting accidents.</li> <li>• Reviewing and auditing health and safety performance.</li> </ul>
Daniel Mlombwa	Gender and Social Officer	<ul style="list-style-type: none"> <li>• Providing guidance on social and gender development issues</li> <li>• Serving as a lead person on gender and social issues including, stakeholder engagement, grievance management, vulnerable and marginalized groups who may be affected by the project, and work closely with community and consultants to address any challenges</li> </ul>

		<ul style="list-style-type: none"> <li>• Advising and/or providing quality operational leadership on major or sensitive matters relating to gender, social impacts and risks associated with project activities</li> <li>• Supporting the set up and operationalization of projects Grievances Redress Mechanisms (GRMs)</li> <li>• Integrating social inclusion (with respect to gender, age, marginalised groups or any other relevant factors) into ESMP of the project</li> <li>• Ensuring that relevant stakeholders are informed about issues relating to implementation of ESMP and providing the required support for timely implementation</li> <li>•</li> </ul>
Benson Supada	Site Foreman	<ul style="list-style-type: none"> <li>• Guarantee all safety precautions and quality standards are met</li> <li>• Coordinate tasks according to priorities and plans</li> <li>• Produce schedules and monitor attendance of crew</li> <li>• Allocate general and daily responsibilities</li> <li>• Supervise and train workers and tradespeople</li> <li>• Ensure manpower and resources are adequate</li> </ul>

## **ANNEX 22: EMERGENCY PREPAREDNESS, RESPONSE AND FIRE MANAGEMENT PLAN**

### **Introduction**

Emergency response preparedness plan is a scenario-based tool for planning response to a potential emergencies and ensure that adequate arrangements are made in anticipation of a crisis. The main goal of the EPP is to facilitate an appropriate, timely and effective response. CAS Civils recognizes the need for its workers to be familiarized with this tool in case an emergency occurs during the construction works of the access road for Mzedi dumpsite

### **Purpose**

The purpose of the Emergency Preparedness and Response Plan is:

- To assist workers to prepare for and respond quickly and safely to emergency incidents, and to establish a state of readiness which will enable prompt and effective responses to possible events.
- To control or limit any effect that an emergency or potential emergency may have on site or on neighbouring areas.
- To facilitate emergency responses and to provide such assistance on the site as is appropriate to the occasion.
- To ensure communication of all vital information as soon as possible.
- To facilitate the reorganisation and reconstruction activities so that normal operations can be resumed.
- To provide for training so that a high level of preparedness can be continually maintained.

This plan outlines response actions for potential incidents of any size. It details response procedures that will minimise potential health and safety hazards, environmental damage, and clean-up efforts. The plan has been prepared to ensure quick access to all the information required in responding to an emergency event. The plan will enable an effective, comprehensive response to prevent injury or damage to the construction personnel, public, and environment during the project.

### **Tornado (Kavuluvulu):**

- When a warning is issued, seek inside shelter at the campsite. Consider the following:
- Stay away from outside and sit down inside the shelter.

- Use arms to protect head and neck.
- Remain sheltered until the tornado threat is announced to be over.

### **Earthquake:**

- Stay calm and await instructions from the Health and Safety Officer or the designated official at the site.
- Keep away from overhead fixtures, machinery, and electrical power lines at the campsite.
- Assist people with disabilities in finding a safe place.
- Evacuate as instructed by the Health and Safety Officer and/or the designated official.

### **Cyclone:**

The nature of a Cyclone provides for more warning than other natural and weather disasters.

Once a Cyclone watch has been issued:

- Stay calm and await instructions from the Health and Safety or the designated official.
- Seek shelter at the campsite.
- Continue to monitor local radio stations for instructions.
- Move away from low-lying areas and head to high ground
- Avoid spreading rumours about the disaster, this will prevent panic situations among workers.

### **Landslides**

Construction of the access road shall involve excavating debris, loading in dump trucks, and disposal. During excavation works, there shall be a potential landslide of the loose material, hence the need to prepare,

- Always work in pairs or more to lookout for one another
- Run to the nearest high ground away from the debris flow
- If escape is not possible, curl into a tight ball to protect your head

### **Fire Emergency Procedure**

- Fire extinguishers signs shall be included in all the offices, in addition to an office plan clearly showing the exits.
- The fire emergency procedure shall be shared with all employees and reminded regularly:
- Where a fire is detected, the person should attempt to extinguish the fire only if it is safe to do so and the fire is containable.

- The person must notify the Health and Safety Officer immediately.
- If required, the project manager will make an announcement for all employees to evacuate the premises immediately and meet at the “Fire Assembly Point”.
- Assembly Points and the location of fire extinguishers will be made clear by the Health and Safety Officer to all the employees during regular toolbox talks.
- All employees must stop work immediately and evacuate.
- Employees are advised to leave everything onsite and make their way calmly and quickly to the “Assembly Point”.
- The project manager must notify the Fire Services as soon as practical.
- The project manager will conduct a headcount to ensure no one is left behind. If anybody is found missing the project manager will inform emergency services.
- An incident/accident report form will be filled out by the project manager and personnel on the site at the time.
- A review will be carried out of the effectiveness of the process and any improvements or corrective actions will be recorded for future implementation.

### **Emergency Contact Details**

The below table is to be completed, shared with all the employees and also displayed in the workplace.

<b>EMERGENCY CONTACT NUMBERS</b>	
Ambulance	990
Police	997
Fire Service	175
<b>INTERNAL INFORMATION</b>	
Focal Point for Emergencies	OHS Manager
Contact Details	0888 969 929
Position	Site foreman
Contact Details	0999363402

**Procedure responsibility**

CAS Civils' Health and Safety officer shall be responsible for managing the day-to-day on-site implementation of this Plan, and for the compilation of regular (usually weekly) Monitoring Reports. In addition, Social and Environmental Officer shall be a liaison and advisor on all environmental and related issues.

The local authorities such as BCC (Fire Department), Blantyre DHO, and Malawi Police will provide their assistance and guidance when deemed necessary, or when it has been requested of them in a case of an emergency.