GREAT LAKES TRADE FACILITATION PROJECT (GLTFP)

Environmental and Social Management Plan

Mpondwe One-Stop Border Post Plot 29, Block 26 Mpondwe - Lhubiriha Town Council, Kasese District

2020

FUNDER:

THE WORLD BANK
IBRD.IDA | WORLD BANK GROUP

CLIENT:

MINISTRY OF WORKS AND TRANSPORT
GOVERNMENT OF UGANDA

CONSULTANT:

KK PARTNERSHIP ARCHITECTS
in association with Multi-Konsults Ltd, SEKA Associates Consulting Engineers Ltd and Orion Associates Ltd

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ACKNOWLEDGEMENTS

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ABBREVIATIONS AND ACRONYMS

BMP	Biodiversity Management Plan
BOD	Biological Oxygen Demand
CESMS	Construction Environmental & Social Management Systems
COD	Chemical Oxygen Demand
EHS	Environmental Health & Safety
EIA	Environmental Impact Assessment
ESHS	Environmental, Social, and Health & Safety
ESIA	Environmental Social Impact Assessment
ESMMP	Environmental Social Management and Monitoring Plan
H&S	Health & Safety
HR	Human Resources
MLTC	Mpondwe-Lhubiriha Town Council
MOWT	Ministry of Works and Transport
MSDS	Material Safety Data Sheets
NEA	National Environment Act
NEMA	National Environment Management Authority
NWSC	National Water and Sewerage Corporation
OESMS	Operational Environmental & Social Management System
OSBP	One-Stop Border Stop
PR	Public Relations
RAP	Resettlement Action Plan
RCF	Resettlement Compensation Framework
SEP	Stakeholder Engagement Plan
SMP	Site Management Plan
TMP	Transport Management Plan
UEDCL	Uganda Electricity Distribution Company Limited
UNBS	Uganda National Bureau of Standards
UNRA	Uganda National Roads Authority
URA	Uganda Revenue Authority

EXECUTIVE SUMMARY

Introduction:

The Government of Uganda intends to implement a Great Lakes Trade Facilitation Project (GLTFP) focusing on improving regional infrastructure and facilities at the border posts, undertaking procedural reforms to facilitating cross border trade, promoting performance-based border management in cross border trade administration and ensuring effective communication, monitoring and evaluation. The project will support efforts for reducing nontariff barriers to intraregional trade, by improving regional environments for business and by supporting regional measures to improve governance. In addition, the project is designed to address underlying sources of conflict as well as poverty and under-development at the Ugandan border with Democratic Republic of Congo (DRC), as well as contributing to the attainment of key regional commitments on Peace and Security. Cross-border trade will be used as a toll for stimulating and facilitating agricultural trade and increasing resilience and social cohesion. The project will be implemented with funding from World Bank.

The Government of Uganda through Ministry of Works and Transport is in advanced stages of constructing a One Stop Border Post facility in Kabuyini I Village, Kabuyini Ward, Mpondwe-Lhubiriha Town Council, Kasese District. It will be developed on a 2.04 ha piece of land currently housing URA offices, URA staff residences, open green area and a Timber loading and off-loading. The proposed site for re-development is bordered by Lhubiriha-Mpondwe Town CBD along the eastern flank while the main town council market is located in the northerly direction. The immediate southern flank is characterised by Mpondwe Police station offices and barracks while the western neighbourhood comprises of commercial buildings and residential homes on privately owned land. The site is located approximately 200 metres from Uganda-DRC Border and is located on an undulating hill inclined to the north-western flank.

It is envisaged that construction of the One Stop Border Post will increase efficiency at the border post thus reduce delays and subsequently improve livelihoods in border areas. It is projected to promote cross-border trade, strengthen economic interdependence and support regional peace and stability. It will enable comprehensive control of goods entering either country including controlled hazardous substances.

The Planned Project

The proposed project will be a two - level mixed-use One Stop Border Post with major components being offices, restaurants, banking area, vehicle parking section, residential rooms, wash rooms, holding areas for breast feeding mothers, waiting areas, drainage system, and security fence among others.

Project Activities during the Construction and Operation Phases

Landscaping of the area by undertaking deep excavation, levelling and compacting for site stabilisation, undertaking concrete column erecting for the general structure and construction of the building with the associated attributes and connection to service utilities will be the major activities during the construction phase.

Major activities during the operation phase will be geared towards daily and periodic maintenance and upgrade of the buildings to ensure efficiency and minimise adverse effects to the environment. The facility will be handling both human and vehicular traffic on a daily basis hence will lead to generation of both liquid and solid waste among others that will require efficient management.

Design of the project, Construction Period and materials to be used

The proposed project is a 2-level building comprising of Offices, Restaurants, Banks, residential rooms, open greenery, circulation roads, vehicle parking space, drainage system and security fence as the major components.

Raw materials required during the construction phase include water, ordinary sand, hard core and stone aggregate, gravel, cement and sand blocks, various types of iron bars, timber, tiles and corrugated iron sheets among others and will be accessed locally from private dealers/suppliers within and around the project area. Others not accessible from the immediate neighbourhood will be sourced from other areas of the country. The project is expected to be completed in 9 calendar months with a defect's liability period of 12 calendar months.

During the operation phase inputs required will include cleaning detergents, food items, drinks stationery and many more associated with facilities offering office/business and accommodation with associated attributes.

Project By-products

The major project by-products will be in form of generated solid waste and wastewater (effluent). The solid waste stream will include body waste, packaging materials, leftover food and paper (from the eating places, residential rooms and offices). Wastewater will be from the wash-ups of the facility and effluent from washrooms.

Developer's Name:	Ministry of Works and Transport
Developer's Address:	P.O. Box 7174, Kampala. Tel: 041-4-320101/9 Or 041-4-321312 Fax: 041-4-320135 Or 041 – 321364, E-mail: ps@works.go.ug
Project Name:	Proposed One-Stop Border Post (OSBP) Facilities at Mpondwe Border
Project Location:	Plot 29, Block 26 Mpondwe-Lubiriha Town Council, Kasese District
Coordinates:	Latitude $0^0$2'32" N, Longitude $20^0$43'21" E
Project Cost:	United States Dollars Six Million, One Hundred Thirty Thousand, Seven Hundred Fifty-Six and Thirty-Eight Cents (US $ 6,130,756.38) Only inclusive of 18% VAT (preliminary cost estimate)
Construction Period:	09 months (Feb to Oct 2020)
Defects Liability period (Maintenance period)	12 months

Table 1: Particulars Of The Proposed Development Project

Developments of this nature and magnitude have environmental impacts associated with them mainly during the construction phase. These include among others disposal of excavated earth material, eroding away of soil,

inconveniencing the neighbourhood and interference with normal flow of traffic considering its location along the busy border post, noise, dust, visual impairing, oil spills from construction equipment, risk of fires, likelihood of lightning strikes, dirtying of the road, silting up of Lhubiriha River, loss of working space for URA and those involved in timber business, giving away of structures among others.

In this ESMP a number of mitigation measures to minimize the negative impacts have been identified and recommendations made on their implementation.

Public Consultation and Disclosure

During the assessment, the consultant carried out a number of engagements with key stakeholders on the proposed project. This section of the report presents the objectives, process and the outcomes of the stakeholder engagement in the process of this ESMP. The key stakeholders that were engaged include Uganda Revenue Authority, Private Sector, specifically the Community Based Organizations (CBOs), Non-Government Organizations (NGOs), and Political leaders from the community and the district level.

Section 5.2 of the report describes the key issues discussed with each of the stakeholders that were engaged in the preparation of this ESMP. For each stakeholder, the section shows the Venue, Time, date, participants and the key issues that were discussed during each engagements. Section 6.3 of the reports elaborates the key concerns from the consultations ad how they have been addressed in the ESMPs and the Project Design.

Project Benefits

The project is expected to employ a large workforce during the construction phase and many more directly and indirectly when operational. Other benefits expected from the project include:

- Creating a modern facility that will increase efficiency at the border post thus reduce delays and subsequently improve livelihoods in border areas;
- The facility is projected to promote cross-border trade, strengthen economic interdependence and support regional peace and stability;
- Enabling comprehensive control of goods entering either country including controlled hazardous substances;
- Creating a modern facility offering business space for offices, business and hospitality related activities currently yearned for by the stakeholders at the border;
- Provision of ample and safe car parking space hence contributing to traffic management at the border post once operational;
- Establishing a high value project unlike the current status today;
- Providing market for the raw materials and inputs to be used during the construction and operation phases;
- Contribution of revenue to Mpondwe-Lhubiriha Town Council and national treasuries in form of taxes of various categories;
- Improvement of the aesthetic value of the area with a high value development facility in place with attributes currently lacking including convenient wash rooms, holding grounds for breast feeding mothers, provision of easy and convenient banking services, having all offices in the cross-border

business sector under one roof; and

- Improved security in the project area since the development facility will be having security guards and better lighting system along this stretch.

Anticipated Construction Phase Impacts

Developments of this nature and magnitude have environmental impacts associated with them mainly during the upgrade/re-construction phase. The project is expected to have negative impacts during the construction phase and these are described in section 7.2 of this report. These shall include the following;

- Soil Erosion
- Pollution of surface waters
- Impact of Noise and Vibrations
- Impacts on Air Quality
- Poor Sanitary Waste Management
- Impact of Fuel and Oil Spills contamination
- Improper Management of Solid Waste (Construction Debris/ Demolition Waste)
- Degradation of Material Source Points
- Loss of secondary Vegetation cover
- Occupational Health and Safety during Construction
- Community Health and Safety during Construction
- Traffic interference and accidents
- Security

Anticipated Operational Phase Impacts

During the operation phase, a number of impacts are expected although these will mainly be minor and of low significance. The mitigation of these impacts is mainly dependent on the occupants and beneficiaries using the OSBP, which in case is Uganda Revenue Authority. The impacts expected in the operation phase shall include;

- Impact of poor solid waste management
- Pollution from wastewater from human occupancy
- Pressure on water consumption
- Pressure on energy consumption and control
- Likelihood of fire outbreaks
- Possibility of Natural Disasters
- Likelihood of collapse of structure

Mitigation Measures

For all the mentioned anticipated impacts in both the construction and operational phases, the consultancy team proposed a variety of mitigation measures which should be implemented by the developer to avert the magnitude of the proposed impacts to a minor or negligible. In section 7.2 and 7.3, the consultant airs out each anticipated impact and then gives adequate description of the mitigation measures that can be implemented to avert each of the mentioned impacts.

In addition, section 7.4 of the report describes the key social impacts especially the Gender Based Violence (GBV) and Violence Against Children (VAC) that are likely to rise with the establishment of the BP. The consultant goes ahead to propose a grievance redress mechanism that can be implemented by the developer to ensure that grievances from communities are obtained and handled in a proper manner to ensure harmony of the project with the community.

Environmental and Social Management Plan

The responsibility of implementing an Environmental and Social Management Plan lie with the implementing agency (MOWT, contractor, the supervising Engineers) and the primary users during the operation phase. An environmental and social management plan has been prepared for the construction and operation phases of the OSBP facility. It describes in details each of the mitigation measure to be implemented and whose responsibility for both phases. MOWT has the overall task of ensuring that the mitigation measures are implemented.

Conclusion and Recommendation

A number of environmental and social impacts will result from the establishment of this BP. Major issues of concern include; pollution due to dust, noise, oil leakages, sediments, increased storm water generation as a result of the paved surfaces, earthworks.

Sensitive issues have been identified, mitigation measures to address the issues recommended and an environmental management and monitoring plan suggested to allow best management practices within the construction and operation phases.

No alternative to the project was considered since the proposed development is suitable with the area land use and planning provisions however the project design was studied to ensure that it has put into consideration the safety and environmental aspects before execution of the project. Such included provisions for use by the physically handicapped, presence of fire escape routes, availability of adequate vehicle parking facilities commensurate with the commercial useable space available, provision for effective evacuation of generated wastewater, and suitability of the soil profile where to execute the project among others.

The area is characterised by institutional developments and other commercial undertakings as the proposed development which makes the project compliant with area land use and planning provisions. Guidance should be provided during the execution of the project as is the case on other establishments to ensure it complies with the engineering, environmental and regulatory planning provisions.

The proposed commercial development is to be developed in an area zoned for mixed-use developments.

The project site is adequate enough to accommodate the proposed project in the current magnitude and general development safeguard measures have been proposed to ensure implementation of the project in harmony with the neighbourhood.

The proposed OSBP development process is environmentally and socially acceptable considering that this is a category three III process "Projects requiring environmental analysis" where the foreseen adverse impacts can easily be mitigated and the developer is committed to ensuring that implementation of this project does not cause injury to the environment. Care must be taken to ensure that the existing adjacent infrastructure including Police Station and barracks, highway to DRC and the community road behind the site to be developed is not interfered with and the best engineering practises are put to use.

The concerted view of the consultancy team is to allow the project to be implemented in the proposed way (design and magnitude) on condition that MOWT and the primary users implements the identified mitigation measures and undertakes to monitor all the key areas identified in the report.

1.0 BACKGROUND INFORMATION

1.1 Introduction

The Great Lakes Trade Facilitation Project (GLTFP) is a 5 year regional project implemented by the governments of the Democratic Republic of Congo, the Republic of Rwanda, the Republic of Uganda, and the Common Market for Eastern and Southern Africa (COMESA). The main project objective is to facilitate cross-border trade by increasing the capacity for commerce and reducing the costs faced by traders, especially small-scale and women traders, at targeted locations in the borderlands. Total budget for the project is 26,000,000 USD over a period of 5 years (2016-2020).

The Government of Uganda intends to implement a Great Lakes Trade Facilitation (GLTF) project focusing on improving regional infrastructure and facilities at the border posts, undertaking procedural reforms to facilitating cross border trade, promoting performance-based border management in cross border trade administration and ensuring effective communication, monitoring and evaluation. The project will support efforts for reducing nontariff barriers to intraregional trade, by improving regional environments for business and by supporting regional measures to improve governance. In addition, the project is designed to address underlying sources of conflict as well as poverty and under-development at the Ugandan border with Democratic Republic of Congo (DRC), as well as contributing to the attainment of key regional commitments on Peace and Security. Cross- border trade will be used as a toll for stimulating and facilitating agricultural trade and increasing resilience and social cohesion.

Since the project is to be implemented with funding from World Bank, a number of environmental and social safeguards have to be considered before and during the implementation of the project. The project is classified by the World Bank and a category B project and thus shall require environmental impact assessment to be carried out prior to commencement. In addition, the project shall comply to all the ten (10) environmental and social standards of the World Bank Environmental and Social Framework and in line with this, six (6) of these have been cleared and four (4) are under review pending.

The Government of Uganda through Ministry of Works and Transport is in advanced stages of constructing a One Stop Border Post facility in Kabuyini I Village, Kabuyini Ward, Mpondwe-Lhubiriha Town Council, Kasese District. It will be developed on a 2.04 ha piece of land currently housing URA offices, URA staff residences, open green area and a Timber loading and off-loading. The proposed site for re-development is located approximately 200 metres from Uganda-DRC Border and is bordered by Lhubiriha-Mpondwe Town CBD along the eastern flank, the highway to DRC and Mpondwe central market in the northerly direction while Mpondwe Police station offices and barracks are to the immediate southern flank. The western neighbourhood comprises of commercial buildings and residential homes on privately owned land.

The current set up comprises of scattered offices (customs, security, migration) which results in delays while serving the business community and those in transit to and from DRC/Uganda. To better serve the business community at the border, Government of the Republic of Uganda together with development partners mooted the Great Lakes Trade Facilitation Project which will see an OSBP established.

Putting in place the above-proposed development is likely to have both positive and negative impacts (Social-cultural and environment) hence the need to undertake an assessment for the projects' aspects.

Section 20 (3) of the National Environment Statute, (NES) 1995 requires that all projects or policies that may, are likely to or will have significant impacts on the environment be subjected to EIA so that adverse impacts can be eliminated or mitigated. In addition, Environmental Impact Assessment (EIA), as a tool for better planning, permits the integration of environmental concerns into the project planning process at the earliest possible planning and design stages. The assessment will help in identifying, predicting and evaluating the foreseeable environmental impacts, both beneficial and adverse, with the view to eliminating where possible, or minimising the negative impacts while optimising the positive impacts.

Therefore, this assessment complies with Ugandan Statutory requirements; the National Environment Act (1995), and the Environmental Impact Assessment (EIA) Regulations (1998). These require a developer to submit to the National Environment Management Authority (NEMA) a project brief or an EIA depending on the level of effects of a project in question is likely to have on the environment.

By complying with the statutory requirements, this assessment will provide the developer with practical advice on the mitigation of any potentially adverse environmental impacts of the project.

1.2 Objectives of the Environmental Management and Social Assessment

The overall objective of the study was to identify possible environmental and social impacts resulting from the establishment of the OSBP in this location and to ensure that the environmental considerations are incorporated into the project implementation plan before the pre-operational stage.

Other specific objectives were:

- To establish the baseline conditions in the projects and their surrounding environments and assess how these conditions will be affected by the proposed project on one hand and how the conditions will affect the project on the other hand;
- To identify and assess the magnitude and duration of both positive and negative impacts resulting from the implementation and operation of the project;
- To promote public consultations amongst stakeholders so as to assess the acceptability of the project; and
- Compile an environmental and social management Plan of the project to assist in the decision-making process and serve as a basis for future environmental monitoring of the project – offer guidance.

1.3 Scope of this Assessment

The study covered all the principal areas which included:

- Location study e.g. suitability of proposed site vis-à-vis adjacent land-use, any risks to sensitive ecological, economic resources or to neighbouring communities a how these infrastructures will be altered by the proposed project;
- Risk to ground water and surface water pollution and ensuring that hydrological concerns are addressed;
- Significant impacts - both positive and negative impacts;
- The Social-economic impacts of the proposed construction were assessed to determine the effect on the communities to be directly or indirectly affected by the project including positive attributes;
- The study identified measures of ensuring safety, avoidance of pollution, traffic accidents and interference with existing infrastructure in the project area as a result of the activities associated with the construction of the OSBP;
- Mitigation measures to combat and monitor the critical negative environmental impacts during the project implementation phase were outlined;
- Technical soundness and validity of the contents of the environment social assessment was ensured in addition to ensuring that the study conformed with the requirements of the national and sectoral guidelines; and;
- As a requirement for any EIA in Uganda, the study was carried out in close consultations with all the relevant stakeholders including lead agencies and the communities to discuss public concerns of the intended OSBP.

1.4 Methodology

The proposed project was a comprehensive assessment that had to be well organised and structured in order to achieve the stated tasks in the terms of reference. Several approaches were used including; document review, site visits and/or observation and interviews.

1.4.1 Document Review

Documents readily available relating to OSBP in general and the site catchment areas in particular were reviewed. These included project reports and area development plans among others.

1.4.2 Site Visits and Observation

The whole area of the proposed project was examined by a walk-through tour with a view to assessing the likely impacts as a result of project implementation. This enabled the consultants to physically make professional observation of the physical environment in addition to other environmental attributes likely to affect or be affected by the implementation of the projects.

As a result of site visits and observation, consultants were able to triangulate findings from documents reviews, identify land use patterns, vegetation cover, population densities, settlement patterns and prevailing economic undertakings.

1.4.3 Questionnaire

Questionnaires were administered to two categories of respondents i.e. the technical people or professionals from relevant agencies and the local communities around the project site where the OSBP project is to be established.

1.4.4 Public Consultations

The consulting team held consultative meetings with URA, town council officials and community members. It is most important that people are aware of the impending developments more so when it involves their neighbourhood. Local communities have knowledge of their natural, physical, cultural and social environment and therefore best placed to assist in the identification of likely environmental and social issues in addition to proposing practical solutions for any adverse impacts. Advance warning of the likely project impacts allows the communities to plan for any likely eventualities especially if it is to lead to change of life styles. Issues discussed centred on aspects of the projects like noise and dust pollution, loss of working space, likely traffic accidents, long distances to access construction materials, waste management, and employment among others. Positive attributes were also discussed during these consultations.

1.4.5 Expert and Scientific Data Analysis

Scientific data collection and analysis was carried out around the area of influence. Of great concern was how the activities will relate to the hydrological set of the area including impacting on the surface water considering that the site neighbours Lhubiriha River.

1.4.6 The Consulting Team

The survey team was composed of the core consulting team, which was the policy and technical organ of the assessment responsible for the direction of the study. It was composed of core consultants from different professional specializations headed by a team leader. The core consultants included an environmentalist and a Sociologist. The consultants pooled together their varied expertise and experiences to be able to accomplish this assignment.

1.5 Structure of this Assessment

The remainder of this Assessment is divided into the following principal Chapters:

- **Chapter 2** deals with the legislation taken into consideration that has a bearing on this project;
- **Chapter 3** provides a general outline of the existing environment in the area of the proposed project;
- **Chapter 4** describes the proposed OSBP project components during the construction and operation phases;
- **Chapter 5** presents analysis of project alternatives: the no action versus the proposed development;
- **Chapter 6** deals with Public Consultations and Disclosure;
- **Chapter 7** deals with environmental, Social-cultural impacts associated with the construction and operation phases of the project;
- **Chapter 8** deals with mitigation measures for adverse (analysing each aspect of the environment in detail, providing an account of baseline conditions, prediction and evaluation of the impacts of the project; evaluation of significant environmental and social – cultural impacts);
- **Chapter 9** comprises an Environmental and Social Management Plan identifying the measures to be adopted during the operational life of the projects to ensure their environmental acceptability to minimise any adverse impacts and provide for appropriate environmental monitoring.
- **Chapter 10** puts across main findings, recommendations and conclusion

2.0 POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

2.1 POLICY, LEGISLATION AND REGULATORY CONSIDERATIONS

Environmental Studies are a legal requirement and should be carried out for all proposed developments that are likely to have significant environmental impacts so that any negative impacts can be minimised or eliminated. This environmental study that addresses the proposed Mpondwe OSBP project, falls under the third schedule of the NEA 1995 (category 2): Urban Development-establishment {development of shopping centres and complexes}, hence the need to call for an assessment to report to conform to the regulatory requirements. The policies and regulations applicable to environmental and social management with respect to the construction works are:

2.2 POLICIES

2.2.1 The National Environment Management Policy, 1994

Its overall goal is the promotion of sustainable economic and social development that enhances environmental quality without compromising the ability of future generations to meet their own needs. The policy clearly states that an EIA should be conducted for any policy or project that is likely to have significant adverse impacts on the environment.

2.2.3 The National Land Policy 2013.

The objectives of this National Land Policy are to among others to stimulate the contribution of the land sector to overall Social-economic development, wealth creation and poverty reduction in Uganda, ensure sustainable utilization, protection and management of environmental, natural and cultural resources on land for national Social-economic development and ensuring planned, environmentally-friendly, affordable and orderly development of human settlements for both rural and urban areas, including infrastructure development. Development of an ESMP for the OSBP rhymes well with the objectives of the land policy.

2.2.3 Uganda Gender Policy

The policy aims at establishing a clear framework for identification, implementation and coordination of interventions designed to achieve gender equality and women's empowerment in Uganda. It is a guide to all stakeholders in planning, resource allocation, implementation and monitoring and evaluation of programmes with a gender perspective. Specifically, the policy among others aims at reducing gender inequalities so that all women and men, girls and boys, are able to move out of poverty and achieve improved and sustainable livelihoods, increase knowledge and understanding of human rights so that they can identify violations, demand, access, seek redress and enjoy their rights. This is in line with the undertaken ESMP

2.2.4 National Water Resources Policy 1999

The policy caters for safeguarding water sources. It also stipulates that the quality of drainage water shall be such as not to pollute the receiving water or ground water and that all measures must be taken by the users to

minimise water logging, prevent increase in salinity levels in receiving waters, to prevent the accumulation of dangerous or toxic compounds in the subsoil, capable of contaminating underground waters. Considering the excavations to be carried out during project development, this policy offers guidance on how to execute the project diligently and cautiously. The policy offers principles and strategies for monitoring, assessment, allocation and protection of the resources and management framework.

2.3 THE LEGAL AND REGULATORY FRAMEWORK

2.3.1 The Uganda Constitution (1995)

The Uganda Constitution of 1995, Articles 39 and 41 provide that everyone has a duty to maintain and enjoy a sound environment. Every person in Uganda has a right to a clean and healthy environment and as such can bring action for any pollution or disposal of wastes. It states that government will promote development, utilisation and public awareness of the need to manage land air and water resources in a balanced and sustainable manner for present and future generations. The constitution vests all land in the country in the citizens of Uganda, and protects property and other individual rights. The government, or local government, may acquire land in the public interest, subject to provisions of Article 26 of the Constitution. This gives every person in Uganda the right to own property, and stipulates that the land or property cannot be compulsorily acquired unless prompt, prior and adequate compensation has been paid to the owner of the land/property.

2.3.2 The National Environment Act (1995) and Regulations

Section 19(1): This provides for a developer of a project described in the third schedule to this Act to submit a project brief to the lead agency, in the prescribed form and giving the prescribed information. Where a project/an activity is out of character with its surroundings; any structure of a scale not in keeping with its surroundings; and likely to lead to changes in land use an EIA should be conducted. The EIA Regulations specifies the projects to be subjected to EIA. These are:

- Where an environment impact review shall be required for small scale activities that may have significant impact;
- Where environmental impact evaluation for activities that are likely to have significant impacts; and
- Where environmental impact study for activities that will have significant impacts.

Third schedule of the EIA regulations lists Urban Development-establishment {development of shopping centres and complexes} as requiring EIA's.

2.3.3 The National Environment (Waste Management) Regulations (1999)

Section 5 provides for a person who owns or controls a facility or premises, which generate waste, to minimise the waste generated by adopting cleaner production methods.

Subsection 1(b)(i): identifying and eliminating potential negative impacts of the product/waste. (c): incorporating environmental concerns in the design and disposal of a product. Section 12 provides that a facility shall not discharge or dispose of waste of any state into the environment, unless the waste has been treated in a treatment

facility and in a manner approved by a lead agency in consultation with the authority. "Developments of this nature normally generate huge amounts of solid & liquid wastes from offices, residential rooms and washrooms hence appropriate measures must be put in place for effective and timely disposal. The planned sanitation and drainage system are aimed at ensuring that the facility operates in a harmonious coexistence with the environment''.

2.3.4 The National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, S.I. No 5/1999.

Section (1) requires every industry or establishment to install at its premises, anti-pollution equipment for the treatment of effluent chemical discharge emanating from the industry or establishment. And section (2) calls for that anti-pollution equipment installed, under regulation (1) to be based on the best practicable means environmentally sound practice or other guidelines as the Executive Director may determine.

Considering the effluent to be generated from the OSBP and where it will eventually be discharge; near a sensitive ecosystem (River Lhubiriha), this regulation has to be taken into consideration. The regulation provides for standards (maximum permissible limits) for effluent or waste water before discharge into water or on land a general obligation to mitigate pollution, and duty to keep records of amount of waste generated and parameters of the discharge.

2.3.5 The National Environment (wetlands, River Banks and Lake Shores Management) Regulation (2000)

Section 34(1) highlights the fact that any developer desiring to conduct a project which may have significant impact on a wetland, river bank or lake shore shall be required to carry out an environmental impact assessment in accordance with sections19, 20, and 21 of the Act. The regulation provides for regulated activities whose implementation in wetlands/River Bank/Lakeshore is subject to issuance of a permit granted by NEMA in consultation with lead agencies.

The regulation also provides that resources in wetlands, river banks and lakeshores should be utilized in a sustainable manner compatible with continued presence of wetlands and their hydrological functions and services. Environmental Impact Assessment as required under the act is mandatory for all activities in the wetlands, river banks and lake shores and special measures are essential for protection of river banks, lake shores and wetlands of international, national and local importance as ecological systems and habitat for fauna and flora species, and for cultural and aesthetic purposes, as well as for their hydrological functions and values for preventing soil erosion, siltation and water pollution. Every land owner, occupier or user who is adjacent or contiguous with a wetland, river bank and lakeshore has a duty to prevent degradation or destruction of the wetland/River Bank/Lakeshore, and to maintain ecological and other functions of the wetland.

Though the project is not located in the protection zone of the river, considering that the site storm water will eventually be directed towards Lhubiriha river located approximately 200 metres away, this regulation will be put into consideration and observed.

2.3.6 The National Environment (Noise Standards and Control) Regulations, 2002

The regulation provides standards for:

- The maximum permissible noise levels to which a person may be exposed from a facility, activity or construction site;
- Control of noise and for mitigating measures for the reduction of noise levels; and giving effect to the provisions of section 29 of the Act.

Regulation 6 (1) provides that the maximum noise levels to which a person may be exposed from any area and shall not exceed the level specified in Column 2 of Part 1 of the First Schedule.

Regulation 7 (1) No person shall emit or engage in any activity that emits or is likely to emit noise in excess of the permissible noise level specified in regulation 6, unless permitted by a license under these Regulations.
(2) Any person who emits or engages in any activity that emits or likely to emit noise above a maximum permissible level specified in sub-regulation (1) commits an offence.

Section 8 (1) Duty to control noise; It shall be the duty of the owner or occupier of a facility or premise or machinery, to use the best practicable means of ensuring that the emission of noise from that machinery, facility or premises does not exceed the permissible noise levels.

Sub-regulation (3) a person or occupier of a premise or facility or machinery or plant generating noise who fails to comply with this regulation commits an offence.
"This Act is greatly applicable in the case of the proposed commercial development to ensure protection of both the workforce and neighbours from exposure to excessive noise levels during construction and operational phases of the project. To this effect, the appropriate measures include provision of protective gear to the work force during construction such as ear muffs, having a noise reduction facility fitted to the standby generator to be used in case of power failure and limiting construction activities to daytime only when impacts of noise are least felt".

2.3.7 The Environmental Impact Assessment Regulation 1998

The Environmental Impact Assessment Regulation, 1998 (Statutory Instrument No. 13/1998), an EIA shall be conducted in accordance with terms of reference proposed by the developer in consultation with the authority. As per section 12, public participation is a requirement. In course of this study local communities and stakeholders have been widely consulted about the project for their views on the effects and benefits of the proposed facility. The photographs and list of persons consulted and their views and responses by the developer are contained within the section on Public Consultations and Disclosure.

2.3.8 The Land Act (1998)

Section 43 provides that whoever owns land or occupies land shall manage and utilise it in accordance with the Forest Act, the Mining Act, the National Environment Act CAP 153, the Water Act (1995), Uganda Wildlife Act (1996), and other laws.

Section 46 requires use of land to conform to the provisions of the law relating to Town and Country Planning Act and any other law.

"Before any development project is approved for implementation, plans must first be submitted to LMTC for regularisation to ascertain whether the intended development conforms to the planning provisions of that particular zoned area in line with this piece of legislation. The proposed development project in question rhymes with the area planning provisions and the planned submission of the plans to LMTC for regularisation and approval is in conformity with the urban planning provisions''.

2.3.9 The Roads Act 1964

The act stipulates that no person may, without the written permission of the road authority erect any building, plant any tree or permanent crops within the road reserve, subject to any order made under this Act. Under the Roads Act 1994 the Minister may declare by statutory instrument an area bounded by imaginary lines parallel to and distant not more than fifty feet from the centreline of any road to be road reserve. ''This Act is applicable in the case of this particular development project since it is located along the highway to DRC and accordingly extra care should be taken not to encroach on the road reserve during construction phase. The project should limit activities to the proposed site as indicated on the development plans. The proposed site is big enough to accommodate all the proposed project components".

2.3.10 The Town and Country Planning Act. CAP 30

The Act provides for the orderly planning of urban settlements and the countryside. Plans for all intended development projects must first be submitted to LMTC for regularisation and approval before implementation starts in line with the Town Council Planning provisions. *''For the case of this particular proposed project, structural/architectural plans should be submitted to LMTC as per the provisions of the above-mentioned legislation for regularisation and approval before embarking on project implementation. The project in question rhymes with the area planning provisions''.*

2.3.11 Occupational safety and Health Act, 2006

The Act replaces the Factories Act of 1964 and encourages technical measure to ensure safety of workers at work place through a preventive approach. The Act provides for protection and prevention of all people at all workplaces from injuries, death, diseases and damage of property. Unlike the factories Act that emphasized workplaces mainly, this Act extends to all employment places to include both the workers and any other persons at that workplace at the time. Employers are supposed to ensure the safety of their workers, provide protective gears and a clean environment on top of all basic facilities like sanitary facilities.

Section 13(1) declares it the employer's responsibility to undertake such measures at his/her own cost to clear working environment free of any hazard due to pollution and (2) specifies some of the duties like provision and maintenance of plant and systems of work, arrangements to ensure and absence of risks to health, adequate information instructions among others regarding occupational health and provision and maintenance of access and exits from workplace that are safe.

''This Act is greatly applicable in the case of this proposed development to protect both workers and site visitors together with tenants and/or occupants during the operation phase''.

2.3.12 The Public Health Act

The Act consolidates the law in the respect of Public health and places duties on the Urban and local authorities in matters pertaining to public Health. It provides for measures to minimise water, air and noise pollution and empowers local authorities to take lawful, necessary and reasonably practicable measures for the prevention of any pollution dangerous to health of any supply of water, which the public within its district has a right to use, and does use for drinking or domestic purposes. The Public Health Act seeks to protect health of all citizens including the health of the environment through stipulation about drainage and safety of buildings and activities.

2.3.13 The Water Act (1995)

Section 5: All right to investigate, control, protect and manage water in Uganda is vested in the Government and in Section 31, it makes it an offence to pollute or cause risk of water pollution.
Under section 18 of the water act, no person shall construct any works unless authorised to do so under by the director following application for a permit. Under section 20 a holder of such permit shall not cause or allow any water to be polluted.

2.3.14 The Physical Planning Act Cap 281

The physical planning act, 2011 establishes district and urban physical planning committees. It provides for making and approval of physical development plans and applications for development.
Section 37 of the Act requires an EIA permit for developments before they are implemented, stating: "Where a development application related to matters that require an environmental impact assessment, the approving authority may grant preliminary approval subject to the applicant obtaining an EIA certificate in accordance with the National Environment Act".
"LMTC has jurisdiction over this proposed site and therefore has regulatory control to ensure that this project conforms to local physical planning requirements. In the case of this proposed development project, plans should be submitted to LMTC for regularization and approval pursuant to the provisions of this Act."

2.3.15 The Local Governments Act, 1997

This act provides for a district-based system of local governments. This system provides for elected councils that have both legislative and executive powers. Thus, the district councils play an important role in land administration, land surveying, physical planning, and management of forests, wetlands, environment and sanitation and road services that are not the responsibility of the central government. They are therefore charged with the crucial role of sensitisation and mobilisation of the local communities.

2.3.16 The penal Code Act cap.120

In section 176, 177, it creates offence against pollution and adulteration of air, water as well as noise pollution. This calls for the OSBP to take precaution and mitigate any likelihood to foul air or water in the surrounding environs in compliance of set standards.

2.3.16 The Investment Code of 1991

In Section 18(2(d), the code makes it an implied condition of every investment license to take necessary steps to ensure that the operation of his business enterprise do not cause injury to the ecology or environment. This calls for the OSBP to take precaution and mitigate any likelihood injury to the ecology or environment.

2.4 International and Institutional Framework

2.4.1 The Universal Declaration of Human Rights1948

The UDHR is the foundation upon which the international system for protection and promotion of human rights has been built.

The Declaration is handy with the establishment of this proposed project. It puts emphasis of human rights where Article 17 (1) Everyone has the right to own property alone as well as in association with others. (2) No one shall be arbitrarily deprived of his property. Applicable measures or rightful ownership are required to be taken without violating any of the party's rights.

2.4.2 The Convention on Biological Diversity (CBD), 1992

This international legally binding treaty has three main goals (1) conservation of biological diversity, (2) sustainable use of its components; and (3) fair and equitable sharing of benefits arising from genetic resources. The document is seen as a key tool for sustainable development which among the many issues dealt with includes Impact assessments and Education and public awareness.

It is so relevant in this case to internationally support Impact assessments before projects commence to avoid adverse effects to biological resources in Uganda

2.4.3 The United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, 1994

Convention to combat desertification and mitigate the effects drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements. Uganda is a party to this legally binding Convention that came to force in 1996. The proposed developments are close to river Lhubiriha that is utilized by many for mainly domestic purposes. Any excessive fall in the water/stream flow is likely to cause droughts in the areas. This therefore calls for precautions by the proposed activities.

2.4.4 Rio declaration on Environment and Development, 1992

This is not a legally binding tool; however, it offers a number of guiding principles that emphasize sustainable development, public participation especially women, use of indigenous knowledge and the polluter pays and precautionary principles during development proposals.

Principle 17 states that Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority. This adequately supports the need for EIA's for projects like this in order to safe guard man's interest and nature.

2.4.5 The United Nations Framework Convention on Climate Change (UNFCCC) On June 12, 1992, 154

Uganda upon ratification committed a voluntarily to "non-binding aim" to reduce atmospheric concentrations of greenhouse gases with the goal of "preventing dangerous anthropogenic interference with Earth's climate system" with other signatories who agreed in general that they would recognize "common but differentiated responsibilities". However, the Kyoto Protocol calls upon signatories to cut emissions/pollution through various measures such as energy efficiency, protection of carbon sinks and the like. *The convention is of relevancy to the establishment of the OSBP which is so energy intensive and produces carbon emissions. With that in mind, the developers will have to devise ways to reduce the likely negative impacts related.*

2.4.6 Environmental & Social Safeguards

The primary role of Environmental and Social Safeguards are to protect people and environment from adverse impacts, reduce and manage risk ensure a sound and sustainable development. The triggered safeguards as far as Mpondwe site is concerned include: OP/BP 4.01 Environmental Assessment, OP 4.04 Natural Habitats, and OP 4.12 Involuntary Resettlement

OP/BP 4.01Environmental Assessment

This safeguard is concerned with ensuring that projects proposed for Bank financing are environmentally, socially sound and sustainable, inform decision makers of the nature of environmental and social risks and increase transparency and participation of stakeholders in the decision-making process. This ESMP has been prepared in compliance with this requirement.

OP 4.04 Natural Habitats

This is aimed at safeguarding natural habitats and their biodiversity, avoid significant conversion or degradation of critical natural habitats and ensuring sustainability of services and products which natural habitats provide to human society. Though it was among the safeguards triggered by the project, on ground assessment established that there is no natural habitat to be impacted on.

OP 4.12 Involuntary Resettlement

This safeguard aims at minimizing displacement, treat resettlement as a development program, provide affected people with opportunities for participation, assist displaced persons in their efforts to improve their incomes

and standards of living, or at least to restore them, assist displaced people regardless of legality of tenure and pay compensation for affected assets at replacement cost.
The project has no component of resettlement before commencement of the project and thus this aspect is not triggered by the implementation of the project.

2.4.7 General World Bank Guidelines on Environment Health and Safety

The World Bank Guidelines on Environment Health and Safety provide guidance to users on Environment Health and Safety issues in specific industry sectors. It involves creating organized efforts and procedures for identifying workplace hazards and reducing accidents and exposure to harmful situations and substances. It also includes training of personnel in accident prevention, accident response, emergency preparedness, and use of protective clothing and equipment.

The guidelines offer guidance on development of safe, high quality, and environmentally friendly processes, working practices and systemic activities that prevent or reduce the risk of harm to people in general, operators, or patients in addition to creating a systematic approach to complying with environmental regulations, such as managing waste or air emissions all the way to helping site's reduce the company's carbon footprint.

These guidelines area relevant to the OSBP and will be put into consideration to ensure smooth execution of the project in a safe and environmentally sound environment

2.4.8 Uganda Vision 2040

Uganda Vision 2040 provides development paths and strategies to operationalize Uganda's Vision statement which is "A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years".

It aims at transforming Uganda from a predominantly peasant and low-income country to a competitive upper middle-income country. The Vision 2040 is conceptualized around strengthening the fundamentals of the economy to harness the abundant opportunities around the country among which include geographical location and trade in addition to reviewing and strengthening the foreign policy to enhance collaboration in accordance with existing and future agreements, standards and protocols within the framework of East African Community, other regional blocs, African Union and global community, for the realisation of this Vision.

It also looks at directly investing in strategic areas to stimulate the economy and facilitate private sector growth as this proposed OSBP.

2.4.9 Ministry of Trade, Industry and Cooperatives

Ministry of Trade, Industry and Cooperatives is responsible for promoting trade and industry and cooperatives for the development of the country. This Ministry is to ensure expansion and diversification of trade, cooperatives, environmentally sustainable industrialization, appropriate technology, conservation and preservation of other tradable national products. The roles above are targeted at generating wealth to benefit the country socially and economically as this proposed OSBP.

2.4.10 Ministry of Water and Environment

The ministry is the institution responsible for the formulation of policies that govern environmental management in Uganda hence responsible for environmental issues in the country.

2.4.11 National Environment Management Authority

This is the principal agency in Uganda responsible for the management of environment and is charged with the coordination, supervision and monitoring of all activities related to environmental management.

2.4.12 The Uganda Land Commission

It is responsible for sustainable management of land in Uganda.

2.4.13 The Town and Country Planning Board

The board provides for the orderly planning in urban and rural areas. It defines building operations to include the making accessible of electrical installations and development in relation to any land.

2.4.14 The District Land Board

This (**Kasese District Land Board**) is charged with the responsibility for land issues at the local government level. This is the principal agency in Uganda responsible for the management of environment and is charged with the coordination, supervision and monitoring of all activities related to environmental management.

2.4.15 Mpondwe-Lhubiriha Town Council

The town council is charged with orderly planning hence clearance of development plans and guidance will primarily be the responsibility of this institution.

2.4.16 Uganda National Roads Authority

The Highway to DRC is under the management of Uganda National Roads Authority hence authority to obtain access to the site will be granted by UNRA.

3.0 PROJECT AREA ENVIRONMENTAL BASELINE CONDITIONS

3.1 The Project Area Biophysical Environment

The site to be developed lies on an undulating hill in Kabuyini I Village, Kabuyini Ward, Mpondwe-Lhubiriha Town Council, Kasese District and currently houses URA customs offices. The site measures approximately a 2.04 ha. Details of the site and the immediate neighbourhood are indicated in the table below:

Table 2: Site Characteristics

Site & Neighbourhood	Existing Environment / Attributes
Site	▪ Measures approximately 2.04 ha; ▪ Dotted with several buildings accommodating offices, residential units, generator house, canteen/kitchen unit and stores; ▪ Has open space under secondary/exotic grass; ▪ There several ornamental and exotic tree species including eucalyptus, Mango trees among others; ▪ Connected to hydro power though not reliable and piped water; ▪ Has coverage of MTN and Airtel communication networks; ▪ Hosts the timber off-loading and loading yard (for only timber in transit to other countries); and ▪ Its enclosed in a chain link fence and accessed from the al-weather Mpondwe-DRC Road
Eastern Flank	Access road and CBD of Lhubiriha-Mpondwe town
Western Flank	▪ Earth road, commercial and residential developments on privately owned land. River Lhubiriha is approximately 200 metres away in this direction
Southern Flank	▪ Mpondwe Police Station and part of the town council developments
Northern Flank	▪ All-weather road to DRC, Central market and other commercial developments. River Lhubiriha is approximately 200 metres away in this direction

Figure 1: Google map portraying project site enclosed in corner points marked A, B, C and D is the project site for the OSBP

	
URA Mpondwe Customs office – site current landuse	Part of the site for development in its current status

Figure 2: Current Site Land Use

	
Timber Loading & Off-loading near the site	Public toilet on site

Figure 3: Some of the crucial facilities on site for the proposed OSBP

	
The immediate western flank	The immediate eastern neighbourhood

Figure 4: The immediate Neighbourhood; Western and Eastern Flanks respectively

	
The immediate southern neighbourhood; Mpondwe Police Barracks	The immediate northern neighbourhood; Highway to DRC and Mpondwe Central Market

Figure 5: The immediate Neighbourhood; Southern and Northern Flanks respectively

Kasese District information was largely used in the description of site and area baseline information

3.2 Geology

There are four important geological features which include: partly granitized and metamorphosed formations, Pleistocene to recent rock formations, wholly granitized or high to medium grade metamorphosed formations, and the Rift Valley with its associated geology.

The site area basement rock is Pre-Cambrian (partly granitized and metamorphosed formations). This is associated with the Buganda-Toro system. The Buganda-Toro system is the most extensive of the cover formations which occupies much of western Uganda. This Buganda- Toro system consists mainly of Agrellites (Phyllites and Schists) with basal quartzites and amphibolite occurring locally.

Cainozoic rocks (Pleistocene to recent) cover somewhat distinct areas such as the plains in the areas of Lhubiriha – Mpondwe town council, Muhokya, Kitchwamba, Karusandara, and Lake Katwe, where rift valley sediments are evident, and the permanent swamp zone where sediments, alluvium, black soils and moraines (Pleistocene to recent) occur.

3.3 Site soils

The dominant soil is brown sandy loams and sandy clay loams. Large spreads of sands, gravel and clays have been brought down by rivers draining of Rwenzori Mountains into the plains. They can be seen near the Rwimi bridge and sections along the course of river Mubuku. In general, these soils are typically deep and of high base status and calcareous as the Nyakatonzi soils (eastern neighbourhood. The sandy phases of alluvium, however, occur nearer the river mouths and foot-hills, and the heavier textured material towards the lake.

3.4 Landscape and drainage

The geomorphology of Kasese District is such that the western half is mountainous terrain while the eastern half comprises the plains lying roughly between 900m and 1800m above sea level. The landscape has two discernible levels, a lower level or terrace to the east and a higher level/terrace to the west towards the mountain base. The topography stands at an altitudinal range of 1100-1350m, with 1320-1340m being the most common level. The site is located on an undulating hill though the neighbourhood is generally flat. The natural area landscape is inclined to the north-western flank.

3.5 Water resources

In Kasese District, the area occupied by water is 481 sq. km. The drainage is dominated by rivers flowing from the swampy watersheds of the Virunga massif, on the north western slopes which drain into Lake Edward via several rivers and streams. Lhubiriha River which is located approximately 200 metres west and north-west of the site is the dominant water body within a radius of 2 kilometres however there are several streams that traverse the area.

	
Arrow points at Lhubiriha River one of the major water bodies in the area (located approx. 200 metres away from the site	Kyanzi Stream one of the water body within the town council located approximately 1 kilometre away from the site

Figure 6: Arrow pointing at Lhubiriha River. To the right is one of the water points (stream and a protected spring)

3.6 Climate: Rainfall and temperature

The district experiences bimodal rainfall pattern. The first rains are short and occur during March - May, and the longer rains from August - November. Annual rainfall ranges from less than 800mm -1600mm, and is greatly influenced by altitude. For the central part of the district stretching diagonally in the south-west to the north-east direction, annual rainfall ranges from 1000 - 1200mm. Annual average temperature is at 23.9 degrees centigrade, with minimum and maximum averages of 17.7 and 30.2 degrees centigrade, respectively.

3.7 Vegetation Cover

The natural vegetation of the district varies with the different ecosystems that characterise the area. It ranges from natural mountain forest through permanent swamps to grassland, shrubs and acacia savannahs, to post

cultivation communities. Due to rapid urban expansion and agricultural activities and increase in population, there has been a lot of interference with the natural vegetation in the project area. The project site is devoid of any vegetation of significance. Exotic grass, fruit trees and ornamental trees denote the site and the immediate neighbourhood.

Figure 7: Vegetation Cover on the project site for the OSBP

3.8 Social-economic Environment

3.8.1 Land Tenure System

Customary land ownership tenure is the most widespread in the district and town council however the project site is under leasehold tenure (Plot 29, Block 26 Mpondwe).

3.8.2 Social Services and Infrastructure

The area is supplied with the necessary basic infrastructure. There is piped water provision by NWSC, UEDCL grid power line in addition to having coverage from all the telecommunication companies.

3.8.3 Demographic Characteristics

The indigenous Bakonzo are the most dominant tribe followed by the Batoro, Banyankole and Bakiga. Swahili, English, Lukonzo, Runyankole-Rukiga are the main languages used. All have been attracted to this place by the business opportunities prevailing. The area is settled with linear settlement pattern observed in the town CBD.

3.8.4 Economic Activity

The major source of livelihood around the site is employment income and trading/business. The project site is located on the busy FortPortal-Mpondwe Road. Project neighbourhood is also known for subsistence agriculture with the main crops being bananas, potatoes, maize, coffee and beans as portrayed from the photograph above.

3.8.5 Security

The area security is provided by several agencies that include the Uganda Police Force, UPDF, Local Defence Forces and private security firms. UPDF barracks is located 5 kilometres away at Katojo in the southerly direction while Mpondwe Police Barracks borders with the project site to be developed.

3.8.6 Drainage and Water Supply

The site is well drained, with most of the storm water ending up in the valley to the west where Lhubiriha River is located. The site has access to portable water supplied by NWSC. Several boreholes, protected springs and stream water are other major sources of domestic water within the town council as portrayed from the photographs below.

3.8.7 Body Waste/Sewerage Treatment/Solid Waste Management

The town council relies on individual septic tanks and pit latrines for body waste disposal. It's only the hospital that has got a built wastewater treatment facility though not properly functioning in addition to the newly constructed incinerator to handle medical waste. The proposed facility will rely on septic tanks and soak pits for management of the wastewater from the wash rooms.

3.8.8 Health Care and Education Facilities

There are several healthy units located in the immediate neighbourhood including the Bwera 100-bed government hospital and Kasanga Health Centre.

There are several educational institutions within the proximity both government and privately owned.

3.8.9 Fire protection

The area does not have a fire engine and relies on what is based in Kasese town which is quite far. Considering the fire threat in housing developments, these services will be required. The proposed OSBP will have an in-house fire safety system established to handle any fire occurrences.

4.0 PROJECT CHARACTERISTICS

4.1 Introduction

This chapter presents a detailed description of the activities involved in the development of OSBP development. Major activities will involve site stabilisation, delivery of the required raw materials, construction of the several building structures and landscaping after the construction works.

The major focus of this study was on the establishment of the OSBP on plot 29, Block 26 Mpondwe -Lhubiriha Town Council Kasese District.

4.2 Project Activities

The project is designed to ensure that there is no disruption of the border post activities during the implementation of the project. In order to meet this, the facility shall be constructed in an existing space and thus there will be no disruption of URA staff in the existing structure. Once the BP new structure is completed, the URA staff shall shift in this new structure and the current one shall be demolished to provide space for parking and other components as laid out in the project design.

In order for this OSBP to successfully be developed and made operational, a number of activities will be carried out on site as indicated below.

4.2.1 The Construction Phase:

The following will be undertaken during the construction phase to put in place an operational OSBP:

a) Demolition of existing buildings, removal of installations on Plot N.29, Block 26.
b) Demolition of existing boundary fence; construction of new wall realigned to the correct plot boundary
c) Improving of the access road and the parking area
d) Construction of the following buildings:
    - Commercial Services Building to accommodate the following offices: Uganda Revenue Authority, Uganda National Bureau of Standards, Ministry of Internal Affairs, Department of Immigration Control, Uganda Police Force and other security agencies and Uganda Bureau of Statistics
    - Warehouse, Agriculture, Crop Industry & Fisheries offices
    - Verification Bay
    - X Ray Building
    - Breast Feeding shed/waiting Area
    - Gate Houses (2 in No)
    - Multipurpose conference/meeting and training hall and ancillary services to above
    - Canteen
    - Vehicle parking
    - Waiting lounges

Civil Engineering

The civil works of the project will comply with the National Building Code and will involve the following:

- Establishment of the civil and structural design, analysis and execution documents and drawings for all buildings and facilities;
- Engineering and construction of all foundations below ground level;

- Engineering and construction of all civil works for all buildings and support structures and facilities below and above ground, including concrete and structural steel works.

Other activities will include putting in place the following:

- Laboratory to be used by UNBS;
- Wash rooms and water borne toilet facilities for management, staff and the business community;
- Centralized electrical power control (MCB);
- Electrical wiring for all electrically powered equipment/motors, and for other use such as lighting and office use; and
- Water supply lines connection to water mains.

4.2.2 The Operational Phase:

Major activities during the operational phase will include daily inspection and clearing of goods and raw materials traded across the border, clearing of people in transit to either country, maintenance of machinery and the buildings to ensure efficiency and minimise adverse effects on the environment.

Several people will be directly employed at the premises in addition to those in transit whose hygiene, occupational health and safety aspects at work will be of concern to the facility management. Details are indicated here below;

OSBP effluent Management

Given the level of anticipated human traffic, there are concerns regarding BOD, COD and nutrient loads of discharged effluent. The pH levels can be greatly influenced by cleaning agents used. Considering the nature of the terrain, several septic tanks and soak pits will be used in the management of facility wastewater to be generated (mainly domestic effluent).

Energy Consumption

The facility energy sources will be UEDCL electrical power tapped from the 3-phase line in its neighbourhood, which will be stepped down by a transformer for use in addition to other sources as solar power and standby generators for power backup.

Solid Waste Management

Significant quantities of solid waste will be generated from the facility. On top of the domestic waste which will be handled using coded dust bins packaging material will be generated from the facility among others which will require effective and efficient management. Most of the generated solid waste (not hazardous will be disposed of at the town council dumping ground located at Katojo approximately five kilometres way in the south-easterly direction. Special waste will be handled by licensed agencies or delivered to special facilities as the newly constructed incinerator at Nyabutundu hill where Bwera general hospital is located. Reusable or recyclable waste will be accordingly handled.

	
Katojo solid waste dump site used by Mpondwe-Lhubiriha Town Council	Some of the equipment and vehicles used in solid waste transportation

Figure 8: Solid Waste Infrastructure in Use

Fire hazard prevention

The OSBP will have an elaborate fire hydrant system, with the infrastructure in place and ready for use in case of an emergency handling. A Fire base unit with a standby generator, water tank farm and foam tanks connected to the fire hydrant system will be well positioned within easy reach in case of any eventuality.

Provision of Emergency/safety support systems

Management of the OSBP will ensure periodic upgrading of the safety support systems. These include the firefighting equipment, Fire policy details and assembly points gazetted, ensuring that the escape routes are always free of any obstacle all the time. The entire buildings will be fitted with smoke detectors and fire alarms that will periodically be checked and serviced to ensure effective performance.

Lightening arrestors will be in place before operation of the OSBP and guiding signages and educative materials on what to do in case of an emergence will be made available and in an understandable language. Regular painting of the interior with fire resistant paint will be undertaken. There is provision for an automated standby generator in case of power outage.

Periodic upgrading of the energy, water supply and sanitation systems and other components

One of the areas that are likely to cause great injury to the environment if not addressed well is the sanitation and energy systems at the OSBP. Major activities to this effect will be geared towards periodic upgrading of the energy systems to avert any would be fire occurrence from electric short circuits and audit areas of energy wastage to conserve better.

Efforts have to be made to ensure water availability all the time through provision of reservoir tanks. Roof water will be harvested and properly directed to tanks and any excess directed to the drainage system north of the development.

Sanitation is a crucial factor in the management of developments of such magnitude. Effective collection, storage, disposal of all wastes and in housekeeping will be given priority and periodically undertaken. Management of the OSBP will acquire several garbage bins for storage of the different types of wastes to be

generated. Contracted firms will ensure effective and efficient maintenance of the complex sanitation system.

Maintenance of the waste water system will be undertaken to ensure that there isn't any leakage.

Proper maintenance of the physical structures and the refurbishing of the entire OSBP will be among the regular activities that will be carried out during the operation phase.

Additionally, continuous maintenance of the landscaped gardens after construction works will be ensured for aesthetic and environmental sustainability.

During operation, a worker's policy will be made availed by management of the OSBP to guide activities and operations of the OSBP.

5.0 PUBLIC CONSULTATIONS AND DISCLOSURE

Consultation with all relevant stakeholders including regulatory institutions is mandatory. The National Environment Act 2019, EIA regulations (1998) and the Conduct of Environmental Practitioners Regulations (2001), all demand for public consultation. A stakeholder can be defined as any individual, group, or institution with a vested interest in the natural resources of the project area and/or who potentially will be affected by project activities and have something to gain or lose if conditions change or stay the same.

This section of the report presents the objectives, process and the outcomes of the stakeholder engagement in the process of this ESMP. Consultation with key stakeholders is a continuous process that was be carried out throughout the ESMP period. It is the intention of developer to continue with it during preparation, operation and decommissioning phases of the project. During the study, stakeholder analysis exercise was undertaken to identify Interested and Affected Parties (I&APs) to the project.

5.1 Objectives of Stakeholder Engagement

The primary purpose of the stakeholders' consultations was to provide an overview of the project to the relevant agencies, stakeholders in Kasese District, Mpondwe -Lhubiriha Town Council and Community Based Organisations (CBOs)/ NGOs in the planning for the proposed project. This allows the PAPs to make an input at both planning and implementation stages of the project. The proposed project can have several benefits to the area, but it can also arouse environmental and social concerns. It is therefore important, that the contractor understands these concerns and seek to address them from the outset in an open and accessible way.

Consultation helps local people to understand how the proposed project activities will affect them, and how the contractor will operate to the highest possible environmental and social standards. Adoption of a formal "good neighbor" policy by the contractor is essential to win the support of communities for the proposed border post. In the context of this project, stakeholder consultation aimed at achieving the following objectives:

- To facilitate an open and inclusive approach to consultation that provides timely and transparent dissemination of information concerning the project to all stakeholders regardless of their status, and to increase their opportunity to provide comment on the project and to voice their opinions.
- To provide the mechanism to give key messages to stakeholders and manage community expectations (e.g. about project timelines) and address concerns.
- To establish a feedback mechanism for ensuring that affected stakeholders have the opportunity to voice facilitate an open and inclusive approach to consultation that provides timely and transparent information concerning the project to all stakeholders regardless of their status, and to increase their opportunity to provide comment on the project and to voice their opinions.
- To provide the mechanism to give key messages to stakeholders and manage community expectations (e.g. about project timelines) and address concerns.
- To establish a feedback mechanism for ensuring that affected stakeholders can engage in the decision-making stages of ESIA. Part III Section 12 (1) of the Environmental Impact Assessment Regulation 1998 addresses public participation. It states that: "The developer shall take all measures necessary to seek

the views of the people in the communities which may be affected by the project during the process of conducting the study under these regulations".

5.2 Key Stakeholders Engaged and Issues Discussed

Table 3: Stakeholder Engagement with Technical Persons

Project: Proposed establishment of Mpondwe Border Post	
Agency: Technical Persons: [Uganda Revenue Authority/Government officials; Town Clerk; Town Engineer; Environment Officer; Community Development Officer; Security officers]	
Purpose of meeting:	To establish any concerns that Government Officials/ URA may have towards the establishment of the proposed one stop border post.
Date, place, Time of Start and End of meeting	Meetings: June 3, 2019; 9.15am -10.00am; URA Boardroom, Mpondwe June 4, 2019; 4.00pm – 5.00pm; URA Boardroom, Mpondwe June 18, 2019; 9.00am – 10.00am; URA Boardroom, Mpondwe July 1, 2019; 9.30am- 10.30am; URA Boardroom, Mpondwe
Meetings attended by: 1) Eng. John Muhindo Zoze (M) Mpondwe Town Engineer 2) Muhindo Joachim (M) Mpondwe Health Inspector 3) Moses Mugisa (M) Mpondwe Town Clerk 4) Mwanje J. (M) O/C POLICE 5) Fred Sabiiti (M) Uganda Revenue Authority Mpondwe 6) Sylvester Kiwanuka (M) Manager URA, Mpondwe 7) Abel Gulu (M) Uganda Revenue Authority Mpondwe 8) Masika Malima Ruth (F) Community Development Office 9) Bob Mugisha (M) External Security, Mpondwe 10) Arthur Kale (M) BISO – Security 11) Masika Patience (M) Community Dev. Office; Mpondwe Lhubiriha TC	

12) Alinaitwe Juliet (F)
Community Development Office
13) Katuura (M)
CMI – State House
14) Alice Biira (F)
Community Development Office
15) Nayiga Najuma (F)
Environment Officer
16) Spencer Birungi (M)
Immigration Officer

KK Architects and Partners:

1. Kabann Kabananukye
2. Martin Aryagaruka
3. Dr. Daisy Owomugasho

Aspects discussed are presented below:

- The officials were interested in how long the project would take and requested that the consultant ensures that the contractors carry out the assignment in the stipulated timelines to avoid any delays.
- It was noted that some URA staff would lose their areas of aboard during the re-construction phase.
- Provision of mobile toilets/wash rooms for the workforce during the construction
- site hoarding should be prioritized before commencement of the project.
- Air Quality issues: during construction activities (excavation works, ground works and construction works).
- Solid Wastes disposal (not hazardous): To be disposed of at the Mpondwe town council dumping ground - Katojo village [5 kilometers away]
- Reusable or recyclable waste to be accordingly handled.
- health a safety measures for workers should be put in place during project implementation;
- Washing roads should be done to reduce dust especially during the construction phase;
- Water run-off: from Roads: protect the market and business community [downstream]; contamination of water sources; protection of water sources

Identified positive attributes associated with the project:

- Creating a modern facility that will increase efficiency; reduce delays and subsequently improve livelihoods
- Enabling comprehensive control of goods entering either country including controlled hazardous substances.
- Creating a modern facility offering space for offices, business and hospitality related activities currently yearned for by the stakeholders
- Improved security in the project

Table 4: Stakeholder Engagement with PAPs, CBOs and NGOs

Project: Proposed establishment of Mpondwe One Stop Border Post	
Agency/Stakeholder: Project Affected Persons	
Purpose of meeting:	To establish any concerns that Project Affected Persons (PAPs), CBOs/NGOs may have towards the establishment of the proposed one stop border post.
Date & place; Time of Start and End of meeting	June 4, 2019; 9.00am -1.00pm; URA Park-Yard, Mpondwe June 18, 2019; 11.00am-2.00pm; URA Park-Yard, Mpondwe June 18, 2019; 2.00pm –4.00pm; URA Park-Yard, Mpondwe July 1, 2019; 2.00pm –3.00pm; URA Park-Yard, Mpondwe July 2, 2019; 9.00am – 1.00pm; URA Park-Yard, Mpondwe
Meeting attended by:	**Community Based Organisations (CBOs)/ NGOs)**
	KIKWARA CUSTOMS WOMEN UNITED GRP -------(5 females)
	ABASUBULI ABESYANGOKO THUMINYA WOMEN GRP ------- (6 females)
	MPONDWE LHUBIRIHA MARKET TRADERS ASSOCIATION -------(10 females)
	KARAMBI GROUP OF PEOPLE WITH DISABILITIES -------(1 male and 2 females)
	KARAMBI GROUP OF PEOPLE WITH DISABILITIES -------(2 males)
	MPONDWE LHUBIRIHA MARKET LOADRERS AND OFFLOADERS ASSOCIATION -----(8 males)
	ALISAMU TUSOKERE OBUKULILO ASSOCIATION -------(4 females)

Name	**CBO/NGO Represented**	**Gender**
(1) Biira Juliet	Insight Ecotourism Information Centre	F
(2) Bwambale Zadoki	DOS Senior Teacher (History/ Geography)	M
(3) Twinamasiko Vincent	Mpondwe Business community	M
(4) Byaruhanga Abrahim	Mpondwe Business community	M
(5) Mbambu Jacqueline	Trader and Leader PWDs	F
(6) Mbusa Bumenze	Water Technician Mpondwe Town Council	M
(7) Lois Masika	Business community	F
(8) Mrs Masereka Alice	Community leader, Mother	F
(9) Mrs Baluku oliver	Business community	F

KK Architects and Partners:

- Kabann Kabananukye
- Martin Aryagaruka

	• Dr. Daisy Owomugasho

Aspects discussed are presented below:

In the consultations made, emphasis was made on the social order disruption; Gender based violence and violence against children; impacts of noise and dust; loss of working and boarding space.

Gender based violence and violence against children

- Workforce engaged in cross boarder businesses which may attract a number of people with unknown behaviour
- Management of wooden scooters Children with scooter wooden cycles; petty trade
- Some women experiencing gender discrimination, harassment and at times sexual abuse in the area.
- Influx of migrant labour workers [including women, girls and minors] who may be taken of advantage of when on site.
- Business competition issues; including seeking for employment: involving children; males and females; older persons, people with disabilities (PWDs)
- Sexual harassment and discrimination by the contractor, or contractors' staff
- Sexual engagements with young girls who may later elope with the contractor, or contractors' staff

Grievance Management Processes

- Establishment of relevant institutional structures to address grievances: Police, Social Workers, Courts, Local Council Officials, employees' unions etc.)
- Resources/ Financing the grievance management processes (requirement of funds as demotivator)

Concerns about dust and noise pollution

- Ensure minimal noise pollution at the project site
- Dust management measures should be incorporated to avoid disruption of business community around the site.

The safety and health of the workforce

- Influx of migrant workers [children, girls, women and older persons]; The need for the provision of the right protective gear;
- Migrant workforce: HIV/AIDS, Ebola, COVID19 epidemic
- Solid wastes; solid waste management (paper, mowed grass, leftover food etc) and body waste
- Noise: Impacts of construction noise onto the communities and workers

Table 5: Stakeholder Engagement with Political Team

Project: Proposed establishment of Mpondwe One Stop Border Post			
Agency: Political Team - Mayor's Team; LC Chairpersons			
Purpose of meeting:	To establish any concerns that Political Persons may have towards the establishment of the proposed one stop border post.		
Date & place; Time of Start and End of meeting	June 3, 2019; 11.00am – 1.00pm; Town Clerk's Office, Mpondwe June 4, 2019; 2.00pm – 3.30pm; Town Clerk's Office, Mpondwe July 1, 2019; 11.am – 1.00pm; Town Clerk's Office, Mpondwe		
Meeting attended by:			
	Kinyonyi T.Francis	LC1 Chairman Kisaka 1	M
	Riisa Magezi	Kambukamabwe 2 Cell	M
	Muhindo Jean Pierre	Kabuyiiri 1 Cell	M
	Masereka Yona	Upper Customs	M
	Baluku Moses	Lower Customs	M
	Mbusa Bumenze	Kambukamabwe LC2	M
	Obed Karisha	Kabuyiri Ward	M
	Kambasu Josephat	Nyakahya Ward	M
	Zephanasi Mukababerwa	Clerk to Council	M
	Mapozi Silvester	Mpondwe Lhubiriha Town Council	M
	KK Architects and Partners: • Kabann Kabananukye • Martin Aryagaruka • Dr. Daisy Owomugasho		
Aspects discussed are presented below:			
In the consultations made, emphasis was made on the following aspects: • Soil Erosion Impacts and Community Health and Safety: • Water run-off; and the flooding of farmlands within the outskirts of Mpondwe Market area; and related impacts [contamination issues] on ground and surface water; • The need to look into water supply and water consumption challenges (for homesteads; restaurants) • Employment opportunities for the local population ***Gender based violence*** • Complaints that emerge between business community / partners, including those across the border • Cross border migrant workers [including women, girls and minors]; older persons, people with disabilities (PWDs)were concerned as to whether they would be provided with easy access ways. • Safety and health of the workforce: Migrant workforce: potential source of spreading contagious diseases			

especially HIV/AIDS, Ebola or any other emerging epidemic (such as COVID19)

- Sexual harassment and discrimination by the contractor, or contractors' staff
- Sexual engagements with young girls who may increase sexual related diseases

Grievance Management Processes (GMP)

- The need strengthens community-based institutions (Police, Social Workers, Courts, Local Council Officials, Religious Leaders; Respectable elders to be used in grievance management
- Formalize stakeholders SACCOs; Conflicts arising of business transactions; and or conflicts arising from the contractor and employees; the need to involve police; labour unions; Local council officials and courts of law
- Conflicts arising from labour and working condition related cases; Formalize such institutions that address conflicts.

5.3 Summary of Key Concerns from Stakeholders and how they are incorporated in the Project Design and ESMP

Table 6: Summary of Key Concerns from Stakeholders and how they are incorporated in the Project Design and ESMP

Key Concerns from Stakeholder	Incorporation of concerns in Project Design	Incorporation of concerns in ESMP
Engagement with Technical Persons		
Contactors should meet timelines for the assignment	Single phase comprehensive construction drawings, specifications and Work programs have been prepared for the proposed works.	N/A
Loss of workspace to aboard by URA officials	▪ Construction of new facilities will be phased to ensure that the border will remain operation during implementation of the project and therefore no disturbance to URA officials.	Section 4.2 describes how the project activities shall be undertaken without disruption of URA workspace.
Sanitary waste management during construction phase	▪ Contractor to manage as per the ESMP. ▪ Toilets connected to a septic tank and soakaway pits or evapotranspiration beds have been provided. ▪ Provisional sum has been allowed to facilitate the building contractor in managing sanitary waste.	Section 7.2.5 provides mitigations to ensure proper management of sanitary waste
Site hoarding and air quality issues	Provisional Sum has been allocated to preliminary cost to cater for this.	Section 7.2.4 talks about management of ambient air quality during project implementation
Health and Safety of	▪ Provided for adequate safety signs	Section 7.2.10 elaborates on health and

workers	within the building and border post precincts ▪ Provided for fighting systems	safety of workers during project implementation.
Solid waste management	▪ Provisional sum has been allowed to facilitate the building contractor in managing solid waste generated.	Section 7.2.7 describes management of solid waste during construction phase.
Storm water management	▪ Surface water/ storm water drainage channels have been provided.	Section 7.2.2 elaborates about management of storm water to protect surface waters.
Security	The following installations/ facilities have been provided in the proposed design: ▪ chain link fence around the border post ▪ street lighting and CCTV surveillance ▪ gate/ security house ▪ waiting shed for small scale traders.	Section 7.3.12 elaborates on security during project implementation
Employment of Locals	N/A	Section 7.2 gives employment as one of the benefits of the project.
Engagement with PAPs, CBOs and NGOs		
Gender Based Violence and Violence against Children	The following installations/ facilities have been provided in the proposed design: ▪ Small-Scale Traders (mostly women) Clearance Booth ▪ Police facility to handled cases of GBV and VAC ▪ Public toilet facilities for men, women, PWDs, to prevent GBV issues ▪ Women's crèche (breast feeding area and diaper changing stations)	Section 7.4.1 elaborates on handling of GBV and VAC while implementing the project.
Grievance Management Processes	Border management and Police facilities have been provided to handle grievances during the operation of the border post.	Section 7.4.2 elaborates the proposed Grievance Redress Mechanism to be used on site.
Dust and noise pollution	Provisional Sum has been allocated to preliminary cost to cater for environmental issues such as these	Section 7.2.3 discusses how noise pollution shall be managed on site. Section 7.2.4 talks about management of ambient air quality during project implementation.
The safety and health of the workforce	Provisional sum has been allocated to the preliminaries for the contractor to implement all OSH	Section 7.2.10 elaborates on health and safety of workers during project implementation.

	measures.	
Engagement with Political Team		
Storm water management	Surface water/ storm water drainage channels have been provided in the design.	Section 7.2.2 elaborates about management of storm water to protect surface waters.
Water supply and water consumption challenges	Water reservoir tanks have been provided (1No. of 40m^3 & 6 No. of 2m^3)	Section 7.3.3 elaborates measures to be undertaken to reduce pressure on water consumption.
Grievance Management Processes	Border management and Police facilities have been provided to handle grievances during the operation of the border post.	Section 7.4.2 elaborates the proposed Grievance Redress Mechanism to be used on site.
Soil Erosion Impacts and Community Health and Safety	Surface water/ storm water drainage channels have been provided.	Section 7.2.1 describes management of soil erosion. Section 7.2.11 elaborates management of community health and safety aspects on the project.
Gender Based Violence	The following installations/ facilities have been provided in the proposed design: ▪ Small-Scale Traders (mostly women) Clearance Booth ▪ Police facility to handled cases of GBV and VAC ▪ Public toilet facilities for men, women, PWDs, to prevent GBV issues ▪ crèche (breast feeding area and diaper changing stations)	Section 7.4.1 discusses management of Gender Based Violence issues on the project.

Figure 9: Undertaking Consultations

	
Interacting with one of the URA Staff	Interacting with one of the immediate neighbours; Police

Figure 10: Undertaking consultations with stake holders

	
Discussing with Town Council officials led by the TC	Interacting with the community to get their views on the project

Figure 11: Undertaking consultations with stake holders

6.0 ANALYSIS OF ALTERNATIVES

Analysis of project alternatives in Environmental and Social Impact Assessment process should consider other practicable strategies that will promote the elimination of negative environmental impacts identified. It is a requirement to have alternatives to the proposed project in an effort to have an ideal development with minimal environmental disturbance.

This study identified the major environmental issues (environmental impacts) upon which analysis of possible options for the final development were based. The following alternatives were taken into consideration as a means of reducing environmental effects.

6.1 The NO – Action Alternative

The "no action" alternative is important to ensure the consideration of the original environment without any additional developments. It is important for the decision makers in considering all possibilities and taking an informed decision.

This option would mean that the local environment would remain in its present condition with dilapidated structures, scattered offices which results in service delivery delays, malfunctioning infrastructure as the wash rooms, absence of waiting lounges and untold suffering by the business community especially women.

Choosing this option would also lead to sacrificing the positive Social-economic impacts associated with this project including increased efficiency at the border post thus reduce delays and subsequently improve livelihoods in border areas. The projected cross-border trade, strengthened economic interdependence and support to regional peace and stability would be sacrificed among others.

This option will also not lead to social order disruptions through dust and noise pollution, disposal debris and other associated waste, soil erosion and storm water down slope. With respect to the Social-economic environment, the "no action" alternative would totally eliminate the positive impacts associated with the proposed construction of this project as highlighted in the report hence not a preferred alternative.

6.2 Alterative Project Location

The developer provided only one location for the proposed project thus no other sites were evaluated during the ESIA process. However, the site is preferred because of being close to the border, is not encumbered (belongs to Government), has easy access to required infrastructural services as piped water, access road, security and telecommunications services in addition to the architectural plans blending well with the existing land use.

In respect of the above reasons no alternative locations were taken into consideration during the ESIA study.

6.3 Phasing Execution of Project Components Alternative

Consideration should be made when executing the project to have them phased instead of implementing them at ago. By studying the site layout plan, phasing of project components construction can be considered where components that can be undertaken without relocating some of the existing infrastructure as offices, residences should be promoted.

6.4 The proposed development as described in the assessment

The impacts and mitigation measures for this alternative have been thoroughly discussed throughout this report in addition to identifying the positive impacts associated with the development.

The project will not have significant impacts (Social or environmental) considering that it lies amidst a built environment though issues associated with dust generation, construction traffic jam, noise and unsightly conditions in addition to increased storm water and wastewater and solid waste generation during the construction and operation phases will be registered. However, measures to mitigate these have been recommended.

Analysing the status of the existing Border Post infrastructure and the benefits that would be realised upon implementation of the proposed project, coupled by the suggested mitigation measures for ensuring that the proposed development does not lead to the degradation of the environment, this alternative is the most friendly and opportune.

7.0 ENVIRONMENTAL AND SOCIAL IMPACT ANALYSIS AND MITIGATION MEASURES

This section describes the potential environment and social impacts of the proposed establishment of the border post. The methodology for analyzing the potential significance and magnitude of the activities is described and mitigation measures that developer should implement to ensure environmental sustainability during the project operation are as well laid down.

An impact is any change to the existing condition of the environment caused by human activity or an external influence. Impacts therefore maybe positive (Beneficial) or negative (adverse). They may also be direct or indirect, long term or short term, and extensive or local in effect. Impacts are termed cumulative when they add incrementally to existing impacts. Both positive and adverse environmental impacts could arise during the site preparation, construction and the operations phases of the facility. While the positive impacts will be enhanced, adequate measures are suggested for implementation to minimize, or avoid, or mitigate the identified negative impacts.

7.1 Methodology of Impact Analysis

The significances of the impacts were determined through a synthesis of the criteria as shown below:

Probability of Occurrence: This describes the likelihood of the impact actually occurring. It can be:

Improbable:	The possibility of the impact occurring is very low, due to the circumstances, design or experience (<25%)
Probable:	There is a probability that the impact will occur to the extent that provision must be made thereof (25-27).
Highly Probable:	It is most likely that the impact will occur at some stage of the development regardless of any prevention plans, and there can only be relied on mitigation actions or contingency plans to contain the effect (>75%).

Duration: This defines the lifetime/persistence of the impact on the subject environment as;

Temporary:	The impact will either disappear with mitigation or will be mitigated through natural processes in a time span shorter than any of the phases (< 1 year).
Short term:	The impact will last up to the end of the phases, where after it will be negated (1 - 3 years)
Long term:	The impact will last for the entire operational phase of the project but will be mitigated by direct human action or by natural processes thereafter (3 – 5 years).
Permanent:	Impact that will be non-transitory. Mitigation either by man or natural processed will not occur in such a way or in such a time span that the impact can be considered transient (> 5years).

Spatial Extent /Scale: Evaluates the area of occurrence/influence by the impact on the subject environment.

Site specific:	The impacted area extends only as far as the proposed site up to a distance within 1km radius of the site.

Local: The impact could affect the whole, 0r a measurable portion of the nearby environment including the neighbouring residential areas up to a distance within 5km radius.

Regional: The impact could affect a large area as far as regional lever (above 5km).

The significances of the impacts were determined through a synthesis of the criteria as shown below:

Magnitude/ severity: The quantifiable effects of impacts on the environment. Does the impact destroy environment, or alter its function?

Low: The impact alters the affected environment in such a way that natural processes are not affected.

Medium: The affected environment is altered, but functions and processes continue in a modified way.

High: Function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

Overall impact Significance:

This is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. Using a combination of the above criteria, the overall. Importance of the impact is assigned a rating of severe, substantial, moderate, minor and negligible as described in the table below.

Table 7: Criteria for rating impact significance

Impact Rating	Description of Impact
Severe	▪ Highly noticeable, irreparable effect upon the environment ▪ Significant, widespread and permanent loss of resource ▪ Major contribution to a known global environmental problem with demonstrable effects ▪ causing mortality to individuals of a species classified as globally or regionally endangered ▪ Major exceedance of water/air quality and noise guidelines representing threat to the human health in long and short term, Causing widespread nuisance both on and off site.
Substantial	▪ Highly noticeable effects on the environment, difficult to reverse ▪ Widespread degradation of resources restricting potential for further usage ▪ Significant contribution to a known global environmental problem when compared with the industry world-wide ▪ Sub-lethal effects upon a globally or regionally endangered species compromising reproductive fitness and/or resulting in long-term disruption/disturbance to normal behaviour ▪ Air quality/noise approaching occupational exposure limits. Water quality parameters approaching maximum stipulated values ▪ Periodic widespread nuisance both on and off site

Moderate	▪ Noticeable effects on the environment, reversible over the long term ▪ Localized degradation of resources restricting potential for further usage ▪ Sub-lethal effects upon a globally or regionally endangered species with no effect on reproductive fitness and/or resulting in disruption/disturbance to normal behaviour but returning to normal in the medium term ▪ Elevated contribution to global air pollution problem partly due to preventable releases ▪ Frequent breaches of water/air quality and noise guidelines; ▪ Causing localized nuisance both on and off site
Minor	▪ Noticeable effects on the environment, but returning naturally to original state in the medium term ▪ Slight local degradation of resources but not jeopardizing further usage ▪ Disruption/disturbance to normal behaviour of a globally or regionally endangered species returning to normal in the short term ▪ Small contribution to global air problem through unavoidable releases ▪ Elevation in ambient water/air pollutant levels greater than 50% of guidelines ▪ Infrequent localized nuisance
Negligible	▪ No noticeable or limited local effect upon the environment, rapidly returning to original state by natural action ▪ Unlikely to affect resources to noticeable degree ▪ No noticeable effects on globally or regionally endangered species ▪ No significant contribution to global air pollution problem ▪ Minor elevation in ambient water/air pollutant levels well below guidelines ▪ No reported nuisance effects

7.2 Negative Impacts Anticipated in the Construction Phase

7.2.1 Soil Erosion

The major issue during the construction phase will be soil erosion as a result of the earth works and the operation of borrow pits. Clearing of the site vegetation cover will encourage soil erosion by runoff and wind. Some erosion will occur after construction due to increased runoff from added paved surface and wind. Improper drainage of runoff from the site to Lhubiriha River will lead to subsequent high sediment load in the water body. Raised flanks are likely to occur as a result of the excavations to be undertaken.

Mitigation Measures

The speed of the runoff is one of the main contributing factors to erosion and siltation of the existing drainage channels. Storm water check dams or impact dissipaters in the side drains should be introduced. Storm water retention ponds should be established along the drainage channels to retain any run-off from the site. Later the area should be grassed. Regular maintenance of this infrastructure should also be undertaken.

Raised embankments along the excavated area should be vegetated after the construction works or stone pitched to stabilize them and deter soil erosion. Excavations should be undertaken in required areas only so that land that is not required for purposes of BP with the associated components construction is not disturbed. Earth works should be undertaken during the dry season to reduce on the possibility of soil being washed down the slope.

Topsoil excavated during site stabilization should be used to restore murram quarries or landscaping/backfilling lowly placed sections of the site.

Overall impact significance with mitigation: Minor

7.2.2 Pollution of Surface Waters

The proposed Mpondwe BP is located near the River Lhubiriha which is about 200 meters to the downstream of the proposed BP site. Oil pollution will be from storage of fuel on site, washing of vehicle engines, undertaking vehicle servicing, fuel spillage as the contractor undertakes vehicle/equipment refuelling from the site. Waste fuel contains toxic substances such as polychlorinated biphenyls, polycyclic aromatic hydrocarbons and Chlorinated hydrocarbons. Such waste if not well handled can find its way into surface or ground water and soils and lead to its contamination.

Sediment loads as a result of deposition of the construction debris and excavation works will have an impact on the area water quality.

Silty and contaminated water from de-watering of excavation as well as silty and contaminated water from exposed round, earth stockpiles, and muddy roads can as well affect the nearby surface waters if not properly managed.

Mitigation Measures

- Contractor should ensure that oil spill kits are provided around the site to allow for proper management of pills during construction.
- Proper drainage channels should be established around the construction site and ensure that all run off from the site is diverted to the drainage channel along the main road.
- Oil storage areas should be bunded off to ensure that leakages from these areas are not disposed to storm

water on rainy days.

- Developer should ensure that a greenery section is established having grasses and plants. These shall help in reduction of speed of runoff thereby holding the sediments, preventing them from reaching the surface waters.

Overall impact significance with mitigation: Minor

7.2.3 Impact of Noise and Vibrations

Noise is normally associated with construction works though it is temporal. Construction equipment and other activities like murram extraction will generate much of the noise associated with construction sites. Upon completion of the construction works, noise will mainly be coming from the increased vehicular volumes.

Mitigation Measures

- All construction equipment will comply with the requirements National Standards on noise emissions in the environment by equipment for use outdoors.
- The equipment will be fitted with appropriate noise muffling devices that will reduce sound levels.
- As the project activities are performed, (in several noise level areas, according to the national legislation), every effort shall be carried out to comply with the corresponding noise limits for each area.
- Construction works shall not be permitted during the night; the operations on site shall be restricted to the period 7.00-19.00 h.
- All vehicles and machinery used at the construction sites shall be subjected to regular maintenance. The vehicles and machines that are excessively noisy due to poor engine adjustment or damaged noise control devices shall not be operated until corrective measures have been taken.
- The construction traffic plan shall establish speed limits for construction vehicles and machinery at the construction site and the haulage roads used, and organize traffic so as to avoid as much as possible populated areas.
- Affected local residents will be kept informed on due time of the planned works and the
- vibration and noise levels and periods during which they will occur.
- The location of noisy equipment will be chosen as far as possible from sensitive receptors (houses, workplaces, schools and hospitals). When near sensitive receptors, constructions will be scheduled and provided with the necessary resources so that the time of exposure is as short as possible.
- Good management practice will be used to distribute heavy noise equipment along the route so as to avoid the cumulative effects of noise.
- In the case where noisy works would need to be performed at night or during a longer period than a day at a given site, a noise shield be erected around the working area.
- Monitoring of vibrations during the performance of critical work processes (e.g. foundation of BP) should be undertaken in building which are within a distance of 20-30 meters from the area where these works take place. Should buildings result damaged as a result of vibrations generated by the construction works, the damaged buildings will be repaired or compensation paid.
- Operate earthmoving equipment on the construction site far away from vibration-sensitive receptors as possible.

- Activities such as demolition, earthmoving and ground-impacting operations shall be scheduled so as not to occur in the same time period. Unlike noise, the total vibrations level produced could be significantly less when each vibration source operates separately.
- Decrease vibrations from construction sources, including:
    - Blasting. Explosion type and weight, delay-timing variations, size and number of holes, distance between holes and rows, methods and directions of blast initiation
    - Dynamic compaction. A smaller falling weight will produce smaller vibrations.
    - Pile driving. Predrilling, pre-setting, replacement of displacement piles with non- displacement ones, switch impact hammer to vibratory one, replacement of driven piles with augured cast in-place piles or drilled shafts.
    - Select demolition methods not involving vibration impact, where possible.
    - Avoid vibratory rollers and packers near sensitive receptors.
- A detailed BP noise and vibration study will be completed during the development of the detailed design of the BP project to determine the specific and optimum noise abatement measures to be taken.
- Proposed Noise mitigation measures leading to the decrease of noise exposure include measures implemented at the source of noise and measures that intercept the noise reduction between the source and the receptor: At the source:
    - Use power generators with canopy.
    - Noise barriers (protective walls) with noise reduction potential by 15-15 dB (A).
    - Insulation of house windows and façade with noise reduction potential by 10-30 dB (A).

7.2.4 Impacts on Air Quality

Construction activities have the potential to affect air quality mainly due to the dust created by activities during delivery of the required raw materials, excavation works, ground works and construction works. Dust emissions will be a result of earthworks, transportation of construction materials from quarries especially during the dry season and through the fugitive dust from cleared areas and raw materials stored on site. The impacts will be greatly felt by communities in the immediate proximity of these roads. Fugitive dust has the potential of affecting the health of the workforce and area resident population.

In addition, construction plant and vehicles can affect air quality as a result of exhaust emissions. Suspension of dust through activities on the site or wind can cause a nuisance and affect human health. Favourable conditions for dust generation are dry weather combined with high winds. Continual or severe concerns are most likely near to dust sources, usually within 100 metres.

Particulate Matter Emissions – Minimal dust to be generated

Control Techniques								
Fugitive Emission sources	**Planting/ Vegetative Cover**	**Paving Gravel**	**Wind Barriers**	**Sweeping & Cleaning**	**Enclosure**	**Hood & Ducting**	**Reducing Drop Height**	**Water Spray**
Crusher discharge					x	x	x	x

Screening					x	x	x	x
Conveyor transfer points					x	x	x	x
Discharge to & from hoppers					x	x	x	
Silos and bins						x	x	
Stack cleaning						x	x	
Loading and unloading			x					
Paved roads			x	x				
Un paved roads	x	x	x					
Open Storage piles	x		x				x	x
Construction on sites		x	x					
Exposed areas	x	x	x	x				

Overall impact significance with mitigation: Minor

Mitigation Measures

- Regular sprinkling of water along stretches under construction and routes used to deliver construction materials during the construction phase should be undertaken in a manner that effectively suppresses dust.
- Trucks delivering construction materials such as sand and murram and gravel should be covered with tarpaulins and once the construction activities are over, there will be limited dust pollution if the driveways and parking yard are paved.
- The construction site will be hoarded off to restrict dust to the site boundaries only.
- Construction workers will be provided with protective respiratory equipment like dust masks where need be.
- Vehicles and other equipment on site should be in good condition to limit localized emission releases to the environment;
- Careful driving should be the norm and observed by truck drivers hence they should limit their speed.
- Periodic automobile maintenance especially for those on site will be important in reducing the production of un-burnt carbon to the surrounding.
- Ducts to be used to direct debris from upper floors

- Accesses and construction sites will be kept moist to reduce dust formation.
- Water sprays will be implemented during drilling and excavation activities.
- In the dry season, hygroscopic additives will be used in water to increase its presence in the ground.
- Dust generating activities will be slowed down in days of strong winds.
- In windy and dry conditions, earth stockpiles will be moistened to prevent the lifting of dust particles.
- Ground will be moistened during loading and unloading of aggregates in trucks.
- Loaded trucks will be washed down prior to exit from working site to ensure that loose material is not tracked onto the roads.
- No unnecessary idling of construction vehicles at the construction sites will be allowed.
- Construction truck traffic will be optimized so as to get a minimum number of trucks
- Carrying the maximum volume of materials. This will be addressed in the construction Traffic Management Plan.
- The truck routes will be planned to avoid peak traffic hours or routes with heavy traffic.
- Regular maintenance of the diesel locomotives will be performed to keep them in optimal working conditions, including the achievement of minimal air emissions set by the manufacturer.
- Every effort will be made to use the cleanest fuels within technically feasible possibilities.

7.2.5 Poor Sanitary Waste Management

During the construction period, there will be influx of the population due to the employment of labour at the construction site. These people shall generate sanitary waste which can be a source of pollution if poorly managed and diseases if inadequately disposed of (Sanitary wastewater from the site temporal body waste handling facilities).

Mitigation Measures

Sanitary waste should be properly disposed of to avoid unsanitary and unhygienic environs around the project site. There will be mobile toilets for body waste disposal to avoid contaminating the neighbourhood and ground water with facial matter during the construction phase.

Once the project becomes operation facial matter will be handled by the planned centralised system comprising of septic tanks and soak pits. Wastewater pipes and sumps will be newly constructed. Pipe work will be subjected to periodic inspection.

Overall impact significance with mitigation: Minor

7.2.6 Impact of Fuel and Oil Spills contamination

Oil pollution will be from storage of fuel on site, washing of vehicle engines, undertaking vehicle servicing, fuel spillage as the contractor undertakes vehicle/equipment refueling from the site. Waste fuel contains toxic substances such as polychlorinated biphenyls, polycyclic aromatic hydrocarbons and Chlorinated hydrocarbons. Such waste if not well handled can find its way onto soils and lead to its contamination which alters the properties of the soils. In addition, poor management of spillages can lead to seepage of these spills into the ground which can lead to ground water contamination and hence affecting communities that rely on this ground water.

Mitigation Measures

- Extra care should be taken while refuelling trucks and equipment to avoid fuel spills. It is in the interest of the BP developer and the contractor not to spill any fuel as this implies loss of income.
- When servicing the equipment measures should be put in place to undertake effective disposal of the used oil or any oil wastes.
- Servicing of construction vehicles should be undertaken from designated areas like service garages. Well-serviced equipment reduces emissions of noxious fumes (carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxides).
- Potentially polluting materials, such as fuels, oils, chemicals and associated liquid waste materials, etc. will be stored in dedicated, segregated storage areas, with spillage protection and appropriate environmental security measures to prevent accidental release to ground during storage.
- In addition, appropriate working procedures will be adopted to minimise the risk of accidental release during delivery to and removal from the storage areas. Working procedures will ensure that these materials (raw and waste) are handled correctly. Working procedures will seek to prevent accidental release during the use of these materials, for example, vehicle refuelling and plant maintenance, especially with regard to waste oil.
- Procedures will be adopted to minimise the potential for accidental discharge of pollutants during the washing down of equipment and vehicles.
- All roads and hard standings will be kept clean and tidy to prevent the build-up of oil and dirt that may be washed into a watercourse or drain during heavy rainfall.
- Oil spill kits will be availed at the construction sites in case there is an accidental spill, so that it can be immediately cleaned up.
- Vehicles and construction machinery will be subject to regular preventive maintenance so as to reduce leakages of lubricants, motor oil and fuels.

Overall impact significance with mitigation: Minor

7.2.7 Improper Management of Solid Waste (Construction Debris/ Demolition Waste)

A variety of solid waste shall be generated from the construction activities of the border post. Poor Solid waste management destroys the aesthetics of the environment if poorly managed and as well takes up space which could be used for other productive purposes. The expect waste streams are during the construction stage will mainly be construction debris and demolition waste.

The exercise will generate significant amounts of construction debris (stone, sand, metal, pipes, and waste paper) and spoil while undertaking excavations during site stabilisation and laying foundations for the equipment and machinery. There will be solid waste generated by the workforce especially from the packaging of eats/ fruits/ cane, delivered/sold to them by vendors. These will lead to unsanitary conditions at the project site and immediate neighbourhood and will have an aesthetic impact in the project area if improperly handled.

Mitigation Measures

- A site waste management plan should be prepared by the contractor prior to the commencement of construction works. This should include designation of appropriate waste storage areas, collection and disposal schedule to approved dumping sites.
- Special attention should be given to minimizing and reducing quantities of solid waste produced.

- Use the excavated material for backfilling.
- Provide waste bins for proper waste storage.
- Generated waste that can be re-usable will be sold or given away to interested parties.
- In all, waste management will be addressed through waste management system that addresses issues linked to waste minimization, generation, transport, disposal, and monitoring. The developer/contractor will endeavor to implement systems towards these waste management systems.

Overall impact significance with mitigation: Minor

7.2.8 Degradation of Material Source Points

Reasonable construction materials including aggregates, hard-core, sand among others will be required for site stabilisation and construction works. This will be obtained from the privately-owned land. As the excavations are undertaken to obtain the required gravel, Steep flanks and deep pits will develop. Raw materials extraction is associated with dust and noise that are an inconvenience to the neighbourhood. Transportation of the material also poses danger to the children. If improperly managed water tends to stagnate at the bottom of the quarry thereby turning into a breeding ground for mosquitoes. Eroding of the bare flanks and deposition of gravel down-slope hence inconveniencing the neighbours is another issue associated with operation of quarries.

Acquisition of sand and rock materials is also associated with negative attributes like noise during blasting, dust and accidental rock fall especially during transportation.

During site levelling, some sections will be raised hence creating steep flanks that would induce soil erosion and the aspects associated with steep flanks.

Mitigation Measures

This is mainly concerned with gravel and sand quarries. The operators of murram gravel quarries should have a management plan for them and during their operation water stagnation should not be allowed to take place. After use of the quarry, proper landscaping should be undertaken to improve the aesthetic value of the area. The quarry should be fenced off to avoid accidental fall over from the quarry flanks. The contractor should procure from those having a management plan for their quarries.

In addition, the law requires that opening up of borrow pits and quarry sites should have independent detailed environmental and social impact assessment and approved by NEMA. This assessment shall guide on the proper management of material source points and thereby reduce potential impacts.

Emphasis will be put on ensuring that hard core and other stone aggregate materials are purchased from those obtaining them in a friendly way.

Overall impact significance with mitigation: Minor

7.2.9 Loss of secondary Vegetation cover

The proposed site is under exotic grass, fruit and ornamental trees. The OSBP will be established on 2.04 ha piece of land hence site stabilisation for development of the same will lead to loss of the existing vegetation cover. During the study survey, it was noted that all the vegetation cover and greenery are mainly secondary and not classified as endangered or rare species. To a large extent it has been mainly for provision of shade and aesthetic value.

Mitigation Measures

Minimal vegetation loss is expected considering that the site has for long been used for related activities (office and residential accommodation in addition to hosting a parking/loading and off-loading yard). Only vegetation within the areas to be developed shall be removed during clearing but no grown tree species shall be eliminated. The minimal vegetation that will be cleared will be compensated with the greenery to be introduced after construction works.

In addition, proper landscaping shall be done with planting of ornamental trees and flowers done thereafter. This shall improve the aesthetics of the BP

Overall impact significance with mitigation: Minor

7.2.10 Occupational Health and Safety during Construction

Establishment of the BP will involve a big workforce during the construction phase. The possibility of accidental injury either minor or major is high as well as high chances of dust/noise related sickness during project development. Operators of the site machinery and equipment are also exposed to work related hazards which if not accorded the right protective gear. Impacts related to health and safety during construction are mainly related to accidents and injuries from falling objects, injuries from construction machinery, accidents from moving vehicles, slips, trips and falls. Some of these injuries become sources of chronic pain and damage while others can lead to loss of lives. This impact is negative, short term and reversible if corrective precautions are put in place. It can however be severe if carelessly handled involving deaths.

Mitigation Measures

- The works contractor will take measures to provide Personal Protective Equipment (PPE) to the construction workers like helmets, gumboots and overalls to help limit injuries during construction.
- Contractor/proprietor will provide well stocked first aid kit for the work force to cater for minor cases prior to any referrals to health centres or hospitals.
- The contractor will put in place proper guiding and appropriate educative signage at the site to keep the work force aware of their obligations and the general public aware that there is construction work in progress and appropriate precaution to be taken while at the site.
- Close supervision of work, including the provision of appropriate training for the workforce in observing better construction practices and handling emergency cases will be given priority and undertaken.
- The hoarding should be tall enough to avert any falling debris and other remains that may harm the public.
- The contractor should ensure that only trained workers operate equipment.
- Guidelines and regulations on site safety should be communicated to all workers, suppliers, sub-contractors and residents.
- All other measures as found appropriate to keep the workers and other people free from OSH hazards will be undertaken by the contractor in collaboration with the developer

7.2.11 Community Health and Safety during Construction

During establishment of the BP, a number of social concerns will come up and my affect the health and safety of the community around the proposed site for the BP. The main social concerns will be from site neighbours regarding the issues arising from project undertaking such as dust, noise, sharp lights at night, and vehicular traffic along the road. Other cases may involve behaviour of workers on site as most of the workers on construction sites tend to be abusive, destructive to property and lack respect for the public. Migrant workforce

is likely to lead to spread of contagious diseases especially HIV/AIDS, Ebola or any other emerging epidemic thus, putting pressure on the existing health facilities and increasing the disease incidence in the area. Disagreements about the working hours between contractors and neighbours also can create social conflict. This impact should be made negligible by engaging the parties involved by the developer and contractor prior and during implementation but can also be severe if ignored as it can hamper project progress.

Mitigation Measures

- The developer will engage the resident neighbours and area local leaders prior to commencement of the project. This helps in ironing out their grievances, ensures project ownership by the community and fosters cooperation.
- The developer and contractor will employ mainly area residents during the construction to minimize any form of social order disruption through influx of migrant labour force.
- Working hours during the construction phase will be restricted to daytime since the project has a component of residences to avoid any interruptions to the neighbours especially during night.
- Any form of misunderstanding will be amicably solved with the help of local leadership.
- Safety signage shall be installed at the site and along the road to guide communities on safety aspects during the project construction.
- Construction work shall commence on site only when the construction phase Health & Safety (H&S) Plan has been adequately developed by the Contractor and approved by MOWT Representative
- Traffic Management Plan will be developed for the safe use of vehicles on and off site; driving standards; safe access to construction sites with minimum negative impact on the existing roads and in parallel for ensuring community safety and easy access to their properties (homes, land and gardens). Workforce transportation should be considered within TMP.
- A construction community Health and Safety Educational Programme will be developed to inform and build awareness and understanding of the local community and drivers on the construction hazards and potential adverse impacts during the construction phase and how to minimise the potential for an accident and/or injury to occur. The Programme will be linked to the SEP and utilize various communication methods to address the needs of vulnerable groups such as children and illiterate residents.
- Workers must receive training and guidance on how to avoid conflicts with the local community members and sign code of conduct, in order not to create conflicts with local government.
- Any damage or grievance shall be managed by the Grievance Process and any repair/compensation be made in a timely basis.
- Worker transportation and modes for workforce movements during construction works will be organised in a way that will minimise negative impacts on local residents.
- The design and location of structures along DRC Highway must take into account the views and concerns raised by local residents and other stakeholders, especially UNRA. Evidence of consultation with stakeholders to be retained.

7.2.12 Traffic interference and accidents

Site preparation and construction activities will see an increase in the movement of heavy vehicles and construction equipment. This will cause disruption of traffic along the access road with possibility of accidents.

Since the normal traffic along the road is a bit high, any interference for a few minutes will lead to build up of traffic causing delays and anxiety and possibly unnecessary accidents. The impact is limited to construction phase only and its magnitude may be low to high depending on when and how it impacts on the recipients.

Mitigation measures

- Proper signage will be installed at appropriate distance at diversion point to warn all road users of on-going construction activities and thus heavy vehicles. Such signs may be like "Heavy trucks turning ahead".
- Most of the construction materials will be delivered to site during off peak hours when there is always minimal vehicular volume on the road or early in the morning before heavy traffic builds up to minimize traffic hindrance and delay.
- Proper temporary road barriers such as humps will be put in place to limit speed and drivers will be cautioned to check speed.
- The developer will liaise with traffic officers to ensure adequate signage on the roads during the construction phase for smooth flow of traffic and to warn and alert other road users of the construction activities on site.
- Flagmen should also be employed to control traffic and guide vehicles during offloading and heavy vehicle turning.
- The developer should also prepare a traffic management plan (TMP) which is a site-specific plan that covers the design, implementation, maintenance and removal of temporary traffic management (TTM) measures while work or activity is carried out.

7.2.13 Security

During the construction stage, there will be a number of people frequenting the site especially employees at the site and service providers. There will also be a variety of construction material that will be stored at the site both while construction is ongoing. Therefore, there is a likeliness off some of the material being stolen by some ill-mannered workers at the site and other individuals that may access the site illegally. Some of these may be armed and as they tend to steal items, end up hurting other personnel at the work site. Therefore, the contractor shall put in place measures to ensure the security of personnel, equipment and material that are at the work site. These shall include the following;

Mitigation Measures

- The construction site should be fully horded off using material such as iron sheets to prevent random access to the site by unauthorized people.
- The site should be given one access with a lockable gate and full time armed security guards to monitor entry and exit of all personnel equipment and materials to and from the site.
- Security cameras should be placed in strategic locations around the camp site to record all activities that happen at the construction site both day and night so as to ensure easy follow up on security cases.
- Metal detectors should be installed at the entrance to the construction site to ensure that armed weapons and devices are not allowed through the gate.
- Security lights should be installed around the construction site to provide illumination to the equipment and materials at the site during the night hours.
- Working hours should be restricted to the day time so that only security guards are expected to be at the site during the night time. This will reduce on the potential of work activity in the night and thereby reducing the risk of theft at the site.

7.3 Negative Impacts Anticipated in the Operation Phase

7.3.1 Impact of poor solid waste management

Solid waste will be generated from the border post offices. The waste stream from the facility will mainly include food remains, package bags, stationery waste and other forms of domestic and hazardous wastes depending on the different goods. If not well managed, the area could be prone to nuisance from foul smell, breeding of vermin and vectors, and lead to outbreak of diseases.

Mitigation Measures

- Waste collection bins will be provided at strategic positions at the structure for temporary waste storage. The waste collection bins shall be provided with covers to avoid spillage by scavengers;
- Coded litterbins shall be provided at the building with a provision for sorting the wastes according to their composition (biodegradable and non-biodegradable wastes); and
- Arrangements will be made to hire a certified waste collection company to transport the waste for final disposal to designated waste dumping sites approved by NEMA.

7.3.2 Pollution from wastewater from human occupancy

The border post will have water borne sanitary facilities. Therefore, a significant amount of sewage and effluent will be generated. Any mismanagement will lead to pollution of the area as well as cause risk to public health of the structure occupants and neighbouring residences.

Mitigation Measures

- Well-designed plumbing system will be installed to collect all the wastewater from washrooms and toilets to the septic tanks for effective treatment and final disposal;
- Ensure prompt emptying of the septic tanks once it's full to avoid overflow into the nearby environment causing pollution.
- Routine quarterly maintenance should be done to ensure there are no leakages in the sewer system to ensure no seepage of waste water into the ground.
- Periodic maintenance regime for the plumbing system will be put in place and implemented to minimize the health risks associated with broken / malfunctioning system

7.3.3 Pressure on water consumption

Considerable quantities of water are required to maintain hygiene, sanitation, cooling and heating purposes in addition to being one of the major raw materials. Mpondwe-Lubhiriha Town Council is supplied by NWSC which picks the water from the Lubhiriha River, although at times this is not stable. During operation of the BP, water consumption will increase which will lead to increased pressure on the water supply system. This is also because the border post will be using water based facilities which shall increase the water demand required in operation of the BP and the Mpondwe-Lubhiriha community at large, leading to shortages.

Mitigation Measures

A number of strategies outlined below will be utilized in reducing water consumption and water use costs.

- Installation of fixtures that restrict or control the flow of water for manual cleaning processes, as well as meters to monitor water use;

- Use of high pressure rather than high volume horse pipes for cleaning surfaces;
- Reporting and fixing water leaks promptly;
- Good housekeeping as well as operator/employee and management awareness on water use costs and reduction efforts.
- There should be operational measures put in place, in addition to the design and infrastructural measures, to ensure that the water resource is not wastefully used. Below is a summarised checklist for water conservation.

Table 8: Water Conservation Strategies

Areas	Strategies
Housekeeping	▪ Do not leave the tap running while cleaning, use buckets for holding water instead; ▪ Make sure that all water handling/distribution gadgets do not leak & are in good condition; ▪ Report immediately any leaking or dripping water handling/ distribution gadgets or toilet; ▪ Purchase and use of water saving equipment (Install infrared-activated faucets and toilets in public washrooms); ▪ Use of automatically timed water equipment like on hand wash basins and kitchen sinks; ▪ Keep utility bills to track the consumption of water; ▪ Establish an effective employee-training program about water conservation; and ▪ Use harvested rain water for floor cleaning and watering of ornamental plants.
Restaurants	▪ Do not leave taps and other water release point running; ▪ Wash food products like potatoes in buckets, bowls or containers; ▪ Use dishwasher with sufficient loads; ▪ Do not use water to defrost or thaw frozen food products. Defrost in refrigerator; ▪ Report any leakages immediately; ▪ Make inspections of dishwasher pumps for water leakages; ▪ Track the consumption of water by regular monitoring utility bills; ▪ Establish an employee-training program about water conservation; and ▪ Install infrared-activated faucets and toilets in restaurants.
Maintenance	▪ Regular inspections of circulating pumps for water leakages; ▪ Report immediately any water equipment leakage; ▪ Purchase and use of water-saving equipment; and ▪ Track the consumption of water by regular monitoring utility bills.

Overall impact significance with mitigation: Minor

7.3.4 Pressure on energy consumption and control

Given the extent of operations and number of energised drives, energy consumption will be quite high. The energy needs of the BP will include machinery used in the offices such as computers, printers, sealers, air conditioning, among other needs. This increased energy demand may increase pressure on the community which can lead to shortages and possibly increase load shedding in the area.

Mitigation Measures

There is need for instituting energy saving techniques to bring down energy costs and shortage.

First; backups should be installed, automatic generator introduced and diverse energy sources should be applied like use of solar for lighting among others. Conservation practices of switching off unwanted lights should be encouraged, centralizing energy connections for a central switch should be done where needed, automatic energy controllers and appliances used. Windows and structural designs to be used should be those that enable use of daylight in the building. Meanwhile records should be kept for energy auditing to check progress regarding conserving and reducing wastages.

Other power saving considerations includes:

- Make someone the Energy Champion of the establishment so they can allocate staff certain responsibilities, e.g. making sure lights are switched off they're not needed;
- Involve staff. Let them help you to work out an action plan for making the BP more energy efficient and therefore more competitive;
- Use low energy light bulbs (Light Emitting Diodes - LED). Replace standard fluorescent tubes with slim line tubes;
- Install movement detectors to control lighting in areas not in constant or frequent use, such as toilets;
- Don't leave electrical equipment switched on or on standby mode for long periods when not in use;
- Make sure there is adequate ventilation at the top and back of refrigeration equipment, and that the coils are cleaned regularly to remove dust and fluff. Energy consumption will increase if the heat cannot be dispersed;
- When buying or leasing equipment, always ask about energy efficient models;
- Have electrical fitting devices such as time-switches, thermostats, and photo-electric cells. This saves electricity by making sure it is only used when it is needed, or by controlling temperatures accurately;
- Make sure motors are kept clean and have an air-flow free of rubbish or stored material; and
- Monitor your progress and keep your energy.

Overall impact significance with mitigation: Minor

7.3.5 Likelihood of fire outbreaks

The OSBP facility is not particularly prone to fire hazards but investments in fire mitigation measures are anticipated considering that there is on site storage of combustible material. In addition, there is a potential risk of accidental fire outbreak in the structure especially as a result of short circuits. Careless use of power appliances or possible torching of the building by arsons is all major fire sources. This can lead to significant loss of property and at worst lives.

Mitigation Measures

- The proprietor will put in place a comprehensive fire plan to guide the occupants and users of the BP in case of fire outbreak;
- All electrical wiring will be carried out by certified electricians in liaison with the developer;
- There shall be installation and proper maintenance of firefighting equipment;
- The building will be fitted with smoke detectors and fire alarms that should periodically be checked to ensure effective performance.
- Management shall carry out annual fire drills to ensure evacuation plans are effective and are understood by all occupants; and
- The premises shall also have permanently stationed security guards and lighting to ensure security against arson-associated fires.
- Ensure the use of circuit breakers.
- Training of the workforce in firefighting and emergency response shall be done by the developer to ensure quick response.
- Designation of assembly points in case of fire hazards shall be done
- Regular oiling of machinery contacts to avoid fire sparks; and
- Regulation and avoiding any fire contact with inflammable substances.

Overall impact significance with mitigation: Minor

7.3.6 Possibility of Natural Disasters

The site to be developed is subject to being struck by lightning or to be affected by earthquakes or earth tremors. However, the proposed building is located in less severe earthquake prone area. In addition, the proposed area has not had severe natural disasters, but nevertheless, the developer should be prepared in case any is to occur.

Mitigation Measures

The new building will be equipped with modern lightning conductors/arrestors to handle any would be lightning strikes as is the case with the existing structures. Site geotechnical investigations have been undertaken and the results have proved that the site is suitable for development and free from natural faults that would cause weakening of the grounds subsequently causing giving away of the structures. Details in appendix 6.

Overall impact significance with mitigation: Minor

7.3.7 Likelihood of collapse of structure

There is a possibility where a section or all the structure established can collapse during the operation phase. This can result from use of substandard materials or natural disasters. When such takes place, it is likely to lead to extensive damage both to property and human life for both the inhabitants of the structure and the neighbouring communities.

Mitigation Measures

Use of standard and UNBS certified quality materials should be ensured. The services of credible building contractors will be put to use in addition to periodic testing of the concrete mixture through certified consultants and calling in inspections from qualified entities. If found lacking the contractor will be made to comply with the required standards or have the contract cancelled and a credible contractor taken on. Supervision of works will

be undertaken by a certified firm, and the site Engineers should have membership of renowned certification agencies.

Overall impact significance with mitigation: Minor

7.4 Mitigation of other Social Impacts

7.4.1 Gender Based Violence and Violence against Children

Gender base Violence (GBV) is defined as any harmful act that is perpetrated against a person's will and that is based on socially ascribed (i.e. gender) differences between males and females while, Violence against Children (VAC) is the physical, sexual, emotional and/or psychological harm, neglect or negligent treatment of persons under the age of 18 (World Bank Code of Conduct and Action plan for Implementing ESHS and OHS Standards).

Construction sites are also a reflection of our societies and have on many occasions been reported to perpetuate GBV and VAC. The Mpondwe One Border Post project area is characterised by a number of small-scale cross border traders moving back and forth from either country with goods and food stuff. Both women and men are involved in this trade. A number of Shops and Kiosks exist in the Project area that will require resettlement/ relocation or a temporary shift to allow for the development of the One Border Post. These interventions tend to increase the vulnerability of persons affected with women, children and Persons with Disabilities being more affected.

The likelihood that the implementation of the Project activities may aggravate gender-based violence and sexual harassment that may already be occurring in the communities is eminent. This may occur during the allocation of the temporary spaces for doing business, not giving women work or contracts for service provision on site due to gender related prejudices even when they meet the requirements and, by giving women lower pay for similar work done by their male counter parts. Women may also be used sexually in exchange for work at site or discriminated against by not being paid for services provided such as food and water vending, and supply of casual labour that usually is left for them in such work environment. Being a border area, trafficking of persons and sexual abuse of young girls may occur. The problem may be worsened a large influx of migrant workers who may come to area seeking employment.

Understanding the different ways GBV and VAC may occur so as to prevent and mitigate against risk is crucial for a successful implementation of the Project. The project should put in place mechanisms to quickly address cases of GBV and VAC reported. Provisions on the code of conduct should be included in the contract with the contractor to ensure no incidences of GBV occur by the staff on or off the site. The contractor must ensure workers sign contracts with a clause on the Code of Conduct.

Effective training of stakeholders to handle complaints from the traders and community members in the project area of influence must be planned. In addition, awareness creation to communities on their rights, responsibilities and on redress mechanism in place should be done. Efforts should be made to communicate in

the local languages, using printed materials and in radio programs to address the problem of semi illiteracy, ignorant of their rights, obligations and the channels for reporting and seeking justice when rights are violated.

The Project should work with established Government/District Local Government structures to provide redress mechanism for cases on GBV and VAC that may arise during project implementation. The community development office of the Kasese District Local Government is already playing an important role if addressing family related cases. In addition to the grievance redress committee, the Mpondwe police posts and the Kasese District Police station will be involved as appropriate depending on the nature of the offence.

Mitigation Measures

Because Gender based violence and Violence Against children do exist in communities, the likelihood that they will happen in the project area of influence due to project related activities highlighted under 7.2.5 above exist. The project is obliged to prevent and mitigate GBV and VAC by following the Grievance Redress Mechanism process under 8.2 and, by ensuring the following;

- Include in contractor's contract a provision on observing the code of conduct to prevent GBV. The contracts of the staff of the contractor should include a clause on the GBV Code of Conduct as elaborated under Codes of conduct and Action Plan for Implementing ESHS and OHS attached in Appendix 5.
- Train and create awareness to Contractors staff and workers on what GBV and VAC is, responsibilities, penalties and redress mechanisms.
- Create awareness to the vendors and the communities using printed materials and radio programs in local languages to enable them understand gender-based violence; their rights, responsibilities and redress mechanism.
- Work with the communities, the Local Council, and vendor's/ trader's association to ensure that any GBV case is quickly identified and addressed.
- Work with the District and the Police to ensure any cases that are registered are addressed as quickly as possible and in a manner that provides justice to the victim.
- Increase representation of special interest groups on grievance redress committees, Joint Border Committees and Cross Border Trade Associations.
- Establish a feedback mechanism to monitor activities of the contractor's staff on and outside the site to ensure compliance with the code of conduct

Overall impact significance with mitigation: Minor

7.4.2 Grievance Redress Mechanism (GRM)

This involves the main stages of settling of a grievance as quickly as possible, from its point of origin and encourages staff and their superiors/managers to resolve grievances informally. The following three (3) stages are set to address the situations where this is not possible. A Grievance Form (Appendix 7) has been designed for easy application of the procedure. Two grievance redress mechanism shall be put in place, one for the general public to report issues on the project and another grievance redress mechanism for workers to report labour and working condition related cases. Both GRM should make provision for escalation of unresolved issues and

depending on the nature of the grievance. GBV/VAC should be referred to relevant agencies like police, health facilities or CSOs in the area that handle GBV/VAC related issues.

7.4.2.1 How grievances will be managed during project execution

When making a grievance, the complainant has to provide as many details as possible concerning the reasons for the grievance, such as:

- What was done in a non-compliance manner or in violation of the CPIG management process, rules and procedures or in violation of existing law or the regulations, governing the ISWDP?
- How the complainant has been affected by this?
- Any relevant details about time and date, place, names of staff the complainant has dealt with, information received, etc.?
- Copies of any letters or other documents to support the grievance?
- What remedy measure does the complainant expect to be taken to put thing right?

It needs to be noted that the complainant should be aware that neither additional information nor documents towards the application can be provided other than the originally submitted proposal.

The institutions and staff involved in the receipt, review and response to grievances relating to the OSBP project will be guided by the following principles:

1. All complainants will be treated with courtesy, equally and fair at all times;
2. All complaints will be treated seriously, regardless of whether made by telephone, by letter, by e-mail. Regardless of form of communication and submission, all complaints will be registered in a designated log- book, documented and responded in writing;
3. Timescales set down within the adopted procedures made public on the OSBP web-page will be strictly observed and if, more time is required, the complainant will be contacted and explained the reason why and let them know when a full reply can be expected.
4. No complainant will be treated less favourably than anyone else because of their:
    a) Gender, social and marital status or age;
    b) Residence status, provincial origin or location;
    c) Sexual orientation;
    d) Colour, race, ethnic or nationality origin;
    e) Religious or political believes or affiliation;
    f) Institutional affiliation;
    g) Other unjustifiable factors such as language, age, etc.
5. All complainants, if requiring, will receive assistance in making and filing their complaint;
6. All complaints will be dealt with confidentiality and confidential treatment of all information, personal and institutional facts relating to the complaint

7.4.2.2 Key standards will be followed in grievance redress mechanisms

1) **Proportionality** - scope, form, and level of complexity of a grievance mechanism shall be proportionate to the potential adverse impact on and interaction with the local communities, Contracted Workers and

Supply Chain Workers.

2) **Cultural Appropriateness**- the grievance mechanism shall be designed to take into account specific cultural attributes as well as traditional mechanisms for raising and resolving issues to ensure that the concerns of significantly different groups and subgroups are acknowledged and addressed.
3) **Accessibility**- clear and understandable mechanisms shall be designed to be accessible to all segments of the affected communities, Contracted Workers and Supply Chain Workers at no cost to them.
4) **Transparency and Accountability to all Stakeholders** – the grievance mechanism shall provide a way for Affected Parties to hold the OSBP project accountable, to be sure it takes inputs seriously, and deals with them through a clear and transparent process.
5) **Appropriate Protection** - the grievance mechanism shall work when Affected Parties are encouraged to share their concerns freely, with the understanding that no retribution will be exacted for participation.

In this process, OSBP will apply highest standards in ensuring openness, transparency and accountability to all parties involved in the project implementation and reporting stages. This will include consistent, comprehensive and careful redressing of all grievances, concerns and claims communicated to the project management or other relevant authorities on the basis of the above principles.

7.4.2.3 Proposed Grievance Handling Processes: Operationalising GRM

The main stages of settling of a grievance as quickly as possible, from its point of origin and encourages staff and their superiors/managers to resolve grievances informally. The following three (3) stages are set to address the situations where this is not possible. A Grievance Form (Appendix 7) has been designed for easy application of the procedure.

Stage I: Statement of Grievance

- An officer/ or the aggrieved person who has any grievance or complaint should raise it with his/her Head of Department (this can also be the LC1, and another community leader that are respected by the community) in writing by completing the Grievance Form.
- The Head of the Department (this can also be the LC1, and another community leader that are respected by the community) will give an answer as soon as possible and within a maximum of seven (7) working days.

State II: First Appeal Level

- If the matter is unresolved at stage II, the aggrieved officer can appeal in writing to the Town Council chaired by community development officer and another key relevant member
- The above officers will at his discretion arrange a personal interview with the aggrieved officer and will give a written reply to the latter within fourteen (14) working days.

Stage III: Second and Final Appeal Level

- It is expected that most of the cases will be solved at Stage II. But in exceptional circumstances, where this is not possible and matter remains unresolved, the aggrieved officer may present it in writing to the

Ministry of Trade. Works and other key relevant agencies who will handle the matter and give an written reply within a further fourteen (14) working days.

7.4.2.4 GRM: Monitoring and Evaluation

Bi-annually, the GRM will make available to the public, a report describing the work of the GRM, listing the number and nature of the Grievances received and processed in the past six months, a date and description of the Grievances received, resolutions, referrals and ongoing efforts at resolution, and status of implementation of ongoing resolutions. The level of detail provided with regard to any individual Grievance will depend on the sensitivity of the issues and Stakeholder concerns about confidentiality, while providing appropriate transparency about the activities of the GRM. The report will also highlight key trends in emerging conflicts, Grievances, and dispute resolution, and make recommendations regarding:

i) measures that can be taken by the Government to avoid future harms and Grievances; and
ii) improvements to the GRM that would enhance its effectiveness, accessibility, predictability, transparency, legitimacy, credibility, and capacity

Role of the Human Resource Office in the Procedure

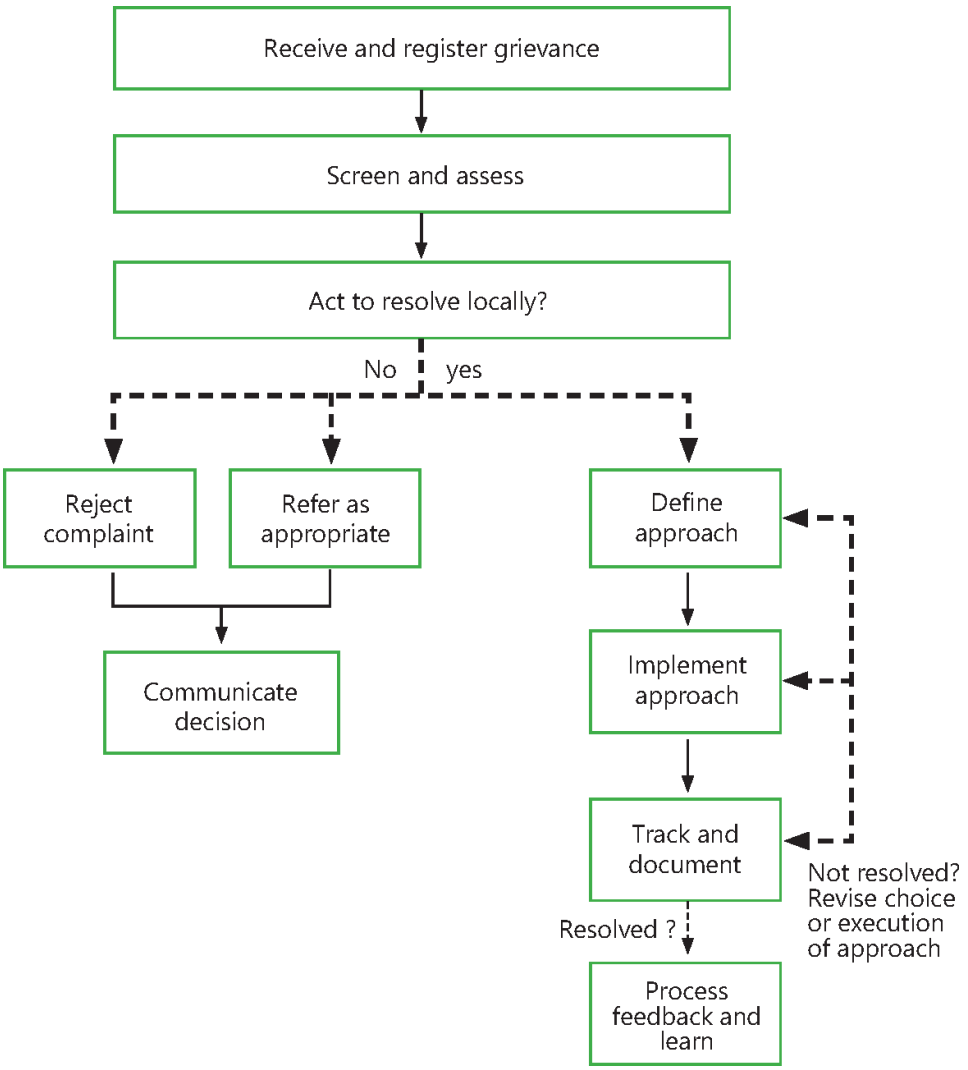
The Human Resource Office is responsible for advising the concerned parties on the handling of staff matters including grievances and may be directly involved at all stages. It is also responsible for monitoring the effectiveness of the grievance procedure and ensuring sufficient supply of Grievance Forms for use by staff when need arises. In addition, the office will receive the grievance forms at the conclusion of the grievance procedures, for records and for future reference if need arises.

7.4.2.5 Resources and Budget lines for GRM

A GRM should have a realistic budget that will sufficiently cover the costs of its operations such as staffing, awareness campaigns, capacity-building training, infrastructure and support services, field inspections, meetings, documentation, and supplies. In is proposed that the GRM budgets are built into the monitoring and evaluation or outreach and communications budgets of the OSBP project implementing agencies.

7.4.2.6 The Proposed Grievance Handling (Process Flow Diagram)

THE PROPOSED GRIEVANCE HANDLING (PROCESS FLOW-DIAGRAM)



(1) Grievance Appeal Committee

The OSBP Grievance Appeal Committee (GAC) will comprise of the OSBP Project Co-ordinator (or representative thereof), and other project management staff.

The GAC will serve as the second level authority for redressing grievances, which are not resolved satisfactorily for the claimant. The GAC may assign a second investigation of the grievance case to another expert or group of experts, depending on the required expertise for analysis and reporting. Alternatively, in grievance cases, which have legal implications, the GAC may decide to pursue a course of action that will best meet the interest of the claimant and the project.

(2) Legal Handling of Grievance

Grievance cases, which may bear serious implications to the OSBP and the institutions involved in its governance will be consulted with a lawyer and based on recommendations, the GAC may follow legal process to manage the grievance case, if satisfactory solution for all parties involved cannot be achieved through a communication, discussion or mediation process.

7.4.3 Effects of Employment

Several people will be employed both during the construction and the operational phase. This represents an increase in the level of employment within the study area and therefore has a high potential to be a significant positive impact that does not require mitigation. However, emphasis should be put on employing people from the area of influence of the project site so as to deter negative attributes associated with area foreign workforce.

Those employed will have to observe the standing rules and regulations governing the Ugandan labour market and must possess the skills or will to be trained. Improved incomes with the associated positive attributes are expected once the project takes off.

7.4.4 Public Health and Occupational Safety

The impact of work place hazards, diseases, air, noise and dust pollution can easily be reduced/mitigated by instituting the following measures.

- Adequate protective gear be accorded to workforce in addition to protection of the conveyors and other machinery to avoid accidents caused by un-protected equipment;
- Promotion of use of local labour force where necessary in addition to having sensitization programs on impacts of diseases to the workforce and community;
- Having a code of conduct for the workforce and community educative and awareness programs;
- Regular sprinkling of water along stretches under construction and routes used to deliver raw materials should be undertaken;
- Careful driving should be the norm and observed by truck drivers hence they should limit their speed.
- Truck delivering wind-blown raw material as and sand for construction should be covered with tarpaulins;
- Proper maintenance of equipment and machinery in addition to sensitisation of the workforce will ensure reduced noise emission;
- Sensitisation of motor vehicle owners not to hoot anyhow and to leave vehicles on idling will reduce on emission of fumes hence minimal pollution of the air.

Hygiene and sanitation issues have to be taken into consideration. Mobile toilets should be provided and vendors of edibles should be responsible for the by-products of their edibles (solid wastes from their products).

Protective gear should be accorded to the workforce in addition to having first aid kits on site for any emergence case. Training and knowledge of first aid administration should be given priority. The workforce should have access to clean water for drinking.

Waste water/sewerage from the BP and associated attributes will be handled by the planned centralised sewerage system to be established at the BP.

The proposed development will inevitably emit some noise and dust to the immediate neighbourhood. This will be a result of site landscaping and stabilisation. Flying sand/earth/ gravel particles from construction works and delivery of the required materials will lead to dust and noise pollution. Proper and effective safe keeping of the construction materials should be undertaken.

Once the building reaches the first level, dust preventive material should be wrapped around the building to cover dust source points and deter its emission to the immediate neighbourhood. Debris from the upper floors should be passed through a debris tube onto awaiting trucks for disposal as portrayed from the photos below.

	
Dust preventive material wrapped around the building to cover dust source points and deter its emission to the immediate neighbourhood.	Debris Tube for proper direction of construction debris from the upper floors onto awaiting trucks for effective disposal

Figure 12: Dust Preventive and Construction Debris Management Methods from upper floors

Sprinkling of water or wetting of dust source points during sunny days will be undertaken to do away with dust pollution. Proper hoarding of the site will be undertaken to retain the likely soil to be deposited down the slope/road and proper landscaping will be undertaken once the construction activities are over.

Regular sprinkling of material access routes should be carried out during the dry season to avert dust pollution caused by trucks movement along the dusty roads.

Raw materials should be well covered and kept in banded areas to avert being blown by wind.

Paving of the open areas should be a must to do away with dust generation from un-paved surfaces during the operation phase.

Other social concerns include unpleasant smell from poorly managed wastes (odour smell). Poor housekeeping practices, such as improper and untimely disposal of food remains, foul water, oils and other wastes from the OSBP, poor maintenance of sewerage and effluent drainage facilities are likely to lead to emission of odorous smell.

Waste bins will be made available for garbage segregation and efficient pick-up and disposal arranged with the Town Council Authorities or their agents. Immediate repairs should be done on the wastewater and effluent drainage systems in case of any breakdown. Periodic check-ups should be done to ensure that foul water systems are in sound position. Management of the facility is encouraged to engage competent service providers in waste collection, housekeeping and facility maintenance services.

Workforce in noisy areas should be accorded protective gear as ear muffs while efforts should be made to contain site noise levels in acceptable national standard as portrayed from the table below.

Table 9: Acceptable national standard

Noise control zone	Sound level dB (A)(Leq)- Day	Sound level dB (A) (Leq)- Night
Residential	60	40
Commercial	75	50
Industrial	85	65

Time frame: Day - 6.00am to 10.00pm

Night - 10.00pm to 6.00am

Due to the nature and activities carried out at the site and its immediate neighbourhood, the noise levels should not exceed 60dBA

Overall impact significance with mitigation: Minor

7.4.5 Social Order Disruption (Disturbance to Public)

Advance warning on the impending construction activities should be given to the communities in the immediate proximity of the site and the material delivery routes. The same is true to those who are currently using part of the site as a timber loading and off-loadings area so that an alternative place where to undertake their activities from is identified and smooth relocation takes place.

URA Staff residing on site will also be temporarily disrupted in addition to customs services to the business community. Informative signs should be put in place to guide road users or communities in the proximity.

In areas with heavy vehicular traffic during the normal working days work should be undertaken during off-peak hours. Use of flag men to guide traffic should be promoted.

URA staff should be accorded ample time to find an alternative area of aboard while phased development if possible, should be promoted to avert disrupting normal service delivery to the business community. Arrangements are being made to ensure smooth relocation of current business undertakings on site before start of construction works. There will be no need of a RAP.

Overall impact significance with mitigation: Minor

7.5 Positive Attributes Associated with the proposed Mpondwe OSBP

The project is expected to employ a large workforce during the construction phase and many more directly and indirectly when operational. Other benefits expected from the project include:

- Creating a modern facility that will increase efficiency at the border post thus reduce delays and subsequently improve livelihoods in border areas;
- The facility is projected to promote cross-border trade, strengthen economic interdependence and support regional peace and stability;
- Enabling comprehensive control of goods entering either country including controlled hazardous

substances;

- Creating a modern facility offering business space for offices, business and hospitality related activities currently yearned for by the stakeholders at the border;
- Provision of ample and safe car parking space hence contributing to traffic management at the border post once operational;
- Establishing a high value project unlike the current status today;
- Providing market for the raw materials and inputs to be used during the construction and operation phases;
- Contribution of revenue to Mpondwe-Lhubiriha Town Council and national treasuries in form of taxes of various categories;
- Improvement of the aesthetic value of the area with a high value development facility in place with attributes currently lacking including convenient wash rooms, holding grounds for breast feeding mothers, provision of easy and convenient banking services, having all offices in the cross-border business sector under one roof; and
- Improved security in the project area since the development facility will be having security guards and better lighting system along this stretch.

Table 10: Summary of Impact Analysis (Impact Matrix Table)

Impact	Extent	Magnitude	Duration	Probability of occurrence	Overall significance without mitigation	Overall significance with mitigation
Construction phase						
Soil Erosion impacts	Site specific	Low	Temporary	Probable	Minor	Minor
Pollution of Surface Waters	Local	Low	Temporary	Probable	Minor	Minor
Impacts of noise and vibrations	Site specific	Low	Temporary	Probable	Minor	Minor
Impacts on Air quality	Site specific	Low	Temporary	Probable	Minor	Minor
Poor Sanitary Waste Management	Local	Medium	Temporary	Probable	Moderate	Minor
Impact of Fuel and Oil Spills Contamination	Site Specific	Low	Temporary	Probable	Moderate	Minot
Impacts of construction solid waste	Site specific	Low	Temporary	Highly probable	Minor	Minor
Degradation of material source points	Site specific	Low	Temporary	Probable	Minor	Minor
Loss of secondary vegetation cover	Site specific	Low	Permanent	Highly probable	Moderate	Minor
Occupational health and safety impacts	Site specific	medium	Temporary	Probable	Moderate	Minor
Community Health and Safety impacts	Site specific	medium	Temporary	Probable	Moderate	Minor
Traffic Interference and accidents	Local	Low	Temporary	Probable	Minor	Minor
Security	Local	Low	Temporary	Probable	Minor	Minor
Operation phase						
Impacts of poor solid waste management	Site specific	Medium	Long term	Highly probable	Moderate	Minor
Pollution from wastewater from human occupancy	Local	Medium	Long term	Highly probable	Moderate	Minor
Pressure on water consumption	Local	Medium	Long term	Highly probable	Moderate	Minor
Pressure on energy consumption and control	Local	Medium	Long term	Highly probable	Moderate	Minor
Likelihood of fire outbreaks	Site specific	Medium	Long term		Moderate	Minor
Possibility of Natural Hazards	Site specific	Medium	Long term	Improbable	Moderate	Minor
Likelihood of collapse of structures	Site specific	Medium	Long term	Improbable	Moderate	Minor

8.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING PLAN

There is need for a monitoring process put in place to check the progress and the resulting effects on the environment by the planned project. The process begins during the construction stage and continues through the operation phase. Monitoring determines the effectiveness of recommended mitigation measures and includes regular reviews of the impacts that cannot be adequately assessed before the beginning of the project, or which arise unexpectedly. In such cases, appropriate new actions to mitigate any adverse effects should be undertaken.

Uganda Revenue Authority as the major beneficiary of the BP's establishment shall be in charge of management and monitoring of potential impacts during the operation of the BP. Ministry of Works as the implementer as well should work hand in hand with URA to ensure that the operations at the BP in the operational phase are carried out in an environmentally friendly manner.

The management plan will present an overview of the considerations to be taken into consideration during the design, construction, operation and maintenance phases.

Environmental activities to be monitored

- Restoration of gravel sites;
- Monitoring of contamination from fuel/oil spillages especially in water bodies;
- Water quality;
- Efficiency of erosion control measures;
- Healthy status of the Lhubiriha water body;
- Management of body waste and general sanitation at the OSBP;
- Availability of first aid facilities and emergency readiness; and
- Management of dust and noise source points.

Social Activities to be monitored

- Culture heritage and the disadvantaged;
- Resettlement if any;
- Community Health and Safety;
- Influx;
- Occupational Health and Safety Issues for workers;
- Local employment;
- Gender base Violence and Violence Against Children
- Impacts of Noise and dust pollution;
- Use of personal protective gear during construction and operation;
- Pressure on existing health infrastructure;
- Spread of diseases especially HIV/AIDS and Ebola;
- Road safety measures in place and their impact on the road;
- Changes in land use and resultant effects must be monitored;

Environment Management Plans provides a link between the mitigation measures or enhancing attributes put forward in the assessment report and the integration of these measures during the design, construction and operation phases. They provide details of impacts, measures to mitigate the impacts, whose responsibility, timeframe and the cost of mitigation. Therefore, the above has to be incorporated in the planning phase early enough to ensure that they are taken care of.

Next pages are the Environmental Management Plan / Environmental Social Monitoring Plan for Mpondwe OSBP to be implemented.

Table 11: Environmental and Social Management and Monitoring Plan for Mpondwe One Stop Border Post

Management				**Monitoring**		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
General Requirements						
Environmental and Social Management	MOWT and the Contractor will regularly review and update as required the ESMMP and SEP to ensure it is responsive to changes in project circumstances.	Throughout project life	Contractor	Updated ESMMP and SEP	Every quarter throughout project life	MOWT
Applicable Standards	The project will be managed, constructed and operated in a manner that is complaint with applicable national, international law and Conventions, and relevant National requirements, policies and guidance.	Throughout project life	Contractor	Monthly compliance status demonstrating compliance with national regulations laws and policies	Monthly throughout project life	MOWT
Applicable Project Documentation	MOWT and Contractor will implement and comply with all the measures specified within the relevant project Documentation, including: ▪ ESMMP ▪ Stakeholder Engagement Plan (SEP) ▪ Resettlement Compensation Framework (RCF) ▪ Project contractually binding documents, including the Employer Requirements ▪ Environmental and Social Impact Assessment/ Statements and related Decisions from the competent ministries/ authorities such as NEMA, BTC and MOWT	Throughout project life	Contractor	Monthly and Quarterly reports demonstrating compliance with environmental and social requirements	Monthly and quarterly throughout project life	MOWT
BP Environmental & Social Resources & Organisation	MOWT will establish within its organisation the environmental & social management capacity and capability to undertake the following: ▪ Reviews of the environmental and social performance of its contractors and suppliers during BP construction and operation; ▪ Co-ordinate the implementation of actions/ measures under the ESMMP which are the ▪ responsibility of BP; ▪ Regular reviews of compliance with the ESMMP obligations; and ▪ Review and update to ESMMP to ensure it reflects project circumstance and still complies with NEMA Requirements.	Throughout project life	Contractor MOWT	Established sufficient environmental and social management capacity and capability for each phase.	Monthly	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
Environmental & Social Management Systems						
Construction Environmental & Social Management System (CESMS)	As part of the Site Management Plan the Contractor will develop and implement a Construction Environmental & Social Management System (CESMS) to support the Implementation of the ESMMP & SEP and support good environmental & social management practices. The CESMS will be developed and implemented in-line with international standards including: ▪ Organisation, responsibilities and resources (including commitment that critical ESHS positions will be identified and maintained); ▪ Construction Environmental & Social Management Plan, including supplementary plans (e.g. Waste Management Plans, Hazardous Materials Management Plans); ▪ Procedure which assesses ESHS risks; ▪ Monitoring Plan; ▪ Emergency Preparedness & Response Plan; ▪ An audit process and programme (including performance audits, audits on labour & working conditions); ▪ Training programme; and ▪ Reporting of Environmental & Social performance. The Contractor shall appoint an appropriately qualified Environmental, Social, and Health & Safety (ESHS) Manager who will be responsible for the development and implementation of the CESMS and co-ordination to ensure the provisions of the ESMMP are complied with. The ESHS Manager shall have appropriate qualifications, and resources. The ESHS Manager shall have assigned responsibilities including, but not limited to: ▪ Implementation of the ESMMP; ▪ Implementation and co-ordination of Construction Environmental & Social Management Plan and associated management & mitigation plans; ▪ Preparation of quarterly reports for compliance with ESMMP (and other applicable standards/documents)	During construction Phase	Contractor	Presence of a functional CESMS	Throughout construction phase	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	and related to CESMS and Construction Environmental & Social Management Plan; ▪ Managing an incident reporting system (including near-misses); and Preparation and submission of environmental monitoring reports to MOWT as required by NEMA which will include review of compliance with ESMMP obligations.					
Operational Environmental & Social Management System (OESMS)	MOWT will develop and implement an Operational Environmental & Social Management System (OESMS) to support the implementation of ESMMP & SEP and support good environmental & social management practices. The OESMS will be developed and implemented in-line with international standards and include (but not limited to) the following: ▪ Organisational, responsibilities and resources; ▪ Operational Environmental & Social Management Plan, including supplementary plans e.g. Waste Management plans, Hazardous Materials Management plans, etc.; ▪ Operational Monitoring Plan; ▪ Emergency Preparedness & Response Plan; ▪ An audit process and programme, including performance audits and BP safety audits; ▪ Training programme; and ▪ Reporting of Environmental & Social performance. MOWT shall appoint a qualified ESHS Manager who will be responsible for the development and Implementation of the OESMS and co-ordination to ensure the provisions of the ESMMP are complied with. The ESHS Manager shall have appropriate qualifications, training, authority & responsibility and resources. The ESHS Manager shall have assigned responsibilities including, but not limited to: ▪ Implementation and co-ordination of OESMS (and associated audits, corrective action, etc.);	During Operation Phase	MOWT	Presence of an OESMS prior to commissioning and operating of the BP	During Operation	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	▪ Implementation of the ESMMP; ▪ Implementation and co-ordination of OESMP (and associated management & mitigation plans); ▪ Preparation of quarterly reports for compliance with ESMMP (and other applicable standards/documents) and related to OESMS; ▪ Managing an incident reporting system (including near-misses); and Preparation and submission of environmental monitoring reports to BP and reports as required by NEMA which will include review of compliance with ESMMP Obligations.					
Site Management Plan (SMP)	Preparation and implementation of Site Management Plan for construction, including inter alia: ▪ Location of borrow pits and inert waste landfills to be used; ▪ Location of batching and crushing plants and construction camps; ▪ Haulage routes; ▪ Site Clearance plan; ▪ Construction Travel Plan (including volume and type of construction vehicles etc) & Traffic Management; ▪ Location of workforce accommodation camps; and ▪ Security plan Within the Site Management Plan the contractor must demonstrate how they intend to ensure clear delineation of the 'Project Area' (i.e. site) to ensure construction activities (including site clearance, movement of machinery & vehicles etc.) do not go outside specified area approved in main design.	During Construction Phase	Contractor	Presence of an SMP in place prior to construction. Draft SMP to be provided for review by MOWT within 30 days of award.	Monthly and quarterly throughout the project life.	MOWT
Sub-/ Supplier Management	The BP Contractor/Operator will apply contractual agreements for securing services of sub-contractors and suppliers, which ensure they are obliged to comply with all environmental and social requirements contained with	During construction phase	Contractor	Contractual agreements of suppliers	Throughout Construction Phase	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	applicable project documentation and standards. The Contractor/Operator will advise their sub-contractors and suppliers of their Environmental, Social, Health & Safety (including Labour& Working Conditions) responsibilities, including relevant requirements within the ESMMP. Applicable ESHS requirements shall be contained within contractual agreements, including the requirements for sub-contractors to pass requirements to any of their subcontractors and establish provisions for EHS reporting.					
Social-economic requirements						
Stakeholder Engagement	MOWT shall maintain and implement a Stakeholder Engagement Plan (SEP) and grievance mechanism relevant for each phase of the project to ensure that all stakeholders are identified, that sufficient information about issues and impacts arising from the project (e.g. construction impacts) and proposed mitigation are disclosed in a timely manner and that all stakeholders are consulted in a meaningful and culturally appropriate way throughout project implementation. Determine whether any vulnerable / disadvantaged groups or communities are likely to be disproportionately or permanently and adversely affected by the Project and identify and implement appropriate communication methods to consult with them about mitigation measures. Contractors shall adopt the SEP and grievance mechanism principles and requirements within their own management Systems as appropriate, and provide training to staff on the SEP requirements. MOWT will aim to involve stakeholders and to keep good communication practices during the lifetime of the project through its PR Division. Their Objectives will be: ▪ Providing local communities with a project schedule and information on project activities that may affect them, together with mechanisms for their feedback ▪ Provide general information to improve knowledge of what the project involves, with all stages and expected performance	During construction phase	Contractor	Stakeholder Engagement Plan and Operational grievance mechanism in place before construction begin.	Planning, Construction & Operational phases	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	▪ To make available to the public a grievance procedure, in order to collect, respond and resolve issues and complaints on a timely basis (30 days) Stakeholders to be affected include timber dealers, URA, Business community among others. For each of the stakeholders defined in the SEP communication tools suggested will be used in order to ensure easy, transparent, direct, open and interactive communication with all stakeholders.					
Construction Phase Impacts						
Soil Erosion	Storm water check dams or impact dissipaters in the side drains shall be introduced. Storm water retention ponds shall be established along the drainage channels to retain any run-off from the site. Later the area shall be grassed. Regular maintenance of this infrastructure should also be undertaken. Raised embankments along the excavated area should be vegetated after the construction works or stone pitched to stabilize them and deter soil erosion. Excavations should be undertaken in required areas only so that land that is not required for purposes of BP with the associated components construction is not disturbed. Earth works should be undertaken during the dry season to reduce on the possibility of soil being washed down the slope. Topsoil excavated during site stabilization should be used to restore murram quarries or landscaping/backfilling lowly placed sections of the site. Sedimentation and Erosion Control Plan, will be developed in order to identify specific erosion control techniques for use at particular sites along the BP alignment. The plan will be based on several principles and approved by MOWT prior to construction: • Site characteristics (topography, soils, drainage patterns, and covers) will be considered when developing the plan. Areas which are prone to erosion will be left undisturbed and undeveloped if possible. Entrance and	During Construction Phase	Contractor	Status of check dams in drains Status of raised embankments along excavated area Extent and timing of excavations	During Construction phase	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	exit points for runoff will be protected from erosion and equipped with sediment control devices. • Minimise the extent of the disturbed area. Typically, if an area is not going to be worked on in more than 30 days, it will be protected by erosion control mats. • The use of heavy equipment and techniques that will result in excessive soil disturbances or compaction of soils will be minimised, especially on unstable slopes. • The drainage and runoff controls will be established before starting the site clearance and earthworks. The existing vegetation will be retained as much as possible. • Where water would need to be removed from excavations, it will be transferred at the minimum practical distance to be discharged. • Concentrated flows if possible, will be diverted away from sensitive areas. • Sediment control devices such as sediment control ponds will be used to retain sediments from leaving the site. • The most effective erosion control devices will be implemented: Sediment control devices to be implemented will include; i) site fencing; ii) straw bales; iii) sediment basin /traps; iv) storm inlet traps; v) rock check dams and vi) interception berms/swales. • Once construction is completed at a site, the decomposition and restoration of the disturbed areas that are not to be occupied by permanent structures will be carried out by tilling the land before proceeding to the vegetation reinstatement.			Final management of top soils after excavation Preparation and Implementation of the sedimentation and erosion control plan minimise the loss of soil.		
Surface Water Pollution	• Contractor should ensure that oil spill kits are provided around the site to allow for proper management of pills during construction. • Proper drainage channels should be established around the construction site and ensure that all run off from the site is diverted to the drainage channel along the main road. • Oil storage areas should be bunded off to ensure that leakages from these areas are not disposed to storm water on rainy days.	During construction Phase	Contractor	Presence of Oil Spill Kits on site Size of drains around the facility Bunding around oil storage areas	Monthly inspection during construction phase	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• Developer should ensure that a greenery section is established having grasses and plants. These shall help in reduction of speed of runoff thereby holding the sediments, preventing them from reaching the surface waters.			Greenery section established Monthly water tests from River Lubhiriha		
Noise and Vibrations	• All construction equipment will comply with the requirements National Standards on noise emissions in the environment by equipment for use outdoors. • The equipment will be fitted with appropriate noise muffling devices that will reduce sound levels. • As the project activities are performed, (in several noise level areas, according to the national legislation), every effort shall be carried out to comply with the corresponding noise limits for each area. • Construction works shall not be permitted during the night; the operations on site shall be restricted to the period 7.00-19.00 h. • All vehicles and machinery used at the construction sites shall be subjected to regular maintenance. The vehicles and machines that are excessively noisy due to poor engine adjustment or damaged noise control devices shall not be operated until corrective measures have been taken. • The construction traffic plan shall establish speed limits for construction vehicles and machinery at the construction site and the haulage roads used, and organize traffic so as to avoid as much as possible populated areas. • Affected local residents will be kept informed on due time of the planned works and the vibration and noise levels and periods during which they will occur. • The location of noisy equipment will be chosen as far as possible from sensitive receptors (houses, workplaces, schools and hospitals). When near sensitive receptors, constructions will be scheduled and provided with the necessary resources so that the time of exposure is as short as possible. • Good management practice will be used to distribute heavy noise equipment along the route so as to avoid the cumulative effects of noise.	During construction phase	Contractor	Daily Records of noise and vibration levels at sensitive receptors Records of vehicle and equipment servicing. Activity scheduling that minimizes impact of noise. Community complaints on noise and vibrations. Number of nearby buildings damaged by vibrations from site.	At start up and then monthly during construction	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• In the case where noisy works would need to be performed at night or during a longer period than a day at a given site, a noise shield be erected around the working area. • Monitoring of vibrations during the performance of critical work processes (e.g. foundation of BP) should be undertaken in building which are within a distance of 20-30 meters from the area where these works take place. Should buildings result damaged as a result of vibrations generated by the construction works, the damaged buildings will be repaired or compensation paid. • Operate earthmoving equipment on the construction site far away from vibration-sensitive receptors as possible. • Activities such as demolition, earthmoving and ground-impacting operations shall be scheduled so as not to occur in the same time period. Unlike noise, the total vibrations level produced could be significantly less when each vibration source operates separately. • Decrease vibrations from construction sources, including: o Blasting. Explosion type and weight, delay-timing variations, size and number of holes, distance between holes and rows, methods and directions of blast initiation o Dynamic compaction. A smaller falling weight will produce smaller vibrations. o Pile driving. Predrilling, pre-setting, replacement of displacement piles with non-displacement ones, switch impact hammer to vibratory one, replacement of driven piles with augured cast in-place piles or drilled shafts. o Select demolition methods not involving vibration impact, where possible. o Avoid vibratory rollers and packers near sensitive receptors. • A detailed BP noise and vibration study will be completed during the development of the detailed design of the BP project to determine the specific					

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	and optimum noise abatement measures to be taken. • Proposed Noise mitigation measures leading to the decrease of noise exposure include measures implemented at the source of noise and measures that intercept the noise reduction between the source and the receptor: At the source: o Use power generators with canopy o Noise barriers (protective walls) with noise reduction potential by 15-15 dB (A). o Insulation of house windows and façade with noise reduction potential by 10-30 dB (A).					
Impact on ambient Air Quality	• Regular sprinkling of water along stretches under construction and routes used to deliver construction materials during the construction phase should be undertaken in a manner that effectively suppresses dust. • Trucks delivering construction materials such as sand and murram and gravel should be covered with tarpaulins and once the construction activities are over, there will be limited dust pollution if the driveways and parking yard are paved. • The construction site will be hoarded off to restrict dust to the site boundaries only. • Construction workers will be provided with protective respiratory equipment like dust masks where need be. • Vehicles and other equipment on site should be in good condition to limit localized emission releases to the environment; • Careful driving should be the norm and observed by truck drivers hence they should limit their speed • Periodic automobile maintenance especially for those on site will be important in reducing the production of un-burnt carbon to the surrounding. • Ducts to be used to direct debris from upper floors	During Construction	Contractor	Presence of a functional Dust Management Plan Dust present on vegetation and structures neighbouring the site Visual checking of dust emissions from construction sites. Monthly and Quarterly air quality reports	Monthly during construction works involving earth movements. Increased frequency during dry season.	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• Accesses and construction sites will be kept moist to reduce dust formation. • Water sprays will be implemented during drilling and excavation activities. • In the dry season, hygroscopic additives will be used in water to increase its presence in the ground. • Dust generating activities will be slowed down in days of strong winds. • In windy and dry conditions, earth stockpiles will be moistened to prevent the lifting of dust particles. • Ground will be moistened during loading and unloading of aggregates in trucks. • Loaded trucks will be washed down prior to exit from working site to ensure that loose material is not tracked onto the roads. • No unnecessary idling of construction vehicles at the construction sites will be allowed. • Construction truck traffic will be optimized so as to get a minimum number of trucks • Carrying the maximum volume of materials. This will be addressed in the construction Traffic Management Plan. • The truck routes will be planned to avoid peak traffic hours or routes with heavy • traffic. • Regular maintenance of the diesel locomotives will be performed to keep them in optimal working conditions, including the achievement of minimal air emissions set by the manufacturer. • Every effort will be made to use the cleanest fuels within technically feasible possibilities.					
Poor Sanitary Waste Management	Sanitary waste should be properly disposed of to avoid unsanitary and unhygienic environs around the project site.	During construction	Contractor	Presence of adequate gender sensitive sanitary facilities at the site	Weekly Supervision by Local Authorities	Local Authorities

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	There will be mobile toilets for body waste disposal to avoid contaminating the neighbourhood and ground water with facial matter during the construction phase. Once the project becomes operation facial matter will be handled by the planned centralized system comprising of septic tanks and soak pits. Wastewater pipes and sumps will be newly constructed. Pipe work will be subjected to periodic inspection.			Sanitary facilities clean	Monthly Supervision	MOWT
Impact of fuel and oil spills contamination	• Extra care should be taken while refuelling trucks and equipment to avoid fuel spills. It is in the interest of the BP developer and the contractor not to spill any fuel as this implies loss of income. • When servicing the equipment measures should be put in place to undertake effective disposal of the used oil or any oil wastes. • Servicing of construction vehicles should be undertaken from designated areas like service garages. Well- serviced equipment reduces emissions of noxious fumes (carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxides). • Potentially polluting materials, such as fuels, oils, chemicals and associated liquid waste materials, etc. will be stored in dedicated, segregated storage areas, with spillage protection and appropriate environmental security measures to prevent accidental release to ground during storage. • In addition, appropriate working procedures will be adopted to minimise the risk of accidental release during delivery to and removal from the storage areas. Working procedures will ensure that these materials (raw and waste) are handled correctly. Working procedures will seek to prevent accidental release during the use of these materials, for example, vehicle refuelling and plant maintenance, especially with regard to waste oil. • Procedures will be adopted to minimise the potential for accidental discharge of pollutants during the washing down of equipment and vehicles.	During construction	Contractor	Presence of a functional Oil spill management plan Presence of oil spill kits at the site Contract with licensed hazardous waste handler Water quality analysis reports from nearest downstream spring well.	Monthly and quarterly	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• All roads and hard standings will be kept clean and tidy to prevent the build-up of oil and dirt that may be washed into a watercourse or drain during heavy rainfall. • Oil spill kits will be availed at the construction sites in case there is an accidental spill, so that it can be immediately cleaned up. • Vehicles and construction machinery will be subject to regular preventive maintenance so as to reduce leakages of lubricants, motor oil and fuels.					
Improper Management of Solid Waste (Construction Debris/ Demolition Waste)	• A site waste management plan should be prepared by the contractor prior to the commencement of construction works. This should include designation of appropriate waste storage areas, collection and disposal schedule to approved dumping sites. • Special attention should be given to minimizing and reducing quantities of solid waste produced. • Use the excavated material for backfilling. • Provide waste bins for proper waste storage. • Generated waste that can be re-usable will be sold or given away to interested parties. • In all, waste management will be addressed through waste management system that addresses issues linked to waste minimization, generation, transport, disposal, and monitoring. The developer/contractor will endeavor to implement systems towards these waste management systems.	During construction	Contractor	Presence of a functional waste management plan. Number of approved dumping sits for construction debris Records of amount of waste disposed per month	Monthly	MOWT
Degradation of material Source points	The operators of murram gravel quarries should have a management plan for them and during their operation water stagnation should not be allowed to take place. After use of the quarry, proper landscaping should be undertaken to improve the aesthetic value of the area. The quarry should be fenced off to avoid accidental fall over from the quarry flanks. The contractor should procure from those having a management plan for their quarries.	Before and during construction	Contractor	Availability of ESIA certificate for borrow pits and quarry sites where material is to be extracted. Decommissioning plan for borrow pits and quarry sites.	During construction phase Before, during and decommissioning of material extraction sites.	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	In addition, the law requires that opening up of borrow pits and quarry sites should have independent detailed environmental and social impact assessment and approved by NEMA. This assessment shall guide on the proper management of material source points and thereby reduce potential impacts. Emphasis will be put on ensuring that hard core and other stone aggregate materials are purchased from those obtaining them in a friendly way.					
Loss of Vegetation Cover	Only vegetation within the areas to be developed shall be removed during clearing but no grown tree species shall be eliminated. The minimal vegetation that will be cleared will be compensated with the greenery to be introduced after construction works. Proper landscaping shall be done with planting of ornamental trees and flowers done thereafter. This shall improve the aesthetics of the BP.	During demolition and construction	Contractor	Extent of vegetation cleared Types of trees and ornamental plants replanted	During and after construction	MOWT
Occupational Health and Safety Impacts	• The works contractor will take measures to provide Personal Protective Equipment (PPE) to the construction workers like helmets, gumboots and overalls to help limit injuries during construction. • Contractor/proprietor will provide well stocked first aid kit for the work force to cater for minor cases prior to any referrals to health centres or hospitals. • The contractor will put in place proper guiding and appropriate educative signage at the site to keep the work force aware of their obligations and the general public aware that there is construction work in progress and appropriate precaution to be taken while at the site. • Close supervision of work, including the provision of appropriate training for the workforce in observing better construction practices and handling emergency cases will be given priority and undertaken. • The hoarding should be tall enough to avert any falling debris and other remains that may harm the public. • The contractor should ensure that only trained workers operate equipment.	During construction phase	Contractor	PPES issuance records Number of accidents and injuries per month Number and condition of first aid boxes on site ESH training records and schedules Monthly reports on safety	Before the start of the project activities and every working day during construction phase	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• Guidelines and regulations on site safety should be communicated to all workers, suppliers, sub-contractors and residents. • All other measures as found appropriate to keep the workers and other people free from OSH hazards will be undertaken by the contractor in collaboration with the developer.					
Community Health and Safety	• The developer will engage the resident neighbours and area local leaders prior to commencement of the project. This helps in ironing out their grievances, ensures project ownership by the community and fosters cooperation. • The developer and contractor will employ mainly area residents during the construction to minimize any form of social order disruption through influx of migrant labour force. • Working hours during the construction phase will be restricted to daytime since the project has a component of residences to avoid any interruptions to the neighbours especially during night. • Any form of misunderstanding will be amicably solved with the help of local leadership. • Safety signage shall be installed at the site and along the road to guide communities on safety aspects during the project construction. • Construction work shall commence on site only when the construction phase Health & Safety (H&S) Plan has been adequately developed by the Contractor and approved by MOWT Representative • Traffic Management Plan will be developed for the safe use of vehicles on and off site; driving standards; safe access to construction sites with minimum negative impact on the existing roads and in parallel for ensuring community safety and easy access to their properties (homes, land and	During Construction phase	Contractor	Presence of a community grievance redress mechanism that is functional Presence of a functional community health and safety plan Approved Traffic Management Plan in place Functional Community Health and Safety Educational Programme that continuously sensitizes communities. Nature and frequency of conflicts between workers and local communities. Number of employees not from the project communities.	Prior to the start of the construction phase daily checking of construction site boundaries.	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	gardens). Workforce transportation should be considered within TMP. • A construction community Health and Safety Educational Programme will be developed to inform and build awareness and understanding of the local community and drivers on the construction hazards and potential adverse impacts during the construction phase and how to minimise the potential for an accident and/or injury to occur. The Programme will be linked to the SEP and utilize various communication methods to address the needs of vulnerable groups such as children and illiterate residents. • Workers must receive training and guidance on how to avoid conflicts with the local community members and sign code of conduct, in order not to create conflicts with local government. • Any damage or grievance shall be managed by the Grievance Process and any repair/compensation be made in a timely basis. • Worker transportation and modes for workforce movements during construction works will be organised in a way that will minimise negative impacts on local residents. • The design and location of structures along DRC Highway must take into account the views and concerns raised by local residents and other stakeholders, especially UNRA. Evidence of consultation with stakeholders to be retained.					
Traffic Interference and Accidents	• Proper signage will be installed at appropriate distance at diversion point to warn all road users of on-going construction activities and thus heavy vehicles. Such signs may be like "Heavy trucks turning ahead". • Most of the construction materials will be delivered to site during off peak hours when there is always minimal vehicular volume on the road or early in the morning before heavy traffic builds up to minimize traffic hindrance and delay.	During construction phase	Contractor	Signage along the road Presence of a functional Traffic Management Plan Number and type of speed limiting structures in place	Before the start of the project activities and every working day during construction phase	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• Proper temporary road barriers such as humps will be put in place to limit speed and drivers will be cautioned to check speed. • The developer will liaise with traffic officers to ensure adequate signage on the roads during the construction phase for smooth flow of traffic and to warn and alert other road users of the construction activities on site. • Flagmen should also be employed to control traffic and guide vehicles during offloading and heavy vehicle turning. • The developer should also prepare a traffic management plan (TMP) which is a site-specific plan that covers the design, implementation, maintenance and removal of temporary traffic management (TTM) measures while work or activity is carried out.			Number of traffic guides Traffic accident log showing minimal figures		
Security	• The construction site should be fully horded off using material such as iron sheets to prevent random access to the site by unauthorized people. • The site should be given one access with a lockable gate and full time armed security guards to monitor entry and exit of all personnel equipment and materials to and from the site. • Security cameras should be placed in strategic locations around the camp site to record all activities that happen at the construction site both day and night so as to ensure easy follow up on security cases. • Metal detectors should be installed at the entrance to the construction site to ensure that armed weapons and devices are not allowed through the gate. • Security lights should be installed around the construction site to provide illumination to the equipment and materials at the site during the night hours.	During construction phase	Contractor Hired security firm	Well trained security guards on site Number and status of accesses to site Presence and location of security cameras at site Record of security cases at the site Number of police cases regarding the site	Monthly during construction	MOWT

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• Working hours should be restricted to the day time so that only security guards are expected to be at the site during the night time. This will reduce on the potential of work activity in the night and thereby reducing the risk of theft at the site.					
Mitigation of other Social Impacts						
Gender Based Violence and Violence against Children (GBV and VAC)	• Include in contractor's contract a provision on observing the code of conduct to prevent GBV. The contracts of the staff of the contractor should include a clause on the GBV as elaborated under Codes of conduct attached in Annex 5. • Train and create awareness to Contractors staff and workers on what GBV and VAC is, responsibilities, penalties and redress mechanisms. • Create awareness to the vendors and the communities using printed materials and radio programs in local languages to enable them understand gender-based violence; their rights, responsibilities and redress mechanism. • Work with the communities, the Local Council, and vendor's/ trader's association to ensure that any GBV case is quickly identified and addressed. • Work with the District and the Police to ensure any cases that are registered are addressed as quickly as possible and in a manner that provides justice to the victim. • Increase representation of special interest groups on grievance redress committees, Joint Border Committees and Cross Border Trade Associations. • Establish a feedback mechanism to monitor activities of the contractor's staff on and outside the site to ensure compliance with the code of conduct. • Strengthen risk assessments and use them to trigger action: The project will be mindful on how the SEA/GBV risks can be monitored, on a continuous basis through the life of a project;	During construction phase	Contractor	Codes of conduct on GBV and VAC signed by all project personnel. Training records on GBV and VAC on site and in the community. Number of complaints from community on GBV and VAC	Regular monitoring on a monthly basis or, as and when a case of a grave magnitude occurs.	MOWT District Community Development Officer Uganda Police

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	SEA/GBV specific risk assessment /analysis methodologies • Educate and raise the awareness of women, adolescents and children of SEA and their legal rights and potential risks. This will among others, include the matters related to the influx of labour associated with a project and made aware of the laws and services that can protect them and provide redress in case of an incident. a) Children/ minors: identify and support appropriate local community institutions/expertise to consult with children; b) one of the mitigation measures is for CSOs with expertise in child abuse and the sexual exploitation of children as well as those with expertise in project-related risks eg: Health services, psychosocial support, security and access to legal services.					
Grievance Handling and Redress Mechanism	Two grievance redress mechanism shall be put in place, one for the general public to report issues on the project and another grievance redress mechanism for workers to report labour and working condition related cases. Both GRM should make provision for escalation of unresolved issues and depending on the nature of the grievance. GBV/VAC should be referred to relevant agencies lie police, health facilities or CSOs in the area that handle GBV/VAC related issues.	During construction phase	Contractor	Presence of a grievance redress mechanism that if functional on site Grievances register with filled in information. Number of grievances that are still pending and not closed	Regular monitoring on a weekly basis or, as and when a grievance is registered.	MOWT
Social Order Disruption (Disturbance to Public)	Advance warning on the impending construction activities should be given to the communities in the immediate proximity of the site and the material delivery routes. URA Staff residing on site will also be temporarily disrupted in addition to customs services to the business community. Informative signs should be put in place to guide road users or communities in the proximity.	During construction phase	Contractor URA	URA offices shifted before commencing construction works	Before Construction begins	MOWT URA

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	In areas with heavy vehicular traffic during the normal working days, work should be undertaken during off-peak hours. Use of flag men to guide traffic should be promoted. URA staff shall be accorded ample time to move into the already existing empty shelters on the property. This shall be done is a phased manner to ensure minimal disruptions in the normal service delivery at the border post. Arrangements are being made to ensure smooth relocation of current business undertakings on site before start of construction works. There will be no need of a RAP.					
Operational Phase Impacts						
Impact of poor waste management	• Waste collection bins will be provided at strategic positions at the structure for temporary waste storage. The waste collection bins shall be provided with covers to avoid spillage by scavengers; • The waste bins shall be well labelled to enable segregation of the wastes • Coded litterbins shall be provided at the building with a provision for sorting the wastes according to their composition (biodegradable and non-biodegradable wastes) to allow activities of recycling and reuse.; and • Arrangements will be made to hire a certified waste collection company to transport the waste for final disposal to designated waste dumping sites approved by NEMA.	Throughout the operation phase	URA	Number and location of waste bins at the BP Labels on the waste bins Certificate of the licensed waste handler. Complaints from community on waste management	On a daily basis during the operation	URA MOWT
Pollution from waste water from human occupancy	• Well-designed plumbing system will be installed to collect all the wastewater from washrooms and toilets to the septic tanks for effective treatment and final disposal; • Ensure prompt emptying of the septic tanks once it's full to avoid overflow into the nearby environment causing pollution. • Routine quarterly maintenance should be done to ensure there are no leakages in the sewer system to ensure no seepage of waste water into the ground. • Periodic maintenance regime for the plumbing system will be put in place and implemented to	During operation phase	URA	Foul odour around the facility Ground water tests showing presence of ecoli. Records of quarterly checks for the sewer system.	Monthly during operation of the BP	URA

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	minimize the health risks associated with broken / malfunctioning system.					
Pressure on water consumption	• Installation of fixtures that restrict or control the flow of water for manual cleaning processes, as well as meters to monitor water use; • Use of high pressure rather than high volume horse pipes for cleaning surfaces; • Reporting and fixing water leaks promptly; • Good housekeeping as well as operator/employee and management awareness on water use costs and reduction efforts.	During operation phase	URA	Alternative water sources on site Water leakages visible on site Water consumption bills paid by occupants	On a daily basis during the operation	URA MOWT
Pressure on energy consumption ad control	• There is need for instituting energy saving techniques to bring down energy costs and shortage. • First; backups should be installed, automatic generator introduced *(UNRA should hand over the power infrastructure on site to URA)* and diverse energy sources should be applied like use of solar for lighting among others. • Conservation practices of switching off unwanted lights should be encouraged, centralizing energy connections for a central switch should be done where needed, automatic energy controllers and appliances used. • Windows and structural designs to be used should be those that enable use of daylight in the building. Meanwhile records should be kept for energy auditing to check progress regarding conserving and reducing wastages. In addition, • Make someone the Energy Champion of the establishment so they can allocate staff certain responsibilities, e.g. making sure lights are switched off they're not needed; • Involve staff. Let them help you to work out an action plan for making the BP more energy efficient and therefore more competitive;	Throughout operation phase	URA	Energy consumption bills paid by occupants. Energy use policy available Servicing records of equipment such as air conditioners and fridges	On a daily basis during the operation	URA

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• Use low energy light bulbs (Light Emitting Diodes - LED). Replace standard fluorescent tubes with slim line tubes; • Install movement detectors to control lighting in areas not in constant or frequent use, such as toilets; • Don't leave electrical equipment switched on or on standby mode for long periods when not in use; • Make sure there is adequate ventilation at the top and back of refrigeration equipment, and that the coils are cleaned regularly to remove dust and fluff. Energy consumption will increase if the heat cannot be dispersed; • When buying or leasing equipment, always ask about energy efficient models; • Have electrical fitting devices such as time-switches, thermostats, and photo-electric cells. This saves electricity by making sure it is only used when it is needed, or by controlling temperatures accurately; • Make sure motors are kept clean and have an air-flow free of rubbish or stored material; and • Monitor your progress and keep your energy					
Likelihood of fire outbreaks	• The proprietor will put in place a comprehensive fire plan to guide the occupants and users of the BP in case of fire outbreak; • All electrical wiring will be carried out by certified electricians in liaison with the developer; • There shall be installation and proper maintenance of firefighting equipment; • The building will be fitted with smoke detectors and fire alarms that should periodically be checked to ensure effective performance. • Management shall carry out annual fire drills to ensure evacuation plans are effective and are understood by all occupants; and	During operation phase	URA	Service of fire extinguishers up to date Record of fire drills done on site Record of trainings on fire emergencies Fire assembly point available at the site	Monthly and quarterly supervision	URA

Management				Monitoring		
Impact/ Aspect	**Mitigation /Enhancement Measures**	**Timeline**	**Responsibility**	**Targets/Parameters to Monitor**	**Frequency of Monitoring**	**Responsibility**
	• The premises shall also have permanently stationed security guards and lighting to ensure security against arson-associated fires. • Ensure the use of circuit breakers. • Training of the workforce in firefighting and emergency response shall be done by the developer to ensure quick response. • Designation of assembly points in case of fire hazards shall be done; • Regular oiling of machinery contacts to avoid fire sparks; and • Regulation and avoiding any fire contact with inflammable substances.					
Possibility of natural disasters	The new building will be equipped with modern lightning conductors/arrestors to handle any would be lightning strikes as is the case with the existing structures. Site geotechnical investigations have been undertaken and the results have proved that the site is suitable for development and free from natural faults that would cause weakening of the grounds subsequently causing giving away of the structures.	During operation phase	URA	Presence of lightning conductors on the structures.	Annually	URA
Likelihood of Collapse of structure	Use of standard and UNBS certified quality materials should be ensured. The services of credible building contractors will be put to use in addition to periodic testing of the concrete mixture through certified consultants and calling in inspections from qualified entities. If found lacking the contractor will be made to comply with the required standards or have the contract cancelled and a credible contractor taken on. Supervision of works will be undertaken by a certified firm, and the site Engineers should have membership of renowned certification agencies. Ensure not to exceed the stipulated loading onto the structure to avoid collapse.	During Construction and Operation	Contractor MOWT URA	Certification of materials used for construction Approval of building plans by relevant authorities Loading subjected onto the structures	Before and during construction phase During operation phase	URA MOWT

9.0 MAIN FINDINGS AND RECOMMENDATIONS

A number of environmental and social impacts will result from the establishment of this BP. Major issues of concern include; pollution due to dust, noise, oil leakages, sediments, increased storm water generation as a result of the paved surfaces, earthworks.

Sensitive issues have been identified, mitigation measures to address the issues recommended and an environmental management and monitoring plan suggested to allow best management practices within the construction and operation phases.

No alternative to the project was considered since the proposed development is suitable with the area land use and planning provisions however the project design was studied to ensure that it has put into consideration the safety and environmental aspects before execution of the project. Such included provisions for use by the physically handicapped, presence of fire escape routes, availability of adequate vehicle parking facilities commensurate with the commercial useable space available, provision for effective evacuation of generated wastewater, and suitability of the soil profile where to execute the project among others.

The area is characterised by institutional developments and other commercial undertakings as the proposed development which makes the project compliant with area land use and planning provisions. Guidance should be provided during the execution of the project as is the case on other establishments to ensure it complies with the engineering, environmental and regulatory planning provisions. The proposed commercial development is to be developed in an area zoned for mixed-use developments.

The project site is adequate enough to accommodate the proposed project in the current magnitude and general development safeguard measures have been proposed to ensure implementation of the project in harmony with the neighbourhood.

The proposed Mpondwe OSBP development process is environmentally and socially acceptable considering that this is a World Bank Category B project **("*Projects requiring environmental analysis*")** where the foreseen adverse impacts can easily be mitigated and the developer is committed to ensuring that implementation of this project does not cause injury to the environment. Care must be taken to ensure that the existing adjacent infrastructure including Police Station and barracks, highway to DRC and the community road behind the site to be developed is not interfered with and the best engineering practises are put to use.

The concerted view of the consultancy team is to allow the project to be implemented in the proposed way (design and magnitude) on condition that MOWT and the primary users implements the identified mitigation measures and undertakes to monitor all the key areas identified in the report.

10.0 References

1. The National Environment Act, 1995 revised 2019.
2. Environment Impact Assessment Guidelines, 1997.
3. Environment Impact Assessment Regulations, 1998
4. The National Environment (Waste Management) Regulations, 1999
5. The National Environment (Noise) Regulations, 2002
6. Kasese District Environment Profile, 1997. And District State of Environment Report, 2005
7. Environment Standards and Preliminary Environment Impact Assessment for Water Quality and Discharge of Effluent into Water and Land, 1998.
8. Occupational Safety and Healthy Act 2006.
9. Atlas of Uganda, 1967.
10. OSBP Architectural Plans.
11. The Gender Policy 1997, revised 2007.
12. World Bank Code of Conduct and Action Plan for ESHS and OHS standards.

11.0 Appendices

Appendix 1: Consultees contacted during the study

Appendix 2: Project Site Land Title

Appendix 3: Site Layout Plan & Architectural Drawings

Appendix 4: Cultural Resources Chance Finds Procedure

Appendix 5: Codes of Conduct and Action Plan for Implementing ESHS and OHS Standards, and Preventing Gender Based Violence and Violence Against Children

Appendix 6: Site Geotechnical Investigation Results

Appendix 7: Grievance Procedure Grievance Form

Appendix 1: Consultees contacted during the study

Consultees: TECHNICAL PERSONS

S/No.	Name	Designation	Frequency of meetings	Gender: Male/ Female
1	Eng. John Muhindo Zoze	Mpondwe Town Engineer	5	M
2	Muhindo Joachim	Mpondwe Health Inspector	2	M
3	Moses Mugisa	Mpondwe Town Clerk	5	M
4	Mwanje J.	O/C POLICE	1	M
5	Fred Sabiiti	Uganda Revenue Authority Mpondwe	3	M
6	Sylvester Kiwanuka	Manager URA, Mpondwe	2	M
7	Abel Gulu	Uganda Revenue Authority Mpondwe	2	M
8	Masika Malima Ruth	Community Development Office	4	M
9	Bob Mugisha	External Security, Mpondwe	1	M
10	Arthur Kale	BISO – Security	1	M
11	Masika Patience	Community Dev. Office; Mpondwe Lhubiriha TC	4	M
12	Alinaitwe Juliet	Community Development Office	4	F
13	Katuura	CMI – State House	1	M
14	Alice Biira	Community Development Office	1	F
15	Nayiga Najuma	Environment Officer	1	F
16	Spencer Birungi	Immigration Officer	4	M

POLITICAL TEAM

S/No.	Name	Designation	Frequency of meetings	Gender: Male/ Female
1	Kinyonyi T. Francis	LC1 Chairman Kisaka 1	2	M
2	Riisa Magezi	Kambukamabwe 2 Cell	2	M
3	Muhindo Jean Pierre	Kabuyiiri 1 Cell	1	M
4	Masereka Yona	Upper Customs	3	M
5	Baluku Moses	Lower Customs	3	M
6	Mbusa Bumenze	Kambukamabwe LC2	2	M
7	Obed Karisha	Kabuyiri Ward	1	M
8	Kambasu Josephat	Nyakahya Ward	2	M
9	Zephanasi Mukababerwa	Clerk to Council	3	M
10	Mapozi Silvester	Mondwe Lhubiriha Town Council	1	M

PRIVATE SECTOR

S/No.	Name	Institution / Organisation	Frequency of meetings	Gender: Male/ Female
1	Biira Juliet	Insight Ecotourism Information Centre	1	F
2	Bwambale Zadoki	DOS Senior Teacher (History/ Geography)	3	M
3	Twinamasiko Vincent	Mpondwe Business community	1	M
4	Byaruhanga Abrahim	Mpondwe Business community	1	M
5	Mbambu Jacqueline	Trader and Leader PWDs	2	F
6	Mbusa Bumenze	Water Technician Mpondwe Town Council	3	M
7	Lois Masika	Business community	2	F
8	Mrs Masereka Alice	Community leader, Mother	2	F
9	Mrs Baluku oliver	Business community	2	F

PRIVATE SECTOR

S/No.	Community Based Organisations (CBOs)/ NGOs	Number of times met
1	KIKWARA CUSTOMS WOMEN UNITED GRP -------(5 females)	2
2	ABASUBULI ABESYANGOKO THUMINYA WOMEN GRP ------- (6 females)	1
3	MPONDWE LHUBIRIHA MARKET TRADERS ASSOCIATION -------(10 females)	1
4	KARAMBI GROUP OF PEOPLE WITH DISABILITIES -------(1 male and 2 females)	2
5	KARAMBI GROUP OF PEOPLE WITH DISABILITIES -------(2 males)	3
6	MPONDWE LHUBIRIHA MARKET LOADRERS AND OFFLOADERS ASSOCIATION -------(8 males)	1
7	ALISAMU TUSOKERE OBUKULILO ASSOCIATION -------(4 females)	1

Appendix 1.1: Attendance List of Site Meeting No. 1 with Stake Holders

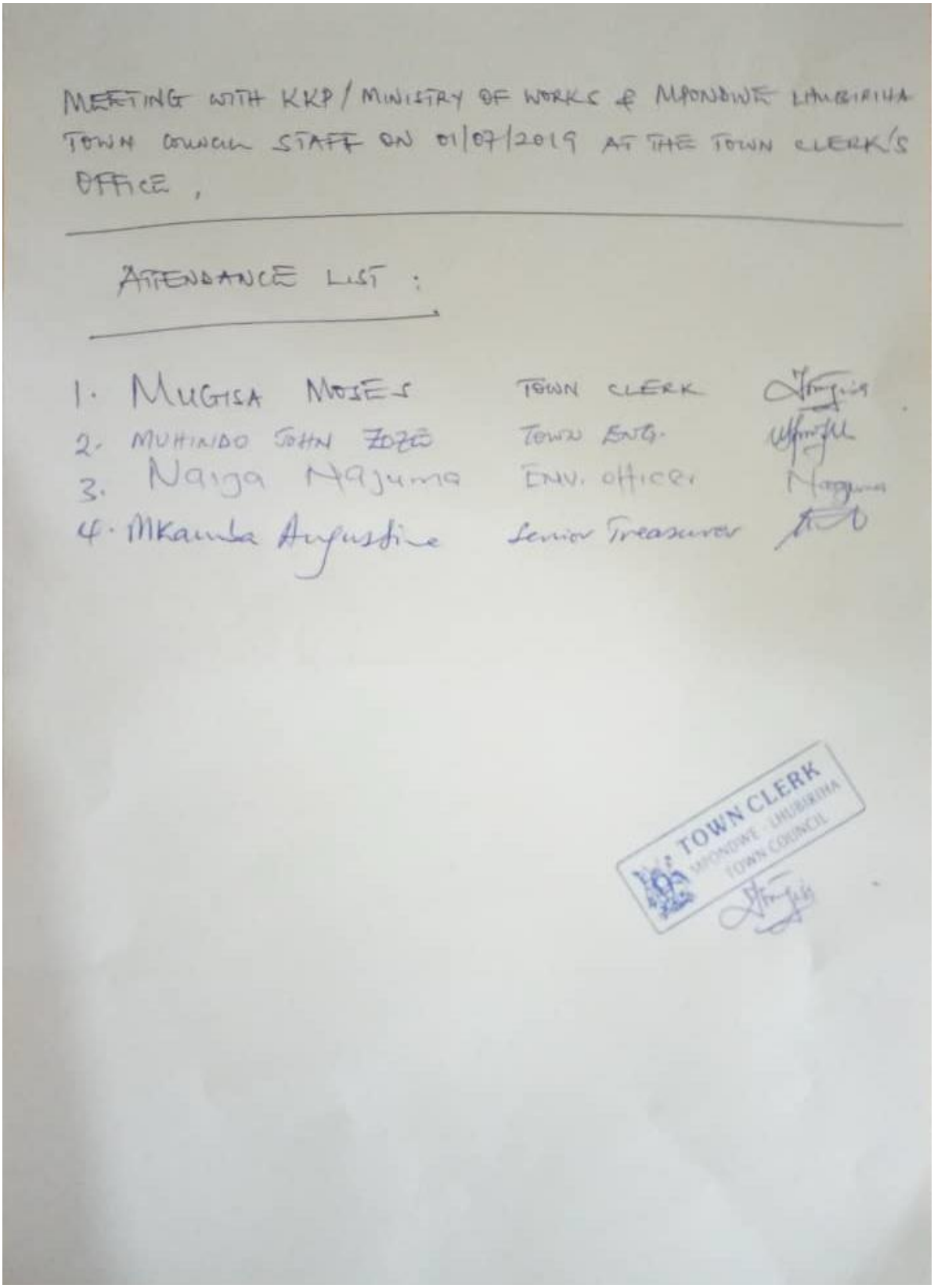
CONSULTANCY SERVICES FOR DESIGN, DOCUMENTATION AND CONSTRUCTION SUPERVISION OF THE PROPOSED BORDER FACILITIES AT MPONDWE AND BUNAGANA BORDER POSTS; PROCUREMENT REFERENCE NO.; MOWT/CONS/17-18/00333

Date: ……18th…JUNE 2019

SITE ~~HANDOVER~~ WIT MEETING WITH STAKEHOLDERS NO. 01

S/N	Name	Position/ Organization	Telephone	Email	Signature
	KabananuKYE Ishmaels	Soc-Economist	0772413022	KabananuKye@gmail.com	[signature]
	DR. DOSSY OWAMUGASHO	TRADE SPECIALIST	0772 726803	dowomugisho@gmail.com	[signature]
	Aryagaruka Martin	Environmental Specialist	0772523728	Martinaryagaruka@gmail.com	[signature]
	Kiwanuka Sylvester	Uganda Revenue Authority	0776503879	skiwanuka@ura.go.ug	[signature]
	Spencer Binya	DCIC	0775417801	spander@live.com	[signature]
	Mrs M. Katuure	In charge o/c Mpondwe	0392966758		[signature]
	MPORA EDWIN	BISO MPONDWE	0782823546	edwinmpora@gmail.com	[signature]
	Gulu Abel	Uganda Revenue Authority	0772140923	agulu@ura.go.ug	[signature]
	Mugisha BOB	BLO Mpondwe	0703135688	musiimonyasiimo@gmail.com	[signature]
	ASP Mwanga James H	OC police Mpondwe / Uganda Police	0772503990	mwangaherbert@yahoo.com	[signature]
	MUHINDO ERIC	TIDO	0777548969	emuhindok@gmail.com	[signature]
	MUGISA MISAKI	C-I MPONDWE	0772863998	[illegible]	[signature]
	BRENDAH M. DUSHIME	Trainee Electrical engineer	0414232836	multikonsults@multikonsults.com	[signature]
	MUSUBIRE VINCENT	Mechanical Engineer	0772435344 / 0414341321	multikonsult@multikonsults.com / Musubire@multikonsults.com	[signature]
	BUKENYA NULUDIN	Civil/Structural Eng	0702817306	nuludinbukenya@yahoo	[signature]
	Masereko Festo	Fisheries Officer	0789024113	Masereko.festo@gmail.com	[signature]
	Job Mwanyasi	QS UPA	0772466578	cronung@gmail.com	[signature]
	Lwalaza Charles	MK Partnership Architects	0756903288	lwalazac@gmail.com	[signature]
	SABIITI FRED	URA-Station Head	0772141005	fsabiiti@ura.go.ug	[signature]

Appendix 1.2: Attendance List of Meeting with Mondwe Lhubiriha Town Council Staff



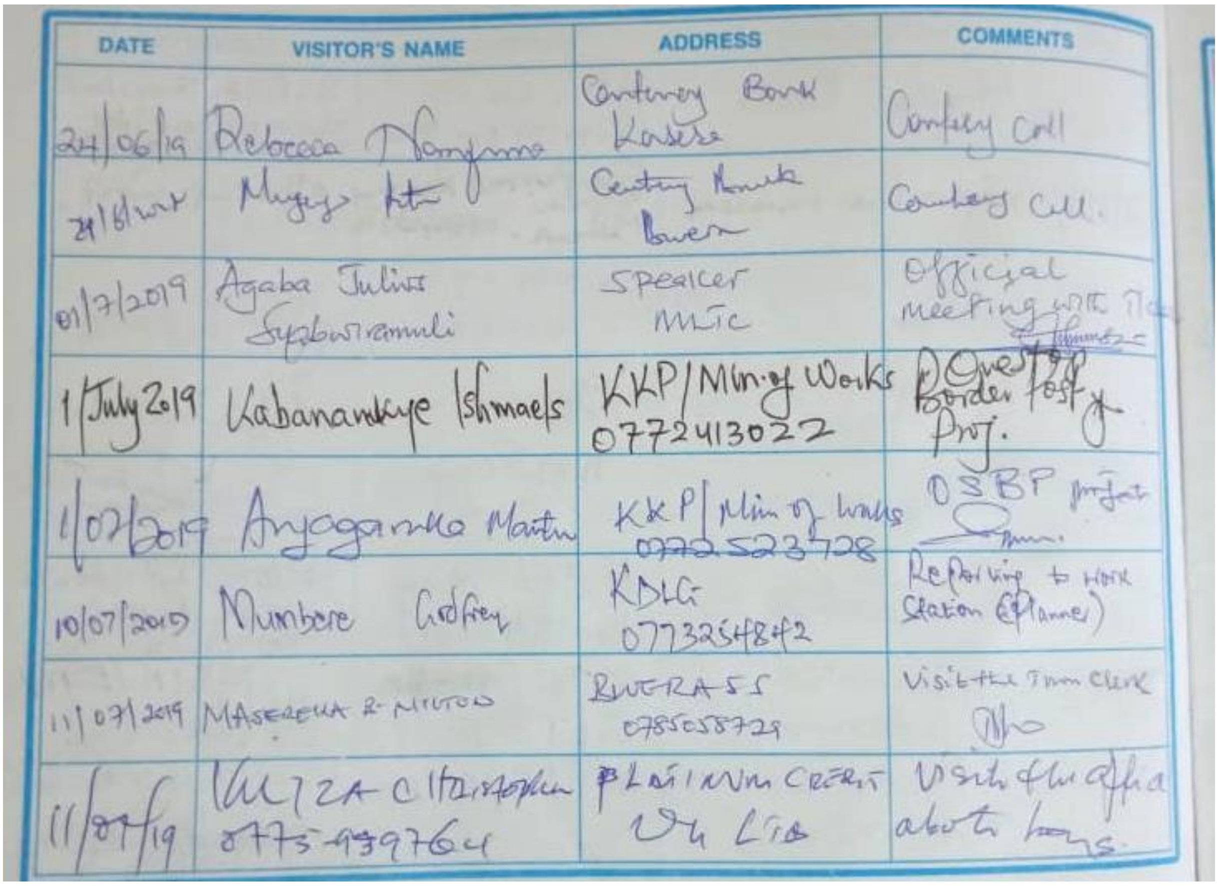
MEETING WITH KKP / MINISTRY OF WORKS & MPONDWE LHUBIRIHA TOWN COUNCIL STAFF ON 01/07/2019 AT THE TOWN CLERK'S OFFICE,

ATTENDANCE LIST:

1.	MUGISA MOSES	TOWN CLERK	
2.	MUHINDO JOHN ZOZO	TOWN ENG.	
3.	Naiga Najuma	ENV. officer	
4.	Mkamba Augustine	Senior Treasurer	

TOWN CLERK
MPONDWE - LHUBIRIHA
TOWN COUNCIL

Appendix 1.3: Visitors Book at Mondwe Lhubiriha Town Council Staff



DATE	VISITOR'S NAME	ADDRESS	COMMENTS
24/06/19	Rebecca [illegible]	Century Bank Kasese	Century Cell
24/6/2019	[illegible]	Century Bank [illegible]	Century Cell.
01/7/2019	Agaba Julius Syabwiramuli	Speaker MTC	Official meeting with the [illegible]
1 July 2019	Kabanankye Ishmaels	KKP/Min. of Works 0772413022	One Stop Border Post Proj.
1/07/2019	Anyogamike Martin	KKP / Min of Works 0772523728	OSBP project
10/07/2019	Mumbere Godfrey	KDLG 0773254842	Reporting to work Station (Planner)
11/07/2019	MASERERA R. MILTON	RWERASS 0785058729	Visit the Town Clerk
11/07/19	KIIZA Christopher 0775 939764	PLATINUM CREDIT Ug Ltd	Visit the office about loans.

Appendix 2: Project Site Land Title

SD 5600

(15) 5000 PAGE 1 OF 3

LO. REF. LWK/2809

MINUTE REF. KDLB. MIN NO, 19/1999(A)(22) of 14/7/1999

UGANDA

THE REGISTRATION OF TITLES ACT.

LEASE BY DISTRICT LAND BOARD

UGANDA REVENUE AUTHORITY
INTERNAL REVENUE DEPARTMENT
31 AUG 2005
EMBOSSING OFFICER
STAMP DUTY SECTION

This Lease made the day of the year 5637

under and subject to the Land Act and rules made/saved thereunder

BETWEEN KASESE DISTRICT LAND BOARD a body incorporated by the Land Act (hereinafter called "the Lessor") of the one part, and UGANDA REVENUE AUTHORITY of P.O.Box 7279, Kampala (hereinafter called "the Lessee/s") of the other part. WITNESSETH as follows:—

1. In consideration of the sum of Shillings two hundred thousand (Shs. 200,000/-) paid to the Lessor by the Lessee/s on or before the execution of these presents (the receipt whereof the Lessor doth hereby acknowledge) and also in consideration of the rent hereby reserved and of the covenants and conditions hereinafter contained on the part of the Lessee/s to be observed and performed, the Lessor hereby demises unto the Lessee/s ALL THAT piece of land ~~in the Municipality/Township of~~ and known as Bukonjo Block 26 Plot 29 measuring approximately 2.04 hectares as the same is more particularly delineated on the plan annexed hereto and thereon edged with red (hereinafter called "the said land") TO HOLD the same unto the Lessee/s ~~(as joint tenants/tenants in common in~~) for the term of 49 years ~~and~~ ~~months~~ from the 1st day of July the year 2005 YIELDING AND PAYING therefor during the said term the yearly rent of Shillings twenty thousand (Shs. 20,000/-) payable by two equal half-yearly payments in advance on the first day of January and the first day of July in every year.

2. THE LESSEE/S HEREBY ~~JOINTLY AND SEVERALLY~~ COVENANT/S with the Lessor as follows namely:

UGANDA REVENUE AUTHORITY
INTERNAL REVENUE DEPARTMENT
RELEASE
DUTY SECTION

(a) to observe and perform all the conditions and covenants implied by law in this lease or otherwise herein contained or referred to.

(b) to ~~erect~~ maintain on the said land the existing buildings (hereinafter called "the said buildings") ~~of a value of not less than Shillings~~ in good and tenantable repair throughout the term hereby granted fair wear and tear excepted ~~(Shs.~~ ——) in accordance with plans and specifications which shall be approved by the Lessor.

J. Kuraiwe Museri

4. When the Lessee/s shall have complied with the building covenant herein and if there shall not at the time be any existing breach or non-observance on the part of the Lessee/s of any of the covenants and conditions in this lease whether expressed or implied the said term shall be enlarged to years and months from the said day of the year automatically and this lease shall thenceforth be read and construed as if the said term of years and months had been originally granted hereby.

IN WITNESS WHEREOF the common Seal of ~~the~~ Its Lessor has hereunto been affixed and the Lessee/s has/have ~~hereunto set his/her /their hand/s~~ caused ~~his/her/their~~ common Seal to be affixed hereto the day and year first above written.

The COMMON SEAL of the Lessor KASESE DISTRICT LAND BOARD
hereunto affixed in the presence of us:—

Inst. No 357871 — PROCEED / REJECT
Lodged for Registration at 8:17 A.M./P.M. on 5:9 2005 — C18

5/9/05 .... Chairman

.... Secretary

THE COMMON SEAL of the said UGANDA REVENUE AUTHORITY ~~SIGNED by the said~~ was hereunto affixed

in the presence of:—

AUTHORISED WITNESS:—

~~Name~~ ALLEN KAGINA

~~Address~~ ....

~~Occupation~~ J. SEMAKULA MUSISI

.... COMMISSIONER GENERAL

J. Semakula Musisi .... BOARD SECRETARY

DRAWN BY:—
The Government Conveyancer,
Office of Titles,
P.O. Box 7061,
Kampala.

CERTIFIED Memorial of the instrument registered in
INV 2430
FO 5
COMMISSIONER LAND REGISTRATION
5/9/05

Printed by Uganda Printing and Publishing Corporation

THE REPUBLIC OF UGANDA

LEASEHOLD REGISTER

Volume 3430 Folio 5

REGISTRATION OF TITLES ACT

CERTIFICATE OF TITLE

DESCRIPTION OF LAND

The Leasehold land edged red on the plan attached hereto and situate and known as follows:—

PLOT
Street Number: 29
Road Name: BUKONJO BLOCK 26
Township/Municipality/City: AT MPONDWE CUSTOMS
District: KASESE Area: APPROX. 2.04 HECTARES

TERM from 1ST JULY 2005 for 49------ years and ~~months~~ at the rent and subject to the covenants and conditions contained or implied in Lease Number bound up herewith and to the incumbrances (if any) entered in the Incumbrance Register.

Easements

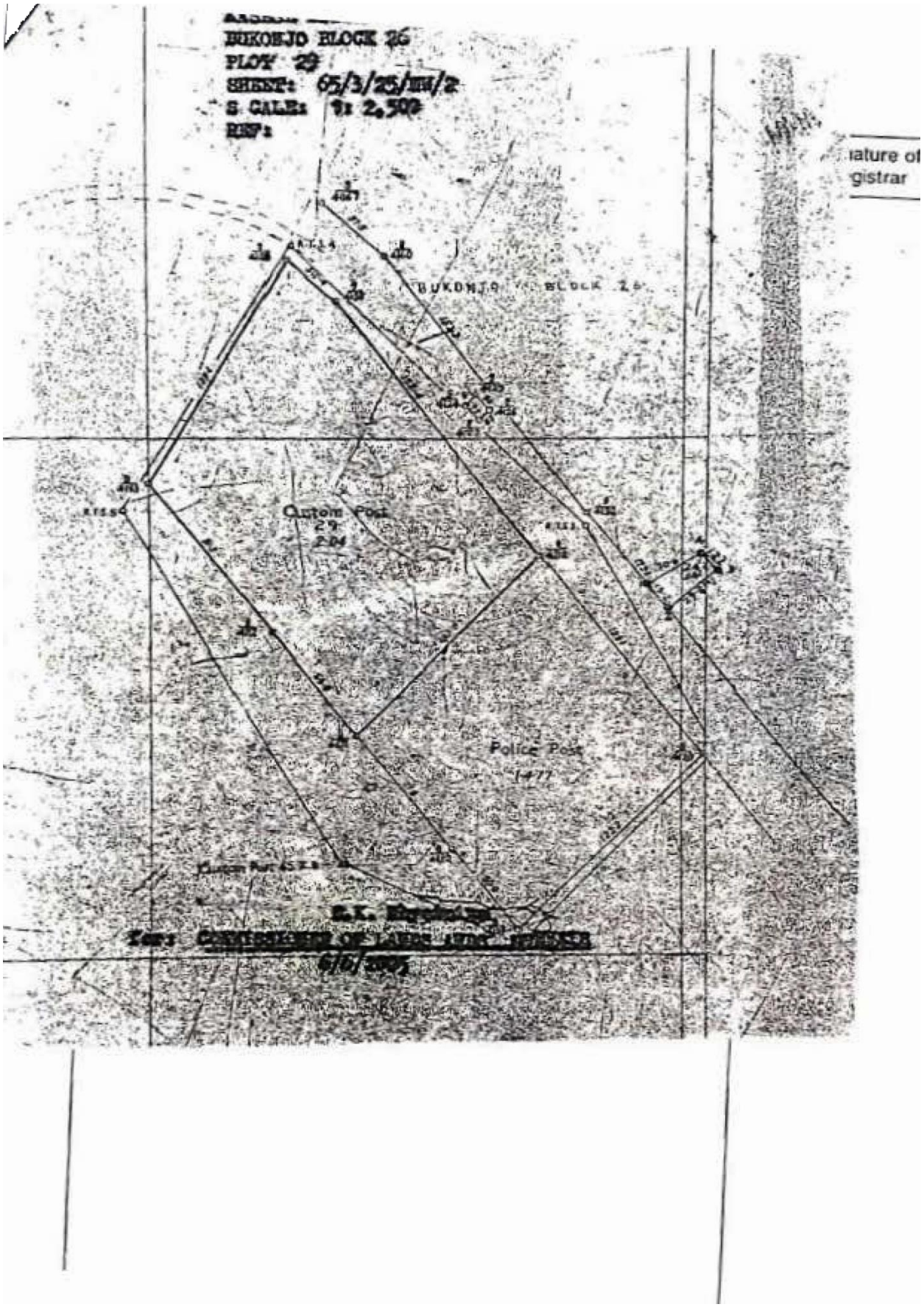
PROPRIETORSHIP

Date, time and Inst. No.	Name and Address of Proprietor	Signature of Registrar
REGD. 5.9.05 AT. 3.17 A.M INST. 357871	UGANDA REVENUE AUTHORITY OF P.O.Box 7279, KAMPALA	Registrar of Titles

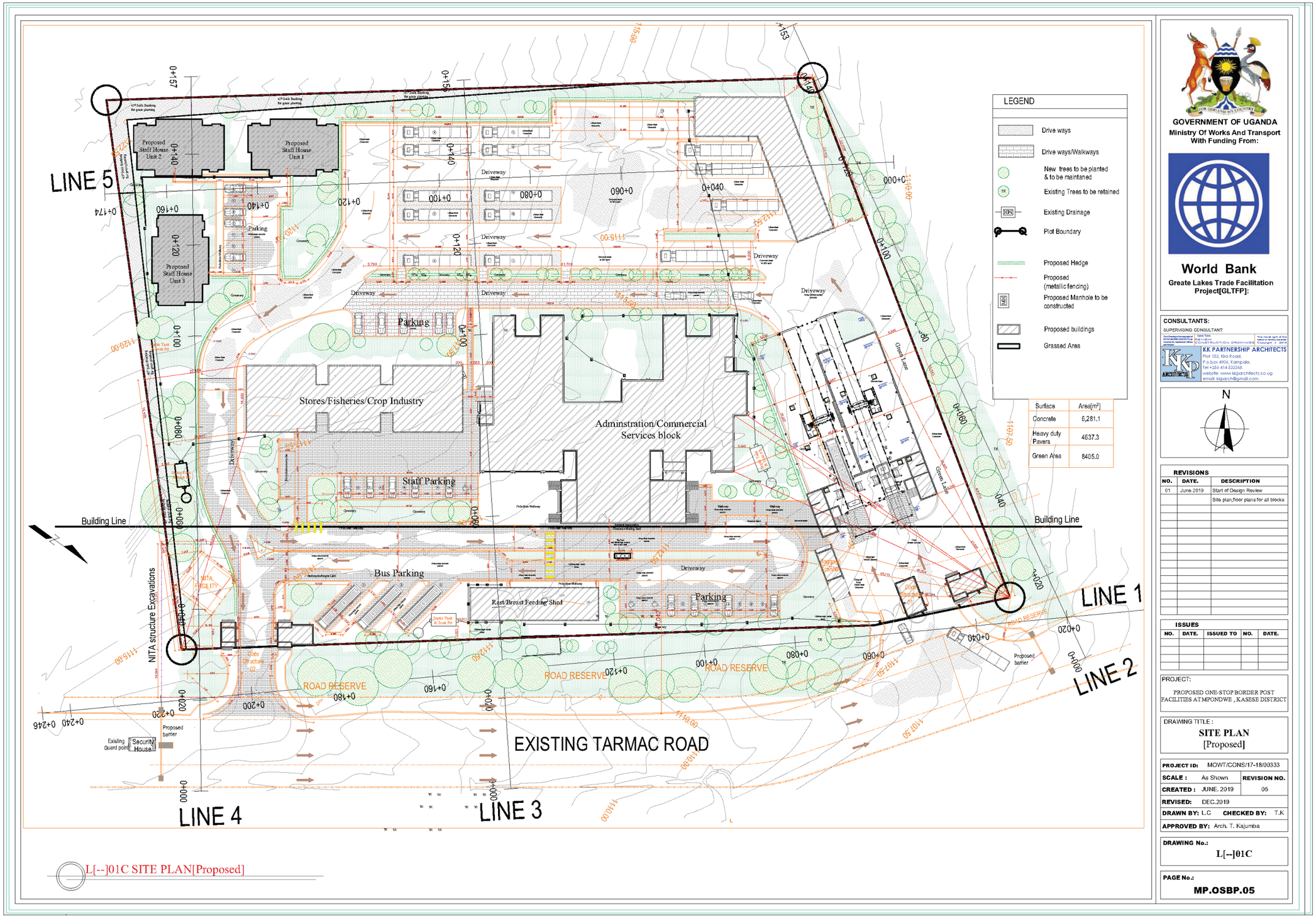
Date of issue: 5TH SEPTEMBER 2005

Registrar of Titles.

Owner's Copy


BUKOMJO BLOCK 26
PLOT 29
SHEET: 65/3/25/III/2
SCALE: 1: 2,500
REF:
Custom Post
29
204
Police Post
1477

Appendix 3: Site Layout Plan



L[--]01C SITE PLAN[Proposed]

GOVERNMENT OF UGANDA
Ministry Of Works And Transport
With Funding From:

World Bank
Greate Lakes Trade Facilitation Project[GLTFP]:

CONSULTANTS:
SUPERVISING CONSULTANT:
KK PARTNERSHIP ARCHITECTS
Plot 153, Kira Road,
P.o.box 4906, Kampala.
Tel +256 414 533368.
website: www.kkparchitects.co.ug
email: kkparch@gmail.com.

REVISIONS		
NO.	DATE.	DESCRIPTION
01	June 2019	Start of Design Review
		Site plan,floor plans for all blocks

ISSUES				
NO.	DATE.	ISSUED TO	NO.	DATE.

PROJECT:
PROPOSED ONE-STOP BORDER POST FACILITIES AT MPONDWE , KASESE DISTRICT

DRAWING TITLE :
SITE PLAN
[Proposed]

PROJECT ID:	MOWT/CONS/17-18/00333		
SCALE :	As Shown	REVISION NO.	
CREATED :	JUNE. 2019	05	
REVISED:	DEC.2019		
DRAWN BY:	L.C	CHECKED BY:	T.K
APPROVED BY:	Arch. T. Kajumba		

DRAWING No.:
L[--]01C

PAGE No.:
MP.OSBP.05

Appendix 4: Cultural Resources Chance Finds Procedure

CHANCE FINDS PROCESURE

1. DEFINITIONS AND ABBREVIATIONS

MOWT	Ministry of Works and Transport
CM	Contractor Manager.
LC	Local Council
IFC	International Finance Corporation
Cultural Heritage Property	Movable or immovable objects, sites, structures, groups of structures and unusual natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance. Physical cultural resources may be located in urban or rural settings and may be above or below the ground or under water. Their cultural interest may be at the local, provincial or national level or within the international community.

2. PURPOSE

The purpose of this procedure is to ensure the protection of sacred sites and underground cultural heritage property within the project area including potential archaeological finds discovered during the construction phase of the OSBP project.

3. POLICY, LEGALAND REGULATORY FRAMEWORK.

No	Title
1.	Uganda Historical Monuments Act (Cap 46)
2.	The Uganda National Culture Policy 2006.
3.	WB Operational Manual -OP4.11 Physical Cultural Resources.
4.	IFC Performance Standard 8 Cultural Heritage.
5.	The Uganda Constitution

4. ROLES AND RESPONSIBILITY.

MOWT and contractor personnel operating within Mpondwe OSBP project are responsible for the application of this procedure.

(a) Ministry of Works and Transport

MOWT guarantees the availability of the economic, human and technical resources needed to ensure that cultural property resources are preserved and protected.

(b) Contactor Firm.

It is the responsibility of the manager of the company contracted to build the OSBP to ensure that during excavation and construction of the OSBP, all discovered cultural heritage property is preserved.

(c) Contractor Supervisors.

The supervisors are the competent persons acting for the Contractor Firm. They are the technicians who supervise the excavations and other construction works. They must report to The Contractor Manager (CM) any discovered archaeological finds.

(d) Foremen.

These report to the supervisors and lead the workers in carrying out their duties.

(e) Workers.

These carry out the tasks as directed by their foremen.

5. ARCHAEOLOGICAL ARTEFACTS and CULTURAL CHANCE FINDS.

During the period of the construction of the project infrastructure which involves excavations, it is possible that chance finds will be encountered. These may include the following:

- Archaeological heritage which has remained unnoticed in the past;
- An encounter with a grave containing human remains which the local residents may have not mentioned at the survey stage; and
- An encounter with a sacred site which was not mentioned at the survey stage.

In order to avoid potential damage to cultural property discovered during construction, the following will apply:

a) Workers must be vigilant to any relics found during excavation. In case of a discovery during the excavation, workers must immediately report the findings to the foreman;
b) The Foreman must stop the work immediately and communicate the findings to the Supervisor;
c) The supervisor then communicates the findings to the Contractor Manager;
d) The Contractor Manager then notifies MOWT headquarters;
e) The Department of Museums and Monument of Uganda will then be notified either via communicating with the MOWT via telephone or email or based on a site visit within 14 days from the time of discovery;
f) Any further excavations or continuation of the infrastructure development at the Site of the discovered heritage will be undertaken only with the approval of the Department of Museums and Monuments;
g) Should the Conservator of Antiquities from the Department of Museums and Monuments confirm that the discovered resource falls within the heritage resource description, he/she will report the resource to the Minister of Tourism, Heritage and Antiquities for preservation and protection. Rescue excavation or in-situ conservation will be proposed based on the disturbance likely to be caused by the project or in relation to cost versa via value of the heritage resource;
h) The MOWT will then apply for either an excavation or preservation in-situ license of the discovered resource. The feasible proposal will then be executed. In case of in-situ conservation, the site will be managed and open to the communities and tourists that access the project area; and
i) All chance finds will be recorded in the chance find form.

The project activities will then continue after the following have taken place:

- In the case of archaeological artefacts discovery, MOWT will inform the Uganda Museum and grant a period where specialists from the Department of Museums and Monuments excavate and curate the artefacts professionally;
- In the case of discovered human remains the police will have to be notified and either the remains are taken for forensic investigation or the LCI authorities sanction the burial of the remains at another location. The Contractor then meets the relocation and reburial expenses;
- In the case of an encounter with an unknown sacred site, relocation ceremonies will be undertaken by the custodians of the site and the contractor then meets the relocation expenses.

Next Page is the Chance Finds Report Form

CHANCE FINDS REPORT FORM

Report Reference	

Initial Detail

Location of Find:	Date of Find:	Person who identified find:

GPS coordinates	Zone:	X.	Y.
Multiple coordinates in case of a polygon: 1. 2. 3. 4.			

Description of initial find:

Photo Record: Insert at least one Jpeg photo as example of cultural heritage site.

Was work stopped in the immediate vicinity of the find?	Yes No

Was an archaeologist from the Department of Museums and Monuments contacted?	Yes? No
If yes, state the name of the reporting archaeologist?	

Statement of Significance (scientific, spiritual, historic, aesthetic and emotive):

Detailed Description of Find: (e.g. approximate size of site (area, length, height), description of site and vegetation, description artefacts and number amongst others)

Is site destroyed?	□ Yes □ No
Can further impacts to the chance find be avoided?	□ Yes □ No
Avoidance and mitigation measures discussed: Outline the different avoidance and mitigation measures discussed.	

impact to find (avoidance and mitigation outcome): Outline the course of action taken and the reason for choosing these measures.

Date completed form lodged:	Person who lodged form:	Signature:

Report form verified and validated by Environment Department. Name: Position: Date: Signature:

Appendix 5: Codes of Conduct and Action Plan for Implementing ESHS and OHS Standards, and Preventing Gender Based Violence and Violence Against Children

1. Background

The purpose of these Codes of Conduct and Action Plan for Implementing ESHS and OHS Standards, and Preventing Gender Based Violence (GBV) and Violence Against Children (VAC) is to introduce a set of key definitions, core Codes of Conduct, and guidelines that:

i. clearly define obligations on all project staff (including sub-contractors and day workers) with regard to implementing the project's environmental, social, health and safety (ESHS) and occupational health and safety (OHS) requirements, and;

~~i.~~ii. help prevent, report and address GBV and VAC within the work site and in its immediate surrounding communities.

The application of these Codes of Conduct will help ensure the project meets its ESHS and OHS objectives, as well as preventing and/or mitigating the risks of GBV and VAC on the project and in the local communities.

These Codes of Conduct are to be adopted by those working on the project and are meant to:

i. create awareness of the ESHS and OHS expectations on the project;
ii. create common awareness about GBV and VAC and:
   (a) ensure a shared understanding that they have no place in the project; and,
   (b) create a clear system for identifying, responding to, and sanctioning GBV and VAC incidents.

Ensuring that all project staff understand the values of the project, understand expectations for all employees, and acknowledge the consequences for violations of these values, will help to create smoother, more respectful and productive project implementation thereby helping ensure that the project's objectives will be achieved.

2. Definitions

The following definitions apply:

Environmental, Social, Health and Safety (ESHS): an umbrella term covering issues related to the impact of the project on the environment, communities and workers.

Occupational Health and Safety (OHS): Occupational health and safety is concerned with protecting the safety, health and welfare of people engaged in work or employment. The enjoyment of these standards at the highest levels is a basic human right that should be accessible by each and every worker.

Gender-Based Violence (GBV): is an umbrella term for any harmful act that is perpetrated against a person's will and **that is based on socially ascribed (i.e. gender) differences between males and females**. It includes acts that inflict physical, sexual or mental harm or suffering, threats of such acts, coercion, and other deprivations of liberty. These acts can occur in public or in private. The term GBV is used to underscore systemic inequality between males and females (which exists in every society in the world) and acts as a unifying and foundational characteristic of most forms of violence perpetrated against women and girls. The 1993 United Nations

Declaration on the Elimination of Violence against Women defines violence against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women."[1] The six core types of GBV are:

- **Rape**: non-consensual penetration (however slight) of the vagina, anus or mouth with a penis, other body part, or an object.
- **Sexual Assault**: any form of non-consensual sexual contact that does not result in or include penetration. Examples include: attempted rape, as well as unwanted kissing, fondling, or touching of genitalia and buttocks.
    - **Sexual Harassment:** is unwelcome sexual advances, requests for sexual favours, and other verbal or physical conduct of a sexual nature. Sexual harassment is not always explicit or obvious, it can include implicit and subtle acts but always involves a power and gender dynamic in which a person in power uses their position to harass another based on their gender. Sexual conduct is unwelcome whenever the person subjected to it considers it unwelcome (e.g. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; in some instances, giving personal gifts).
    - ***Sexual Favours***: is a form of sexual harassment and includes making promises of favourable treatment (e.g. promotion) or threats of unfavourable treatment (e.g. loss of job) dependent on sexual acts—or other forms of humiliating, degrading or exploitative behaviour.
- **Physical Assault**: an act of physical violence that is not sexual in nature. Examples include: hitting, slapping, choking, cutting, shoving, burning, shooting or use of any weapons, acid attacks or any other act that re*sults* in pain, discomfort or injury.
- **Forced Marriage**: the marriage of an individual against her or his will.
- **Denial of Resources, Opportunities or Services:** denial of rightful access to economic resources/assets or livelihood opportunities, education, health or other social services (e.g. a widow prevented from receiving an inheritance, earnings forcibly taken by an intimate partner or family member, a woman prevented from using contraceptives, a girl prevented from attending school, etc.).
- **Psychological / Emotional Abuse:** infliction of mental or emotional pain or injury. Examples include: threats of physical or sexual violence, intimidation, humiliation, forced isolation, stalking, harassment, unwanted attention, remarks, gestures or written words of a sexual and/or menacing nature, destruction of cherished things, etc.

Violence Against Children (VAC): is defined as physical, sexual, emotional and/or psychological harm, neglect or negligent treatment of minor children (i.e. under the age of 18), including exposure to such harm,[2] that results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship

[1] It is important to note that women and girls disproportionately experience violence; overall 35 percent of women worldwide have faced physical or sexual violence (WHO, Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence, 2013). Some men and boys also face violence based on their gender and unequal power relationships.

[2] Exposure to GBV is also considered VAC.

of responsibility, trust or power. This includes using children for profit, labour[3], sexual gratification, or some other personal or financial advantage. This also includes other activities such as using computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography.

Grooming: are behaviors that make it easier for a perpetrator to procure a child for sexual activity. For example, an offender might build a relationship of trust with the child, and then seek to sexualize that relationship (for example by encouraging romantic feelings or exposing the child to sexual concepts through pornography).

Online Grooming: is the act of sending an electronic message with indecent content to a recipient who the sender believes to be a minor, with the intention of procuring the recipient to engage in or submit to sexual activity with another person, including but not necessarily the sender.[4]

Accountability Measures: are the measures put in place to ensure the confidentiality of survivors and to hold contractors, consultants and the client responsible for instituting a fair system of addressing cases of GBV and VAC.

Contractors Environmental and Social Management Plan (CESMP): the plan prepared by the contractor outlining how they will implement the works activities in accordance with the project's environmental and social management plan (ESMP).

Child: is used interchangeably with the term 'minor' and refers to a person under the age of 18. This is in accordance with Article 1 of the United Nations Convention on the Rights of the Child.

Child Protection (CP): is an activity or initiative designed to protect children from any form of harm, particularly arising from VAC.

Consent: is the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained through the use of threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even in the event that national legislation of the country into which the Code of Conduct is introduced has a lower age.[5] Mistaken belief regarding the age of the child and consent from the child is not a defence.

Consultant: is as any firm, company, organization or other institution that has been awarded a contract to

[3] The employment of children must comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's safeguard policies on child labor and minimum age. They must also be able to meet the project's Occupational Health and Safety competency standards.

[4] For example, the Vanuatu Criminal Code Act 1995, Division 474 (telecommunications offences, subdivision C).

[5] For example, under Article 97 Criminal consolidation act for age of legal consent in Vanuatu, sexual activity with any child under the age of 15 years for heterosexual conduct and 18 years for same sex conduct is prohibited (http://tinyurl.com/vu-consent). However, the World Bank follows the United Nations for the age of consent (18 years) so this applies on World Bank financed projects.

provide consulting services to the project, and has hired managers and/or employees to conduct this work.

Contractor: is any firm, company, organization or other institution that has been awarded a contract to conduct infrastructure development works for the project and has hired managers and/or employees to conduct this work. This also includes sub-contractors hired to undertake activities on behalf of the contractor.

Employee: is any individual offering labour to the contractor or consultant within country on or off the work site, under a formal or informal employment contract or arrangement, typically, but not necessarily (e.g. including unpaid interns and volunteers), in exchange for a salary, with no responsibility to manage or supervise other employees.

GBV and VAC Allegation Procedure: is the prescribed procedure to be followed when reporting incidents of GBV or VAC.

GBV and VAC Codes of Conduct: The Codes of Conduct adopted for the project covering the commitment of the company, and the responsibilities of managers and individuals with regards to GBV and VAC.

GBV and VAC Compliance Team (GCCT): a team established by the project to address GBV and VAC issues.
Grievance Redress Mechanism (GRM): is the process established by a project to receive and address complaints.

Manager: is any individual offering labour to the contractor or consultant, on or off the work site, under a formal or informal employment contract and in exchange for a salary, with responsibility to control or direct the activities of a contractor's or consultant's team, unit, division or similar, and to supervise and manage a pre-defined number of employees.

Perpetrator: the person(s) who commit(s) or threaten(s) to commit an act or acts of GBV or VAC.

Response Protocol: is the mechanisms set in place to respond to cases of GBV and VAC (see Section 4.7 Response Protocol).

Survivor/Survivors: the person(s) adversely affected by GBV or VAC. Women, men and children can be survivors of GBV; children can be survivors of VAC.

Work Site: is the area in which infrastructure development works are being conducted, as part of the project. Consulting assignments are considered to have the areas in which they are active as their work sites.

Work Site Surroundings: is the 'Project Area of Influence' which are any area, urban or rural, directly affected by the project, including all human settlements found on it.

3. Codes of Conduct

This chapter presents three Codes of Conduct for use:

i) **Company Code of Conduct:** Commits the company to addressing GBV and VAC issues;

ii) **Manager's Code of Conduct:** Commits managers to implementing the Company Code of Conduct, as well as those signed by individuals; and,

iii) **Individual Code of Conduct:** Code of Conduct for everyone working on the project, including managers.

Company Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender Based Violence and Violence Against Children

The company is committed to ensuring that the project is implemented in such a way which minimizes any negative impacts on the local environment, communities, and its workers. This will be done by respecting the environmental, social, health and safety (ESHS) standards, and ensuring appropriate occupational health and safety (OHS) standards are met. The company is also committed to creating and maintaining an environment in which gender-based violence (GBV) and violence against children (VAC) have no place, and where they will not be tolerated by any employee, sub-contractors, supplier, associate, or representative of the company.

Therefore, to ensure that all those engaged in the project are aware of this commitment, the company commits to the following core principles and minimum standards of behaviour that will apply to all company employees, associates, and representatives, including sub-contractors and suppliers, without exception:

General

1. The company—and therefore all employees, associates, representatives, sub-contractors and suppliers—commits to complying with all relevant national laws, rules and regulations.
2. The company commits to full implementing its 'Contractors Environmental and Social Management Plan' (CESMP).
3. The company commits to treating women, children (persons under the age of 18), and men with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. Acts of GBV and VAC are in violation of this commitment.
4. The company shall ensure that interactions with local community members are done with respect and non-discrimination.
5. Demeaning, threatening, harassing, abusive, culturally inappropriate, or sexually provocative language and behaviour are prohibited among all company employees, associates, and its representatives, including sub-contractors and suppliers.
6. The company will follow all reasonable work instructions (including regarding environmental and social norms).
7. The company will protect and ensure proper use of property (for example, to prohibit theft, carelessness or waste).

Health and Safety

8. The company will ensure that the project's occupational health and safety (OHS) Management Plan is effectively implemented by company staff, as well as sub-contractors and suppliers.
9. The company will ensure that all those on-site wears prescribed and appropriate personal protective equipment, preventing avoidable accidents and reporting conditions or practices that pose a safety hazard or threaten the environment.
10. The company will:

i) prohibit the use of alcohol during work activities.
ii) prohibit the use of narcotics or other substances which can always impair faculties.

11. The company will ensure that adequate sanitation facilities are available on site and at any worker accommodations provided to those working on the project.

Gender Based Violence and Violence Against Children

12. Acts of GBV or VAC constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment, and if appropriate referral to the Police for further action.
13. All forms of GBV and VAC, including grooming are unacceptable, regardless of whether they take place on the work site, the work site surroundings, at worker's camps or within the local community.
    i) Sexual Harassment—for instance, making unwelcome sexual advances, requests for sexual favours, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behaviour, is prohibited.
    ii) Sexual favors —for instance, making promises or favorable treatment dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior are prohibited.
14. Sexual contact or activity with children under 18—including through digital media—is prohibited. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.
15. Unless there is full consent[6] by all parties involved in the sexual act, sexual interactions between the company's employees (at any level) and members of the communities surrounding the work place are prohibited. 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.
16. In addition to company sanctions, legal prosecution of those who commit acts of GBV or VAC will be pursued if appropriate.
17. All employees, including volunteers and sub-contractors are highly encouraged to report suspected or actual acts of GBV and/or VAC by a fellow worker, whether in the same company or not. Reports must be made in accordance with project's GBV and VAC Allegation Procedures.
18. Managers are required to report and take action of suspected or actual acts of GBV and/or VAC as they have a responsibility to uphold company commitments and hold their direct reports responsible.

Implementation

To ensure that the above principles are implemented effectively the company commits to ensuring that:

[6] **Consent** is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained through the use of threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even in the event that national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

19. All managers sign the project's 'Manager's Code of Conduct' detailing their responsibilities for implementing the company's commitments and enforcing the responsibilities in the 'Individual Code of Conduct'.
20. All employees sign the project's 'Individual Code of Conduct' confirming their agreement to comply with ESHS and OHS standards, and not to engage in activities resulting in GBV or VAC.
21. Displaying the Company and Individual Codes of Conduct prominently and in clear view at workers' camps, offices, and in in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.
22. Ensure that posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.
23. An appropriate person is nominated as the company's 'Focal Point' for addressing GBV and VAC issues, including representing the company on the GBV and VAC Compliance Team (GCCT) which is comprised of representatives from the client, contractor(s), the supervision consultant, and local service provider(s).
24. Ensuring that an effective GBV and VAC Action Plan is developed in consultation with the GCCT which includes as a minimum:
    i) **GBV and VAC Allegation Procedure** to report GBV and VAC issues through the project Grievance Redress Mechanism (Section 4.3 Action Plan);
    ii) **Accountability Measures** to protect confidentiality of all involved (Section 4.4 Action Plan); and,
    iii) **Response Protocol** applicable to GBV and VAC survivors and perpetrators (Section 4.7 Action Plan).
25. That the company effectively implements the agreed final GBV and VAC Action Plan, providing feedback to the GCCT for improvements and updates as appropriate.
26. All employees attend an induction training course prior to commencing work on site to ensure they are familiar with the company's commitments to ESHS and OHS standards, and the project's GBV and VAC Codes of Conduct.
27. All employees attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the project's ESHS and OHS standards and the GBV and VAC Code of Conduct.

I do hereby acknowledge that I have read the foregoing Company Code of Conduct, and on behalf of the company agree to comply with the standards contained therein. I understand my role and responsibilities to support the project's OHS and ESHS standards, and to prevent and respond to GBV and VAC. I understand that any action inconsistent with this Company Code of Conduct or failure to take action mandated by this Company Code of Conduct may result in disciplinary action.

Company name: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Manager's Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender Based Violence and Violence Against Children

Managers at all levels have a responsibility to uphold the company's commitment to implementing the ESHS and OHS standards, and preventing and addressing GBV and VAC. This means that managers have an acute responsibility to create and maintain an environment that respects these standards, and prevents GBV and VAC. Managers need to support and promote the implementation of the Company Code of Conduct. To that end, managers must adhere to this Manager's Code of Conduct and also sign the Individual Code of Conduct. This commits them to supporting the implementation of the CESMP and the OHS Management Plan, and developing systems that facilitate the implementation of the GBV and VAC Action Plan. They need to maintain a safe workplace, as well as a GBV-free and VAC-free environment at the workplace and in the local community. These responsibilities include but are not limited to:

Implementation

1. To ensure maximum effectiveness of the Company and Individual Codes of Conduct:
   i) Prominently displaying the Company and Individual Codes of Conduct in clear view at workers' camps, offices, and in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.
   ii) Ensuring all posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.
2. Verbally and in writing explain the Company and Individual Codes of Conduct to all staff.
3. Ensure that:
   i) All direct reports sign the 'Individual Code of Conduct', including acknowledgment that they have read and agree with the Code of Conduct.
   ii) Staff lists and signed copies of the Individual Code of Conduct are provided to the OHS Manager, the GCCT, and the client.
   iii) Participate in training and ensure that staff also participate as outlined below.
   iv) Put in place a mechanism for staff to:
      (a) report concerns on ESHS or OHS compliance; and,
      (b) confidentially report GBV or VAC incidents through the Grievance Redress Mechanism (GRM)
   v) Staff are encouraged to report suspected or actual ESHS, OHS, GBV or VAC issues, emphasizing the staff's responsibility to the Company and the country hosting their employment, and emphasizing the respect for confidentiality.
4. In compliance with applicable laws and to the best of your abilities, prevent perpetrators of sexual exploitation and abuse from being hired, re-hired or deployed. Use background and criminal reference checks for all employees.
5. Ensure that when engaging in partnership, sub-contractor, supplier or similar agreements, these agreements:

i) Incorporate the ESHS, OHS, GBV and VAC Codes of Conduct as an attachment.
ii) Include the appropriate language requiring such contracting entities and individuals, and their employees and volunteers, to comply with the Individual Codes of Conduct.
iii) Expressly state that the failure of those entities or individuals, as appropriate, to ensure compliance with the ESHS and OHS standards, take preventive measures against GBV and VAC, to investigate allegations thereof, or to take corrective actions when GBV or VAC has occurred, shall not only constitute grounds for sanctions and penalties in accordance with the Individual Codes of Conduct but also termination of agreements to work on or supply the project.

6. Provide support and resources to the GCCT to create and disseminate internal sensitization initiatives through the awareness-raising strategy under the GBV and VAC Action Plan.
7. Ensure that any GBV or VAC issue warranting Police action is reported to the Police, the client and the World Bank immediately.
8. Report and act according to the response protocol (Section 4.7 Response Protocol) any suspected or actual acts of GBV and/or VAC as managers have a responsibility to uphold company commitments and hold their direct reports responsible.
9. Ensure that any major ESHS or OHS incidents are reported to the client and the supervision engineer immediately.

Training

10. The managers are responsible to:
    i) Ensure that the OHS Management Plan is implemented, with suitable training required for all staff, including sub-contractors and suppliers; and,
    ii) Ensure that staff have a suitable understanding of the CESMP and are trained as appropriate to implement the CESMP requirements.
11. All managers are required to attend an induction manager training course prior to commencing work on site to ensure that they are familiar with their roles and responsibilities in upholding the GBV and VAC elements of these Codes of Conduct. This training will be separate from the induction training course required of all employees and will provide managers with the necessary understanding and technical support needed to begin to develop the GBV and VAC Action Plan for addressing GBV and VAC issues.
12. Managers are required to attend and assist with the project facilitated monthly training courses for all employees. Managers will be required to introduce the trainings and announce the self-evaluations, including collecting satisfaction surveys to evaluate training experiences and provide advice on improving the effectiveness of training.
13. Ensure that time is provided during work hours and that staff prior to commencing work on site attend the mandatory project facilitated induction training on:
    i) OHS and ESHS; and,
    ii) GBV and VAC required of all employees.
14. During civil works, ensure that staff attend ongoing OHS and ESHS training, as well as the monthly mandatory refresher training course required of all employees to combat increased risk of GBV and VAC.

Response

15. Managers will be required to take appropriate actions to address any ESHS or OHS incidents.
16. With regard to GBV and VAC:
    i) Provide input to the GBV and VAC Allegation Procedures (Section 4.2 Action Plan) and Response Protocol (Section 4.7 Action Plan) developed by the GCCT as part of the final cleared GBV and VAC Action Plan.
    ii) Once adopted by the Company, managers will uphold the Accountability Measures (Section 4.4 Action Plan) set forth in the GBV and VAC Action Plan to maintain the confidentiality of all employees who report or (allegedly) perpetrate incidences of GBV and VAC (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law).
    iii) If a manager develops concerns or suspicions regarding any form of GBV or VAC by one of his/her direct reports, or by an employee working for another contractor on the same work site, s/he is required to report the case using the GRM.
    iv) Once a sanction has been determined, the relevant manager(s) is/are expected to be personally responsible for ensuring that the measure is effectively enforced, within a maximum timeframe of 14 days from the date on which the decision to sanction was made
    v) If a Manager has a conflict of interest due to personal or familial relationships with the survivor and/or perpetrator, he/she must notify the respective company and the GCCT. The Company will be required to appoint another manager without a conflict of interest to respond to complaints.
    vi) Ensure that any GBV or VAC issue warranting Police action is reported to the Police, the client and the World Bank immediately
17. Managers failing address ESHS or OHS incidents, or failing to report or comply with the GBV and VAC provisions may be subject to disciplinary measures, to be determined and enacted by the company's CEO, Managing Director or equivalent highest-ranking manager. Those measures may include:
    i) Informal warning.
    ii) Formal warning.
    iii) Additional Training.
    iv) Loss of up to one week's salary.
    v) Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
    vi) Termination of employment.
18. Ultimately, failure to effectively respond to ESHS, OHS, GBV and VAC cases on the work site by the company's managers or CEO may provide grounds for legal actions by authorities.

I do hereby acknowledge that I have read the foregoing Manager's Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, GBV and VAC requirements. I understand that any action inconsistent with this Manager's Code of Conduct or failure to take action mandated by this Manager's Code of Conduct may result in disciplinary action.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Individual Code of Conduct

Implementing ESHS and OHS Standards

Preventing Gender Based Violence and Violence Against Children

I, _____, acknowledge that adhering to environmental, social health and safety (ESHS) standards, following the project's occupational health and safety (OHS) requirements, and preventing gender based violence (GBV) and violence against children (VAC) is important.

The company considers that failure to follow ESHS and OHS standards, or to partake in GBV or VAC activities—be it on the work site, the work site surroundings, at workers' camps, or the surrounding communities—constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. Prosecution by the Police of those who commit GBV or VAC may be pursued if appropriate.

I agree that while working on the project I will:

1. Attend and actively partake in training courses related to ESHS, OHS, HIV/AIDS, GBV and VAC as requested by my employer.
2. Will wear my personal protective equipment (PPE) at all times when at the work site or engaged in project related activities.
3. Take all practical steps to implement the contractor's environmental and social management plan (CESMP).
4. Implement the OHS Management Plan.
5. Adhere to a zero-alcohol policy during work activities, and refrain from the use of narcotics or other substances which can impair faculties at all times.
6. Consent to Police background check.
7. Treat women, children (persons under the age of 18), and men with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
8. Not use language or behaviour towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
9. Not engage in sexual harassment—for instance, making unwelcome sexual advances, requests for sexual favours, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behaviour (e.g. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; giving personal gifts; making comments about somebody's sex life; etc.).
10. Not engage in sexual favours—for instance, making promises or favourable treatment dependent on sexual acts—or other forms of humiliating, degrading or exploitative behaviour.
11. Not participate in sexual contact or activity with children—including grooming, or contact through digital media. Mistaken belief regarding the age of a child is not a defence. Consent from the child is also not a defence or excuse.

12. Unless there is the full consent[7] by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or 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.
13. Consider reporting through the GRM or to my manager any suspected or actual GBV or VAC by a fellow worker, whether employed by my company or not, or any breaches of this Code of Conduct.

With regard to children under the age of 18:

14. Wherever possible, ensure that another adult is present when working in the proximity of children.
15. Not invite unaccompanied children unrelated to my family into my home, unless they are at immediate risk of injury or in physical danger.
16. Not use any computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography (see also "Use of children's images for work related purposes" below).
17. Refrain from physical punishment or discipline of children.
18. Refrain from hiring children for domestic or other labour below the minimum age of 14 unless national law specifies a higher age, or which places them at significant risk of injury.
19. Comply with all relevant local legislation, including labour laws in relation to child labour and World Bank's safeguard policies on child labour and minimum age.
20. Take appropriate caution when photographing or filming children (See Annex 2 for details).

Use of children's images for work related purposes

When photographing or filming a child for work related purposes, I must:

21. Before photographing or filming a child, assess and endeavour to comply with local traditions or restrictions for reproducing personal images.
22. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.
23. Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
24. Ensure images are honest representations of the context and the facts.
25. Ensure file labels do not reveal identifying information about a child when sending images electronically.

Sanctions

[7] **Consent** is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained through the use of threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even in the event that national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

1. Informal warning.
2. Formal warning.
3. Additional Training.
4. Loss of up to one week's salary.
5. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
6. Termination of employment.
7. Report to the Police if warranted.

I understand that it is my responsibility to ensure that the environmental, social, health and safety standards are met. That I will adhere to the occupational health and safety management plan. That I will avoid actions or behaviours that could be construed as GBV or VAC. Any such actions will be a breach this Individual Code of Conduct. I do hereby acknowledge that I have read the foregoing Individual Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, GBV and VAC issues. I understand that any action inconsistent with this Individual Code of Conduct or failure to take action mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

4. GBV and VAC Action Plan

4.1 The GBV and VAC Compliance Team

The project shall establish a 'GBV and VAC Compliance Team' (GCCT). The GCCT will include, as appropriate to the project, at least four representatives ('Focal Points') as follows:

i) A safeguards specialist from the client;
ii) The occupational health and safety manager from the contractor[8], or someone else tasked with the responsibility for addressing GBV and VAC with the time and seniority to devote to the position;
iii) The supervision consultant; and,
iv) A representative from a local service provider with experience in GBV and VAC (the 'Service Provider').

It will be the duty of the GCCT with support from the management of the contractor to inform workers about the activities and responsibilities of the GCCT. To effectively serve on the GCCT, members must undergo training by the local service provider prior to the commencement of their assignment to ensure that they are sensitized on GBV and Child Protection.

The GCCT will be required to:

i) Approve any changes to the **GBV and VAC Codes of Conduct** contained in this document, with clearances from the World Bank for any such changes.
ii) Prepare the **GBV and VAC Action Plan** reflecting the Codes of Conduct which includes:
   (a) **GBV and VAC Allegation Procedures** (See 4.2)
   (b) **Accountability Measures** (See 4.4)
   (c) An **Awareness raising Strategy** (See 4.6)
   (d) A **Response Protocol** (See 4.7)
iii) Obtain approval of the GBV and VAC Action Plan by the contractor's management;
iv) Obtain client and World Bank clearances for the GBV and VAC Action Plan prior to full mobilization;
v) Receive and monitor resolutions and sanctions with regard to complaints received related to GBV and VAC associated with the project; and,
vi) Ensure that GBV and VAC statistics in the GRM are up to date and included in the regular project reports.

The GCCT shall hold quarterly update meetings to discuss ways to strengthen resources and GBV and VAC support for employees and community members.

4.2 Making Complaints: GBV and VAC Allegation Procedures

All staff, volunteers, consultants and sub-contractors are encouraged to report suspected or actual GBV or VAC cases. Managers are required to report suspected or actual GBV and/or VAC cases as they have responsibilities to uphold company commitments and they hold their direct reports accountable for complying with the

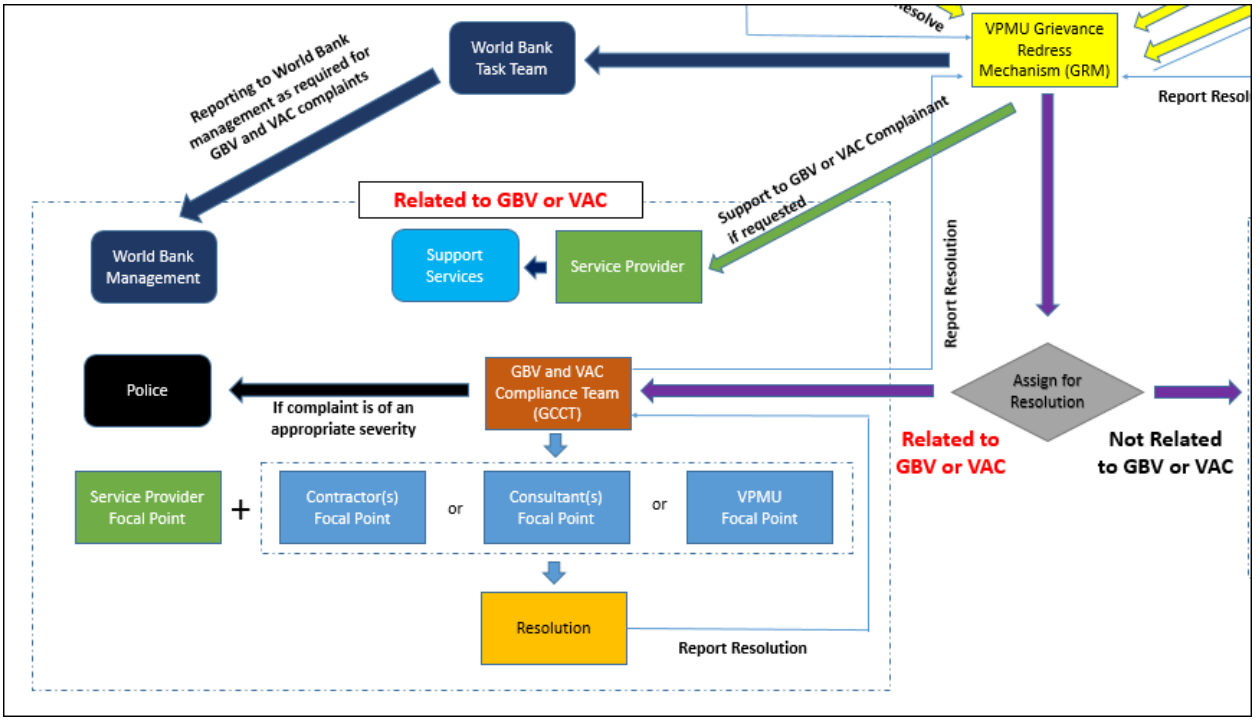
[8] Where there are multiple contractors working on the project each shall nominate a representative as appropriate.

Individual Code of Conduct.

The project will provide information to employees and the community on how to report cases of GBV and VAC Code of Conduct breaches through the Grievance Redress Mechanism (GRM). The GCCT will follow up on cases of GBV, VAC and Code of Conduct breaches reported through the GRM.

4.3 Addressing Complaints about GBV or VAC

The figure below shows the process for addressing complaints based on the example of the Vanuatu Aviation Investment Project (VAIP).



Note: VPMU is the Vanuatu Project Management Unit (VPMU) responsible for the implementation of VAIP.

GRM

The project operates a grievance redress mechanism (GRM) which is managed by a designated GRM operator with the project management unit. Reports of GBV or VAC, other complaints, or other concerns may be submitted online, via telephone or mail, or in person.

All complaints regarding GBV and VAC must immediately be reported to the World Bank task team by the GRM operator.

The GRM operator will refer complaints related to GBV or VAC to the GCCT to resolve them. In accordance with the GBV and VAC Action Plan, the GCCT through the Service Provider and Focal Point(s) will investigate the complaint and ultimately provide the GRM operator with a resolution to the complaint, or the Police if necessary. The victim's confidentiality should also be kept in mind when reporting any incidences to the Police.

The GRM operator will, upon resolution, advise the complainant of the outcome, unless it was made

anonymously. Complaints made to managers or the Service Provider will be referred by them to the GRM for processing.

If the complaint to the GRM is made by a survivor or on behalf of a survivor, the complainant will be directly referred to the service provider to receive support services while the GCCT investigates the complaint in parallel.

Service Provider

The Service Provider is a local organization which has the experience and ability to support survivors of GBV or VAC. The client, the contractor(s) and consultant must establish a working relationship with the Service Provider, so that GBV and VAC cases can safely be referred to them. The Service Provider will also provide support and guidance to the GBV and VAC Focal Points as necessary. The Service Provider will have a representative on the GCCT and be involved in resolving complaints related to GBV or VAC.

GCCT GBV and VAC Focal Points

The GCCT shall confirm that all complaints related to GBV or VAC have been referred to the World Bank by the GRM operator.

The GCCT shall consider all GBV and VAC complaints and agree on a plan for resolution. The appropriate

Focal Point will be tasked with implementing the plan (i.e. issues with contractor's staff will be for the contractor to resolve; consultant's staff the consultant; and client staff the client). The Focal Point will advise the GCCT on resolution, including referral to the Police if necessary. They will be assisted by the Service Provider as appropriate.

All the Focal Points on the GCCT must be trained and empowered to resolve GBV and VAC issues. It is essential that all staff of the GRM and GCCT understand the guiding principles and ethical requirement of dealing with survivors of GBV and VAC. All reports should be kept confidential and referred immediately to the Service Provider represented on the GCCT[9]. In GBV and VAC cases warranting Police action, the Focal Points must appropriately refer the complaint to: (i) the authorities; (ii) the Service Provider; and, (iii) management for further action. The client and the World Bank are to be immediately notified.

4.4 Accountability Measures

All reports of GBV or VAC shall be handled in a confidential manner in order to protect the rights of all involved. The client, contractor and consultant must maintain the confidentiality of employees who notify any acts or threats of violence, and of any employees accused of engaging in any acts or threats of violence (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law). The contractor and consultant must prohibit discrimination or adverse action against an employee on the basis of survivor's disclosure, experience or perceived experience of GBV or VAC (see Annex 1 for examples of actions to

[9] Survivors of GBV and VAC may need access to Police, justice, health, psychosocial, safe shelter and livelihood services to begin on a path of healing from their experience of violence.

maintain accountability).

To ensure that survivors feel confident to disclose their experience of GBV or VAC, they can report cases of GBV or VAC through multiple channels: (i) online, (ii) phone, (iii) in-person, (iv) the local service provider, (v) the manager(s), (vi) village councils; or, (vii) the Police. To ensure confidentiality, only the service provider will be privy to information regarding the survivor and only GCCT will primary point of contact for information and follow up regarding the perpetrator. Only the Service Provider will have access to the name of the survivor.

4.5 Monitoring and Evaluation

The GCCT must monitor the follow up of cases that have been reported and maintain all reported cases in a confidential and secure location. Monitoring must collect the number of cases that have been reported and the share of them that are being managed by Police, NGOs etc.

These statistics shall be reported to the GRM and the Supervision Engineer for inclusion in their reporting.

For any GBV and VAC cases warranting Police action, the client and the World Bank are to be immediately notified.

4.6 Awareness-raising Strategy

It is important to create an Awareness-raising Strategy with activities aimed to sensitize employees on GBV and VAC on the work site and its related risks, provisions of the GBV and VAC Codes of Conduct, GBV and VAC Allegation Procedures, Accountability Measures and Response Protocol. The strategy will be accompanied by a timeline, indicating the various sensitization activities through which the strategy will be implemented and also the related (expected) delivery dates. Awareness-raising activities should be linked with trainings provided by the Service Provider.

4.7 Response Protocol

The GCCT will be responsible for developing a written response[10] protocol to meet the project requirements, in accordance to national laws and protocols. The response protocol must include mechanisms to notify and respond to perpetrators in the workplace (See 4.9 for Perpetrator Policy and Response). The response protocol will include the GRM process to ensure competent and confidential response to disclosures of GBV and VAC. An employee who discloses a case of GBV or VAC in the workplace shall be referred to the GRM for reporting.

4.8 Survivor Support Measures

It is essential to appropriately respond to the survivor's complaint by respecting the survivor's choices to minimize the potential for re-traumatization and further violence against the survivor. Refer the survivor to the Service Provider to obtain appropriate support services in the community—including medical and psychosocial support, emergency accommodation, security including Police protection and livelihood support—by facilitating

[10] Develop appropriate protocol for written recording of GBV issues and VAC raised in case the notes are subpoenaed. Develop processes for record keeping including activities undertaken by the GCCT.

contact and coordination with these services. The client, contractor or consultant may, where feasible, provide financial and other supports to survivors of GBV or VAC for these services (see Annex 1 for examples of financial support).

If the survivor is an employee, in order to ensure the safety of the survivor, and the workplace in general, the client, contractor or consultant, in consultation with the survivor, will assess the risk of ongoing abuse to the survivor and in the workplace. Reasonable adjustments will be made to the survivor's work schedule and work environment as deemed necessary (see Annex 1 for examples of safety measures). The employer will provide adequate leave to survivors seeking services after experiencing violence (see Annex 1 for details).

4.9 Perpetrator Policy and Response

Encourage and accept notification through the GRM from employees and community members about perpetrators in the workplace. Through the GCCT and/or the Service Provider, oversee the investigation of these grievances, ensuring procedural fairness for the accused, and within the local laws. If an employee has breached the Code of Conduct, the employer will take action which could include:

i) Undertake disciplinary action up in accordance with sanctions in the GBV and VAC Codes of Conduct;
ii) Report the perpetrator to the Police as per local legal paradigms; and/or
iii) If feasible, provide or facilitate counselling for the perpetrator.

5.0 Sanctions

In accordance with the Code of Conduct, any employee confirmed as a GBV or VAC perpetrator shall be considered for disciplinary measures in line with sanctions and practices as agreed in the Individual Code of Conduct (see Annex 1 for examples of sanctions). It is important to note that, for each case, disciplinary sanctions are intended to be part of a process that is entirely internal to the employer, is placed under the full control and responsibility of its managers, and is conducted in accordance with the applicable national labour legislation.

Such process is expected to be fully independent from any official investigation that competent authorities (e.g. Police) may decide to conduct in relationship to the same case, and in accordance with the applicable national law. Similarly, internal disciplinary measures that the employer's managers may decide to enact are meant to be separate from any charges or sanctions that the official investigation may result into (e.g. monetary fines, detention etc.).

Annex 1 - Potential Procedures for Addressing GBV and VAC

Accountability Measures to maintain confidentiality can be achieved through the following actions:

1. Inform all employees that confidentiality of GBV/VAC survivors' personal information is of utmost importance.
2. Provide the GCCT with training on empathetic and non-judgmental listening.
3. Take disciplinary action, including and up to dismissal, against those who breach survivor's confidentiality (this is unless a breach of confidentiality is necessary to protect the survivor or another person from serious harm, or where required by law).

GBV and VAC Allegation Procedures should specify:

1. Who survivors can seek information and assistance from.
2. The process for community members and employees to lodge a complaint through the GRM should there be alleged GBV or VAC.
3. The mechanism for how community members and employees can escalate a request for support or notification of violence if the process for reporting is ineffective due to unavailability or non-responsiveness, or if the employee's concern in not resolved.

Financial and Other Supports to survivors can include:

1. No/low interest loans.
2. Salary advances.
3. Direct payment of medical costs.
4. Coverage of all medical costs related specifically to the incident.
5. Upfront payments for medical costs to later be recouped from the employee's health insurance.
6. Providing or facilitating access to childcare.
7. Providing security upgrades to the employee's home.
8. Providing safe transportation to access support services or to and from accommodation.

Based on the rights, needs and wishes of the survivor, survivor support measures to ensure the safety of the survivor who is an employee can include[11]:

1. Changing the perpetrator or survivor's span of hours or pattern of hours and/or shift patterns.
2. Redesigning or changing the perpetrator or survivor's duties.
3. Changing the survivor's telephone number or email address to avoid harassing contact.
4. Relocating the survivor or perpetrator to another work site/ alternative premises.
5. Providing safe transportation to and from work for a specified period.
6. Supporting the survivor to apply for an Interim Protection Order or referring them to appropriate support.
6.7. Taking any other appropriate measures including those available under existing provisions for family friendly

[11] It is critical that a survivor centered approach be adopted. The survivor should be fully involved in the decision making. Except for exceptional circumstances the perpetrator should be required to take appropriate actions to accommodate the survivor (e.g. move, change hours, etc.), rather than the survivor changing.

and flexible work arrangements.

Leave options for survivors that are employees can include:

1. An employee experiencing GBV should be able to request paid special leave to attend medical or psychosocial appointments, legal proceedings, relocation to safe accommodation and other activities related to GBV.
2. An employee who supports a person experiencing GBV or VAC may take care givers leave, including but not limited to accompanying them to court or hospital, or to take care of children.
3. Employees who are employed in a casual capacity may request unpaid special leave or unpaid care givers leave to undertake the activities described above.
4. The amount of leave provided will be determine by the individual's situation through consultations with the employee, the management and the GCCT where appropriate.

Potential Sanctions to employees who are perpetrators of GBV and VAC include:

1. Informal warning
2. Formal warning
3. Additional Training
4. Loss of up to one week's salary.
5. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
6. Termination of employment.

Referral to the Police or other authorities as warranted.

Appendix 6: Site Geotechnical Investigation Results

SOILS BEARING CAPACITIES DUE TO SPT-N VALUES FOR BOREHOLES AT MPONDWE SITE

CENTRAL MATERIALS LABORATORY

CLIENT : M/S KK PARTNERS LIMITED
PROJECT : PROPOSED CONSTRUCTION OF A ONE-STOP-BORDER-POST (OSBP) & A BORDER EXPORT ZONE (BEZ) AT MPONDWE (KASESE DISTRICT)
DATE : JUNE 2019

EVALUATION OF BEARING CAPACITY BASED ON FIELD SPT-N VALUES

BH Label	DEPTH (m)	PREDOMINANT SOIL FRACTION	Design N-value	Unconfined Compressive Strength q_u (KPa)	Undrained Cohesion C_u (KPa)	Ultimate bearing capacity q_{ult} (KPa)	Allowable bearing capacity q_{all} (KPa)
BH1	1.5	Lean Clays (cotton soils)	9	118	59	303	101
	3.0	Lean Clays (cotton soils)	15	197	98	505	168
	4.5*	Silty/ clayey fine sands/ Very Dense Sand Clay Mixtures	50	–	–	640	213
BH2	1.5	Lean Clays (cotton soils)	11	144	72	370	123
	3.0	Lean Clays (cotton soils)	44	576	288	1481	494
	4.5*	silty or clayey fine sands/ Very Dense Sand Clay Mixtures	50	–	–	640	213
BH3	1.5	Lean Clays (cotton soils)	10	131	66	337	112
	3.0	Lean Clays (cotton soils)	9	118	59	303	101
	4.5	Very fine sands/ silty or clayey fine sands	16	–	–	640	213
	6.0	silty or clayey fine sands/Sand Clay Mixtures	32	–	–	640	213
	7.5*	silty or clayey fine sands/ Very Dense Sand Clay Mixtures	50	–	–	640	213

For cohesive soils, the relationship qu = 13.1 x Design N-value is used for evaluation of the Unconfine Compressive Strength qu, the cohesion Cu = qu 2 and qult = 5.14 x Cu. qult is evaluated usingg factor of safety of 3

Allowable Bearing capacity with settlement limited to approximately 25mm for cohesionless soils read off directly from the Chart (Published by Terzaghi and Peck 1967) breath of footing (B) is 1.0m considered

Legend* *Had SPTN Value greater than 50*

SOILS BEARING CAPACITIES DUE TO SHEAR STRENGTH TEST FOR UNDISTURBED SAMPLES PICKED FROM MPONDWE

CENTRAL MATERIALS LABORATORY

PROJECT : PROPOSED CONSTRUCTION OF A ONE-STOP-BORDER-POST (OSBP) & A BORDER EXPORT ZONE (BEZ) AT MPONDWE (KASESE DISTRICT)
CLIENT : M/S KK PARTNERS LIMITED
DATE : JUNE 2019

EVALUATION OF BEARING CAPACITY BASED ON TERZAGHI'S MODEL FOR 1.0M SQUARE FOOTING (LOCAL SHEAR)

TP LABEL	DEPTH, D (m)	WIDTH, B (m)	BULK DENSITY, γ (kN/m^3)	COHESION C' (KPa)	COHESION C' (KPa)	ANGLE OF FRICTION f (Degrees)	MODIFIED ANGLE OF FRICTION f' (Degrees)	BEARING CAPACITY FACTORS Nc	Nq	N_γ	ULTIMATE BEARING CAPACITY q_{ult} (KPa)	SAFETY FACTOR (F)	ALLOWABLE BEARING CAPACITY q_{all} (KPa)
BH1	1.5	1.0	18.47	16	11	4	2	6.34	1.24	0.20	125	3	42
	3.0	1.0	18.80	12	8	9	5	7.30	1.60	0.50	169	3	56

$q_{ult} = 1.3CN_C + q_oN_q + 0.4\gamma BN_\gamma$

Where: $q_o = \gamma D$

$f = \tan^{-1}(0.67 \tan f)$

$C' = 0.67C$

$q_{all} = q_{ult}/F$

For :	strip	round	square
sc	1	1.3	1.3
sg	1	0.6	0.8

CENTRAL MATERIALS LABORATORY

PROJECT : PROPOSED CONSTRUCTION OF A ONE-STOP-BORDER-POST (OSBP) & A BORDER EXPORT ZONE (BEZ) AT MPONDWE (KASESE DISTRICT)
CLIENT : M/S KK PARTNERS LIMITED
DATE : JULY 2018'

EVALUATION OF BEARING CAPACITY BASED ON TERZAGHI'S MODEL (GENERAL SHEAR)

BH LABEL	DEPTH, D (m)	WIDTH, B (m)	BULK DENSITY, Y (KN/m^3)	COHESION C (KPa)	ANGLE OF FRICTION f (Degrees)	BEARING CAPACITY FACTORS Nc	Nq	N_g	ULTIMATE BEARING CAPACITY q_{ult} (KPa)	SAFETY FACTOR (F)	ALLOWABLEBEARING CAPACITY q_{all} (KPa)
BH1	1.5	1.0	18.47	16	4	6.98	1.48	0.40	191	3	64
	3.0	1.0	18.80	12	9	9.14	2.48	1.06	288	3	96

$q_{ult} = CN_c sc + q_o N_q + \frac{1}{2} gBN_g sg$

Where: $q_o = gD$

$q_{all} = q_{ult}/F$

For :	strip	round	square
sc	1	1.3	1.3
sg	1	0.6	0.8

Appendix 7: GRIEVANCE PROCEDURE GRIEVANCE FORM

GRIEVANCE PROCEDURE GRIEVANCE FORM

Officer's Full Name	**OSBP staff No.**	Designation & Grade
Department or the LC1, and another community leader that are respected by the community		Section
Office Tel. No. ……	Official E-mail Address:	Mobile Telephone No.
Stage I		
Grievance Statement/Issues (Use attachments if necessary): Submitted to: Name:…… Head/Officer in Charge ……Dept/Section …… Date ……		
Date Received:		

Response/Action taken: Respondent's Name …… Designation…… Signature: …… Date …… Employee's response I conclude my grievance and am returning the form to the Human Resource Office ,

STAGE 3:

Submitted to: …… Name: …… Ministry of Trade. Works and other key relevant agencies Date: ……
Date Received: ……
Response/Action taken: …… Respondent's Name …… Designation …… Signature: …… Date …… Employee's Response ☐ I have documented my grievance and am returning the form to the Human Resource Office ☐ I request that my grievance be taken to the next stage
Stage III
Submitted to the Ministry of Trade. Works and other key relevant agencies

Date Received
Action taken/ Comments & instructions: - …… …… Employee's Response: …… …… I have been informed of the decision. Signed …… Date ……

Complaints Record Form/ Logbook

Date of Complaint: ...../...../..... Complaint Received by:

Name:.....Position.....

Complaint made via:

- Telephone
- Text
- In person
- E-mail
- Web-site
- Complaint Box

Subject of Complaint .....

Name of Complainant:

.....

Address: .....

Phone number (Optional): .....

Detail of Complaint: .....

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Comments:

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Action to be Taken:

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Outcome:

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Signed by: (GRM Focal Point)

……

Date: ……/……/……