



Republic of Liberia



**Ministry of Public Works
Liberia Urban Resilience Project (LURP)**

ID No.: P169718

Closing Date: 17 October 2025



**ADDENDUM ONE (1) ENVIRONMENTAL AND SOCIAL MANAGEMENT
PLAN (ESMP) FOR LURP DRAINAGE CLEANING ACTIVITIES**

PHASE II

NOVEMBER 2024

Executive Summary

Rationale for Phase II to Quick Win Drainage Cleaning Activity

The first drainage cleaning exercise under LURP intervention had been completed with the report submitted to the Bank in August 2024. The phase 1 drainage cleaning exercise started in February 2024 and ended in June 2024, characterized by the removal of silts and solid wastes from the drainage channels. The intervention resulted in the reduction of flooding in the target communities during the raining season. However, this outcome was short-lived, with the poor waste management practices among the intervention population resulting in the reoccurrence of the pilling of silts and solid wastes in the cleaned drainage channels. This is compounded by the limited communication and knowledge about proper sanitation practices in the intervention communities.

Site visitation to the locations where the project had intervened were carried out in September 2024 and it was observed that there has been some level of flood reduction due to the drainage cleaning activities but there's still need for additional waste and silt/sand removal along those same corridors due to erosion and the poor sanitation practices by many residents in those communities. , a decision was reached to conduct Phase II of the drainage cleaning exercise to enhance conveyance of storm water within the drainages while focusing on behavior change communication geared towards enhancing sustainable waste management practices among the target population.

Hence, based on lessons learned from Phase I implementation, the PMU will launch a mass public education and sensitization campaign in the project communities during Phase II, with a focus on enhancing behavior change in proper waste management practices among the target communities. This education campaign will continue throughout LURP implementation in line with the approved project communication strategy. In addition to the robust engagement and behavior change education campaign, the PMU will work with the community residents, ensuring they prioritize routine maintenance of the drainages by empowering them with the requisite tools. The PMU has made allocations for securing the first sets of tools in this EMSP and plans to build the capacities of the communities in sourcing additional resources through engaging with the relevant agencies. In the same vein, LURP, as part of the new investment portfolio, is in the process of securing drainage cleaning equipment for the Ministry of Public Works to enhance the frequency and efficiency of drainage cleaning in Monrovia.

Project description

The Liberia Urban Resilience Project (LURP) is a World Bank funded project that aims to increase flood resilience and access to urban infrastructure in selected neighborhoods and to improve urban management in Liberia. The project became effective on 28 February 2023 and will be implemented over a period of 6 years, ending in June 2028.

The Project Development Objective (PDO) is to increase flood resilience and access to urban infrastructure in selected neighborhoods and to improve urban management in Liberia.

Specific outcomes are:

- Outcome 1: Area protected from flooding
- Outcome 2: People benefitting from improved urban infrastructure (gender-disaggregated)
- Outcome 3: Urban management capacity enhanced

The four (4) main components of the Project are:

- 1) Climate Resilient Infrastructure and Urban Upgrading,
- 2) Strengthening Integrated Resilient Urban Development Capacity,
- 3) Project Management, and
- 4) Contingency Emergency Response Component.

Component One (1) will support flood risk management and community upgrading infrastructure in prioritized areas of Greater Monrovia. This will include investments in drainage infrastructure to improve connectivity of drainage networks to reduce climate and flood risk, neighborhood and market upgrading interventions to improve access to public services.

Subproject description

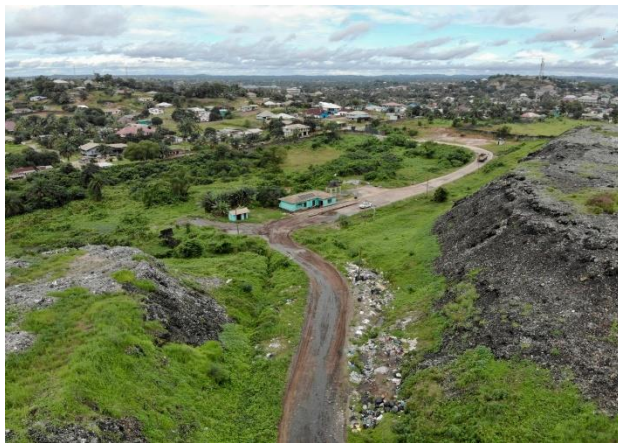
A subproject under component 1 has been identified and relates to drainage cleaning to mitigate an imminent flood risk in several parts of Greater Monrovia. This will benefit both subcomponents (subcomponent 1.1. Climate Risk Management Infrastructure and subcomponent 1.2. Climate Resilient Community and Market Upgrading).

The subproject under component 1 is referred to as “Drainage Cleaning Activity” (or “quick win activity” due to the time pressure caused by the rainy season). This encompasses the cleaning of drainage channels in the Central and Greater Monrovia areas. The cleaning of drainage channels is considered to be of an immediate and time-sensitive priority to avoid that clogged up drainage channels and reduce flood in neighboring communities in the rainy season (between May and November). The subproject initial intervention had resulted in immediate positive impacts as it had reduce flooding and protected people’s lives and assets in the communities adjacent to the targeted drainage channels.

The proposed second round drainage cleaning is planned to be carried out through a labor-based approach as was done during the phase I intervention, with an estimated number of 300 persons to be recruited and managed by a firm/company that the PMU will hire through competitive bidding. Using simple tools such as shovels, rakes, buckets, wheelbarrows, machetes/cutlasses and garbage bins, the 300 estimated workers to be recruited will be organized into small work teams and assigned to clean up defined lengths of the selected drainage channels. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to the MCC operated landfill in Whein Town (northern Paynesville).

In the initial phase of the drainage cleaning exercise, an assessment was conducted at the Whein Town Landfill to determine the capacity of the landfill to accommodate the estimated volume of wastes to be collected from the drainage channels. During the assessment, it was discovered that the Landfill still has space on the right side to accommodate the anticipated volume of waste to be

collected, but the Project would have to rehabilitate the access road up the cells to be used as a pathway for dumping, and to make provision for a D8 Bulldozer to support the pushing and compaction of waste at the landfill during the phase I cleaning period. LURP PMU provided resources and hired the services of a qualified contractor who rehabilitated the access road, reshaped the dumping area, provided and operated a D8 Bulldozer to push and compact the waste that was disposed from the drainage cleaning activities. For phase II, the PMU inquired from MCC and their management confirmed that Whein Town Landfill is still opened and accepting waste from MCC and PCC operations, and that there is enough space to accommodate the waste to be generated from LURPs' Phase II drainage cleaning exercise. The condition of the access road is not a challenge for vehicles movement at the moment. However, there's a need to hire a qualified service provider to reshape the dumping area, and to push and compact the waste at the landfill when phase II drainage cleaning kicks off. Pushing and compacting of incoming waste at Whein Town is a key component of the landfill site operations and is critical to ensuring continuous availability of space for dumping. In this operation, the access road may be compromised to the rising height of the landfill and may from time to time be reconstructed or rehabilitated. However, to ensure that the access road is fit for purpose and for a longer span operation, proper supervision of the landfill site operation is required. One supportive measure to sustain what has been done to upgrade the access road is to allow the continuous pushing, compacting and shaping of incoming wastes so that waste do not interfere with the access road but directed to the proper locations on site.



A photo showing the access road leading up the Landfill from the Office area



A photo showing an intersection along the access road over the waste leading to the top



4A photo showing the access road at the top of the landfill entering the dumping space that was used for phase I drainage cleaning



A photo showing a section along the access road to be used for phase II drainage cleaning activities

Environmental and social context

The target areas for drainage cleaning topography ranges from flat to gentle and steep slopes. All target areas are prone to flooding during the wet season of the year. Shrubs, mangrove trees, grass and fruit trees are present in the areas. Soils are predominantly sand, clay and loam. The general ecology is terrestrial with close proximity to wetlands. All the drainage channels in this area are filled with plastic, human feces and other type of wastes and are highly polluted.

The target areas are characterized by high population density with densely congested housing including a vast number of substandard houses and informal settlements. The land uses are predominantly residential and commercial with schools, health facilities, religious service centers, and agricultural activities present in the target areas. Sanitary conditions in the target communities are very poor and pose health hazards.

Environment and social issues

Several environmental risks related to the removal of waste from the drainage channels exist. Flood risks are a key risk in the areas as clogged up drainage channels cannot fulfill their function of draining the target areas. Not removing the waste poses a significant risk to the environment as floods would spread the existing liquid and solid wastes from the drainages to residential and commercial areas and potentially neighboring wetlands. Removing the waste could also pose a risk of soil and water contamination if the removed waste was improperly stored, transported and disposed or illegally dumped. There are also occupational health and safety risk of workers (including accidents) due to unsafe and hazardous working conditions.

On the social side, not removing the waste from the drainages would pose significant social risks as the resulting floods would prevent community members from accessing work, school, health institutions, and other basic services. Using workers from outside the communities could lead to dissatisfaction within the communities that hope to benefit from short term employment. Removing the waste with the help of community workers poses some social risks as well. The occupational health and safety of workers could be at risk if adequate protection equipment is not provided. Also, workers' rights could be violated if there is no adequate supervision and monitoring of their payment. Gender Based Violence (GBV) could occur between the workers and community members if workers are not sensitized and if the works are not adequately supervised.

To mitigate the environmental and social risks and impacts, a range of mitigation measures has been identified in this ESMP: Procure and provide to all workers appropriate personal protective equipment (gloves, hooded reflective overalls, nose covers, rain/safety boots safety eye goggles); contractors to recruit occupational health and safety officers; install safety signs in the target areas; provide first aid kits on the sites; provide awareness on the risk of vector borne diseases in such a working environment and encourage workers to seek voluntary preventive vaccinations; make it mandatory for contractors to hire workers from the target areas; contractors to sign code of conduct to mitigate GBV; establish worker performance and payment tracking system; release payments to contractors only based on number of trucks dumping at official landfill; and the PMU will ensure confidential and timely handling of grievances and separate handling of GBV cases.

Stakeholders' Engagement

Stakeholder engagement conducted as part of developing this ESMP was on a small scale, done in parallel with the E&S screening exercise in the form of consultations targeting community leaders in the proposed intervention communities. A total of four consultation meetings were held in the project areas of Central Monrovia, Bushrod Island and Sinkor, and Southern Paynesville on September 11, and 12 and 13 respectively. A total of 30 community leaders (including representatives from the elders, youth, and women) participated in those meetings.

The team made the decision to limit the scope of the current engagement exercise because information gathered during previous stakeholders' engagement for Phase 1 are still deemed valid and useful, since Phase 2 intervention would target the same communities. However, these small-scale consultation meetings generated additional information and learning. Generally, a major feedback from the communities was the need to strengthen collaboration between the contractors and community leaders on labor recruitment, ensuring that community members are prioritized. The community leaders also requested the project to empower them with tools to continue with regular cleaning of the drainages beyond the intervention. The project team highlighted the importance of enhancing awareness raising on proper sanitation practices and the role of the community leaders in ensuring such practices are effectively adapted. Attendance records from the meetings are available in Annex B.

In addition to these consultation meetings, the team plans on conducting a round of engagement meetings in the intervention communities prior to the start of work. This exercise will focus on discussing the role and involvement of all stakeholders (especially the intervention communities) in the cleaning exercise and strengthening education on the grievance mechanism, occupational health and safety, and proper waste management/sanitation practices. The planned engagement activities will be conducted jointly by the PMU, MPW, PCC, MCC, and the contractors.

E&S Screening and Environmental and Social Management Plan

E&S screening for Phase II was carried out between September 10, 11, 12 & 13, 2024. In Phase I, five (5) consultation meetings were held with a cluster of communities in the proposed subproject areas, including Central Monrovia (2 meetings), Bushrod Island (3 meetings), and Paynesville (1 meeting) with 114 participants in total. This has initially informed the preparation of this Environmental and Social Management Plan (ESMP). This Phase II ESMP was prepared in accordance with the World Bank ESF and the Liberia Environmental and Social Assessment Guidelines and procedures. The methodology essentially entailed: Preliminary site visits, literature review/desktop studies, field studies, community/stakeholder consultations and the preparation of the ESMP.

The table below summarizes key findings from the ESMP in line with guidance provided in the project ESMF:

Table 1: Brief ESMP Summary

<i>Subproject Name</i>	<i>Drainage Cleaning</i>
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Subproject Location	<i>Bushrod Island; Central Monrovia; Paynesville</i>
Risk level (low, moderate, substantial or high)	<i>Moderate</i>
Date of the field visit	<i>September 10, 11, 12 & 13, 2024</i>
Consultation Summary	<p><i>During the phase II assessment, the PMU didn't host big meetings in communities. However, the E&S team had onsite discussion with leaders and they embraced the project and highly expressed their desire to participate as was done in phase I.</i></p> <p><i>They again complained about illegal dumping and no access to collection points. They stressed the need for the PMU to Provide continuous support by empowering the communities to carry out the cleaning works themselves which will enable them to ensure a sustainable cleaned drainage system afterwards. This is a concern of many community Leaders and members engaged.</i></p>
Observations/Comments	<p><i>All methods of Illegal disposal of waste were evident in many areas assessed. Many collection points are closed down and Community dwellers complained that they don't have access to waste bin or collection points to dispose their waste. Hence, all drainages seen are clogged with waste.</i></p> <p><i>Continuous Community engagement, awareness of the Project GBV, GRM, health and Safety training of community workers and prioritizing the community during mobilization is key for a successful implementation</i></p>
Signature of PMU E&S staff	<i>Harriett Peal- Keamu, Samson Wonah & Eugene S. Caine</i>
Date	<i>September 13, 2024</i>

1.0 Introduction

Objectives of the ESMP

The overarching objective of the ESMP is to ensure that the environmental and social impacts likely to arise from the subproject activities are identified and appropriate mitigation measures integrated into project implementation and operation in order to protect human and environmental health.

The specific objectives of the ESMP are to:

- Comply with applicable national environmental and social legislations, standards and guidelines as well as the World Bank's ESF
- Achieve and demonstrate sound environmental and social performance

- Identify potential positive and negative environmental and social risks and impacts that may arise from the implementation of the project
- Proffer mitigation and management measures that need to be implemented in order to mitigate the negative environmental and social impacts and enhance the positive impacts of the project
- Propose environmental and social monitoring programs that will ensure that mitigation measures are implemented and effective during project execution and timely corrective actions are taken where required
- Propose institutional arrangements, incorporating roles and responsibilities of stakeholders involved in management actions and monitoring
- Outline the implementation schedule and reporting procedures for the ESMP
- Communicate environmental and social expectations and requirements throughout the project life cycle; and
- Ensure the allocation of sufficient resources for effective implementation of the mitigation measures

Literature Review/Desktop Studies

Literature review and desktop studies were undertaken to obtain information on the proposed project as well as the environmental and socio-economic conditions in the project area.

The documents reviewed included:

- Project Appraisal Document (PAD)
- Stakeholder Engagement Plan (SEP)
- Labor management Procedures (LMP)
- Environmental and Social Management Framework (ESMF)
- World Bank ESF
- National environmental laws regulations, policies and guidelines
- E&S screening report for the subproject

Field Data Collection

Major field studies were carried out during Phase I. Field studies were carried out with a view to gather additional information on the baseline environmental and social conditions that may potentially be affected during project implementation and operation phases. This involved in-situ measurements, visual assessment/observations, Focus Group Discussions and Key Informant Interviews (KIIs).

For Phase II, the PMU carried out another field visitation to verify the current status of drainages. There was no further Focus Group Discussion in Phase II. Environmental and social conditions at the various sites is almost the same, only that the flooding conditions along most corridors have improved.

Stakeholder Consultations

During phase II assessment, the PMU didn't host engagement meetings in Project Communities. However, the E&S team had onsite discussion with community leaders and few members, and they embraced the project and highly expressed their desire to participate as was done in phase I.

They complained about illegal dumping of waste into their drainage system, and having no access to collection points. They stressed the need for the PMU to Provide continuous support by empowering the communities to carry out the cleaning works themselves which will enable them to ensure a sustainable cleaned drainage system afterwards. This is a concern of many community Leaders and members engaged.

2.0 Project Description

2.1 Nature and scope of activities

The Project Proponent has decided to undertake a subproject under component 1, referred to as “Phase II Drainage Cleaning Activity” (or “quick win activity” due to the time pressure caused by the rainy season). This encompasses the cleaning of drainage channels in the Central and Greater Monrovia areas (see figures 1-6). The cleaning of drainage channels is considered to be of an immediate and time-sensitive priority to avoid that clogged up drainage channels flood neighboring communities in the rainy season (between May and November). The Ministry of Finance and Development Planning (MFDP) and the Ministry of Public Works (MPW) have identified the drainage cleaning as a priority activity to protect people’s lives and assets in the communities adjacent to the targeted drainage channels.

The Phase I proposed drainage cleaning was planned to be carried out through a labor-based approach, with an estimated number of 300 persons to be recruited and managed by a firm/company that the PMU will hire through competitive bidding. Using simple tools such as shovels, rakes, buckets, wheelbarrows, machetes/cutlasses and garbage bins, the 300 estimated workers to be recruited will be organized into small work teams and assigned to clean up defined lengths of the selected drainage channels. Phase II will follow the same trend as was done in Phase I. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to the MCC operated landfill in Whein Town (northern Paynesville).

The proposed activities will involve no earthworks and widening of drainage channels. As such, there will be no land acquisition or demolition of structures along the drainage during execution of the proposed cleaning activities. Implementation of the proposed activities will cause no negative changes to or adverse impacts on livelihood earnings for nearby community residents and businesses.

The PMU shall ensure that the contractor(s) hired to implement the proposed drainage cleaning will, when dealing with labor related risks/issues, refer to the requirements/provisions of ESS2, the Project’s Labor Management Procedures, and Liberia’s Decent Work Act of 2015. These frameworks and covenants seek to address issues related to labor and working conditions, remuneration, occupational health and safety, discrimination, worker rights, etc.

The main objective of the proposed drainage cleaning activity is to reduce flooding in the targeted communities by opening up drainage channels to enhance the free flow of storm and wastewater, as well as to promote a clean and healthy environment for community dwellers and the larger population. The scope of works for this drainage cleaning activity including activity description, performance requirements and the outcome indicators are given in the matrix below.

In line with the project’s Environmental and Social Framework (ESMF), the Project Management Unit (PMU) within MPW has prepared an initial E&S screening checklist. In the course of the exercise, this was expanded to an Environmental and Social Management Plan (ESMP). The ESMP covers mitigation, monitoring, and institutional measures to be taken during implementation and operation of this subproject to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to an acceptable level.

Table 2: Scope of Work for Drainage Cleaning Activity

Scope of Work for Drainage Cleaning Activity under Phase II			
<u>Activity</u>	<u>Activity Description</u>	<u>Performance Requirements</u>	<u>Outcome Indicator & Penalty</u>
<p>Drainage Cleaning:</p> <ul style="list-style-type: none"> • removal of waste from drainage • desilting • shoulder cleaning • haulage and disposal of waste 	<p>The Contractor cleans the drainage structures (based on the measurements and condition of the existing drainage structure) for earth drainages.</p> <p>For concrete structures, the full measure of the drainage by both length and depth (ranging from 1.5m to 2m) must be cleaned including drainage ditches, channels, inlet and outlet chambers to discharge areas, etc.</p> <p>The contractor should also be aware that the work will require cleaning (removal of garbage and desilting) of underground drainages (Pipe culverts or drainage channels)</p> <p>The contractor ensures that the structures are completely clear of debris and able to function at their intended capacity. Absolutely no silt or debris impeding the functionality of the drainages shall be permitted.</p>	<p>Clearance of all debris from all drainage structures including the associated outlets and inlets.</p> <p>The lack of access route for equipment to travel along the drainages will make it difficult for heavy equipment to clean the drains. Therefore, based on the depths and types of drainage systems (earth drains and old concrete drains) the usage of hand tools will be the best method to achieve the required level of cleanliness.</p> <p>There should be no hindrance to stormwater flowing into and out of the drainage structure.</p> <p>All debris collected from the earth and concrete drains should be transported using waste bins/buckets, and wheelbarrows to the collection points; and by Trucks from the collection points to Whein Town Landfill.</p>	<p>The unimpeded flow of water through the drainage structure is inspected monthly to ensure compliance. i.e., All drainage sections must be cleaned and inspected monthly</p> <p>Where debris and other organic matter hinder the free flow of water or significantly affect the flow of stormwater through the drainage, (10%) of the due payment as required in the scope of works would be deducted.</p>

2.2. Subproject Location

The drainage cleaning activity (subproject) will cover several communities clustered under three locations or areas within Greater Monrovia; namely: Bushrod Island, Central Monrovia and Paynesville. Bushrod Island lies in the western end of Monrovia and comprises a whole host of communities including (*Clara/Paity Town close to the Ocean, Freeport (Liberia's main seaport) Doe Community close to Du River, Logan Town close to Stockton Creek, and New Kru Town close to Duala Market*). See figures 1 and 2.

Central Monrovia lies along the seacoast in the south, spanning from the top of Mamba Point through Crown and Capitol Hills and Sinkor to the end of Congo Town at SKD Boulevard Junction. The communities assessed within Central Monrovia consist of *Newport- Redemption Road, Ministry of Public Works Backgate -Soni Wein, Buchanna Street – Soni Wein Drainage, Randall-Carey-Benson-Gurley-Center Streets, UL Capitol Bye-Pass-Perry Street Intersection, Water Side – Old Cat Building -West Point Beach, 12th Street-19th Street – Fiamah-Weasay, Divine Town- Bernard Beach, Small Town- Behind Catholic Hospital*. See figures 3 and 4.

Paynesville Township lies in the eastern end of Monrovia and covers large number of communities. The areas assessed for the ESMP are: (*Kpelleh Town-SD Cooper Road, Sand Town -AB Tolbert Road and SD Cooper Road-Car Wash- SKD 72nd Blvd*). See figures 5 and 6.

Apart from Mamba Point, Crown Hill, Capitol Hill and the hill around Pagus Island in Congo Town, most of the project areas are relatively flat and comprise marsh lands and mangrove swamps. The Atlantic Ocean, Du River, Mesurado River, St. Paul River, Stockton and Warner Creeks are the main water bodies in the project areas. The Montserrado wetlands (protected Ramsar site) will be affected by drainages leading from SD Cooper Road through King Gray ELWA, GSA Road to Du Port Road: Drainage does not lead through wetland; drainages drain into Gulf of Guinea and the Mesurado Wetlands (see figure 5)

To protect the Mesurado Wetland from pollution during and after the cleaning activities, the below mitigation measures will be carried out, primarily including the preparation and installation of energy dissipators and screens at selected locations from where the drainage channels drain into the wetland.

Boulder rocks measuring 30.2cm to 45cm will be placed at the apron slab of the existing culverts and will serve as stormwater dissipators. The use of boulder rocks is recommended to prevent the construction of concrete structures using Portland Cement that would contaminate the wetland. The installation of energy dissipators will be done immediately after the drainage is cleaned.

A screen made out of corrosion resistant materials, particularly stainless steel, will be installed to prevent debris and other pollutants from entering the Mesurado Wetland. The installation of this system will be done during the drainage cleaning activities.

The screen will be mounted on corrosion resistant galvanize poles drilled deep beneath the water bed at the drainage outlet just before entering the Mesurado Wetland. The effective functioning of the system will require regular cleaning to routinely remove the accumulated trash and debris, especially during the raining season. The frequency of removal will depend on debris or sludge

accumulated. Once the screen is constructed, the PMU will enter into an agreement with a local sanitation company for regular maintenance and debris removal. The installation of energy dissipators and screens will take approximately one (1) week for each of the two identified sites (SD Cooper Road Drainage).

Figure 1: Bushrod Island # 1- Vai Town-Freeport-Doe Community

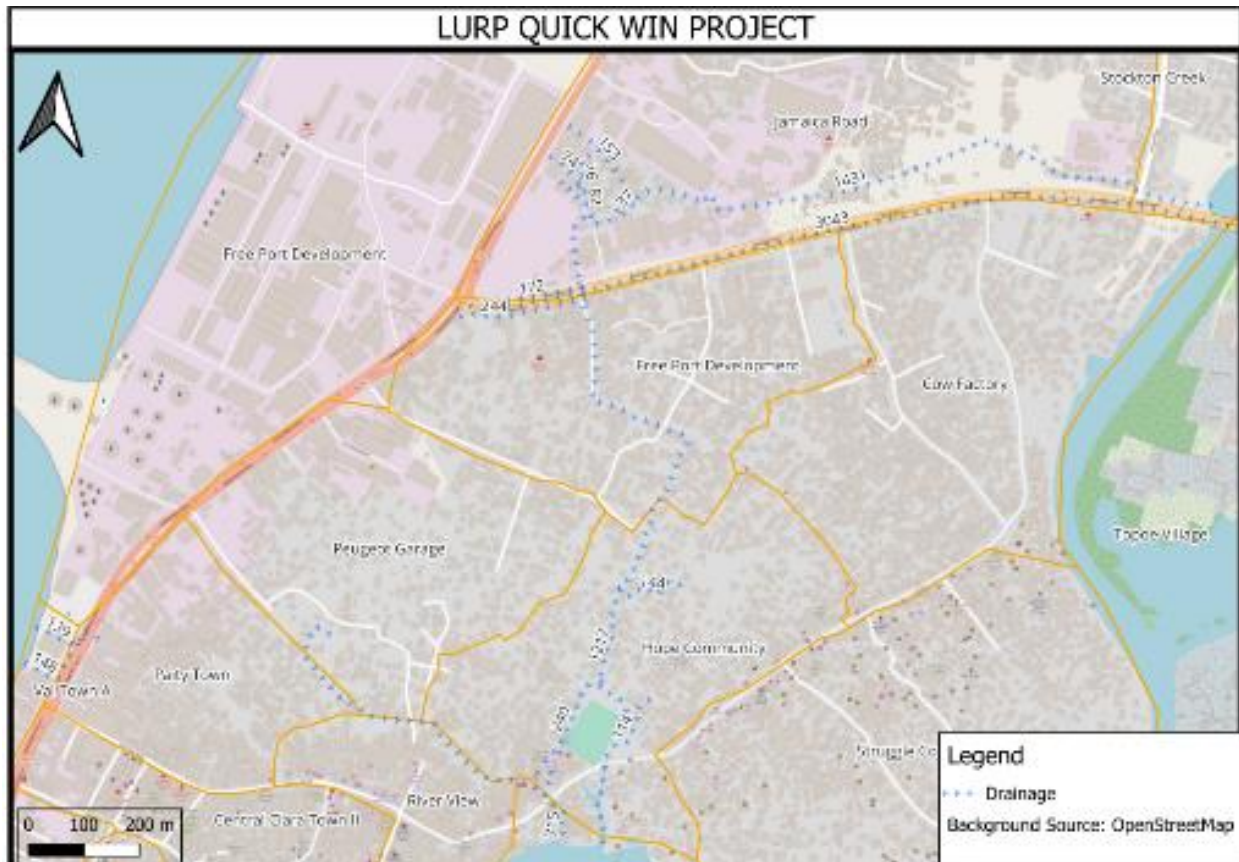


Figure 2: Bushrod Island # 2 – Duala, New Kru Town and other nearby communities

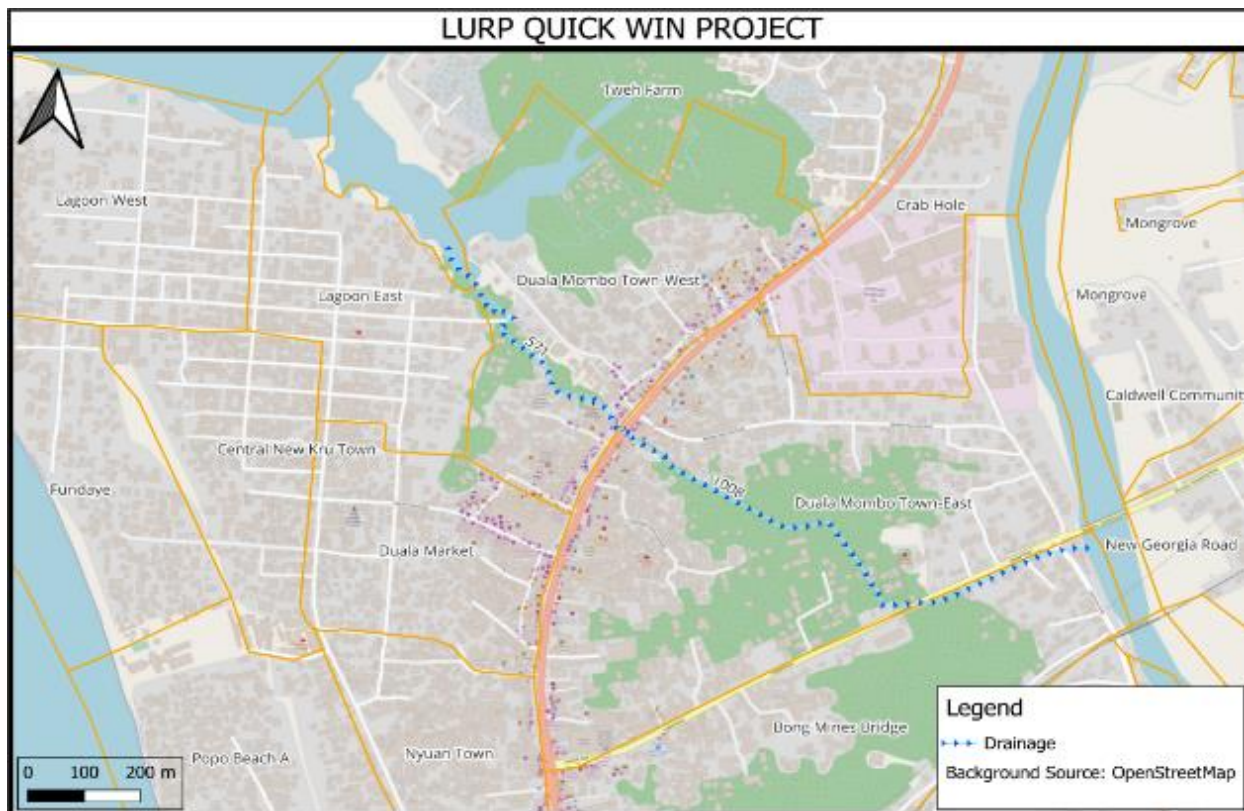


Figure 3: Central Monrovia # 1- Covers West Point, Mamba Point, Capitol Hill to 12th Street Sinkor

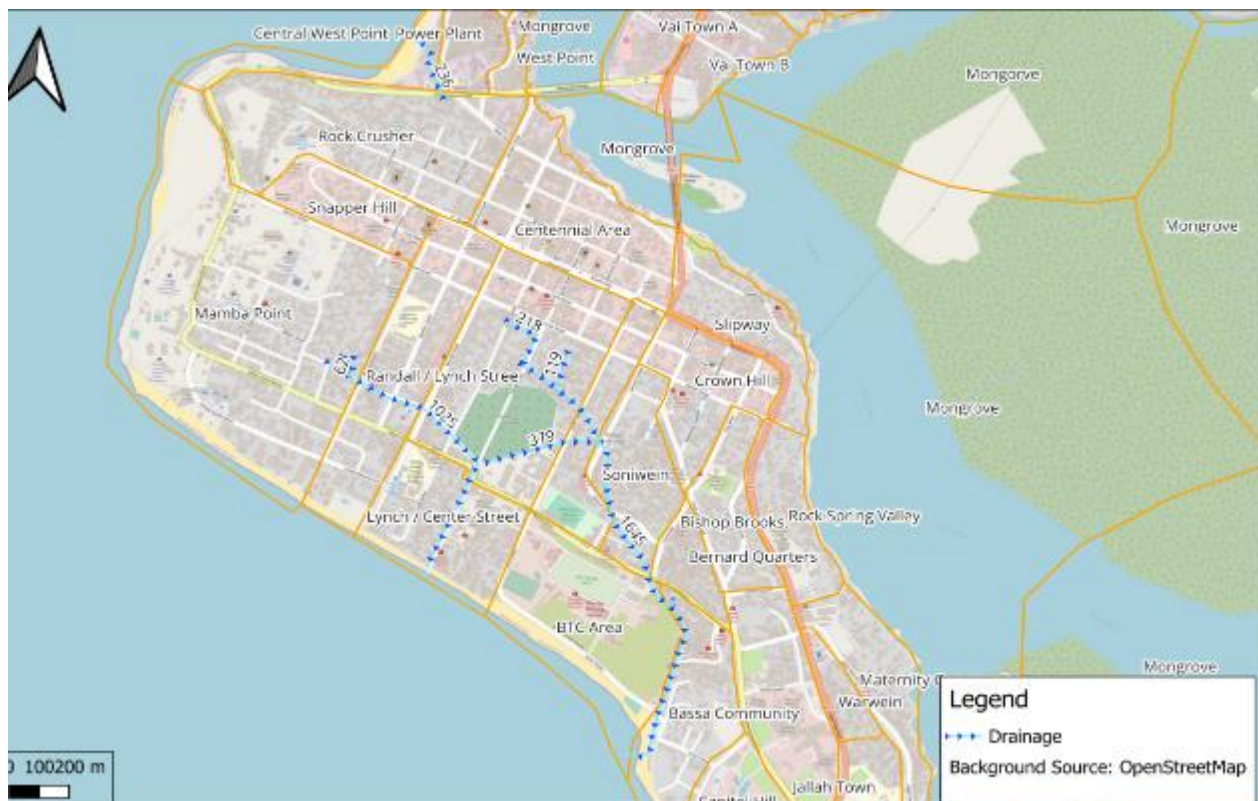


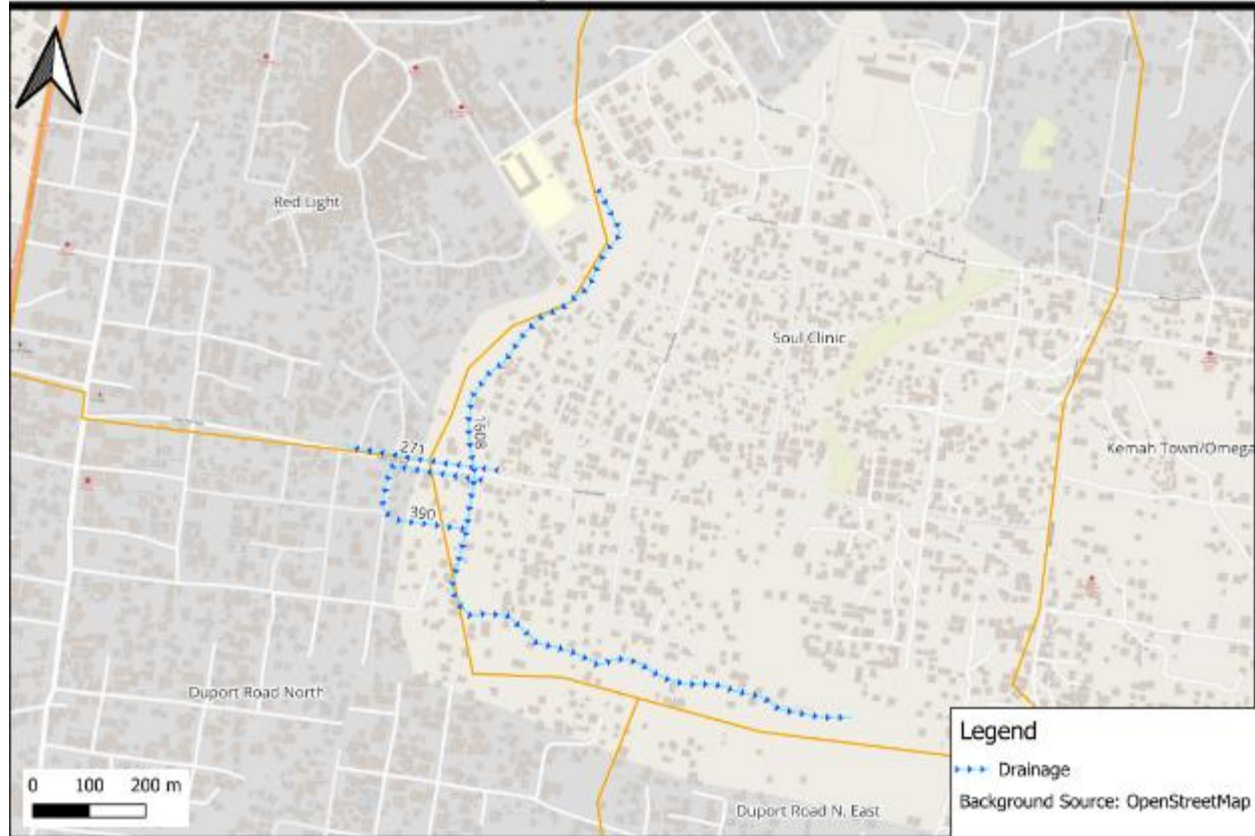
Figure 4: Central Monrovia # 2- 12th Street Sinkor to Fiamah, Fish Market to Catholic Hospital



Figure 5: Paynesville #1 – SD Cooper Road through King Gray ELWA, GSA Road to Du Port Road



Figure 6: Paynesville # 2 – Du Port Road Northeast, Red Light and surround communities
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The following table provides further information on the drainage locations, lengths, and types.

Table 3: Drainages Location and Types

Drainage Location	Approximate Length (m)	Drainage Type
BUSHROD ISLAND		
VAI TOWN-PITY TOWN (Vai Town-Millennium Park, Thunder Bird – Du-River, Sethi Brother-Du-River, Clara Town Gas Station-Clara Town Market, Pity Town-Du-River	2500	Concrete & Earth drains
LPRC – FREEPORT YARD BUSHROD	1500	Concrete /side/cross drains
FREEPORT CONEX GAS STATION-DOE COMMUNITY- DU-RIVER	1800	Concrete & Earth/side/cross drains
CEMENCO – STOCKTON CREEK	2000	Concrete & Earth/side/cross drains
JAMAICA ROAD – STOCKTON CREEK	2000	Earth drains

LOGAN TOWN – STOCKTON CREEK	1000	Earth drains
BACK OF LEC FENCE – POPO BEACH	1250	Earth drains
LEC MAIN GATE – STOCKTON CREEK	1250	Earth drains
CALDWELL ROAD-MOMOBOE TOWN COMMUNITY – DUALA MARKET-NEW KRU TOWN	2500	Earth drains
CENTRAL MONROVIA		
CABRA ESTATE-END OF ACS FENCE	2500	Concrete & Earth/side/cross drains
DIVINE TOWN- BERNARD BEACH	2000	Earth drains
SMALL TOWN- BEHIND CATHOLIC HOSPITAL	3500	Concrete & Earth/side/cross drains
17 th STREET-18 TH STREET – FIAMAH-WEASIA	1800	Concrete & Earth/side/cross drains
12 TH STREET -14 TH STREET –ISLAND DRAINAGE	2000	Concrete & Earth/side/cross drains
WATER SIDE – OLD CAT BUILDING -WEST POINT BEACH	2500	Concrete & Earth/side/cross drains
NEWPORT-CENTER STREETS, CENTER STREET- REDEMPTION ROAD AND MINISTRY OF PUBLIC WORKS BACKGATE-SONNI WIEN	3000	Concrete & Earth/side/cross drains
BUCHANNA STREET – SONNI WIEN DRAINAGE	1000	Concrete & Earth/side/cross drains
RANDALL-CAREY-BENSON-GURLEY-CENTER STREETS	1800	Concrete & Earth/side/cross drains
UL CAPITOL BYE-PASS-PERRY STREET INTERSECTION(Out)	1,050	Concrete & Earth/side/cross drains
PAYNESVILLE		
GSA ROAD- ZUBAH TOWN	2500	Concrete & Earth drains
KPELLEH TOWN-SD COOPER ROAD	1500	Earth drains
SAND TOWN -AB TOLBERT ROAD	2000	Concrete & Earth/side/cross drains
SD COOPER CAR WASH-72 nd BLVD	1500	Earth drains
REHAB-DUPORT ROAD	2400	Earth drains

GOBACHOP MARKET-ZAYZAY COMMUNITY	2500	Earth drains
SAINT KIZITO CHURCH-ZAYZAY COMMUNITY	1500	Concrete & Earth/side/cross drains
NEEZOE COMMUNITY-CHANESE COOL STORAGE	3000	Earth drains
STOCKTON CREEK-REDLIGHT (JAPANESE FREEWAY)	13,000	Concrete /side/cross drains
BARNESVILLE TOWN HALL-KESSELY BOULEVARD (No provision in BOQ)	2000	Earth drains

On average, the level of waste and silt in the drainages varies. The drains are not completely full across all sections of the full distance of the drains to be cleaned. Moreover, the initial drainage cleaning has reduced the quantity of silt within the drainages. For phase II, the Engineers estimated 18.2% volume of the drainages as waste/silts which is equivalent to 28,697.5m³. Considering this volume, the Engineers estimated 70% waste materials which is equivalent to 20,088.25m³ (22,750 tons), and 30% silt materials which is 8,609.25m³ (9,750tons), as the expected specific volume of silt and waste to be collected.

A key challenge faced during the phase one drainage cleaning activities was the proper disposal and management of silt materials collected from the drainages. During Phase I drainage cleaning, MCC had indicated that silts materials are not allowed with in the landfill but due to the fire outbreak in January 2024 which lasted up to June, the silt material was accepted and used to help in extinguishing the fire. During the course of preparing this phase II ESMP, the PMU have had series of engagements with MCC's Director General for Environmental Health and Sanitation including the Landfill Site Manager and Supervisor, concerning the disposal of the silt since it is anticipated that the quantity of silt to be disposed under phase II will be far less than the silt disposed under Phase I and that the silt could be used for periodic covering of the waste. MCC indicated that presently, there is no covering of waste ongoing at the landfill due to safeguarding of space and limited funding. However, after a site visit and series of discussions MCC has accepted that the silt will be disposed at the landfill and will be used to fill in some deep gaps/spaces. In addition, some of the silt will be stored on site to aid in future fire outbreak at the landfill since at the time the drainage cleaning will be implemented will fall within the pick of the dry season when the possibility of fire outbreak is very high.

3.0 Regulatory, Policy and Institutional Framework

The preparation of this ESMP was carried out within the context and requirements of the relevant Liberia regulatory and institutional framework, and the relevant environmental and social standards of the World Bank Environmental and Social Framework (ESF).

3.1 National Regulations and Policies

The applicable Liberian Policy, legal and Regulatory framework consulted for this ESMP includes the following. Details about the content of these policies, laws and regulations is summarized in the project ESMF:

- **The 1986 Constitution**, which provides for the effective management of the nation's natural resources;
- **The Environmental Protection Agency (EPA) Act of 2003**, created and mandated the EPA to coordinate, monitor and supervise all activities related to the protection of the environment and the sustainable use of natural resources;
- **Environmental Protection and Management Law, 2003**; provides the legal basis for EPA's management and protection of the environment and natural resources;
- **EPA's ESIA Procedural Guidelines (2017)** provide the framework for conducting environmental assessment and management prior to executing any project activities.
- **Land Rights Policy, 2013**
- **National Environmental and Occupational Health Policy, 2010**
- **Liberia Land Authority Act, 2016**
- **Liberia Land Rights Act, 2018**
- **National Environmental Policy of Liberia (2002)**: aims to enhance sustainable environmental quality and resource productivity.

3.2 Relevant Institutional Framework

The relevant institutions for this activity include the Environmental Protection Agency (EPA), the Ministry of Public Works (MPW), Monrovia City Corporation (MCC), and the Paynesville City Corporation (PCC). Communities and contractors will support the implementation of the activities. The World Bank will provide overall guidance.

Environmental Protection Agency (EPA)

The Environmental Protection Agency (EPA) is the regulatory Institution of the Government of Liberia for the sustainable management of the environment and its natural resources. The Agency was established by an act of the Legislature November 26, 2002 and published on April 30, 2003. Section 5 of the Act designates the EPA as the principal Liberian authority for environmental management which shall co-ordinate, monitor, supervise, and consult with relevant stakeholders on all the activities for environmental protection and the sustainable use of natural resources. Based on this mandate, EPA will be involved in the activities to ensure that they comply with national policies, laws, and regulations related to environmental protection.

Ministry of Public Works (MPW)

MPW is the implementing agency for the LURP. A Project Management Unit (PMU) has been established with MPW and is responsible for the day to day implementation of LURP. For this subproject, MPW's role is to provide overall guidance and supervision to the activities. MPW has provided support to preparing this ESMP through providing vehicles and information on similar, previous activities carried out by MPW. The PMU is handling the preparation of the ESMP through its social and gender specialist and the environmental specialist. These PMU staff will also handle grievances related to this activity. The MPU will further be responsible for handling procurement and financial management as well as M&E related tasks for this activity.

Monrovia City Corporation (MCC) and Paynesville City Corporation (PCC)

The activities will be implemented within the administrative boundaries of MCC and PCC. Both cities have the mandate for solid waste management and MCC is responsible for managing the Whein Town landfill. Both city corporations will be engaged to provide guidance and contacts as needed for implementing the activity. Supervision will be provided to ensure that the activities in each jurisdiction comply with any relevant procedures related to their waste management mandates.

Communities

Communities targeted by the activities will benefit from the drainage cleaning. Further, workers will be recruited from these communities. Community workers will be required to comply with the ESMP provisions and will be provided with safety equipment and relevant instructions to mitigate any environmental and social risks, including those related to GBV.

Contractors

Contractors will be hired to carry out the work. Contractors will be required to fully comply with the ESMP and its key provisions will form part of the contract between MPW and the contractors. Contractors will recruit community workers and ensure their compliance with the ESMP provisions.

World Bank

The World Bank will provide technical and E&S advice as required. The World Bank will be responsible for reviewing all related E&S documents, interim reports, and final reports from the contractor and MPW/PMU to ensure that all E&S provisions from the EMSP are complied with. Further information on the ESF and related ESS is presented in the following section.

3.3 World Bank Environmental and Social Standards (ESSs)

The World Bank Environmental and Social Standards applicable to the project and the quick win drainage cleaning activity are presented in table 4 below:

Table 4: Applicable ESS to project and subproject

ESS	Applicable to project (per ESCP)	Applicable to subproject
ESS1: Assessment and Management of Environmental and Social Risks and Impacts;	Yes	Yes
ESS2: Labor and Working Conditions;	Yes	Yes
ESS3: Resource Efficiency and Pollution Prevention and Management	Yes	Yes
ESS4: Community Health and Safety;	Yes	Yes
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Yes	No (no land acquisition required and no resettlements are triggered due to nature of the subproject activities)
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Yes	No (no adverse impacts on biodiversity/living natural resources anticipated due to nature of the subproject activities)
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	No	No (not applicable to project)
ESS 8: Cultural Heritage	Yes	No (not applicable due to nature of the subproject activities)
ESS 9: Financial Intermediaries	No	No (not applicable to project)
ESS10: Stakeholder Engagement and Information Disclosure;	Yes	Yes

3.4 Steps Taken by the Project to Comply with ESF Requirements

Early during project appraisal, the client (MPW) took the necessary steps to comply with the Bank's environmental and social standards by preparing and disclosing five ESF instruments for the project, namely; the Environmental and Social Management Framework (ESMF), the

Resettlement Policy Framework (RPF), the Stakeholder Engagement Plan (SEP), the Labor Management Procedures (LMP), and the Environmental and Social Commitment Plan (ESCP).

In compliance with the approved ESMF, the PMU also conducted detailed site environmental and social screening of drainage channels being considered for the quick win cleaning activity in Central and Greater Monrovia. As an integral part of the screening exercise, the screening team held extensive consultations with community residents across the project areas.

4.0 Environmental and Social Baseline Conditions

4.1. Summary of the environmental and social baseline conditions

This section presents an overview of the environmental and socio-economic conditions around the various sites where clearing activities are planned to take place. The following table provides a summary of the environmental and social baseline conditions.

Environmental and Social Baseline Data Collection Methods

Table 5: Environmental and Social Characteristics of the Assessed Project Areas

Population Density	Vegetation	Topography/Landscape	Soil Type	Current Land Uses	General Ecology	Sanitation
Bushrod Island (Clara Town-Paity Town-Freeport-Doe Community, New Kru Town-Duala Market-Logan Town-Stockton Creek)						
High population density with densely congested housing (including vast number of substandard houses and informal settlements) with little or no access to vital infrastructure services. Members of Liberia's 16 ethnic/language groups are present there, with the majority being the Grebo, Kru and Krahn ethnic groups.	Shrubs, mangrove trees	Very flat land and prone to flooding during the wet season of the year	Predominantly Sandy, clay and loam	Industrial (cement, steel manufacturing and flour mill are among the key industries in the Freeport area of Bushrod Island), commercial, residential, schools, health facilities, religious service centers, agricultural activities-especially the production of vegetables during the dry season	Terrestrial with close proximity to wetlands: Vai Town/Freeport-Doe Community: Drainage leads through a wetland located north of Clara Town Community, draining into the Stockton Creek and then into the Mesurado River (see figure 1) Duala, New Kru Town and nearby communities : Drainage leads through a wetland	Sanitary conditions in the clustered communities comprising this area are very poor and pose serious health hazards to the very community dwellers and to people and other life forms within the surrounding environments. All the drainage channels in this area are filled with plastic, human feces and other type of wastes and are

					(east of Duala Market) and drains into St Paul River in the north and Stockton Creek in the east (see figure 2)	highly polluted.
<p>The main potential environmental and social risks identified during the E&S screening of drainage channels on Bushrod Island are as follows:</p> <ul style="list-style-type: none"> ✓ Risk of contaminating nearby soil, surface and ground water sources if wastes are improperly handled; ✓ Occupational health and safety risks of workers and community members arising from the work; ✓ Risk of silts and debris removed from drainage channels being dumped illegally and causing more problem; ✓ Risk of cleaners being unable to freely access all part of the drainage channels to transport wastes due to lack of access routes; 						
<p>Central Monrovia (Newport- Redemption Road, Ministry of Public Works Backgate-Soni Wien, Buchanna Street – Soni Wien Drainage, Randall-Carey-Benson-Gurley-Center Streets, UL Capitol Bye-Pass-Perry Street Intersection, Water Side – Old Cat Building -West Point Beach, 12th Street-19th Street – Fiamah-Weasay, Divine Town- Bernard Beach, Small Town- Behind Catholic Hospital)</p>						
High population density and densely congested housing (including substandard houses and informal settlements) with limited access to water and sanitation infrastructure. Representatives of Liberia's multi ethnic groups reside in the area.	Grass, fruit trees	Comprises: Steep and gentle slopes Flat terrain	Sandy, clay, loam	Commercial (including markets), residential, schools, health facilities, religious service centers, and agricultural activities-vegetable production.	Terrestrial West Point, Mamba Point, Capitol Hill: No wetlands present; drainage drains into the Gulf of Guinea (see figure 3) 12 th St. Sinkor-Fiamah-Fish Market-Catholic Hospital: The drainage flows through a wetland that has been filled in with houses. The drainage drains into a stream north of the Catholic	Very poor sanitary conditions, which pose substantial health risk to both human and other life forms in the nearby environment.

					Hospital (see figure 4)	
<p>The main potential environmental and social risks identified during the E&S screening of drainage channels in Central Monrovia are as follows:</p> <ul style="list-style-type: none"> ✓ Risk of contaminating nearby soil, surface and ground water sources if wastes are improperly handled; ✓ Occupational health and safety risks of workers and community members arising from the work; ✓ Risk of silts and debris removed from drainage channels being dumped illegally and causing more problem; ✓ Risk of cleaners being unable to freely access all part of the drainage channels to transport wastes due to lack of access routes; 						
Paynesville (Kpelleh Town-SD Cooper Road, Sand Town -AB Tolbert Road and SD Cooper Road-Car Wash-SKD 72 nd Blvd)						
High population density and densely congested housing (including substandard houses and informal settlements) with limited access to water and sanitation infrastructure. Representatives of Liberia's multi ethnic groups reside in these areas.	Grass, fruit trees, mangrove trees	Relatively flat with gentle slopes	Sandy, clay, loam	Commercial (including markets), residential, schools, health facilities, religious service centers, and agricultural activities-vegetable production.	<p>Terrestrial</p> <p>SD Cooper Road through King Gray ELWA, GSA Road to Du Port Road: Drainage does not lead through wetland; drainages drain into Gulf of Guinea and the Mesurado Wetlands (see figure 5)</p> <p>Du Port Road Northeast, Red Light and surround communities : No wetlands present; drainage drains into unoccupied areas (see figure 6)</p>	Very poor sanitary conditions, which pose substantial health risk to both human and other life forms in the nearby environment.
<p>The main potential environmental and social risks identified during the E&S screening of drainage channels in Central Monrovia are as follows:</p> <ul style="list-style-type: none"> ✓ Risk of contaminating nearby soil, surface and ground water sources if wastes are improperly handled; ✓ Occupational health and safety risks of workers and community members arising from the work; 						

- ✓ Risk of silts and debris removed from drainage channels being dumped illegally and causing more problem;
- ✓ Risk of cleaners being unable to freely access all part of the drainage channels to transport wastes due to lack of access routes;

4.2 Photos taken during the Sites Assessment

Photos of site visits in September 10, 11, 12 & 13, 2024



5.0 Environmental and Social Risks and Impacts

Introduction

In this section, an overview of the anticipated environmental and social risks and impacts of proposed cleaning activities across the proposed intervention sites, as well as recommendations to mitigate the negative/adverse impacts are presented. It also presents an environmental and social management and monitoring plan to ensure that the mitigation measures are implemented and are effective. The presentation in this section is based on observations made in the course of field data collection and assessment carried out specifically for the purpose of preparing this ESMP report.

5.1 Risk assessment

The overall risk level is considered to be **Moderate** based on the following assessment, which is a result of an E&S screening conducted on September 10, 11, 12 and 13, 2024.

Anticipated positive impacts associated with the cleaning of drainage channels

The proposed drainage cleaning, if successfully implemented, will have huge positive benefits, including but not limited to i) a clean and healthy environment for community dwellers and businesses, ii) income for community workers participating in the cleaning activities, iii) improved capacity of drainage channels to allow the free flow of storm water, thereby significantly reducing the incidence of flooding in project affected communities and surrounding areas, and iv) the improved awareness of LURP activities in and across the project areas in Great Monrovia.

The main positive impacts of the planned quick impact activities include the following:

- ✚ improved drainage capacity to allow free flow of stormwater thereby reducing flood risk in surrounding communities, protecting community members' lives and physical assets;
- ✚ reduced occurrences of water borne diseases, insects and vermin and improved health conditions of people living in the surrounding communities;
- ✚ enhanced awareness of project activities within the local communities;
- ✚ opportunity for communities to take ownership of and sustain the exercise for their own wellbeing;
- ✚ temporary job creation and income generation for community workers that would be hired to carry out the activities.

Potential negative impacts associated with the cleaning of drainage channels

The identified potential adverse environmental and social risks/impacts of the proposed drainage cleaning activities are as follows:

- ✚ the risk of soil and water contamination resulting from improper handling, storage, transportation and disposal of wastes removed from drainage channels;
- ✚ occupational health and safety risks of workers who would be subjected to unsafe and hazardous working conditions, especially without provision of the required personal protective equipment (PPE);
- ✚ risk of violation of workers' rights

- ✚ risk of gender-based violence (GBV), sexual exploitation and abuse (SEA) and sexual harassment (SH) against workers as well as community members;
- ✚ risk of community members not cooperating in the implementation of the proposed activities due to hiring of most of the workers from outside the affected community.

Methodology for risk assessment

The risks for this project were categorized on a scale from 1 to 5 (1-2 = low risk; 3 = moderate risk; 4 = substantial risk; 5 = high risk).

Table 6: Description and rating of potential negative environmental and social risks and mitigation measures

Risk Description	Likelihood of occurring (1-5) *	E & S Rating	
Mobilization Phase			
Risk of community members rejecting program due to hiring majority of the workers from outside the affected community.	2	Low	
Implementation/Cleaning Phase			
Risk of soil and water contamination through improper storage, transportation and disposal of wastes removed from drainage channels	5	High	
Risk of air pollution due to emissions from engines and dust from vehicle movement and other work activities.	3	Moderate	
Risk of negatively affecting flora and fauna	1	Low	
Risk of silts and debris removed from the drainages being dumped illegally.	4	Substantial	
Unsuitable dumping of waste materials constituting aesthetic nuisances and odors	4	Substantial	
Occupational health and safety risk of workers (incl. accidents) due to unsafe and hazardous working conditions.	5	High	
Risk of violation of workers' rights, including discrimination of all kinds	3	Moderate	
Risk of Gender-based Violence (GBV), sexual exploitation and abuse (SEA) and sexual harassment (SH) among workers at different levels, and between workers and community members	3	Moderate	

The risk of negatively polluting the RAMSAT SITE	4	Substantial	
Traffic impact during mobilization of equipment to sites and carting away of wastes, especially along sites that may not be accessible by good roads	4	Substantial	
Noise pollution	1	Low	
Operation/Maintenance Phase			
The risk of waste, including silt and vegetation, returning to the drainages after cleaning is completed	5	High	

**On the scale of 1 to 5, 5 is the highest score.*

As shown in Table 6, the overall Environmental and Social risk rating for the drainage cleaning activities is “**Moderate**”.

This risk rating is informed by the following considerations on the potential positive and negative impacts of the subproject:

5.2 Risk Summary

Risks during preparation of the subproject are limited and can be addressed through further community consultations (building on the E&S screening consultations) and adequate structuring of the contracts for the cleaning activities.

From the overall assessment, the adverse environmental and social risks and impacts associated with the drainage channels during implementation of the subproject are similar despite their different locations. The main potential environmental and social risks associated with the execution of the drainage cleaning are the risks of soil and water pollution that may result from poor and improper handling and disposal of the wastes to be collected, and occupational health and safety risks of workers who would be involved in the unsafe and hazardous work of cleaning the highly polluted drainages. Some estimated 300 people are expected to be recruited from the various project affected communities by the firm/company that will be hired by the PMU to organize and oversee the work.

The main risk related to the maintenance of the drainages after the cleaning is completed remains the core objective of the LURP. The subproject is embedded in the overall project activities that seek to reduce community flooding in a sustainable manner by combining infrastructure investments for flood risk management, combined with capacity building for urban planning and solid waste management, and awareness raising on these aspects through LURP components 1 and 2.

See Annex C for a Traffic Management Plan, Annex D for an Occupation Health and Safety Management Plan, Annex E for an Emergency Preparedness Plan, and Annex F for a Waste Management Plan.

6.0 Consultations

6.1 Consultations background

The ESMP was prepared based on an E&S screening activity, which was carried out over a period of 5 days (April 6, 2023; May 4,5,15&17, 2023) and covered drainage channels in the below listed communities, which are grouped under three (3) clusters/ key locations as follows:

- **Bushrod Island** (Clara Town, Paity Town, Freeport (Liberia's main seaport), Doe Community, Logan Town, New Kru Town, Duala Market and Stockton Creek);
- **Central Monrovia** (Newport- Redemption Road, Ministry of Public Works Backgate - Soni Wien, Buchanna Street – Soni Wien Drainage, Randall-Carey-Benson-Gurley-Center Streets, UL Capitol Bye-Pass-Perry Street Intersection, Water Side – Old Cat Building - West Point Beach, 12th Street-19th Street – Fiamah-Weasay, Divine Town- Bernard Beach, Small Town- Behind Catholic Hospital);
- **Paynesville** (Paynesville (Kpelleh Town-SD Cooper Road, Sand Town -AB Tolbert Road and SD Cooper Road-Car Wash- SKD 72nd Blvd)

The lead Project Engineer who supported the E&S team took GPS coordinates of all the areas visited during the ESMP preparation. The GPS coordinates have been shared with PMU staff and the Bank's Task Team. See figures 1-6 for location details.

The ESMP used a methodological mix of the following approaches: Use of environmental and social screening checklist (included as Annex A), community consultations (see consultation summary in Annex B), site inspection, taking GPS coordinates and photographing of drainage channels.

6.2 Consultations Summary

As a key aspect of the site screening exercise for the ESMP, five (5) consultation meetings were held with a cluster of communities in the proposed subproject areas, including Central Monrovia (2 meetings), Bushrod Island (3 meetings), and Paynesville (1 meeting). Through these consultation meetings the Project Team, particularly the environmental and social (E&S) team and community engagement staff provided an overview of the LURP in general and the Drainage Cleaning Activities in particular.

The team also listened to, recorded and provided answers to questions and concerns raised by community members. Major concerns raised by the community are:

- *The Community Leaders and member Embraced the project and highly expressed their desire to participate by providing their services to clean the drainage; Need protective gears to wear; Need payment for the work to be carried out*
- *They complained about illegal dumping and clogged drainages which will lead to flooding of their homes during the rain;*
- *Community dwellers complained that they don't have access to waste bin or collection points to dispose their waste. Many collection points are closed down;*

- *Providing support and security to ensure a sustainable cleaned drainage system after the cleaning exercise is a concern of many community engaged;*
- *Some members stressed the need for Alleys to be opened to allow the free flow of surface water;*
- *They stressed the need for Continuous Community meetings and awareness of the Project.*

The community consultations that were conducted as part of the ESMP are consistent with the objectives of ESS 10 and in alignment with the Project's approved Stakeholder Engagement Plan (SEP), which clearly sets out a program and method for stakeholder engagement and information disclosure throughout the period of project implementation. It is also consistent with the Freedom of Information Act of 2010, which is referenced in the SEP.

The summary of proceedings at the community consultation meetings are provided in Annex B.

7.0 Environmental and Social Mitigation and Monitoring Plan

7.1. Environmental and Social Management and Monitoring Program

The Environmental and Social management plan (ESMP) is a management tool that details

- (i) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental and social risks and impacts, or to reduce them to acceptable levels; and
- (ii) the actions needed to implement these measures.

Several appropriate mitigation measures are proffered for the identified and potential environmental and social risks and impacts of the proposed project and the adjoining environment in which the project is to be located.

Table 7 below describes the environmental and social management and monitoring plan which includes the actions needed to implement these measures, required all through the implementation stage of the project including the following features:

- Mitigation measures based on the potential environmental and social risks and impacts, the agencies responsible for the mitigation, the timeline, and the estimate of each of the measures
- Monitoring measures that specify parameters to be measured, the method used, the frequency of measurements, the agency responsible for the monitoring, and the associated cost for each monitoring measure.

Table 7 summarizes the potential impacts and mitigation measures, responsibilities, timeframes and budgets for the implementation of the recommendations.

Table 7: Environmental and Social Management Plan

Potential Negative Impacts	Proposed Mitigation and Management Measures	Mitigation Responsibility and comments	M&E (responsibility, indicator, frequency)	Timeframe	Budget (US\$)
ESS1: Assessment and Management of Environmental and Social Risks and Impacts					
E&S risks if no adequate assessment is conducted	Conduct E&S Screening and prepare ESMP	PMU	Responsibility: PMU, WB Indicator: E&S Screening Report and ESMP available (target: yes)	September 2024	The PMU safeguards team conducted the assessment at no additional cost

			Frequency: Once, prior to contract signing		
E&S risks if ESMP is not adequately monitored	Monitor ESMP implementation and ensure regular reporting	PMU	Responsibility: PMU, WB Indicator: E&S reports available (target: yes) Frequency: Monthly	– December 2024	No added cost
ESS2: Labor and Working Conditions, ESS4: Community Health and Safety					
Occupational health and safety risk – workers would be subjected to unsafe and hazardous working conditions without the availability of the required PPE	Procure and provide to all workers on site PPE items that are appropriate for the work at hand (i.e. hand gloves (Impermeable and Chemically resistant); hooded reflective overalls (Impermeable and Chemically resistant); Nose covers with respirators; Rain/safety boots; Safety eye goggles). The contractor shall recruit an occupational health and safety officer to manage, document and report all health and safety issues (incidents and accidents) on site. The OHS officer shall conduct weekly toolbox talk for workers on the health and safety requirements of the different tasks that will be included in the assignment, and to sensitize workers on the	Contractor In addition to ESS2 and ESS4 mentioned above, the contractor shall refer to the Project's Labor Management Procedures (LMP) for guidance in dealing with issues related to the recruitment, organization, deployment, management and remuneration of workers, including resolving work related complaints and grievances. The contractor shall also refer to the Project's Stakeholder Engagement Plan (SEP) to help him/her hold meaningful consultations with workers, community	Responsibility: PMU through its E&S Team Indicator: PPE procurement receipts and evidence of use of PPE equipment available through field visit reports (target: yes) Frequency: Weekly	Throughout the contract period	41,250.00 (for provision of hand tools and PPE items for all three lots or areas). PMU E&S monitoring will not require additional costs

	<p>spread of communicable diseases</p> <p>Prepare and install warning and safety signs in work zones</p> <p>Procure and make available on site First Aid Kits for use by workers as and when necessary</p>	members and other people who may be affected by or have interest in the project activity			<p>4,500.00 (for Project sign boards and road safety signages at all critical work sites)</p> <p>\$1,500.00 (for First Aid Kits for all sites)</p>
Risk of Workers contacting vector borne diseases (particularly Hep B) as a result of the contaminated drainages	To avoid the risk of contracting vector borne diseases, workers should adhere to wearing proper PPEs and have easy and free access to vaccines against vector borne diseases particularly Hepatitis B	PMU should make provision within the contract for all workers to have proper PPEs and provision should be made within the Project's contingency budget to allow workers to have free access to vaccines.	<p>Responsibility: PMU through its E&S Team Contractor's E&S Officer</p> <p>Indicator: Environmental and Social Officer hired by contractor and incidents occurrence reported in E&S reports (target: yes)</p> <p>Frequency: Weekly</p>	Throughout the drainage cleaning activities	Contractor should estimate and include cost for provision of PPEs for all required staff and should coordinate with the PMU to ensure that workers have easy and free access to vaccines against vector borne diseases
Risk of gender-based violence (GBV), sexual exploitation and abuse (SEA), and sexual harassment (SH) occurring at different levels among workers, and between workers and community members	<p>The contractor and his/her workers shall sign a Code of Conduct as part of their works contract with the Project prior to implementation of the agreed activities</p> <p>GBV, SEA and SH issues shall be handled in a</p>	<p>Contractor shall include in its workforce a GBV/Gender Specialist who will monitor and ensure compliance to the Project's GBV Action Plan.</p> <p>PMU Social Safeguard and Gender</p>	<p>Responsibility: PMU through its E&S Team</p> <p>Indicator: GBV/Gender Specialist hired by contractor and GBV incidents reported upon in E&S reports (target: yes)</p>	Throughout the contract period	<p>Contractor should estimate and include cost of hiring a GBV/Gender Specialist in the contract budget;</p> <p>\$8,750.00 to cover training costs for 300 workers; broken down</p>

	confidential and timely manner, using special structures (including referral pathways) established for the purpose as part of the overall Project Grievance Redress Mechanism	Specialist will monitor to ensure that the contractor is operating in compliance with the GBV Action Plan and provide guidance for proper implementation	Frequency: Weekly		as follows: 5,000.00 for participants meals; 2,250.00 for participants' transportation reimbursement (based on distance from training venue), and 1,500.00 for hall rental (two days) <i>This cost is included within the stakeholder engagement overall cost</i> PMU E&S monitoring will not require additional costs
Risk of violation of workers' rights, including various forms of discrimination	Workers shall make use of the Labor Management Procedures including the Code of Conduct and the Project's Grievance Mechanism to seek redress to their grievances	Contractor and workers	Responsibility: PMU through its E&S Team Indicator: Workers trained in LMP and CoC (target: yes) Frequency: Monthly	Throughout the contract period	Training on LMP and Code of Conduct to be combined with GBV and Health/Safety trainings and carried out by the PMU. So, the above-mentioned training budget covers the cost of the combined training.
Risk of community members not cooperating with the Project due to hiring of majority workers from outside the affected community	The PMU shall include clause(s) in the contract which will require contractors to utilize as much as possible the available labor within the affected communities. The PMU will also ensure that	Contractor	Responsibility: PMU through its E&S Team Indicator: Percentage of workers originating from target communities (target: 90%)	First two months	99,000.00 to cover the payment of workers (daily hire and company employees) PMU E&S monitoring will not require additional costs

	contractors have proper documentation system in place to track the performance of workers and the payments they receive for work done		Frequency: Monthly		
ESS3: Resource Efficiency and Pollution Prevention and Management					
Risk of soil and water contamination through improper handling, storage, transportation and disposal of the collected wastes	<p>Procure and place small and medium-sized bins at selected points along each drainage channel for immediate temporary storage of the wastes being collected. Wastes collected from drainage channels should NOT be placed on bare ground and near surface or ground water sources.</p> <p>Procure and place larger bins at major points where waste from small and medium-sized bins can be taken for pick up by vehicles for disposal at official landfill sites.</p>	Contractor	<p>Responsibility: PMU through its E&S Team and the Project Engineer</p> <p>Indicator: Number of bins provided (target: to be established with contractor)</p> <p>Frequency: Monthly</p>	Throughout the contract period	<p>Costs included in overall amount for loading, haulage and disposal of wastes from site to landfill. See estimated cost below.</p> <p>PMU E&S monitoring will not require additional costs</p>
Risk of air pollution	Procure and supply nose mask to workers while on site	Contractor	<p>Responsibility: PMU through its E&S Team</p> <p>Indicator: Compliance checks demonstrate that nose masks and fumigation is conducted (target: yes)</p> <p>Frequency: Weekly</p>	Regular intervals during contract period	

Risk of and debris removed from the drainages being dumped illegally.	<p>Create awareness amongst the workers on the proper and safe disposal of waste and the negative health impacts associated with illegally dumping the waste or using the silt materials to fill swamps or low-lying lands.</p> <p>MCC has given its support to effectively and efficiently manage the disposal of all collected waste and silts at Whein Town Landfill</p> <p>The PMU should enforce that all waste and silt collected from the drainages are properly disposed at Whein Town Landfill and ensure that payment is only made to Contractors that properly disposed all of their waste and silts collected.</p>	Contractor	<p>Responsibility: PMU through its E&S team</p> <p>Indicator: Percentage of collected waste and silts disposed at Whein Town landfill (target: 100%)</p> <p>Frequency: Weekly</p>	Throughout the contract period	222,650.00 covers the costs of truck hire, the loading, haulage and disposal of waste to the designated landfill PMU E&S monitoring will not require additional costs
Risk of identifying and not adequately handling any potential contaminated materials/sediment/silt.	<p>To collect, transport, process and treat the contaminated waste identified/collected from the drains</p> <p>To safely dispose of treated contaminated waste in an environmentally sound manner.</p> <p>To ensure the environment, public and workers are protected from</p>	Contractor	<p>Responsibility: PMU through its E&S team</p> <p>Indicator: Identification of contaminated waste reported to PMU and agreement on safe waste disposal reached (target: yes)</p> <p>Frequency: Weekly</p>	Throughout the contract period	

	harm or injury in the process etc.				
ESS4: Community Health and Safety					
Risk of community exposure to harmful project-related activities, vehicles (trucks – road safety risks), diseases and contaminated materials	<p>Prepare and place clear warning and safety signages in all critical work zones</p> <p>Barricade sensitive or dangerous areas and/or equipment within the work zone to prevent community exposure to danger and harm</p> <p>Carry out community awareness and education campaign</p> <p>Keep and refer to the Emergency Response Plan as regularly as may be necessary to promptly address any emergency situation that may occur on site.</p>	Contractor	<p>Responsibility: PMU through its E&S team</p> <p>Indicator: Emergency response plan in place;</p> <p>Number and nature of incidents and accidents reported</p>	Throughout the contract period	Costs of signages and first aid kits are provided above
ESS8: Cultural Heritage					
Risk of destroying cultural heritage site	No cultural properties will be affected as the work area is limited to the drainage channels. However, if any items of cultural value are accidentally found, the work shall be halted and the finding reported to the proper authority.	Contractor	<p>Responsibility: PMU through its E&S team</p> <p>Indicator: Finding of items of cultural values reported, and mitigation measures identified (target: yes)</p> <p>Frequency: Monthly</p>	Throughout the contract period	N/A
ESS 10: Stakeholder Engagement and Information Disclosure					
Risk of ignoring stakeholders and their engagement regarding project implementation causing the	In accordance with the SEP, ensure that consultations with stakeholders are planned and	PMU	<p>PMU through its E&S Team</p> <p>Indicator:</p>	Prior to the start of work and throughout	18,000.00 to cover the costs of water, soft drink and snacks for

stakeholders harboring undue expectations and distrust due to lack of engagement and inadequate awareness raising about the project	carried out before and during work activities at regular intervals throughout the contract period		Number and nature of consultations held Frequency: Three times – before, during and at end of contract	the contract period	participants during consultation meetings
TOTAL COST					\$386,900.00

In summary, most mitigation measures shall be carried out by the contractors who will be required to include respective costs in their financial proposals. The existing LURP operational budget covers for the staff and transportation costs of the PMU E&S staff. As indicated in the above matrix, the estimated cost of training the contractors and their workers (about 300 workers) is \$8,750.00. The training will cover health and safety, GBV, labor management procedures and grievance redress. However, if the training should only be provided to the contractors and their key staff (training of trainers) who will thereafter train the workers, then this estimated cost will substantially reduce. The cost of training should be included in the overall cost of the quick win drainage cleaning activity, and should NOT be taken from the Project's operational budget.

7.2 Institutional Arrangements

The PMU

The PMU will have the overall responsibility for the implementation and monitoring of the ESMP. It will fulfill this responsibility through its E&S specialists, who will supervise the contractors' work to ensure compliance with the ESHS requirements of the project generally, and the ESMP particularly.

The E&S specialists will investigate and report all incidents/accidents reported to occur on site – either involving workers or community dwellers. The E&S specialists will supervise the contractor's ESHS specialist

Information gathered from site monitoring of the ESMP implementation shall be disclosed through periodic reports that will be produced and shared by the PMU with the project stakeholders.

Both the Grievance Mechanism which is part of the Stakeholder Engagement Plan and the overall Project Grievance Redress Mechanism (which is still in a draft form) will be used to receive, address, document and report all grievances/complaints related to the subproject implementation activities.

The Contractors

The contractors will be responsible for the implementation of all management and mitigation measures laid out in the ESMP to address work related environmental, social, health and safety risks and impacts. This responsibility will require the contractor to have in place dedicated

environmental, social, health and safety specialist(s) to coordinate, monitor, document and report all ESHS issues and to ensure that the contractor implement the mitigation measures described in the ESMP and the contractor's site-specific management plans. The dedicated contractors' ESHS specialists will also conduct periodic (weekly) toolbox talk for workers on the inherent health and safety risks of waste-filled and highly polluted drainage channels.

7.3 Capacity Building

The PMU will organize and conduct capacity building training for the contractors, their site engineers, environmental, social and safety officers and workers during the initial stages of implementation of the assigned works. The training will, inter alia, sensitize them on: a) the Bank's ESF, b) the management of environmental, social, health and safety risks associated with the execution of the works, including the safe removal, handling and disposal of wastes, and c) the provisions of the ESMP and the M&E/reporting responsibilities of the contractor. The training program will help build and/or strengthen the requisite capacities within the contractors' organizations. The PMU will use its E&S staff to provide the capacity building training. Such training will be provided periodically as may be deemed necessary throughout the subproject implementation period.

7.3. Contractual Measures

The risks and mitigation measures identified as part of this ESMP are to be included in the contract and used to monitor the environmental and social performance of the contractor. All mitigation measures for the cleaning activities are the obligations of the Contractor during all phases of project implementation. Therefore, provision should be made in the tender documents to conveniently address all the mitigation measures, with appropriate flexibility to adjust these measures to site circumstances.

7.4. GRIEVANCE REDRESS MECHANISM (GRM)

Grievance/complaint cases shall be handled and managed using the grievance procedures outlined in the Project's Stakeholder Engagement Plan (SEP). The SEP itself will be used as part of the grievance redress tool for engaging workers and community stakeholders during the quick win draining cleaning activity. The contractor's health and safety officer assigned on site will be responsible to receive, register and report workers' grievances/complaints, and incidents and accidents.

7.5. IMPLEMENTATION SCHEDULE

Activity	Timeframe	Responsible
Prepare E&S Screening and ESMP	September – November 2024	PMU

Recruit contractors (signing of contract)	October 2024 - January 2025	PMU
Mobilization and Training of contractors/workers	Last Week in January, 2025	PMU
Implement subproject	February to March, 2025	PMU
Monitor subproject	February to March, 2025	PMU
Final reporting	April 30, 2025	PMU

8.0 Conclusion

The E&S category under which the drainage cleaning activity falls is B, which means the environmental and social risks and impacts of the works are moderate, largely limited to the project sites, and easily amendable to the application of sound mitigation and management measures.

Overall, the benefit of temporary jobs creation for community dwellers, a significantly reduced flooding incident and a sanitary environment in the project communities far outweigh the moderate negative impacts that can be managed and offset through mitigation measures.

ANNEXES

ANNEX A: Environmental and Social Screening forms for Phase II

Environmental and Social Screening for Water Side – Old Cat Building -West Point Beach and all Soni Wein Drainage Channels: Newport- Redemption Road, Ministry of Public Works Backgate-Soni Wien, Buchanna Street – Soni Wien Drainage, Randall-Carey-Benson-Gurley-Center Streets, UL Capitol Bye-Pass-Perry Street Intersection conducted on September 10–11, 2024

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. This will guide in the identification and categorization of the project accordingly.

Component under LURP	Component One (1)
Name of Subproject	Quick Win (Drainage Cleaning) PHASE II
Project Objective	To enhance Environmental Sanitation within the project communities and to disbursement of project funds
Expected Commencement Date	November 2024
Proposed Main Project Activities	Removal of Waste and Silt from drainage channels
Location (District, Community)	Water Side-Old Cat Building -West Point Beach and all Soni Wein Drainage Channels under Central Monrovia area
Name of Evaluator	Harriett Peal-Keamu (Environmental Specialist-LURP/MIDP) & Eugene S. Caine Environmental Specialist for Solid Waste

BRIEF DESCRIPTION OF THE PROPOSED PROJECT

The Project activities consist of the cleaning of drainage channels in the Central and Greater Monrovia areas as quick win activities. The cleaning will involve the manual removal of waste from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to the MCC operated landfill in Whein Town (northern Paynesville).

EMPLOYEES AND LABORERS

Number of people to be employed: Employees and Laborers	During Construction	During Routine Operation /Maintenance
FULL-TIME		

PART-TIME /Temporary

50 Persons

DESCRIPTION OF PROCESS THAT COULD BE IMPLEMENTED

Briefly describe the type and nature or type of the project at the site:

The work activities on this site consist of the cleaning of drainage channels along the route from Water Side – Old Cat Building to West Point Beach and all Soniwein Drainage Channels as shown on the Title above. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to Whein Town Landfill located in Northern Paynesville City.

List the type and quantity of raw materials to be used in the project and highlight their sources

Material/Tools/Equipment	Quantity	Source

POTENTIAL ENVIRONMENTAL IMPACTS

Please indicate environmental impacts that may occur as a result of the proposed project.

A. The Biological Environment

The Natural Environment

Describe the habitats and flora and fauna in the project area and in the entire area expected to be affected by the sub-project (e.g., downstream areas, access roads):

Will the project directly or indirectly affect?

Natural forest types? **No**

Swamps? **No**

Wetlands (i.e., lakes, rivers, swamps, seasonally inundated areas)? **No**

Natural critical habitats (parks, protected areas)? **No**

Other habitats of threatened species that require protection under Liberia laws and/or international agreements?

YES _____ NO ☒ _____

Are there according to background research/observations any threatened/ endemic species in the project area that could be affected by the project?

YES _____ NO ☒ _____

Will vegetation be cleared? If yes, please state the distance/length of affected area

YES _____ NO ☒ _____

Will there be any potential risk of habitat fragmentation due to the clearing activities?

YES _____ NO ☒ _____

Will the project lead to a change in access, leading to an increase in the risk of depleting biodiversity resources?

YES _____ NO ☒ _____

Provide an additional description for “yes” answers:

Protected Areas

Does the subproject area or do subproject activities?

Occur within or adjacent to any designated protected areas?

YES _____ NO ☒ _____

Affect any protected area downstream of the project?

YES _____ NO ☒ _____

Affect any ecological corridors used by migratory or nomadic species located between any protected areas or between important natural habitats (protected or not) (e.g., mammals or birds)?

YES _____ NO ☒ _____

Provide an additional description for “yes” answers:

Invasive Species

Is the sub-project likely to result in the dispersion of or increase in the population of invasive plants or animals (e.g., along distribution lines)?

YES _____ NO ☒ _____

Provide an additional description for a “yes” answer:

B. The Physical Environment

Geology/Soils

Will slope or soil stability be affected by the project? YES _____ NO ☒

Will the subproject cause physical changes in the project area (e.g., changes to the topography)? YES _____ NO ☒

Will local resources, such as rocks, wood, sand, gravel be used?

YES _____ NO ☒

Could the subproject potentially cause an increase in soil salinity in or downstream the project area? YES _____ NO ☒

Could the soil exposed due to the project potentially lead to an increase in lixiviation of metals, clay sediments, or organic materials? YES _____ NO ☒

Landscape / Aesthetics

Is there a possibility that the sub-project will adversely affect the aesthetics of the landscape?

YES _____ NO ☒

Pollution

Will the sub-project use or store dangerous substances (e.g., large quantities of hydrocarbons)? YES _____ NO ☒

Will the subproject produce harmful substances? YES _____ NO ☒

Will the subproject produce solid or liquid wastes? YES ☒ NO _____ **(The activities will produce Solid Waste that will be removed from the drainage channels)**

Will the subproject cause air pollution? YES _____ NO ☒

Will the subproject generate noise? YES _____ NO ☒

Will the subproject generate electromagnetic emissions? YES _____ NO ☒

Will the subproject release pollutants into the environment? YES _____ NO ☒

C. The Social Environment

Land Use, Resettlement, and/or Land Acquisition

Describe existing land uses on and around the sub-project area (e.g., community facilities, agriculture, tourism, private property, or hunting areas):

Are there any land use plans on or near the sub-project location, which will be negatively affected by subproject implementation? YES ____ NO ☒

Are there any areas on or near the subproject location, which are densely populated which could be affected by the sub-project? YES ☒ NO ____

Are there sensitive land uses near the project area (e.g., hospitals, schools)?

YES ☒ NO ____

Will there be a loss of livelihoods among the population? YES ____ NO ☒

Will the sub-project affect any resources that local people take from the natural environment? YES ____ NO ☒

Will there be additional demands on local water supplies or other local resources?

YES ____ NO ☒

Will the sub-project restrict people's access to land or natural resources?

YES ____ NO ☒

Will the project require resettlement and/or compensation of any residents, including squatters?

YES ____ NO ☒

Will the subproject result in construction workers or other people moving into or having access to the area (for a long-time period and in large numbers compared to permanent residents)?

YES ____ NO ☒

Who is/are the present owner(s)/users of resources/infrastructures in the subproject area?

____ Community Residents _____

Loss of Crops, Fruit Trees, and Household Infrastructure

Will the subproject result in the permanent or temporary loss of?

Crops? **No**

Fruit trees / coconut palms? **No**

Household infrastructure? **No**

Any other assets/resources? **No**

Occupational Health and Safety, Health, Welfare, Employment, and Gender

Is the sub-project likely to safeguard worker's health and safety and public safety (e.g., occupational health and safety issues)? YES ☒ NO ____

How will the project minimize risk of HIV/Aids? **By conducting regular HIV/AIDS awareness during the implementation stage.**

How will the sub-project minimize the risk of accidents? How will accidents be managed, when they do occur? **By carrying out regular tool-box talk on health, safety and risk management, and establishing a First Aid management system on all sites.**

Is the project likely to provide local employment opportunities, including employment opportunities for women? YES ☒ NO ☐

Provide an additional description for “yes” answers:

According to the revised concept note for this Quick win activity, *“The mobilization of labor and other resources which is a key component of the community engagement activities will be incorporated under a service contract with qualified construction Firms. However, the PMU will provide oversight and ensure that the Communities are prioritized in the labor mobilization. Additionally, the Contractor will enter a memorandum of understanding (MOU) with the community leaders that encapsulates labor arrangements. As the project is community-driven, the team will ensure the full involvement of the communities in the work and related activities”.*

Historical, Archaeological, or Cultural Heritage Sites

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-project alter?

Historical heritage site(s) or require excavation near the same? YES ☐ NO ☒

Archaeological heritage site(s) or require excavation near the same? YES ☐ NO ☒

Cultural heritage site(s) or require excavation near the same? YES ☐ NO ☒

Graves, or sacred locations (e.g., fetish trees or stones) or require excavations near the same?

YES ☐ NO ☒

N.B For all affirmative answers (YES) Provide description, possible alternatives reviewed and/or appropriate mitigating measures.

RECOMMENDATIONS

Environmental category: (tick where applicable)

	Category	Justification
	Does not require further environmental or social studies	
	Requires submission of only a Project Brief	
	Requires a full ESIA to be submitted on date	
	Requires an ESMP to be submitted on date	As a temporary activity involving the use of labor-based method with basic hand tools to carry out the cleaning of drainage channels which won't cause any major

		<p>adverse impact to the surrounding communities but will promote community cleanliness and reduce the risk to public health, flooding and poor sanitation significantly, there won't be a need to prepare an ESIA or other detailed E&S management documents.</p> <p>However, as was done in Phase I, it is recommended that a short and simple E&S management plan be prepared to guide the contractor in carrying out the agreed activities, as well as to ensure safety of people and the environment and compliance with the requirements of the Project's Environmental and Social Management Framework (ESMF) and the Bank's Environmental and Social Framework (ESF) and its associated Environmental and Social Standards (ESSs) that may be relevant or applicable to any aspects of the planned activities.</p>
	Requires a RP to be submitted on date	
	Requires an Indigenous Peoples Plan (IPP)	
	Requires a Physical Cultural Resources Plan	

CERTIFICATION

We certify that we have thoroughly examined all the potential adverse effects of this subproject.

Reviewer: Environmental Specialists

Name: ... Harriett Peal-Keamu & Eugene S. Caine

Signature:

Date: 26/09/2024

Environmental and Social Screening for Clara Town-Paity Town-Freeport-Doe Community-Du River on September 12, 2024

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. This will guide in the identification and categorization of the project accordingly.

Component under LURP	Component One (1)
Name of Subproject	Quick Win (Drainage Cleaning) Phase II
Project Objective	To enhance environmental sanitation
Expected Commencement Date	November 2024
Proposed Main Project Activities	Removal of Waste and Silt from drainage channels
Location (District, Community)	Clara Town-Paity Town-Freeport-Doe Community-Du River under Bushrod Island
Name of Evaluator	Harriett Peal-Keamu (Environmental Specialist-LURP) & Eugene S. Caine Environmental Specialist for Solid Waste

BRIEF DESCRIPTION OF THE PROPOSED PROJECT

The Project activities consist of the cleaning of drainage channels in the Central and Greater Monrovia areas as quick win activities. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to the MCC operated landfill in Whein Town (northern Paynesville).

EMPLOYEES AND LABORERS

Number of people to be employed: Employees and Laborers	During Construction	During Routine Operation /Maintenance
FULL-TIME		
PART-TIME /Temporary		50 Persons

DESCRIPTION OF PROCESS THAT COULD BE IMPLEMENTED

Briefly describe the type and nature or type of the project at the site:

The work activities on this site consist of the cleaning of drainage channels along the route from Clara Town to Paity Town to freeport to Doe Community to the Du River. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to Whein Town Landfill located in Northern Paynesville City.

List the type and quantity of raw materials to be used in the project and highlight their sources

Material/Tools/Equipment	Quantity	Source

POTENTIAL ENVIRONMENTAL IMPACTS

Please indicate environmental impacts that may occur as a result of the proposed project.

A. The Biological Environment

The Natural Environment

Describe the habitats and flora and fauna in the project area and in the entire area expected to be affected by the sub-project (e.g., downstream areas, access roads):

Will the project directly or indirectly affect?

Natural forest types? **No**

Swamps? **No**

Wetlands (i.e., lakes, rivers, swamps, seasonally inundated areas)? **No**

Natural critical habitats (parks, protected areas)? **No**

Other habitats of threatened species that require protection under Liberia laws and/or international agreements?

YES _____ NO **X** _____

Are there according to background research/observations any threatened/ endemic species in the project area that could be affected by the project?

YES _____ NO **X** _____

Will vegetation be cleared? If yes, please state the distance/length of affected area

YES _____ NO ___X___

Will there be any potential risk of habitat fragmentation due to the clearing activities?

YES _____ NO ___X___

Will the project lead to a change in access, leading to an increase in the risk of depleting biodiversity resources?

YES _____ NO ___X___

Provide an additional description for “yes” answers:

Protected Areas

Do the subproject area or do subproject activities:

Occur within or adjacent to any designated protected areas?

YES _____ NO ___X___

Affect any protected area downstream of the project?

YES _____ NO ___X___

Affect any ecological corridors used by migratory or nomadic species located between any protected areas or between important natural habitats (protected or not) (e.g., mammals or birds)?

YES _____ NO ___X___

Provide an additional description for “yes” answers:

Invasive Species

Is the sub-project likely to result in the dispersion of or increase in the population of invasive plants or animals (e.g., along distribution lines)?

YES _____ NO ___X___

Provide an additional description for a “yes” answer:

B. The Physical Environment

Geology/Soils

Will slope or soil stability be affected by the project? YES _____ NO ___X___

Will the subproject cause physical changes in the project area (e.g., changes to the topography)? YES _____ NO ___X___

Will local resources, such as rocks, wood, sand, gravel be used?

YES ____ NO ☒

Could the subproject potentially cause an increase in soil salinity in or downstream the project area? YES ____ NO ☒

Could the soil exposed due to the project potentially lead to an increase in lixiviation of metals, clay sediments, or organic materials? YES ____ NO ☒

Landscape / Aesthetics

Is there a possibility that the sub-project will adversely affect the aesthetics of the landscape?

YES ____ NO ☒

Pollution

Will the sub-project use or store dangerous substances (e.g., large quantities of hydrocarbons)? YES ____ NO ☒

Will the subproject produce harmful substances? YES ____ NO ☒

Will the subproject produce solid or liquid wastes? YES ☒ NO ____ **(The activities will produce Waste that will be removed from the drainage channels)**

Will the subproject cause air pollution? YES ____ NO ☒

Will the subproject generate noise? YES ____ NO ☒

Will the subproject generate electromagnetic emissions? YES ____ NO ☒

Will the subproject release pollutants into the environment? YES ____ NO ☒

C. The Social Environment

Land Use, Resettlement, and/or Land Acquisition

Describe existing land uses on and around the sub-project area (e.g., community facilities, agriculture, tourism, private property, or hunting areas):

Are there any land use plans on or near the sub-project location, which will be negatively affected by subproject implementation? YES ____ NO ☒

Are there any areas on or near the subproject location, which are densely populated which could be affected by the sub-project? YES ☒ NO ____

Are there sensitive land uses near the project area (e.g., hospitals, schools)?

YES ☒ NO ☐

Will there be a loss of livelihoods among the population? YES ☐ NO ☒

Will the sub-project affect any resources that local people take from the natural environment? YES ☐
NO ☒

Will there be additional demands on local water supplies or other local resources?

YES ☐ NO ☒

Will the sub-project restrict people's access to land or natural resources?

YES ☐ NO ☒

Will the project require resettlement and/or compensation of any residents, including squatters?

YES ☐ NO ☒

Will the subproject result in construction workers or other people moving into or having access to the area (for a long-time period and in large numbers compared to permanent residents)?

YES ☐ NO ☒

Who is/are the present owner(s)/users of resources/infrastructures in the subproject area?

_____ Community Residents _____

Loss of Crops, Fruit Trees, and Household Infrastructure

Will the subproject result in the permanent or temporary loss of?

Crops? **No**

Fruit trees / coconut palms? **No**

Household infrastructure? **No**

Any other assets/resources? **No**

Occupational Health and Safety, Health, Welfare, Employment, and Gender

Is the sub-project likely to safeguard worker's health and safety and public safety (e.g., occupational health and safety issues)? YES ☒ NO ☐

How will the project minimize risk of HIV/Aids? **By conducting regular HIV/AIDS awareness during the implementation stage**

How will the sub-project minimize the risk of accidents? How will accidents be managed, when they do occur? **By carrying out regular safety box talk on health, safety and risk management, and establishing**
a **First** **Aid** **system** **on** **all** **sites.**

Is the project likely to provide local employment opportunities, including employment opportunities for women? YES ☒ NO ☐

Provide an additional description for “yes” answers:

According to the revised concept note for this Quick win activity, *“The mobilization of labor and other resources which is a key component of the community engagement activities will be incorporated under a service contract with qualified construction Firms. However, the PMU will provide oversight and ensure that the Communities are prioritized in the labor mobilization. Additionally, the Contractor will enter a memorandum of understanding (MOU) with the community leaders that encapsulates labor arrangements. As the project is community-driven, the team will ensure the full involvement of the communities in the work and related activities”.*

Historical, Archaeological, or Cultural Heritage Sites

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-project alter?

Historical heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Archaeological heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Cultural heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Graves, or sacred locations (e.g., fetish trees or stones) or require excavations near the same?

YES ____ NO ☒ ____

N.B For all affirmative answers (YES) Provide description, possible alternatives reviewed and/or appropriate mitigating measures.

RECOMMENDATIONS

Environmental category: (tick where applicable)

	Category	Justification
	Does not require further environmental or social studies	
	Requires submission of only a Project Brief	
	Requires a full ESIA to be submitted on date	
	Requires an ESMP to be submitted on date	As a temporary activity involving the use of labor-based method with basic hand tools to carry out the cleaning of the drainage channels which won't cause any major adverse impact to the surrounding communities but will promote community cleanliness and reduce the risk to public health, flooding and poor sanitation significantly,

		<p>there won't be a need to prepare an ESIA or other detailed E&S management documents.</p> <p>However, as was done in phase I, it is recommended that a short and simple E&S management plan be prepared to guide the contractor in carrying out the agreed activities, as well as to ensure safety of people and the environment and compliance with the requirements of the Project's Environmental and Social Management Framework (ESMF) and the Bank's Environmental and Social Framework (ESF) and its associated Environmental and Social Standards (ESSs) that may be relevant or applicable to any aspects of the planned activities.</p>
	Requires a RP to be submitted on date	
	Requires an Indigenous Peoples Plan (IPP)	
	Requires a Physical Cultural Resources Plan	

CERTIFICATION

We certify that we have thoroughly examined all the potential adverse effects of this subproject.

Reviewer: Environmental Specialists

Name: ... Harriett Peal-Keamu & Eugene S. Caine

Signature:

Date: 26/09/2024.....

Environmental and Social Screening for Drainage Channels assessed in Monrovia area: 12th Street-19th Street – Fiamah-Weasay, Divine Town- Bernard Beach, Small Town- Behind Catholic Hospital conducted on September 12, 2024

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. This will guide in the identification and categorization of the project accordingly.

Component under LURP	Component One (1)
Name of Subproject	Quick Wins (Drainage Cleaning) PHASE II
Project Objective	To enhance environmental sanitation
Expected Commencement Date	November 2024
Proposed Main Project Activities	Removal of Waste and Silt from drainage corridor
Location (District, Community)	Central Monrovia area as listed in the Title above
Name of Evaluator	Harriett Peal-Keamu (Environmental Specialist-LURP) & Eugene S. Caine Environmental Specialist for Solid Waste

BRIEF DESCRIPTION OF THE PROPOSED PROJECT

The Project activities consist of the cleaning of drainage channels in the Central and Greater Monrovia areas as quick win activities. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to the MCC operated landfill in Whein Town (northern Paynesville).

EMPLOYEES AND LABORERS

Number of people to be employed: Employees and Laborers	During Construction	During Routine Operation /Maintenance
FULL-TIME		
PART-TIME /Temporary		35 Persons

DESCRIPTION OF PROCESS THAT COULD BE IMPLEMENTED

Briefly describe the type and nature or type of the project at the site:

The work activities on this site consist of the cleaning of drainage channels along the route from 12th Street to 19th Street leading up to Fiamah-Weasay, and from Divine Town to Bernard's Beach community

in Small Town to the drainage Behind Catholic Hospital. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to Whein Town Landfill located in Northern Paynesville City.

List the type and quantity of raw materials to be used in the project and highlight their sources

Material/Tools/Equipment	Quantity	Source

POTENTIAL ENVIRONMENTAL IMPACTS

Please indicate environmental impacts that may occur as a result of the proposed project.

A. The Biological Environment

The Natural Environment

Describe the habitats and flora and fauna in the project area and in the entire area expected to be affected by the sub-project (e.g., downstream areas, access roads):

Will the project directly or indirectly affect?

Natural forest types? **No**

Swamps? **No**

Wetlands (i.e., lakes, rivers, swamps, seasonally inundated areas)? **No**

Natural critical habitats (parks, protected areas)? **No**

Other habitats of threatened species that require protection under Liberia laws and/or international agreements?

YES _____ NO **X** _____

Are there according to background research/observations any threatened/ endemic species in the project area that could be affected by the project?

YES _____ NO **X** _____

Will vegetation be cleared? If yes, please state the distance/length of affected area

YES _____ NO ___X___

Will there be any potential risk of habitat fragmentation due to the clearing activities?

YES _____ NO ___X___

Will the project lead to a change in access, leading to an increase in the risk of depleting biodiversity resources?

YES _____ NO ___X___

Provide an additional description for “yes” answers:

Protected Areas

Do the subproject area or do subproject activities:

Occur within or adjacent to any designated protected areas?

YES _____ NO ___X___

Affect any protected area downstream of the project?

YES _____ NO ___X___

Affect any ecological corridors used by migratory or nomadic species located between any protected areas or between important natural habitats (protected or not) (e.g., mammals or birds)?

YES _____ NO ___X___

Provide an additional description for “yes” answers:

Invasive Species

Is the sub-project likely to result in the dispersion of or increase in the population of invasive plants or animals (e.g., along distribution lines)?

YES _____ NO ___X___

Provide an additional description for a “yes” answer:

B. The Physical Environment

Geology/Soils

Will slope or soil stability be affected by the project? YES _____ NO ___X___

Will the subproject cause physical changes in the project area (e.g., changes to the topography)? YES _____ NO ___X___

Will local resources, such as rocks, wood, sand, gravel be used?

YES ____ NO ☒

Could the subproject potentially cause an increase in soil salinity in or downstream the project area? YES ____ NO ☒

Could the soil exposed due to the project potentially lead to an increase in lixiviation of metals, clay sediments, or organic materials? YES ____ NO ☒

Landscape / Aesthetics

Is there a possibility that the sub-project will adversely affect the aesthetics of the landscape?

YES ____ NO ☒

Pollution

Will the sub-project use or store dangerous substances (e.g., large quantities of hydrocarbons)? YES ____ NO ☒

Will the subproject produce harmful substances? YES ____ NO ☒

Will the subproject produce solid or liquid wastes? YES ____ NO ____

Will the subproject cause air pollution? YES ____ NO ____

Will the subproject generate noise? YES ____ NO ☒

Will the subproject generate electromagnetic emissions? YES ____ NO ☒

Will the subproject release pollutants into the environment? YES ____ NO ☒

C. The Social Environment

Land Use, Resettlement, and/or Land Acquisition

Describe existing land uses on and around the sub-project area (e.g., community facilities, agriculture, tourism, private property, or hunting areas):

Are there any land use plans on or near the sub-project location, which will be negatively affected by subproject implementation? YES ____ NO ☒

Are there any areas on or near the subproject location, which are densely populated which could be affected by the sub-project? YES ☒ NO ____

Are there sensitive land uses near the project area (e.g., hospitals, schools)?

YES ☒ NO ____

Will there be a loss of livelihoods among the population? YES ____ NO ☒

Will the sub-project affect any resources that local people take from the natural environment? YES ____
NO ☒

Will there be additional demands on local water supplies or other local resources?

YES ____ NO ☒

Will the sub-project restrict people's access to land or natural resources?

YES ____ NO ☒

Will the project require resettlement and/or compensation of any residents, including squatters?

YES ____ NO ☒

Will the subproject result in construction workers or other people moving into or having access to the area (for a long-time period and in large numbers compared to permanent residents)?

YES ____ NO ☒

Who is/are the present owner(s)/users of resources/infrastructures in the subproject area?

____ Community Residents _____

Loss of Crops, Fruit Trees, and Household Infrastructure

Will the subproject result in the permanent or temporary loss of?

Crops? **No**

Fruit trees / coconut palms? **No**

Household infrastructure? **No**

Any other assets/resources? **No**

Occupational Health and Safety, Health, Welfare, Employment, and Gender

Is the sub-project likely to safeguard worker's health and safety and public safety (e.g., occupational health and safety issues)? YES ☒ NO ____

How will the project minimize risk of HIV/Aids? **By conducting regular HIV/AIDS awareness during the implementation stage**

How will the sub-project minimize the risk of accidents? How will accidents be managed, when they do occur? **By carrying out regular safety box talk on health, safety and risk management, and establishing**
a First Aid system on all sites.

Is the project likely to provide local employment opportunities, including employment opportunities for women? YES ☒ NO ____

Provide an additional description for "yes" answers:

According to the revised concept note for this Quick win activity, *“The mobilization of labor and other resources which is a key component of the community engagement activities will be incorporated under a service contract with qualified construction Firms. However, the PMU will provide oversight and ensure that the Communities are prioritized in the labor mobilization. Additionally, the Contractor will enter a memorandum of understanding (MOU) with the community leaders that encapsulates labor arrangements. As the project is community-driven, the team will ensure the full involvement of the communities in the work and related activities”*.

Historical, Archaeological, or Cultural Heritage Sites

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-project alter?

Historical heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Archaeological heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Cultural heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Graves, or sacred locations (e.g., fetish trees or stones) or require excavations near the same?

YES ____ NO ☒ ____

N.B For all affirmative answers (YES) Provide description, possible alternatives reviewed and/or appropriate mitigating measures.

RECOMMENDATIONS

Environmental category: (tick where applicable)

	Category	Justification
	Does not require further environmental or social studies	
	Requires submission of only a Project Brief	
	Requires a full ESIA to be submitted on date	
	Requires an ESMP to be submitted on date	As this is a temporary activity involving the use of labor-based method with basic hand tools to carry out the cleaning, there is a need to prepare an ESMP which will be used to guide the contractor in carrying out the agreed activities, as well as to ensure safety of people and the environment and compliance with the requirements of the Project's Environmental and Social Management Framework (ESMF) and its associated Environmental and Social Standards (ESSs) that is relevant or applicable to mitigate adverse impact as a result of the planned cleaning activities.

	Requires a RP to be submitted on date	
	Requires an Indigenous Peoples Plan (IPP)	
	Requires a Physical Cultural Resources Plan	

CERTIFICATION

We certify that we have thoroughly examined all the potential adverse effects of this subproject.

Reviewer: Environmental Specialists

Name: ... Harriett Peal-Keamu & Eugene S. Caine

Signature:

Date: 26/09/2024

Environmental and Social Screening for Drainage Channels assessed in Paynesville area: Kpelleh Town-SD Cooper Road, Sand Town -AB Tolbert Road and SD Cooper Road-Car Wash- SKD 72nd Blvd conducted on September 12, 2024

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. This will guide in the identification and categorization of the project accordingly.

Component under LURP	Component One (1)
Name of Subproject	Quick Wins (Drainage Cleaning) Phase II
Project Objective	To enhance Environmental Sanitation and reduce flooding
Expected Commencement Date	November 2024
Proposed Main Project Activities	Removal of Waste and Silt from drainage channels
Location (District, Community)	SD Cooper Road-Car Wash- SKD 72nd Blvd, Kpelleh Town-SD Cooper Road, and Sand Town -AB Tolbert Road in Paynesville
Name of Evaluator	Harriett Peal-Keamu (Environmental Specialist-LURP) & Eugene S. Caine Environmental Specialist for Solid Waste

BRIEF DESCRIPTION OF THE PROPOSED PROJECT

The Project activities consist of the cleaning of drainage channels in the Central and Greater Monrovia areas as quick win activities. The cleaning will involve the manual removal of wastes from the drainages, desilting, shoulder cleaning, haulage and disposal of the collected wastes to the MCC operated landfill in Whein Town (northern Paynesville).

EMPLOYEES AND LABORERS

Number of people to be employed: Employees and Laborers	During Construction	During Routine Operation /Maintenance
FULL-TIME		
PART-TIME / Temporary		80 Persons

DESCRIPTION OF PROCESS THAT COULD BE IMPLEMENTED

Briefly describe the type and nature or type of the project at the site:

The work activities on this site consist of the cleaning of drainage channels along the route from SKD 72nd Blvd-Car Wash-SD Cooper Road-Kpelleh Town-Sand Town -AB Tolbert Road within the Paynesville area. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to Whein Town Landfill located in Northern Paynesville City.

List the type and quantity of raw materials to be used in the project and highlight their sources

Material	Quantity	Source

POTENTIAL ENVIRONMENTAL IMPACTS

Please indicate environmental impacts that may occur as a result of the proposed project.

A. The Biological Environment

The Natural Environment

Describe the habitats and flora and fauna in the project area and in the entire area expected to be affected by the sub-project (e.g., downstream areas, access roads):

Will the project directly or indirectly affect?

Natural forest types? **No**

Swamps? **No**

Wetlands (i.e., lakes, rivers, swamps, seasonally inundated areas)? **No**

Natural critical habitats (parks, protected areas)? **No**

Other habitats of threatened species that require protection under Liberia laws and/or international agreements?

YES _____ NO **X** _____

Are there according to background research/observations any threatened/ endemic species in the project area that could be affected by the project?

YES _____ NO **X** _____

Will vegetation be cleared? If yes, please state the distance/length of affected area

YES _____ NO ___X___

Will there be any potential risk of habitat fragmentation due to the clearing activities?

YES _____ NO ___X___

Will the project lead to a change in access, leading to an increase in the risk of depleting biodiversity resources?

YES _____ NO ___X___

Provide an additional description for “yes” answers:

Protected Areas

Do the subproject area or do subproject activities:

Occur within or adjacent to any designated protected areas?

YES _____ NO ___X___

Affect any protected area downstream of the project?

YES _____ NO ___X___

Affect any ecological corridors used by migratory or nomadic species located between any protected areas or between important natural habitats (protected or not) (e.g., mammals or birds)?

YES _____ NO ___X___

Provide an additional description for “yes” answers:

Invasive Species

Is the sub-project likely to result in the dispersion of or increase in the population of invasive plants or animals (e.g., along distribution lines)?

YES _____ NO ___X___

Provide an additional description for a “yes” answer:

B. The Physical Environment

Geology/Soils

Will slope or soil stability be affected by the project? YES _____ NO ___X___

Will the subproject cause physical changes in the project area (e.g., changes to the topography)? YES _____ NO ___X___

Will local resources, such as rocks, wood, sand, gravel be used?

YES ____ NO ☒

Could the subproject potentially cause an increase in soil salinity in or downstream the project area? YES ____ NO ☒

Could the soil exposed due to the project potentially lead to an increase in lixiviation of metals, clay sediments, or organic materials? YES ____ NO ☒

Landscape / Aesthetics

Is there a possibility that the sub-project will adversely affect the aesthetics of the landscape?

YES ____ NO ☒

Pollution

Will the sub-project use or store dangerous substances (e.g., large quantities of hydrocarbons)? YES ____ NO ☒

Will the subproject produce harmful substances? YES ____ NO ☒

Will the subproject produce solid or liquid wastes? YES ____ NO ____

Will the subproject cause air pollution? YES ____ NO ____

Will the subproject generate noise? YES ____ NO ☒

Will the subproject generate electromagnetic emissions? YES ____ NO ☒

Will the subproject release pollutants into the environment? YES ____ NO ☒

C. The Social Environment

Land Use, Resettlement, and/or Land Acquisition

Describe existing land uses on and around the sub-project area (e.g., community facilities, agriculture, tourism, private property, or hunting areas):

Are there any land use plans on or near the sub-project location, which will be negatively affected by subproject implementation? YES ____ NO ☒

Are there any areas on or near the subproject location, which are densely populated which could be affected by the sub-project? YES ____ NO ☒

Are there sensitive land uses near the project area (e.g., hospitals, schools)?

YES ____ NO ☒

Will there be a loss of livelihoods among the population? YES ____ NO ☒

Will the sub-project affect any resources that local people take from the natural environment? YES ____
NO ☒

Will there be additional demands on local water supplies or other local resources?

YES ____ NO ☒

Will the sub-project restrict people's access to land or natural resources?

YES ____ NO ☒

Will the project require resettlement and/or compensation of any residents, including squatters?

YES ____ NO ☒

Will the subproject result in construction workers or other people moving into or having access to the area (for a long-time period and in large numbers compared to permanent residents)?

YES ____ NO ☒

Who is/are the present owner(s)/users of resources/infrastructures in the subproject area?

____ Community Residents _____

Loss of Crops, Fruit Trees, and Household Infrastructure

Will the subproject result in the permanent or temporary loss of:

Crops? **No**

Fruit trees / coconut palms? **No**

Household infrastructure? **No**

Any other assets/resources? **No**

Occupational Health and Safety, Health, Welfare, Employment, and Gender

Is the sub-project likely to safeguard worker's health and safety and public safety (e.g., occupational health and safety issues)? YES ☒ NO ____

How will the project minimize risk of HIV/Aids? **By conducting regular HIV/AIDS awareness during the implementation stage**

How will the sub-project minimize the risk of accidents? How will accidents be managed, when they do occur? **By carrying out regular safety box talk on health, safety and risk management, and establishing**
a First Aid system on all sites.

Is the project likely to provide local employment opportunities, including employment opportunities for women? YES ☒ NO ____

Provide an additional description for "yes" answers:

According to the revised concept note for this Quick win activity, *“The mobilization of labor and other resources which is a key component of the community engagement activities will be incorporated under a service contract with qualified construction Firms. However, the PMU will provide oversight and ensure that the Communities are prioritized in the labor mobilization. Additionally, the Contractor will enter a memorandum of understanding (MOU) with the community leaders that encapsulates labor arrangements. As the project is community-driven, the team will ensure the full involvement of the communities in the work and related activities”*.

Historical, Archaeological, or Cultural Heritage Sites

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-project alter?

Historical heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Archaeological heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Cultural heritage site(s) or require excavation near the same? YES ____ NO ☒ ____

Graves, or sacred locations (e.g., fetish trees or stones) or require excavations near the same?

YES ____ NO ☒ ____

N.B For all affirmative answers (YES) Provide description, possible alternatives reviewed and/or appropriate mitigating measures.

RECOMMENDATIONS

Environmental category: (tick where applicable)

	Category	Justification
	Does not require further environmental or social studies	
	Requires submission of only a Project Brief	
	Requires a full ESIA to be submitted on date	
	Requires an ESMP to be submitted on date	As a temporary activity involving the use of labor-based method with basic hand tools to carry out the cleaning of drainage channels which won't cause any major adverse impact to the surrounding communities but will promote community cleanliness and reduce the risk to public health, flooding and poor sanitation significantly, there won't be a need to prepare an ESIA or other detailed E&S management documents. However, as was done in phase II, it is recommended that a short and simple management plan be prepared to guide the contractor in carrying out the agreed activities, as well as to ensure safety of people and the environment and compliance with the requirements of the Project's Environmental and Social Management

		Framework (ESMF) and the Bank's Environmental and Social Framework (ESF) and its associated Environmental and Social Standards (ESSs) that may be relevant or applicable to any aspects of the planned activities.
	Requires a RP to be submitted on date	
	Requires an Indigenous Peoples Plan (IPP)	
	Requires a Physical Cultural Resources Plan	

CERTIFICATION

We certify that we have thoroughly examined all the potential adverse effects of this subproject.

Reviewer: Environmental Specialists

Name: ... Harriett Peal-Keamu & Eugene S. Caine

Signature:

Date: 26/09/2024

Environmental and Social Screening for New Kru Town-Duala Market-Logan Town-Stockton Creek conducted on September 13, 2024

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. This will guide in the identification and categorization of the project accordingly.

Component under LURP	Component One (1)
Name of Subproject	Quick Win (Drainage Cleaning)
Project Objective	To enhance Environmental Sanitation
Expected Commencement Date	November 2024
Proposed Main Project Activities	Removal of Waste and Silt from drainage channels
Location (District, Community)	New Kru Town-Duala Market-Logan Town-Stockton Creek
Name of Evaluator	Harriett Peal-Keamu (Environmental Specialist-LURP) & Eugene S. Caine Environmental Specialist for Solid Waste

BRIEF DESCRIPTION OF THE PROPOSED PROJECT

The Project activities consist of the cleaning of drainage channels in the Central and Greater Monrovia areas as quick win activities. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to the MCC operated landfill in Whein Town (northern Paynesville).

EMPLOYEES AND LABORERS

Number of people to be employed: Employees and Laborers	During Construction	During Routine Operation /Maintenance
FULL-TIME		
PART-TIME /Temporary		50 Persons

DESCRIPTION OF PROCESS THAT COULD BE IMPLEMENTED

Briefly describe the type and nature or type of the project at the site:

The work activities on this site consist of the cleaning of drainage channels along the route from New Kru Town to Duala Market to Logan Town and ending at Stockton Creek. The cleaning will involve the manual removal of wastes from the drainage, desilting, shoulder cleaning, haulage and disposal of the collected wastes to Whein Town Landfill located in Northern Paynesville City.

List the type and quantity of raw materials to be used in the project and highlight their sources

Material/Tools/Equipment	Quantity	Source

POTENTIAL ENVIRONMENTAL IMPACTS

Please indicate environmental impacts that may occur as a result of the proposed project.

A. The Biological Environment

The Natural Environment

Describe the habitats and flora and fauna in the project area and in the entire area expected to be affected by the sub-project (e.g., downstream areas, access roads):

Will the project directly or indirectly affect?

Natural forest types? **No**

Swamps? **No**

Wetlands (i.e., lakes, rivers, swamps, seasonally inundated areas)? **No**

Natural critical habitats (parks, protected areas)? **No**

Other habitats of threatened species that require protection under Liberia laws and/or international agreements?

YES _____ NO **X** _____

Are there according to background research/observations any threatened/ endemic species in the project area that could be affected by the project?

YES _____ NO **X** _____

Will vegetation be cleared? If yes, please state the distance/length of affected area

YES _____ NO **X** _____

Will there be any potential risk of habitat fragmentation due to the clearing activities?

YES _____ NO **X**_____

Will the project lead to a change in access, leading to an increase in the risk of depleting biodiversity resources?

YES _____ NO **X**_____

Provide an additional description for “yes” answers:

Protected Areas

Do the subproject area or do subproject activities:

Occur within or adjacent to any designated protected areas?

YES _____ NO **X**_____

Affect any protected area downstream of the project?

YES _____ NO **X**_____

Affect any ecological corridors used by migratory or nomadic species located between any protected areas or between important natural habitats (protected or not) (e.g., mammals or birds)?

YES _____ NO **X**_____

Provide an additional description for “yes” answers:

Invasive Species

Is the sub-project likely to result in the dispersion of or increase in the population of invasive plants or animals (e.g., along distribution lines)?

YES _____ NO **X**_____

Provide an additional description for a “yes” answer:

B. The Physical Environment

Geology/Soils

Will slope or soil stability be affected by the project? YES _____ NO **X**_____

Will the subproject cause physical changes in the project area (e.g., changes to the topography)? YES _____ NO **X**_____

Will local resources, such as rocks, wood, sand, gravel be used?

YES _____ NO **X**_____

Could the subproject potentially cause an increase in soil salinity in or downstream the project area? YES _____ NO ☒

Could the soil exposed due to the project potentially lead to an increase in lixiviation of metals, clay sediments, or organic materials? YES _____ NO ☒

Landscape / Aesthetics

Is there a possibility that the sub-project will adversely affect the aesthetics of the landscape?

YES _____ NO ☒

Pollution

Will the sub-project use or store dangerous substances (e.g., large quantities of hydrocarbons)? YES _____ NO ☒

Will the subproject produce harmful substances? YES _____ NO ☒

Will the subproject produce solid or liquid wastes? YES ☒ NO _____ **(The activities will produce Solid Waste that will be removed from the drainage channels)**

Will the subproject cause air pollution? YES _____ NO ☒

Will the subproject generate noise? YES _____ NO ☒

Will the subproject generate electromagnetic emissions? YES _____ NO ☒

Will the subproject release pollutants into the environment? YES _____ NO ☒

C. The Social Environment

Land Use, Resettlement, and/or Land Acquisition

Describe existing land uses on and around the sub-project area (e.g., community facilities, agriculture, tourism, private property, or hunting areas):

Are there any land use plans on or near the sub-project location, which will be negatively affected by subproject implementation? YES _____ NO ☒

Are there any areas on or near the subproject location, which are densely populated which could be affected by the sub-project? YES ☒ NO _____

Are there sensitive land uses near the project area (e.g., hospitals, schools)?

YES ☒ NO _____

Will there be a loss of livelihoods among the population? YES _____ NO ☒

Will the sub-project affect any resources that local people take from the natural environment? YES _____
NO ☒ _____

Will there be additional demands on local water supplies or other local resources?

YES _____ NO ☒ _____

Will the sub-project restrict people's access to land or natural resources?

YES _____ NO ☒ _____

Will the project require resettlement and/or compensation of any residents, including squatters?

YES _____ NO ☒ _____

Will the subproject result in construction workers or other people moving into or having access to the area (for a long-time period and in large numbers compared to permanent residents)?

YES _____ NO ☒ _____

Who is/are the present owner(s)/users of resources/infrastructures in the subproject area?

_____ Community Residents _____

Loss of Crops, Fruit Trees, and Household Infrastructure

Will the subproject result in the permanent or temporary loss of?

Crops? **No**

Fruit trees / coconut palms? **No**

Household infrastructure? **No**

Any other assets/resources? **No**

Occupational Health and Safety, Health, Welfare, Employment, and Gender

Is the sub-project likely to safeguard worker's health and safety and public safety (e.g., occupational health and safety issues)? YES ☒ _____ NO _____

How will the project minimize risk of HIV/Aids? **By conducting regular HIV/AIDS awareness during the implementation stage**

How will the sub-project minimize the risk of accidents? How will accidents be managed, when they do occur? **By carrying out regular tool-box talk on health, safety and risk management, and establishing a**
First Aid management system on all sites.

Is the project likely to provide local employment opportunities, including employment opportunities for women? YES ☒ _____ NO _____

Provide an additional description for "yes" answers:

According to the revised concept note for this Quick win activity, *“The mobilization of labor and other resources which is a key component of the community engagement activities will be incorporated under a service contract with qualified construction Firms. However, the PMU will provide oversight and ensure that the Communities are prioritized in the labor mobilization. Additionally, the Contractor will enter a memorandum of understanding (MOU) with the community leaders that encapsulates labor arrangements. As the project is community-driven, the team will ensure the full involvement of the communities in the work and related activities”*.

Historical, Archaeological, or Cultural Heritage Sites

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-project alter?

Historical heritage site(s) or require excavation near the same? YES ____ NO ☒ X ____

Archaeological heritage site(s) or require excavation near the same? YES ____ NO ☒ X ____

Cultural heritage site(s) or require excavation near the same? YES ____ NO ☒ X ____

Graves, or sacred locations (e.g., fetish trees or stones) or require excavations near the same?

YES ____ NO ☒ X ____

N.B For all affirmative answers (YES) Provide description, possible alternatives reviewed and/or appropriate mitigating measures.

RECOMMENDATIONS

Environmental category: (tick where applicable)

	Category	Justification
	Does not require further environmental or social studies	
	Requires submission of only a Project Brief	
	Requires a full ESIA to be submitted on date	
	Requires an ESMP to be submitted on date	As was done in Phase I, it is recommended that a short and simple E&S management plan be prepared to guide the contractor in carrying out the agreed activities, as well as to ensure safety of people and the environment and compliance with the requirements of the Project's Environmental and Social Management Framework (ESMF) and its associated Environmental and Social Standards (ESSs) that may be relevant or applicable to any aspects of the planned activities.
	Requires a RP to be submitted on date	
	Requires an Indigenous Peoples Plan (IPP)	

	Requires a Physical Cultural Resources Plan	

CERTIFICATION

We certify that we have thoroughly examined all the potential adverse effects of this subproject.

Reviewer: Environmental Specialist & Social Safeguard and Gender Specialist.....

Reviewer: Environmental Specialists

Name: ... Harriett Peal-Keamu & Eugene S. Caine

Signature:

Date: 26/09/2024

Annex B: Attendance Records of Stakeholder Engagement



Republic of Liberia
Ministry of Public Works
Project Management Unit
Liberia Urban Resilience Project



Attendance
 Stakeholder Engagement/Consultation Meeting
 In Preparation of Developing an ESMP for
 Quick Win (Phase 2) Drainage Cleaning Project

Name of Community/Location: Central Monrovia

Meeting Date: Sept 11, 2024

Sn	Name	Community	Position	Phone Number
1.	Samsen Wannah	LURP-MPW	Communication Specialist	0770115038
2.	JEREMIA COOPER	NEWPORT STREET	GROUP REP. REGRONAL COORDINATOR	0776544976
3.	Eugene S. Caine	LURP-MPW	ENV. SPECIALIST	0886578557
4.	Constant C. Pree	Newport Street	CHAIRMAN	0770123178
5.	Clapha Kamara	Lynch Street	Chairman	0777270186
6.	Harriett P. Keamy	LURP/MPW	Env. Specialist	0770479866
7.	Tarley Johnson	Soniewein Community	Chairman	0777575278
8.	Oti Nyanti Steh	New Km Town	Youth Chair	0885066383
9.	Fannie Greene	Center Street	Chairlady	0777428484
10.	Peter Ageo	Buzzi Quarter	Chairman	0777596030



Republic of Liberia
Ministry of Public Works
Project Management Unit
Liberia Urban Resilience Project



Attendance
 Stakeholder Engagement/Consultation Meeting
 In Preparation of Developing an ESMP for
 Quick Win (Phase 2) Drainage Cleaning Project

Name of Community/Location: Bushrod Island

Meeting Date: Sept 12, 2024

Sn	Name	Community	Position	Phone Number
1.	Samsen Wannah	LURP-MPW	Communication Specialist	0770115038
2.	Joshuel M. Cooper	Don Community	Chairman	0772381834
3.	Joe D. Sosa	DOE Community	Youth Chair	0775660409
4.	Eugene S. Caine	LURP-MPW	ENV. SPECIALIST	0886578557
5.	Peter Jankpal	Momo Town East	Chairman	0770656953
6.	Marylyne Cibe	Momo Town East	Elder Council Co-Chair	0775679565
7.	Harriett Peal-Keamy	LURP/MPW	Env. Specialist	0770479866
8.	Uaibah V. Mulbah	Sawmill Community	Chairlady	077112290
9.	Kapo Kollie	Jamica Road	Chairlady	0779369351

10.



Republic of Liberia
Ministry of Public Works
 Project Management Unit
 Liberia Urban Resilience Project



Attendance
 Stakeholder Engagement/Consultation Meeting
 In Preparation of Developing an ESMP for
 Quick Win (Phase 2) Drainage Cleaning Project

Name of Community/Location: Sinkor

Meeting Date: Sept. 12, 2024

Sn	Name	Community	Position	Phone Number
1.	Samsun Wunnah	LURP- MPW	Communication Specialist	0770115038
2	James D. BARNARD	SMALL TOWN Community	CHAIRMAN	0778059521
3	Christain Horrace	Bernard Beach	Chairlady	0886444247
4	Eugene S. Caine	LURP- MPW	ENV. Specialist	0886578557
5.	Harriett P. Kearney	LURP/MPW	Env. Specialist	0770479866
6.	Lillian Wonsiah	Catholic Community	Chairlady	0778812380
7	ELIZABETH ALLIE	12 th STREET	CHAIRLADY	0777145614
8.	Jie J. Bbeh	15 th Street	Chairman	0776238033
9.	Brown Teddy	12 th Street	Youth Chairman	0777138399



Republic of Liberia
Ministry of Public Works
 Project Management Unit
 Liberia Urban Resilience Project



Attendance
 Stakeholder Engagement/Consultation Meeting
 In Preparation of Developing an ESMP for
 Quick Win (Phase 2) Drainage Cleaning Project

Name of Community/Location: Southern Paynesville

Meeting Date: September 13, 2024

Sn	Name	Community	Position	Phone Number
1.	Samsun Wunnah	LURP- MPW	Communication Specialist	0770115038
2.	Shelt K. Sackie	Zayzay Comm.	Chairman	0777703424
3	Satta S. Siafa	Zayzay Community	Chairlady	0886905717
4	Eugene S. Caine	LURP- MPW	Env. Specialist	0886578557
5.	Harriett P. Kearney	LURP/MPW	Env. Specialist	0770479866
6	Godfrey M. Johnson	Shara Community	Chairman	0776207124
7.	Patrick K. Sackie	Zuba Town	Chairman	0777073991
8	Ekenneh G. Sahn	Giluah ^{Soul} Clinic	District SG	0777845145
9	Cyrus Awah	Cowfield	Chairman	0775137015
10.	Vision Maudah	Duput Road	Chairman	0775448244
11.	Ruth George	Cowfield		- 0777551513

Annex C: Traffic Management Plan

This Traffic Management Plan (TMP) has been prepared to address the following key issues related to the subproject:

- **MOBILITY** - including interruptions to pedestrians, cyclists and vehicular traffic; and
- **COMMUNITY** - including interruptions to surrounding businesses and residents from drainage cleaning and waste transportation

The objective of this TMP is to provide safe passage for pedestrians, cyclists and vehicular traffic along the proposed intervention sites

General Traffic Management Measures

Based on the various activities described in the ESMP, drainage cleaning activities will involve the use of trucks to collect waste from drainages. To do this safely, it may necessitate cordoning off of the road, around the target areas and will generate minor traffic issues. In the following, an overview of traffic management requirements and plans are described.

Components of the Traffic Management Plan

The Contractor should designate a TMP Supervisor who will oversee traffic management along major roads within the subproject target areas.

The TMP Supervisor will address the following:

- **Safety Signage:** Safety signage will be put up along when waste trucks are parked on the road next to target sites when waste is removed and transferred from drainages/bins to the trucks. This signage will indicate that there are “Men at Work”. Caution is most required by motorists and cyclists who transverse the project areas.
- **Liaisons with Government Traffic Agencies.** The TMP will ensure liaisons with the relevant traffic control agency. In situations where heavy traffic impacts are envisaged, the Contractor will liaise with the relevant traffic control agency to ensure traffic coordination and mitigate adverse traffic impacts.
- **Movements of project vehicles** will be timed to coincide with off peak periods of traffic.
- **Strict speed limits** shall be enforced on all truck drivers working on this project and non-compliance shall be addressed by the contractor, supervision engineer and PMU. Measures will be taken to educate the drivers during weekly pep talks.
- Vehicle breakdowns could occur and this could cause bottlenecks and snarls. Therefore, in the event of such an occurrence, there should be provision to immediately assist with evacuating such vehicles from the alternative routes while tow vehicles will be contacted from the nearest point.
- Adequate number of well-trained flagmen should be deployed to manage the traffic situation.

- The contractor should ensure that all rehabilitation activities are performed in accordance with the approved Traffic Management Plan.
- Adequate dewatering of waste material before transport to Whein Town disposal site;
- Maintain cleanliness of trucks for transporting dredged materials;
- All vehicles transporting dredged spoils to final dump sites must be covered completely with tarpaulin;
- Provide notification about the dredging activities at roads that will be and are currently affected by the activities;
- The contractor shall adopt best practices for transporting the dredged materials to prevent soil/mud spilling on the roads or environment;

Every Vehicle used for the transportation of waste shall:

- Be registered with the relevant Authority
- Have a hauling body constructed of metal, or any other approved material and all joints in the hauling body shall be effectively sealed and smoothened to avoid drippings or leakages of liquids
- Be provided with a tight metal hood having adequate openings fitted with smoothly operating loading and unloading doors.
- Have a means of covering the waste to be hauled and keep such waste secured within the hauling body to prevent dispersal
- Have covers made with appropriate material such as tarpaulin, canvas cover fitted with proper eyes, grommets and tie ropes and hooks whereby the cover can be held securely over the loaded wastes
- Not be loaded with garbage to a level above the side wall height if it does not have permanent covers
- Be thoroughly washed and steamed regularly and kept in good working condition
- Conduct collection and transportation of waste in such a manner that will not cause scattering, escaping, flowing out of the waste
- Be in such a state that shall not cause scattering, escaping, flowing out of the waste or emitting of noxious smells from the waste
- Collect waste from designated area of operations and shall deliver such waste to the designated station, disposal sure or plant.
- Equipment and vehicles that have all auxiliary (Water retaining facility, etc.) functional shall be engaged.
- Registered sand haulage Vehicles with the government should not be used for this exercise for the activities to be well regulated.
- The vehicles in use must be in good order.
- The haulage trucks will be adequately secured to prevent dust pollution and prevent dewatered dredged material from falling onto the access routes
- Contractor flagmen will work collaboratively with relevant traffic management

- authorities to prevent traffic congestion along the route to the approved disposal site.
- Health and safety of the communities living in the influence area of the anticipated dredged will be prioritized along material disposal transport routes and sites and road safety and traffic constraints

S/N	Aspects	Descriptions	Responsible Party	Cost (USD)
1	Traffic/Safety Signage	<ul style="list-style-type: none"> ▪ Safety signage should be put at both ends of the road to warn road users of the ongoing cleaning activities. 	Contractor	Included in ESMP Table 7
		<ul style="list-style-type: none"> ▪ Mobilization of equipment and materials should be done at off-peak period (10am – 4pm). ▪ Enforce speed limit. 	Contractor	\$1,000.00 is allocated in each BoQ for all three Lots
2	Training	<ul style="list-style-type: none"> ▪ Hire drivers with appropriate driver's license. ▪ Ensure drivers are familiar with TMP 	Contractor	Training cost covered ESMP Table 7
3	Communication	<ul style="list-style-type: none"> ▪ All Traffic and Safety signages should be boldly written in English languages ▪ Any incident/ accidents should be reported immediately to the PMU 	Contractor PMU	
	Cost	All cost included have been embedded in the ESMP Matrix Table		

Annex D: Occupation Health and Safety Management Plan

PURPOSE	This table describes the Project Occupational Health and Safety (OHS) plan for the proposed project and the specific management controls, risk control systems and workplace and safeguards required to ensure compliance with Occupational Health and Safety Laws and Standards.
SCOPE	The Project Occupational Health and Safety (OHS) plan covers the scope of works defined in the contract. This includes the cleaning of drainages at the preparatory, implementation, and maintenance phase.
OBJECTIVES OF THE PLAN	<ul style="list-style-type: none"> • Adopt a positive Health & Safety Culture. • Adopt the principles of prevention to avoid risk. • Complete the project without incident (Zero fatalities, Zero Lost Time Injury or occupational illness).
OBLIGATIONS	<ul style="list-style-type: none"> • Participation of all personnel and the management in executing, maintaining and continually improving OHS processes is vital to the successful completion and achievement of quality objectives set by the management.

	<ul style="list-style-type: none"> • All project personnel shall therefore be required to be familiar with the content of the OHS plan and shall participate in implementing, maintaining and improving the management system • It is the responsibility of the project coordinator and all key personnel to ensure that the requirements for quality are fulfilled for works under their responsibility. • All new staff and staff who are given new responsibilities are to be inducted into the requirements set out in the plan in general and into their function and responsibilities in particular
POLICIES	<ul style="list-style-type: none"> • Workplace Health and Safety: all workers shall adhere to all workplace health and safety rules and the management will ensure the safety of the workers on site. • Rehabilitation Policy • Drug and Alcohol Policy: Prohibiting the consumption or possession of narcotics, drugs, alcohol and other banned substances
DUTIES AND RESPONSIBILITIES	<p>Safety Officer Responsibilities include:</p> <ul style="list-style-type: none"> • Main communication link between the contractor and the PMU Project Coordinator and PMU E&S Team. • Review daily work to be assigned to workers in line with ESMP • Inspect all work areas on a daily basis. • Respond immediately to all unsafe conditions. • Control of and distribution of all workers personal protective equipment. • Ensure deficiencies are corrected and reported to site manager. • Complete all incident/Non-conformance reports as required • Complete all orientation of all new or transferred employees. • Ensure that all required training is given or made available to all employees • Ensure Public health, Safety, and proper handling of waste during the transport of waste materials; <p>Workers' roles and responsibilities for Health and Safety</p> <ul style="list-style-type: none"> • Carry out their work in a manner that will not create a hazard to the health and safety of self or other employees. • Have the right to refuse unsafe work and report all job specific hazards to their manager. • Take care, an active role in the elimination and control of workplace hazards. • Assist site managers in reducing and controlling accident producing conditions and unsafe acts on the work sites. • Report any accidents/incidents, near misses and/or injuries immediately to the manager. • Report any anticipated loss of work time to the manager as soon as possible after being treated by a physician following injury. • Providing suggestions to improve the overall health and safety program. • Using all safety equipment provided. • Participating as required, in accident/incident investigations and assisting in the completing of the accident/incident forms. • Ensure co- workers are advised of unsafe conditions or acts that may cause injury or illness. • Demonstrate a professional attitude towards all projects OHS efforts.
COMMUNICATION RESOURCES	This may include project management meetings; inductions; training; and outcomes from inspections
RULES FOR WORKPLACE SAFETY	BEHAVIOR: Consuming or being in possession of or under the influence of alcohol or illegal drugs on project site and environs premises, is prohibited and disciplinary action will be taken. Fighting, horseplay, practical jokes or otherwise interfering with other workers is prohibited and disciplinary action will be taken. Theft, vandalism or any other

		<p>abuse or misuse of equipment is prohibited and may be cause for immediate dismissal. "Strike Anywhere" matches are prohibited. Running is not permitted anywhere, except in the case of extreme emergency. Riding on any hook, hoist or other material handling equipment which is used strictly for handling material and not specifically designated to carry riders is prohibited.</p> <p>First Aid and Injury Management Emergency Procedures</p> <ul style="list-style-type: none"> i. Render first aid immediately, first aid kits should be made available in all vehicles and all sites. All serious first aid injuries should be attended to by a trained first aid attendant only. ii. For all serious injuries, these general directions should be followed: <ul style="list-style-type: none"> • If you do not have first aid training send or locate a trained first aid attendant immediately • Apply artificial respiration if the patient is not breathing (by trained first aid attendants only) • Stop any severe bleeding, by applying pressure to the immediate wound area • Send someone for a doctor • Keep victim lying down: never move injured personnel unless the potential for further injury is immediately present iii. Stay calm. If the patient is breathing and no artery is spurting blood, giving first aid is usually unnecessary, and is often harmful iv. Do not attempt to remove foreign objects from eyes or any other part of the body or allow anyone else to do so, except a first aid attendant or a doctor v. Call for assistance; be ready to give the following information: <ul style="list-style-type: none"> • Accurate directions to the location of the injured person. • Nature of the injury. • Any assistance that may be required. <ul style="list-style-type: none"> • Give information slowly and clearly. • Report back to the scene of the accident; report to the superintendent or first aid attendant that help is on the way. <p>If no one can be contacted at the office call/Inform operator which of the following is required:</p> <ul style="list-style-type: none"> a. Ambulance. b. Police. c. Fire Department. d. Electrical Power Company. e. Gas utility company. f. Hospital. <p>Restrict the immediate area of the accident, check if further danger exists</p>
TRAINING CONTRACTOR'S PERSONNEL	OF	<p>The Contractor shall provide sufficient training to his own personnel to ensure that they are all aware of the relevant aspects of these general conditions and the ESMP, and are able to fulfil their expected roles and functions. Specific training should be provided to those employees that have particular responsibilities associated with the implementation of the ESMP.</p> <p>The topics to be covered are OHS in general (working procedures), emergency procedures, and social and cultural aspects (awareness raising on social issues).</p>

Annex E: Emergency Preparedness Plan

Emergency procedures and response plan shall be developed by the contractor prior mobilizing to site. The procedures shall be communicated to all staff and all workers shall be trained to avoid and respond to emergencies appropriately. Also, each site shall always have at least a trained first aider on site.

Aspects	Requirements
Competency	All personnel required to operate or work with any equipment or machine must be competent, be tested for each equipment that he/she shall be operating. All personnel who as part of their profession require licensing or certification must obtain the necessary certification before he/she shall be allowed to work on the site. All personnel working on site shall be required to be certified medically fit to do so by an approved medical facility or Medical Doctor (pre-employment medical examination)
Induction/ Orientation	<p>Every new or rehired employee must undergo mandatory OHS orientation / induction. The purpose of the Induction is to educate workers and make them aware of the major potential hazards he or she shall come into contact with while working on the site; also, it is one more opportunity to stress the importance of HSE being the first priority in the operations.</p> <p>The content of the HSE orientation / induction shall cover the following subjects:</p> <ul style="list-style-type: none"> • Manual handling. • Emergency Prevention, Preparedness and Response • First Aid training (for site First Aiders) • Lifting and Rigging • Safe Driving techniques (for drivers)
Major Hazards	The major hazards identified for the proposed project include the general OHS risks of drainage cleaning works
Personal Protective Equipment (PPE)	The basic PPE required for the project shall be hand gloves (Impermeable and Chemically resistant); hooded reflective overalls (Impermeable and Chemically resistant); Nose covers with respirators; Rain/safety boots; Safety eye goggles). Any other PPE shall be used as applicable. The contractor is responsible for the provision of PPE and usage shall be enforced at all times. PPE shall be provided in circumstances where exposure to hazards cannot be avoided by other means. Information, instruction & training shall be given to all employees on safe use, maintenance and storage of PPE. Employees shall, in accordance with instructions given, make full use of all PPE provided and maintain it in a serviceable condition and report its loss or defect immediately to the maintenance department where it shall be replaced. PPE shall be replaced when it is no longer serviceable and returned on a new for old basis. Employees shall sign to state that they have received PPE when issued.
Signage	Adequate provision for warning and directional signs shall be made.
Reporting	All accidents must be reported to the PMU after which investigation shall commence and recorded so that appropriate corrective actions shall be implemented to prevent any re-occurrence and report findings shall be forwarded to the PMU. Reporting requirements shall include notification of incident, investigation report, and monthly report. Notification of Incident form shall be developed which shall be filled and submitted to the PMU for investigation.

Annex F: Waste Management Plan (WMP)

S/N	Potential Source	Waste Type	Waste Streams	Management	Responsibility	Cost
A	MOBILIZATION					
1	Movement of vehicles on unpaved surface and engine exhaust	Emission	CO ₂ , SO ₂ , NO ₂ , CO, Dust	Use water suppression to prevent dust emission Maintain vehicles and machineries to reduce emission Maintain low speed to reduce dust and gaseous emission	Contractor	Contractor may provide an estimate. However, dust emission will be of little or no issue during this rainy (wet) season in Liberia, particularly in Monrovia and surrounding coastal areas where rainfall is highest
B	DRAINAGE CLEANING					
1	Movement of vehicles on unpaved surface and engine exhaust	Emission	CO ₂ , SO ₂ , NO ₂ , CO, Dust, PM2.5, PM10	See A1	Contractor	Dust emission will be of little or no impact during this wet season in Liberia
2	Drainage cleaning works	Non-Hazardous /Industrial	<ul style="list-style-type: none"> Sand, silts, debris Plastic bottles, plastic bags Domestic-type waste: wastepaper and food scraps, metal cans Liquid waste/feces 	Waste collected from drainages will be placed in smaller waste bins at congested areas and transported by workers to the bigger Bins and then to the Skip Bucket which will be stationed at a major collection point. The Waste collection vehicle will collect the skip bucket with waste from the collection point and transport it to Whein Town for disposal	Contractor	Cost is estimated in BoQ and also provided in ESMP Table 7
3	Drainage cleaning works	Hazardous Waste	Solid Wastes: used batteries, chemical	Store on site in closed containers with secondary	Contractor	Included in the cost of loading,

			containers, concrete etc.	containment and transferred to a registered waste contractor with off-site permitted hazardous waste treatment, storage, or disposal facilities	Contractor	haulage and disposal of collected wastes to the designated landfill. See ESMP Matrix – Table 7
			Liquid Waste: spent lubricating oils, hydraulic fluids, brake fluids, battery electrolyte, and dielectric fluids, chemical cleaning agents, paints, primers, thinners, and corrosion control coatings; sealants and adhesives etc.			
4	Worker areas during breaks	Domestic and Sanitary	<ul style="list-style-type: none"> • Food remnant, kitchen wastes. Food packaging etc. • Domestic Sewage 	See B2	Contractor	Usually, in such casual work or daily hire arrangements, the contractor does not provide food or resting area for workers. Workers leave site as soon as they complete their assigned individual task (specified distance) for the day.
C	MAINTENANCE					
	<i>To be specified in overall project ESIA and Umbrella Waste Management Plan and Site-Specific Waste Management Plans</i>					
	During the recent E&S site screening consultations, community members suggested the setting up of community-based taskforce teams to help them monitor and ensure that drainage channels are, during and after completion of the quick win cleaning activities, kept clean and functional. The suggested taskforce teams would through regular monitoring help prevent people dumping waste into the drainage channels. If the Project could consider providing support to the formation and operation of such community-based teams, this would be one practical way of supporting the maintenance of the drainage channels following the quick win cleaning activities.					
	Cost (Also captured in the relevant sections of the ESMP Table)					

The PMU will monitor compliance to these activities