Republic of Yemen

Ministry of Public Works and Highways
Rural Access Program – Central Management Office

UNITED NATIONS OFFICE FOR PROJECT SERVICES

YEMEN EMERGENCY LIFELINE CONNECTIVITY PROJECT (P177053)

Rehabilitation of Al Amror – Asshahel District Center Rural Road
Hajjah Governorate

Environmental and Social Management Plan

28 November 2022

Table of Contents

Abbreviations

BoQs	Bill of Quantities
C-ESMP	Contractor Environmental and Social Management Plan
cm	centimeter
cu m.	Cubic Meter m^3
EHS	Environmental, Health and Safety
E&S	Environmental and Social
ESF	Environmental and Social Framework
ESHS	Environment, Social , Health, and Safety
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
ESSO	Environmental and Social Safeguards Officer
GBV	Gender Based Violence
GHS	General Health and Safety Guidelines
GM	Grievance Mechanism
HSSE	Health, Safety, Social and Environment
km	Kilometer
L.M.	Linear Meter
LMP	Labor Management Procedures
m	meter
mm	millimeter
N.A.	Not Applicable
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
RF	Resettlement Framework
RAP	Rural Access Program
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
SEP	Stakeholder Engagement Plan
SMP	Security Management Plan
sq.m.	square meter m^2
TPM	Third Party Monitoring
UNOPS	United Nations Office for Project Services
YELCP	Yemen Emergency Lifeline Connectivity Project

Summary Sheet

Table 1 Subproject summary sheet

Subproject Name **ID Number**	Al Amror – Asshahel District Center Rural Road Rehabilitation ELC-HAJ-002
Subproject Location	Asshahel District – Hajjah Governorate
Implementing Partner	Rural Access Programme (RAP)
Subproject Proposed Risk	Moderate
Date of the field visits	20 November 2021, 23 May 2022 and 14 September 2022
Consultation date	23 May 2022 and 14 September 2022
Subproject Estimated Total Cost	US$ 3,106,688
ESMP Implementation Estimated Cost	US$ 22,200
Subproject implementation period	18 months
Observations/Comments	Indicated below

1. Introduction

In December 2021, the World Bank approved Yemen Emergency Lifeline Connectivity Project (YELCP) with objectives to provide climate resilient road access and employment and entrepreneurship opportunities to the food insecure rural population of Yemen. YELCP will be implemented through the United Nations Office for Project Services (UNOPS) in partnership with the Rural Access Program (RAP) as a local implementation partner. The Project will finance the rehabilitation of lifeline rural access roads in selected areas in Yemen to contribute toward addressing road access to food and other humanitarian needs. Al Amror – Asshahel District Center rural road is one of the roads that is selected and will be rehabilitated as part of the YELCP support. The subproject location was selected based on the needs and priorities in consultation with the relevant stakeholders and authorities at various levels.

Environmental and Social Management Framework (ESMF) for the YELCP was prepared by the UNOPS to meet the requirements of the World Bank's Environmental and Social Framework (ESF), UNOPS requirements and the national laws and regulations. For YELCP UNOPS has also prepared the following instruments: (i) a Labor Management Procedures (LMP), (ii) a GBV/SEA/SH Plan, (iii) a Security Management Plan (SMP), (iv) a Resettlement Framework (RF), and (v) a Stakeholder Engagement Plan (SEP).

Subproject screening was performed jointly by the UNOPS and RAP as guided by the YELCP ESMF, screening table is available in annex 1. Risk level of the subproject was identified as moderate as the subproject will be mainly rehabilitation of existing unpaved road, further information on the associated risks are detailed in section 4.1 hereinafter. Accordingly, the current Environmental and Social Management Plan (ESMP) has been prepared in which its structure has been defined based on the guidelines available in the YELCP ESMF section 7.3.2[1].

[1] (UNOPS/WBG (2022). YELCP ESMF. Retrieved from https://documents1.worldbank.org/curated/en/099210001112224568/pdf/P1770530ESMF020210120310FNL.pdf

2. Subproject description

2.1. Subproject location details

Hajjah Governorate is located 123 kilometers northwest of Sana'a, north of Al-Hodeidah, between Amran to the east and the Red Sea to the west. Hajjah Governorate has 31 administrative districts and Hajjah city is the capital of the governorate. Figures 1 and 2 include the Yemen Map as well as Hajjah districts.

The expected total number of direct and indirect beneficiaries who will benefit from this subproject are 58,414 inhabitants of which 28,437 are men and 29,977 are women.

Table 2 Subproject coordinates

Road Name	Start Point		End Point		Length Meter	Width Meter
	Latitude	Longitude	Latitude	Longitude		
Al Amror – Asshahel District Center	15.852144	43.452902	15.860408	43.405806	13,146	4–6

Figure 1[2] Hajjah governorate borders, red, within Yemen

[2] Yemen National Information Center

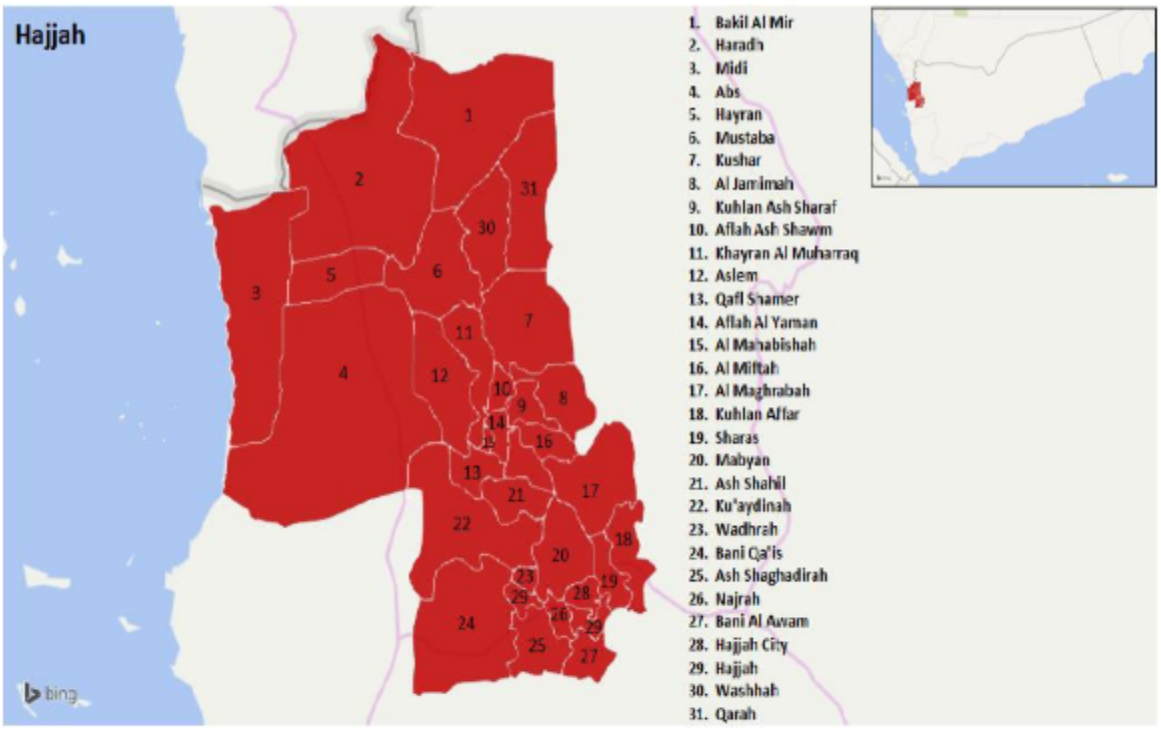

Figure 2[3] Hajjah governorate and its districts. Subproject location is within AsShahil District (21)

Al Amror – Asshahel District Center Rural Road is located in AsShahil district, 45 km to the north of Hajjah city (the governorate's capital). The subproject start point is in Al-Mahata from Al-Hazah village at the coordinates on Hajjah – Mabian – Kusher asphaltic road. Subproject end point is located in Asshahel district center connected with Madikhah – Shamr – Shafar, asphalt road, about 43 km from Shafar commercial city, which is located on Al Hodeidah – Haradh international asphaltic road. The proposed road links 4 districts from Hajjah Governorate namely Asshahel, Qafl Shamr, Aflah Al Yaman, and Kuaidenah. Road photos are available in annex 3. Table 3 below includes the names and locations of villages directly adjacent to the road track.

Table 3 Villages adjacent to subproject road track

No	Village name	Subdistrict name	Distance from subproject start point km+m[4]
1	Al-Hazah	Al Amror	1+100
2	Al-Kiro	Al Amror	3+550
3	Al-Qareh	Al Amror	5+375
4	Annaid	Al Amror	6+670
5	Kobaiban	Janb Al-Yaman	8+550
6	Al-Majma	Janb Al-Yaman	10+800

[3] Mapping of Local Governance in Yemen Governorates

[4] (1km +100 meters) which is representing the point within the road track which is in 1,110 meters distance from the subproject start point, point 0

No	Village name	Subdistrict name	Distance from subproject start point km+m[4]
7	Bni Badr	Janb Al-Yaman	12+300
8	Souq Al-Madinah	Janb Assham	13+146

The subproject is located within rolling mountains terrain in an area with sparse vegetation, the terrain rises from 1,322m to 1,600m above MSL over the whole track length. The road track is gravel standards, carriageway varying between 5 m to 8 m from the subproject start point till station 8+550 and 4 m to 6 m from station 8+550 till the subproject end point. The current road alignment is rugged and not engineered.

Figure 3 Road track including the start and end points, google map.

Figure 4 Road track from 0+000 km to 4+300 Km, google map.

Figure 5 Road track from 4+200 km to 8+440 Km, google map.

Figure 6 Road track from 8+440 km to end point at AsShahil district center, google map.

2.2. Scope of work

The proposed subproject activities includes the rehabilitation of the existing unpaved road and upgrading the pavement surface to asphalt standards;. Activities include as well the widening in some road sections to fulfill the design and safety requirements which will take place entirely on the existing road alignment at its right of way, public land where there is no cultivation nor fruit trees. Road length under the subproject is 13,146 meter with 6 meter width, 2 lanes, asphalt surface will be maintained.

The activities under the subproject will include generally: earth excavation, fill of borrow materials, subgrade preparation, granular base coarse, bitumen prime coat, asphalt concrete wearing, structural excavation for culverts, irish crossing and retaining walls, reinforced concrete pipe culverts , Irrigation plastic pipes, concrete mixture, high tensile steel, cyclopean concrete, grouted riprap and stone masonry for retaining walls and culverts with safety and environmental works.

Contractors are not required to develop any quarries in which the civil work materials will be sourced locally from authorized quarries located outside of ecologically sensitive zones, archeological zones, conflict zones, and high OHS risk zones, with no child labor employment allowed. Summary of activities under the subproject included hereafter.

2.2.1 Engineer's Facilities[5]

- Provision of rented site office, housing and accommodation for the Engineer staff 18 months.
- Provision of 2 vehicles for the Engineer staff including operation cost 18 months.
- Provision of rented laboratory equipment for the Engineer staff including Operation cost 18 months.
- Provision of rented Survey Equipment for the Engineer staff including Operation cost 18 months.

2.2.2 Excavation Works[6]

- Roadway common excavation 42,729 Cu. m.
- Roadway Rock excavation 41,787 Cu.m.
- Fill of suitable material from common excavation and/or rock excavation within all haulage distance 25,190 Cu.m.

2.2.3 Earthworks

- Disposal of surplus and/or unsuitable excavated material outside the right of way to dedicated locations approved by the engineer 27,691 Cu. m.
- Remove invasive weeds mechanically and fill back with common soil as required 16,000 Sq. m. Construct 20 cm subgrade layer with selected material according to the specification requirements 8,360 Cu. m.

2.2.4 Pavement and Shoulders

- Prepare subgrade layer, in cut locations, where the material is suitable and satisfies the specification requirements. The work shall include scarifying to a depth of not less than 15 cm, watering and compacting. The finished work shall be in accordance with the drawings and specifications 63,800 Sq.m.
- Shoulder preparation using screened materials 19,800 Sq.m.
- Granular Base Course Layer 150 mm thick 15,615 Cu. m.
- Provision and spray Bituminous Prime Coat, as per Specification 86,930 Sq. m.
- Provision and lay Asphalt Concrete Wearing Course 40 mm thickness 3,414 Cu. m.
- Stone Pavement 250mm thick 1,600 Cu.m.

2.2.5 Structural Works

- Structural Excavation 25cm-150cm for Culverts, Retaining Walls, Irish Crossings 15,537 Cu. m.
- Cyclopean Concrete Class 210/20 (Culvert / Retaining Walls Beds, barriers, Paving) 2080 Cu. m.
- Concrete Class 210/20 (Culvert Top Slab, Irish Crossings Cut off Wall & Slab etc...) 301Cu. m.
- Grouted Riprap 25cm thick (Irish Crossing, roadside ditches, slope protection and culvert inlet & outlet) 40,847 Sq.m
- Stone Masonry Dressed Coursed with Mortar for Retaining Walls, Culverts, and Safety Barriers 5,320 Cu. m.
- Boulder Masonry for Retaining Walls, Culverts, Safety Barriers 805 Cu. m.

2.2.6 Safety Works

- Project Name Board with their support, fittings and concrete foundation) (2 No).
- Small Signs (not exceeding 1 Sq.m. area) with their posts (94 No).
- Thermoplastic, reflectorized paint for Pavement Marking of 10 cm (36,920 L.m).
- Relocation of public assets into public lands[7]:
    - Existing public walls 100 L.m.
    - Relocation of existing fences 100 L.m.

[5] The contractor will be responsible for the rest of the workers' lodging, which must meet UNOPS OHS criteria and minimum requirements that include appropriate accommodation with a limited number of personnel and to be provided with the proper sanitation premises.

[6] Excavation works in the road vary from section to section based on the road condition and the necessary alignment, maximum excavation depth is 80 cm.

[7] All assets (walls, fences, poles and pipes) that require relocation/reinstallation are public and will be relocated into public lands. Further details available in annex 8.

  - Relocation of drinking water pipeline 200 L.m.
  - Reinstallation of electric poles 5 No.
  - Reinstallation of telephone poles 5 No.
- Provision and installation road Cats Eyes two face (270 No.
- Provision and installation Galvanized Steel fences Guardrails 1016 L.m.
- Provision and installation speed hump as shown on drawings including paint (white & yellow) (30No).

2.2.7 Environmental Works

- Reinforced Concrete Pipe Culvert 120 cm diameter including plain concrete 53 L.m.
- Reinforced Concrete Pipe Culvert 100 cm diameter including plain concrete 77 L.m
- Reinforced Concrete Pipe Culvert 90 cm diameter including plain concrete for 275 L.m
- Irrigation Pipes[8] 300 mm diameter including excavation and filling 120 L.m.
- Stone Masonry Dressed Coursed with Mortar, which serves as safety barriers at the road curves 222 Cu.m.

3. Environmental and social baseline conditions

3.1. Environmental aspects

Hajjah governorate has a semi-arid climate where the yearly evapotranspiration is 2 to 4 times higher than the yearly precipitation. Its elevation ranges between 5-2600 above MSL[9]. The terrain rises from 1,322m to 1,600m above Mean Sea Level (MSL) over the whole track length of the subproject. The hottest month in the governorate and subproject area is July and the coldest is January. The area is characterized by a relatively low average yearly rainfall between 50mm to 130mm. The rainfall recharges the groundwater but also runs on the ground surface in the valleys (Wadis). In general, the temperature is normal throughout the year and the humidity is about 45%. Rainfall and temperature rates are available in figure7 and 8 below.

The targeted road is passing through stable rolling mountainous terrain characterized by its mixed sedimentary sock with no potential rocks falling or sliding. Agricultural lands are available around the subproject area outside the corridor of impact, in which the agricultural activities are mainly dependent on the rainwater. Sorghum, Millet, cash crops are among the most farmed products. Water harvesting enables farmers to supplement rainfall with runoff water gathered from uncultivated areas and roadways and conveyed to cultivated lands. Several systems could be used as water harvesting systems in the area including irrigation from groundwater for agriculture purposes

Cattle, goats, donkeys and a variety of birds can be found in the area. During the site visit, the observed fauna and flora are not those of particular interest and no protected or endangered species were identified. The road does not affect any sensitive, specially designated area or protected species.

[8] These irrigation pipes are to convey irrigated water from one side of the road to the other and are located based on consultation with the water users in the area. The role of such is to safely intake the water into the road drainage system and take it out in a safe manner.

[9] Yemen National Information Center

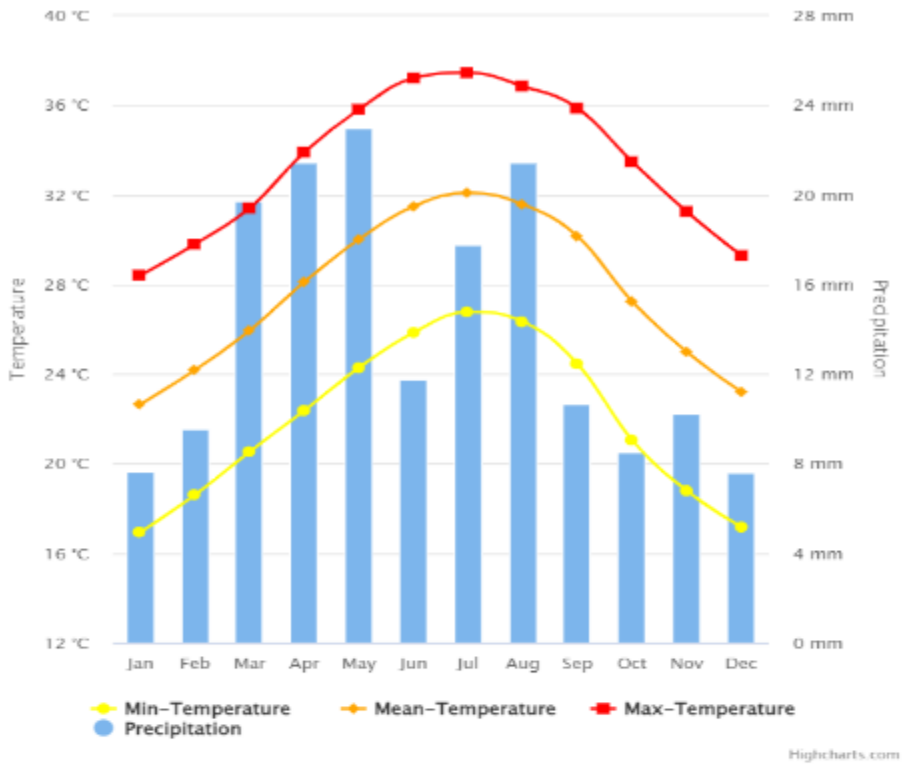

Figure 7[10] Hajjah Governorate Monthly Climatology of Min-Temperature, Mean-Temperature, Max Temperature & Precipitation 1991-2020

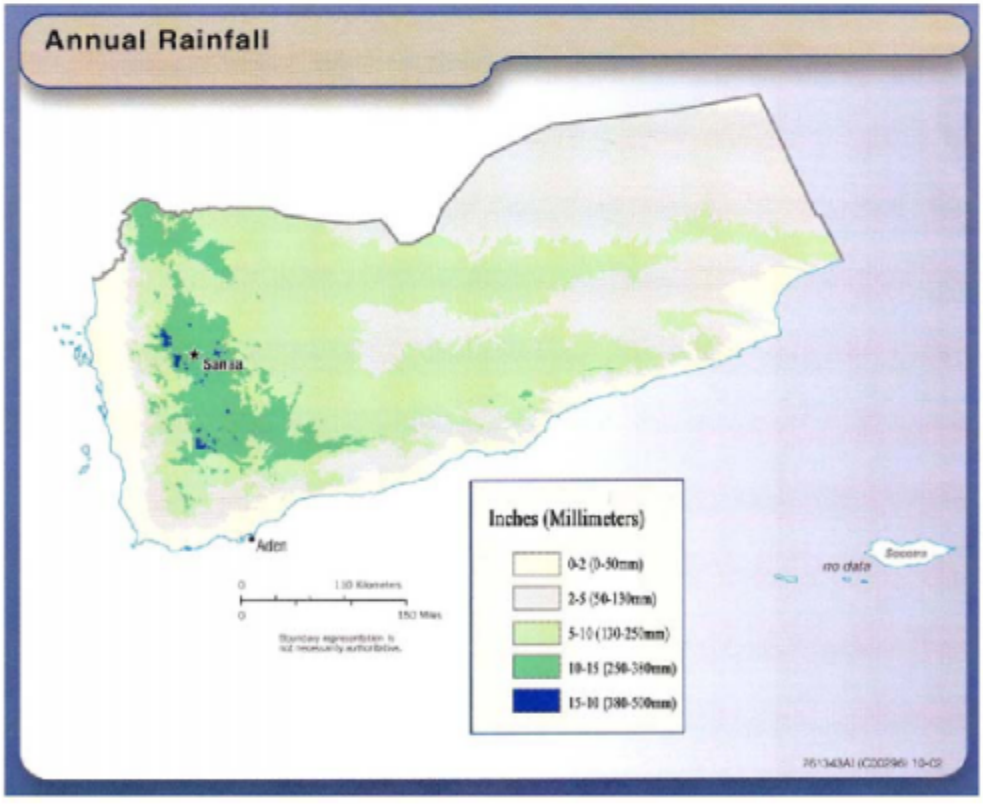

Figure 8[11] Annual rainfall ranges in Yemen in which the subproject area is located in 50-130 mm range

[10] Yemen, Rep. - Climatology | Climate Change Knowledge Portal (worldbank.org)
[11] Yemen Annual Rainfall Map

In general, there is a lack of air quality data in Yemen. Noise is seen as a minor concern in Yemen, the concept of noise pollution is not readily recognized, and the potential adverse impacts on health are not generally understood. On the other hand, typical existing noise levels near the project site are generally limited as the road is located in a relatively underdeveloped area.

3.2. Socioeconomic aspects

According to the 2014 Household Budget Survey, the poverty rate in Hajjah reached about 64%. More recent statistics suggest that the poverty rate is now 83%. The Interim Food Security Classification for 2019 ranks Hajjah as the governorate with the second-highest levels of poverty in Yemen, after Al-Hodeidah.

On 2 October 2022, the UN-mediated truce in Yemen came to an end despite the efforts made to reach an extension agreement. The overall security condition within the country remains stable without conflict escalation post the truce end. The truce had first come into effect on 2 April 2022 and was renewed twice for two-month periods, in June and August. Among other things, it provided for a halt to offensive military operations. Overall, the six months of truce brought several tangible benefits to the Yemeni population, including improved access to humanitarian aid, greater economic opportunities , and a significant reduction in violence and casualties countrywide. The security situation within the subproject is stable in which there is no active conflict across the area.

Agriculture and grazing are the key economic activities in Hajjah in which the governorate produces 4.6% of the total agricultural production of the Republic of Yemen. Majority of the locals within the subproject area are working in agriculture and herding livestock with a minority working in trading or within the governmental sector such as schools and health centers.

Approximately 10 basic schools and 3 secondary schools are available within the subproject area in which the students are crossing long distances to reach their schools, particularly secondary schools students. The people in the targeted region have a great hope that this road will facilitate construction of the schools by the concerned bodies, and this consequently will increase the level of education especially among females, and by this the most important aim of development will be achieved. Limited and basic public health services available within the subproject area provided through one rural hospital and 3 health centers.

The targeted road is one of most important rural roads as it serves a large population density of the poorest rural residents in Asshahel district in Hajjah Governorate. It is the only road that connects their villages and farms with public service areas, neighboring markets, commercial city centers, and the water sources at (Wadi Moor).

The subproject will be implemented within the existing road in which there is no record for any archaeological or historical sites at any of its areas.

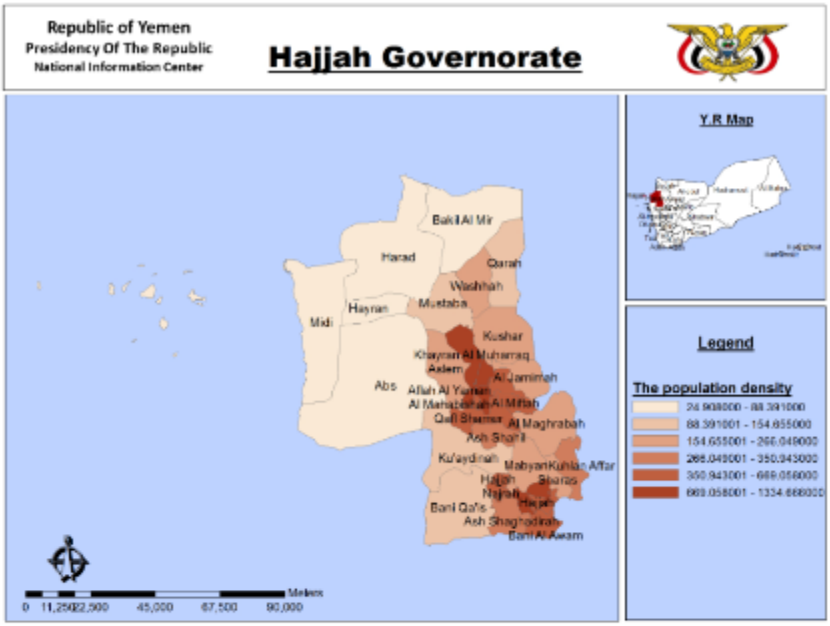

Figure 9[12] population density in Hajjah governorate and its districts. Subproject area is located within the relatively high density range.

Table 3 Population of Hajjah Governorate and AsShahil district[13]

	2022 Estimation			
	Male	Female	Total	Area km^2
Hajjah Governorate	1,237,000	1,178,000	2,415,000	8,227
AsShahil District	27,371	26,536	53,907	196

4. Environmental and social management at the subproject area

4.1. Subproject potential risks and impacts

The subproject implementation will result in significant improvement of the communities life across the area. Such positive impacts include attained, particularly increased level of service for the maintained and rehabilitated road to good conditions and prevention of further deterioration, improving drainage, environment, and health and safety conditions. The subproject will also provide an improved environment for area dwellers, creation of local employment through road rehabilitation works and local economic development. It will improve access to health and education services. The risk level of this subproject is estimated to be moderate, which requires preparation of ESMP as the activities will mainly be rehabilitation of existing unpaved road in the existing right of way.

Site specific impacts may be triggered including noise, dust generation, disruption of traffic, waste disposal, hazardous materials and wastes, soil, surface and groundwater contamination from oil, fuel and chemical spills and safety risks for workers and community including occupational health and safety. Assessment was conducted to evaluate whether any assets will be affected by the subproject civil work in which all assets found outside the corridor of impact. Further details on the assessment result available in annex 7. Annex 8 provides details on the public assets that could/will be relocated or rebuilt if affected/will be affected by the civil works or vehicles movement.

[12] The map retrieved from Yemen NIC website https://yemen-nic.info/gover/hajaa/images/hajaa1.jpg
[13] Population estimation; Yemen Central Statistical Organization CSO based on 2004 census.

Potential risks and impacts have been communicated to the communities at the subproject level during the site visits. Required mitigation measures, GM channels and system have been also detailed to the interviewees. Consultation details are available in section 5 of this ESMP.

4.1.1 Labor management

The interventions will provide opportunities for small contractors, skilled, semi-skilled and unskilled labor from local communities which will reduce the negative impacts of the recent crisis in the country and will generate positive impacts on the economy, education, and health in the subproject areas.

While a substantial number of jobs will be created through the subproject lifetime, it is not expected that the labor influx will be experienced as the majority of the workers required by contractor will be sourced locally from the same communities. The subproject is expected to provide approximately 36,093 labor days over the course of its life cycle, with 6,940 labor days by skilled workers, 13,905 labor days by semi-skilled workers and 15,248 labor days by unskilled workers for which the contractor is accountable. Estimated maximum number of workers who will be sourced from the surrounding cities and governorates is 20 to 25, will be working in intermittent periods, in which such workers will be provided with the necessary accommodation and services by the contractor. Such accommodation needs to be located away from the local communities and to be determined/approved in coordination with the local authorities and communities. The accommodation is expected to be in portable portacabins provided with the necessary water and electrical supply. As a minimum 4 m^2 per person should be assured, the number of the collective room should be minimized, 2-6 workers per room will be acceptable.

Women employment in the subproject civil work areas is not feasible considering the existing cultural and social aspects in the country. However, women employment is emphasized by UNOPS and RAP within the contractor head office in the administration and engineering roles.

Discrimination in employment can occur in the workplace in various ways, such as unequal payment/paid less, inappropriate treatment of workers and disproportionate selection and termination.

No child labor is allowed and the contractors are forbidden to hire a person under the age of 18 years. The minimum age of workers has been specified in the tender documents for contractors. On the other hand, forced, involuntary or unpaid labor will not be used in any work under the subproject. A labor log including names, ages and other details will be managed by the contractor, and all workers will be registered. RAP and UNOPS will regularly monitor this issue and will verify the registers as well as the workers onsite.

The Contractor shall put in place a Grievance Mechanism for workers and the workers that is proportionate to its workforce. The Project level Grievance Mechanism, detailed in section 6 which can be used by workers as an additional means to report any complaint about their employment. Contractor GM system shall be communicated to all workers with a transparent mechanism for resolving complaints in addition to ensuring confidentiality. Further details on the workers GM requirements are available in annex 2 hereinafter.

4.1.2 Occupational health and safety

Workers involved in the subproject might be affected by the civil work activities. Hazards associated with the subproject include manual handling, exposure to noise/dust/hazardous substances, slip, trip and fall and working near electrical poles or while transferring electrical poles. Additional hazards are associated with vehicles/equipment movements, work on powered systems, work at height and excavation activities. Workers might not be provided with adequate work/rest areas and might be exposed to extreme weather conditions or biological hazards. Workers injuries might be resulted from the subproject activities, however with appropriate management of working area, adequate selection of workers, close supervision and appropriate management of emergencies the risk level will be significantly managed.

The contractor shall maintain occupational health and safety system in the site to protect workers from associated hazards and provide adequate training, close supervision, required PPE, first aid kits, potable drinking water, appropriate rest hours, and mobile gender-segregated toilets with a sewage pipe attached to a properly insulated/lined and covered cesspit that will be backfilled with stones and gravel and compacted once the job is over (after removing all sewage and sludge and transporting the waste to authorized sewage facilities and/or designated sites by the local authority) or the waste shall be transported to authorized sewage system if the backfilling option is not feasible.

Workers training and tool box talks shall be conducted by contractor on a regular basis in which the associated risks and impacts need to be clearly and frequently communicated to workers on the importance of compliance to PPE requirements. Moreover, the contractor shall provide the workers with the necessary PPE that is reliable and appropriate to the risk level and implemented tasks. Adequate emergency management as guided in annex2 shall be arranged by the contractor in the working area with provision of workers for the insurance following the Yemen labor law.

This subproject, like other sectors, will be under the risks of Covid-19 pandemic. The precautionary measures against it shall be strictly applied in the subproject worksites and workers' accommodation place during implementation. The contractor shall protect the workers from any risk that may be encountered during the implementation including exposure to the COVID-19 virus.

4.1.3 Noise and air quality

The activities implemented as part of the road rehabilitation will potentially have a minor noise impact on the labors and community. This could be the result of civil work and equipment movement l. Impact and magnitude results are expected to be low and contained within the civil work area.

To reduce the impacts of noise on the workers involved in subproject implementation, the contractor shall ensure the integrity of provided tools (adequate selection of equipment), implement engineering control to reduce noise level in addition to providing workers with ear protection equipment where needed. Strict supervision from the contractor side as well as the supervision engineer is required to ensure compliance with the management plan. Time and work duration of noise generation activities shall be reduced to the minimum, so the human exposure risk is limited.

Potential impacts on air quality might be caused by the generated dust resulting from different site activities such as excavation, civil work, cleaning, building, transportation, road paving … etc. Volatile components might be emitted and cause irritation to the eye and respiratory system of the workers. Such impacts are expected to be limited with low magnitude and effect if the necessary precautionary measures are well implemented and monitored.

Therefore, the mitigation measures required to avoid impacts on air quality are to reduce the dust generation during civil work by spraying water, dust sweeping in addition to installing barriers around the civil work to avoid any emissions to the occupied areas. Additionally, provision of the necessary Personal Protective Equipment PPE to the workers with enforcement of compliance as well as regularly conducting the appropriate training and supervision.

The generation of GreenHouse Gasses emission from the fuel combustion and the other volatile organic compounds are expected to be low with neglected impacts. Meanwhile, the contractor shall provide low fuel consumption equipment and ensure integrity by performing the regular inspection or maintenance for the fuel driven engines. Usage of renewable energy supply sources is recommended and to be implemented by the contractor where feasible. Usage of environmentally friendly and low hazardous effect substances is required for all subproject activities and shall be strictly implemented by the contractors.

Air quality at the subproject areas will be visually assessed and monitored through evaluation of the emitted dust, particulate matters and the affected areas by the supervision engineer as well as the contractor safety officer.

4.1.4 Water, biological resources and landscaping

Since the project is rehabilitation of an existing road, disturbance to wildlife will be minor, temporary and localized and mostly due to noise and air emissions. With proper management of air, noise, waste and air emissions this impact during rehabilitation will be negligible.

There will be no resettlement or displacement during the rehabilitation work, the subproject does not involve any land acquisition and / or restrictions on land use and it is not expected to have impacts on local biodiversity. Assessment was conducted to evaluate whether any assets will be affected by the subproject civil work in which all assets were found outside the corridor of impact without any potential impact that could result Further details on the assessment result is available in annex 7. Annex 8 provides details on the public assets that could/will be relocated or rebuilt if affected/will be affected by the civil works or vehicles movement.

4.1.5 Solid Waste generation

Generated rehabilitation waste will be limited to the sand and stones and domestic waste from workers that will be deposited at external waste management facilities represented by the public landfill in the governorate. Waste that is resulted from the workers activities, vehicles or equipment repair shall be deposited in the designated areas and waste shall not be disposed of in any of the subproject areas.

Waste management guidelines for the contractor to deal with all issues related to waste from waste generation until disposal is available below, section 4.3, in which close coordination with local authorities and landfill management shall take place.

4.1.6 Hazardous materials/chemicals and waste

Risks associated with the handling of hazardous substances include workers/communities exposure, pollution, soil contamination. With adequate management of such substances utilizing the guidance included in sections 4.3 and annex 2 hereinafter the impacts on workers, communities and environment can be largely minimized.

4.1.7 Community health and safety

The subproject will contribute to improving living standards, facilitate access to services, reduce the travel times and create additional job opportunities that will improve the overall economical condition in the area. The interventions will generate positive impacts on the livelihoods of the beneficiaries and the environment. During public consultations at all levels, RAP and UNOPS investigated whether the subproject is a priority, free of conflict, or had significant negative effects during the implementation. It was concluded that the subproject is an urgent priority for the community and beneficiaries and it is completely supported by various stakeholders and all consulted persons expressed their satisfaction with the selection. Moreover, it was proven that the subproject is free of conflict sensitivity and any negative effects that may hinder implementation according to screening and consultations. In general, the subproject will improve the condition of the road which in turn will strengthen community and climate change resilience and improve their living conditions.

The subproject will not cause restrictions for the services or resources. The implementation will follow effective measures to avoid complete closure to the road. The works will be implemented section by section in addition to other mitigation measures, such as informing the public about implementation schedules. There will be close coordination with local authorities and communities to ensure smooth implementation and to avoid any potential impacts on services and resources access.

On the other hand, some negative impacts might be resulting from the implemented activities such as dust, noise, vehicle movements and disturbing the services across the road and potentially can affect the health and safety of communities. Movement restriction in some areas might result as well and there will be a need for alternative routes provision. Therefore, all work areas shall be controlled, provided with physical barriers, sufficient lighting during night, and clear signs / instructions to avoid any unauthorized entry or any traffic incidents. Additionally, the stakeholder engagement activities to cover such issues with the communities on a regular basis. Availability of GM system channels at the subproject areas will be ensured so the communities can raise their concerns.

Strict control and management for traffic by arranging detours and alternate bypass for traffic and roadside residences & businesses for each site using traffic cones, barriers, fences, banksman or lights as appropriate in coordination with traffic officers and according to the work and traffic plan included in the contractor (C-ESMP). Moreover, there will be a traffic plan which will include arrangements for each section that should be prepared by the contractor in consultation with RAP, local authorities, community committee and beneficiaries. The contractor will not start any rehabilitation activities until the required plans are agreed by the various stakeholders and approved by RAP. The plan shall include among other aspects the traffic safety and control measures, workers access, civil work equipment access, safe pedestrian pathways, alternative routes and other measures as needed. Special attention and precautions shall be taken during the rehabilitation of road sections that are close to the buildings, water tanks, schools and villages in which such measures need to be explained in the proposed plan. As extra precautions, light and low vibration equipment to be used near any structure that is located 3 meters or less from the corridor of impact. In addition, physical barriers such as wooden/metal barriers shall be installed during the civil work activities that are implemented near such structures to avoid unauthorized entry and to reduce the impacts of associated risks.

Community committee that is planned to be formed before the civil works commencement will work to ensure and confirm community participation, and help in facilitating implementation. The committee will be formed from local councils, utilities, representatives of youth and women. The key duty of such committees is to ensure smooth implementation and sustainability of the subproject after the completion. Committee will play a role in monitoring subproject progress, contractors compliance and will participate in resolving any issues that may arise.

4.1.8 Gender-Based Violence GBV and Sexual Exploitation and Abuse SEA, Sexual Harrassment

Although with low magnitude and occurrence probability due to the cultural aspects in the country, UNOPS has already taken the following steps in regards the GBV/SEA/SH issues in which it will be maintained during the subproject implementation:

- During the stakeholder engagement activities, the project GBV SEA/SH action plan had been discussed. Although the consultation meeting targets both males and females, more attention is paid to females' participants. GM mechanism highlighted how it is transparent, secured and confidential.
- UNOPS has developed visibility materials to promote awareness for SEA/SH in local language (Arabic) the materials and messages used are adapted to be suitable for the Yemen context and sensitivity of the subject.
- GM focal point received specialized training about SEA/SH cases and the way to deal with it using Victim centered approach
- UNOPS has in place protocol for GM in how to deal with SEA/SH cases.
- UNOPS has conducted refresh sessions for Project Personnel in GBV/SEA/SH and trained retainers' sites engineers as well
- UNOPS has prepared risk assessment tools for GBV and will require contractors to fill out a checklist on GBV/SEA/SH and to prepare a code of conduct for their workers/staff.
- Strengthen coordination and collaboration with relevant GBV actors in Yemen, in particular the Protection Cluster, GBV sub-cluster and Child protection sub-cluster to tap into the existing referral system
- As part of the YELCP GBV SEA/SH action plan UNOPS will roll out SEA/SH prevention and response plans for contractors, where the contractors need to prepare the action plan as part of the tender documents. UNOPS is supporting to enhance the contractors' capacity in this area since they have limited knowledge and capacity. Hence, UNOPS developed a contractors action plan template, which covers the most priority areas. Moreover, UNOPS conducted an induction session for contractors about this requirement and presented to contractors on how to prepare their own GBV SEA/SH prevention and response plans (GBV Action Plans) using the developed template. In addition, in depth training sessions will follow and will continue during the project life cycle.

4.2. Institutional arrangements

The subproject implementation period is expected to be 18 months in which UNOPS will carry out tender bidding, bids analyses, signing the contract and the overall management in cooperation with its implementing partner RAP. Onsite supervision of the civil work activities at subproject level will be handled by the RAP in which a dedicated supervision team will be appointed. UNOPS shall perform additional supervisory activities for the civil work as well as the compliance to environmental and social safeguards requirements at the subproject areas by its personnel where needed.

UNOPS and RAP will ensure implementation of proper mitigation measures for the potential impacts by including environmental and social requirements for contractor and OHS requirements in the contract as well as requiring contractors to comply with the applicable rules and guidelines.RAP and UNOPS has strong monitoring and inspection on daily, weekly and monthly basis to ensure full compliance particularly to OHS measures.

Section 4.3 and annex 2 hereinafter provide further details on the mitigation and prevention measures that need to take place during the subproject implementation as well the monitoring arrangements. The ESMP requirements will be included in the subproject tendering and contracting documents. The contractor shall prepare his own C-ESMP that is reflecting the environmental and social requirements including those stated in this ESMP, C-ESMP shall be reviewed and approved by RAP/UNOPS prior commencing any activities at the subproject areas. Moreover, the contractor shall sign the UN/UNOPS Code of Conduct as part of the contracting process while the workers involved in subproject implementation shall be aware of and sign the personnel CoC that is available within the annex 2 hereinafter.

The Environmental and Social Safeguards Officer (ESSO) as well as the Health, Safety, Social and Environmental (HSSE) officer within UNOPS will follow the overall implementation of the environmental and social requirements at the project and subprojects level. The RAP has in place ESSO at central level to follow up and report the level of compliance to the environmental and social requirements across all subprojects. RAP will hire and use a resident supervision engineer at the subproject site to monitor the progress and report on Environmental, Social, Health and Safety (ESHS) performance. Contractor shall appoint a qualified safety officer, permanently available in the subproject, responsible for the followup of day to day activities and to ensure compliance to the requirements stated in this ESMP. Summary of the ESHS requirements for contractors is available in annex 2 of this ESMP.

A Community committee will be established from the different stakeholders groups at the subproject which will play a role in facilitating the implementation and monitor the progress as well as project requirements in close coordination with UNOPS, RAP, local authorities and contractor. The committee shall be formed prior to the civil work implementation in coordination between RAP and local authorities and it shall include members from the various stakeholders groups including the communities leaders, affected parties, local authorities, youth and societies representatives.

UNOPS and RAP will provide the required guidance and capacity building for the contractor and community committee in terms of environmental and social safeguard management before commencing the civil work activities at the subproject areas.

Activities under the subproject will be closely followed up and monitored in which the Third Party Monitoring (TPM) will be deployed, environmental and social safeguards requirements management will be part of the subproject main agenda that will result in enhancing the capacity of communities, contractors and their workers.

4.3. Environmental and social risks management and monitoring plan

The following table includes the mitigation measures for the potential risks and impacts. The mitigation measures implementation cost is to be handled by the contractor as part of the subproject and BoQ items implementation cost, cost that is included in the below table is estimated and might vary during the implementation.

Monitoring responsibilities are: Contractor safety officer, RAP resident supervision engineer, UNOPS ESSO

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
1. Occupational Health and Safety **1.1. Work related accidents and injuries**				
- Maintain insurance coverage for workers in subproject sites according to the requirements and conditions of insurance in the bidding documents which should comply with labor law, UNOPS and the World Bank requirements. - Provide occupational health and safety training to all subproject workers. - Provide protective masks, safety helmets, goggles, shoes and overall safety materials as appropriate. - Provide workers in high noise areas with earplugs or earmuffs. - Ensure availability of first aid boxes at the work areas with trained staff on the emergency response. - Following driving safety instructions i.e., trained/qualified drivers, following speed limits, using well maintained trucks. - Heavy equipment must be inspected on a daily basis to ensure safety and to rectify any failures. Records of inspections shall be maintained by the contractor. - The contractor shall maintain a banksman for heavy equipment movement. - The contractor shall prepare an emergency plan with the C-ESMP to address the related emergencies. - Ensure air and noise mitigation measures stated previously are well implemented - No explosives to be used in the project or activities related to the project. - Avoid working in extreme environments/weathers conditions (i.e sand storms, rainy periods etc.). - Add warning signs at a safe distance from the targeted road sections to warn drivers about the rehabilitation work and to prevent them from running into	1,000	- Inspection and photographic documentation - Maintaining a record of injuries and accidents specifying cause and location - Contractors are required to provide a list of trained workers, who will be checked for their training skills and age and the measures will be implemented onsite and followed by regular monitoring visits Indicators - Number of reported incidents - Occupational health and safety training records - Documents for insurance coverage of workers - Number of fatalities, number of injuries - Number of workers not adhering to wearing PPE - Number of injured workers	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
workers while doing their work. - Shorten exposure time to heat or stress through frequent rest breaks. - Provide appropriate potable drinking water - Awareness needs to be provided to workers on the importance of maintaining body fluids and avoiding dehydration. - Excavated zones shall be properly fenced and marked to avoid falling. - Work at height areas shall be properly marked and controlled, workers shall be trained on the work at height protection measures as well as provided with the required fall protection PPE. Any work at height platforms shall be properly secured and inspected regularly. - First aid equipment shall be present on site and workers shall be trained with first aid activities - Details of the nearest hospital and transfer vehicles shall be present on site		due to not adhering to PPE - PPE availability and distribution records - Number and type pf workers grievances and number of solved grievances		
1.2. Workers exposure to hazardous substances such as fuel, lubricating oil, bitumen, paints and chemicals				
- Workers training on the handling procedure for hazardous materials and wastes. - Hazardous substances shall be stored properly in dedicated areas following the Material Safety Data Sheets (MSDSs) as well as the national and international guidelines including the World Bank and UNOPS Guidelines. - Ensure availability of fire extinguishers and the workers need to be trained on the emergency response measures. - Storage areas shall be provided with clear identification, labeling, storage, no smoking signs. - All workers handling the cement and hazardous substances shall be provided with adequate PPE relevant to their tasks. - Flammable materials shall be stored in well ventilated and insulated areas, inaccessible to the public.	500	- Inspection and photographic documentation - Maintaining a record of injuries and accidents specifying cause and location. Indicators - Number of reported incidents - Training records on the handling of hazardous materials and wastes - MSDS availability - Presence of clear labels on materials - Number and type of workers grievances and number of solved grievances	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
1.3. Poor onsite sanitation or water supply, leading to illness and disease				

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
- Ensure mobile toilets and their cesspits are properly insulated and located away from drainage and runoff zones. Ensure cesspits are properly lined, covered and waste is disposed of in an authorized area. - Ensure the mobile toilets are equipped with water and soap - Provide potable drinking water through distributing drinking water containers/ bottles for all working sites. - Ensure proper housekeeping practices are maintained - Ensure when the cesspits are filled, to safely transfer and dispose sewage and sludge at designated areas/facilities by the authority - Ensure all surfaces are free from oil, grease or any other contaminants, particularly soluble contaminants. - Provide and implement safety precautions onsite during subproject implementation.	1,300	- Site inspection Indicators - Number of recorded complaints - Number of reported incidents - Presence of pests in latrines and project site	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
1.4. Risk of manual handling				
- Avoid manual handling activities to the possible extent. - Reduce the load risk by using lighter weights or more stable containers. - Reorganize the activity to further reduce the impact on the individual(s). - Utilize mechanical lifting aids or equipment as appropriate. - Ensure appropriate rest breaks, job rotation and training for workers. - Provide PPE to the workers on a regular basis (e.g. gloves, foot protection, and non-slip footwear) - Ensure appropriate PPE is available during weed removal	500	- Inspection and photographic documentation - Maintaining a record of injuries and accidents specifying cause and location. - Number and type of injuries recorded - Workers grievances	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
1.5. COVID-19 spread causing illnesses				
- Ensure adherence to COVID-19 precautionary measures by all workers. - Ensure face masks are available and used by all workers. - Ensure awareness sessions are conducted on COVID-19 with all workers. - Ensure availability of hygiene kits, soap, clean water, and hygiene etiquette is followed. - Ensure social distancing is applied in the worksite.	500	- Visual inspection and health inspections Indicators - Number of infected workers - Number of workers adhering to wearing PPEs	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
1.6. Working at quarries and transporting stones				
Contractor is not expected to develop his own queries and shall rely on the existing quarries to source civil works materials. Required mitigation for working in quarries or stones transportation are:	500	- Inspection and photographic documentation - Maintaining a record of	Contractor	Contractor (Daily), RAP (Daily)

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
- Use of explosives is forbidden in any of the project activities. This is clearly communicated to all communities. - Ensure all workers are aware of the dangers of using explosive materials. - Report to UNOPS any serious workplace accident or incident within 24 hours - Providing high visibility clothes for those who work in quarries. - Ensure activity is done by skilled workers from the targeted areas and in case the skilled workers are not available in the targeted areas, skilled workers from other neighboring area will be employed for the task - Ensure that the quarries are safe and construct barriers to protect workers from falling with no child labor allowed. - Make sure that the rocks are cohesive and not lose to ensure that the rocks do not fall out - Checking daily the condition of the rocks and soil, especially after rain and the use of compressors. - Daily awareness of the mechanism of cutting rocks is done in a safe way and it is forbidden to cut rocks from the bottom or from the top - Conduct awareness sessions about handling materials and motivate workers to ask for help from other workers when performing heavy tasks. - Organizing and arranging labor at the site of stone quarries to avoid congestion between working groups. - Check the efficiency and insulation of electrical wires of mechanical cutting equipment (Air Compression Machine). - Drivers are to be aware of the importance of periodic maintenance and inspections of stone transporting vehicles and are to be committed to do so. - Emergency response plan is prepared, and all workers are aware of it - Ensure areas where rocks are obtained have no potential risks of falling rocks or have barriers for falling rocks. - Regular break to workers to reduce the weather impact and provide drinking water.		injuries and accidents specifying cause and location. Indicators - Number and type of injuries recorded - Number of workers grievances from quarrying activities		UNOPS and TPM (Monthly)
1.7. Risk of electrical shock				
- Minimize the potential for water or chemical spills on or near electrical equipment. - Use safe work practices every time electrical equipment is used.	N.A	- Visual observation and photographic documentation of equipment including the	Contractor	Contractor (Daily), RAP (Daily)

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
- Disconnect the power source before working on the electrical poles or connections.. - Ensure that workers are wearing suitable PPE. - Avoid working during rainy seasons. - Workers on electrical connections or poles should be qualified and trained.		connections - Condition of the electrical equipment - Number of related incidents/failures		UNOPS and TPM (Monthly)
2. General environmental impacts **2.1. Dust generation during rehabilitation work, excavation, backfilling, and compaction of the pavement layers. Air pollution due to emissions from machinery and vehicles**				
- Properly use dust control methods, such as covers, water suppression, or increased moisture content for open materials storage piles, or controls, including air extraction. - Ensure spraying water efficiently during dust suppression to avoid wasting water. Water spraying can be carried out by using gray-water if available or collected rainwater where possible. - Reduce the amount of water used to control dust, and use sweeping practices. - Conducting cleaning activities away from drainage structures. - Reduce dust generation due to cutting work by spraying water when needed and avoiding spraying water where electrical live lines are presented. - Cover open bodied trucks handling sand, gravel or remains. - Regularly clean road surfaces within the rehabilitation areas to remove accumulated fine material, and regularly clean transportation vehicles. - Ensure turning off vehicles and machinery when not in use to reduce NOx and CO and PM emissions from machinery and vehicles used. - Properly and regularly maintain machinery to minimize exhaust emissions, suspended particulates and fumes, in particular by ensuring that the engine, injection system and air cleaners are in good condition. - Properly cover transport vehicles containing soil or rocks or materials that can be easily spread in the air.	500	- Visual observation and photographic documentation of equipment induced dust clouds during rehabilitation/ rehabilitation activities Indicators - Visual presence of dust clouds - Quantity of consumed fuel	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
2.2. Increased levels of noise and vibration due to heavy vehicles and equipment, which may be a nuisance to the community around the rehabilitation areas				
- Use well-maintained and inspected equipment. - Shut down equipment when not in use. - Use operational noise mufflers. - Limit noisy activities to normal daylight hours.	1,000	- Site supervision/inspection and documentation to ensure compliance with the noise mitigation measures	Contractor	Contractor (Daily), RAP (Daily) UNOPS

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
- Limit vehicle speed and equipment movement at critical locations. - Provide advance notice to occupants if an activity involving high level impact noise is in close proximity to buildings.		Indicators - Number of complaints concerning noise		and TPM (Monthly)
2.3. Disruption of environment by borrow pits and quarries				
- Materials required for rehabilitation must be obtained from approved borrow areas and quarries and avoid ecologically sensitive zones Although not expected, if a contractor should seek to develop, operate and reinstate borrow pits and /or quarries, the contractor will adhere to the following: - Inform RAP and UNOPS about developing and operating or reinstating borrow pits and/ or quarries for approval. - Obtain all necessary permits for borrow pits and quarry operations. - Locate quarry sites as far away from settlements as possible. - Ensure quarries are not ecologically sensitive zones - Locate borrow pits and quarries at least 100 m from watercourses or human habitations. - Fence and secure quarry sites. - Locate borrow pits on land that is not used for cultivation and is not wooded. - The use of explosives is prohibited. - Apply all the working conditions and labor requirements.	500	- Site supervision/inspection and documentation to ensure compliance	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
2.4. Leakage of vehicles lubricants and oil and chemicals in worksites				
- Avoid any leakage of oil in the worksite. - Avoid refueling vehicles or changing lubricants in places on site other than allocated locations. - Use impervious surfaces for refueling areas and other fluid transfer areas. - Provision of spill prevention kits in the work area, carry out appropriate collection and cleaning of areas in case of leakage.	500	- Visual observation and photographic documentation of equipment and soil leaks (detected through changes in soil color). Indicators - Presence of spills - Change in soil color	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
2.5. Soil/ groundwater/ runoff contamination				
- Pave in dry weather to prevent runoff of asphalt or concrete materials and avoid working during rainy seasons - Cover storm drain inlets and cesspits during paving operations - Conduct cleaning activities away from drainage structures	500	- Inspection and photographic documentation. - Photographic detection of changes in soil color at	Contractor	Contractor (Daily), RAP (Daily) UNOPS

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
- Properly store all types of waste and hazardous chemicals if any in insulated areas to avoid spillage and away from runoff areas and soil - Ensure mobile latrines if used are insulated from the ground and located away from runoff zones as well as their cesspits and ensure they are properly covered - Remove spills if any regularly - Ensure concrete mixing if any is done at designated insulated areas away from soil, and water drains. - Ensure hazardous chemicals and waste, if any, are stored, handled and disposed of according to their Material Safety Data Sheets. - Construction waste should be stored and handled in designated areas away from the soil and water runoffs. Ensure no clogged runoffs/drainage zones.		particular sites. - Presence of waste stored near runoffs or at undesignated areas		and TPM (Monthly)
2.6. Blockage of culverts, drainage ditches, stormwater catchment basin and channels				
- Clean and maintain drainage structures. - Provide adequate drainage works.	N.A		Contractor	
2.7. Water logging due to inefficient drainage for surface runoff in some locations or shallow water				
- Keeping trenches and excavations free of water. - Dewatering surface water if needed using water vacuum mobile tankers. - Provide adequate and efficient drainage for surface runoff. - Ensure proper waste management and no wastes to be stored in drainage areas	N.A	- Site inspection and photographic documentation of cleaning activities Indicators - Presence of materials and wastes within culverts	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
2.8. Low aesthetic value of landscape such as accumulation of waste and debris in the rehabilitation site and damaged curbs and tiles				
- Where occur, replant the damaged and dry trees with native non-invasive trees, available in local nurseries at subproject areas. - Remove the accumulated wastes and debris in the work site - Reconstruct damaged curbs, and tiles. - Rehabilitated sites must be cleaned when work is completed.	N.A	- Site inspection and documentation of general landscape **Indicators:** - Presence of wastes at undesignated zones - Number of complaints related to aesthetic value and waste mismanagement	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
2.9. Production and disposal of rehabilitation work's debris and waste materials				

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
Loading: - Properly collect and load the debris and domestic waste using well maintained equipment 'to suitable trucks with suitable load and put more emphasis on the safeguards requirements. Solid wastes should be stored in designated zones and away from drains and runoff zones. - Hazardous waste should be handled and stored and disposed according to their MSDSs. Storage of hazardous waste should be at designated inaccessible sites and at well insulated zones, away from runoff/ drains - The contractor should continuously remove the waste immediately and transfer it to the approved disposal site. - Minimize littering of roads by ensuring that vehicles are licensed and loaded in such a manner as to prevent falling off or spilling of construction materials, and by sheeting the sides and tops of all vehicles carrying sand, other materials or debris.	1,000	- Site inspection and photographic - Level of cleanliness in the site - Documentation of the waste management and streams	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
Transportation: - Properly transport the loaded wastes and debris and hazardous waste (separately) by suitable trucks with emphasis to cover trucks with appropriate traps to avoid spillage during transportation. And direct the drivers to follow the driving safety instructions i.e. licensed and well-trained drivers, following speed limits, using well maintained trucks; and follow the traffic rules.	1,000			
Final Disposal: - Properly dispose of solid waste at designated permitted sites, landfill allocated by the local authorities and cleaning funds; and attach the receipt of waste from the relevant landfill authorities to the site engineer.	N.A			
3. Social Impact **3.1. Temporary disruption of traffic and congestion due to road closure and detours**				
- Prepare a traffic plan during implementation in coordination with the responsible authorities and affected communities. - Inform and coordinate with the local councils and traffic authority, public and roadside residents on the implementation schedule. - Shorten implementation period to the possible extent. - Road rehabilitation to be performed in sections to avoid full closure of the road. - Control and manage traffic, by arranging detours and alternate bypass for traffic	N.A	- Site inspection and documentation of community economic activities nearby site. - Visual observation and photographic documentation	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
and roadside residences & businesses for each site using traffic cones, barriers, fences, or lights as appropriate in coordination with traffic officers and according to the work plan provided by the contractor (C-ESMP) and approved by Resident Engineer / RAP. - The contractor should not start any rehabilitation activities before the installation of traffic safety and control safeguards.		of traffic management plan Indicators - Number of reported complaints		
3.2. Temporary disruption of obtaining water and electricity during the relocation of water pipes and electrical poles				
- Informing locals prior starting the displacement activities of water pipes and electrical poles - Displaying signs alerting residents to the hazard of the construction zone. - Where applicable, supplying residents with several tanks of drinkable water in an emergency.	N.A	Site inspection and documentation	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
3.3. Temporary disruption of the construction machinery noise during the construction phase				
- Working at night is not allowed. - Avoid exposure to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection. In addition, no unprotected ear should be exposed to a peak sound pressure level (instantaneous) of more than 140 dB(C). - The use of hearing protection should be enforced when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110 dB(A). - Reduce the "allowed" exposure period or duration by 50 percent for every 3 dB(A) increase in excess of 85 dB(A). - Perform periodic medical hearing checks on workers exposed to high noise levels. - Rotate staff to limit individual exposure to high levels. - Install practical acoustical attenuation on construction equipment, such as mufflers. - Use silenced air compressors and power generators - Keep all machineries maintained, inspected and in good condition - Install exhaust silencing equipment on bulldozers, compactors, crane, dump trucks, excavators, graders, loaders, scrapers and shovels.	500	- Visual observation and photographic documentation of safety measures. - Meeting with communities - Visual observation for installing warning signs, barricading of working areas with safety tapes and fencing/barricades to prevent unauthorized access of public and pedestrians to the working areas. Indicators: - Number of recorded complaints - Number of reported incidents	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
- Installation of signs in all areas where the sound pressure level exceeds 85 dB (A). - Shut down equipment when not in use. - Provide advance notice to occupants if an activity involving high level impact noise is in close proximity to buildings.				
3.4. Public safety during the rehabilitation phase				
- Conduct management and safety plan for rehabilitation activities. - Install warning signs near and around the working sites. - Erect removable barriers in high risk areas. - Provide and maintain required barricades, guards, fencing, shoring, temporary roadways, footpaths, lighting and traffic flagging. - Protect workers and the public by covering openings and by protected fencing, barricaded and guardrails. - Protect proper shielding scaffolds. -	500	- Visual observation and photographic documentation of safety measures. - Meeting with communities Indicators: - Number of recorded complaints - Number of reported incidents	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
3.5. Complaints				
- A complaints register will be kept on site and this will feed into the GM. Details of complaints received will be incorporated into the audits as part of the monitoring process. - Project GM channels are posted at the subproject site - Contractor shall develop and maintain GM for his workers in which the workers shall be fully aware of the mechanism -	N.A.	- Number and type of grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken	Contractor UNOPS, and RAP	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
3.6. Influx of non-local manual labor and risk of GBV and SEA.				
- Ensure that local laborers are hired within the subproject to provide opportunities for local communities and to avoid labor influx to the possible extent.	N.A.	- Labor registers - Meeting with communities and workers	Contractor, and RAP	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
3.7. Sexual harassment, abuse, gender-based violence, and discrimination				

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
- Mandatory and repeated training and awareness-raising for the workforce about refraining from unacceptable conduct toward local community members, specifically women. - Informing workers about national laws that make sexual harassment and gender-based violence a punishable offense that is prosecuted. - Introducing a Worker Code of Conduct as part of the employment contract, and including sanctions for non-compliance (e.g., termination). - Set up a solid GM and code of conduct and contractual provisions to prevent the act of GBV and SEA. - Adopting a policy to cooperate with law enforcement agencies in investigating complaints about gender-based violence. - Contractor and workers to sign the code of conduct, and ensure workers comply and adhere to the code of conduct. - Conduct regular awareness sessions on site in GBV prevention. - GM system shall be put in place to handle any issue on Gender SEA and GBV.	N.A.	- Documentation of contractors. - Meeting with communities Indicators - Number of reported and registered cases of the SEA/SH through project GM. - Number of reported cases of contractors' noncompliance to SEA/SH obligation on work sites.	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
3.8. Child Labor and Forced labor				
- All workers should be more than 18 years old. - Verifying age of workers by checking IDs and official documents. - Ensure a worker log is available, and all workers are registered. - A labor log including names, ages and other details will be kept, and all workers will be registered. UNOPS will continuously monitor this issue and ensure that workers are properly paid.	N.A.	- Inspection and maintaining a record of labors specifying age and any other necessary details. - Site inspection / interviews Indicators - Number of GM Reports - Number and type of workers and presence of workers with ID below 18 years old	Contractor	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
3.9. Poor coordination, planning and sequencing of work could lead to the breakdown of unseen underground services networks (electric power cables, telephone lines, water distribution networks).				
- Coordinate with local councils, community committee, and other authorities. - Inspection of site to clearly identify any electrical hazards or other utility lines damages in the working areas. - Use the designs and plans of the underground networks in coordination with competent authorities to identify the location of the underground pipes,	N.A.	- Regular inspection. - Reinstatement activities status Indicators - Number of complaints or grievances	Contractor	Contractor (Daily), RAP (Daily) UNOPS

Prevention and Mitigation Measures	Estimated Cost US$	Monitoring Parameters	Measures Responsibility	
			Implementation	Monitoring
sewage pipes and cables. - Repair any damage caused by the Contractor's activities, in coordination with concerned authorities. - The contractor should coordinate with the Traffic Department to prepare a Traffic Management Plan for traffic detours to ensure traffic transfers are smoothly managed for each street/ work area with a clear plan and an engineering scheme. - Safeguard all existing structures, works, pipes, cables, sewers, or other services or installations from harm, disturbance or deterioration during rehabilitation activities. - Backfill service trenches as soon as possible after the service has been maintained and if possible, on the same working day.		- Number of incidents or damages occured		and TPM (Monthly)
3.10. Discrimination in employment can occur in the workplace in various ways				
- The employment of all project workers be based on the principles of non-discrimination and equal opportunity and no discrimination is allowed with respect to any aspects of the employment relationship, including recruitment, compensation, working conditions and terms of employment, access to training, promotion, or termination of employment. - Rely on the relevant provisions of the Yemeni Labor Code which match ESS2 requirements	N.A.	- Inspection and auditing for workers' documents. - Meeting with workers Indicators - Number of GM reports regarding labor discrimination, rights and issues	UNOPS, RAP, Contractors and workers	Contractor (Daily), RAP (Daily) UNOPS and TPM (Monthly)
3.11. Operation and maintenance of the rehabilitated road, lack of maintenance				
- Maintenance is required to ensure sustainability of this project. - Inform the locals on maintenance periods and ensure providing alternative road access during maintenance work - Ensure same mitigation measures are applied during maintenance works	N.A.	- Visual inspections on roads, culverts, electricity poles, water pipes etc. Indicator - Number of grievances related to the infrastructure of this project - Presence of failure in roads, and number of times they occurred	Local authority	RAP

5. Stakeholder engagement and information disclosure

YELCP project level stakeholders' engagement and information disclosure activities took place regularly by UNOPS and RAP with the various stakeholders at central and local level. The project documents including ESCP, ESMF, LMP, SEP and RF have been communicated to the relevant stakeholders and disclosed in Arabic and English on the official UNOPS website.

Consultation process takes the form of semi-structured and direct interviews with local communities and group discussions with stakeholders groups including, community leaders, beneficiaries, households, land and business owners in the different subproject areas. Consultation sessions were conducted in the subproject different areas taking into consideration precautionary measures to avoid the spread of Covid-19; social distance was applied and implemented outdoors.

The consultation session summarized below in which consultation questionnaires distributed/asked to the interviewees is available in annex 4 and examples of the consultation records are available in annex 5.

Date	Location	Participants Details	Total Participants	
			Men	Women
23 May 2022		2 local officials, 13 community members	11	4
14 Sep 2022	Alamror	2 local officials, 3 community leaders, 22 community members	19	8
14 Sep 2022	Alhazah Village	5 community leaders, 25 community members	16	14
14 Sep 2022	AsShahel center	1 local official, 5 community leaders, 65 community members	36	35
Total			**82**	**61**

The consultations with men and women at subproject areas covered several issues and aspects including:

- Ensure communities' needs and confirm the selection priority.
- Inform local communities about the subproject activities and its timetable;
- Inform them about their rights to have a job opportunity during implementation.
- Raise their awareness about potential risks associated with the contractors work such as safety, health, environmental, and social risks and required control measures.
- Document and address the local communities' concerns, expectations, and feedback.
- Discuss the positive impacts that the subprojects will have such as improved transportation services, accessibility and road safety;
- Discuss subprojects' possible negative impacts such as disruption of traffic and safety of workers and proposed mitigation measures and how to avoid and mitigate them.
- Inform them that the road traffic may temporarily be interrupted during implementation and how to coordinate with subproject supervisors and contractors to manage the traffic.
- Raise awareness regarding social risks that may occur during the implementation and the required measures that should be taken in case of occurrence.
- Provide full details on the Project GM system so they can send their opinions, concerns and

inquiries regarding the subproject without fear with emphasis on the confidentiality of such mechanisms.

The consulted individuals and authorities have expressed their strong support to the subproject. They showed their interest in facilitating implementation and were eager for the subproject as it is the key priority for them. Moreover, the interviewees expressed their happiness for hearing about the subproject and how the planned activities will have positive impacts such as improving access to local services, schools and health care centers and other local services. However, they have expressed some concerns about the delay of commencement and implementation in addition to the use of poor materials in rehabilitation; they also emphasize avoiding complete closure of the road during implementation and support the suggested mitigation measures to be applied section by section. Furthermore, stakeholders emphasized on the importance of adequate selection of the contractors who are able to complete the work activities safely in due time in addition to performing close monitoring of the contractor activities.

5.1. Consultation during implementation

Consultations will continue during civil work implementation with the local communities, affected parties, community committee, local authorities as well as workers and business owners to assess beneficiaries' satisfaction on implementation of mitigation measures and accommodation of all their concerns and will conduct broader consultation with more beneficiaries and wider representatives of local communities.

Furthermore, the contractor will be required to undertake a process of stakeholder engagement with the various stakeholders groups in the subproject areas. The contractor shall also maintain good relations with local communities throughout the subproject and will give these communities prior notice of plans and schedules as they might affect local people.

To ensure engagement with stakeholders during subproject implementation, the following mechanism will be adapted:

- Consultation with local communities by interviews, meetings and using questionnaires to assess beneficiaries' satisfaction on the implementation of activities and safeguards.
- Utilize GIS-based portal mapping for all activities including sub projects supported to promote transparency to reach more stakeholders.
- Utilize engagement findings to improve the Project implementation and performance.
- Explore using UNOPS' remote monitoring tools for engaging stakeholders in monitoring and quality assurance of subproject activities.
- Include a TPM component in reaching various stakeholders groups during implementation.
- Receive feedback from stakeholders through the RAP and UNOPS personnel located in the subproject area or through the established GM system of the project.

5.2. Subproject sustainability

The subproject implementation will take into consideration the climate change resilience to ensure sustainability through improving road drainage system capacity, ensuring work quality resistant to flash flood, adjustment of structural design of the pavement (flexible, semi-rigid and rigid/composite designs), etc in which such aspects have been considered during the design stage.

A community committee is planned to be established before the commencement date which will work with RAP, UNOPS and authorities in facilitating implementation. The community committee is formed from local councils, affected parties, representatives of youth and women. The key duty of this committee is to facilitate subproject implementation and ensure sustainability after the implementation phase. Also, coordination with local authorities / councils took place to inform them on activities, the importance of their role in facilitating implementation.

6. Grievance mechanism

UNOPS has established a GM system under the YELCP to enable beneficiaries to communicate their concerns regarding the project activities. The GM details the procedures that communities and individuals, who believe they are adversely affected by the project or a specific subproject, can use to submit their complaints, as well as the procedures used by UNOPS and RAP to systematically register, track, investigate and promptly resolve complaints. Project GM system can be used also by contractor workers to raise any issues related to their employment and contractors work.

Hard copies of the translated GM channels as available in annex 4 were introduced to interviewees and they have been informed that the GM contact information will be posted at the subproject site. Resolving complaints at community level is always encouraged to address the problem that a person may have during the implementation and/or operation phase. RAP shall maintain records for grievances and complaints including minutes of discussions, recommendations and resolutions made.

Anonymous complaints will be admissible to their attention verbally or in writing by subprojects affected communities or individuals and will relay these concerns in writing to UNOPS on a next day basis. UNOPS will determine if these concerns rise to the level of a complaint.

UNOPS will register the complaint in a dedicated log by gender, age, and location, and include a copy of the complaint and supporting documents. UNOPS will record and document complaints received in the subproject file and the subproject progress reports, including the number and type of complaints and the results of their resolution.

6.1. GM channels

Multiple access points to the GM system are provided for beneficiaries to voice their concerns. These access points will be advertised at subproject level and put on the sign boards on each subproject site, and include GM contact information including toll free number, landline, mobile SMS, email and website:

GM channels details	
Address	Haddah Street, former European Union Office Building, Sana'a
Toll Free Number	8000190
Landline	01 504914 and 01 504915
SMS and WhatsApp	739888388
Email	grm-yemen@unops.org
Website	www.unops.org

The GM contact information will be posted in Arabic in the subproject areas and be communicated through multiple channels to ensure all groups can easily access contact information and relevant mechanisms to provide feedback.

Grievances can be brought up by affected people in case of: (i) non-fulfillment of contracts or agreements; (ii) disputes related to destruction of assets or livelihoods; (iii) disturbances caused by rehabilitation activities; (iv) concerns around safety and protection related to project's activities.

6.2. Tracking, investigating and resolving complaints

The GM log that is maintained by UNOPS will track the date the complaint was received, date responded to, the type of response, and if the complaint was resolved to the satisfaction of the plaintiff.

The GM focal point will register complaints; Inform the complainant if the complaint is accepted or rejected within 3 days from receiving the complaint in addition to providing the rejection reasons. UNOPS ESSO, GM focal point shall work with engineers, local partners, and contractors to resolve the complaint within 21 days of its submission.

The UNOPS ESSO will coordinate with local partners, local field staff and local government officials to ensure prompt follow up action in response to each complaint.

6.3. Grievance categories

The grievance could be registered among but not limited to the following categories:

- Access to project benefits (e.g., no or insufficient jobs created for local communities).
- Non-equal distribution of project services among target beneficiaries.
- Disputes (e.g. matters raised by/related to beneficiaries.
- Disturbance (e.g. noise, traffic road access and public safety etc.).
- GBV, SEA/SH grievance.
- Workers grievances.

6.4. Steps to handle GM

- Publicizing: stakeholder's consultation, printed materials.
- Receiving and registering complaints: staff at local and central level who will be responsible for receiving, registering and tracking complaints.
- Acknowledging: The GM staff (team) acknowledges receipt of the complaint within 2-3 working days. Inform the complainant on the eligibility of his/her complaint.
- Anonymous complaints: To be studied as well.
- Reviewing and investigating, collecting, reviewing and analyzing related documents.
- Conducting interviews of the people involved, officers and staff.
- Analyzing the related national legislations & regulations, World Bank Policies & Guidelines and UNOPS standards.
- Summarizing the facts and findings.
- Developing resolution options: based on the collected evidence, the GM staff (team) will draw conclusions, make recommendations for solutions, and present it to the complainant.
- If the solution is not accepted, the complaint will be presented to the Program Manager as a second level to appeal who can make the resolution and/or can delegate an arbitrator to investigate on the complaint and propose recommendations for resolution; the complainant can appeal and initiate legal process for his complaint if not satisfied with the proposed resolution.
- Implementing resolution: If the solution is accepted, then it will be implemented;
- Monitoring and closing: the complaint should be monitored for a reasonable period of time to make sure that the complainant does not express additional concerns, and then the complaint could be closed.
- Reporting (recording): prepare concise summary reports of the complaints received, with the resolutions taken and status of resolutions implementation, and fill in the database with detailed records. Annex 6 summarizes the complaints management review process.

7. Reporting of ESMP

The RAP ESSO will report to UNOPS on a monthly basis the implementation of the ESMP and UNOPS will report the ESMP implementation to the WB. There will also be irregular reports based on the situation and updates. The RAP Supervision Engineer assigned as a worksite resident engineer is in charge of all construction activities. The RAP ESSO shall perform monthly visits to each subproject to ensure that all mitigation measures are in place. UNOPS ESSO as well as the assigned engineers shall perform regular visits to the subproject sites to ensure compliance where needed.

As guided by this ESMP as well as annex 2 requirements, the contractors shall monitor, keep records and report on the environmental and social issues : safety, environmental incidents and near misses, major works, ESHS requirements, ESHS inspections and audits: workers, training on ESHS issues, footprint management, stakeholder engagement, details of any security risks, worker grievances,

stakeholder grievances, major changes to Contractors environmental and social practices, deficiency and performance management.

The following table provides an indicative reporting plan.

Table 4 Reporting plan

What	How	Who	When
Compliance level to the ESMP including environmental and social issues, OHS, GM, etc.	Based on monitoring and inspections, log, the engineer reports, GM log	RAP ESSO	Monthly from RAP to UNOPS and quarterly from UNOPS to WB.
Compliance level to the ESMP and environmental and social issues: safety, environmental incidents and near misses, major works, ESHS requirements, ESHS inspections and audits: workers, training on ESHS issues, footprint management, stakeholder engagement, details of any security risks, worker grievances, stakeholder grievances, major changes to Contractors environmental and social practices, deficiency and performance management.	Based on monitoring, inspection, records, logs, and contractor reports.	RAP Supervision Engineer	Monthly to RAP and based on cases
Environmental and social issues: safety, environmental incidents and near misses, major works, ESHS requirements, ESHS inspections and audits: workers, training on ESHS issues, footprint management, stakeholder engagement, details of any security risks, worker grievances, stakeholder grievances, major changes to Contractors environmental and social practices, deficiency and performance management.	Based on monitoring, inspection, records, logs.	Contractor	Monthly to RAP and UNOPS and based on cases

8. Implementation budget

The contractors shall cover the cost mitigation measures implementation including the workers, training, PPE provision and other related costs within the overall subproject cost as part of their respective offers. Items that require additional cost that will be covered by UNOPS are available below, number 1 to 3, with the estimated budget:

Item	Cost US$
1. Travel of UNOPS team to the subproject areas for monitoring and supervisory purposes.	6,000
2. Development and deployment of awareness materials on the GM channels and OHS requirements.	2,000
3. Consultation and communication meetings with the various stakeholders groups at the subproject areas.	4,000
4. Mitigation measures implementation	10,200
Total	22,200

Annex 1 Subproject environmental and social screening form

Question	Answer		ESS relevance	Due diligence/ Actions
	Yes	No		
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of existing infrastructure?	X		ESS1	ESMP, SEP
Does the subproject involve land acquisition and/or restrictions on land use?[14]		X	ESS5	SEP
Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant?		X	ESS3	ESMP, SEP
Does the subproject have an adequate system in place (capacity, processes and management) to address waste?	X		ESS1, ESS3	ESMP
Does the subproject involve the recruitment of workers including direct, contracted, primary supply, and/or community workers?	X		ESS2	LMP, SEP
Does the subproject have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?	X		ESS2	LMP
Does the subproject have a GM in place, to which all workers have access, designed to respond quickly and effectively?	X		ESS10, ESS2	SEP, LMP
Does the subproject involve use of security or military personnel during construction and/or operation of healthcare facilities and related activities?		X	ESS2, ESS4	ESMP, LMP, SMP
Does the subproject establish and implement an appropriate quality management system to anticipate and minimize risks and impact that services may have on community health and safety?	X		ESS2, ESS4	ESMP, LMP GBV Action Plan
Does the subproject apply the concept of universal access where technically and financially feasible?	X		ESS4	ESMP, SEP
Is the subproject located within or in the vicinity of any ecologically sensitive areas?		X	ESS6	ESMP, SEP
Is the subproject located within or in the vicinity of any known cultural heritage sites?		X	ESS8	ESMP, SEP
Does the project area present potential Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?		X	ESS1,ESS4	ESMP, SEP, GBV Action Plan

Conclusion

Risk level of the subproject is Moderate and Subproject ESMP preparation is required

[14] A due diligence was conducted to assess whether any of the subproject road sections led to ESS 5 impacts and it concluded that there is no impact. Due diligence report is available in annex 7 of this ESMP.

Annex 2 Environmental and social requirements for contractors

Contractors shall meet the following Environmental, Health, Safety and Social requirements – thereafter called ESHS requirements[15].

The ESHS requirements include the following sections

1. Contractor Environmental and Social Management Plan (C-ESMP)
2. ESHS Training
3. Construction Site Management
4. Occupational Health and Safety
5. Road safety and Traffic Safety
6. Emergency Preparedness and Response
7. Stakeholder Engagement
8. Labor Management including Code of Conduct
9. Contractor Environmental and Social Reporting

1. General Provision

Contractor Environmental and Social Management Plan (C-ESMP)

- Contractor Environmental and Social Management Plan (C-ESMP) shall be prepared and submitted to RAP/ UNOPS for approval
- Include in the C-ESMP a detailed explanation of how the contractor's performance will meet the ESHS requirements
- Ensure that sufficient funds are budgeted to meet the ESHS requirements, and that sufficient capacity is in place to oversee, monitor and report on C-ESMP performance.
- Put in place controls and procedures to manage their ESHS performance.
- Get prior written approval from RAP Engineers before starting rehabilitation activities.

2. ESHS Training

- Determine ESHS training needs in collaboration with RAP/ UNOPS
- Maintain records of all ESHS training, orientation, and induction.
- Ensure, through appropriate contract specifications and monitoring that service providers, as well as contracted and subcontracted labor, are trained adequately before assignments begin.
- Demonstrate that its employees are competent to carry out their activities and duties safely. For this purpose, the Contractor shall issue a Competence Certificate for every person working on site (relative to trade and aspect of work assignment) that specifies which tasks can be undertaken by which key personnel.
- Training should include occupational health and safety measures, GBV HS and social health and safety measures, Environmental health and safety measures, waste management and hazardous materials management.

Orientation Training

- Provide ESHS orientation training to all employees, including management, supervisors, and workers, as well as to subcontractors, so that they are apprised of the basic site rules of work at/on the site and of personal protection and preventing injury to fellow employees.
- Training should consist of basic hazard awareness, site-specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate. Any site-specific hazard or color coding in use should be thoroughly reviewed as part of orientation training.

Visitor Orientation

- Establish an orientation program for visitors, including vendors that could access areas where hazardous conditions or substances may be present.
- Visitors shall not enter hazard areas unescorted.

[15] The ESHS requirements build on the General EHS Guidelines of the World Bank Group, but also take into account other World Bank guidelines, and good practice notes

- Ensure that visitors shall always be accompanied by an authorized member of the contractor, or a representative of UNOPS or RAP, who has successfully fulfilled the ESHS orientation training, and who is familiar with the project site construction hazards, layout, and restricted working areas.

New Task Employee and Contractor Training

- Ensure that all workers and subcontractors, prior to commencement of new assignments, have received adequate training and information enabling them to understand work hazards and to protect their health from hazardous ambient factors that may be present. The training should adequately cover the step-by-step process that is needed for Project activities to be undertaken safely, with minimum harm to the environment, including:
    - Knowledge of materials, equipment, and tools
    - Known hazards in the operations and how they are controlled
    - Potential risks to health
    - Precautions to prevent exposure
    - Hygiene requirements
    - Wearing and use of protective equipment and clothing
    - Appropriate response to operation extremes, incidents and accidents

3. Construction Site Management

Vegetation

- Prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the construction site
- Protect all trees and vegetation from damage by construction operations and equipment, except where clearing is required for permanent works, approved construction roads, or excavation operations
- Revegetate damaged areas on completion of the Works, and for areas that cannot be re vegetated, scarifying the work area to a condition that will facilitate natural re vegetation, provide for proper drainage, and prevent erosion
- Use, as much as possible, local species for replanting and species that are not listed as a noxious weed
- Repair, replant, reseed or otherwise correct, as directed by UNOPS or RAP, and at the Contractor's own expense, all unnecessary destruction, scarring, damage, or defacing of the landscape resulting from the Contractors operations
- Transport labor and equipment in a manner to avoid as much as possible damage to grazing land, crops, and property

Protection of the Existing Installations

- Safeguard all existing buildings, structures, works, pipes, cables, sewers, or other services or installations from harm, disturbance or deterioration during construction activities
- Coordinate with local authorities to identify existing infrastructure that might not be visible
- Repair any damage caused by the Contractor's activities, in coordination with concerned authorities.
- Take all precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants or occupiers of properties to the construction activities, and more generally to the public
- Maintain safe access to public and private properties that might be affected by construction activities. If necessary, provide acceptable alternative means of passage or access to the satisfaction of the persons affected.
- Avoid working during night hours

Waste from Construction Activities

- Collect and properly store and manage all solid wastes and hazardous wastes (separated hazardous wastes from solid wastes) resulting from the construction activities, including construction debris and spoils, to prevent the contamination of soil and groundwater. In case chemicals are present they should be stored and disposed according to their Material Safety Data

Sheets (MSDSs)
- Remove unneeded excavation material from construction sites as soon as possible
- Agree with relevant municipalities about construction waste disposal
- Waste shall be disposed of in approved waste areas that is determined in coordination with RAP.
- Minimize littering of roads by ensuring that vehicles are licensed and loaded in such a manner as to prevent falling off or spilling of construction materials, and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials or debris
- Transfer construction waste to assigned places in the selected waste disposal sites with documented confirmation.
- Properly dispose of solid waste and debris and hazardous waste (separately) at designated permitted sites, waste disposal sites allocated by the local authorities, and obtain a receipt of waste from the authorized landfill authority.

Air Quality

The most common pollutant involved in fugitive emissions is dust or particulate matter that is released during civil work, transport and open storage of solid materials, and from exposed soil surfaces, including unpaved roads. Accordingly, the Contractor shall:
- Use dust control methods, such as covers, water suppression, or increased moisture content for open materials storage piles, or controls, including air extraction and treatment through a baghouse or cyclone for material handling sources, such as conveyors and bins;
- Use water suppression for control of loose materials on paved or unpaved road surfaces. Oil and oil by-products are not a recommended method to control road dust.
- Use wheel washes at quarries, ready-mix plants, construction sites, and other facilities to prevent track-out of mud, dust and dirt on to public roads.
- Regularly clean road surfaces within the construction sites to remove accumulated fine material, and regularly clean transportation vehicles.
- Cover open bodied trucks handling sand, gravel or earth.
- Minimize smoke from diesel engines by regular and proper maintenance, in particular by ensuring that the engine, injection system and air cleaners are in good condition.

Hazardous and Toxic Materials

Toxic and deleterious wastes resulting from the Project Company's activities require special attention in order to forestall their introduction into the natural environment which could result in harm to people, aquatic life or natural growth of the area. The Contractor shall take precautions relative to the conditions specified herein.
- Train workers regarding the handling of hazardous materials
- Store hazardous materials as per the statutory provisions of the Manufactures, Storage and Import of Hazardous Chemicals Rules (1989), under the Environment (Protection) Act, 1986.
- Provide adequate secondary containment for fuel storage tanks and for the temporary storage of other fluids such as lubricating oils and hydraulic fluids,
- Use impervious surfaces for refueling areas and other fluid transfer areas
- Train workers on the correct handling of fuels and chemicals and the response to spills
- Provide portable spill containment and cleanup equipment on site and training in the equipment deployment
- Deposit or discharge toxic liquids, chemicals, fuels, lubricants and bitumen into containers for salvage or subsequent removal to off-site locations.
- Treat hazardous waste separately from other waste
- Avoid the storage or handling of toxic liquid adjacent to or draining into drainage facilities.
- Keep absorbent materials or compounds on Site in sufficient quantities corresponding to the extent of possible spills.

Borrow Pits and Quarries

Materials required for site fill, backfill or the construction of permanent works that are not available from the surface will be obtained from borrow areas and quarries that the Contractor will identify, subject to approval by the RAP following the applicable regulations.

The Contractor shall adhere to the following standards when sitting, developing, operating, and reinstating borrow pits and quarries:

- Obtain all necessary permits for borrow pits and quarry operations.
- Locate quarry sites as far away from settlements as possible. Quarry operations will produce noise and dust that will impact on nearby inhabitants even if controls are imposed.
- Fence and secure quarry sites. Steep quarry faces are a hazard to people and livestock.
- Locate borrow pits and quarries at least 100 m from watercourses or human habitations.
- Avoid all use of explosives for stones quarrying
- Locate borrow pits on land that is not used for cultivation and is not wooded.
- Avoid areas of local historical or cultural interest and locate pits more than 25 m of grave sites.
- Hide, to the extent possible, pits from the road. Quarries and borrow pits should be designed to minimize visible scarring of the landscape.
- Develop and implement plan to reinstate borrow pits and quarry sites as closely as possible to their original state

Area Signage

- Appropriately mark hazardous areas and install warning signs where needed
- Ensure that signage is in accordance with international standards and is well known to, and easily understood by workers, visitors and the general public as appropriate.
- Demarcate work sites with safety tape, fencing or barricades, as appropriate, to prevent unauthorized access to the construction sites
- Safeguard public safety by covering holes and by installing guardrails along temporary pathways.

Chance Find Procedures

Actions to be taken if previously unknown cultural heritage is encountered, including:

- Train construction crews and supervisors to spot potential archaeological finds
- Keep records and ensure expert verification
- Provide chain of custody instructions for movable finds
- notify the Department of Archaeology at the Ministry of Culture or a local university, for quick assessment and action
- Define clear criteria for potential temporary work stoppages required for rapid disposition of issues related to the finds.
- Avoid indirect damage to existing cultural heritage, such as affecting masonry through vibration

Decommissioning of Worksites and Plant

- Clear construction sites of any equipment or waste, and ensuring that the sites are free from contamination.
- Dispose of or recycle any equipment or waste in an appropriate and environmentally sound manner.
- Hand construction sites over to the original owners, taking into account his/her wishes and national legislation.

4. Health and Safety

Severe Weather and Facility Shutdown

- Design and build workplace structures to withstand the expected elements for the region and designate an area designated for safe refuge, if appropriate.
- Develop Standard Operating Procedures (SOPs) for project or process shut-down, including an evacuation plan.

Lavatories and Showers

- Provide adequate lavatory facilities (toilets and washing areas) for the number of people expected to work at the construction sites, and make allowances for segregated facilities, or for indicating whether the toilet facility is “In Use” or “Vacant”.
- Provide toilet facilities with adequate supplies running water, soap, and drying substances.
- Where workers may be exposed to poisonous substances by ingestion and skin contamination , provide facilities for showering and changing into and out of street and work clothes.

Potable Water Supply

- Provide adequate supplies of potable drinking water from a fountain with an upward jet or with a sanitary means of collecting the water for the purposes of drinking
- Ensure that water supplied to areas of food preparation or for the purpose of personal hygiene (washing or bathing) meets drinking water quality standards

Clean Eating Area

- Where there is potential for exposure to substances poisonous by ingestion, make suitable arrangements to provide clean eating areas where workers are not exposed to the hazardous or noxious substances.

Personal Protective Equipment (PPE)

- Identify and provide at no cost appropriate PPE to workers, the workers of subcontractors, as well as to visitors, which gives adequate protection without incurring unnecessary inconvenience to the individual
- Ensure that the use of PPE is compulsory.
- Provide sufficient training in the use, storage and maintenance of PPE to its workers and workers of its subcontractors.
- Properly maintain PPE, including cleaning when dirty and replacement when damaged or worn.
- Determine requirements for standard and/or task-specific PPE based on Job specific Safety Analysis.
- Consider the use of PPE as a last resort when it comes to hazard control and prevention, and always refer to the hierarchy of hazard controls when planning a safety process.

Noise

Institute appropriate measures to reduce the workers exposure to construction noise, including:

- Avoid exposure to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection. In addition, no unprotected ear should be exposed to a peak sound pressure level (instantaneous) of more than 140 dB(C).
- The use of hearing protection should be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110 dB(A).
- Provide hearing protective devices capable of reducing sound levels at the ear to at most 85 dB(A).
- Reduce the "allowed" exposure period or duration by 50 percent for every 3 dB(A) increase in excess of 85 dB(A).
- Perform periodic medical hearing checks on workers exposed to high noise levels.
- Rotate staff to limit individual exposure to high levels.
- Install practical acoustical attenuation on construction equipment, such as mufflers.
- Use silenced air compressors and power generators
- Keep all machinery in good condition
- Install exhaust silencing equipment on bulldozers, compactors, crane, dump trucks, excavators, graders, loaders, scrapers and shovels.
- Post signs in all areas where the sound pressure level exceeds 85 dB(A).
- Shut down equipment when not directly in use
- Provide advance notice to occupants if an activity involving high level impact noise is in close proximity to buildings.

Slip, trip and Falls

Slips and falls on the same elevation associated with poor housekeeping, such as excessive waste debris, loose construction materials, liquid spills, and uncontrolled use of electrical cords and ropes on the ground, are also among the most frequent causes of lost time accidents at construction and decommissioning sites. To prevent slips and falls from, or on, the same elevation, the Contractor shall

- Implementing good house-keeping practices, such as the sorting and placing loose construction materials or demolition debris in established areas away from footpaths
- Clean up excessive waste debris and liquid spills regularly
- Locate electrical cords and ropes in common areas and marked corridors

- Ensure that workers use slip retardant footwear

Working at Heights

The contractor shall implement fall prevention and protection measures whenever a worker is exposed to the hazard of falling more than two meters, or through an opening in a work surface. The Contractor shall:

- Install guardrails with mid-rails and toe boards at the edge of any fall hazard area
- Train workers on the proper use of ladders and scaffolds
- Install fall prevention devices, including safety belt and lanyard travel limiting devices to prevent access to fall hazard area, or fall protection devices such as full body harnesses used in conjunction with shock absorbing lanyards or self retracting inertial fall arrest devices attached to fixed anchor point or horizontal life-lines
- Train workers in the use, serviceability, and integrity of the necessary PPE
- Include rescue and recovery plans, and equipment to respond to workers after an arrested fall

Struck By Objects

The Contractor shall:

- Use a designated and restricted waste drop or discharge zones, and/or a chute for safe movement of wastes from upper to lower levels
- Conduct sawing, cutting, grinding, sanding, chipping or chiseling with proper guards and anchoring as applicable
- Maintain clear traffic ways to avoid driving of heavy equipment over loose scrap
- Use temporary fall protection measures in scaffolds and out edges of elevated work surfaces, such as handrails and toe boards to prevent materials from being dislodged
- As necessary, require workers to wear appropriate PPE, such as safety glasses with side shields, face shields, hard hats, and safety shoes

First Aid and Accidents

- Ensure that qualified first-aid by qualified personnel is always available. Appropriately equipped first-aid stations should be easily accessible throughout the place of work.
- Provide workers with rescue and first-aid duties with dedicated training so as not to inadvertently aggravate exposures and health hazards to themselves or their co- workers. Training would include the risks of becoming infected with blood–borne pathogens through contact with bodily fluids and tissue.
- Provide eye-wash stations and/or emergency showers close to all workstations where immediate flushing with water is the recommended first-aid response.
- Provide dedicated and appropriately equipped first-aid room(s) where the scale of work or the type of activity being carried out so requires.
- Equip first aid stations and rooms with gloves, gowns, and masks for protection against direct contact with blood and other body fluids.
- Make widely available written emergency procedures for dealing with cases of trauma or serious illness, including procedures for transferring patient care to an appropriate medical facility.
- Immediately report all accidental occurrences with serious accident potential such as major equipment failures, contact with high-voltage lines, exposure to hazardous materials, slides, or cave-ins to UNOPS and RAP.
- Immediately investigate any serious or fatal injury or disease caused by the progress of work by the Contractor, and submit a comprehensive report to UNOPS and RAP.
- Provide for access to hospital/clinic in case of accident/ serious injury

Communicable Diseases

The Contractor shall implement a combination of behavioral and environmental modifications to mitigate communicable diseases:

- Ensure ready access to medical treatment and appropriate care.
- Promote collaboration with local authorities to enhance access of workers' to public health services and ensure the immunization of workers against common and locally prevalent diseases.
- Provide basic education on the conditions that allow the spread of other diseases such as

COVID-19, Lassa Fever, Cholera and Ebola. The training should cover sanitary hygiene education.

COVID-19

In the context of the COVID-19 pandemic, Contractors shall develop and implement measures to prevent or minimize an outbreak of COVID-19, and develop procedures indicating what should be done if a worker gets sick. The measures shall include:

- Assessing the characteristics of the workforce, including those with underlying health issues or who may be otherwise at risk
- Confirming that workers are fit for work, including temperature testing and refusing entry to sick workers
- Considering ways to minimize entry/exit to site or the workplace, and limiting contact between workers and the community/general public
- Training workers on hygiene and other preventative measures, and implementing a communication strategy for regular updates on COVID-19 related issues and the status of affected workers
- Treating workers who are or should be self-isolating and/or are displaying symptoms
- Assessing risks to continuity of supplies of medicine, water, fuel, food and PPE, taking into account international, national and local supply chains
- Reducing, storing and disposing of medical waste
- Adjusting work practices, to reduce the number of workers and increase social distancing
- Expanding health facilities on-site compared to usual levels, developing relationships with local health care facilities and organize for the treatment of sick workers
- Building worker accommodations further apart, or having one worker accommodation in a more isolated area, which may be easily converted to quarantine and treatment facilities, if needed
- Establishing a procedure to follow if a worker becomes sick
- Implementing a communication strategy with the community, community leaders and local government in relation to COVID-19 issues on the site.

5. Road safety and Traffic Safety

The Contractor shall ensure traffic safety by all project personnel during displacement to and from the workplace, and during the operation of project equipment. The Contractor shall adopt best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public, including:

- Emphasize safety aspects among drivers
- Improve driving skills and requiring licensing of drivers
- Institute defensive driving training for all drivers prior to starting their job
- Adopt limits for trip duration and arranging driver rosters to avoid overtiredness
- Avoid dangerous routes and times of day to reduce the risk of accidents
- Require that drivers and co-passengers wear seatbelts, and duly sanction defaulters.
- Regularly maintain vehicles and use manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.

Where the project may contribute to significant changes in traffic along existing roads the Contractor shall:

- Commence activities that affect public motorways and highways, only after all traffic safety measures necessitated by the activities are fully operational.
- Arrange diversions for providing alternative routes for transport and/or pedestrians
- Minimize pedestrian interaction with construction vehicles, particularly at crossing points to schools, markets, and any animal crossing points of significance, through appropriate signage, engineered footpaths or traffic slowing devices.
- Organize meaningful road accident awareness events at all roadside schools and communities within 150 meters of the road centerline, covering safe road crossing, road accident hazards from weather conditions and vehicle roadworthiness, overloading and driver alertness, dangers posed by parked and broken-down vehicles, etc.
- Collaborate with local communities and responsible authorities to improve signage, visibility and

overall safety of roads, particularly along stretches located near schools or other locations where children may be present.
- Collaborate with local communities on education about traffic and pedestrian safety (e.g. school education campaigns).
- Coordinate with emergency responders to ensure that appropriate first aid is provided to all affected persons in the event of accidents.
- Use locally sourced materials, whenever possible, to minimize transport distances, and locate associated facilities close to project sites.
- Employ safe traffic control measures, including road signs, traffic cones, removable barriers, and flag persons to warn of dangerous conditions.

6. Emergencies

Establish and maintain an emergency preparedness and response system, in collaboration with appropriate and relevant third parties including to cover: (i) the contingencies that could affect personnel and facilities of the project to be financed; (ii) the need to protect the health and safety of project workers; (iii) the need to protect the health and safety of the Affected Communities. The emergency preparedness and response system shall include:
- Identification of the emergency scenarios
- Specific emergency response procedures
- Training of emergency response teams
- Emergency contacts and communication systems/protocols (including communication with Affected Communities when necessary)
- Procedures for interaction with government authorities (emergency, health, environmental authorities)
- Permanently stationed emergency equipment and facilities (e.g., first aid stations, firefighting equipment, spill response equipment, personal protection equipment for the emergency response teams)
- Protocols for the use of the emergency equipment and facilities
- Clear identification of evacuation routes and muster points
- Emergency drills and their periodicity based on assigned emergency levels or tiers
- Decontamination procedures and means to proceed with urgent remedial measures to contain, limit and reduce pollution within the physical boundaries of the project property and assets to the extent possible.

7. Stakeholder Engagement

The contractor will be required to undertake a process of stakeholder engagement with representative persons and communities directly affected by the activities it undertakes. The contractor shall also maintain throughout the Project good relations with local communities and will give these communities prior notice of plans and schedules as they might affect local people.

8. Labor Force Management

The Contractor shall
- Shall ensure no discrimination in hiring of worker.
- Provide opportunities for workers to get adequate rest period and regularly return to their families
- Provide opportunities for workers to take advantage of entertainment opportunities away from rural host communities
- Pay adequate salaries for workers to reduce incentive for theft
- Pay salaries into workers' bank accounts rather than in cash where possible and applicable
- Get an appropriate mix of locally and non- locally procured goods to allow local project benefits while reducing risk of crowding out of and price hikes for local consumers
- Establish substance abuse prevention and management programs
- Hire workers through transparent process, and avoid hiring "at the gate" to discourage

spontaneous influx of job seekers
- Identify authorized water supply source and prohibiting use from other community sources;
- Put in place measures to reduce water and electricity consumption;
- Employ locals to the extent possible;
- Develop and adopt a Gender Action Plan to promote the transfer of construction skills to local women, to facilitate their employment at the Project site, including training and recruitment targets.

Labor Conditions
- Implement the measures and commitments defined in the Labor Management Procedures. A copy of the LMP can be found in the Project ESMF
- Provide all workers with terms and conditions that comply with Yemeni Labor Legislation, most particularly Decree 5/1995) and applicable International Labor Organization conventions on workplace conditions.

Insurance
- Provide insurance for all employees involved in the subproject as indicated by Yemen's Labor Law
- Compensate any employee for death or injury, except to the extent that liability arises.

Grievance Mechanism for Workers

The Contractor shall put in place a Grievance Mechanism for its workers and the workers of its subcontractors that is proportionate to its workforce. The GM shall be distinct from the Project level Grievance Mechanism for affected individuals and communities, and shall adhere to the following principles:
- Provision of information. All workers should be informed about the grievance mechanism at the time they are hired, and details about how it operates should be easily available, for example, included in worker documentation or on notice boards.
- Transparency of the process. Workers must know to whom they can turn in the event of a grievance and the support and sources of advice that are available to them. All line and senior managers must be familiar with their organization's grievance procedure.
- Keeping it up to date. The process should be regularly reviewed and kept up to date, for example, by referencing any new statutory guidelines, changes in contracts or representation.
- Confidentiality. The process should ensure that a complaint is dealt with confidentiality. While procedures may specify that complaints should first be made to the workers' line manager, there should also be the option of raising a grievance first with an alternative manager, for example, a human resource (personnel) manager.
- Non-retribution. Procedures should guarantee that any worker raising a complaint will not be subject to any reprisal.
- Reasonable timescales. Procedures should allow for time to investigate grievances fully, but should aim for swift resolutions. The longer a grievance is allowed to continue, the harder it can be for both sides to get back to normal afterwards. Time limits should be set
- for each stage of the process, for example, a maximum time between a grievance being raised and the setting up of a meeting to investigate it.
- Right of appeal. A worker should have the right to appeal to the UNOPS or national courts if he or she is not happy with the initial finding.
- Right to be accompanied. In any meetings or hearings, the worker should have the right to be accompanied by a colleague, friend or union representative.
- Keeping records. Written records should be kept at all stages. The initial complaint should be in writing if possible, along with the response, notes of any meetings and the findings and the reasons for the findings. Any records on SEA shall be registered separately and under the strictest confidentiality.
- Relationship with collective agreements. Grievance procedures should be consistent with any collective agreements.
- Relationship with regulation. Grievance processes should be compliant with the national employment code.

Protection from Sexual Exploitation and Abuse

- Provide repeated training and awareness raising to the workforce about refraining from unacceptable conduct toward local community members, specifically women
- Inform workers about national laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted
- Prohibit its employees from exchanging any money, goods, services, or other things of value, for sexual favors or activities, or from engaging any sexual activities that are exploitive or degrading to any person.
- Develop a system to capture gender-based violence, sexual exploitation and workplace sexual harassment related complaints/issues.
- Adopt a policy to cooperate with law enforcement agencies in investigating complaints about gender-based violence.

Protection from Child Labor

- Verify that workers are older than 18 when hiring
- Exclude all persons under the age of 18.
- Review and retain copies of verifiable documentation concerning the age of workers

Code of Conduct

Contractors shall ensure that all employees, including those of subcontractors, are informed about and sign Code of Conduct. Code of Conduct sample is available below in which the contractor shall adopt and include all provisions in their own Code of Conduct:

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We the Contractor [enter name of Contractor] have signed a contract with UNOPS for [enter description of the activities]. These activities will be carried out at [enter the Site and other locations where the activities will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the activities, including the risks of sexual exploitation and assault and gender-based violence.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the activities. It applies to all our staff, including laborers and other employees at all the places where the activities are being carried out. It also applies to the personnel of every subcontractor and any other personnel assisting us in the execution of the activities. All such persons are referred to as "Contractor's Personnel" and are subject to this Code of Conduct.

This Code of Conduct identifies the behavior that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

Required Conduct

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
4. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
5. wearing required personal protective equipment;
6. using appropriate measures relating to chemical, physical and biological substances and agents; and
7. following applicable emergency operating procedures.
8. report work situations that he/she believes are not safe or healthy and remove

himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;

9. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
10. not engage in any form of sexual harassment including unwelcome sexual advances, requests for sexual favors, and other unwanted verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
11. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. In Bank financed projects, sexual exploitation occurs when access to or benefit from Bank financed Goods, Works, Consulting or Non-consulting services is used to extract sexual gain;
12. not engage in Sexual Assault, which means sexual activity with another person who does not consent. It is a violation of bodily integrity and sexual autonomy and is broader than narrower conceptions of "rape", especially because (a) it may be committed by other means than force or violence, and (b) it does not necessarily entail penetration.
13. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
14. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Assault (SEA);
15. report violations of this Code of Conduct; and
16. Not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the Grievance mechanism for Contractor's Personnel or the project's Grievance Mechanism.

Raising Concerns

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contacting the Individual designated by the Contractor [enter name of Contact)
2. In writing at this address [ ]
3. By telephone at [ ]
4. In person at [ ]
5. Calling [ ] to reach the Contractor's hotline and leave a message (if available)

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

Consequences of Violating the Code of Conduct

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

For Contractor's Personnel

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [enter name of Contractor's contact person with relevant experience in handling gender-based violence] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: _____
Date: (day month year): _____
Countersignature of authorized representative of the Contractor:
Signature: _____
Date: (day month year): _____

9. Contractor Environmental and Social Reporting

The Contractor shall report work-related incidents, accidents to UNOPS within 24 hours of their occurrence.

Contractors shall monitor, keep records and report on the following environmental and social issues: *Safety:* hours worked, lost time injury (LTI), lost workdays, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).

Environmental incidents and near misses: environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.

Major works: those undertaken and completed, progress against project schedule, and key work fronts (work areas).

ESHS requirements: noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other ESHS requirements.

ESHS inspections and audits: by Project Company, Independent Engineer, UNOPS and its implementing partners, or others—to include date, inspector or auditor name, sites visited and records reviewed, major findings, and actions taken.

Workers: list of workers at each site, confirmation of ESHS training, indication of origin (expatriate, local, nonlocal nationals), gender, age with evidence that no child labor is involved, and skill level (unskilled, skilled, supervisory, professional, management).

Training on ESHS issues: including dates, number of trainees, and topics.

Footprint management: details of any work outside boundaries or major off-site impacts caused by ongoing construction—to include date, location, impacts, and actions taken.

Stakeholder engagement: highlights, including formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).

Details of any security risks: details of risks the Project Company may be exposed to while performing its work—the threats may come from third parties external to the project.

Worker grievances: details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.

Stakeholders grievances: grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender-disaggregated.

Major changes to Contractors environmental and social practices.

Deficiency and performance management: actions taken in response to previous notices of deficiency or observations regarding ESHS performance and/or plans for actions to be taken should continue to be reported to UNOPS until it determines the issue is resolved satisfactorily.

Annex 3 Subproject photos

	
Photo 1 Station 0+500	Photo 2 station 2+725
	
Photo 3 Station 3+700	Photo 4 Station 4+250

	
Photo 5 Station 5+350	Photo 6 Station 6+050
	
Photo 7 Station 7+000	Photo 8 Station 9+050

	
Photo 9 Station 10+300	Photo 10 Station 11+650
	
Photo 11 Station 13+100	

Annex 4 Public consultation questionnaires

YEMEN EMERGENCY LIFELINE CONNECTIVITY PROJECT

برنامج تنمية الطرق الريفية

إن الهدف الرئيسي لبرنامج تنمية الطرق الريفية على المدى البعيد هو تحسين حياة ومعيشة سكان المناطق النائية بما في ذلك سكان الأرياف وتقليل العزلة التي يعيشونها وكذلك تواصل المجتمع الريفي بسكان المناطق الأخرى وتسهيل الدخول إلى الأسواق والحصول على الخدمات العامة من مياه – تعليم –صحة – كهرباء – وتحسين الطرق وربط تلك المناطق بالمراكز الإدارية لمراكز المديريات والمحافظات . وعلى ضوء ما تقدم تم إختيار مسار المشروع (.....) ضمن المشاريع المستهدف تنفيذها (إنشاء الطريق / (صيانة الطريق) والذي يتوقع أن يساهم في تحسين حياة ومعيشة المواطنين.

وعليه يرجى إكمال الاستبيان أدناه للمصلحة العامة ويمكن للمشارك عدم كتابة أي بيانات غير مرغوب في تضمينها

اسم المشروع..... ..... رمز المشروع..... مديرية:..... محافظة:.....	
اسم منفذ الاستبيان :	التاريخ: ...../...../.....
اسم مشارك الاستبيان :	النوع: ☐ ذكر ☐ أنثى
(العمر : .....(اقل من15) (16-30) (31-45) (46 –أكثر	:رقم الهاتف
المهنة:	

م	**الآثار الإيجابية لمشروع الطريق : ما مدى موافقتك على ما يلي:**	موافق	غير موافق	لا أعرف
1	صيانة الطرق سيخفف من الازدحام المروري			
2	تأهيل الطريق سوف يساعد في الحفاظ على المركبات			
3	تنفيذ المشروع سوف يساعد في تحسين السلامة المرورية للمركبات والأشخاص وخاصة المعوقين والأطفال			
4	تنفيذ المشروع سيساهم في تحسين الخدمات : ماء – كهرباء – غاز-تعليم –صحة -تقليل زمن المواصلات – تسويق المحاصيل الزراعية			
5	المشروع سوف يساهم في تشجيع تشغيل عمالة من السكان المحليين وتحسين دخلهم.			
6	المشروع سوف يساهم في الحد من الحوادث داخل القرى التي يمر بها الطريق.			
7	المشروع سيساهم في تقليص زمن الوصول إلى الخدمات كالمدارس والمستشفيات.			
8	سيساهم المشروع في مساعدة الأسرة بالتنقل بسهولة وزيارة الأقارب .			
9	سيساهم المشروع في التخفيف من معاناة النازحين والفقراء والسكان بشكل عام			
10	تنفيذ المشروع سيساهم في تحسين الأنشطة الاقتصادية			
11	أي آثار إيجابية أخرى تتوقعها			

م	**المخاوف من المشروع الطريق : هل لديك تخوف مما يلي**	نعم	لا	لا أعرف
1	بعد تنفيذ المشروع ستزداد سرعة المركبات على الطريق وتكثر الحوادث			
2	انقطاع الطرق سيؤدي إلى صعوبة الوصول إلى مرافق الخدمات مثل المستشفيات والمدارس والأسواق العامة أثناء فترة العمل بمشروع الطريق			
3	الخسارة الاقتصادية للمحلات التجارية في فترة التنفيذ وإغلاق الطريق			
4	عدم الاستجابة لشكاوى الأهالي في حين حدوث ووجود مخالفات في فترة التنفيذ من قبل المقاول			
5	عدم مراقبة المقاول أثناء تنفيذ عن العمل من قبل أصحاب العمل			

6	الازعاج اثناء التنفيذ			
7	الغبار الناتج عن الأعمال			
8	الاستحواذ واستخدام ارضي خاصة			
9	توجيه حركة المرور لطرق عبر تحويل أخرى قد يسبب ازدحام مروري اختناقات مرورية في شوارع اخرى			
10	انقطاع وتعطيل خدمات المياه والمواصلات في موقع المشروع			
11	سيتسبب المشروع بعنف مجتمعي (ضد النساء- الأطفال – المهمشين- النازحين..)			
12	أي تخوفات أخرى			
13	أي احتياجات أخرى:.....			

هل يمثل المشروع أولوية لتنفيذ أعمال الإنشاء / الصيانة ولماذا؟

.....
.....
.....
.....
.....

Complaints or enquiries related to this project which is supported by the World Bank and implemented in the country by UNOPS and RAP can be sent via the below channels:

يمكن إرسال الملاحظات والاستفسارات بخصوص هذا المشروع (المشروع الطارئ للربط الحيوي للطرق) والممول من البنك الدولي عبر القنوات التالية والتي تقع تحت مسؤولية مكتب الأمم المتحدة لخدمات المشاريع:

Toll Free Number	**8000190**	**رقم مجاني**
Landline	**01 504914 and 01 504915**	**رقم هاتف أرضي**
SMS and WhatsApp	**739888388**	**رسائل نصية أو واتساب**
Email	grm-yemen@unops.org	**بريد إلكتروني**

Annex 5 Consultation records samples

بسم الله الرحمن الرحيم

برنامج تنمية الطرق الريفية

الإدارة العامة - صنعاء

بسم الله الرحمن الرحيم

برنامج تنمية الطرق الريفية

الإدارة العامة - صنعاء

بسم الله الرحمن الرحيم

برنامج تنمية الطرق الريفية

الإدارة العامة - صنعاء

Annex 6 GM Complaint and suggestion form

YEMEN EMERGENCY LIFELINE CONNECTIVITY PROJECT YELCP Sample of GM Complaint and Suggestion Form	استمارة توثيق ومتابعة شكاوى المستفيدين	برنامج تنمية الطرق الريفية نموذج لآلية التظلمات والشكاوى

"Documenting and Monitoring Complaints Form of
Beneficiaries of Yemen Emergency Life Line Connectivity Project YELCP

الاسم الثلاثي للمستفيد: Beneficiary Name			
رقم البطاقة الشخصية: ID No.		رقم الهاتف للمتابعة Tel Number for follow up	
العنوان الدائم: Permanent Address			
اسم النشاط المنفذ (مركز/وحدة) Name of Activity / Subproject			
مكان تنفيذ النشاط: Place of activity implementation	القرية: Village	المديرية: District	المحافظة: Governorate

نوع الشكوى Complaint Type	إدارية Administrative	فنية Technical	مالية Financial	أخرى Other

موضوع الشكوى **Complaint Subject**

الوضع الحالي: Current Situation			
أسباب المشكلة: Reason of the situation			
التاريخ: Date		توقيع صاحب الشكوى: Complainant Signature	

الجهة التي يجب أن يقدم لها الشكوى The entity, which the complaint should be forwarded to

Toll Free No: 8000190 **Tel: 01 504914/915** **SMS: 739888388** **Email: grm.yemen@unops.org**

الرأي في جدية الشكوى:..... Opinion on the seriousness of the complaint

الجهة المحول لها الشكوى :..... The complaint referred to

المدة الزمنية اللازمة للبت في الشكوى:..... Time required for response

مدى رضا المستفيد عن الاستجابة لحل شكواه:..... Satisfaction of beneficiary in responding to his/her complaint

الإجراءات المتخذة : Action taken			
ما ترتب عليها من نتائج: The results of the action taken		التاريخ: Date	

اسم مستلم الشكوى ووظيفته: ..... Name of person received the complaint and his/her position

التاريخ/ Date : ..... توقيع الموظف المختص/ Signature: .....

Annex 7 Due diligence report

Assessment was conducted to evaluate whether any assets will be affected by the subproject civil work in which all assets found outside the corridor of impact without any potential impact that could be resulted. The entire civil work will be implemented within the existing right of way, public land where there is no cultivation nor fruit trees. The following assets were identified along the road and all assets were out of the corridor of impact; distance from the end of the corridor of impact is added in the below table.

No	Description	Latitude	Longitude	Distance from end of corridor of impact (meter)
1	Resident house right side	15.852405	43.452432	5
2	Water tank left side	15.855671	43.451644	4
3	Al Hazah village nearest house left side	15.859263	43.449270	3.5
4	Al Darbah village nearest house right side	15.868219	43.437576	2
5	House right side	15.854039	43.436030	4
6	Nearest house of Al Karn village right side	15.857337	43.436569	5
7	House right side	15.857245	43.436286	4
8	House left side	15.854478	43.426925	5
9	House left side	15.856699	43.425171	1.5
10	House left side	15.854126	43.426133	2
11	Nearest house of the village left side	15.852274	43.426309	2
12	House left side	15.852066	43.425959	1.5
13	House left side	15.852368	43.425080	1.5
14	House right side	15.856584	43.419668	1.5
15	House right side	15.858181	43.417861	3
16	Water tank	15.858120	43.417617	2
17	School left side	15.858522	43.417195	2.5
18	House left side	15.856935	43.414600	2.5
19	Water tank	15.855293	43.409592	1.5
20	House left side	15.855893	43.409346	3
21	House left side	15.860438	43.449154	3.5
22	House left side	15.861617	43.448628	2.5
23	School left side	15.866925	43.440014	4.5
24	Farm left side	15.867398	43.435585	2
25	House left side	15.867242	43.434834	2
26	Nearest house of the village left side	15.858533	43.436107	3

Annex 8 Relocation activities summary

This annex has been added to clarify the activities stated under the scope of work which includes any relocation activities. All assets that will be relocated are public assets and will be relocated into public lands.

- **Relocation of existing public water pipes**

  This item is related to the transferring of the existing public water pipes so such pipes will not be affected by the movement of equipment or civil work activities. Water pipes will be secured and relocated adjacent to the road side in a safe public land. Existing location of the pipes and its dimensions are available in the below table:

Distance from the start point of the subproject (km +m)		Length (Meter)	Location
From	To		
8+750	8+795	45	Adjacent to the ditch (within 1 meter)
8+950	9+00	50	Adjacent to the ditch (within 1 meter)
9+725	9+780	55	Adjacent to the ditch (within 1 meter)
13+085	13+125	40	Adjacent to the ditch (within 1 meter)

- **Relocation of existing public walls**

  This item is about the reinstallation/rebuilding of existing public walls if affected by the civil work or equipment/vehicles movement. Those walls are public and will be rebuilt as required immediately after completing the civil work at the relevant road section in public lands. The walls existing location and its dimensions are available in the below table:

Distance from the start point of the subproject (km +m)		Length (Meter)	Description	Current location
From	To			
1+470	1+500	30	Re building at same location in case affected by civil works activities	Adjacent to the ditch
5+540	5+560	20	If affected by civil works, to be shifted 0.5 m within the corridor limit.	At the inner edge of the shoulder
8+825	8+850	50	Re building at same location in case affected by civil works activities	Out of the road shoulder

- **Relocation of public fences**

  This item is about the reinstallation of existing public fences if affected by the civil work or equipment/vehicles movement. Those fences are public and will be reinstalled in public lands as required immediately after completing the civil work at the relevant road section. The fences existing location and its dimensions are available in the below table:

Distance from the start point of the subproject (km +m)		Length (Meter)	Description	Current location
From	To			
0+825	0+875	50	Re building at same location in case affected by civil works activities	Adjacent to the ditch
11+700	11+750	50	If affected by civil works, to be shifted 0.5 m within the corridor limit .	At the outer edge of the shoulder