

REPUBLIC OF IRAQ

MINISTRY OF PLANNING

**Iraq Social Fund for Development
SFD
(P163108)**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN
(ESMP)**

FOR THE

**CONSTRUCTING A HEALTH CENTER IN THE VILLAGE OF (SHAT
HUSSEIN, MUHAMED SAJAT, ALBO MUFARAJ)**

**IN
AL-DIWANIYAH GOVERNORATE**

30TH NOVEMBER 2023

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IRAQ: Social Fund for Development Project

PART A: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE	
Country	IRAQ
Project Title	CONSTRUCTING A HEALTH CENTER IN THE VILLAGE OF (SHAT HUSSEIN, MUHAMED SAJAT, ALBO MUFARAJ) IN AL-DIWANIYAH GOVERNORATE
Introduction	<p>Iraq faces a historic opportunity for national reconciliation through the effective delivery of critical social services, economic growth and recovery programs. The reinstatement of trust between the State and its citizens is highly dependent on the Government of Iraq (GOI) demonstrating its capacity to deliver security, jobs and economic growth to all Iraqis, with a focus on the poor, the vulnerable and the millions of Internally Displaced People (IDP).</p> <p>The GOI, represented by the Ministry of Planning (MOP), requested the World Bank’s support in the design and financing of a Social Fund for Development (SFD) project to support locally driven initiatives to improve the living conditions and opportunities of the poor and most vulnerable in Iraq. The GOI has demonstrated its commitment and support to the design of this operation and established a high-level national team to guide and coordinate the development and institutionalization of the SFD, as well as five technical teams to work on the different aspects of the fund.</p> <p>The Project Development Objectives (PDOs) are to: (1) Improve access to basic services and; (2) Increase short-term employment opportunities, in targeted communities. This environmental and social management checklist reflects the main issues (project description and activities, baseline conditions, impact analyses, mitigation measures and monitoring arrangements). The main objective of this document is to examine the environmental and socio-economic impacts of the project (both construction and operation phases), and to propose mitigation measures. The project is expected to result in significant socio-economic benefits for the local communities and surrounding areas in addition to</p>

developing social awareness, group responsibility.

PROJECT LOCATION & SITE DESCRIPTION

Project Location

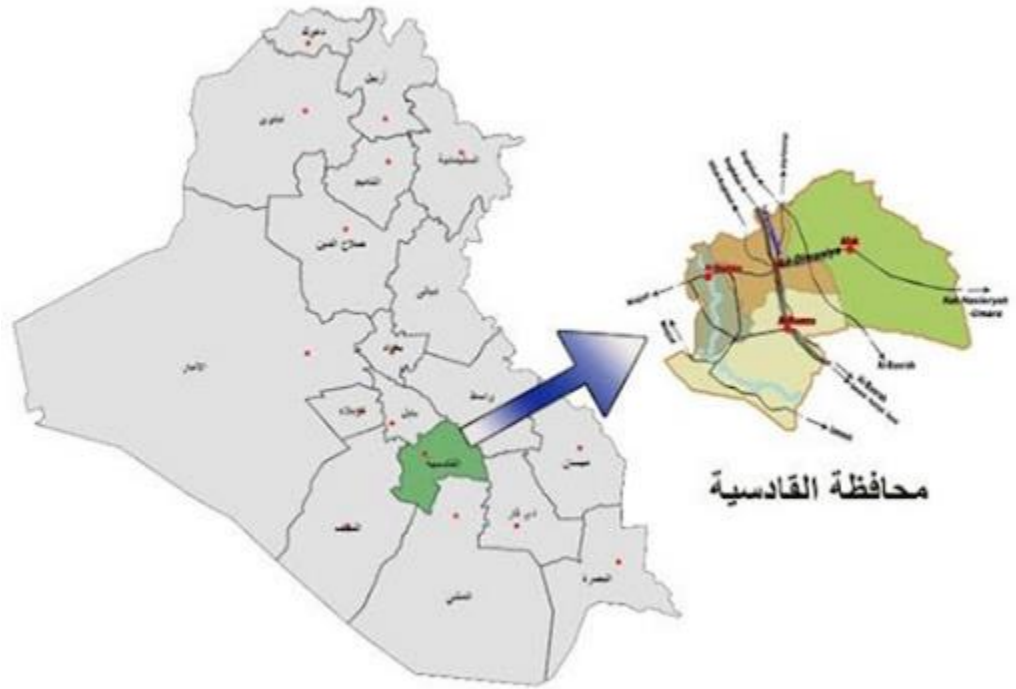
According to the Environmental and Social Management Framework (ESMF) which was prepared for the Iraq Social Fund for Development Project disclosed locally in Iraq and on the World Bank's website¹. Environmental and Social Management plan (ESMP)/ Environmental and Social Management Checklist should be prepared, cleared, publicly consulted, and disclosed before the commencement of any rehabilitation activity. The World Bank Operational Policy 4.01 on Environmental Assessment was triggered as the proposed Subprojects have some potential negative environmental and social impacts. Accordingly, this Environmental and Social Management Checklist is required to implement the Sub-project in accordance with the requirements of the World Bank's Operational Procedures and applicable Iraqi national legislation.

The subproject is located in the governorate of Al-Diwaniyah which is situated in Mid-South part of Iraq, Al-Diwaniyah shares internal boundaries with the governorates of Thi-Qar, Al-Muthana, Babylon, Wasit, and Al-Najaf (as shown in the figure below). The area of each Health center, coordinates, and the population in each village are shown in the table below:

Table 1: Information about the villages

No.	Village	Area (m ²)	Population	Coordinates
1	SHAT HUSSEIN	375	909	32.0554841, 45.28547991
2	MUHAMED SAJAT	375	1496	31.76904808, 44.76214673
3	ALBO MUFARAJ	375	727	32.04865297, 44.59778935

¹<https://documents1.worldbank.org/curated/en/221731554372651925/pdf/Environmental-and-Social-Management-Framework.pdf>



SHAT HUSSEIN



MUHAMED SAJAT



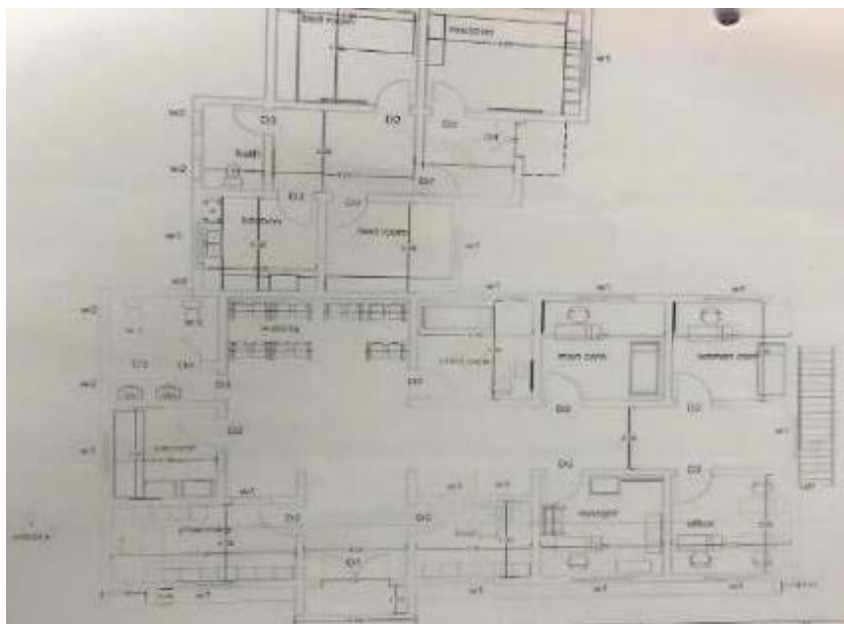
ALBO MUFARAJ

Figure 1: Project Location

The area adjacent to the subprojects site is characterized as rural residential and agricultural in some areas. The subproject is located within a residential part of the area. There are no protected areas or endangered species (there are no critical or high biodiversity values

	<p>that might be affected) in the vicinity of the site. There are no close sensitive receptors located to the subprojects site. The subproject is expected to result in significant socio-economic benefits for the local community and surrounding areas as it will improve the health and wellbeing of residents and to create a caring, secure environment so that in health center feel a sense of worth.</p> <p>The objective of the subprojects is to construct a new health center facility. The subprojects will improve the health care services in these villages and will support mitigating the effects of war to attract displaced citizens to their villages.</p>
<p>Project Duration</p>	<p>The anticipated project duration is 240 days</p>
<p>Proposed Project Activities</p>	<p>The health center consists of a one-floor building that contains doctors' rooms, administrative rooms, reception, child and pregnant care rooms, a dressing room, a pharmacy, and sanitary facilities, according to the instructions of the Ministry of Health. Works for the construction of the health center will include the following activities:</p> <p>The site plan is shown in the figure below. All civil work from foundation up to wall building construction is represented by:</p> <ul style="list-style-type: none"> A) Site preparation and Earthworks B) Masonry works C) Structural works which include concrete works D) Finishing works which include painting and tiling in addition to sanitary and electrical works <p>The anticipated duration of construction works is about 240 days for the health center with about 20-25 workers per day with about 95% of them are local workers and the rest are engineers and technicians that may be from the closest area. The work will also comprise of civil works such as excavation, lifting the soil and other waste produced during the excavation, and concrete casting to prepare the foundations for the fence, as follows:</p> <ul style="list-style-type: none"> • Providing workers and all the surveying equipment required for the execution works. • Conduct excavation work according to the dimensions and methodologies mentioned in the drawings with others considering the possibility of groundwater. • Prepare all materials for the implementation of the weak concrete layer and then coat them with bitumen.

- Processing all construction materials with a number of works and workers to carry out the work of reinforced concrete.
- Execution casting works.
- All the raw materials that will be used in the construction of the health center are from an authorized quarry.



Although most of the workers are local workers (more than 95%), however, a camp will be erected within the health center. No land related impact is expected as they will establish the camp within the boundaries of the health center. The water, wastewater, and the solid waste that will be generated from this camp will be treated properly and transferred to the authorized treatment plants or landfills.

During the operation of the health center, hazardous and nonhazardous wastes will be generated during routine operations (e.g., consumable materials and vaccinations, dental materials, and cleaning agents). Therefore, the impact of these wastes should be according to the medical waste management plan (MWMP) which should be followed and implemented in a separate document. Also, sanitary wastewater will be generated during the operation phase of the project. Wastewater will be collected in the collection tank and then transported periodically to the nearest authorized wastewater treatment plant as there is no sewage network available in the area of these health centers.

<p>Land Use and Acquisition</p>	<p>The area adjacent to each sub-project site is characterized as a rural to agricultural area. However, the construction activities will not cause an impact on agricultural areas or cause any crop damage.</p> <p>The health center will be constructed on state land and hence there are no issues related to land acquisition. The implementation activities will not cause relocation of people, vendors, or any individuals. The area is free from squatters/encroachers. No involuntary resettlement or economic displacement are expected to take place.</p>
<p>Contractor's Camp</p>	<p>The construction of the health center will need about 20-25 workers per day.</p> <p>Although most of the workers are local workers (more than 95%), however, a camp will be erected within the health center and therefore, the water, wastewater, and solid waste that will be generated from this camp will be treated properly and transferred to the authorized treatment plants or landfills in coordination with the local municipality.</p> <p>The contractor will establish his storage on vacant state-owned land for equipment and materials within the area close to the construction area. This will be done in coordination with the authorized entities like the municipality.</p> <p>The construction camp should have independent sources of water and electricity and an adequate septic tank for sanitary effluent disposal. Due to its geographical location, an influx of workers to the subproject area is not expected. Most of the workers will be locals from the surrounding area and will return to their homes.</p>
<p>PROJECT BASELIN CONDITIONS</p>	
<p>Geographic Conditions</p>	<p>The terrain is characterized as flat. In the project area the elevation is about 21m asl. No natural land obstacles are presented in the subproject areas. The subprojects areas are free of mountains, cliffs, and valleys.</p>
<p>Climate, Air Quality and noise</p>	<p>Al-Diwaniyah governorate is located in the Mid-South part of Iraq. The city of Diwaniya is located in the southern part of Iraq, about 180 km south of Baghdad, located on a branch of the Euphrates River called Shatt Al-Diwaniya</p> <p>The climate is the most important factor affecting the quality of surface</p>

	<p>water, groundwater and the hydrological cycle in the study area. The prevailing climate is the continental climate, characterized by the area of study, the summer is hot and dry, and the winter is cool with little rainfall. It is characterized by high rates of air temperature and high-temperature differences between daytime and night as well as between winter and summer. It is also characterized by varying relative humidity. The year is divided into two influential seasons. A long warm dry summer, a short cold rainy winter cold season and sunny weather often year-round. The major rain falls from November thru February, with a spread showering in March. During the year, about 104 mm of precipitation falls annually, while the average annual temperature is 22.7 °C. The driest weather is in June, July & August, September when no rainfall (precipitation) occurs. While, the wettest weather is in February & March when rainfall (precipitation) occurs.</p> <p>These subprojects sites are located in open areas, so the expected concentration of air pollutants is low. Air pollutants in the villages are caused mainly from movement of vehicles and trucks. Therefore, the ambient air quality is expected to be within the WHO ambient air quality standards (Annex3).</p> <p>Currently, there is no traffic congestion and consequently the existed noise level is within the normal levels.</p>
Hydrogeology Conditions	Flooding of the area near the project has not been reported in the past years. The depth of ground water in the area ranges of about 20 meters.
Ecology Conditions	The project areas does not contain any globally important habitats or ecosystems. There are no Nature Reserves or other legally protected areas in the vicinity of the project or in a close proximity.
Heritage Environment	There are no sites of historical or cultural importance in the area. There are no cemeteries, historical-cultural monuments, churches, mosques near the project that need to be removed or will be impacted due to the rehabilitation activities.
Socio-economic Aspects	The population of these projects area is approximately 3132. The suggested areas of the school will be on state land, where no land or property expropriation will be necessary and is free from encroachers or squatters. All the areas around the sites remain clear of any settlement or economic use and are ready for construction works, no interference is registered from the local community which is eager for the works to be completed. It is important to mention that during the construction of the school, it is not expected to cause restriction of access or livelihood

	<p>impacts. Some of the population have a degree or equivalent to Bachelor level, and some have equivalent to middle school., some of them operating small businesses and they have only a few years of basic education.</p>
<p>LEGISLATION & POLICIES</p>	
<p>National & Local Legislation and World Bank Policies that Apply to the Project</p>	<p>The applicable national legislation is as follows:</p> <ul style="list-style-type: none"> ➤ The Law for the Protection and Improvement of Environment No. 27, 2009; ➤ Public Health Law No. 89 of 1981, amended by Resolution No.54 of 2001; ➤ Law No.3,1997 regarding to Environment protection ➤ Instructions no.3 of 2012 on National Emissions' Determinants for Activities and Businesses by the Ministry of Health and Environment. ➤ Instructions no.1 of 2015 on Medical Waste Management issued by the Ministry of Health and Environment. ➤ Instructions no. 3 of 2015 on Hazardous Waste Management issued by the Ministry of Health and Environment. ➤ Instructions No. 2 of 2014 on Environmental Protection from Municipal Waste; ➤ Instructions no. 3 of 2015 on Hazardous Waste Management; ➤ Law No. 6 of 1988 concerning the National Commission for Occupational Hygiene and Safety; ➤ Instructions No. 12 of the year 2016: Occupational Health and Safety; ➤ Labor Law No. 37 of 2015; ➤ Law no. 89 of the year 1981, amended by Decree No.54 of 2001: Public Health; ➤ Law No. 41 for the year of 2015: Noise Protection and Control; ➤ Public Roads Law No. 35 of 2002; ➤ Instructions No.3 of 2012: National Emissions' Determinants for Activities and Businesses by the Ministry of Health and Environment; ➤ Regulation No. 4 for the year of 2012: Ambient Air Quality; ➤ The main WB safeguard policies applicable for SFD are: ➤ OP 4.01 Environmental Assessment ➤ OP 4.12 Involuntary Resettlement (There might be a probability of storage of construction materials within the project area. Until the date of report development, no land acquisition is anticipated.). ➤ OP 4.11 Physical and Cultural Resources (The proposed construction activities are not expected to pose risks of damaging cultural property).

- labor influx guidance note (2016).
- WB General Environmental, Health, and Safety guideline²

The EHS guidelines entails the effective methods for managing environmental, health and safety issues in accordance with WBG requirements. This includes understanding the likelihood, magnitude and priority of the EHS risks. The EHS guidelines includes 4 primary sections and respective sub sections (applicable segments from the EHS guidelines for the sub-project are highlighted in **Red**):

- Environmental Guidelines
 - **Ambient Air Quality** – Limits and Guidelines
 - **Energy Conservation** – Energy Conservation and Efficiency Methods
 - **Wastewater and Ambient Water Quality** – Effluent water quality and indicators for water discharge and treatment
 - **Water Conservation** – Methods for ensuring reduction in water consumption
 - **Hazardous Material Management** – The appropriate Methods for managing hazardous waste and instructions on community and worker protection
 - **Waste Management** – Instructions on waste management and planning, waste prevention and safe waste disposal
 - **Noise** – Methods for prevention and control of Noise, and the applicable noise limits for different activities and exposure period
 - **Contaminated Land** – Management approaches for contaminated land due to different hazardous substances or waste or oil. Includes Risk Reduction measures
- Occupational Health and Safety Guidelines³
 - **General Facility Design and Operation** – ensuring appropriate facility integration of H&S, that integrates safety measures in design for different physical hazards

² <https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=nPtguVM>

³ <https://www.ifc.org/wps/wcm/connect/1d19c1ab-3ef8-42d4-bd6b-cb79648af3fe/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxyx>

- **Communication and Training** – Ensuring there is an appropriate level of communication between workers and management, and that there is sufficient training for all workers prior to operations
- **Physical Hazards** – Methods for prevention of accidents or injuries that can occur due to exposure to mechanical or other physical works, including Noise and Vibrations
- **Chemical Hazards** – Injuries and accidents that could occur due to usage of chemicals and methods of protection and prevention. Includes management of fires and explosions
- Biological Hazards – Protection and Management of different biological agents
- Radiological Hazards – Management and Limits for Radiation Exposure
- **PPE** – Guidance on usage of PPE and clearly highlighting that it should be considered the last resort
- Special Hazards Environments – Guidance on Managing different environments that can present a risk to workers such as confined spaces.
- **Monitoring** – Efficient monitoring of occupational health and safety programs and mitigation measures. This includes the Occupational Accident Reporting frequency
- Community Health and Safety Guidelines⁴
 - **Water Quality and Availability** – Ensuring the protection of nearby water resources such as groundwater and surface water sources.
 - **Structural Safety of the Project** – Potential Hazards that could occur due to poor design and methodology for dealing with those hazards. Includes the general approach that architects/structural engineers must follow to ensure community safety is considered during design
 - **Life and Fire Safety (L&FS)** – Ensuring that

⁴ <https://www.ifc.org/wps/wcm/connect/eeb82b4a-e9a8-4ad1-9472-f1c766eb67c8/3%2BCommunity%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES&CVID=nPtgxTd>

	<p>building design is in accordance with local regulations and requirements, and that it integrates Fire safety standards (more focused on buildings rather than infrastructure)</p> <ul style="list-style-type: none"> ○ Traffic Safety – Includes the potential risks and impacts on traffic and from traffic that occurs due to the project. Includes recommend measures to deal with traffic risk ○ Transport of Hazardous Material – Approach and Guidelines for transporting hazardous material, including a hazard assessment and emergency response plan. ○ Disease Prevention – Includes the recommended interventions and methods to protect the community from communicable diseases and vector borne diseases ○ Emergency Response and Preparedness – This sub section requires a plan and response system in place to respond to any potential emergency that could occur due to the works or operation <p>➤ <u>Construction and Decommissioning Guidelines⁵</u></p> <ul style="list-style-type: none"> ○ Environment – covers the different environmental factors that could be affected by the construction activities including soil erosion, disturbance to water bodies, disturbance to air quality, wastewater discharges etc. ○ Occupational Health and Safety – Different OHS risks due to construction or decommissioning works ○ Community Health and Safety – Different Hazards that can occur due to the project and affect the surrounding community. ○ Grievance Redress Service
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PUBLIC CONSULTATION & GRIEVANCE REDRESS MECHANISMS

Public Consultation Process	The consultations were carried out in the village for the construction of the health center in October 2023. One on one interviews were conducted. Accordingly, a questionnaire was formatted to cover the key
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⁵ <https://www.ifc.org/wps/wcm/connect/7d708218-2a9e-4fcc-879d-9d5051746e7d/4%2BConstruction%2Band%2BDecommissioning.pdf?MOD=AJPERES&CVID=nPtgy6x>

environmental and social aspects related to the subproject. The purpose of conducting the consultation activities is to achieve the below:

1. Introduce the construction subproject of the health centers.
2. Disclose information regarding the Grievance Mechanism resources in place.
3. Discuss anticipated environmental and social impacts associated with the project.
4. Propose extensive mitigation measures to address potential environmental and social risks associated with the project activities.

The formatted questionnaire was then addressed to 7 women and 21 men in the surrounding community randomly to have their opinions and thoughts regarding the construction activities.

Consultation Results:

All those interviewed expressed their support to the project. All interviewees expressed their hope that the completion of the project will lead to more goods moving through their areas. Therefore, they link the project with improving their living conditions and the development of the area economically. They also stressed the importance of providing a timetable for the completion of the project because they heard of many planned projects in their district but had not seen them being completed. The participants emphasized that they know that the project's benefits are far greater than its negative impacts and confirmed their willingness to cooperate with the project. All participants in the village expressed that the construction of the health centers will have a positive impact on their social daily life. Please refer to Annex 1 and Annex 2 for a sample of the consultations for both men and women in these villages. The full list of participants for public consultations and individual interviews is attached in the standalone document to reduce the size of the instrument. As per the questionnaire prepared for individual interviews, below are the main findings:

- 1) No deportation, or dislocation of any of the local community will be needed due to these activities.
- 2) No vegetation covers, crops, plants, trees...etc. will be removed to execute the construction activities of the subproject.
- 3) No claims from any locals were recorded or alleged regarding the

	<p>ownership of the land where the health centers will be constructed.</p> <p>4) No infrastructure will be affected negatively due to the construction activities and there is no need for alternative roads.</p> <p>5) All interviewed locals agreed that the construction activities of the subproject will serve all the people in the village and have a strong positive impact from the social perspectives on the locals by improving their achievements and performance via simplifying the ways of communications.</p> <p>6) The construction of the project will enhance the economic situation of the people via saving transportation fares to achieve their daily requirements.</p>										
<p>GRM Process</p>	<p>The Grievance Redress Mechanism is a procedure that aims to facilitate the most satisfactory solution and/or guidance to stakeholders seeking to submit their comments or complaints.</p> <p>Before the start of the project, local community members will be informed about the GRM via communication channels. For example, they will be informed verbally by their community leader or through social media online. Visible sign boards, hard copies of the GRM brochures, and online platforms will also be made available posting GRM-relevant contact information and an explanation of the grievance process.</p> <p>The SFD established a central free hotline, and it is functioning properly in addition to the email and WhatsApp application. The digital system with multi-channels for receiving complaints, inquiries, feedback or comments like WhatsApp, Facebook, email and complain boxes for each subproject. Additionally, GRM focal points will be assigned at local level and central level to be in charge of handling complaints. The focal point will maintain a log and report on grievance management, which includes minutes of meetings, resolutions and recommendations as part of an annual project progress report.</p> <p>The information for the central office is:</p> <table border="1" data-bbox="423 1560 1500 1780"> <thead> <tr> <th>#</th> <th>Name</th> <th>Job Title</th> <th>Phone Number</th> <th>E-mail</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Husam A. Shaael</td> <td>GRM Team leader</td> <td>07833344263 07733344263</td> <td>Sfd.grm.iraq@gmail.com</td> </tr> </tbody> </table> <p>Meanwhile, in order to comply with the WB requirements, SFD has assigned staffs as focal points with their cell phone numbers to be disseminated at each</p>	#	Name	Job Title	Phone Number	E-mail	1	Husam A. Shaael	GRM Team leader	07833344263 07733344263	Sfd.grm.iraq@gmail.com
#	Name	Job Title	Phone Number	E-mail							
1	Husam A. Shaael	GRM Team leader	07833344263 07733344263	Sfd.grm.iraq@gmail.com							

subproject level for receiving calls and handling complaints. The contact details will be posted on subproject signboard and the complaint boxes will be installed in each location as shown in the below table.

Contact Information for GRM

#	Name	Job Title	Phone Number	E-mail
1	Ghalib Radhi Ismaael	SFD Team leader	07812436945	Sfd.diw.iraq@gmail.com
2	Mhammed Qasim Abd	Environmental Officer	07714418010	diwanivahplan@yahoo.com
3	Zainab Ali Hussein	GRM Officer	07808447035	Zainabali1912@gmail.com

The process of managing complaints will be as follows:

The grievance note should be signed and dated by the aggrieved person. Where the affected person is unable to write, s/he should obtain assistance from the community to write the note and mark the letter with his/her thumbprint. Individuals who submit their comments or grievances have the right to request that their name be kept confidential, though this may mean that the social officer in charge of the GRM is unable to provide feedback on how the grievance is to be addressed. However, an anonymous complaint can receive a code and should be investigated appropriately and treated courteously.

After receiving the comments and complaints, they will be summarized and listed in a Complaints/Comments LogBook, containing the name/group of commenter/complainant, date the comment was received, brief description of issue, information on proposed corrective actions to be implemented (if appropriate), and the date of response sent to the commenter/complainant. Complaints should be sorted out according to complexity; Significantly, the GRM classifies feedback in two categories, high-level and standard, each has its own procedure as explained further below.

High-Level Feedback

Feedback received to be categorized as ‘high’ level instances will include issues that meet the following criteria:

- Incidents that caused or may potentially cause significant or great harm to the environment, workers, communities, or natural resources;
- Incidents which entail failure to implement environmental and social measures with significant impacts or repeated non-compliance with E&S policies;

- Incidents for which failure to address may potentially cause significant impacts that are complex and/or costly to reverse; and
- Incidents that may result in a fatality or some level of lasting damage or injury.

This type of feedback will be acknowledged, and an investigation will be launched by the PCU/PMO and any other relevant stakeholders with 24 hours during work days and within 48 hours if the feedback was received over the weekend. It should be noted that some types of incidents, including accidents and fatalities need to be reported to the World Bank. This guidance is provided in the Environment & Social Incident Response Procedures.

Standard-Level Feedback

If the identity of the aggrieved person is known and the grievance is classified as ‘standard’, the acknowledgement of grievance will be within 3 working-days and the response will be within 20 working-days (depending on the type of grievance i.e. high or standard). The GRM Social Officer will keep a grievance log and report on grievance management (i.e. minutes of meeting, recommendations, and resolutions made) as part of annual project progress reports. At the 20 business-day mark, if a complaint/question is still pending, the GRM focal point will provide an update to the aggrieved person and inform them of the reason of delay in resolving their case, and provide the date for which a response will be provided.

Aggrieved people who are dissatisfied with the outcome of their complaint can appeal the decision by resubmitting their complaint to the GRM Social Officer within 30 working days of receiving a response to the original submitted grievance. Subsequently, the GRM Social Officer and other relevant personnel have 30 working days to investigate and address the issue. Additionally, the GRM Social Officer has 10 working days to prepare a comprehensive response, including the findings of the investigation and the rationale of the determination. Accordingly, within a maximum of 40 working days, the appeal case should be closed.

Lastly, if the aggrieved person is still not satisfied with the solution provided, s/he has the option to go to court.

Individuals who submit their comments or grievances have the right to request that their name be kept confidential. An anonymous complaint will receive a code and should be investigated appropriately and treated courteously. Ensuring confidentiality when dealing with cases of sexual harassment, sexual exploitation and sexual abuse. In order to mitigate those issues/ complaints, assigning female GRM officer in case of facing any SEA/SH incidents, in addition, all GRM officers/ focal points must

	<p>be trained on how to handle SEA/SH related grievances.</p> <p>In addition to PMO, the MOP, project offices in governorates, and Community Development Groups (CDGs), the World Bank's Grievance Redress System (GRS) can also be approached for reporting and resolving issues.</p> <p>Disclosure activities</p> <p>As soon as the site-specific ESMP gets clearance from the World Bank and approval from the Ministry of planning, the following disclosure procedures will be adapted. A final report, in English and in local language, will be published on the WB, SFD and Ministry of Planning websites and also will be available locally (such as at local SFD office.</p>
INSTITUTIONAL CAPACITY BUILDING	
Will there be any capacity building?	<p><input type="checkbox"/> N or <input checked="" type="checkbox"/> Y</p> <p>It is recommended to provide safety training and induction sessions to the workers and engineers who will be employed throughout the construction phase. Moreover, there needs to be more training on GRM implementation to ensure its proper functioning in the future.</p>

PART B: SAFEGUARDS SCREENING AND TRIGGERS

ENVIRONMENTAL /SOCIAL SCREENING FOR SAFEGUARDS TRIGGERS			
	Activity / Typology	Status	Triggered Actions
Will the site activity include/in involve any of the following?	1. Re/construction of urban, inter-urban or rural roads	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	This subproject is the construction of health center.
	2. Reconstruction of / impacts on surface drainage system	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The subproject doesn't have an impact on Surface drainage system
	3. Activities in Historic building(s) and districts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The construction activities do not take place anywhere near historic buildings or districts and
	4. Required acquisition of land or temporary / permanent impacts on livelihoods	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No land acquisition is required for this subproject.
	5. Handling or presence of hazardous or toxic materials	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There are no toxic or hazardous materials generated by the project.
	6. Impacts on forests and/or protected areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There are no forests or protected areas surrounding the subproject area.
	7. Risk of unexploded ordinance (UXO)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	8. Traffic and Pedestrian Safety	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", see Part C

PART C: MITIGATION MEASURES/ CONSTRUCTION PHASE

No.	Potential Impacts	Mitigation Measures
1	General Conditions	<ol style="list-style-type: none"> 1) The local construction and environment inspectorates and communities have been notified of upcoming activities. 2) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works). 3) All legally required permits have been acquired for construction and/or rehabilitation. 4) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment. 5) There is posted material indicating the nearest police station and hospital (with accident and emergency facilities). 6) The contractor must take reasonable steps to prevent unauthorized people accessing the site. 7) Prohibit the burning of waste on site. 8) Providing extinguishers which distributed within the working area. 9) If work involving the use of flammable materials is being carried out or any other material that might make any danger, stop people smoking and do not allow other work activities involving potential ignition sources to take place nearby. 10) Providing site boundaries (if any) by installing suitable physical boundaries (barriers, tape or fence). 11) Marking excavation holes (if any) with physical boundaries (barriers, tape or fence). 12) The contractor should put up barriers or covers in the area of openings and excavations if any. 13) Clearance letter of explosive remnants of War (ERW) Unexploded Ordnance (UXO) should be obtained before commencing the work in the site area. 14) Contractor to ensure PPE (personal protective equipment) is used by all workers on site. 15) Materials and equipment are tidily stacked, protected and covered where necessary. Additionally, there is adequate space for new materials to be stored in secured covered areas to avoid damage, theft, and to protect these items from weather conditions. 16) Appropriate signposting of the sites will inform workers of key rules and regulations to follow. 17) The contractor should provide full insurance coverage schema of all type of workers. The insurance should cover work related accidents (Injuries and fatalities) as well as insurance for third party. 18) Rigid obligations and penalties will be added to the contractor/subcontractors' contractual agreements in order to guarantee child labor is prohibited in the project. Penalties to be applied in cases where workers under the age of 18 are hired. 19) The contractor must clean up and rehabilitate all sites prior to handing over. 20) Actions to make the health center more energy efficient, such as use of natural light and ventilation which may also reduce the reliance on generators and other sources for energy should be considered. 21) The new building shall be designed, constructed, and operated in full compliance with local building codes, local fire department regulations, local legal/insurance requirements, and in accordance with an internationally accepted L&FS standard. A suitably qualified L&FS professional acceptable to the Bank and hired by the Borrower shall prepare and submit a L&FS Master Plan, including preliminary drawings and specifications, and certify that the design meets the requirements of WBG General EHS guidelines. This professional should conduct a review of L&FS systems as part of the commissioning tests for new and renovated buildings and certifies that construction of the L&FS systems has been carried out in accordance with the accepted design.

No.	Potential Impacts	Mitigation Measures
2	Generation, storage, disposal of construction, hazard, and domestic waste	<ol style="list-style-type: none"> 1) Waste collection and disposal pathways and sites will be identified for all major waste types expected from construction activities. 2) Construction and demolition waste, if any, will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers. 3) Construction waste will be collected and disposed properly by licensed collectors to authorized area. 4) The records of waste disposal will be maintained as proof for proper management as designed. 5) Whenever feasible Contractor will reuse and recycle appropriate and viable materials 6) Simple waste management plan for specific waste streams must be developed. 7) General waste must be collected and transported to the approved disposal sites. 8) Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site through licensed contractors. 9) Waste containers must be located at each worksite with sufficient numbers.
3	Hazardous wastes and materials ⁶	<ol style="list-style-type: none"> 1) Hydrocarbons, including lubricants, which will be very limited and resulted just from machines/trucks shall be collected for safe transport outside the site for recycling, transport, or disposal at approved sites to be nominated by the Municipality and the Ministry of Health and Environment 2) The site will be cleaned from all wastes frequently and wastes will be stored in safe containers until transported 3) The waste shall be transported by specially licensed Transporters and disposed of in the special areas to be determined by the authority. 4) Empty containers of treatment chemicals shall be returned to suppliers.
4	Air quality ⁷	<ol style="list-style-type: none"> 1) Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust when necessary 2) There will be no open burning of construction / waste material at the site. 3) All machinery will comply with Iraqi emission regulations, shall well maintained and serviced and there will be no excessive idling of construction vehicles at sites
5	Noise ⁸	<ol style="list-style-type: none"> 1) Construction noise will be limited to restricted times agreed to in the permit 2) All the workers will be supplied with fully safety measures including earmuffs.
6	Runoff water and drainage systems	<ol style="list-style-type: none"> 1) Procedures will be put in place for rapid response to accidental spills of fuels, lubricants and other toxic or noxious substances, and for their recovery and appropriate disposal 2) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies 3) There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other contaminated waters into the ground or the water resource.
7	Groundwater quality	Sewage from construction offices and rest areas will be collected in septic tanks and transferred by trucks to the nearest sewage treatment plant by authorized contractors.
8		<ol style="list-style-type: none"> 1) In compliance with national regulations, the Contractor will ensure that the construction site is properly secured and construction-related traffic regulated. 2) The site will be visible and the public warned of all potential hazards by signposting and barriers/fencing

⁶ <https://www.ifc.org/wps/wcm/connect/90231ba8-5bb3-40f4-9255-eaf723d89c32/1-5%2BHazardous%2BMaterials%2BManagement.pdf?MOD=AJPERES&CVID=nPtgwml>

⁷ <https://www.ifc.org/wps/wcm/connect/4e01e089-ad1a-4986-b955-e19e1f305ff0/1-1%2BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS>

⁸ <https://www.ifc.org/wps/wcm/connect/4a4db1c5-ee97-43ba-99dd-8b120b22ea32/1-7%2BNoise.pdf?MOD=AJPERES&CVID=nPtgwZY>

No.	Potential Impacts	Mitigation Measures
	Traffic	3) Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement 4) If required, active traffic management by trained and visible staff at the site for safe passage for the public 5) Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction
9	community health & safety conditions	1) Provide adequate signage to prevent accidental falling into open areas 2) The contractor should develop and implement “EHS Procedures”. 3) Deployment of HSE procedures for the construction personnel. 4) During the loading and unloading of debris specific measures should be applied: a. Covering the trucks using polyethylene sheets to avoid the falling of debris b. Trucks should use unpopulated routes as much as possible 5) For proper implementation of Community Health and Safety mitigation measures during construction, it is essential to establish and sustain an open and transparent dialogue between MoP/contractor and the affected communities in full compliance with the WB standards related to stakeholder engagement activities. 6) It is necessary to put signs telling the citizens that the health center is under construction. 10) Apply the concept of universal access to the design and construction of buildings or any structures where technically and financially feasible (i.e. access to all users, including persons with disabilities such as wheelchair users) 11) A grievance mechanism should be made available to community people
	OHS	1) The contractor should develop and implement the Construction OHS Plan (submitted and approved by the Resident Engineer) prior to the start of construction. It will address all the risks anticipated including, but not limited to: Working in confined space (inside sheet piles), Risk of sinking, Electrocution, and Safety of equipment. 2) 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. Fall prevention/protection measures may include: 3) Installation of guardrails with mid-rails and toe boards at the edge of any fall hazard area 4) Proper use of ladders and scaffolds by trained employees 5) Use of 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 6) Appropriate training in use, serviceability, and integrity of the necessary PPE 7) Inclusion of rescue and/or recovery plans, and equipment to respond to workers after an arrested fall 8) Conduct a Risk Hazard Assessment (RHA), prepare an Emergency Response Plan (ERP) 9) Specific emergency response procedures 10) Training of emergency response teams 11) Permanently stationed emergency equipment and facilities (e.g., first aid stations, firefighting equipment, spill response equipment, personal protection equipment for the emergency response teams) 12) ensure that all electrical equipment and machinery is switched off and all power sources are unplugged. 13) Warning signs can be used to remind workers to do this before the initial maintenance inspection takes place. 14) Ensure all surfaces and work areas are dry when working with electricity and electrical devices or appliances. 15) If this can't be avoided, rubber gloves and boots should be used to reduce the

No.	Potential Impacts	Mitigation Measures
		intensity of an electric shock.
	Worker conditions	<ol style="list-style-type: none"> 1) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) 2) Provide a first aid kits in different places of the work site with the appropriate number of materials given the number of workers on site. The workers will be noted about the locations of the first aid kits. 3) Everyone who works on any site must have access to adequate toilet and washing facilities, a place for preparing and consuming refreshments, and an area for storing and drying clothing and personal protective equipment (PPE). 4) Develop contingency plans with arrangements for accommodation, care and treatment for: <ul style="list-style-type: none"> • Workers self-isolating • Workers displaying symptoms • Getting adequate supplies of water, food and supplies 5) Contingency plans also should consider arrangements for the storage and disposal arrangements for medical waste, which may increase in volume and which can remain infectious for several days (depending upon the material). 6) Ensure medical facilities are stocked with adequate supplies of medical PPE, as a minimum: <ul style="list-style-type: none"> • Gowns, aprons • Medical masks and some respirators (N95 or FFP2) • Gloves (medical, and heavy duty for cleaners) • Eye protection (goggles or face screens) 7) Enhanced cleaning arrangements should be put in place, to include regular and deep cleaning using disinfectant of catering facilities/canteens/food/drink facilities, latrines/toilets/showers, communal areas, including door handles, floors and all surfaces that are touched regularly (ensure cleaning staff have adequate PPE when cleaning consultation rooms and facilities used to treat infected patients) 8) Other measures (such as working water sprinkling systems at crushers and stock piles, covered wagons, water suppression or surfacing of haul roads etc.) should be used for dust suppression on site before relying upon the use of dust masks (which could unnecessarily reduce the availability of N95 masks for use by medical staff performing some duties)
10	Social Impacts	<ol style="list-style-type: none"> 1) Reducing impacts on the community through community and neighbour engagement. 2) Provide proper GRM for handling complaints
11	Child labor	<ol style="list-style-type: none"> 1) Rigid obligations and penalties will be added to the contractor contracts in order to warrantee no child labor exist in the subproject 2) The PMO will oblige the contractor to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old). 3) The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance 4) The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and also training and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities. 5) Implement all facets of the established grievance mechanism, ensuring anonymous channels are available.
12	Accessibility	<ol style="list-style-type: none"> 1) Health centers should be accessible to all patients with disabilities, including wheelchair users. 2) The project should have measures to make health centers accessible to men and women, such as including separate toilets for men and women,

PART D: MONITORING PLAN/ CONSTRUCTION PHASE/ OPERATION PHASE

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
				Implementation	Monitoring	Mitigation measures	Monitoring
1	General Conditions	<ol style="list-style-type: none"> 1) The local construction and environment inspectorates and communities have been notified of upcoming activities 2) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) 3) All legally required permits have been acquired for construction and/or rehabilitation 4) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment. 5) Workers' PPE will comply with international good practice 6) (Always hardhats, as needed masks and safety glasses, harnesses and safety boots) 7) There is posted material indicating the nearest police station and hospital (with accident and emergency facilities). 8) The contractor must take reasonable steps to prevent unauthorized people accessing the site. 9) Prohibit the burning of materials on site. 10) Provide a first aid kits in different places of the work site with the appropriate number of materials given the number of workers on site. The workers will be noted about the locations of the first aid kits. 11) Providing extinguishers which distributed within the working area. 12) If work involving the use of flammable materials is being carried out or any other material that might make any danger, stop people smoking and do not allow other work activities involving potential ignition sources to take place nearby. 13) Providing site boundaries (if any) by installing suitable physical boundaries (barriers, tape or fence). 14) Marking excavation holes with physical boundaries (barriers, tape or fence) 	<p>Bi-monthly: record of all the licenses and permits obtained;</p> <p>Compliance with the HSE requirements</p>	Contractor	<p>- E&S Specialist</p> <p>- Resident Engineer</p>	No additional cost	No additional cost

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
				Implementation	Monitoring	Mitigation measures	Monitoring
		<p>15) The contractor should put up barriers or covers in the area of openings and excavations.</p> <p>16) Store building materials (such as pipes, manhole rings, and cement bags) so that they cannot topple or roll over.</p> <p>17) Everyone who works on any site must have access to adequate toilet and washing facilities, a place for preparing and consuming refreshments, and an area for storing and drying clothing and personal protective equipment (PPE).</p> <p>18) Contractor to ensure PPE (personal protective equipment) is used by all workers on site.</p> <p>19) Materials and equipment are tidily stacked, protected and covered where necessary. Additionally, there is adequate space for new materials to be stored in secured covered areas to avoid damage, theft, and to protect these items from weather conditions.</p> <p>20) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.</p> <p>21) The contractor should provide full insurance coverage schema of all type of workers. The insurance should cover work related accidents (Injuries and fatalities) as well as insurance for third party.</p> <p>22) Rigid obligations and penalties will be added to the contractor/subcontractors' contractual agreements in order to guarantee child labor is prohibited in the project. Penalties to be applied in cases where workers under the age of 18 are hire.</p> <p>23) The contractor must clean up and rehabilitate all sites prior to handing over.</p> <p>24) Actions to make the health center more energy efficient, such as use of natural light and ventilation which may also reduce the reliance on generators and other sources for energy should be considered.</p> <p>25) The new building shall be designed, constructed, and operated in full compliance with local building codes, local fire department regulations, local legal/insurance requirements, and in accordance with an internationally</p>					

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
				Implementation	Monitoring	Mitigation measures	Monitoring
		accepted L&FS standard. A suitably qualified L&FS professional acceptable to the Bank and hired by the Borrower shall prepare and submit a L&FS Master Plan, including preliminary drawings and specifications, and certify that the design meets the requirements of WBG General EHS guidelines. This professional should conduct a review of L&FS systems as part of the commissioning tests for new and renovated buildings and certifies that construction of the L&FS systems has been carried out in accordance with the accepted design.					
2	Generation, storage, disposal of construction, hazard, and domestic waste ⁹	<ol style="list-style-type: none"> 1) Waste collection and disposal pathways and sites will be identified for all major waste types expected from construction activities. 2) Construction and demolition waste, if any, will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers. 3) Construction waste will be collected and disposed properly by licensed collectors to authorized area. 4) The records of waste disposal will be maintained as proof for proper management as designed. 5) Whenever feasible Contractor will reuse and recycle appropriate and viable materials 6) Simple waste management plan for specific waste streams must be developed. 7) General waste must be collected and transported to local council approved disposal sites. 8) Food wastes must be collected, where practicable, considering health and hygiene issues, for disposal off-site through licensed contractors. 9) Waste containers must be located at each worksite with sufficient numbers. 10) Storage, transport and handling of all chemicals must be conducted in accordance with all legislative requirements, through licensed contractors and in coordination with the local authority. 	Weekly site inspections and verifying the records on waste disposal	Contractor	- E&S Specialist - Resident Engineer	No additional cost	No additional cost

⁹ <https://www.ifc.org/wps/wcm/connect/456bbb17-b961-45b3-b0a7-c1bd1c7163e0/1-6%2BWaste%2BManagement.pdf?MOD=AJPERES&CVID=nPtgwEW>

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
				Implementation	Monitoring	Mitigation measures	Monitoring
3	Handling of hazardous wastes and materials	<ol style="list-style-type: none"> 1) Hydrocarbons, including lubricants, which will be very limited and resulted just from machines/truck shall be collected for safe transport outside the site for recycling, transport or disposal at approved sites to be nominated by the Municipality and the Ministry of Health and Environment 2) The site will be cleaned from all wastes frequently and wastes will be stored in safe containers until transported 3) The waste shall be transported by specially licensed tankers and disposed of in the special areas away from the city to be determined by the paddies. 4) Paints containing solvents, solvents or lead-based paints shall not be used as per requirements, instructions and coordination with the Ministry of Science and Technology. 	Weekly site inspections and verifying the records on waste disposal	Contractor	- E&S Specialist - Resident Engineer	No additional cost	No additional cost
4	Deterioration of air quality ¹⁰	<ol style="list-style-type: none"> 1) Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust 2) During pneumatic drilling and foundations dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site 3) The surrounding environment (sidewalks, roads) shall be kept free of soil and debris to minimize dust 4) There will be no open burning of construction / waste material at the site. 5) All machinery will comply with Iraqi emission regulations, shall well maintained and serviced and there will be no excessive idling of construction vehicles at sites 	<p>Ambient air quality test, 1 time prior to construction to obtain the baseline Air quality parameters:</p> <p>PM₁₀, PM_{2.5}, SO₂, NO_x, CO, Ozone and HC</p> <p>Compliance with dust abatement measures</p>	Contractor	- E&S Specialist - Resident Engineer	Additional cost of water 500	Testing done by accredited Laboratories. Additional cost 750 US
5	Increased level of	<ol style="list-style-type: none"> 1) Construction noise will be limited to restricted times agreed to in the permit 2) All the workers will be supplied with fully safety measures 	Weekly site inspection	Contractor	- E&S Specialist - Resident	No additional	No additional

¹⁰ <https://www.ifc.org/wps/wcm/connect/4e01e089-ad1a-4986-b955-e19e1f305ff0/1-1%2BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS>

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
				Implementation	Monitoring	Mitigation measures	Monitoring
	noise ¹¹	including earmuffs. 3) Compliance with the time limitations; 4) Switching off the equipment not in use; 5) Use of protective gear			Engineer	cost	cost
6	Disruption of the runoff water and drainage systems	1) Procedures will be put in place for rapid response to accidental spills of fuels, lubricants and other toxic or noxious substances, and for their recovery and appropriate disposal 2) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies 3) There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other contaminated waters into the ground or adjacent streams or rivers;	Weekly site inspection during rainy season; Bi-weekly site inspection during dry seasons; <input type="checkbox"/> Alteration of water courses; <input type="checkbox"/> Signs of spillage of hazardous materials <input type="checkbox"/> Testing in case of accidental spills of hazardous materials	Contractor	- E&S Specialist - Resident Engineer	additional cost: contingency for removal of accidental hazardous spills 1000 US \$	No additional cost
7	Deterioration of groundwater	1) Sewage from construction offices and rest areas will be collected in septic tanks and transferred by trucks to the nearest sewage treatment plant	Weekly site inspection during rainy season; Bi-weekly site inspection during dry seasons	Contractor	- E&S Specialist - Resident Engineer	No additional cost	Testing done by Accredited Laboratories.

¹¹ <https://www.ifc.org/wps/wcm/connect/4e01e089-ad1a-4986-b955-e19e1f305ff0/1-1%2BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES&CVID=nPtgvbS>

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
				Implementation	Monitoring	Mitigation measures	Monitoring
	quality		Water testing: in case of accidental spills of hazardous materials: pH, Turbidity, (EC), Color, Total Suspended Solids (TSS), (TDS), (COD), (BOD),				Additional cost 500 US \$
8	Disruption of traffic	<ol style="list-style-type: none"> 1) In compliance with national regulations the Contractor will ensure that the construction site is properly secured and construction related traffic regulated. 2) The site will be clearly visible and the public warned of all potential hazards by signposting and barriers / fencing 3) Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. 4) Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement 5) Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction 	Monthly site surveillance for the presence of fencing/barriers and warning signs, and traffic speed limitations	Contractor	Resident engineer PMO	No additional cost	No additional cost
9	Deterioration of health & safety conditions	<ol style="list-style-type: none"> 1) Provide adequate signage to prevent accidental falling into open areas 2) Fencing of the work areas. 3) The contractor should develop and implement “EHS Procedures”. 4) Include Construction OHS Plan (submitted and approved by the Resident Engineer) prior to the start of construction. It will address all the risks anticipated including, but not limited to: Working in confined space (inside sheet piles), Risk of sinking, Electrocutation, and Safety of equipment. 5) To ensure worker safety, health insurance must be provided to all 	<p>Inspection and photo evidence</p> <p>Maintaining records of injuries and accidents with cause and location</p>	Contractor	- E&S Specialist - Resident Engineer	No additional cost	No additional cost

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
				Implementation	Monitoring	Mitigation measures	Monitoring
		<p>type of workers</p> <p>6) Deployment of HSE procedures for the construction personnel</p> <p>7) An accident and work-related injuries log should be maintained, along with first-aid kit for minor injuries.</p> <p>8) Installation of guardrails with mid-rails and toe boards at the edge of any fall hazard area</p> <p>9) Proper use of ladders and scaffolds by trained employees</p> <p>10) Use of 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</p> <p>11) Appropriate training in use, serviceability, and integrity of the necessary PPE</p> <p>12) Inclusion of rescue and/or recovery plans, and equipment to respond to workers after an arrested fall</p>					
10	Social Impacts	<p>1) Reducing impacts on the community through community and neighbour engagement.</p> <p>2) Provide proper GRM for handling complaints</p>	Weekly monitoring of response to complaints	Contractor	- E&S Specialist - Resident Engineer	No additional cost	Purchasing of the required equipment \$750 UD
11	Child labor	<p>1) Rigid obligations and penalties will be added to the contractor contracts in order to warrant no child labor exist in the subproject</p> <p>2) The PMO will oblige the contractor to keep a copy of IDs of laborers in order to monitor the hired staff (Chapter 11 of the 2015 Labor Law of Iraq sets the age for hazardous works 18 years old).</p> <p>3) The contractor also will be obliged to maintain daily attendance sheets in order to verify the attendance of workers in case of accidents and provide the injured persons with proper health insurance</p>	<p>Inspection and Bi-weekly monitoring</p> <p>Signed Worker's Code of Conduct</p> <p>Trainings on Code of Conduct +</p>	Contractor	- E&S Specialist - Resident Engineer	No additional cost	No additional cost

No.	Potential Impacts	Mitigation Measures	Monitoring	Responsibility		Additional Cost in USD	
				Implementation	Monitoring	Mitigation measures	Monitoring
		4) The code of conduct for workers/contractors should be introduced to prevent misconducts, including prevention of sexual harassment and also training and awareness rising for workers should be continued, through daily toolbox talks and other training opportunities. 5) The monitoring of workers' compliance to the Code of Conduct when interacting with the surrounding communities. 6) Implement all facets of the established grievance mechanism, ensuring anonymous channels are available.	attendance sheet GRM				
12	Accessibility	1) Health center should be accessible to all people with disabilities, including wheelchair users.	Resident engineer	Contractor	Resident engineer	No additional cost	No additional cost
Expected additional mitigation costs:						USD 1500	
Expected monitoring costs:							USD 2250

Mitigation Measures during Operation Phase.

Receptor	Mitigation Measures	Responsibility	Supervision	Total estimated Cost in
1	Air quality	• The net impact of the Project on air quality is not significant and temporary and will be limited to Construction Period.	Not Applicable	Not Applicable
2	Noise	• Negligible noise levels associated with the operation of the health center during operating time.	Not Applicable	Not Applicable
3	Sanitary Waste	• Wastewater (sanitary waste) will be collected in the collection tank (septic tank) and then transported periodically to the nearest authorized wastewater treatment plant as there is no sewage network available in the area of these health centers.	Local authorities	Local authorities municipal budget
4	Soil	Not applicable	Not applicable	Not applicable

5	Solid and hazardous wastes	<ul style="list-style-type: none"> • During the operational period, some littering and waste generation resulting from the repair activities will occur. Littering may occur due to wind action. • In addition, the used oil produced from engines (generator if present) can be stored in an air-tight container that can be sealed with a screw on cap and then transferred to the nearest recycling facility i.e the hazardous waste, the storage, collection, transportation and disposal of hazardous waste should be handle properly. • All waste should be deposited through licensed haulers/transporters to licensed and regulated landfill sites appropriate to the type of waste generated. • Medical waste should be managed according to MWMP. 	Local Authority (Municipality)	Local Authority (Municipality)	Within municipal budget
6	Flora & Fauna	Not applicable	Not Applicable	Not Applicable	Not Applicable
7	Topography and landforms	Not Applicable	Not Applicable	Not Applicable	Not Applicable
8	Handling Complains	The continued operation of a GRM for one year following operating of the health centers for use will ensure that local community members have an accessible, fair and transparent means of reporting any emerging adverse impacts, and a means of obtaining mitigation.	Local authorities	Local authorities	No cost
9	Health and Safety	<ul style="list-style-type: none"> • Having a clear set of emergency Plan and Procedures. • provision of health and safety information; • regular inspection, review and recording of EHS performance; • Medical waste should be managed according to MWMP. 	Contractor	Resident engineer	Included in contractor cost
10	Accessibility	<ul style="list-style-type: none"> • Health centers should be accessible to all patients with disabilities, including wheelchair users. • The project should have measures to make health centers accessible to men and women, such as include separate toilets for men and women, 	Contractor	Resident engineer	Included in contractor cost
Total cost US\$ (Operation phase)					No Cost

ANNEXES

Annex 1: Consultations Photos



Public Consultations at SHAT HUSSEIN Village



Public Consultations at MUHAMED SAJAT Village



Public Consultations at ALBO MUFARAJ Village

Annex (2): Sample individual interviews for both men and women


استبيان الصلوق الاجتماعي للتنمية لمحافظه الميادين
 عزيزتي المواطنة... عزيزي المواطن...
 ثوري (وزارة التخطيط / الصلوق الاجتماعي للتنمية) مسج مودالي لغرض التطوير المجتمعي مع أبناء القرية حول
 الإجراءات الهيئية والاجتماعية التي سيتم تنفيذها بخصوص تنفيذ المشاريع في القرية ومدى اثرها على المجتمع المحلي والبيئة
 المحيطة، راجين الإجابة بصدق وحيادية عن الاستبيان التالي بون العجلة لفر الاسم أو وسيلة الاتصال .

اسم المشروع : انشاء مركز صحي فرعي في قرية طمينة

القضاء طمين الناحية طمين القرية طمين
 الجنس: ذكر أنثى
 العمر: ... سنة
 المهنة: موظف طالب مهنة أخرى

١. هل هناك ادعاءات او مطالبات من قبل السكان المحليين بعادة الارض المزمع عليها المشروع؟
 نعم ملاحظت

٢. هل سيكون هناك ضرر على النشاطات و المصالح اليومية للأهلي بسبب الاصل الانشائية للمشروع؟
 نعم ملاحظت

٣. هل هناك اي بلى تحققة متناظر بسبب الاعمال الانشائية للمشروع ؟
 نعم ملاحظت

٤. هل هناك اعادة توظيف لشخص او لعدة اشخاص بسبب اقامة المشروع في القرية؟
 نعم ملاحظت

٥. هل سوف يتأثر المجتمع المحلي بصورة سلبية نتيجة المشاريع المقامة؟
 نعم ملاحظت


٦. هل اصل انشاء او اعادة تاهيل المشروع سؤاثر بشكل ساري على المجتميع الاثر ضلطا والاثر حثاشة (تساءد والمعالين) ؟
 نعم ملاحظت

٧. هل تتوقع اذقة محاسن زراعية او لشجر او اية غطاء اباني تعود عائدته لمواطني او سكان محليين بسبب الاصل الانشائية للمشروع؟
 نعم ملاحظت

٨. هل سيؤثر المشروع في الكثافة السكانية (مكافئة لفرم مواطنين من مناطق اخرى في القرية بسبب المشاريع التي ستنفذ)؟
 نعم ملاحظت

٩. هل تتوقع ان عملية انشاء او اعادة تاهيل المشروع لها اثر ايجابية من الناحية الاجتماعية بالنسبة لسكان القرية في المناطق القريبة من المشروع؟
 نعم ملاحظت

شكراً على وقتكم


استبيان الصلوق الاجتماعي للتنمية لمحافظه الميادين
 عزيزتي المواطنة... عزيزي المواطن...
 ثوري (وزارة التخطيط / الصلوق الاجتماعي للتنمية) مسج مودالي لغرض التطوير المجتمعي مع أبناء القرية حول
 الإجراءات الهيئية والاجتماعية التي سيتم تنفيذها بخصوص تنفيذ المشاريع في القرية ومدى اثرها على المجتمع المحلي والبيئة
 المحيطة، راجين الإجابة بصدق وحيادية عن الاستبيان التالي بون العجلة لفر الاسم أو وسيلة الاتصال .

اسم المشروع : انشاء مركز صحي فرعي في قرية طمينة

القضاء طمين الناحية طمين القرية طمين
 الجنس: ذكر أنثى
 العمر: ... سنة
 المهنة: موظف متقاعد مهنة أخرى

١. هل هناك ادعاءات او مطالبات من قبل السكان المحليين بعادة الارض المزمع عليها المشروع؟
 نعم ملاحظت

٢. هل سيكون هناك ضرر على النشاطات و المصالح اليومية للأهلي بسبب الاصل الانشائية للمشروع؟
 نعم ملاحظت

٣. هل هناك اي بلى تحققة متناظر بسبب الاعمال الانشائية للمشروع ؟
 نعم ملاحظت

٤. هل هناك اعادة توظيف لشخص او لعدة اشخاص بسبب اقامة المشروع في القرية؟
 نعم ملاحظت

٥. هل سوف يتأثر المجتمع المحلي بصورة سلبية نتيجة المشاريع المقامة؟
 نعم ملاحظت

٦. هل اصل انشاء او اعادة تاهيل المشروع سؤاثر بشكل ساري على المجتميع الاثر ضلطا والاثر حثاشة (تساءد والمعالين) ؟
 نعم ملاحظت

٧. هل تتوقع اذقة محاسن زراعية او لشجر او اية غطاء اباني تعود عائدته لمواطني او سكان محليين بسبب الاصل الانشائية للمشروع؟
 نعم ملاحظت

٨. هل سيؤثر المشروع في الكثافة السكانية (مكافئة لفرم مواطنين من مناطق اخرى في القرية بسبب المشاريع التي ستنفذ)؟
 نعم ملاحظت

٩. هل تتوقع ان عملية انشاء او اعادة تاهيل المشروع لها اثر ايجابية من الناحية الاجتماعية بالنسبة لسكان القرية في المناطق القريبة من المشروع؟
 نعم ملاحظت

شكراً على وقتكم



استبيان الصندوق الاجتماعي للتنمية لمحافظة البراري

عزيزي المواطن... عزيزي المواطن...
تسري وزارة التخطيط / الصندوق الاجتماعي للتنمية (مع مودتي لغرض التشاور المجتمعي مع أبناء القرية حول الإجراءات البيئية والاجتماعية التي سيتم تنفيذها بخصوص تلويد المشاريع في القرية ومدى اثرها على المجتمع المحلي والبيئة المحيطة، راجين الإجابة بسبق وحيدة عن الاستبيان الذي نون الحاجة لذكر الاسم أو وسيلة الاتصال .

اسم المشروع : انشاء مركز صحي في قرية عمال الساجات

القضاء خاين للجهة القرية عمال الساجات
الجنس: ذكر
العمر: 30 سنة
الهوية: موظف مطاب زيرة بيت

- هل تلك ادعاءات او مطالبات من قبل السكان المحليين بعادية الارض التملك عليها المشروع?
 نعم لا ملاحظات
- هل سيكون هناك ضرر على النشاطات و المصالح اليومية للأهلي بسبب الاصل الانشائية للمشروع?
 نعم لا ملاحظات
- هل هناك اي بنى تحتية ستأثر بسبب الاصل الانشائية للمشروع?
 نعم لا ملاحظات
- هل هناك اعتاد توطين لشخص او اعدة لشخص بسبب اقامة المشروع في القرية?
 نعم لا ملاحظات
- هل سوف يتأثر المجتمع المحلي بصورة سلبية نتيجة المشاريع المقامة?
 نعم لا ملاحظات
- هل اصحاب ااشام او اعدة تأهل المشروع ستؤثر بشكل سلب على مجاميع الاقر ضغطا والاطر خشاشة (النساء والمعلمين)?
 نعم لا ملاحظات
- هل تتوقع ازالة محاصيل زراعية او اشجار او اية غطاء نباتي تعود عليه بمواطني او سكان محليين بسبب الاصل الانشائية للمشروع?
 نعم لا ملاحظات
- هل سيؤثر المشروع في الكلفة المعيشية (مكافئة نفوم مواطنين من مناطق اخرى الى القرية بسبب المشاريع التي ستنفذ)?
 نعم لا ملاحظات
- هل تعتقد ان عملية ااشام او اعدة تأهل المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع?
 نعم لا ملاحظات

شكراً على وقتكم



استبيان الصندوق الاجتماعي للتنمية لمحافظة البراري

عزيزي المواطن... عزيزي المواطن...
تسري وزارة التخطيط / الصندوق الاجتماعي للتنمية (مع مودتي لغرض التشاور المجتمعي مع أبناء القرية حول الإجراءات البيئية والاجتماعية التي سيتم تنفيذها بخصوص تلويد المشاريع في القرية ومدى اثرها على المجتمع المحلي والبيئة المحيطة، راجين الإجابة بسبق وحيدة عن الاستبيان الذي نون الحاجة لذكر الاسم أو وسيلة الاتصال .

اسم المشروع : انشاء مركز صحي في قرية عمال الساجات

القضاء خاين للجهة القرية عمال الساجات
الجنس: ذكر
العمر: 30 سنة
الهوية: موظف مطاب سورية بيت

- هل تلك ادعاءات او مطالبات من قبل السكان المحليين بعادية الارض التملك عليها المشروع?
 نعم لا ملاحظات
- هل سيكون هناك ضرر على النشاطات و المصالح اليومية للأهلي بسبب الاصل الانشائية للمشروع?
 نعم لا ملاحظات
- هل هناك اي بنى تحتية ستأثر بسبب الاصل الانشائية للمشروع?
 نعم لا ملاحظات
- هل هناك اعتاد توطين لشخص او اعدة لشخص بسبب اقامة المشروع في القرية?
 نعم لا ملاحظات
- هل سوف يتأثر المجتمع المحلي بصورة سلبية نتيجة المشاريع المقامة?
 نعم لا ملاحظات
- هل اصحاب ااشام او اعدة تأهل المشروع ستؤثر بشكل سلب على مجاميع الاقر ضغطا والاطر خشاشة (النساء والمعلمين)?
 نعم لا ملاحظات
- هل تتوقع ازالة محاصيل زراعية او اشجار او اية غطاء نباتي تعود عليه بمواطني او سكان محليين بسبب الاصل الانشائية للمشروع?
 نعم لا ملاحظات
- هل سيؤثر المشروع في الكلفة المعيشية (مكافئة نفوم مواطنين من مناطق اخرى الى القرية بسبب المشاريع التي ستنفذ)?
 نعم لا ملاحظات
- هل تعتقد ان عملية ااشام او اعدة تأهل المشروع لها اثار ايجابية من الناحية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع?
 نعم لا ملاحظات

شكراً على وقتكم



استبيان الصلوق الاجتماعي للتنمية لمحافظة البراري

عزيزي المواطن... عزيزي المواطن...

لجوزي (وزارة التخطيط / الصلوق الاجتماعي للتنمية) مسح ميداني لغرض تطوير المجتمع مع ابناء القرية حول الإجراءات البيئية والاجتماعية التي سيتم تنفيذها بخصوص تنفيذ المشاريع في القرية ومدى اثرها على المجتمع المحلي والبيئة المحيطة، راجين الاجابة بصدق وحيادية عن الاستبيان التالي دون الحاجة لشكر الاسم او وسيلة الاتصال .

اسم المشروع : مركز صحي في قرية الموضري

القضاء : البراري الناحية : القرية الموضري
 الجنس : ذكر ذكر أنثى
 العمر : 33 سنة 1-10 11-20 21-30 31-40 41-50 51-60 61-70 71-80 81-90 91-100
 المهنة : موظف موظف طالب طلب مربية بيت

- هل تلك اعمالت او مخططات من قبل السكان المحليين بغنية الارض المقام عليها المشروع؟
 نعم لا ملاحظات
- هل سيكون هناك ضرر على النباتات و المصاحف اليومية للأهل بسبب الاعمال الانشائية للمشروع؟
 نعم لا ملاحظات
- هل هناك اي بلى تحلية ستتأثر بسبب الاعمال الانشائية للمشروع ؟
 نعم لا ملاحظات
- هل هناك اعادة توظيف لشخص او لعدة اشخاص بسبب إقامة المشروع في القرية؟
 نعم لا ملاحظات
- هل سوف يتأثر المجتمع المحلي بصورة سلبية نتيجة المشاريع المقامة؟
 نعم لا ملاحظات
- هل اعمال إنشاء او اعادة تأهيل المشروع ستؤثر بشكل سلبي على المجتميع الاثر ضغط والاثار هائلة (النساء والمواطنين) ؟
 نعم لا ملاحظات
- هل توفيق اقامة محاصيل زراعية او اشجار او اية غطاء تراثي تعود عاقبته لمواطنين او سكان محليين بسبب الاعمال الانشائية للمشروع؟
 نعم لا ملاحظات
- هل سيزداد المشروع في الكثافة السكانية (الكثافة قوم مواطنين من مناطق اخرى الى القرية بسبب المشاريع التي ستنفذ)؟
 نعم لا ملاحظات
- هل تعتقد ان عملية إنشاء او اعادة تأهيل المشروع لها اثار ايجابية من التنمية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع؟
 نعم لا ملاحظات

شكراً على وقتكم



استبيان الصلوق الاجتماعي للتنمية لمحافظة البراري

عزيزي المواطن... عزيزي المواطن...

لجوزي (وزارة التخطيط / الصلوق الاجتماعي للتنمية) مسح ميداني لغرض تطوير المجتمع مع ابناء القرية حول الإجراءات البيئية والاجتماعية التي سيتم تنفيذها بخصوص تنفيذ المشاريع في القرية ومدى اثرها على المجتمع المحلي والبيئة المحيطة، راجين الاجابة بصدق وحيادية عن الاستبيان التالي دون الحاجة لشكر الاسم او وسيلة الاتصال .

اسم المشروع : مركز صحي في قرية الموضري

القضاء : البراري الناحية : القرية الموضري
 الجنس : ذكر ذكر أنثى
 العمر : 33 سنة 1-10 11-20 21-30 31-40 41-50 51-60 61-70 71-80 81-90 91-100
 المهنة : موظف موظف طالب طلب مربية بيت

- هل تلك اعمالت او مخططات من قبل السكان المحليين بغنية الارض المقام عليها المشروع؟
 نعم لا ملاحظات
- هل سيكون هناك ضرر على النباتات و المصاحف اليومية للأهل بسبب الاعمال الانشائية للمشروع؟
 نعم لا ملاحظات
- هل هناك اي بلى تحلية ستتأثر بسبب الاعمال الانشائية للمشروع ؟
 نعم لا ملاحظات
- هل هناك اعادة توظيف لشخص او لعدة اشخاص بسبب إقامة المشروع في القرية؟
 نعم لا ملاحظات
- هل سوف يتأثر المجتمع المحلي بصورة سلبية نتيجة المشاريع المقامة؟
 نعم لا ملاحظات
- هل اعمال إنشاء او اعادة تأهيل المشروع ستؤثر بشكل سلبي على المجتميع الاثر ضغط والاثار هائلة (النساء والمواطنين) ؟
 نعم لا ملاحظات
- هل توفيق اقامة محاصيل زراعية او اشجار او اية غطاء تراثي تعود عاقبته لمواطنين او سكان محليين بسبب الاعمال الانشائية للمشروع؟
 نعم لا ملاحظات
- هل سيزداد المشروع في الكثافة السكانية (الكثافة قوم مواطنين من مناطق اخرى الى القرية بسبب المشاريع التي ستنفذ)؟
 نعم لا ملاحظات
- هل تعتقد ان عملية إنشاء او اعادة تأهيل المشروع لها اثار ايجابية من التنمية الاجتماعية بالنسبة للسكان القاطنين في المناطق القريبة من المشروع؟
 نعم لا ملاحظات

شكراً على وقتكم

Annex (3): IRAQI STANDARDS FOR AIR, NOISE, and Water

Ambient Air Quality Guidelines

Pollutant	Iraqi Standards		WHO Standards
	Concentration	Average Time	Concentration
CO	10 ppm	8 hours	N/A
	35 ppm	1 hour	N/A
SO ₂	0.1 ppm	1 hour	500 µg/m ³
	0.04 ppm	24 hours	20 µg/m ³
	0.018 ppm	1 year	N/A
NO ₂	0.05 ppm	24 hours	200 µg/m ³
	0.04 ppm	1 year	40 µg/m ³
Ozone (O ₃)	0.06 ppm	1 hour	100 µg/m ³
PM ₁₀	150 µg/m ³	24 hours	50 µg/m ³
PM _{2.5}	65 µg/m ³	24 hours	50 µg/m ³
	15 µg/m ³	1 year	15 µg/m ³
Total Suspended Particles	350 µg/m ³	24 hours	N/A
	150 µg/m ³	1 year	N/A
Falling Dust	10 t/Km ² /month (Residential Zone)	30 days	N/A
	20 t/Km ² /month (Industrial Zone)	30 days	N/A
Hydrocarbons	0.24 ppm	3 hours	N/A
Pb	2 µg/m ³	24 hours	N/A
	1.5 µg/m ³	3 months	N/A
	1 µg/m ³	1 year	N/A
Benzene	0.003 µg/m ³	1 year	N/A

Pollutant	Iraqi Standards		WHO Standards
	Concentration	Average Time	Concentration
Dioxin	0.6 pico g/m ³	1 year	N/A

Noise:

Law no. 41 of the year 2015: Noise Protection and Control / Noise Limits for Different Working Zones

Type	Allowable (dB)
Industrial	70
Commercial	70
Residential	55

Water:

The table below shows the limits defined for discharges to both natural waters (water resources) and sewers (which generally have higher permissible discharge limits).

Pollutant	Limits for discharge to water resources	Limits for discharge to public sewers
Color	-	-
Temperature	Less than 35°C	45°C
Suspended solids	60	750
pH	6 – 9.5	6 – 9.5
Dissolved Oxygen (DO)	-	-
Biochemical Oxygen Demand (BOD)	Less than 40	1,000
Chemical Oxygen Demand (COD)	Less than 100	-
Cyanide (CN ⁻)	0.05	0.5
Fluoride (F ⁻)	5.0	10
Free Chlorine (Cl ₂)	Traces	100
Chloride (Cl ⁻)	A. If the ratio of the amount of water discharged to the amount of source water is 1000:1 or	600

Pollutant	Limits for discharge to water resources	Limits for discharge to public sewers
	<p>less, the chloride concentration of the discharge is permitted at 1% of the concentration of the natural source before discharge.</p> <p>B. If the ratio of the amount of water discharged to the amount of source water is more than 1000:1 the wastewater discharge must not exceed a chloride concentration of greater than 600 mg/L.</p> <p>C. If the concentration of chloride in the source water is less than 200 mg/L then the permitted discharge limit must be established on a case by case basis</p>	
Phenol	0.01 – 0.05	5 – 10
Sulfate (SO ₄ ²⁻)	<p>A. If the ratio of the amount of water discharged to the amount of source water is 1000:1 or less, the sulfate concentration of the discharge is permitted at 1% of the concentration of the natural source before discharge.</p> <p>B. If the ratio of the amount of water discharged to the amount of source water is more than 1000:1 the wastewater discharge must not exceed a sulfate concentration of greater than 400 mg/L.</p> <p>C. If the concentration of sulfate in the source water is less than 200 mg/L then the permitted discharge limit must be established on a case by case basis</p>	300
Nitrate (NO ₃ ⁻)	50	-
Phosphate (PO ₄ ³⁻)	3	-
Ammonium (NH ₄ ⁺)	-	-
DDT	Nil	-
Lead (Pb)	0.1	0.1
Arsenic (As)	0.05	0.05

Pollutant	Limits for discharge to water resources	Limits for discharge to public sewers
Copper (Cu)	0.2	-
Nickel (Ni)	0.2	0.1
Selenium (Se)	0.05	-
Mercury (Hg)	0.005	0.001
Cadmium	0.01	0.1
Zinc (Zn)	2.0	0.1
Chromium (Cr)	0.1	0.1
Aluminum (Al)	5.0	20
Barium (Ba)	4.0	0.1
Boron (B)	1.0	1.0
Cobalt (Co)	0.5	0.5
Iron (Fe)	2.0	15
Manganese (Mn)	0.5	-
Silver (Ag)	0.05	0.1
Total Hydrocarbons & Derivatives	Allows discharge of total hydrocarbons to water sources and A1 and A2 according to the concentrations and limitations set forth in the tables below; the concentration of hydrocarbons must be measured discharging to the water source. Hydrocarbons shall not be discharged to water sources A3 and A4. For rivers in continuous flow 10 mg/l according to the ratio of the amount of wastewater discharged to the amount of the water source should not be less than 1000:1. For a river in a continuous flow 3 mg/L and in accordance with the ratio of the amount of the wastewater discharged to the amount of water source should not be 300:1 or less.	-
Sulfide (S ²⁻)	Nil	3.0
Ammonia (NH ₃)	Nil	10
Ammonia gas (free NH ₃)	Nil	6.0
Sulfur dioxide SO ₂	Nil	7.0
Calcium Carbide CaC	Nil	Not allowed
Organic solvents	Nil	Not allowed

Pollutant	Limits for discharge to water resources	Limits for discharge to public sewers
Benzene	Nil	0.5
Chlorobenzene	Nil	0.1
TNT	Nil	0.5
Bromine (Br ₂)	Nil	1 – 3

Annex (4): Contractor's Responsibilities (Arabic) مسؤوليات المقاول

يجب على مقاول الإنشاء الالتزام بالإجراءات التالية:

جودة الهواء

- الترطيب المنتظم للطرق بالماء لمنع الغبار
- التحكم في نواتج الحفر والتسوية للحد من إنتشار الغبار.
- أي مواد بناء قابلة للتطاير (أسمنت جاف وخلافه) يتم تخزينها في أكياس محكمة الغلق وتغطيتها لمنع تولد الغبار.
- الاحتفاظ بالمزوت والزيوت والطلاء والمواد الكيميائية الأخرى المستخدمة في الموقع بأقل كميات ممكنة وتخزينها في حاويات محكمة الغلق للحد من الأبخرة ؛
- لا يتم تشغيل محركات المركبات والآلات الأخرى إلا عند الضرورة لتجنب الانبعاثات غير الضرورية ؛
- يتم الحفاظ على جميع المعدات والآلات والمركبات المستخدمة في الموقع في حالة عمل جيدة في جميع الأوقات لضمان الحد الأدنى من استهلاك الوقود وعوادم الدخان. ينطبق هذا على الحافلات المستخدمة لنقل العمال من وإلى الموقع.
- منع الحرق المكشوف للمخلفات.
- يتم تغطية الشاحنة الناقلة لمواد/مخلفات البناء أو المواد المتربة الأخرى وذلك بعد التأكد من الاحتفاظ بمسافة ٠.٣ متر تحت الحافة العلوية لجدران الشاحنة ، بالقماش المشمع للتحكم في الغبار؛
- تغطية درم الحفر المخزن بصفة مؤقتة في الموقع بالمواد المناسبة ، مثل البولي إيثيلين أو ألواح النسيج لتجنب تشتت التربة.
- تحديد سرعة قصوى للمركبات والمعدات التابعة للمشروع بحيث ألا تتجاوز السرعة القصوى داخل حدود الموقع عن ١٠-١٥ كم/ساعة.
- توفير خط ساخن لتلقي الشكاوي ٧/٢٤

الضوضاء

- تطبيق جدول زمني مناسب لتجنب أي أعمال قد تسبب ضوضاء واهتزازات خلال الفترة من ١٠ مساء إلى ٦ صباحا.
- إقتصار تشغيل المعدات المستخدمة في أعمال البناء على أوقات محدودة خلال النهار حيث أنها ليست آمنة للعمل أثناء الليل. سيؤدي ذلك إلى تقليل اضطراب الضوضاء إلى حد كبير للمجتمعات القريبة من مواقع العمل ؛

- تقييد استخدام الآلات التي تصدر ضوضاء بالقرب من المستقبلات الحساسة ، واستخدام وسائل الحد من الضوضاء لآلات البناء ، إذا لزم الأمر ؛
- استخدام المركبات والمعدات المطابقة للمعايير الوطنية للضوضاء والاهتزاز ؛
- أثناء العمل ، يجب إغلاق أغطية المحرك للمولدات وضواغط الهواء وغيرها من المعدات الميكانيكية التي تعمل بالطاقة ، ووضع المعدات بعيداً عن المناطق السكنية قدر الإمكان ؛

- يجب توفير أغطية للأذنين / معدات حماية السمع لجميع العمال
- لا يتم تشغيل محركات المركبات والآلات الأخرى إلا عند الضرورة للتحكم في الضوضاء الناتجة ؛
- تطبيق نظام الشكاوى لتلقي الشكاوى المتعلقة بالضوضاء .

إدارة المخلفات الصلبة والخطرة

التقليل من المخلفات:

- شراء المواد بالكمية الدقيقة المطلوبة ، لتقليل الاستخدامات المتبقية غير المستخدمة.
- تقليل تولد النفايات في الموقع.
- وضع خطة إدارة بسيطة للنفايات.
- يجب جمع النفايات العامة ونقلها إلى المكان المخصص لذلك من قبل البلدية.
- يجب جمع نفايات الطعام ، حيثما أمكن ، مع مراعاة النظافة الشخصية ، للتخلص منها خارج الموقع من خلال مقاولين مرخصين.
- يجب وضع حاويات لتجميع النفايات في كل موقع عمل.
- يجب جمع النفايات الكيميائية في براميل (أو حاويات محكمة ممانعة) ، معنونة بشكل مناسب ، وم ثم يتم إرجاعها إلى المورد أو نقلها بأمان إلى المكان المخصص من قبل البلدية. يحتوي مكب النفايات هذا على مكان مخصص لاستقبال النفايات الخطرة والطبية على حد سواء ، ويجب إجراء عمليات التخزين والنقل والتعامل مع جميع المواد الكيميائية وفقاً لجميع المتطلبات التشريعية ، من خلال المقاولين المرخصين وبالتنسيق مع البلدية.
- يجب تخزين جميع النفايات الخطرة بشكل ملائم في مناطق محدودة ويجب تحديدها بوضوح على أنها "خطرة".
- يجب أن يتم نقل النفايات الخطرة والتخلص منها من خلال مقاولين مرخصين وبالتنسيق الوثيق مع البلدية ذات الصلة ووفقاً للمتطلبات والتعليمات القانونية.
- يجب إدارة السوائل الخطرة ، مثل المذيبات وعوامل مقاومة الصدأ طبقاً لمتطلبات التشريعات ذات الصلة.

- يجب إعداد جرد للمواد الخطرة لفترة البناء .
- يجب توفير صحيفة بيانات سلامة المواد (MSDS) للمواد الخطرة في الموقع أثناء البناء وإتاحتها وشرحها للعمال.
- يجب جمع نفايات المواد الهيدروكربونية ، بما في ذلك زيوت التشحيم ، للنقل الآمن خارج الموقع لإعادة استخدامها أو إعادة تدويرها أو نقلها أو التخلص منها في مكب معين من قبل البلدية.

إعادة استخدام النفايات وإعادة التدوير

- كلما أمكن ، سيعيد المقاول استخدام المواد القابلة للتدوير وإعادة تدويرها.
- يتم إعادة تدوير المخلفات التالية: الورق المقوى ، والمعادن ، وخردة المعادن مثل علب المشروبات الغازية ، وزيت مستهلك ، والورق ، والبلاستيك ، والخرسانة النظيفة ، وكذلك الغطاء النباتي المنزوع .

حفظ السجلات

- سيتم الاحتفاظ بكافة سجلات إزالة النفايات والإبلاغ عنها كما هو مطلوب في تقرير الأداء البيئي الشهري ؛
- السجلات التي سيتم الاحتفاظ بها تشمل: إيصالات وفواتير من مقاول نقل النفايات ومنشأة استلام النفايات
- يتم الاحتفاظ بالسجلات السالفة الذكر في سجل النفايات ، الذي يسجل تواريخ الجمع ونوع النفايات والكميات وشركة نقل النفايات والوجهة وتوقيع الشخص المفوض

تخزين النفايات ومعالجتها

- سيتم تخزين النفايات في حاويات أو صناديق. لن يتم تخزينها مباشرة على أرض غير مبطنة ؛
- سيتم تخزين نفايات إعادة التدوير في مناطق أو حاويات منفصلة ، ولن يتم خلطها مع أنواع النفايات الأخرى ؛
- يجب تخزين جميع النفايات الخطرة بشكل ملائم في المناطق المحصورة وتحديدها بوضوح على أنها "خطرة"
- معالجة النفايات وإدارتها بشكل صحيح من خلال فصل النفايات الصلبة عن النفايات الخطرة وعدم مزجها في مكب النفايات ؛
- سيتم جدولة إزالة النفايات من الموقع ، بحيث يكون لديك دائماً سلة للنفايات متاحة للإستخدام في الموقع ، وللتأكد من عدم الملئ الكامل للنفايات/الحاويات ؛
- أي مناطق تخزين نفايات مؤقتة (غير متضمنة في صناديق أو حاويات) سيتم تغطيتها و / أو إحاطتها بسياج شبكي لمنع هبوب الرياح منها إلي الموقع ؛ و
- يتم تخزين النفايات السائلة ، بما في ذلك نفايات الزيوت والمواد الكيميائية السائلة ، في براميل / حاويات محكمة الإغلاق على سطح خرساني.

التخلص من النفايات

- يجب أن يتم نقل النفايات الخطرة والتخلص منها من خلال المقاولين المرخص لهم وبالتسسيق الوثيق مع البلدية المختصة بذلك.
- يجب جمع النفايات العامة ونقلها إلى المكب المعين من قبل البلدية.

جودة التربة

- وضع علامات لتحديد مكان الحفر عن طريق سور ولاصقات وعلامات ارشادية.
- إتباع الأساليب السليمة للحد من الانسكابات/التسربات؛
- التداول والإدارة السليمة للمخلفات ومواد البناء والمواد الخطرة.
- يتم تخزين النفايات داخل صناديق أو حاويات، وليس على الأرض مباشرة؛
- عدم دفن و / أو حرق النفايات المنزلية في موقع المشروع.
- التخزين المؤقت للنفايات الصلبة عن طريق الاحتواء المناسب لتجنب انتشار النفايات والرائحة وتجنب الغبار؛ احتواء ثانوي لمنع التسرب.
- ضمان أن تكون حاويات المواد السائلة الخطرة / حاويات النفايات محكمة الإغلاق بشكل صحيح دائماً ومؤمنة من الانقلاب / السقوط / التلف / أشعة الشمس المباشرة أثناء النقل والتخزين؛
- تخزين المواد الكيميائية، مثل الزيوت ومضادات التآكل بكميات قليلة بالموقع.
- تحفظ جميع أنواع الوقود والمواد الكيميائية السائلة في أوعية أو براميل أو خزانات محكمة الإغلاق وفوق سطح الأرض.
- يجب إجراء الصيانة والإصلاح الروتيني للمعدات / المركبات المتحركة في ورشة عمل.
- يتم الاحتفاظ بمجموعات التنظيف الخاصة بالانسكابات بالقرب من المناطق المستخدمة لتخزين الوقود أو المواد الكيميائية السائلة وسيتلقى الموظفون تدريباً على استخدام أدوات تنظيف الانسكابات؛
- تخزين الزيت ومواد الطلاء في مكان مناسب له قاعدة واقية، مثل بلاطة خرسانية، لمنع أي تغلغل في الأرض؛
- التأكد من وجود البراميل والحاويات المستخدمة في تخزين الوقود أو المواد الكيميائية السائلة (بما في ذلك الزيوت المستعملة والدهانات) في حالة جيدة وخالية من الصدأ أو التلف؛
- تنظيف موقع البناء من المخلفات الصلبة قبل إغلاقه.
- تخصيص مناطق معينة لتخزين مخلفات التربة ومخلفات البناء.

- يجب أن يتم ترميم التربة السطحية والمناطق المتضررة بعد انتهاء مرحلة البناء .

جودة المياه

- يجب تنفيذ أعمال الأرض (إزالة الغطاء النباتي، والحفر، والتسوية) خلال فترات الطقس الجاف.
- يجب أن يتم تخزين التربة على مسافة آمنة بعيداً عن المجاري المائية.
- يتم تخزين النفايات داخل صناديق أو حاويات ، وليس على الأرض مباشرة لمنع التسرب ؛
- عدم إلقاء / التخلص من النفايات الصلبة (غير الخطرة أو الخطرة) ومياه الصرف في المسطحات المائية أو بالقرب منها.
- التنظيف الجيد لتقليل الانسكابات / التسريبات.
- الاستجابة السريعة للانسكابات العرضية للوقود ومواد التشحيم والمواد السامة أو الضارة الأخرى ، واستعادتها والتخلص منها بشكل مناسب (يجب على المقاول إعداد خطة استجابة للطوارئ).
- عدم غسل أو صيانة المركبات والآلات بالقرب من المسطحات المائية.

المياه الجوفية:

- سيتم تخزين النفايات داخل حاويات أو حاويات نفايات ، وليس مباشرة على الأرض لمنع التسرب ؛
- يجب إجراء الصيانة والإصلاح الروتينية للمعدات / المركبات المتحركة في ورشة ؛
- إجراء الصيانة والتفتيش الدوريين على خزانات الصرف الصحي والسباكة ومرافق الصرف الصحي المرتبطة بها لضمان ظروف صحية جيدة

السلامة والصحة المهنية

يجب على المقاول إعداد خطة الصحة والسلامة المهنية وتحليل مخاطر العمل خلال مرحلة البناء. سيقوم المقاول أيضاً بتعيين شخص متخصص للإشراف على الخطة. فيما يلي بعض تدابير التخفيف الرئيسية التي يجب تضمينها في الخطة:

- يجب تدريب العمال على تحديد وتقييم مخاطر السقوط وأن يكونوا على دراية كاملة بكيفية التحكم في التعرض لمثل هذه المخاطر.
- يجب على العمال وموظفي الموقع دائماً استخدام معدات الحماية الشخصية خاصة عند التعامل مع المواد السامة.
- يجب على العمال الامتثال لقاعدة إدارة الصحة والسلامة المهنية التي تخص الاستخدام الآمن للسلام.
- لمنع مخاطر معدات البناء الثقيلة ، يجب على العمال اتباع إرشادات سلامة البناء المصممة للقضاء على التعرض لمثل هذه الإصابات والحوادث
- يجب أن تكون معدات الطوارئ (مواد تنظيف الانسكاب ، طفايات الحريق ، إلخ ..) متوفرة دائماً في الموقع.

- يجب توفير الفحوصات الصحية الأولية والدورية للعمال.
- يجب أن تتضمن الخطة تدابير الاستجابة لفيروس كورونا المستجد كما هو موضح في الملحق ٤.
- يجب تزويد العمال بتأمين صحي (يغطي تقديم الدعم الطبي في حالة الإصابة بالأمراض) وتأمين السلامة (الذي يغطي العمال في حالة الحوادث)

السلامة المجتمعية

- يجب وضع خطط أمن وأمان كافية لمنع وصول الجمهور إلى مواقع العمل والمواد الخطرة والمخلفات
- يجب على المقاول الالتزام بخطة إدارة المخلفات لتجنب أي عوائق أو مخاطر على السلامة.
- يجب توفير آلية للتظلمات لضمان التواصل الفعال فيما يتعلق بمخاوف المجتمع.

السلامة المرورية

- يجب تثبيت لافتات أمان لإخطار المجتمع بأن مركبات البناء ستستخدم الطرق المؤدية إلى محطة المياه
- يجب على المقاول التأكد من أن النقل المرتبط بالبناء يتوافق مع حدود السرعة

عمالة الأطفال

- يجب كتابة شروط صارمة في عقد المقاول لحظر تعيين الأطفال دون سن ١٨ عامًا
- يجب أن يحتفظ المقاول بنسخة من هويات جميع العاملين

التراث الثقافي

- اتباع إجراء العثور على الآثار (مرفق رقم (٣))

تدفق العمالة و العنف القائم على النوع الاجتماعي

- إعداد مدونة سلوك مناسبة تنص على التزام العمال تجاه فئات المجتمع والسلوكيات التي يجب تجنبها
- يجب تدريب جميع العاملين على قواعد السلوك.
- يجب توقيع قواعد السلوك من قبل المقاول من الباطن
- تعريف بمدونة قواعد السلوك يتم إجراؤه كل أسبوعين للعاملين الدائمين والوافدين الجدد قبل بدء العمل.
- تطبيق المتطلبات الكاملة المتعلقة بتشغيل آلية التظلم بما في ذلك القنوات المجهولة
- زيادة وعي السكان المحليين حول التزام المشروع تجاه المجتمعات والتدابير المتخذة لذلك من خلال المشاورات العامة ومناقشات على شكل مجاميع.
- تطبيق العقوبات على العاملين المخالفين لقواعد السلوك

البنية التحتية والمرافق

- في حالة تلف أحد المرافق الموجودة تحت الأرض وأنابيب البنية التحتية ، يجب اتباع الإجراءات القياسية ، بالإضافة إلى إعداد تقرير توثيقي للحادث.
- في حالة قطع المياه، يجب إعلام المجتمع المحلي قبل القطع
- تنفيذ آلية للشكاوى

إدارة الخدمات الموقعية

- إقامة المخيم داخل أراضي محطة المياه
- ضمان إقامة كرفانات البناء الملائمة ومرافق الصرف الصحي للبناء، أي إنشاء خزان لتخزين المياه العادمة المنزلية الناتجة عن المخيم.
- اتباع أفضل ممارسات إدارة المخلفات وتدابير التخفيف الواردة في خطة الإدارة البيئية والاجتماعية.
- مراقبة ظروف العمل عن كثب ، وفرض تدابير للتحكم في انتقال الأمراض المعدية.
- الحفاظ على آلية فعالة للتظلم (تمت مناقشتها في فصل مشاركة أصحاب المصلحة). يجب أن تكون آلية معالجة المطالم هذه حساسة للنوع الاجتماعي وتضمن السرية
- انخراط محدد مع النساء والفتيات يتضمن التوعية بالعنف القائم على النوع الاجتماعي والوصول إلى قنوات مجهولة للإبلاغ عن الحالات.

العقوبات وإلغاء التعاقد

إذا فشل المقاول في الوفاء بأي من الالتزامات المذكورة أعلاه بموجب العقد ، فسيتم تطبيق العقوبات التالية:

المراحل	الإجراء	التفاصيل
المرحلة الأولى	التحذير	يجب أن يتلقى المقاول بيان تحذير يتضمن الإجراء التصحيحي المقترح. يجب أن تبدأ جميع الإجراءات التصحيحية في مدة لا تزيد عن أسبوعين. يجب على المقاول اتخاذ الإجراء التصحيحي بشكل سريع.
المرحلة الثانية	الدفعات النقدية	في حالة عدم التزام المقاول بخطة الإدارة البيئية والاجتماعية ، لا يحق للمقاول الحصول على الدفعات النقدية بموجب شروط هذا العقد. لن يتم صرف المدفوعات حتى يتم وضع خطة عمل واضحة ويبدأ المقاول في تنفيذ الإجراءات المتفق عليها.
المرحلة الثالثة	إلغاء التعاقد	لن يتم إنهاء العقد بسبب عدم الوفاء بالتزامات خطة الإدارة البيئية والاجتماعية. ومع ذلك ، سيخصم مالك المشروع تكلفة تنفيذ خطة الإدارة البيئية والاجتماعية من العقد. وفي هذه الحالة يجب إرفاق دليل واضح على فشل المقاول في تنفيذ خطة الإدارة البيئية والاجتماعية