



REPUBLIC OF LEBANON
COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

**Damaged Roads Clearing and Restoration
in South Lebanon**

Tender Documents

**Environmental and Social Management Plan (ESMP) Checklist
Bint Jbeil Caza**

January 2026
Revision 2



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LIST OF ABBREVIATIONS & ACRONYMS

Abbreviations and Acronyms	Description
ACM	Asbestos-Containing Materials
CDR	Council for Development and Reconstruction
CDW	Construction and Demolition waste
CNRS-L	National Council for Scientific Research- Lebanon
CoC	Code of Conduct
CoM	Council of Ministers
DMF	Debris Management Framework
DRR	Disaster Risk Reduction
E&S	Environmental and Social
EHS	Environmental Health and Safety
EIA	Environmental Impact Assessment
EMP	Environmental Monitoring Plan
EOD	Explosive Ordnance Disposal
EORE	Explosive Ordnance Risk Education
ERT	Emergency Response Team
ERW	Explosive Remnants of War
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESHS	Environmental, Social, Health, And Safety
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
GBV	Gender Based Violence
GIS	Geographic Information System
GRM	Grievance Redress Mechanism
H&S	Health and Safety
IDPs	Internally Displaced Persons
IFC	International Finance Cooperation
ILO	International Labour Organization
ISF	Internal Security Forces
ITS	Informal Tented Settlement
KPIs	Key Performance Indicators
LAF	Lebanese Armed Forces
LEAP	Lebanon Emergency Assistance Project
LMP	Labor Management Procedures
LMAC	Lebanon Mine Action Center
LULC	Land Use Land Cover
MoC	Ministry of Culture
MoD	Ministry of Defense
MoE	Ministry of Environment
MoIM	Ministry of Interior and Municipalities
MoL	Ministry of Labour
MoPH	Ministry of Public Health

MoPWT	Ministry of Public Works and Transportation
NGOs	Non-Governmental Organizations
NTS	Non-Technical Survey
OHS	Occupational Health and Safety
OSHA	Occupational Safety and Health Administration
PAPs	Project Affected Persons
PFA	Psychological First Aid
PPE	Personal Protective Equipment
PIU	Project Implementation Unit
PM	Particulate Matter
RoW	Right of Way
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SOPs	Standard Operating Procedures
TMP	Traffic Management Plan
ToR	Terms of Reference
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Program
UNOPS	United Nations Office for Project Services
UXO	Unexploded Ordnance
WASH	Water, Sanitation, and Hygiene
WB	World Bank
WBG	World Bank Group

1 INTRODUCTION

1.1 Project Rationale and Objectives

In response to urgent national priorities, the proposed Damaged Roads Clearing and Restoration project in South Lebanon—executed by the Council for Development and Reconstruction (CDR) as the implementing agency, supported by the Ministry of Public Works and Transport (MoPWT), and funded by the World Bank (WB)—aims to restore conflict-damaged classified and local roads within the Cazas of Bint Jbeil, Sour, Marjeyoun, Nabatiyeh, Hasbaya, and the Southern Suburbs of Beirut.

The works fall under Component 1 (Immediate Response) and Component 2 (Rapid Recovery) of the Lebanon Emergency Assistance Project (LEAP). The project addresses immediate response to the 2023–2024 conflict and supports recovery, including proper rubble management, restoration of vital infrastructure services, and rehabilitation of damaged roads in priority areas.

Component 1 covers the removal of obstacles from conflict-damaged Class A roads and initial temporary restoration works. Activities include debris clearance, reconstruction of base and subbase layers, and localized temporary asphalt surfacing to restore immediate access. Component 2 addresses localized repair, including patching, of selected Class B road sections to improve trafficability, enhance road safety, and support socio-economic recovery. Only road sections damaged by the conflict are eligible under both components.

This Environmental and Social Management Plan (ESMP) Checklist applies exclusively to Component 1 (Immediate Response) and covers Class A road segments in Bint Jbeil Caza requiring debris clearance and initial temporary restoration works.

1.2 Environmental and Social Category

Under the World Bank Environmental and Social Framework (ESF), the Project is classified as Moderate Risk. This classification reflects that the proposed works are limited in scale, confined to existing road corridors, and associated impacts are expected to be largely localized and temporary when managed through appropriate mitigation measures.

However, the operating environment remains complex due to post-conflict conditions, where contextual risks—including security constraints, Unexploded Ordnance / Explosive Remnants of War (UXO/ERW) presence, structural instability, and population return dynamics—require strict operational controls and continuous supervision.

For this reason, an ESMP Checklist is required for each sub-project (per Caza). The ESMP Checklist ensures that Environmental, Social, Health, and Safety (ESHS) risks are systematically identified, managed, and monitored throughout implementation. It also enables the rapid initiation of works, which is essential in an emergency context where restoring safe access and connectivity is critical for conflict-affected communities. In World Bank emergency-response operations, simplified yet robust instruments such as the ESMP Checklist are specifically designed to enable rapid, field-ready implementation while ensuring full alignment with the ESF.

1.3 Key Environmental, Social, and Health Impacts

Environmental impacts primarily include (1) fugitive dust and noise from clearing, grading, and debris handling; (2) temporary risks to soil and surface water quality due to rain-induced runoff from exposed soils or loose debris, and from improper handling of rubble or waste; (3) the possibility of minor damage to shallow utilities; and (4) disturbance to remaining natural vegetation along road shoulders. In post-conflict settings, improper disposal of debris—whether along the road alignment, in wadis or riverbeds, agricultural lands, or other non-approved locations—can cause significant off-site impacts. These risks,

however, are fully preventable when debris is handled, transported, and disposed of in designated Ministry of Environment (MoE)-approved Temporary Storage Sites (TSS).

Potential social risks include (1) risks of sexual harassment, exploitation, or abuse (SEA/SH); (2) risks of child labor; and (3) poor labor conditions if the contractor lacks robust Labor Management Procedures (LMP) and fails to enforce labor and working-condition requirements. In the post-conflict emergency context, weak labor management can expose rapidly mobilized workers—especially vulnerable or temporary laborers—to unsafe tasks, unclear supervision, long hours, and inadequate welfare conditions. (4) Community- and worker-level risks include exposure to ERW/UXO, unstable or partially collapsed roadside structures, and potentially hazardous rubble, including asbestos-containing materials. Accidental discovery of human remains during debris clearance may also occur and carries significant psychosocial, procedural, and public-health implications, requiring immediate work suspension and coordination with competent national authorities.

(5) Additional community-level risks include temporary access constraints, localized traffic disturbance, and traffic-safety incidents associated with debris transport and machinery movement during road-clearing, debris hauling, and initial restoration activities. While most target roads are currently closed or only partially accessible, such risks may arise primarily on open or partially open road segments and adjacent connecting roads, particularly in villages where returnees have reoccupied homes or sensitive receptors are present. (6) Social-exclusion risks may also arise if affected people are not adequately consulted or informed, potentially leading to perceptions that the selection of road segments is not aligned with community needs or priorities. These risks include challenges related to information disclosure and the effective use of the Grievance Redress Mechanism (GRM), particularly in frontline or low-return villages.

When properly managed in line with relevant Environmental and Social (E&S) instruments and under effective supervision, the project is expected to deliver positive social outcomes. Beyond restoring mobility and safe access, road-clearing activities may support early recovery by generating short-term employment opportunities for local labor. In addition, the project can strengthen coordination with municipalities and local actors during implementation, indirectly contributing to social cohesion and community participation in recovery processes.

1.4 ESMP Checklist Purpose

The ESMP Checklist for Bint Jbeil serves as practical and enforceable guidance for the Contractor, outlining mandatory mitigation and monitoring measures to address site-specific ESHS risks. It ensures full alignment with national regulations, the WB ESF, relevant Environmental and Social Standards (ESSs), and the World Bank Group (WBG) Environmental, Health, and Safety (EHS) General Guidelines (2007).

In line with **ESS1 (Assessment and Management of Environmental and Social Risks and Impacts)**, the Checklist applies a proportional approach to risk identification, impact assessment, and the adoption of the mitigation hierarchy, supported by robust monitoring and adaptive management mechanisms. Furthermore, in accordance with **ESS2 (Labor and Working Conditions)**, it integrates Labor Management Procedures (LMPs), the worker GRM, Codes of Conduct (CoC)—including SEA/SH clauses—and measures to ensure safe, fair, and non-discriminatory working conditions, as well as Occupational Health and Safety (OHS) protocols, labor safety requirements, and prevention of child labor.

Under **ESS3 (Resource Efficiency and Pollution Prevention and Management)**, the Checklist addresses resource efficiency, management of debris and other waste materials, emissions and dust control, and the safe handling of hazardous materials. Consistent with **ESS4 (Community Health and Safety)**, it includes traffic management, safe operation of machinery, and UXO/ERW risk management. It also includes provisions to prevent and respond to Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH).

In alignment with **ESS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources)**, the Checklist applies biodiversity protection measures where road segments run adjacent to sensitive natural habitats. Additionally, in alignment with **ESS8 (Cultural Heritage)**, the Checklist includes a Chance-Find Procedure should culturally sensitive assets be encountered. Finally, **ESS10 (Stakeholder Engagement and Information Disclosure)** requirements on stakeholder engagement, information disclosure, inclusive consultations, and a functional and responsive GRM—including SEA/SH-sensitive pathways—are fully integrated throughout the Checklist.

1.5 OHS Management Plan (to complement the ESMP Checklist)

Given the post-conflict context, several OHS risks cannot be fully eliminated and must therefore be systematically managed. To ensure a comprehensive approach to worker protection, an OHS Management Plan will be annexed to each Caza-level ESMP Checklist. The Plan aligns with Lebanese legislation, WB ESS2, ISO 45001, relevant Occupational Safety and Health Administration (OSHA) standards, and the MoE/United Nations Development Programme (UNDP) (2025) Standard Operating Procedures (SOPs) for Post-Disaster Rubble Management. These SOPs form part of the United Nations (UN)-endorsed Debris Management Framework (DMF) developed by UNDP, UN-Habitat, and the United Nations Office for Project Services (UNOPS), and provide detailed guidance on safe and environmentally sound debris handling, including mine-action requirements coordinated by the Lebanese Armed Forces (LAF) and the Lebanon Mine Action Center (LMAC).

The OHS Management Plan outlines hazard identification, mitigation measures, monitoring procedures, and emergency response protocols related to ERW/UXO, human remains (chance finds), unstable or partially collapsed roadside structures, heavy machinery operation, traffic hazards, and exposure to hazardous or contaminated materials. It establishes clearance and safe-work procedures required throughout implementation and includes provisions for escalating security-related risks in areas where sudden attacks or shifts in the security situation may occur.

1.6 Methodology

This ESMP Checklist was prepared by TIVÈL Consultancy at the request of Dar Al Handasah Nazih Taleb & Partners in accordance with the Project Terms of Reference (ToR) and World Bank ESF requirements.

The identification of targeted road segments was carried out through technical review, validation with the Ministry of Public Works and Transportation (MoPWT), consultations with concerned parties, and geospatial analysis as outlined in the Inception Report. Baseline environmental and social information was compiled using municipal inputs, previous assessments, high-resolution National Council for Scientific Research – Lebanon (CNRS-L) aerial imagery (2025), and Geographic Information System (GIS) analyses.

GIS buffers were applied along each road alignment to identify sensitive receptors and quantify land-use/land-cover classes, geological formations, and hydrogeological sensitivity intersecting the corridors (Annex2a). Additional baseline context—including water resources and socio-economic characteristics—was drawn from national datasets and updated information provided by the Unions of Municipalities. This analytical process supported the identification of Project-Affected People (PAPs) and the evaluation of impact significance, with high-sensitivity locations to be verified during implementation.

Stakeholder engagement was carried out in accordance with the project Stakeholder Engagement Plan (SEP) through official invitations, calls, and the public consultation held on 27 November 2025, complemented by targeted follow-ups with the Ministry of Environment (MoE) and Non-Governmental Organizations (NGOs).

2 LEGAL AND INSTITUTIONAL FRAMEWORK

2.1 National Legal Framework

The ESMP Checklist is prepared in accordance with applicable Lebanese environmental, social, labor, and OHS legislation, including Law 444/2002 on environmental protection, Decree 8633/2012 on Environmental Impact Assessment (EIA), Law 80/2018 on integrated solid waste management, Decrees 5605/2019 and 5606/2019 governing Construction and Demolition Waste (CDW) and hazardous waste, Decree 11802/2004 on OHS, the Lebanese Labor Law, and Traffic Law 243/2012. In addition, MoE Circular 6/1 (2024) on post-conflict debris staging and disposal is fully integrated into the debris management requirements of this ESMP Checklist.

2.2 Institutional Framework

The project is implemented by CDR in coordination with MoPWT, with support from the MoE, Ministry of Labor (MoL), Internal Security Forces (ISF), Ministry of Defense (MoD) : the Lebanese Armed Forces / Lebanon Mine Action Center (LAF/LMAC), the Directorate General of Antiquities / Ministry of Culture (DGA/MoC), the Governorates, and the concerned municipalities. Their respective roles in debris management oversight, labor enforcement, traffic control, UXO/ERW safety, and cultural heritage management are essential for proper implementation.

2.3 Environmental Standards

Environmental emissions and discharges from the project must at all times comply with the relevant national standards established by MoE — in particular MoE Decision 52/1 (1996) (for noise, ambient air and water/soil quality), MoE Decision 16/1 (2022) (for air-emission ELVs relating to exhaust from backup generators or construction machinery) and — where relevant — MoE Decision 8/1 (2001) (for wastewater discharge and other effluent limits). In addition, emissions — especially noise — must also comply with the stricter limits defined by World Bank Group (WBG) / IFC General EHS Guidelines, and in case of divergence between national and international standards, the more stringent threshold shall apply.

Where domestic wastewater is generated from workers' facilities (e.g. portable portacabins or temporary sanitary installations), discharge into sewage systems (if available) must follow the MoE wastewater-discharge limits defined under Decision 8/1 (or any successor regulation). For other liquid emissions — such as accidental spills or contaminated runoff — routine sampling and quantitative testing may not be practicable (given the relatively small scale and irregular occurrence), but prevention and strict management measures must nevertheless be in place to avoid any uncontrolled release to soil, water or environment.

Thus, during all phases of works execution, the project must adopt the stricter applicable standard (national or WBG/IFC) for any emission or discharge type, to ensure compliance.

2.4 World Bank Environmental and Social Standards (ESSs)

2.4.1 World Bank ESSs

The project follows the World Bank ESF. The relevant ESSs—already described in section 1.4—are: **ESS1, ESS2, ESS3, ESS4, ESS6, ESS8, and ESS10.**

Two standards are **not relevant** to this project: **ESS5** – Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement (no land acquisition or displacement) and **ESS7** – Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities (no communities of this category in the project area).

2.4.2 Additional Guidance

Activities will follow the WBG General EHS Guidelines (2007) and the Good Practice Note on SEA/SH in IPF Projects Involving Civil Works (2022). Relevant guidance from United Nations Environment Program (UNEP), UNDP, and MoE on sustainable rubble management and debris pre-processing is also applied to ensure alignment with international good practice.

2.4.3 Consultation, Disclosure and GRM

Transparency and information access are fundamental principles of WB-financed projects. They are essential for effective stakeholder engagement, trust-building, and the successful implementation of the Project, in line with World Bank Environmental and Social Standard ESS10. These measures also help raise public awareness of the WBG's development role and mission.

Accordingly, a formal public consultation process was carried out during the preparation of this ESMP Checklist, and stakeholder inputs and concerns were documented and considered in its finalization. The final ESMP Checklist will be disclosed on the CDR website prior to commencement of works, and the project's GRM will remain accessible to all stakeholders throughout implementation, as detailed below.

2.4.3.1 Stakeholder Engagement

Stakeholder engagement for this ESMP Checklist was carried out in accordance with project SEP and followed a transparent and inclusive process. Engagement included residents, local authorities (Governorates of South and Nabatieh, municipalities, and Unions of Municipalities), and civil society organizations. Vulnerable groups—such as women, elderly persons, persons with disabilities, displaced households, returnees, poor families, refugees, and informal workers—were reached through local authorities and active NGOs.

Invited international and local NGOs included UN-Habitat, Action Against Hunger, Anera, Acted, SHIELD, Avsi Lebanon, Nabaa, Abaad, KAFA, Amel Association, and the Imam Sadr Foundation.

Additional stakeholder mapping covered the DGA (invited to the meeting), LAF/LMAC, ISF, and Majles el-Janoub for coordination during implementation.

The process also included coordination meetings with the MoPWT, MoE, and CNRS-L to verify technical data, confirm debris-management requirements under MoE Circular 6/1 (2024), and access updated aerial imagery and GIS layers.

The public consultation meeting for Sour and Bint Jbeil Cazas was held on 27 November 2025 in Beirut, with 17 participants (of whom two were women). MoPWT participated, MoE provided inputs through follow-up calls, and one local NGO (جمعية فكر وإنسان) attended. Participants raised technical, environmental, and social concerns—including debris-management procedures, UXO/ERW clearance requirements, eligibility of road segments, and contractor obligations—and expressed their readiness to support access arrangements, community communication, and focal-point designation during implementation.

Targeted follow-up calls with Anera, AVSI Lebanon, and Acted provided further insights into post-conflict conditions, vulnerable groups, and effective communication approaches. NGOs emphasized that door-to-door outreach remains the most reliable method for reaching returning households in low-return villages, while coordination with the Governor, Disaster Risk Reduction (DRR) units, and municipalities constitutes their primary institutional channel for community engagement. AVSI confirmed that return rates are higher where essential services have been restored and highlighted persistent rubble accumulation and uncertainty regarding environmentally compliant debris management, reinforcing the need for strong environmental controls and close coordination with municipalities.

During the consultation meeting, the Project's Grievance Redress Mechanism (GRM) was presented—including telephone, email, and written channels. All feedback has been integrated into this ESMP Checklist, and a detailed consultation log is provided in Annex2b. Key issues raised during the consultation are summarized in the Site Passport (Part 1 of the ESMP Checklist).

2.4.3.2 Grievance Redress Mechanism (GRM)

The Project has two complementary Grievance Redress Mechanisms (GRMs), ensuring accessible, confidential, and survivor-centered reporting throughout implementation:

Community GRM: Available to all Project-Affected Persons (PAPs), including residents, businesses, road users, displaced households, returnees, vulnerable groups, and informal waste pickers who may interact with debris or TSSs. Complaints or information requests—including SEA/SH-related concerns—can be submitted confidentially via phone (01-980096), fax (01-981255), email (GRM.LEAP@cdr.gov.lb), written submissions to CDR (Tallet El-Serail, Beirut), or through municipal focal points and the supervising consultant. GRM information is disclosed through municipal boards, the CDR website, site signage, and community channels.

Worker GRM: A dedicated mechanism, consistent with ESS2 and the LMP, is available to all workers. Worker grievances—covering labor conditions, SEA/SH, and work safety—may be submitted through the same channels or via employer-designated mechanisms, without fear of retaliation.

Detailed resolution structures, timelines, referral pathways, and grievance-log requirements for both GRMs are provided in Annex 2c.

2.4.3.3 Information Disclosure and Reporting

The ESMP Checklist will be disclosed on the CDR website and at the concerned municipalities. Engagement with municipalities, unions, and local stakeholders will continue throughout implementation. All grievances and stakeholder communications will be recorded, monitored, and reported. Reporting will include qualitative and quantitative indicators to assess the effectiveness of engagement and GRM performance. Regular feedback will be communicated to stakeholders to ensure transparency, continuous improvement, and full alignment with WB ESS10 on Stakeholder Engagement and Information Disclosure.

3 APPLICATION OF THE ESMP CHECKLIST

The ESMP Checklist provides pragmatic, user-friendly guidance for addressing predictable, localized ESHS impacts. It operationalizes the environmental and social commitments set out in the Environmental and Social Commitment Plan (ESCP) by translating them into contractor-level actions, including mitigation measures, monitoring requirements, and capacity-building provisions.

3.1 ESMP Structure

The ESMP Checklist consists of an introductory section and three main parts:

- **Introduction, Legal context, and ESMP application and Monitoring** – Presents the project background, environmental and social risk classification, and the purpose and scope of the ESMP Checklist.
- **Part 1:** consolidating all project-specific information, including site characteristics, institutional and legislative context, scope of works, and environmental and social baseline conditions. It also summarizes consultation outcomes and capacity-building needs. This section provides the necessary inputs for the environmental and social screening (Part 2) and the monitoring plan (Part 3).

- **Part 2: Environmental and Social Screening and Mitigation Measures** – A structured Yes/No screening table linking proposed activities to potential ESHS risks, followed by the corresponding mitigation measures consistent with national regulations and WB ESSs.
- **Part 3: Monitoring Plan** – Defines monitoring indicators, frequency, responsibilities, and methods for verifying compliance with mitigation measures during implementation, in line with WB requirements.

Parts 2 and 3 of the ESMP Checklist are intended to be inserted directly into bidding documents to ensure that contractors fully understand, plan, and cost all environmental and social obligations.

3.2 Implementation Approach

The contractor is responsible for implementing all ESMP Checklist measures, under the supervision and monitoring of the implementing agency, CDR (through the Project Implementation Unit (PIU) and the Supervising Engineer). CDR reports environmental and social performance to the WB in line with ESF requirements.

The ESMP Checklist will be included in the bidding package, and the contractor shall be required to prepare and implement a Contractor ESMP (C-ESMP) consistent with the ESMP Checklist and the OHS Management Plan prior to commencement of works. Key E&S obligations will be incorporated as binding clauses within the contract.

Works may only commence once all Pre-Commencement Requirements are completed. Given the post-conflict context and risks from UXO/ERW and hazardous debris, the Contractor must obtain LAF/LMAC authorization confirming that areas are cleared or approved for supervised work, ensure all personnel are trained with STOP-WORK authority, and submit a site-specific Debris Management Plan for approval by the Supervising Engineer and CDR (PIU) in coordination with MoE, as guided by this ESMP Checklist.

Additional site-specific or operational measures—including coordination with local authorities, community notification, GRM/signage display, hazard verification, and emergency procedures—must also be implemented per the ESMP Checklist and OHSMP. Works may proceed only with authorization from LAF/LMAC and the Supervising Engineer/CDR (PIU). A project mechanism shall ensure coordination with MoD, LAF, and LMAC to provide necessary authorizations, guidance, and operational support during implementation.

3.3 Application Across Project Phases

3.3.1 General Identification Phase

- Identify the specific road segments targeted for clearing and initial restoration.
- Prepare the draft ESMP Checklist (Parts 1–3) based on available baseline information.
- Use Part 2 to link typical activities to potential environmental and social risks and to outline initial mitigation measures.

The draft ESMP Checklist provides environmental and social inputs that guide the engineering design process from an early stage.

3.3.2 Detailed Design and Tendering Phase

- Prepare detailed technical specifications and bills of quantities for planned works.
- Update and finalize the ESMP Checklist based on the final technical design and any site-specific assessments needed.

- Disclose the ESMP Checklist prior to tendering and attach it to bidding and supervision documents.
- Require contractors to comply with all ESMP Checklist provisions and to implement mitigation and monitoring measures, together with the separately prepared OHS Management Plan.

3.3.3 Works Implementation and Supervision Phase

- Monitor environmental and social compliance on-site through CDR's PIU E&S specialists and the supervising engineer.
- Apply Part 2 to verify implementation of mitigation measures and Part 3 to track monitoring requirements and performance indicators.
- Conduct regular site inspections, document progress, and prepare compliance reports, using the ESMP Checklist as the standard supervision tool.
- Require prompt corrective actions, document follow-up, and ensure that contractors maintain continuous adherence to the ESMP Checklist and the OHS Management Plan.

4 MONITORING AND REPORTING

To ensure that all ESHS mitigation measures are effectively implemented during project implementation, the Project adopts a comprehensive monitoring framework (Part 3 of the ESMP Checklist) that defines clear indicators, monitoring frequency, responsibilities, and reporting requirements for each impact area. Monitoring covers environmental parameters (dust, noise, debris and waste handling, runoff and spills), social safeguards (labor conditions, GBV/SEA/SH prevention, GRM performance, community access), and post-conflict area hazards and emergency-related OHS aspects, including ERW/UXO, machinery safety, hazardous materials, and worker Personal Protective Equipment (PPE) compliance.

The framework is implemented jointly by the Contractor (daily implementation and self-monitoring), the Supervising Engineer/Consultant (verification, site inspections, document review, non-compliance notices), and the CDR PIU (oversight, field verification, and reporting to the World Bank).

Additional institutional support is provided by municipalities and Unions of Municipalities, the MoE for waste transport oversight, the ISF / Ministry of Interior (MoI) for traffic safety, the MoC/DGA for chance finds, LAF/LMAC for UXO/ERW clearance and emergency response, and the Ministry of Public Health (MoPH) for chance finds involving human remains. All monitoring findings shall be documented, and corrective actions shall be applied immediately.

Annex h and j provide the Environmental and Community Monitoring Sheets as examples/templates for daily and weekly inspections.

Annex 1: ESMP Checklist – Bint Jbeil CAZA

Project: Damaged Roads Clearing and Restoration in South Lebanon

Component: LEAP – Component 1

Implementing Agency: Council for Development and Reconstruction (CDR)

Funder: World Bank (WB)

Sub-project: Bint Jbeil Caza

Part 1: Site Passport

The Site Passport for Bint Jbeil Caza provides a concise overview of the target roads and the scope of works. These works include emergency debris clearance and initial restoration under Component 1 / Phase 1 of the LEAP Project, which is the focus of this ESMP Checklist. While the ESMP Checklist applies exclusively to Phase 1 activities (Class A roads), the identification of sensitive receptors was undertaken at the Caza level and, in some cases, extended to identified Class B roads under Phase 2 to better understand the broader safety and community context.

Along several of the most heavily damaged road sections selected for clearing, **no remaining social receptors** (e.g., houses, places of worship, clinics) were observed, as many structures were fully destroyed during the conflict. Where receptors were still standing and detected, they were mapped through GIS buffer analysis. These locations were flagged for **contractor verification**—to confirm whether they are functional or inhabited—and for the application of **precautionary measures** during implementation.

ESMP Checklist Part 1 : Site Passport	
Institutional & Implementation Arrangements	Implementing Agency: CDR – PIU Supervision: CDR PIU E&S Specialists and the Supervising Engineer. Contractor: Responsible for full implementation of ESMP Checklist Local Authorities: Nabatiyeh Governorate, Bint Jbeil Union of Municipalities & concerned municipalities. LMAC/LAF: UXO/ERW clearance prior to any works
Project Location	Geographic Coverage (District-Level): 18 villages District-wide Road Inventory: ○ Total Road Length (Components 1 & 2 – Class A & B Roads): 69,349 m ○ Total Project Area: 410,148 m² ○ Villages: Aaintaroun, Aaynata Bint Jbeil, Aayta Ech-Chaab, Baraachit, Beit Lif, Beit Yahoun, Bint Jbeil, Chaqra, Hanine, Jmaijme, Kounine, Maroun Er-Ras, Qaouzah, Ramyet Bint Jbeil, Safad Al-Battikh, Yaroun, Yater, Blida. Figure 1 Project Area, Target Roads, and Proposed Activities – Bint Jbeil Caza

Scope of works
Under
component 1

Component 1 – Class A Roads (Emergency Clearing & Initial Restoration– 52 km)

- The ESMP Checklist applies only to Phase 1A emergency works on Class A (local) roads.
- Although the geographic assessment covers all 18 villages in the Caza, Phase 1A includes only the Class A road segments selected for clearing and restoration—located in 14 villages.
- Most primary roads were already reopened during earlier emergency interventions; therefore, Phase 1A focuses on local intra-village roads where access constraints remain.
- Phase 1A Target Villages (14): Works exclude the villages of Beit Lif, Qaouzah, Safad Al-Battikh, and Yater, where roads fall under repair works and are therefore outside the ESMP Checklist scope

Table 1 Scope summary Component 1 (Bint Jbeil Caza)

Parameter	Value
Total Length (m)	51,895.8
Total Area (m ²)	283,424.7

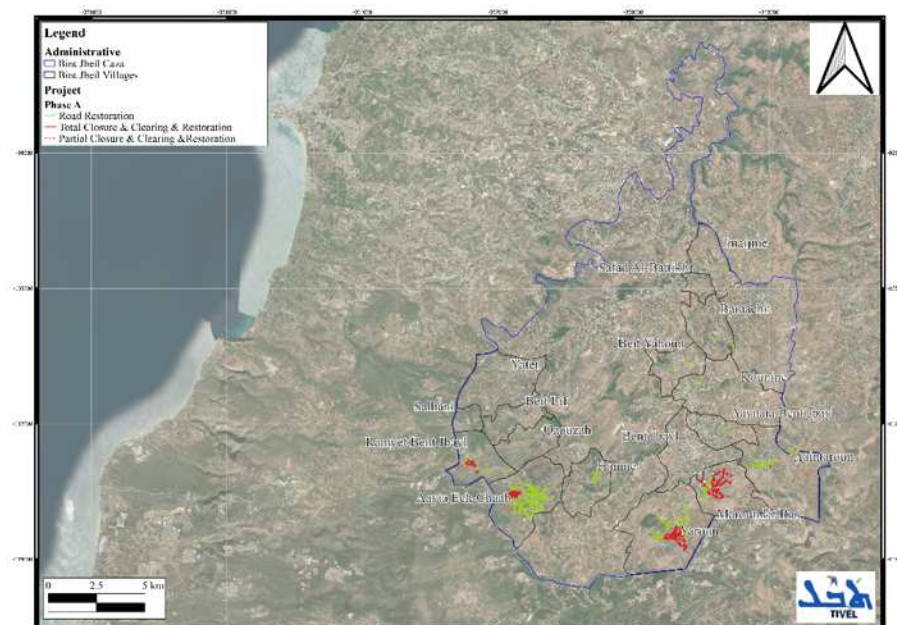


Figure 2 Phase A Roads – Bint Jbeil Caza

Road Condition Categories and Associated Activities:

- **Total closure:** Clearing + temporary restoration
- **Partial closure:** Clearing + temporary restoration
- **Open but damaged:** Temporary restoration

Work Method Sequence:

- **LMAC/LAF Non-Technical Survey (NTS) and daily clearance** — no physical works (debris removal or excavation) shall commence without written LAF/LMAC clearance for the specific road segment.
- Removal of rubble from road corridors.
- Excavation of damaged pavement layers, as required.
- Immediate loading and transport via covered vehicles to **MoE-approved Temporary Storage Sites (TSSs) or quarries**.
- **Reconstruction of pavement:** placement and compaction of subbase and base layers.
- **Temporary asphalt surfacing:** single asphalt layer applied over the reconstructed pavement to restore immediate access and structural integrity.

Applicable
Legislation and

- **National legislations:** Law 444/2002; Decree 8633/2012; Law 80/2018; Decrees 5605/5606; MoE Circular 6/1 (2024); Labor Law; Decree 11802/2004; Traffic Law 243/2012

World Bank requirements	- Environmental Standards: Environmental emissions, discharges, and noise must comply with the stricter applicable standard—whether national (MoE Decisions 52/1–1996, 8/1–2001, 16/1–2022; Decree 8471/2012) or WBG EHS Guidelines (2007) - World Bank ESF: Applicable Environmental and Social Standards include ESS1, ESS2, ESS3, ESS4, ESS6, ESS8, and ESS10. - Right-of-Way: All works remain within the existing road right-of-way. No land acquisition or physical/economic displacement is required; therefore, ESS5 is not triggered.
Environmental Baseline	Land Use & Land Cover (LULC) - Medium-density urban fabric, traditional field crops and olive groves. Severe disruption due to war, <i>with 100% of key crops affected</i> (CNRS-L, 2024). Road corridors often pass adjacent to damaged farmland and fire-affected lands. Hydrogeology - The segments in Hanine, Yaroun, Aayta Ech-Chaab, Beit Yahoun, Ramyet Bint Jbeil fall within Class 2 high-permeability karst → heightened spill sensitivity Natural Habitats - No critical habitat along Class A segments. - Caution required near dense oak stands. - Avoid any additional disturbance outside the zones already impacted by emergency pushed-debris or war-related fires.
Social Baseline	- Administrative Context: Bint Jbeil District hosts approximately 96,200 residents (CAS 2018–2019), with an average household size of 3.6 persons. - Socio-Demographic Vulnerabilities: Elderly persons (+65) represent 10–12% of the population and are more sensitive to disruption. Pre-crisis poverty affected ~25% of households and has likely increased since. Unemployment is estimated at around 6% (IDAL 2017). - Conflict-Related Vulnerabilities (Internal Displaced Persons (IDPs) & Limited Returns): The district recorded 41,847 IDPs during the conflict (IOM DTM, Jan 2024). Return remains very limited in frontline villages—Maroun El Ras (~20 households), Aita El Chaab (~70 families), and Yaroun (~40 families)—all heavily damaged with destroyed services and restricted access (Union of Municipalities of Bint Jbeil, Dec 2025). - Refugee Presence: Bint Jbeil hosts 3,410 registered Syrian refugees (UNHCR, 2025), mainly in urban settings with no ITS. Concentrations in Bint Jbeil town and Yater lie outside the project corridors. Frontline villages have very low numbers (e.g., Maroun El Ras: 13; Ramyet Bint Jbeil: 7). Many Syrians have already returned to Syria, further reducing refugee presence in border villages.
Hospitals in District	- Salah Ghandour Hospital – Aaynata (~102 m from a Class B Road): Operational; main emergency referral point for workers and nearby residents. - Bint Jbeil Governmental Hospital – Bint Jbeil (~339 m from Class B roads): Operational; critical for emergency preparedness and must always remain accessible. - Tibnine Governmental Hospital – Tibnine (farther from target roads): Operational; acts as a secondary referral center and should be included in overall emergency coordination.
Sensitive Receptors (Scope of works = Class A roads; Class B receptors mapped for broader understanding only)	- Sensitive social receptors are relevant only where functional or reoccupied. - Hanine – Mosque (2 m from Class A segment see Annex 2a, Figure 6 and Table 3) → Requires special care if operational. - Other mapped mosques/churches (5–50 m) occur only along Class B roads → outside ESMP emergency scope. - Most frontline receptors are destroyed or non-functional; if reoccupied, they require precautionary protection. - Environmental Receptors: Litani River – Aaintaroun (~63 m, Class B); Wadi Al Izziye – Beit Lif (~153 m, Class B).

Key Site Constraints and Risk Context	- Local roads → slow speeds, spotters, strict pedestrian safety (especially where returnees are present). - Adjacent farmland & oak patches → strict dust/runoff control, no debris push-aside, no machinery encroachment. - Despite the already degraded/contaminated post-conflict environmental conditions, karst geology requires strict spill-prevention and runoff-control measures to avoid additional impacts. - Unstable rubble / conflict damage → trained workers, LMAC-cleared access, STOP-WORK when unsafe. - Active post-conflict operating context → intermittent security incidents and risk of renewed hostilities create ongoing security risks for workers and nearby communities.
UXO/ERW Procedures	- UXO/ERW risk → mandatory LMAC clearance before works - Only LMAC-cleared areas and trained workers allowed on site - STOP-WORK if any suspicious object appears
Debris & Waste Management	- No on-site sorting, direct loading + covered transport to MoE-approved temporary storage sites (currently 26 sites are under examination).
Grievance Redress Mechanism (GRM)	- Accessible to all community members and workers through phone (01-980096), fax (01-981255), email (GRM.LEAP@cdr.gov.lb), or written submissions to CDR (Tallet el-Serail, Beirut); SEA/SH complaints are handled confidentially via survivor-centered GBV pathways, with a sample log provided in Annex2c.
Public Consultation Summary	- A public consultation was held on 27 November 2025 in Beirut with 17 participants (including two female municipal engineers), during which municipalities raised issues related to debris disposal, UXO/ERW risks, eligibility limited to conflict-damaged roads, and contractor OHS/EHS obligations, and confirmed their readiness to support access, communication, and focal-point assignment; the full log is provided in Annex 2b.
Capacity Building Needs	- Contractor and workers require induction on WB ESS requirements, ESMP implementation and monitoring, UXO/ERW safety, OHS procedures and emergency response, GRM use for communities and workers, TMP, Code of Conduct and SEA/SH prevention, and safe debris clearing and handling near unstable rubble.

Part 2: Environmental and Social Screening and Mitigation Measures (Part 2)

The screening below assesses the environmental and social sensitivities of the project area in relation to the clearing and temporary restoration of conflict-damaged roads in Bin Jbeil Caza, and identifies the mitigation measures required under the World Bank ESF. The screening relied on the final scope and location of works, mapped environmental and social receptors, and inputs from municipalities, Unions of Municipalities, and NGOs.

A structured **Yes/No screening matrix** was then applied to assess each potential risk and link it to the relevant mitigation measures and monitoring requirements presented in **Part 2 (Mitigation Measures)** and **Part 3 (Monitoring Plan)** of this ESMP Checklist. The screening reflects actual site conditions in the target villages of Bint Jbeil, including the proximity of sensitive receptors, narrow local roads, war-damaged structures, and other post-conflict constraints.

Part 2 – Environmental and Social Screening			
Question	Yes/No	Description of Site Conditions & Risks	Required Action / Linked Mitigation
Will the sub-project involve clearing or generating debris/rubble?	Yes – High Risk	- All road segments contain war-related debris, unstable rubble, broken asphalt, damaged shoulders, and potentially hazardous fragments. Works will focus on clearing and managing existing conflict-related debris and expected spoil from surface leveling activities.	Section A – Debris & Waste Management (MoE Circular 6/1); Section B – Community Safety; Section C – Debris Handling Safety & UXO/ERW Protocols.
Karstic geology / spill sensitivity?	Yes	- Several Class A segments—particularly in Hanine, Yaroun, Aayta Ech-Chaab, Beit Yahoun, Ramyet Bint Jbeil—fall within Class 2 high-permeability karst formations, increasing sensitivity to any spills or contaminated runoff during works.	Section A – Spill Prevention.
Excavation or soil disturbance?	Moderate to High	- Pavement excavation and grading are required. No deep trenching is anticipated.	Section A – Soil Protection.
Dust emissions likely?	Yes	- Debris loading and gravel works.	Section A – Dust Control.
Works near wadis/drainage?	Low	- No wadis or major surface watercourses lie directly adjacent to Class A segments. The main risk relates to blockage of roadside drains or small local channels, causing localized runoff.	Section A – Stormwater Management.
Heavy machinery required?	Yes	- Loaders, graders, compactors, dump trucks.	Section C – Machinery Safety.
Hazardous materials/spill risk?	Yes	- Fuel, lubricants, possible ACM fragments in rubble.	Section A – Spill Prevention; Section C – Hazardous Material & ACM Safety.
Biodiversity impacts?	Moderate	- No critical or protected habitats. Vegetation along shoulders (shrubs, oaks, olive trees) has already been partly damaged by conflict and fire; no further disturbance is permitted. - Off-site impacts are possible if debris is mismanaged.	Section A – Vegetation Protection; Debris & Waste Management.
Cultural heritage nearby?	Low-Possible	- No registered heritage sites known along the planned corridors. - However, debris removal and surface disturbance may expose buried cultural materials.	Apply ESS8 Chance-Find Procedure – As a precautionary measure.
Temporary traffic disruption?	Yes	- Although Phase 1A focuses mainly on local village roads, several segments pass through partially inhabited areas where returnees have reoccupied homes, requiring heightened pedestrian-safety measures. - In more severely affected or frontline areas—where population return remains limited—community interaction is low, but standard TMP and safety controls continue to apply.	Section B – TMP (controlled access; short work cycles; emergency-vehicle priority; banksmen; signage; municipal + ISF+ LAF/LMAC coordination).

Part 2 – Environmental and Social Screening			
Question	Yes/No	Description of Site Conditions & Risks	Required Action / Linked Mitigation
Social risk?	Yes	- Very low population presence in frontline villages → direct communication needed. - In less frontline villages: higher resident interaction, traffic/dust/noise exposure.	Section B – Community Engagement & Notices; Vulnerability Checks; GRM Access; TMP & Access Management.
Presence of vulnerable groups?	Yes	- Elderly persons, women-headed households, persons with disabilities, and chronically ill individuals remain in some partially damaged villages. - Returning Lebanese households (and a small number of Syrian households) may face higher vulnerability because they are re-entering damaged, high-risk areas with unstable structures and UXO/ERW exposure. - Farmers with agricultural plots directly adjacent to project roads may face temporary access constraints during restoration works, particularly where informal field access points exist.	Section B – Vulnerable Groups & Social Inclusion (mandatory pre-work <i>vulnerability check</i> ; <i>tailored communication</i> ; <i>safe routes</i> ; <i>accessible GRM</i> ; <i>support for elderly/disabled</i>).
Works near sensitive receptors (houses, mosques, clinics/hospitals)?	Yes	- One mosque identified in Hanine within 2 m of Class A works → requires field verification of functionality. - Most frontline receptors destroyed/non-functional. - All other mapped receptors lie along Class B roads, outside the emergency scope	Section A – Dust/Noise Control; Section B – TMP & Access.
Labor influx risks?	Low	- Small temporary workforce; no labor camps; limited interaction with communities, particularly in low-population villages.	Section B – Labor Management & SEA/SH Controls.
Child labor risk?	Possible	- Known risk in local contracting chains, especially for informal labor. - Contextual pressures (economic hardship and school closures) may increase the likelihood of underage workers being engaged indirectly.	Section C – ESS2 Labor Compliance (age verification; contractor labor registry; zero-tolerance for minors; site monitoring).
UXO/ERW risk?	Yes – Critical	- Entire Caza must be treated as suspect until LAF/LMAC clearance. - Stronger controls needed in frontline villages: Maroun El Ras, Aayta Ech-Chaab, Aaintaroun, Yaroun, Ramyet Bint Jbeil.	Section C – UXO/ERW Clearance Protocols (LMAC). Contractor to maintain daily UXO/ERW verification logs; STOP-WORK authority enforced; all findings reported immediately to Supervising Engineer and CDR.
Human remains risk?	Possible – Critical	- Chance finds may occur during debris clearing and excavation; risks include psychological distress to workers and communities, and legal/reputational implications if remains are disturbed.	Section B – Social / Community Awareness & Notification; Section C – OHS Chance-Find Procedures (STOP-WORK, notification, and respectful handling).
Unstable structures near road?	Yes	- Partially collapsed houses, walls, and at least one detected mosque may pose collapse risk during vibration from machinery.	Section C – Structural Safety & Exclusion Zones (pre-work stability check).

Part 2 – Environmental and Social Screening			
Question	Yes/No	Description of Site Conditions & Risks	Required Action / Linked Mitigation
Utilities at risk?	Yes	- Shallow telecom/electricity/water lines may be present; some emergency reconnections ongoing.	Section C – Utility Safety Protocols (LOTO; STOP-WORK).
Need municipal coordination?	Yes	- Municipalities + Union + Governorate involved in access, routing, debris verification.	Section B – Community Engagement & Notices.
GRM disclosed in site areas?	To Be Implemented	- Leap GRM established but not yet displayed at work sites (no posters/numbers installed).	Section B – GRM Disclosure (before commencement of works)
Security risk?	High	- Frontline villages (namely Maroun El Ras) face elevated contextual security risks that may affect worker safety, access continuity, and timing of emergency response; site teams must be prepared for rapid suspension of works and activation of emergency communication protocols.	Section B – Community Safety; Section C – Emergency Preparedness & Security Coordination.

EHS MANAGEMENT PLAN

SECTION A — ENVIRONMENTAL PROTECTION

This section identifies potential environmental impacts associated with Project implementation under Component 1 (Immediate Response). Impacts are grouped by air quality, noise, water and soil quality, waste management, vegetation, and physical cultural resources. Mitigation measures emphasize protection of the environment, public safety, and compliance with relevant regulations and best practice.

Section A: Potential Environmental Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Environmental)
Air Quality, Dust & Odor Control	Debris clearing, pavement excavation, gravel/base-course placement, and single-layer asphalt surfacing.	- Dust emissions from debris removal and truck movement. - Dust generated during pavement excavation and material loading activities. - Short-term emissions (fumes) from asphalt laying and compaction. - Air pollution from machinery and truck exhaust.	- Apply water spraying during debris clearing, loading, transport, gravel placement, and other dust-generating activities. - Cover all trucks transporting debris or fine materials to prevent dust emissions or material spillage. - Use water spraying during excavation and pavement cutting to prevent airborne dust. - Carry out asphalt works during favorable weather conditions and limit exposure time near sensitive receptors. - Limit vehicle and machinery speeds on unpaved or disturbed sections to reduce dust generation. - Maintain machinery and equipment in good working condition to minimize black smoke and exhaust emissions. - Position machinery exhaust outlets away from sensitive receptors.
Noise & Vibration	Operation of equipment, and truck movement	- Increased noise levels affecting nearby residents namely recent returnees. - Short-term vibration from compactors, rollers, and heavy machinery, which may disturb returnees and may affect unstable or conflict-damaged structures.	- Restrict noisy works to daylight hours. - Use well-maintained equipment with functioning mufflers. - Place stationary equipment away from sensitive receptors whenever possible. - Provide advance notification to residents, shops, and institutions before starting high-noise activities. - Avoid prolonged idling of machinery. - In areas with damaged or unstable buildings, minimize vibration-intensive operations, use lighter compaction where feasible, and maintain safe standoff distances. - Use flaggers and community-safety personnel when operating large machinery in narrow streets or near homes, shops, and pedestrian areas. - Prohibit night works
Water & Soil Quality / Spill Prevention	Refueling, machinery operation, debris	- Improper handling of debris leading to localized contamination	- Vehicle Maintenance: Ensure all transport and work vehicles are well-maintained to prevent fuel, oil, or hazardous material leaks. - Prohibition of Dumping: Absolutely no disposal of debris in fields, valleys, wadis, or watercourses.

Section A: Potential Environmental Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Environmental)
	clearing, gravel/base-course placement, and asphalt works.	- Localized contamination from improper debris handling or blockage of drainage. - Illegal dumping of debris or waste. - Soil compaction from machinery movement leading to increased runoff - Localized soil or surface contamination from accidental spillage of bituminous materials during asphalt laying. - Fuel and oil spills contaminating soil or water. - Improper storage or disposal of waste materials.	- Truck Covering: All debris-transport trucks must be fully covered to prevent dust dispersion and material spillage. - Drainage Protection: Keep rubble, gravel, asphalt, and other materials away from natural drainage depressions; do not obstruct runoff paths. - Bituminous Material Control: Handle asphalt and bituminous materials carefully; immediately contain and remove any accidental spills and dispose of waste asphalt at approved facilities only. - Safe Fuel Handling: Store fuel and lubricants in secure, leak-proof containers placed on impermeable surfaces. - Refueling Controls: Conduct refueling and maintenance off-site whenever possible; if on-site, use spill trays and remain at least 20–30 m away from drains or watercourses. - Spill Preparedness: Maintain spill kits at all work fronts and ensure workers are trained in spill response. - Restricted Machinery Movement: Keep machinery strictly on the existing road platform to avoid unnecessary soil disturbance and compaction. - Immediate Clean-Up: Clean any fuel or oil spills immediately and dispose of contaminated materials safely in accordance with regulations. - Proper Waste Disposal: Collect and dispose of all waste (oily rags, filters, plastics, domestic waste) through municipal or approved disposal channels.
Stormwater & Runoff Management	Debris clearing, roadbed excavation and preparation, base-course placement, and asphalt surfacing (as required).	- Blocked roadside drains or natural runoff channels due to debris or excavated material. - Sediment flow onto adjacent land or roads from exposed soil during excavation - Runoff contamination during rain events (fuel/oil spills, fresh asphalt works, equipment maintenance, or improper material storage) - Diversion of natural drainage paths due to temporary mounds of gravel or excavated soil. - Formation of waterlogging or uncontrolled runoff around	- Immediate Debris Removal: Remove cleared material without delay; no stockpiling that may obstruct natural drainage or divert runoff. - Drainage Preservation: Strictly prohibit disposal of debris, gravel, or asphalt materials in wadis, low points, or natural depressions that channel stormwater. - Erosion Monitoring & Control: Regularly inspect disturbed slopes and soil surfaces. Prevent runoff or sediment wash-off from newly excavated or reconstructed pavement surfaces. - Pollution Prevention: Prevent fuel, oils, cement residue, bituminous materials, or chemicals from reaching drains or watercourses during all stages (clearing, excavation, asphalt surfacing). - Safe Material Storage: Store gravel and construction equipment away from drainage lines and natural surface-water flow paths. - Rapid Spill Response: Clean and contain any spills immediately; remove contaminated soil and manage according to regulations. - Final Drainage Check: After asphalt surfacing, ensure runoff drains correctly and no new blockages or diversions have formed. - Schedule works during dry periods to minimize hazards and runoff impacts.

Section A: Potential Environmental Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Environmental)
		newly restored pavement layers.	
Debris & Waste Management (MoE Circular 6/1)	Road clearing and Pavement excavation	- Off-site dumping leading to soil, water, and habitat contamination. - Blockage of wadis, valleys, or agricultural areas if debris is disposed improperly. - Mixing hazardous rubble (asbestos, chemicals, unexploded ordnance debris) with inert waste. - Any site with suspected Asbestos-Containing Material (ACM) becomes a hazardous-material zone. - Traffic and community safety risks during debris loading and transport. - Improper handling of small quantities of hazardous waste	- No sorting, no on-site segregation, and no temporary stockpiling — all war rubble and road construction/demolition waste, including pavement excavation spoil, must be loaded directly onto trucks at the point of clearance. - Immediate transport of this rubble/CDW to MoE-approved TSS in line with MoE Circular 6/1; storage is permitted only in environmentally degraded quarries formally designated by municipalities/unions and approved by the MoE (more than 26 sites are under MoE examination). - Contractor must submit a Debris Management Plan before mobilization, in coordination with local authorities. Municipalities, Unions of Municipalities, and Majles el-Jnoub (South Council) supervise routing, transport, and reception at authorized quarry sites. Detailed debris-management procedures, as well as the Chain-of-Custody Form and the Trip Ticket Template, are provided in Annexes e, f and g. - Strict prohibition of dumping in valleys, riverbeds, wadis, agricultural land, natural habitats, or any informal/unauthorized site. - Truck requirements: - o All trucks must be fully covered. - o No overloading. - o Clean any accidental spillage along public roads. - Chain-of-custody: Maintain daily transport logs including origin, road ID/segment, estimated quantity, truck plate, date/time, destination, and receiving-site signature. - ACM / Hazardous Materials: - o Any suspected asbestos-containing material (ACM) or other hazardous fragments must trigger STOP-WORK, isolation of the material, and handling by a trained specialist in accordance with MoE Circular 6/1 and ESS3. - o Store, transport, and dispose of hazardous waste exclusively through MoE-approved pathways. - Non-rubble waste: - o Domestic waste, packaging, and plastics stored in covered bins for municipal collection. - o Hazardous small waste (oily rags, used filters, contaminated PPE) sent to licensed handlers or municipal hazardous-waste channels. - Supervision: Supervising engineer, municipalities, and CDR must conduct regular site inspections to verify proper loading, routing, and disposal.

Section A: Potential Environmental Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Environmental)
Vegetation & Biodiversity Protection	All works.	- Minor and temporary disturbance to roadside vegetation (shrubs, grasses, agricultural edges), within an already degraded post-conflict environment. - Dust deposition on crops or shrubs during debris removal or gravel works. - Accidental discharge of gravel, debris, or other waste materials into adjacent fields or natural areas (wadis/maquis patches). - Habitat disturbance only if debris is improperly dumped off-site in natural or agricultural areas. - Short-term disturbance to small fauna due to machinery noise and truck movement (fully reversible).	- Strict prohibition of dumping debris and other waste materials in natural areas, wadis, orchards, or agricultural fields (MoE Circular 6/1 compliance). - Restrict machinery strictly to the existing road corridor, no off-road deviation into fields, orchards, or remaining natural areas. - Remove debris immediately and transport to MoE-approved sites, no roadside stockpiling. - Use water spraying near natural habitats to minimize dust deposition. - Avoid cutting vegetation, prune shrubs only if necessary and in coordination with the municipality. - Clean accidental spills immediately (fuel, gravel, asphalt) near vegetation or farmland. - Allow wildlife to move away naturally; workers must not handle or disturb fauna. - Worker briefing on vegetation protection and prohibition of dumping or damage.
Resource Efficiency	All works	- Excessive fuel/water use; inefficient material application	- Avoid machinery idling. - Optimize truck routing to MoE sites. - Use water only when needed for dust suppression. - Apply binder and aggregates in required quantities only.
Physical Cultural Resources	Road clearing, debris removal, limited surface disturbance.	- Chance exposure of buried cultural materials during debris removal or surface disturbance. - Vibration, dust, or accidental machinery encroachment affecting nearby heritage structures.	<u>Worker Training/induction</u> - All workers must receive induction on the Chance-Find Procedure. - The contractor shall include a brief on this procedure in all worker inductions and toolbox talks. - Before starting debris-clearing or any activity that may disturb the ground surface, the contractor must visually inspect the work zone for signs of archaeological materials or old structural remains. <u>Chance-Find Procedure :</u> - Stop all work immediately in the area where an artifact, structure, bone, or cultural material is encountered—regardless of the activity. - Secure and fence off the area to prevent disturbance, damage, or removal of the find.

Section A: Potential Environmental Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Environmental)
			- Notify the Ministry of Culture / DGA within 24 hours, following national regulations (Law 166/LR of 1933 and Law 37/2008). - Do not resume work in the affected area until the DGA provides written instructions and clearance to proceed.

SECTION B — SOCIAL MANAGEMENT PLAN (COMMUNITY AND WORKFORCE)

Section B identifies potential social, community, and worker wellbeing risks associated with project implementation. Risks are grouped into Community Safety and Access, Workforce Management and Labor Risks, and Post-Conflict Risks (Special Hazards). Mitigation measures emphasize safety, communication, inclusion, and coordination with local authorities. Worker-related measures in this section address psychosocial and community-interface risks, while technical occupational health and safety controls are detailed in Section C.

Section B: Potential Social Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Community and worker wellbeing)
Community Safety and Access			
Traffic Management & Access /Traffic Safety	- Road clearing; closures; truck movement; machinery in narrow streets	- Temporary access constraints near community facilities where restoration works occur on already open road segments. - Increased traffic-safety risks for returning residents and vulnerable groups due to debris transport and machinery movement. - Collision risk between trucks/machinery and pedestrians, especially in narrow village streets or areas with returning residents and vulnerable groups. - Safety risks near sensitive receptors such as schools, clinics, mosques, and churches.	Traffic Management Plan (TMP): - Prepare and implement a site-specific Traffic Management Plan (TMP) for each work location prior to any road closure, debris haulage, machinery movement, or asphalt works. - The TMP shall define the Program of Works, Method for Debris Clearing, haulage routes and routing to MoE-approved Temporary Storage Sites (TSSs), regulatory and informative signage, working hours, pedestrian safety measures, vehicle and driver safety requirements, and coordination arrangements with municipalities and the ISF. - TMP measures shall be tailored per village, prioritizing pedestrian safety and clear communication in inhabited or partially re-inhabited areas. <u>Debris haulage & routing:</u> - Formally agree with municipalities on debris haulage routes to MoE-approved TSSs, avoiding residential clusters, sensitive receptors, schools, clinics, mosques, churches, and areas with high pedestrian activity. - Coordinate detours, temporary closures, and alternating one-way traffic with municipalities and the ISF as required.

Section B: Potential Social Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Community and worker wellbeing)
		- Temporary traffic disturbance on adjacent roads during debris transport or asphalt works. - Increased stress or inconvenience for residents due to detours, noise, dust, or restricted access.	<u>Traffic & pedestrian safety measures:</u> - Provide 24–48 hours’ advance notification to residents before starting works. - Install on-site notice boards with contractor name, work schedule, GRM contacts, and emergency numbers in simple Arabic. - Install warning signs, cones, reflectors, physical barriers, and night lighting as needed. - Place trained spotters/banksman at constrained sections and blind corners. - Maintain safe, clearly marked pedestrian paths in active work areas. - Avoid debris transport during school opening and closing hours and enforce low speed limits ($\leq 20\text{--}25$ km/h) in inhabited or partially re-populated areas. <u>Vehicle compliance & spacing:</u> - Prohibit truck convoys and maintain safe spacing between vehicles. - Conduct random compliance checks for truck covering, load securing, and overloading. <u>Emergency access & communication:</u> - Keep emergency access routes open at all times or provide clearly marked and agreed alternatives. - Communicate work schedules and any changes in advance to affected communities. <u>Community liaison & incident monitoring:</u> - Assign a designated Community Liaison / H&S Focal Point at each active work site to coordinate daily with municipalities and respond to community concerns. Record, review, and analyze traffic-related incidents and near-misses on a weekly basis and adjust TMP measures accordingly.
Vulnerable Groups & Social Inclusion	- All works along inhabited road sections	- Exclusion of vulnerable households (women-headed, elderly, persons with disabilities, displaced/returning families, refugees) from information and decision-making. - Disproportionate impact of access restrictions, noise, dust, and traffic risks on vulnerable groups.	- Pre-work vulnerability check: Coordinate with municipalities to identify vulnerable households along each targeted road segment. - Targeted communication: Provide door-to-door or tailored notifications (simple language) to vulnerable households regarding work schedules, access changes, and GRM options. - Differentiated Outreach Strategy: - o Border/frontline villages: Door-to-door engagement with remaining households, given low return levels and limited functioning communal structures. - o Non-frontline villages: Broader communication through municipalities, local committees, and community leaders.

Section B: Potential Social Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Community and worker wellbeing)
			- Protection during works: Where restoration works occur in re-populated villages or along connecting roads, prioritize safe pedestrian routes and ensure continued access to homes. Provide assistance to elderly persons and persons with disabilities where debris transport or machinery movement may temporarily affect mobility. - Accessible GRM: Maintain multiple channels (phone, municipal focal points, written submissions) to ensure vulnerable groups can raise concerns easily.
Community Disturbance & Protection of Sensitive Receptors	- Works near residential clusters, scattered houses, agricultural lands, and, where present, damaged or functional mosques.	- Noise and vibration may disturb residents—especially elderly persons—and may affect old or structurally fragile buildings located immediately along the road edge. - Dust emissions may impact respiratory health of vulnerable people and affect nearby crops and household environments. - Temporary safety-related disturbance may occur near homes, farmland, and small businesses due to debris transport and machinery movement. - Short-term livelihood disturbance may occur in re-populated areas, where present, due to increased truck movement during debris hauling, rather than access restrictions.	- Avoid works during prayer times where mosques are functional. - Apply enhanced dust-suppression measures near sensitive sites (residential clusters, vulnerable households, cropland). - Notify communities in advance of potentially disruptive works (households, shop owners, institutions). - Coordinate access arrangements with municipalities to avoid blocking residences, farms, or local services. - Limit works to <u>daytime hours</u> and avoid very early morning or late evening operations. - Maintain noise levels within national permissible limits and avoid unnecessary machinery idling. - Conduct regular water spraying during dusty operations. - Provide temporary footpaths or alternative safe pedestrian access where needed. - Ensure the GRM sign is displayed along the road section where works are occurring.
Community Exposure to Hazards	- Debris loading, unstable rubble, trucks, machinery	- Risk of injury to residents from interaction with trucks, loaders, rollers, and other heavy machinery operating in confined village streets. - Children or returning residents inadvertently approaching work zones or unstable rubble piles, especially where roads are being reopened after prolonged closure.	- Maintain clearly defined safety buffers between machinery operations and homes, shops, agricultural access points, and pedestrian paths. - Fence, barricade, or tape off active work zones and hazardous areas; restrict public access at all times. - Enforce low-speed driving within villages and along connecting roads used for debris transport (maximum 20 km/h). - Implement mandatory end-of-day site securing, including removal of sharp debris, stabilization of loose rubble, and safe parking or immobilization of machinery. - Implement a proper GRM with clearly defined uptake channels, disseminated to the local community.

Section B: Potential Social Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Community and worker wellbeing)
		- Community safety concerns arising from sharp debris, unstable rubble, or partially cleared road sections if not properly secured at the end of the workday.	
Workforce Management & Labor Risks			
Labor Influx & Workforce Management	- Contractor workforce mobilization, labor recruitment	- Social tension between local and migrant laborers. - SEA/SH risks in communities. - Perceived unfair recruitment practices.	- Prioritize hiring from local communities and encourage gender mainstreaming within the project. - Ensure all site personnel are briefed on, and sign, the Code of Conduct (CoC) prior to mobilization, including clear guidance on conduct towards community members and provisions covering Gender-Based Violence (GBV) and SEA/SH. - Enforce the CoC for all workers with SEA/SH clauses. - Conduct SEA/SH awareness induction for workers. - Provide an accessible, confidential worker GRM, communicated in a language and format understandable to workers. - Maintain transparent hiring criteria and publicly communicate labor opportunities.
Child Labor & Labor Conditions	- Contractor workforce mobilization, labor recruitment	- Risk of child labor in subcontracted work. - Poor working conditions; unsafe practices. - Wage violations or lack of legal documentation.	- Verify worker age and maintain an audited labor registry. Include IDs of all workers. - Daily registration of workers and verification of their age to prevent child labor. - Ensure contractor workers are aware of penalties imposed by Lebanese Labor Law in case of child labor. - Include contractual penalties for child labor. - Enforce compliance with Lebanese Labor Law and Decision 29/1 (2018). - Monitor wages, contract terms, OHS conditions, and working hours. - Provide an accessible and confidential worker GRM in a language and format understandable to workers. - Maintain daily registration forms recording working hours and break times for all workers
Gender & Social Equity	- Workforce recruitment and community interaction	- Risk of unequal treatment or exclusion of women in hiring for non-technical roles. - Risk of SEA/SH incidents affecting women and girls, particularly among returning households and vulnerable groups.	- Apply non-discriminatory recruitment practices for all project-related employment, including support and administrative roles, in line with ESS2. - Clearly prohibit SEA/SH through enforceable Codes of Conduct (CoCs) signed by all workers; ensure zero tolerance for misconduct. - Provide SEA/SH awareness briefings to workers prior to mobilization and reinforce obligations through toolbox talks.

Section B: Potential Social Impacts and their Mitigation Measures			
Parameter	Activities	Potential Impacts	Mitigation Measures (Community and worker wellbeing)
		- Barriers for women, elderly, and persons with disabilities to access information or the GRM.	- Ensure that project information and GRM access are communicated through multiple channels (municipal focal points, phone, written submissions) to accommodate women, elderly persons, and persons with disabilities. - Ensure confidentiality and survivor-centered referral pathways for SEA/SH-related complaints in line with the project GRM.
Post-Conflict Risks			
UXO / ERW	- Clearing debris; disturbing shoulders or collapsed structures	- Anxiety or fear among local communities; reputational risks if community members enter work zones.	- Coordinate with municipalities to share UXO/ERW risk-awareness messages before works. - Post LMAC-approved warning signage at work locations and access points (“Do Not Touch” + emergency contacts). - Establish community notification pathway: residents may alert municipal focal points or Supervising Engineer if suspicious items are seen. - All work is conducted following LAF/LMAC NTS and STOP-WORK procedures as detailed in the OHS Management Plan
Human Remains (Chance Finds)	- Clearing debris	- Psychological distress or trauma; reputational and legal risks if remains are disturbed	- Sensitize workers and local community: do not disturb remains. - Notify authorities respectfully if work is delayed. - Inform community that formal procedures are in place for respectful handling.
Religious / Spiritual Items	- Clearing debris	- Damage or perceived disrespect may upset local communities	- Engage local religious or community leaders prior to resuming work. - Safeguard items until consulted.
Personal Belongings / Valuable Materials	- Clearing debris	- Loss or damage may cause complaints or conflict	- Allow recovery under controlled conditions. - Notify affected households and authorities if valuable items are found.
Hazardous Rubble (e.g., asbestos)	- Clearing debris	- Community exposure to dust or hazardous materials	- Restrict access for residents near work zones. - Communicate hazards to community. - Ensure that any complaints are recorded and responded to through the GRM. - Only qualified personnel handle hazardous materials, following safety protocols in the OHS Plan.

SECTION C— OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT PLAN

This section identifies potential occupational health and safety (OHS) hazards during Project implementation and outlines corresponding mitigation measures. Hazard-specific procedures, including for UXO/ERW and chance-find of human remains, are included, alongside site-wide emergency preparedness and first-aid protocols.

Section C: Potential OHS Impacts and their Mitigation Measures			
Hazard/Risk	Activities	Potential Impacts	Mitigation Measures (Worker Health and Safety)
UXO/ERW	Road clearing; debris removal; disturbing shoulders; stabilizing collapsed edges.	- Fatal or severe injury from UXO/ERW disturbance - Secondary injuries during uncontrolled site access or panic response.	- No work may begin without formal LAF/LMAC clearance, including NTS and, where required, Technical Survey or EOD clearance. - Workers must receive LMAC-approved UXO/ERW induction training before entering the site. - Community awareness posters (LMAC format) must be placed at site entrances and near residential clusters. - No excavation, grading, or debris pushing may occur until LMAC clearance and the daily clearance briefing are confirmed on-site. Daily UXO/ERW safety briefing for all workers. - Maintain a UXO/ERW Daily Logbook signed by the contractor and the LMAC focal point. - Workers are prohibited from touching, moving, or photographing suspicious items. - STOP-WORK immediately if any suspicious object is found; secure the area and call LMAC. - Maintain an exclusion zone as defined by LMAC during EOD operations..
Chance-Find of Human Remains	Road clearing; debris removal; and excavation.	- Psychological trauma and stress to workers	- Immediate STOP-WORK upon discovery of suspected human remains. - Secure and cordon off the area; no touching, moving, or photographing remains. - Activate site Emergency Response Team (ERT). - Notify chain of command (Contractor OHS Officer → Supervising Engineer → CDR PIU). - Notify ISF and MoPH / forensic authorities as per national procedures. - Provide Psychological First Aid (PFA) to affected workers. - Resume works only after written clearance from competent authorities.

Section C: Potential OHS Impacts and their Mitigation Measures			
Hazard/Risk	Activities	Potential Impacts	Mitigation Measures (Worker Health and Safety)
Debris Handling Safety	Loading debris into trucks; clearing collapsed material; removing obstacles.	- Cuts, crush injuries, falling rubble, dust exposure. - Hazardous rubble (asbestos, chemicals).	- Mandatory PPE: helmets, cut-resistant gloves, steel-toe boots, reflective vests, dust masks/respirators (N95), and hearing protection (earplugs). - Workers are forbidden from manually handling sharp or lifted edges. - Use light water spraying for dust control before and during handling of friable or light debris. - No manual breaking of rubble; use machinery only. - Workers are forbidden from climbing rubble piles. - Segregation-free loading; no on-site sorting. - Workers must be trained to recognize asbestos-containing material (ACM) visual cues (friable, fibrous, layered material). - If ACM is suspected: establish a 10 m exclusion zone and stop all dust-generating activities. - STOP-WORK if suspected ACM is confirmed or highly likely → manage as hazardous waste with a certified expert in line with national regulations. - Conduct toolbox talks every morning on debris hazards, unstable materials, ACM suspicion signs, and STOP-WORK triggers. - Workers must maintain a minimum 2–3 m distance from machinery when loading debris. - Debris must never be pushed against standing walls or damaged façades.
Structural Instability / Collapsed Edges	- Working near cracked pavements, collapsed retaining edges, unstable facades.	- Collapsed road edges and unstable building façades present structural risks	- Conduct visual stability check before entering work zone. - Set exclusion zones around unstable structures. - No machinery operation within unsafe distance; use spotters. - STOP-WORK if structural movement or cracking is observed. - Use a structural engineer / site supervisor to approve work zones where buildings show cracks, bulging, or tilting. - Erect physical barriers (not tape only) around high-risk collapsible areas. - Contractor must maintain a photographic record of unstable structures prior to works.
Machinery Operation Safety	- Loader operation; compactors; rollers; excavators	- Roll-over, collision, blind spots, pedestrian impacts.	- Operators must be licensed, trained, and authorized to operate the assigned machinery. - Mandatory banksman/spotter for all reversing, tight turns, and blind corners. - Machinery must have functional audible alarms, flashing lights, and reflective markings. - Enforce strict slow-speed limits (≤ 20 km/h in villages and work zones). - Always maintain a safe separation distance between machinery and workers; workers must remain outside blind-spot zones. - Daily pre-start inspection of brakes, hydraulics, horns, mirrors, tires, and safety devices is mandatory.

Section C: Potential OHS Impacts and their Mitigation Measures			
Hazard/Risk	Activities	Potential Impacts	Mitigation Measures (Worker Health and Safety)
			- Machinery must never reverse without a banksman present and in visual contact. - Operators must maintain radio/phone communication with the banksman during maneuvers. - A fire extinguisher must be mounted on each machine, inspected monthly.
Trucking & Transport Safety	- Hauling debris from sites to MoE-approved locations	- Collision risks, unsecured loads, dust, spills.	- All trucks must be covered, no overloading. - Inspect brakes, lights, tires daily. - Spill kits kept in transport vehicles. - Use only approved haulage routes and avoid school zones during peak times. - All haulage trucks must carry spill kits and wheel chocks. - Trucks must not idle near homes, schools, or clinics (noise + emissions control). - GPS tracking of debris trucks must always be active as part of chain of custody. - Follow general TMP provisions to maintain safe vehicle movement and prevent accidents
Hazardous Materials Safety (Fuel, Oils, Asphalt/Bituminous Binder)	- Refueling machinery on or near site. - temporary fuel storage. - Handling lubricants and oils. - Applying light bituminous binder or asphalt	- Risk of fire, burns, or inhalation from fuel, oils, or hot asphalt/bituminous binder.	- Store fuel in bunded areas $\geq 110\%$ capacity; no smoking or open flames near fuel/bitumen. - Train workers on safe handling of bituminous materials, including PPE (heat-resistant gloves, long sleeves, eye protection, respiratory masks) and STOP-WORK triggers. - Provide shaded rest areas and hydration stations during hot work. - Record all spills; clean immediately following MoE guidelines. - Toolbox talks must cover bituminous binder handling, hot asphalt safety, and STOP-WORK triggers for unsafe conditions.
Working in Narrow Local Roads & Re-populated Areas	- Road clearance and restoration - Machinery and truck movement	- Pedestrian collision, trapped workers, community interference.	- Separate machinery and pedestrians using barriers/tape. - Assign traffic marshals in narrow lanes. - Maintain clear escape routes for workers. - Stop machinery when children approach work zone. - Maintain audible signals when machinery enters blind corners - Manage traffic-related risks in alignment with the TMP to ensure safe operations and minimize accidents.
Electrical & Utility Safety	- Shallow excavation, grading, removal of damaged road furniture; work	- Striking uncharted water or telecom lines; electrocution	- Coordinate with municipalities and utility providers before excavation. - Emergency reconnection works may have restored partial electricity or water supply; therefore all utilities must be treated as active until proven otherwise. - Field-verify all visible and suspected utilities - STOP-WORK if uncharted cables or pipes are found.

Section C: Potential OHS Impacts and their Mitigation Measures			
Hazard/Risk	Activities	Potential Impacts	Mitigation Measures (Worker Health and Safety)
	near overhead lines	from re-energized cables	- Use insulated tools and maintain clearance from overhead lines. - Implement a Lock-Out/Tag-Out (LOTO) procedure for isolated lines and equipment. - Signage “Danger — Electrical Hazard”.
Weather / Heavy Rainfall	- All site activities, machinery operation, debris handling	- Slips, trips, falls, debris displacement, machinery instability, localized flooding, and flash-flood hazards	- Monitor local weather forecasts daily before work commencement. - Suspend works during heavy rainfall or flash-flood warnings. - Implement temporary drainage or barriers to manage runoff. - Ensure safe access and egress routes for workers and vehicles.
Emergency Preparedness & First Aid	- All site activities.	- Injury, accidents, fire, fatalities. - Medical emergencies, and sudden deterioration of the security context.	- Maintain on-site first-aid kit and trained first-aiders per road section (Lebanese Red Cross standards). - Establish a site Emergency Response Team (ERT) with clear roles and authority to STOP WORK immediately if unsafe conditions arise. - Conduct daily toolbox talks including safety and security briefings. - Display emergency contacts prominently (LMAC, ISF, Civil Defense, MoPH, nearest hospital) and maintain immediate communication with authorities in case of incident. - Ensure emergency equipment is available and functional (e.g., fire extinguishers, stretcher, trauma kit, eye-wash/burn kit, AED/defibrillator, whistle/horn, hazard cones/flags, barrier tape, spill kit, flashlights, high-visibility vests, helmets, gloves, goggles, steel-toe boots, two-way radios or backup phones). - Pre-identify evacuation routes and safe assembly points. - Conduct regular emergency drills, scaled to site size and risk. - Emergency response procedures should ensure the Worker GRM addresses psychosocial and community-interface concerns during any incident. - Follow hazard-specific emergency procedures for UXO/ERW, chance-find human remains, or other project-specific risks. - Maintain incident reporting flow: OHS Officer → Supervising Engineer → CDR-PIU → relevant authorities. - Refer to the detailed Emergency Procedures in the OHSMP for further guidance.

Part 3: EHS Monitoring

This section outlines the monitoring framework for environmental, social, and occupational health and safety risks, specifying parameters, frequency, methods, standards, KPIs, and responsibilities to ensure compliance with mitigation measures and regulatory requirements.

EHS Monitoring								
Impact / Source	Parameters to Monitor	Frequency	Monitoring Location	Monitoring Method	Standard / Guidelines	KPIs	Monitoring Responsibility	Institutional Follow-up
<i>Air Emissions / Dust</i>	Visible dust; suppression applied; trucks covered; exhaust machines smoke	Daily	Work fronts; truck routes; near sensitive receptors if any	Visual inspection	MoE 52/1 (1996); WB EHS (2007)	100% trucks covered; 0 dust complaints; Water applied during dust events	Supervising Consultant	CDR (PIU)
<i>Noise</i>	Equipment mufflers; noise near homes/mosques	Daily + Weekly meter check + upon complaint	Sensitive receptors	Visual + handheld meter	MoE 52/1 (1996)	≤65 dB daytime / ≤55 dB evening; 100% mufflers; 0-night works unless approved	Supervising Consultant	CDR (PIU)
<i>Wastewater (Toilets)</i>	Integrity of portable toilets; safe discharge; disposal receipts if pumped	Daily	Toilets / discharge points	Visual + log review	MoE 8/1 (2001)	0 leakage; 100% disposal documented	Supervising Consultant	CDR (PIU)
<i>Accidental Releases</i>	Fuel/oil or asphalt leaks; spill kits	Daily	Machinery & refueling areas	Visual inspection	MoE directives	100% spill kits present; 0 uncontained spills; cleanup <30 min	Supervising Consultant	CDR (PIU)
<i>Debris & Waste Management</i>	No roadside dumping; daily removal; trip tickets; GPS logs	Daily	Loading & disposal points	Visual inspection; receipts	MoE Circular 6/1; UNDP–UNOPS DMF SOPs	0 unauthorized dumping; 100% loads covered; 100% trip tickets signed	Contractor → Supervisor	CDR (PIU)
<i>Hazardous Rubble</i>	Suspicious ACM; exclusion zones	Daily	Debris loading zones	Visual + photos	WB ACM Guidance	0 uncontrolled handling; 100%	Supervising Consultant	CDR (PIU)

EHS Monitoring								
Impact / Source	Parameters to Monitor	Frequency	Monitoring Location	Monitoring Method	Standard / Guidelines	KPIs	Monitoring Responsibility	Institutional Follow-up
<i>(Possible ACM)</i>						STOP-WORK compliance		
<i>Fuel & Water Consumption</i>	Efficiency checks	Monthly	Storage areas	Logbook review	N/A	Reduced idling; optimized routing	Supervising Consultant	CDR (PIU)
<i>Vegetation / Biodiversity</i>	Disturbance to olives / oaks; dumping avoidance	Weekly	Road shoulders; adjacent land	Visual	ESS6	0 new damage; 0 dumping in natural/Agri land	Supervising Consultant	CDR (PIU)
<i>SEA/SH Prevention</i>	CoC signed; workers trained; monthly refreshers	Before mobilization + Monthly	Site office	Records	ESS2; WB SEA/SH GPN (2022)	100% trained & signed CoC, Monthly refresher conducted; % of workers attending refresher sessions	Supervising Consultant	CDR (PIU)
<i>SEA/SH Grievances</i>	Reported cases; confidential GRM functioning	Monthly + immediate upon complaint	Work zones	GRM log review	ESS10	0 unresolved >14 days; confidentiality ensured	Supervising Consultant	CDR (PIU)
<i>Worker Grievances / Labor Mix</i>	Complaints; workforce gender & nationality	Monthly	Workforce registry	Log review	ESS2	Registry updated monthly; 0 retaliation	Supervising Consultant	CDR (PIU)
<i>Access Obstruction</i>	Type/duration; emergency access	Daily	Work fronts	Visual	ESS4	Emergency access always open	Supervising Consultant	CDR (PIU)
<i>Working Conditions</i>	Contracts; wages; documentation	Monthly	Site office	Records check	Labor Law; ESS2	100% legal documentation; 0 delayed payments	Supervising Consultant	CDR (PIU)
<i>Child Labor</i>	Age verification (IDs)	Daily	All work zones	ID check	Labor Law; ESS2	0 under-18 workers	Supervising Consultant	CDR (PIU)
<i>Women's Inclusion</i>	% women in workforce	Monthly	Registry	Record review	ESS2	Monitored monthly; outreach if < target	Supervising Consultant	CDR (PIU)

EHS Monitoring								
Impact / Source	Parameters to Monitor	Frequency	Monitoring Location	Monitoring Method	Standard / Guidelines	KPIs	Monitoring Responsibility	Institutional Follow-up
<i>Social Grievances</i>	GRM logs	Weekly + upon complaint	All sites	GRM review	ESS10	100% logged within 24h; 90% resolved <14 days	Supervising Consultant	CDR (PIU)
<i>Traffic Safety / TMP</i>	Banksmen; signs; speeds ≤20 km/h	Daily	Roads & village centers	Visual	ESS4; Traffic Law	0 safety incidents; 100% signage	Supervising Consultant	CDR (PIU)
<i>Debris Transport Safety</i>	Covers; correct route; no spillage	Daily	Haul routes	Visual	MoE Circular 6/1	100% trucks covered; 0 road spillage	Supervising Consultant	CDR (PIU)
<i>UXO/ERW</i>	LMAC daily clearance; toolbox talks; STOP-WORK triggers	Daily before works	Work fronts	LMAC forms	LAF/LMAC SOPs	100% daily LMAC clearance; 0 unauthorized digging	Supervising Consultant + LMAC	CDR (PIU)
<i>Structural Instability</i>	Cracks; façade tilt; post-vibration re-check	Daily + after vibration	Buildings near road	Visual + photos	UNDP/UNOPS SOPs	0 collapses; exclusion zones enforced 100%	Supervising Consultant	CDR (PIU)
<i>Damage to Utilities</i>	Breakage of telecom/water lines	Daily	Work fronts	Visual	N/A	0 unreported damage; 100% repaired promptly	Supervising Consultant	CDR (PIU)
<i>Chance find Human Remains</i>	Incident report; area secured; authorities notified within 1 hour; worker psychological support provided.	Upon discovery	Work sites/Debris Zone/road section	Written reports, photos, official authority logs, and PFA delivery confirmation.	MoPH instructions, national forensic procedures, relevant Lebanese law.	100% compliance with STOP-WORK & notification protocol; 0 incidents of improper handling.	Supervising Consultant	CDR (PIU)
<i>Cultural Heritage</i>	Chance-find documentation; DGA notification	Upon discovery	Work sites	Photos + notification	ESS8; Law 166/LR	0 disturbance after discovery	Supervising Consultant	DGA

Annex 2: Annexes to the ESMP Checklist

Annex a Environmental and Social Baseline

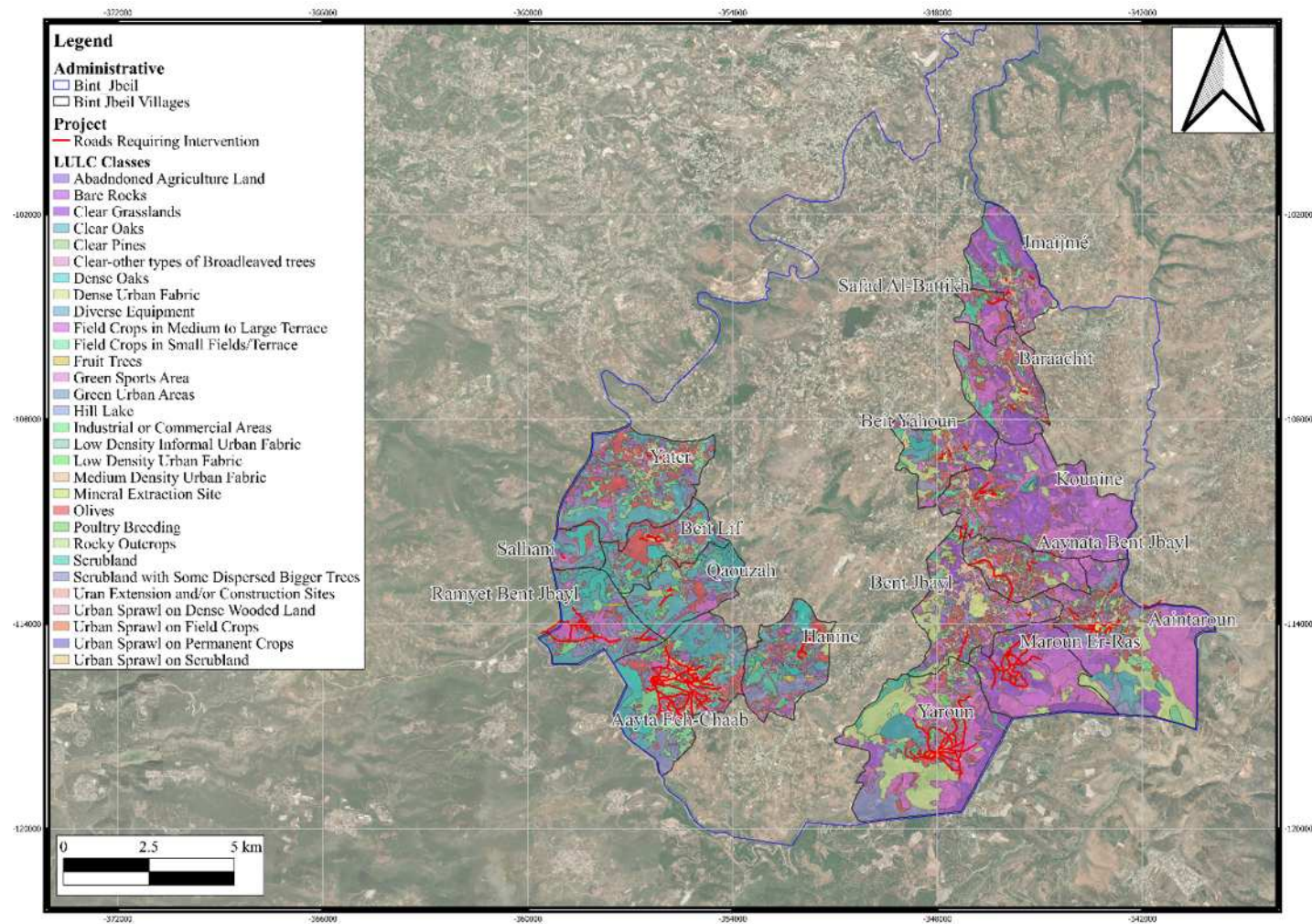


Figure 3 Land Use / Land Cover (LULC) Classification for the Project Area and Surrounding

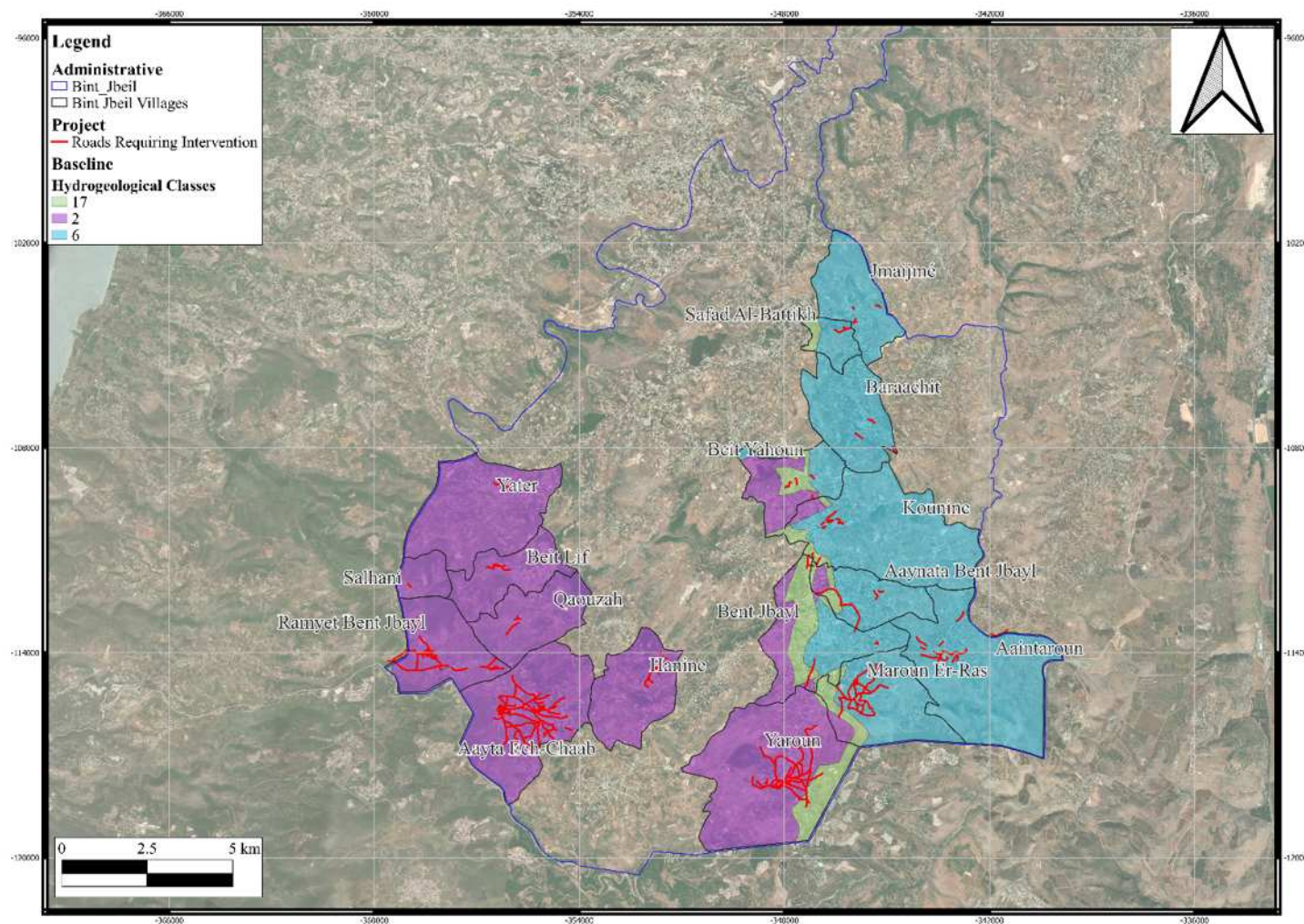


Figure 4 Hydrogeological Classes of the Project Area and Surrounding

Table 2 Hydrogeological Classes Characteristics

Hydrogeological Class	Underground Sheets Of Water	Lithology	Age	Flows Of The Sources l/sec.	Probable Instantaneous Flows Of The Works l/sec.	Transmissivity m ² /sec
2	In Karstic Formations Wide And Rich Water table	Massive Limestones And Dolomitic Limestones With Intercal. Marls Thickness: >1000 M.	Jurassic Bathonien-Portlandien	<100 100-1000 >1000	>100	10-2 ≤ T ≤ 1 Generally High
6	Wide Water Table In Group Karstic Formations	Limestone, Marl Thickness: 100 To 300 M.	Nummulitic Eocene	<100	<50	10 ⁻⁴ ≤ T ≤ 10 ⁻³ Poor
17	Areas Generally Without Water Table or A Very Local Water Table	Marl And Marl-Limestone Thickness: 100 To 200 M.	Cretaceous – Senonian and base of the Eocene	–	Very Weak	Very Weak

Table 3 Example of Sensitive Receptors in the study villages

Road in Village	Place of Worship	Distance
Hanine	Mosque	2 m from class A Road
	Mosque	40.1 m
Kounin	Mosque	47.195 m from class B Road
	Mosque	34 m from class B Road

Road in Village	Hospitals	Distance
Aaynata Bint Jbeil	Salah Ghandour Hospital	102.167 m from class B Road
Bint Jbeil	Bint Jbeil Hospital	247 m from Class B Road

Road in Village	River	Distance
Beit Lif	Wadi Al Izziye	152.99 m from class B Road
Aaintaroun	Litani River	63.23 m from class B road

Hanine involves Class A roads. The mosques kounine are located along road sections expected to be treated under Phase 2/class B roads (patching) and are included to reflect the broader village-level sensitivity screening

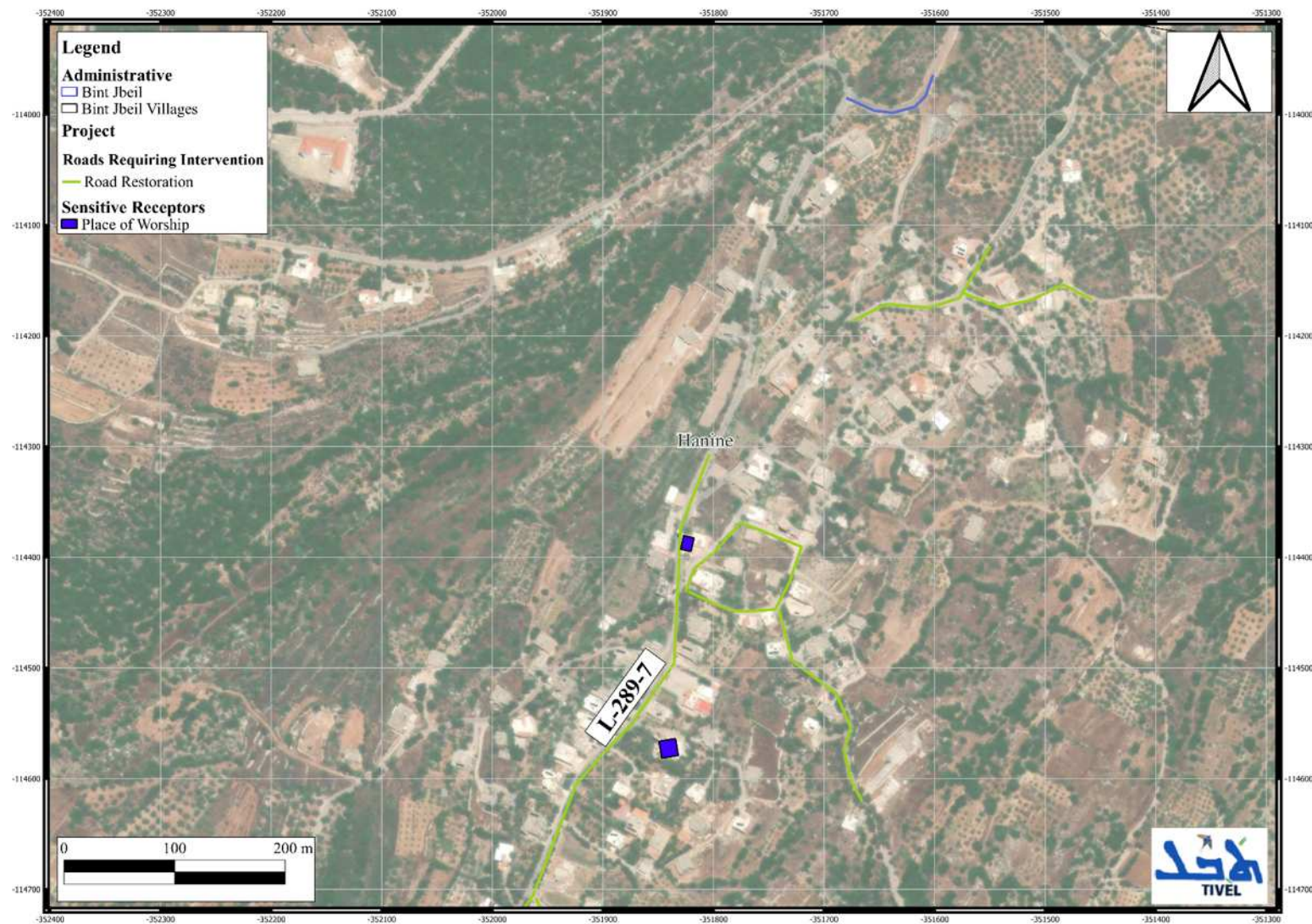


Figure 5 Example of Sensitive Receptors Near the Interventions (Class A Roads) (1)

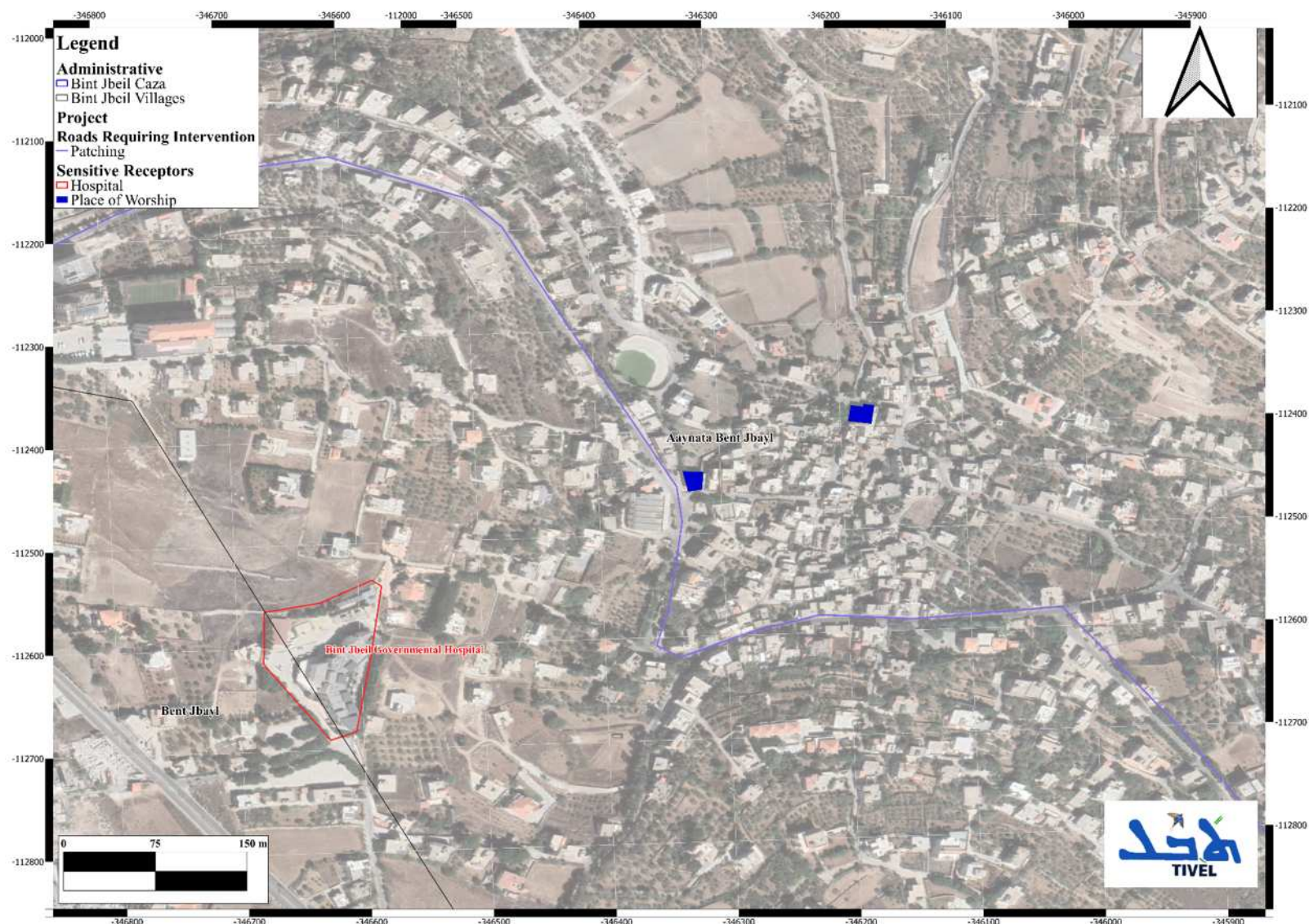


Figure 6 Example of Sensitive Receptors Near the Interventions (Class A Roads) (2)

Annex b: Stakeholder Engagement

A. Public Participation meeting

A public **consultation meeting for Sour and Bint Jbeil** Caza was held on **27 November 2025** in Beirut, with **17 participants (including two female municipal engineers)**. The project team presented the project scope, technical assessment results, and the road segments identified for clearance and initial restoration; explained the obligations under the ESMP Checklist; and introduced the Project GRM.

Key issues raised included debris-management obligations and contractor compliance with national legislation and World Bank standards; UXO/ERW clearance requirements; and contractor responsibilities, supervision arrangements, and the feasibility of implementation during the rainy season. In this context, municipalities confirmed their readiness to support access facilitation, communication, and focal-point designation.

A **summary table of feedback, responses, and agreed follow-up actions** is provided here, along with the invitation letters, photographs, and attendance sheets.

Table 4 Summary of Stakeholder Feedback, Project Responses, and Follow-up Actions

Stakeholder	Summary of Feedback / Questions Raised	Project Team Response	Follow-up Action / Next Steps
President of the Union of Municipalities (Bint Jbeil)	Asked whether soil, water, or air quality measurements would be conducted; inquired about identification of sensitive receptors.	Explained that no new measurements are planned; baseline soil, water, and air conditions rely on existing national studies and datasets, while the assessment relies mainly on GIS analysis to identify environmental features and sensitive receptors along the road corridors.	Conduct field verification before implementation; maintain communication with municipal focal points.
President of the Union of Municipalities (Bint Jbeil)	Asked whether debris management will be controlled and if contractors will comply with MoE requirements.	Clarified that debris handling follows MoE Circular 6/1.	The supervising engineer will verify compliance, and the contractor must submit a Debris Management Plan before mobilization, as required by the ESMP Checklist. This will be coordinated with local municipalities and the MoE.
Municipalities & Union Representatives	Asked whether LAF/LMAC clearance is required prior to works.	Confirmed that all suspected ERW/UXO areas require LAF/LMAC coordination and STOP-WORK procedures.	Coordinate with LAF/LMAC; contractor to train teams on ERW awareness.
Municipalities & Union Representatives	Asked if non-war-damaged roads could be included in project scope.	Clarified that only conflict-damaged roads are eligible; prioritization focuses on border villages most affected.	-
President of the Union of Municipalities (Bint Jbeil)	Asked about supervision mechanisms and whether good practices will be enforced.	Stated that a supervising engineer will monitor contractor performance; contractor must prepare an OHS Manual and C-ESMP before works; ESMP obligations are contractual.	Contractor to submit OHS Manual and C-ESMP; supervision engineer to enforce compliance.
Municipalities	Asked about start date and weather constraints, noting that works cannot proceed during heavy rain.	CDR representatives indicated works may start at the beginning of the year, with scheduling adapted to seasonal conditions.	CDR to communicate implementation schedule; municipalities to coordinate access during dry periods.
Municipalities & Local Authorities	Expressed readiness to support implementation; offered to designate local focal points.	Acknowledged and welcomed cooperation; clarified roles in access facilitation, traffic management, and communication.	-

B. Targeted NGO Consultations

Three NGOs were contacted to understand the scope of their current work in South Lebanon, including their engagement with local communities, and vulnerable groups. A summary table (dates, persons contacted, key insights) is included below.

Table 5 Summary of Stakeholder Feedback

NGO/Date/Participants	Discussed Points & Relevance to ESMP
Anera (1/12/2025 – Jad Sakr, Deputy Country Director for Programs; Mohammad Khadoura, Area Manager – South & BML)	Anera explained that its current work in South Lebanon focuses on livelihoods support, WASH interventions, cash assistance, and community-based recovery programs implemented in coordination with municipalities. They noted that recent activities include small-scale recovery support and solar or renewable-energy initiatives aimed at strengthening local self-sufficiency. Anera emphasized that door-to-door communication remains the most effective approach for reaching returning households, vulnerable groups, and families in border villages.
Acted (10/12/2025 – Wassim Moukarzel, Project Coordinator)	Acted described their ongoing support to vulnerable groups across Lebanon through combined emergency and recovery programming with a strong emphasis on localization and social inclusion. They outlined their Recovery Community-Led Project in Nabatieh District, which covers solar and water infrastructure, WASH assistance, health-related activities, and community-service support. They stressed that DRR, Governors, and the municipalities remain their primary channel for community engagement and clarified that they are not operating in frontline villages due to security constraints.
Avsi Lebanon (scheduled 11/12/2025 – Francesca Lazzari, Country Representative)	AVSI confirmed that they are implementing recovery programmes in South Lebanon, particularly in Marjayoun Caza, working with returned Lebanese residents and Syrian refugees. Their interventions focus on WASH, livelihoods, and infrastructure reconstruction, including restoring water-supply networks. AVSI validated municipal feedback indicating that where essential services remain unrestored, populations could not return, placing additional pressure on vulnerable households who cannot afford prolonged displacement. They also flagged persistent rubble accumulation and uncertainty regarding environmentally compliant debris management. AVSI noted that they can support communication with communities, but advised that information should be shared only prior to the commencement of works so as to avoid creating unrealistic expectations.

Invitation Letter (Sample)



DAR AL HANDASAH NAZIH TALEB & PARTNERS
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الموضوع: دعوة لحضور إجتماع مشاركة عامة حول مشروع إزالة العوائق وترميم الطرق المتضررة في قضائي صور و بنت جبيل في جنوب لبنان بالإضافة إلى منطقة الضاحية الجنوبية لمدينة بيروت.

تحية طيبة وبعد،

بما أن مجلس الإنماء والإعمار، وبتمويل من البنك الدولي، يقوم بتنفيذ مشروع إزالة العوائق وترميم الطرق المتضررة في قضائي صور و بنت جبيل في جنوب لبنان بالإضافة إلى منطقة الضاحية الجنوبية لمدينة بيروت؛

ولما كانت شركة دار الهندسة نزيه طالب وشركاه قد كلفت من قبل مجلس الإنماء والإعمار القيام بمهام إعداد الدراسات الهندسية والبيئية وملفات التلزم للمشروع، والتي بدورها كلفت شركة "TIVÈL" للاستشارات البيئية لإعداد خطة إدارة بيئية واجتماعية للمشروع المذكور؛

وحيث أنه من الضروري عقد إجتماع تشاوري مع الجهات العامة والمعنية بشؤون البيئة والجوانب الاجتماعية ذات الصلة بمشاريع الطرق، بهدف عرض معطيات المشروع، وإبلاغ الأطراف المعنية، والاستماع إلى آرائهم، و أخذ احتياجاتهم وملاحظاتهم بعين الاعتبار؛

لذلك، ندعوكم لحضور إجتماع المشاركة العامة عند الساعة العاشرة صباحاً من يوم الخميس الواقع في 27 تشرين الثاني وذلك في فندق كراون بلازا - بيروت. كما نأمل من المواطنين الكرام إرسال أية ملاحظات خطية متعلقة بالمشروع إلى شركة دار الهندسة نزيه طالب وشركاه عبر الفاكس: 01/863434 أو بواسطة البريد الإلكتروني التالي:

eimad@dartaleb.com

وتقبلوا فائق الاحترام

مديرة شركة TIVÈL

نسرين الغزال معوض



Attendance sheet

November 27, 2025

**DAMAGED ROADS CLEARING AND RESTORATION IN SOUTH LEBANON
SOUR AND BINT JBEIL CAZAS AND THE SOUTHERN SUBURBS OF BEIRUT**

ESMP Checklist-Public Participation
قائمة حضور

Nb.	الاسم	الشركة/المنصب	البريد الإلكتروني	رقم الهاتف
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6	علي فح	وزارة التعليم العالي	U.L.V.WB	03083305
7	محمد الخليل	رئيس بلدية	emad.studies@390@gmail.com	03853985
8	حاتم حارر	بلدية عين ابل	hatemsad@390@gmail.com	03-127760
9	سريال	قائمة متصل		03/846644
10	عبدالله	رئيس بلدية طبريا / ارض		03-127760
11	عقل نزالون	رئيس بلدية دبل		03/857797

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November 27, 2025

Nb.	الاسم	الشركة/المنصب	البريد الإلكتروني	رقم الهاتف
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14	محمد المرس	بلدية البرغلة - جنوب لبنان		03/840144
15	محمد تيسر الراود	بلدية البرغلة - جنوب لبنان	mo.hamed.alraoud1@gmail.com	71/169041
16	د. علي رجب	اتحاد بلديات جنوب لبنان	ali.chaita@gmail.com	76/711067
17	إيلي الخوري	TIVEL	e.jkhoury02@gmail.com	71/816371
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Photos from the public consultation meeting



Figure 7 Photos from the public consultation meeting

Presentation Material

**مشروع إزالة العوائق وترميم الطرق المتضررة في قسبي
صور وبنت جبيل في جنوب لبنان بالإضافة إلى منطقة الضاحية
الجنوبية لمدينة بيروت**

**خطة الإدارة البيئية والاجتماعية
ESMP Checklist**

جلسة مشاركة عامة

دار الهندسة المعمارية نزيه طالب وشركاه
TIVÈL

نقاط حوار الجلسة

1. الخطة
2. الجهات المعنية بالمشروع
3. أهداف اللقاء
4. مراحل إعداد خطة الإدارة البيئية والاجتماعية
5. الأطر القانونية للمشروع
6. وصف المشروع
7. دراسة المحيط البيئي (توضيح حدسي)
8. الآثار البيئية والاجتماعية الإيجابية للمشروع
9. الآثار البيئية والاجتماعية السلبية المحتملة للمشروع
10. خطة الإدارة البيئية والاجتماعية
11. آلية مراجعة الشكاوى GRM
12. أسئلة ومناقشة عامة

1. مقدمة

مع خروج لبنان من نزاع 2023-2024، يهدف مشروع المساعدة
الطاقة لبنان إلى دعم الاستجابة الفورية وتهدئة الظروف للتعافي، بما
يشمل الإدارة السليمة للركام، واستعادة خدمات البنى التحتية الحيوية، و
إصلاح الطرق المتضررة في المناطق ذات الأولوية.

وتتدرج ضمن المكون الأول للمشروع (Immediate Response)
أعمال إزالة العوائق من الطرق، وتنفيذ أعمال تثبيت الأرصفة المتضررة.

أما المكون الثاني (Rapid Recovery) فيشمل أعمال ترميم وترافيع
الطرق المتضررة باستخدام الأسفلت البارد أو البائن بهدف تحسين قدرة
المرور وتعزيز السلامة المرورية، ودعم التعافي الاقتصادي
والاجتماعي.

2. الجهات المعنية بالمشروع

الجهة	الصفة
البنك الدولي	ممول المشروع
مجلس الأمناء والاعمار	إدارة وتنفيذ
دار الهندسة نزيه طالب وشركاه	استشاري هندسي
TIVÈL	استشاري بيئي

3. أهداف اللقاء

تحقيق الشفافية عبر إعلام الرأي العام بالمشروع وإتاحة المجال لإبداء
ملاحظاتهم، وذلك تماثياً مع متطلبات معيار المشاركة والتواصل مع أصحاب
المصلحة ضمن الإطار البيئي والاجتماعي للبنك الدولي "ESS10".

عرض لمشروع، وعرض واقع التقدم في إعداد الدراسات، وشرح أبرز الآثار
البيئية والاجتماعية المتوقعة والتدابير التخفيفية المقترحة.

مناقشة خطة الإدارة البيئية والاجتماعية للمشروع التي تهدف لحماية الصحة
البشرية، السلامة العامة والموارد البيئية.

4. مراحل إعداد خطة الإدارة البيئية والاجتماعية

- تحديد الأطر القانونية للمشروع
- دراسة مكونات المشروع
- دراسة البيئة المحيطة
- تقييم الآثار المحتملة للمشروع
- مشاركة العامة
- تحديد الإجراءات التخفيفية لهذه الآثار وسبل مراقبتها

5. الأطر القانونية للمشروع

القوانين اللبنانية التي تُعنى بحماية البيئة وحقوق وتأمين بيئة عمل العمال أمانة وصحية

- قانون حماية البيئة 444/2002
- والمرسوم 8633/2012 الخاص بتقييم الأثر البيئي
- القانون 80/2018 لإدارة المتكاملة للنفايات
- مرسوم 5606/2019-5605 (CDW) مواد خطرة
- مرسوم 118/1977 (صلاحيات البلديات والمحافظات)
- مرسوم MoE رقم 6/1/2024 (رغمات الحرب)
- قانون العمل 1946
- مرسوم 11802/2004 (OHS)
- قانون السير 243
- الاتفاقيات الدولية

5. الأطر القانونية للمشروع

WB Environmental and Social Framework – ESF, 2018

- ESS1 لتقييم وإدارة المخاطر البيئية والاجتماعية
- ESS2 للعمالة وظروف العمل
- ESS3 لكفاءة استخدام الموارد ومنع التلوث،
- ESS4 للصحة والسلامة المجتمعية
- ESS6 لحفظ التنوع البيولوجي والإدارة المستدامة للموارد الطبيعية الحية
- ESS8 لحماية التراث الثقافي،
- ESS10 لمشاركة أصحاب المصلحة والإفصاح عن المعلومات

6. وصف المشروع

مكونات المشروع ونطاق أعمال التأهيل

المكون الأول - Component 1: التدخل العاجل
تدخلات سريعة تشمل:

- فتح الطرق وإزالة العوائق Road Clearing
- أعمال التثبيت Road Stabilization

المكون الثاني - Component 2: إصلاح الطرق

- ترقيع المقاطع المتصدرة بالأسفلت البارد أو الساخن Patching

شرط أساسي: في حال وجود أضرار في البنى التحتية (مياه، صرف، كهرباء)، يجب إصلاحها أولاً قبل مباشرة أعمال إصلاح.

6. وصف المشروع

نطاق العمل

أن المشروع يهدف للقيام:
بإزالة العوائق وترميم الطرق المتصدرة في قضائي صور و بنت جبيل في جنوب لبنان

6. وصف المشروع

المسح التقني وتحديد احتياجات التأهيل

تم إجراء مسح تقني باستخدام الصور الجوية الحديثة بدقة ٣٠ سم الصادرة عن المجلس الوطني للبحوث العلمية (CNRS)، وبيانات الـ GIS، وذلك في قضائي صور و بنت جبيل بهدف:

- التحقق من الطرق التي لم تشهد أي أعمال إزالة عوائق أو إصلاح (بالتنسيق مع وزارة الأشغال العامة والنقل).
- تصنيف الطرق حسب مستوى الضرر ونوع التدخل المطلوب.
- تحديد الأعمال اللازمة ضمن نطاق المشروع (إزالة الركام، التثبيت الحصوي، الترفيع).

6. وصف المشروع

المخرجات الأولية للمسح التقني

تم تقدير طول ومساحات المقاطع المتصدرة وذلك عبر قياس دقيق للطول والمساحات ضمن كل قضاء، مما أتاح تحديد الحجم الإجمالي للأشغال المطلوبة.

تم تحديد أولويات التدخل العاجل ضمن مكون الاستجابة الفورية/ Component 1 حيث جرى ترتيب المقاطع المتصدرة وفقاً لمدى تأثير الضرر على الوصول إلى القرى والخدمات الأساسية، ومستوى الأضرار الذي يعيق الحركة، والحاجة العاجلة لإعادة فتح الطريق وتأمين المرور الآمن.

تم تحديد النوع الدقيق للتأهيل المطلوب لكل مقطع إذ جرى توصيف نوع التدخل التقني المناسب لكل حالة، سواء لجهة التنظيف، أو إزالة العوائق، أو التثبيت بالمواد الحصوية، أو أعمال الصيانة الموسمية، أو التحضير للتعبيد اللاحق... إلخ.

6. وصف المشروع

فئات الطرق حسب مستوى الضرر

Class A roads /Phase 1

- طرق متصدرة بالكامل ومغلقة — تتطلب إزالة الركام، إعادة الفتح، والتثبيت. Total Closure & Clearing & Road Stabilization
- طرق متصدرة وجزئياً مغلقة — تتطلب إزالة الركام المتبقي والتثبيت. Partial Closure & Clearing & Road Stabilization
- طرق لم تتأثرها وإزالة الحصى — تتطلب أعمال تثبيت هضار Road Stabilization (Base course)

6. وصف المشروع

فئات الطرق حسب مستوى الضرر

Class B roads /Phase2

طرق ذات أضرار موضعية — تتطلب ترقيعات محدودة Patching

قضاء صور

أظهر المسح في قضاء صور أن هناك ما مجموعه 43,724.9 متراً من الطرق التي تتطلب تدخلاً. بمساحة تقديرية تبلغ 306,982 متراً مربعاً. وتنقسم الأعمال إلى مرحلتين:

Stage	Phase	Total Road Length (km)	Total Area (sqm)
Phase 1	Phase 1	22,535.34	300,046.79
	Phase 2	11,369.70	106,936.11
Total	Total	43,724.9	406,982.90

ID	Cultivated Area	Road Type	Required Road Works	Length (m)	Area (sqm)	Assigned Phase
81	Ardena (Ardena)	Primary	Patching	424.1	4241	2
		Local	Partial Closure & Clearing & Road Stabilization	108.4	1084	1
82	Alban Chah	Local	Patching	135.9	478	2
		Local	Road Stabilization	281.8	1119	1
83	Alban Chah	Secondary	Patching	194.8	496	2
		Local	Patching	65.2	512	2
84	Ardena (Ardena)	Primary	Road Stabilization	421.7	4649	1
		Local	Partial Closure & Clearing & Road Stabilization	135.7	4264	1
		Local	Patching	122.5	4613	2
		Local	Road Stabilization	2666.1	16772	1
		Primary	Patching	1371.8	13718	2
85	Ardena (Ardena)	Primary	Road Stabilization	176.1	1581	1
		Local	Road Stabilization	178.2	14864	1
		Local	Patching	146.4	712	2
86	Ardena (Ardena)	Primary	Road Stabilization	243.8	1223	1
		Local	Road Stabilization	6.4	94	1
		Local	Road Stabilization	209.8	862	1
		Primary	Road Stabilization	181.3	867	1
87	Ardena (Ardena)	Primary	Partial Closure & Clearing & Road Stabilization	181.3	867	1
		Local	Patching	65.7	278	2
		Local	Road Stabilization	2209.4	11447	1
		Secondary	Patching	184.7	4707	2
88	Ardena (Ardena)	Primary	Road Stabilization	114.5	1278	1
		Local	Partial Closure & Clearing & Road Stabilization	615.4	4619	1
		Local	Road Stabilization	615.4	3782	1

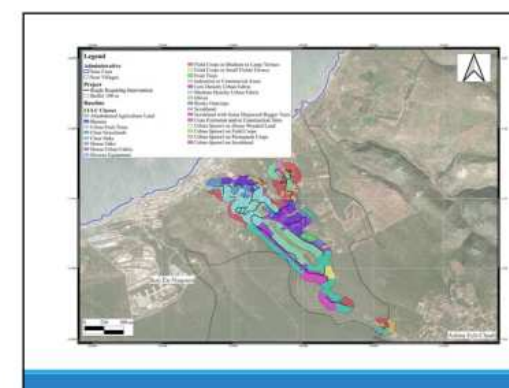
ID	Cadastral Area	Road Type	Required Road Works	Length (m)	Area (m²)	Assigned Phase
S10	Bshar الشجر	Local	Total Closure & Clearing & Road Stabilization	177.9	887	1
		Access	Partial Closure & Clearing & Road Stabilization	228.1	1141	1
		Access	Road Stabilization	198.6	2134	1
		Access	Total Closure & Clearing & Road Stabilization	141.8	407	1
		Local	Partial Closure & Clearing & Road Stabilization	144.2	7662	1
		Local	Paving	421.9	2114	2
		Local	Road Stabilization	213.2	11886	1
		Local	Total Closure & Clearing & Road Stabilization	113.1	768	1
		Primary	Road Stabilization	1181.1	10883	1
		Local	Paving	449.9	1474	2
S11	Hollomine الحولمين	Local	Paving	386.3	1432	2
S12	Jibays جب	Access	Road Stabilization	230.2	921	1
		Access	Total Closure & Clearing & Road Stabilization	306.7	1227	1
		Local	Road Stabilization	1188.4	9602	1
		Secondary	Road Stabilization	3112.8	13439	1
S13	Magdalous مجدلوس	Access	Road Stabilization	242.9	768	1
		Local	Partial Closure & Clearing & Road Stabilization	474.9	1980	1
		Local	Paving	178.7	1976	2
		Local	Road Stabilization	1086.8	7833	1
S14	Mazzari Sour مجازري سور	Local	Paving	61.2	313	2
		Primary	Paving	421.7	4227	2
		Local	Road Stabilization	471.2	4276	1
		Local	Total Closure & Clearing & Road Stabilization	11.8	178	1
S15	Mazzari (Ta-Zalabiyeh) مجازري (تالابيه)	Primary	Paving	1378.4	17788	2
		Local	Partial Closure & Clearing & Road Stabilization	1428.2	7739	1
S16	Mazzaloun مزالون	Local	Road Stabilization			

ID	Cadastral Area	Road Type	Required Road Works	Length (m)	Area (m²)	Assigned Phase
S17	Qasr قصر	Primary	Paving	1749.9	14211	2
		Secondary	Road Stabilization	2081.2	22002	1
S18	Qleir Sour قصر سور	Local	Paving	381.4	2237	2
S19	Tayr Harbi طير حرب	Access	Road Stabilization	299.6	1488	1
		Local	Partial Closure & Clearing & Road Stabilization	84.8	470	1
		Local	Paving	308.2	1580	2
		Local	Road Stabilization	1291.1	6022	1
		Secondary	Partial Closure & Clearing & Road Stabilization	803.6	1194	1
		Secondary	Road Stabilization	802.3	4058	1
S20	Various مختلف	Local	Partial Closure & Clearing & Road Stabilization	608.1	2388	1
		Local	Paving	812.8	1343	2
		Local	Road Stabilization	706.7	4018	1
		Local	Total Closure & Clearing & Road Stabilization	131.4	727	1
		Primary	Paving	614.2	6143	2



District	ID	Cadastral Area	Road Type	Required Road Works	Length (m)	Area (m²)	Assigned Phase
Bint Jbeil	S10	Bshar الشجر	Local	Partial Closure & Clearing & Road Stabilization	186.2	832	1
			Local	Paving	113.2	661	2
			Local	Road Stabilization	247.2	1475	1
			Primary	Paving	282.2	2812	2
			Local	Paving	219.1	1142	2
			Local	Road Stabilization	207.3	1436	1
			Secondary	Paving	248.1	1143	2
			Access	Partial Closure & Clearing & Road Stabilization	42.8	278	1
			Access	Road Stabilization	114.4	427	1
			Local	Partial Closure & Clearing & Road Stabilization	203.3	1793	1
S11	Hollomine الحولمين	Hollomine الحولمين	Local	Road Stabilization	1097.7	6710	1
			Primary	Paving	1114.8	1893	2
			Local	Road Stabilization	112.8	117	1
			Local	Road Stabilization	473.3	2171	1
			Secondary	Paving	128.4	862	2
			Local	Paving	181.3	388	2
			Local	Paving	491.8	2116	2
			Local	Road Stabilization	318.9	1732	1
			Local	Partial Closure & Clearing & Road Stabilization	113.9	469	1
			Primary	Paving	199.9	802	2
S12	Jibays جب	Jibays جب	Primary	Paving	527.9	2178	2
			Primary	Paving	15.1	632	2
			Primary	Road Stabilization	7.4	11	1
			Local	Road Stabilization	1431.9	1128	1
			Secondary	Paving	50.4	771	2
			Local	Paving	183.2	1686	2
			Local	Road Stabilization	128.2	721	1
			Secondary	Paving	47.3	271	2
			Local	Paving	1417.3	2294	2
			Local	Paving			

District	ID	Cadastral Area	Road Type	Required Road Works	Length (m)	Area (m²)	Assigned Phase
Bint Jbeil	S10	Bshar الشجر	Local	Road Stabilization	217.2	1743	1
			Primary	Paving	11.1	111	2
			Local	Partial Closure & Clearing & Road Stabilization	742.8	4884	1
			Local	Road Stabilization	1528.8	8028	1
			Primary	Partial Closure & Clearing & Road Stabilization	810.3	4172	1
			Local	Paving	491.8	1578	2
			Secondary	Paving	491.8	591	2
			Access	Road Stabilization	491.3	3986	1
			Local	Partial Closure & Clearing & Road Stabilization	1011.8	4611	1
			Local	Paving	281.0	1578	2
S11	Hollomine الحولمين	Hollomine الحولمين	Local	Road Stabilization	473.3	1676	1
			Local	Total Closure & Clearing & Road Stabilization	212.2	2677	1
			Primary	Paving	248.1	1143	2
			Secondary	Paving	380.2	2281	2
			Secondary	Road Stabilization	380.2	2418	2
			Secondary	Paving	491.8	2116	2
			Local	Paving	128.4	862	2
			Local	Partial Closure & Clearing & Road Stabilization	113.9	469	1
			Local	Paving	491.3	2116	2
			Local	Road Stabilization	491.3	2116	2
S12	Jibays جب	Jibays جب	Local	Partial Closure & Clearing & Road Stabilization	225.4	1713	1
			Local	Paving	491.3	2116	2
			Local	Road Stabilization	491.3	2116	2
			Local	Total Closure & Clearing & Road Stabilization	212.2	1672	1
			Local	Paving	217.7	2671	1
			Local	Road Stabilization	307.2	1681	1
			Local	Road Stabilization			
			Local	Road Stabilization			
			Local	Road Stabilization			
			Local	Road Stabilization			



11. آلية مراجعة الشكاوى GRM

يمكن للأشخاص المعنيين الاستفسار عن معلومات إضافية أو تقديم أية شكاوى (في حال وجودها) بالتواصل مع وحدة آلية مراجعة الشكاوى من الاثنين حتى الجمعة بين 9:00 صباحاً و 15:00 بعد الظهر، عبر:

1. الهاتف: 01980096
2. البريد الإلكتروني: GRM.LEAP@cdr.gov.lb
3. تسجيل كتاب رسمي لدى مجلس الإنماء والإعمار
(العنوان: تلة السراي - رياض الصلح، بيروت - لبنان)

12. أسئلة ومناقشة عامة

يمكنكم إبداء رأيكم عبر التواصل مع شركة TIVÈL
هاتف: 961 76 788 843+أو بواسطة البريد الإلكتروني
info@tivelconsultancy.com
أو إبداء الملاحظات الخطية، في حال وجودها، وإرسالها إلى شركة دار الهندسة نزيه طالب وشركاه بواسطة البريد الإلكتروني التالي
eimad@dartaleb.com

شكراً لحضوركم
ومشاركاتكم

C1: GRM Resolution Structure

- **Level 1** – Site level (Contractor/Supervising Consultant): Initial receipt and resolution within 7 days.
- **Level 2** – CDR PIU Social Specialist: Second-tier review (within 14 days).
- **Level 3** – CDR PIU Director: Final review (within 14 days). PAPs may access judicial mechanisms at any stage.

- **Level 1** – Contractor’s HSE Officer or Site Manager: Resolution within 7 days.
- **Level 2** – CDR PIU Director: If unresolved.

The PIU maintains a **consolidated grievance log**, updated weekly, tracking complaint type, status, actions taken, and closure.

Table 6 Complaints Registration Form

[illegible]

Annex d: Code of Conduct

Table 7 Contractor Code of Conduct Form

Contractor Code of Conduct:

1. All employees, associates, and representatives commit to treating women, children (under the age of 18), and men with respect, regardless of race; color; language; religion; political or other opinion; national, ethnic or social origin; sexual orientation or gender identity; disability; birth or other status.
2. GBV constitutes acts of gross misconduct and is therefore grounds for sanction, which may include penalties and/or termination of employment. All forms of GBV are unacceptable, regardless of whether they take place on the worksite, the worksite surroundings, or off-site. In addition to the potential sanctions listed above, legal prosecution will be pursued, if appropriate, for any employees, associates, and representatives alleged to have committed GBV.
3. Demeaning, threatening, harassing, abusive, or sexually provocative language and behavior are prohibited among all company employees, associates, and representatives.
4. Sexual favors, making promises or favorable treatment dependent on sexual acts are prohibited.
5. Unless there is the full consent by all parties involved, sexual interactions between the company's employees (at any level) and members of the surrounding communities are prohibited. This includes relationships involving the withholding or promise of any kind of reward.
6. All employees, including volunteers and sub-Contractors are expected to report suspected or actual GBV by a fellow worker, whether in the same company or not. Reports must be made in accordance with GBV allegation procedures.
7. All employees are required to attend an induction training course prior to commencing work on site to ensure they are familiar with the GBV Code of Conduct.
8. All employees will be required to sign an individual code of conduct confirming their agreement to support GBV activities.
9. **All employees must strictly comply with UXO/ERW safety protocols and STOP-WORK procedures issued by LAF/LMAC. Any worker who finds or suspects an explosive item must immediately stop all activities, secure the area, and alert the site engineer. Under no circumstances may workers touch, move, shift, dig around, or attempt to inspect rubble piles, metal fragments, or any suspicious objects.**

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

Company Name:

Signed by:

Title:

Date:

Table 8 Individual Code of Conduct Form

- This individual Code of Conduct should be signed by all employees, from senior managers through the operational staff, and should also be required from any Contractors working with the company.
- I, _____, acknowledge that preventing gender-based violence (GBV) is important, and that preventing it is my responsibility. At [Company], GBV activities constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. All forms of GBV are unacceptable, be it on the worksite, the worksite surroundings, or in the community. Prosecution of those who commit GBV may be pursued if appropriate.
- I agree that while working on the [Project], I will:
- Consent to a police background check.
- Treat women, children (persons under the age of 18), and men with respect regardless of race; color; language; religion; political or other opinion; national, ethnic or social origin; sexual orientation or gender identity; disability; birth or other status.
- Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- Not request or engage in sexual favors—for instance, making promises or favorable treatment dependent on sexual acts.

- Understand that unless there is the full consent by all parties involved sexual interactions between the company's employees (at any level) and members of the surrounding communities are prohibited. This includes relationships involving the withholding or promise of monetary or non-monetary reward.
- Attend and actively partake in training courses related to HIV/AIDS and GBV as requested by my employer.
- Report through the grievance redress mechanism or to my manager any suspected or actual GBV by a fellow worker, whether in my company or not, or any breaches of this Code of Conduct.

Sanctions

Not touch, move, shift, dig around, lift, or attempt to inspect any rubble piles, metal fragments, or suspicious objects. I will immediately stop work and notify my supervisor and LAF/LMAC focal points if any item that may be an unexploded ordnance (UXO/ERW) is encountered. I understand that disturbing any object that may be explosive is strictly prohibited.

[Company] has established a grievance redress mechanism for receiving, reviewing, and addressing allegations of GBV. If an employee has breached the Code of Conduct, the employer will take disciplinary action which could include:

- Informal warning
- Formal warning
- Additional training
- Loss of up to one week's salary
- Termination of employment

In addition to the above, if warranted, [Company] will report the employee to the police as per local legal regulations.

I understand that it is my responsibility to use common sense and avoid actions or behaviors that could be construed as GBV or breach this Code of Conduct. I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to GBV. I understand that any action inconsistent with this Code of Conduct or failure to take action mandated by this Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Individual Name:

Signed by:

Title:

Date:

Annex e: Debris and Rubble Management Requirements

(Aligned with MoE Circular 6/1 (2024) and UNDP/UN-Habitat/UNOPS Rubble Management SOPs (2025))

Purpose: This annex sets out mandatory debris-handling procedures for Phase 1 emergency road-clearing and initial restoration works. Requirements apply to all contractors, supervising teams, and operational partners. These procedures ensure environmental compliance, safe routing, and legal chain-of-custody for all rubble arising from the Project.

1. Direct Loading — No Sorting or Stockpiling at the Work Front

Immediately after LMAC clearance:

- Debris must be directly loaded into trucks at the point of removal.
- No sorting, segregation, breaking, or stockpiling is permitted on the work front.
- Only visual identification of suspect materials (UXO, asbestos, chemical residues) is allowed.
- All segregation, screening, or processing must occur exclusively at MoE-approved Temporary Storage Sites (TSS).

Rationale: Work-front sorting increases exposure to EO, spreads dust and violates MoE Circular 6/1.

Any unauthorized dumping, route deviation, or delivery to a non-MoE-approved site constitutes a violation of MoE Circular 6/1 and will result in corrective actions, penalties, and immediate reporting to CDR-PIU.

2. Transport Only to MoE-Approved Temporary Storage Sites (TSS)

Debris must be transported directly and exclusively to Temporary Storage Sites (TSS) authorized under MoE Circular 6/1 (2024). These sites are typically environmentally degraded quarries that have been verified by the Ministry of Environment, the concerned Municipalities and Unions of Municipalities, and Majles el-Janoub. Nationally, approximately 40 temporary sites have been designated, several of which fall within the southern districts relevant to this Project; around 26 of these sites are currently under MoE examination.

Supervising teams must verify that each delivery is made only to a confirmed MoE-approved site.

3. Contractor Debris Management Plan (DMP) — Mandatory Before Mobilization

Before clearing operations begin, the Contractor shall prepare a Debris Management Plan (DMP) for approval by the Supervising Engineer and CDR-PIU.

The DMP must include:

- Verification of MoE-authorized TSS and quarries
- Proposed haulage routes and alternative routes
- Chain-of-custody system, including trip tickets and weigh/volume records
- GPS tracking protocol for all debris trucks
- Procedures for identifying and isolating hazardous-like debris
- Coordination with Municipalities, Unions, and Majles el-Janoub

No debris transport may begin until the DMP is formally approved.

4. Debris Transport Verification Requirements

Each debris truck movement must comply with the following:

- Trucks must be covered with liners to prevent dust and spills.
- GPS devices must be active from loading to unloading.
- Drivers must follow the authorized route with no unauthorized dumping or deviation.
- Each delivery must be documented using:
 - Debris Chain-of-Custody Form (Annex f)
 - Trip Ticket (Annex g)
 - Quarry/TSS stamp and receiving officer signature

Supervising teams shall perform spot audits and cross-check trip tickets with GPS data.

5. Reference to the National Rubble Recovery Strategy

The Ministry of Environment—supported by the World Bank and UNOPS—is preparing a **Roadmap for Sustainable Rubble Management**, aiming to recover up to **70% of rubble** through recycling and reuse, with the remaining fraction safely integrated into quarry rehabilitation. This Roadmap provides **strategic long-term guidance** for rubble management under LEAP but does **not** replace the **operational procedures required under MoE Circular 6/1** for Phase 1 emergency works.

Annex f: Debris Chain-of-Custody Form

Origin Site: _____

Municipality: _____

Date: ____ / ____ / 2025

1. Loading (Site)

Item	Response
Waste type	☐ War rubble ☐ Mixed ☐ Suspicious
Estimated Quantity	_____ m ³ / tons
Truck Plate #	_____
Driver Name	_____
Load covered with liners	☐ Yes ☐ No
GPS device ID	_____
Loaded by (signature)	_____

Annex g: Trip Ticket Template

1. Transport

- Departure Time: _____
- Route: _____
- No dumping or stopping: ☐ Yes

Driver Signature: _____

2. Temporary Storage Site

- **TSS Name:** _____
- **Arrival Time:** _____
- **Received Quantity:** _____
- **Material Category:**
 - ☐ Non-hazardous rubble
 - ☐ Hazardous-like debris

Received By (Name/Signature): _____

TSS Stamp: _____

Annex h: Environmental Monitoring Sheet

(Daily / Weekly Environmental Inspection – ESMP Part 3)

Project: _____

Caza / Segment: _____

Date: ____ / ____ / 2025

Inspector: _____

1. Dust & Air Quality				
Requirement	Yes	No	N/A	Comments
Water spraying applied	☐	☐	☐	
Trucks covered with liners	☐	☐	☐	
Dust affecting nearby houses/schools?	☐	☐	☐	
Equipment exhaust excessive?	☐	☐	☐	

2. Noise				
Requirement	Yes	No	N/A	Comments
Noisy works limited to daytime hours	☐	☐	☐	
Noise near sensitive receptors monitored	☐	☐	☐	
Hearing protection used by workers	☐	☐	☐	

3. Waste & Debris Management (Circular 6/1)				
Requirement	Yes	No	N/A	Comments
Direct loading (no sorting onsite)	☐	☐	☐	
Debris transported only to MoE-approved TSS	☐	☐	☐	
Chain-of-custody forms completed	☐	☐	☐	
GPS tracking active	☐	☐	☐	
No spills or illegal dumping observed	☐	☐	☐	

4. Hazardous Materials				
Requirement	Yes	No	N/A	Comments
Any suspicious materials observed?	☐	☐	☐	
STOP-WORK applied if needed	☐	☐	☐	
MoE notified (if confirmed)	☐	☐	☐	

5. Community Health & Safety				
Requirement	Yes	No	N/A	Comments
Access for residents maintained	☐	☐	☐	
Signage & barriers in place	☐	☐	☐	
Detours communicated to municipality	☐	☐	☐	
No safety incidents involving public	☐	☐	☐	

Inspector Signature: _____

Annex j: Community Engagement & GRM Disclosure Sheet

Project: _____

Caza / Village: _____

Date of Posting: ____ / ____ / 2025

Verified by: _____

1. Community Notification Measures

Requirement	Yes	No	Comments
Work schedule shared with municipality	☐	☐	
Door-to-door notification (if needed)	☐	☐	
Sensitive receptors informed (houses, schools, mosques)	☐	☐	
Warning signage installed at village entrances	☐	☐	
Detour routes communicated	☐	☐	

2. GRM & SEA/SH Disclosure

Item	Posted?	Location	Comments
GRM poster with hotline	☐	_____	
SEA/SH confidential reporting line	☐	_____	
CDR-PIU contact details	☐	_____	
Contractor OHS/GRM focal point	☐	_____	
SEA/SH Survivor-Centered GRM Procedure available on request	☐	With municipality	Provided verbally upon request to protect confidentiality

3. Community Concerns & Follow-up

Concern Raised	By Whom	Date	Action Taken

4. Verification

- All contact information visible on site? ☐ Yes / ☐ No
- Community aware of work schedule? ☐ Yes / ☐ No
- Any SEA/SH concerns communicated? ☐ Yes / ☐ No

Signature (Supervisor Engineer E&S expert): _____

Signature (Contractor Social Expert): _____