MANAGEMENT PLANS

DRAFT

AIR POLLUTION and EMISSIONS MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision as per comments
16.06.2025	02	Revision as per Environmental and Social Due Diligence comments

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
AQECP	Air Quality and Emissions Control Plan
CLO	Community Liaison Officer
CO	Carbon Monoxide
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
ENCON	ENCON Environmental Consultancy Co.
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
EU	European Union
HC	Hydrocarbons
HSE	Health, Safety and Environment
H&S	Health and Safety
IFC	International Finance Corporation
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
NO_x	Nitrogen Oxides (NO_2 and NO)
PM	Particulate Matter
RAMAQ	Regulation on Assessment and Management of Air Quality
RCA	Root Cause Analysis
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
SO_2	Sulfur Dioxide
VOCs	Volatile Organic Compounds
WHO	World Health Organization

I. PURPOSE AND SCOPE

This Air Pollution and Emissions Management Plan ("the Plan") was prepared by Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. ("AAOİAŞ" or "SPV") for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan;

- Defining country legislation and project standards,
- Defining the duties and responsibilities of the personnel, and
- Identify air emission sources and outline mitigation, control, and monitoring measures to minimize adverse environmental and social impacts during the construction phase.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The Plan has been developed in alignment with applicable national legislation and relevant international standards, including the requirements of international financial institutions. It outlines actions that should be done to manage dust and gas emissions effectively across construction-related activities and facilities. This plan will provide mitigation alternatives and an impact monitoring schedule in accordance with Turkish and international regulations and standards.

This Plan should be applied by all parties involved in the construction phase, including the Project Sponsor, Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ), the Main Contractor (EPC or Limak), and all subcontractors. Responsibilities for implementation, monitoring, and reporting of air quality-related issues should be clearly assigned. Necessary updates to the Plan should be considered in case of changes in project design, construction methodology, or regulatory requirements.

Emissions during project construction will contribute to national air pollutant levels and thereby affect the health of nearby communities. The overall objective of this management plan is to identify and minimize air pollutant emissions and potential impacts from construction activities.

The plan refers to potential emission sources during construction and identifies how effective safeguards and appropriate emission controls will be implemented to ensure ambient air quality is maintained and minimize air quality impacts on adjacent receptors. This Air Pollution and Emissions Management Plan (AQECP) covers all construction-related operations, including HSE activities.

The primary air pollutants associated with motorway projects include nitrogen oxides (NO_x – NO2 and NO), particulate matter (PM), carbon monoxide (CO), hydrocarbons (HC), sulfur dioxide (SO2), and volatile organic compounds (VOCs). Among these, particulate matter emissions are particularly significant and are expected to arise primarily from activities such as material extraction and supply, cut and fill operations, and the storage of excavated materials. This plan will be used to minimize air quality impacts generated during the following activities:

- Cleaning and preparation of the land surface,
- Excavation and filling activities,
- Material handling,
- Topsoil stockpile storage,
- Excavation surplus material storage,
- Passage of transport trucks (especially on stabilized roads),
- Use of heavy machineries, cars, pick-ups, etc.,
- Operation of ready mixed concrete plant, crushing and screening plant, asphalt plant, etc., and
- Use of generators, boilers, etc.

Air pollutant levels derived from construction activities will be assessed against legal requirements and international standards. If the particulate matter level is found to be at risk of exceeding these conditions, preventive actions will be reviewed and enhanced by AAOİAŞ to reduce emissions to a reasonable level. Near sensitive areas such as residential units, schools, public parks, recreational areas and ecologically sensitive areas will be monitored to ensure minimal impact associated with the construction activities.

A separate Air Quality and Emission Control Plan for the operation phase will be prepared by the SPV.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

The Plan has been structured to align with both national and international requirements, including legislation, guidelines, and sectoral standards that define permissible emission levels and air quality thresholds. Accordingly, the following sources of reference will be used to guide the implementation and compliance procedures. The legislation and standards to be implemented in the project consist of:

- Applicable Turkish Laws and national standards,
- IFC General Conditions, Health and Safety Guidelines Air Emissions and Ambient Air Quality,
- IFC Performance Standard 3: Resource Efficiency and Pollution Prevention,
- IFC Performance Standard 4: Community Health, Safety and Security,
- Directive (EU) 2024/2881 (Ambient air quality and cleaner air for Europe)
- The international ambient air quality standards to be implemented by the project are those determined under the IFC General Directives (based on the World Health Organization Air Quality Guidelines 2005 and 2021)

II.1 National Requirements

The following Turkish laws and regulations will be used as the legal basis for managing air emissions during construction:

- Environmental Law No. 2872
- Regulation on the Assessment and Management of Air Quality
- Industrial Air Pollution Control Regulation
- Regulation on the Control of Exhaust Gas Emissions
- Regulation on Decreasing the Ozone Depleting Materials
- Regulation on Monitoring of Greenhouse Gas Emissions
- Regulation on the Control of Air Pollution Caused by Heating
- Regulation on Ozone Depleting Substances
- Regulation on Control of Exhaust Gas Emission and Quality of Petrol and Diesel
- Regulation on the Reduction in the Sulphur Content of Some Fuel Types
- Regulation on the Control of Odorous Emissions.
- The Industrial Air Pollution Control Regulation

Ambient air quality limit values for various air pollutants defined in Turkish Regulation on Assessment and Management of Air Quality are presented in **Error! Reference source not found.**. AAOİAŞ and its subcontractors are responsible for reviewing relevant local legislation and requirements to capture all requirements. The standards in Table.II.1 are the target values for 2024 and further years.

Table.II.1Turkish Regulations: Ambient Air Quality Limit Values

Parameter	Duration	Limit Value*
SO_2	Hourly (cannot be exceeded more than 24 times in a year) **(µg/m³)**	350
	24 hour (cannot be exceeded more than 3 times in a year) **(µg/m³)**	125
	Long term limit **(µg/m³)**	60
	Annual and winter season (from 1 October to 31 March) **(µg/m³)**	20
NO_2	Hourly (cannot be exceeded more than 18 times a year) **(µg/m³)**	200
	Annual **(µg/m³)**	40
PM_{10}	24 hour (cannot be exceeded more than 35 times a year) **(µg/m³)**	50
	Annual **(µg/m³)**	40
Settled Dust	Short-Term Limit Value (**mg/m²day)**	390
	Long-Term Limit Value (**mg/m²day)**	210
CO	8 hour daily maximum **(µg/m³)**	10,000
Total VOC**	Hourly **(µg/m³)**	280
	24-hour **(µg/m³)**	70
In the Settled Dust	Pb and its compounds (long term limit value) (**mg/m²day)**	250
	Cd and its compounds (long term limit value) (**mg/m²day)**	3.75
	Tl and its compounds (long term limit value) (**mg/m²day)**	5

** Regulation on Assessment and Management of Air Quality (RAMAQ)*
*** Industrial Air Pollution Control Regulation (IAPCR)*

II.2 International Standards and Conventions

In addition to national requirements, the following international guidelines and agreements should be considered to ensure alignment with best practices and financial institution requirements:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 3: Resource Efficiency and Pollution Prevention
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- EU Ambient Air Quality Directive (2008/50/EC)
- European Landscape Convention (entered into force in 2000, ratified by Türkiye in 2003)
- European Union Road Safety Policy Guidelines and Directives
- World Health Organization (WHO) Ambient Air Quality Guidelines (2005 and 2021)

These references should be used to guide the implementation, monitoring, and performance evaluation of air pollution and emissions control measures on-site throughout the construction phase.

IFC General EHS Guideline for Air Emissions and Air Quality refers to the limit values recommended by the World Health Organization Ambient Air Quality Guidelines which are presented in Table II.2. In addition, the newly adopted Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (see Table II.3) strengthens and updates the existing framework by setting more stringent air quality standards and reinforcing provisions on public information and air quality plans. Dust and air emissions related to construction activities shall not exceed the levels presented. AAOİAŞ and its subcontractors are responsible for reviewing relevant international standards to capture all requirements.

Table II.2.1 IFC General EHS Guidelines: Environmental Air Emissions And Ambient Air Quality Standards (WHO Ambient Air Quality Guidelines)

Parameter	Duration	Guideline Value (µg/m³)*
SO_2	10 minute	500
	24 hour	20
NO_2	Hourly	200
	Annual	40
PM_{10}	24 hour	50
	Annual	20
$PM_{2.5}$	24 hour	25
	Annual	10
Ozone	8-hour Daily Maximum	100

Table II.3: EU Regulations: Ambient Air Quality Limit Values

Parameter	Duration	Guideline Value (µg/m3)*	Permitted Exceedances / Notes
Particulate Matter (PM_{10})	24-hour average	50 µg/m³	Not to be exceeded more than 35 times/year
	Annual average	40 µg/m³	
Particulate Matter ($PM_{2.5}$)	Annual average	25 µg/m³	
Nitrogen Dioxide (NO_2)	1-hour average	200 µg/m³	Not to be exceeded more than 18 times/year
	Annual average	40 µg/m³	To be reduced to 20 µg/m³ by 2030
Sulfur Dioxide (SO_2)	1-hour average	350 µg/m³	Not to be exceeded more than 24 times/year
	24-hour average	125 µg/m³	Not to be exceeded more than 3 times/year
Carbon Monoxide (CO)	Maximum daily 8-hour mean	10 mg/m³	
Lead (Pb)	Calendar Year	0,5 µg/m³	
Cadmium (Cd)	Calendar Year	5,0 ng/m³	

II.3 Project Standards

To ensure compliance with national and international air quality requirements, the strictest limits among Turkish regulations, international standards should be applied during the construction phase of the Project. Table II.4 outlines the applicable pollutant limits, which should be used for monitoring and mitigation planning. If exceedances occur, corrective actions should be implemented immediately by Limak and its subcontractors.

Table II.4 Reference Limits and Standards for Monitoring and Mitigation

Pollutant	Averaging Period	Turkish Legislation	IFC/WHO (µg/m³)	EU Regulation	Applied Limit
SO_2 (µg/m³)	Hourly (max 24 exceedances/year)	350	-	350	350
	24-hour (max 3 exceedances/year)	125	20	125	20
	Long-term	60	-	-	60
	Annual (winter period)	20	-	-	20
	10-minute	-	500	-	500
NO_2 (µg/m³)	Hourly (max 18 exceedances/year)	200	200	200	200
	Annual average	40	40	40	40
PM_{10} (µg/m³)	24-hour (max 35 exceedances/year)	50	50	50	50
	Annual average	40	40	40	40
$PM_{2.5}$ (µg/m³)	Annual average	-	10		10
	Annual average	-	25	25	25
Settled Dust (mg/m²day)	Short-Term Limit Value	390	-	-	390
	Long-Term Limit Value	210	-	-	210
CO (mg/m³)	8-hour daily maximum	10		10	10
	Maximum daily 8-hour average in one year	120	-	-	120
Ozone (O_3)	Long-term	120	-	-	120
Lead (Pb) in Settled Dust	Long-term	250	-	-	250
Cadmium (Cd) in Settled Dust	Long-term	3,75	-	-	3,75
Total VOC	Hourly	280			
	24-hour	70			

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Air Pollution and Emissions Management Plan:

- Solid Waste Management Plan
- Environmental Accident and Spill Response Management Plan
- Community Health and Safety Management Plan
- Traffic Management Plan
- Hazardous Material Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

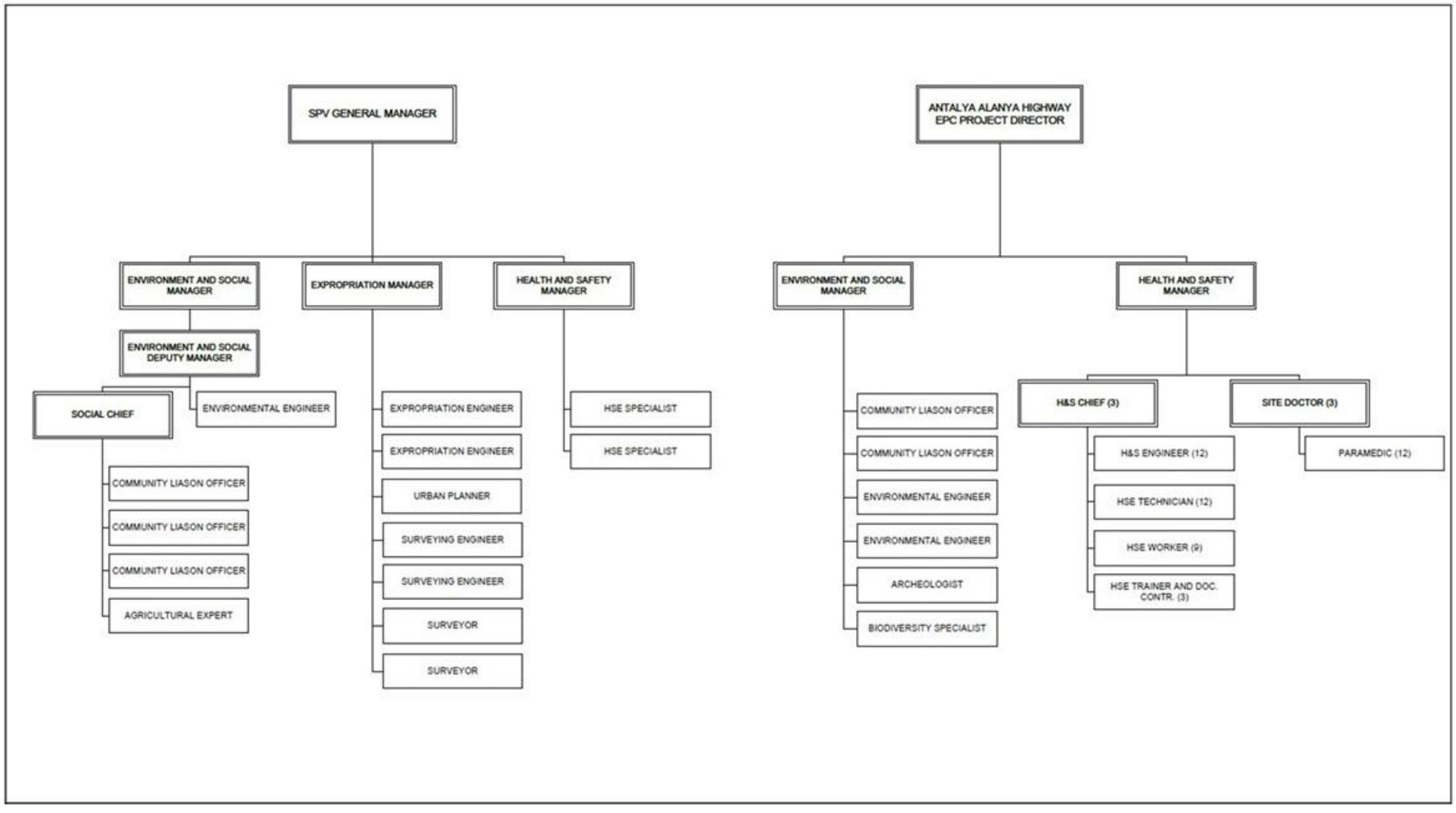

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters

Roles	Responsibilities
	• Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.

Roles	Responsibilities
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation.

Roles	Responsibilities
	• Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review.

Roles	Responsibilities
	• Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution, • and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related • impacts. • Support alignment between community concerns and project execution through proactive communication with • technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments and Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends.

Roles	Responsibilities
	• Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.

Roles	Responsibilities
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required.

Roles	Responsibilities
	• Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings.

Roles	Responsibilities
	• Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders.

Roles	Responsibilities
	• Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director

Roles	Responsibilities
	• Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor.

Roles	Responsibilities
	• Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required.

Roles	Responsibilities
	• Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.

Roles	Responsibilities
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security.

Roles	Responsibilities
	• Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks.

Roles	Responsibilities
	• Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge).

Roles	Responsibilities
	• Support spill response and clean up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs.

Roles	Responsibilities
	• Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums..

Roles	Responsibilities
	• Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. AIR QUALITY AND EMISSIONS MANAGEMENT APPROACH

The primary air pollutants associated with motorway projects include nitrogen oxides (NO_x – NO2 and NO), particulate matter (PM), carbon monoxide (CO), hydrocarbons (HC), sulfur dioxide (SO2), and volatile organic compounds (VOCs). Among these, PM10 emissions are particularly significant and are expected to arise primarily from activities such as material extraction and supply, cut and fill operations, and the storage of excavated materials. Particulate matter can vary in size and composition;

however, PM10—defined as particles with an aerodynamic diameter smaller than 10 µm—is commonly used as a standard indicator, as it represents particles likely to be inhaled. Therefore, regulatory limit values are generally defined for PM10 concentrations.

Additional emissions during the construction phase will originate from the operation of construction machinery, transport vehicles, and equipment, as well as from heating systems at camp facilities. Emissions such as PM10, NO_x, CO, SO2, VOCs, benzene, NH_3, and N_2O are expected, primarily during working hours. The type and quality of fuel used will directly influence the level of pollutant emissions. Furthermore, seasonal heating demand, particularly during winter, will contribute to increased emissions. Asphalt and concrete batching plants, operating as part of construction activities, are also considered key emission sources.

In the scope of the Environmental and Social Impact Assessment study of the Antalya Alanya Motorway Project, air quality baseline measurements were conducted to determine ambient air quality of the region and limitations of the activities during both construction and operation phases. As part of the baseline assessment, in addition to PM_{10}, $PM_{2.5}$, and settled dust, other air pollutants such as SO_2, NO_2, and Volatile Organic Compounds (VOCs) were also measured. SO_2 and NO_2 were monitored using passive sampling over a one-month period between September 21 and October 21, 2024, at the five selected locations. VOC measurements were conducted on October 17, 2024.

Figure V.1: Sampling Points of Air Quality Baseline Measurement Points

Sensitive receptors are defined as areas that host vulnerable populations, such as residential neighbourhoods, schools, healthcare facilities, and recreational areas, where people may be more susceptible to the adverse effects of air pollution. Within the scope of this Project, residential neighbourhoods located in close proximity to the motorway construction corridor are considered sensitive receptor zones.

A review of the Project alignment has identified several neighbourhoods across three districts—Serik, Manavgat, and Alanya—that are located within the immediate vicinity of the construction area. These are listed in Table V.1. Given their spatial proximity to active construction zones, these neighbourhoods warrant increased attention to ensure that air quality impacts are properly managed.

Table V.1 Settlements Located in The Vicinity of the Motorway Components

Districts	Neighborhoods		
Serik	• Aşağıçatma • Aşağıkocayatak • Burmahancı • Çandır	• Cumalı • Deniztepesi • Dikmen • Kayaburnu	• Kökez • Merkez • Sarıabalı • Üründü • Yukarıkocayatak
Manavgat	• Aksaz • Aşağıışıklar • Bucakşeyhler • Çakış • Çavuşköy • Cevizler • Demirciler • Dikmen • Dolbazlar • Evrenleryavşı • Gültepe • Gündoğdu	• Hacıali • Hacıisalı • Hacıobası • Hatipler • Hocalar • Ilıca • Kadılar • Kalemler • Karacalar • Karakaya • Karaöz • Kızılot • Odaönü	• Örenşehir • Sağırin • Sarılar • Side • Şişeler • Sülek • Taşağıl • Ulukapı • Uzunlar • Yalçıdibi • Yavrudoğan • Yeniköy • Yukarıışıklar
Alanya	• Akdam • Alara • Avsallar	• Çakallar • Elikesik • Emişbeleni • İncekum	• Konaklı • Soğukpınar • Toslak • Türkler

It should be noted that the current designation of sensitive receptors is based solely on geographic proximity to the construction corridor. Air quality dispersion modelling studies have not yet been conducted; as such, the extent and distribution of sensitive receptor areas may be revised once model-based assessments are carried out. These future evaluations will help define more accurately the zones potentially affected by construction-related air emissions and allow for a more refined monitoring and mitigation strategy.

The proximity of some settlements to the Project route—several of which are located directly beneath or adjacent to construction sites—necessitates a proactive air quality monitoring approach. Monitoring efforts should prioritize these sensitive receptors, particularly in areas where baseline data indicates a potential for pollutant concentrations approaching regulatory thresholds. Measures such as continuous or periodic ambient air measurements, visual inspections, and responsive grievance mechanisms should be implemented to assess the effectiveness of air pollution mitigation strategies.

By aligning targeted air quality monitoring with the spatial distribution of sensitive receptors and integrating feedback from community stakeholders, the Project will be better equipped to maintain compliance with national and international standards, while also safeguarding the health and well-being of local communities. Air quality emissions during construction are closely associated with the locations and operations of site-specific emission sources along the Project corridor. These sources include construction camps; borrow pits, quarries, stream material quarries, asphalt plants, concrete batching plants, and mechanical plants. The locations and their spatial distribution along the alignment is illustrated in Figure V.2.

These components span the entire motorway corridor and are located across Serik, Manavgat, and Alanya districts. Their proximity to settlements requires a targeted emissions monitoring and mitigation strategy. For instance, Construction Camp Sites at Km 64+400, 87+500, and 124+300 will host the workforce, contributing to heating-related emissions, while asphalt and mechanical plants represent major dust and exhaust emission points. Quarries such as Soğukpınar, Karakaya, and Çenger Stream Quarry are located near residential neighborhoods, increasing the importance of dust suppression measures in those areas. The site layout captured in Figure V.2 allows a clear visualization of how these emission sources align with populated zones. The close proximity of several settlements to the Project route, including areas directly adjacent to construction sites, requires a proactive air quality monitoring approach. Possible problems caused by different types of emissions are listed below (see Table V.2)

Table V.2:Air Emissions and Issues

Emission Types	Possible Problem
Dust	Environmental, social, health
Greenhouse Gases (GHG)	Environmental
Exhaust Gases	Environmental, social, health
Vapor	Health, social
Gases	Environmental, social, health

According to the Project components, emission type also changes. The emission sources according to the components and their potential emission types are summarized below (see Table V.3).

Table V.3: Emission Sources in the Project Areas

Project Areas	Emission Sources
Road Construction	Excavation and embankment processes, transport vehicles, energy sources (electrical generators), working machinery, blasting activities
Disposal Areas	Excavation and embankment processes, transport vehicles, loading/unloading/disposal processes
Camp Areas	Energy sources (electrical generators), heating systems and transport vehicles inside the camp areas, blasting activities
Quarry and Borrow Areas	Site clearance, spot blasting, earthworks, "open-air" blasting excavation, rock extraction
Washing and Screening Plant, Crushing Plant	Emissions into the atmosphere caused by plant operations and electrical generators, blasting activities
Batching Plants	Emissions into the atmosphere from batching plants operations and electrical generators
Vehicles	Exhaust emissions

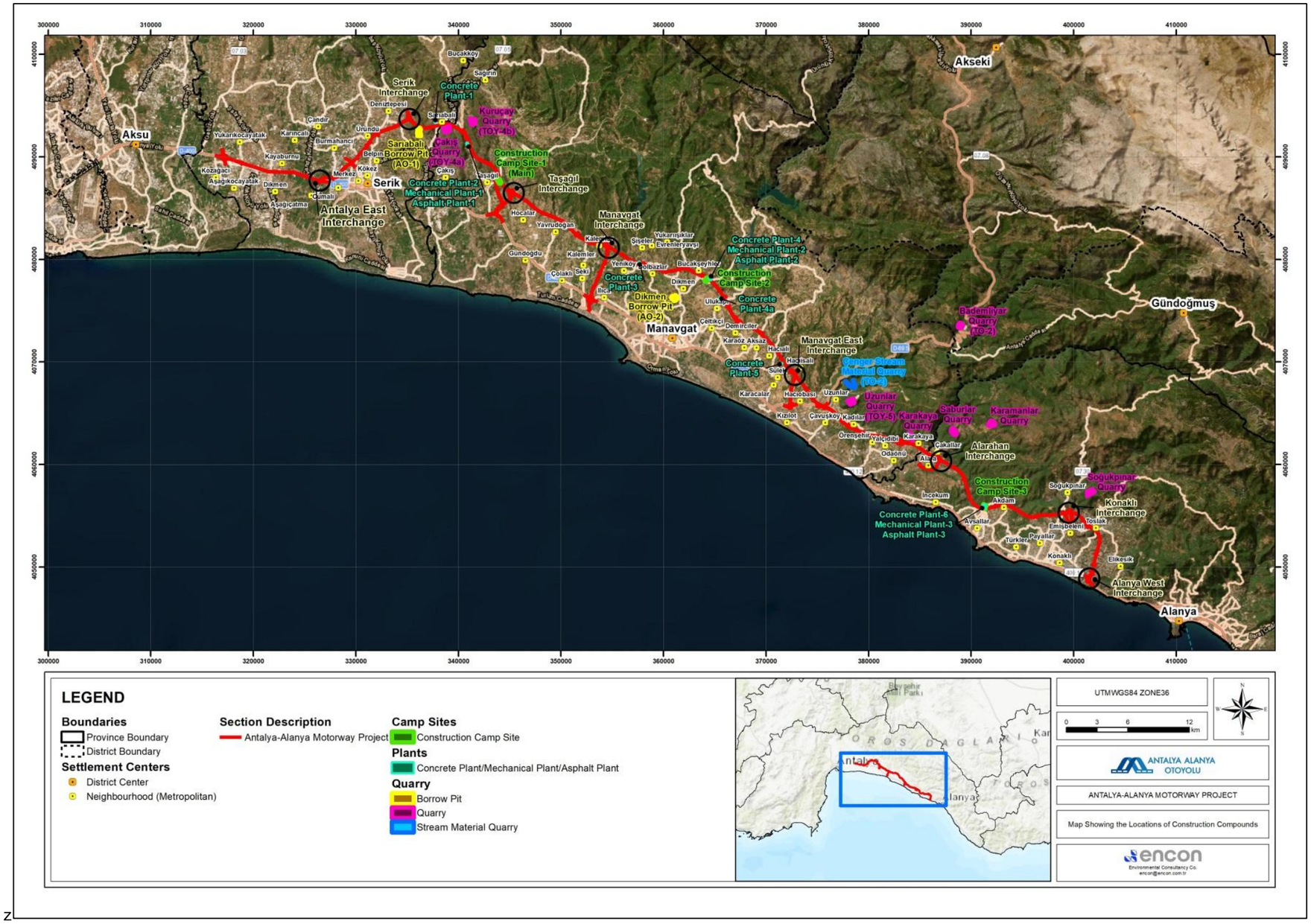

Figure V.2. Spatial Distribution of Construction Camp Sites, Plants, and Material Sources along the Project Route

VI. MITIGATION MEASURES FOR IMPACTS ON AIR QUALITY

The following measures will be implemented throughout the Project sites to prevent or minimize adverse impacts on air quality due to construction activities:

- Dust will be minimized from material handling sources, such as conveyors and bins, by using covers and/or control equipment (water suppression, bag house filters or cyclones)
- Dust will be minimized from open area sources, including storage piles, by using control measures such as installing enclosures and covers, and increasing the moisture content
- The speed limit for construction vehicles is set at 20 km/h.
- Well and adequately maintained vehicles will be used. Regular maintenance of machinery and equipment will be ensured.
- The drop height of potentially dust generating materials will be kept as low as possible.
- A wheel-washing system with a pool or water jet (along with shaker grids where receptors are located within 100 m of the site access point) will be implemented in concrete, mechanical and asphalt plant sites to remove dust and mud before vehicles leave the site.
- The drop height of potentially dust-generating materials will be kept as low as possible.
- Construction vehicles will not be permitted to keep engines running while waiting to enter the site or waiting on-site.
- Dust suppression methods (i.e. watering with water trucks, applying non-toxic chemicals, speed limits for mobile vehicles, use of well-maintained vehicles/machinery) will be applied at road construction sites, service roads and quarry/material borrow/storage sites to mitigate the Project-related dust emissions. Watering will be applied at any time necessary including nighttime, weekends or off-days by using pressurized distribution or spraying systems that would ensure even distribution of water.
- In cases where dust suppression measures are insufficient, surface binding materials should be used in exposed soil works.
- Stockpiling of excavated surface materials (e.g., rock, sand, soil) and unwashed materials will be limited to a maximum height of 3 meters. Stockpiles should be kept covered as much as possible.
- Open areas/soil stockpiles will be afforested after the completion of construction activities to stabilize surfaces.
- Where revegetation or topsoil covering is not feasible, alternative materials such as sacking or mulching will be used as soon as possible.
- If there is traffic flow on the existing roads near the work sites, dust suppression measures will be continuously applied to ensure traffic safety. If there is no traffic existing on the local roads, dust suppression measures will be applied only in local residential and business areas.
- Bulk cement and other fine powdery materials will be delivered in enclosed tankers and stored in silos equipped with suitable emission control systems to prevent material leakage or spillage during delivery. For smaller quantities of fine powdery materials, appropriate storage practices will be applied to prevent dust emissions.
- All the dust-emitting components of the crushing-screening plants will be put in closed spaces and equipped with dust suppression systems.
- Loading and unloading operations will be performed without throwing/scattering.
- Enclosed chutes, conveyors, and containers will be used.
- Equipment will be kept available on-site to clean any dry spills, which will be cleaned as soon as possible using wet cleaning methods.
- Sand and other aggregates will be stored in bounded areas and will not be allowed to dry unless specifically required for a particular operation. In such cases, appropriate additional control measures will be implemented.
- Loading and unloading operations will be performed without throwing/scattering.

- During transportation, excavated materials outside the construction site the material will be covered with nylon tarpaulin.
- In the supply of construction materials, quarries shown in Figure V.2 will be used which has sufficient material for construction works and also were selected to reduce transportation distance to minimize associated impacts and costs.
- Windshields/barriers will be placed at work sites such as material storage areas to prevent dust dispersion where necessary.
- Windbreaks or dust protection systems should be constructed around major construction activities and, where possible, near potentially dusty works to minimize impacts on nearby residential receptors.
- Relevant provisions of the Regulation on Assessment and Management of Air Quality and Industrial Air Pollution Control Regulation will be complied with to minimize air emissions sourced from construction machinery and trucks.
- Blasting operations will be conducted in line with the legislation in force and good industry practices/modern techniques. In the blasting operations to be carried out within the scope of the project, millisecond-delayed detonators will be used to both dampen vibrations and reduce the amount of dust generated. In addition, necessary humidification work will be carried out in the blasting area before and during blasting using water trucks.
- Activities with a high potential for dust generation near residential areas or specific operations will be fully enclosed.
- Interiors of buildings will be softly stripped before demolition (where possible, walls and windows should be retained to act as dust barriers for the remainder of the building).
- Roads to be used for access to quarry sites will be upgraded by AAOİAŞ to minimize dust emissions during transport. These roads will have sufficient width.
- Driving through settlements will be avoided wherever alternative roads are present.
- If the use of unpaved roads near residential areas is necessary, surface binding materials may be used; options include salting or gravel surfacing. As construction progresses, section-by-section pre-construction surveys will be conducted to determine the roads to be built, measures will be implemented, and those roads will not be used until these studies have been completed.
- A speed limit of 20 km/h will be applied on unpaved surfaces near residential areas.
- Reduced speed limits will be applied on unpaved service roads and within work areas and signposts will be used accordingly. If long-distance routes must be used, speed limits may be increased with the approval of the authorized contractor and, provided appropriate additional control measures are implemented. The standard speed limit on unpaved roads will be 20 km/h and may be reduced to 10 km/h during periods of high risk of exceeding air quality standards.
- Any damage caused by insufficient or lack of dust suppression measures will be compensated.
- Best practices should be applied to ensure the selection of project vehicles that meet the latest emission standards (e.g., EURO VI) and are maintained in a reasonable working condition. Currently, at least 80% of the construction machinery operating in the field meets this requirement.
- Site inspections will be conducted by environmental engineer (EPC) daily at and around the site, particularly near receptors (including roads), to monitor dust and record findings. Inspection logs will be submitted to the SPV upon request.
- Internal haul roads will be inspected by environmental specialist weekly for surface integrity, and necessary repairs will be initiated as soon as reasonably practicable.
- The frequency of site inspections by the designated personnel responsible for air quality and dust issues will be increased during high dust-generating activities or prolonged dry or windy conditions.

- All complaints related to dust and air quality will be recorded using the grievance mechanism, and root causes will be identified. Appropriate measures will be taken to reduce emissions in a timely manner.
- Regions with high wildfire risk due to climate change factors—such as prolonged drought, rising temperatures, and reduced humidity—will be identified and regularly monitored.
- Dry vegetation, dead wood, and other combustible materials will be removed through regular clearing and controlled burns to reduce available fuel.
- Materials resistant to climate change will be selected. Regular maintenance/repair and monitoring of machinery equipment will be provided.
- Energy efficient machinery and equipment will be preferred to minimize the contribution to climate change.
- Emergency response plans will be developed for climate-related events that may have an impact on machinery and equipment. This will include equipment shutdown protocols, evacuation procedures, and emergency plans for rapid repairs and recovery.

GHG specific emissions

Türkiye's NDC commits to a 41% reduction in GHG emissions by 2030 relative to the Business-As-Usual (BAU) scenario, with a peak in emissions by 2038. GHG emissions generated during land preparation and construction phase of the Project can be considered as relatively short term emissions when compared to the emissions of operation of the Motorway. Within this regard the following measures are suggested to mitigate the potential impacts of the Project on climate change through greenhouse gas emissions:

- High-efficiency and low-emission construction machinery will be prioritized at construction sites to minimize fuel consumption.
- Regular maintenance of equipment will be conducted to improve engine efficiency and reduce the idling time of stop-and-go heavy vehicles.
- Electricity demand during construction activities will be met as much as possible through renewable energy sources.
- The use of recycled and locally sourced materials will be encouraged to reduce indirect emissions from material transportation.
- An effective waste management plan will be implemented to control organic waste that may cause methane emissions.

All these measures will be monitored and reported to align with the Türkiye's 41% reduction target in 2030 ensure that the Antalya–Alanya Motorway serves as a low-carbon transport infrastructure in the long term from existing road network.

- Reduce the requirement for construction materials and excavation. The excavation-fill balance of the project has been optimized to minimize the transport of excavated material, thereby reducing both costs and greenhouse gas emissions.
- Substitute construction elements for lower-carbon alternatives (e.g., specifying concrete with a higher portion of ground-granulated blast furnace slag (GGBS) content which is widely available in Türkiye); and
- Use efficient construction processes, such as design for manufacture and assembly.
- Energy consumption including fuel usage by, for example, reducing the requirement for earth movements to/from and within the construction site will be minimized;

- The local sourcing of materials and local waste management facilities will be maximized.
- The Project with a view to maximizing the potential for reuse and recycling of materials/elements at the end-of-life stage will be specified and constructed. Approximately 90% of the excavated material from the project is planned to be used as fill.
- High efficiency mechanical and electrical equipment will be specified and constructed.
- Transport logistics (locations/routes) will be optimized to ensure efficient carriage of raw materials and promote fuel efficiency
- Vehicle idling times will be reduced through focus on scheduling of construction operations.
- The use of fuel-efficient transportation vehicles will be prioritized, and regular maintenance of vehicles ensured.
- The timing for works implementation (Traffic management) will be optimized to minimize traffic delays due to rehabilitation, widening or maintenance work zones on existing road sections.
- Energy efficiency specifications for new and retrofitted site accommodation (for example, usage of high-efficiency lightning, usage of led lighting, water fixture selection criteria, etc) will be created.
- Sourcing renewable energy will be considered if applicable.
- Energy efficiency usage among workers will be promoted.

AAOİAŞ will ensure that the mitigation measures listed above are implemented by Limak and its subcontractors. In addition, AAOİAŞ commits to review site management and implement suitable additional mitigation measures if monitoring show exceedances of Project standards for dust deposition, PM10 and/or PM2.5, or if complaints regarding dust mobilization / settlement are received.

Ongoing stakeholder engagement will include consultation with authorities, local communities and any other relevant stakeholders with regard to Air Quality Management during construction phase. Any grievances received from stakeholders will be managed in accordance with Grievance Mechanism as detailed in Project SEP.

VII. TRAINING

Upon hiring, all staff will receive structured training addressing sources of air emissions and dust, air quality degradation, and associated health risks, along with the corresponding mitigation strategies applicable to their responsibilities within the project (e.g., appropriate use of protective equipment, maintenance of machinery). In addition, personnel assigned to air quality monitoring will be provided with specialized training to ensure accurate and compliant performance of their duties.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of air quality and emissions mitigation measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific conditions, air quality trends, stakeholder concerns, or changes in applicable environmental regulations.

Monitoring activities will be coordinated by E&S Manager and his/her team, in close collaboration with the H&S Manager and his/her team. Key responsibilities will include verifying the implementation of dust suppression practices, monitoring equipment and vehicle emissions, evaluating the maintenance status of construction machinery, and ensuring the consistent application of mitigation measures near sensitive receptors such as residential areas, schools, and healthcare facilities.

Regular air quality monitoring will be conducted at designated locations across all worksites to evaluate compliance with national ambient air quality standards and Project-specific emission limits. This will include the measurement of key parameters such as PM_{10}, $PM_{2.5}$, NO_x, and SO_2, as well as visual inspections for dust dispersion, and checks on the use of water spraying systems and covering of materials during transport and storage.

The performance of contractors and subcontractors in implementing air quality management requirements will be reviewed through environmental audits, site supervision reports, and field observations. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to confirm the effectiveness of implemented measures and to ensure recurrence is prevented.

In addition to internal monitoring, inspections may be carried out by relevant public institutions, including the Ministry of Environment, Urbanization and Climate Change, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may include review of monitoring data, on-site emission control practices, and documentation of compliance.

- Periodic visual inspections of activities resulting in impact to air quality. Visual inspections will reflect the ethos of ‘see it, own it’, in terms of identifying and addressing significant air quality impacts. Where significant impacts are observed, these will be recorded and closed out.
- Regular inspections during the site preparation phase to review air and dust issues and dust suppression techniques altered as required.

Dust monitoring will primarily be addressed through site inspection to ensure that good site practice with respect to dust control is being effectively implemented on site. Dust sampling is not considered to be an effective means of monitoring dust during construction due to the delay between sampling and the receipt of sampling results. More immediate real time means of identifying unacceptable levels of dust, such as visual observation, is required so that remedial measures can be implemented immediately. Limak Environmental Engineer will assess on a daily basis the level of dust during construction activities at the RoW, access roads, camp site, general facilities and all temporary

facilities. Mitigation measures will be implemented as required immediately. If there is a complaint from the sensitive receptors about the dust generation, then dust measurement will be conducted. Dust monitoring samples will be taken at sensitive receptors' locations according to the ESIA requirements.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of measurements, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of air quality and emissions mitigation measures and ensuring full compliance with national regulations and Project standards.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
PM_{10}, $PM_{2.5}$, Settled Dust, NO_x, SO_x, VOC	Sensitive receptors*	Site measurements	Quarterly and upon grievance	AAOİAŞ, EPC Independent Environmental Experts, Accredited Laboratories
Number of water trucks and frequency of road watering	Camp sites, road construction sites, quarries, stabilized roads	Visual inspection	Daily or more frequently during high risk, dry and windy conditions.	AAOİAŞ, Limak
Grievances related to dust and air emissions	The field subject to the complaint	Visual inspection and Dust measurement upon grievance	Quarterly and upon grievance	AAOİAŞ, EPC Independent Social Experts
Environmental permits for concrete and asphalt plants	In the six concrete plant areas, In the three mechanical plant and asphalt plant areas	Obtaining necessary permits and document review	AnnuallyQuarterly	AAOİAŞ,EPC, Independent Environmental Experts
Weather conditions and humidity	High-risk area due to flammable material storage and close to the forest area	Weather forecast report checking	Daily during summer period	AAOİAŞ,EPC,
Dust and record findings	Around the site, particularly near receptors (including roads)	Site inspection Inspection log	Daily	SPV & EPC Environmental Engineer
Roads surface integrity and any damage	Internal haul roads	Site inspection	Weekly	Environmental specialist
Exhaust emission measurement for construction vehicle	Vehicles	Measurement	Quarterly	Environmental specialist

** Sensitive receptors have been discussed in detail under Chapter V. Air Quality and Emissions Management Approach.*

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All air quality-related findings, including exceedance of limit values, non-compliance incidents, or complaints received from surrounding communities, will be documented in accordance with national environmental regulations and Project procedures. In the event of serious violations—such as significant exceedance of short-term or long-term limit values—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
On-site air quality training for workers	100% compliance	Monthly	AAOİAŞ, EPC Independent Environmental Experts
Complaints related to air quality	Less than five complaints per month	Continuous (upon each complaint)	AAOİAŞ, EPC Independent Environmental Experts
Speed limit enforcement for site vehicles	100% compliance with designated limits	Daily	AAOİAŞ, EPC Independent Environmental Experts
Vehicle maintenance records	100% compliance with manufacturer's recommendations	Monthly	AAOİAŞ, EPC Independent Environmental Experts
PM_{10} and $PM_{2.5}$ particulate matter levels	Should not exceed WHO / IFC and national limit values	Monthly	AAOİAŞ, EPC Independent Environmental Experts, Accredited Laboratories

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All labor-related incidents and non-conformities should be documented and reported as outlined in the Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established management plans. Records to be reviewed during air quality audits will include, but are not limited to, air emissions monitoring reports, water truck operation logs, maintenance records of construction machinery and equipment, dust suppression activity records, environmental permit files for asphalt and concrete plants, and air quality-related grievance logs. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary to ensure full compliance with labor legislation and international standards.

XI. REPORTING

Regular reporting will be conducted to ensure the effective implementation and continuous improvement of solid waste management activities throughout the construction phase of the Project. Reporting will be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions will be identified, and the required updates will be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Regular audits and visual inspections will be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Quarterly Environmental and Social Monitoring Report will cover at least, but not limited to, the following items. The report will be prepared by the SPV with input data provided by EPC to evaluate the Project performance and compliance of the related plans.

- KPIs and performance trends (see Table XI.1) ;

- Current situation Key Monitoring Activities (see Table XI.2)
- Relevant training activities completed and attendance registers to be maintained;
- Legal Authorities Audit reports;
- Site Inspection logs

In addition, the following external reporting will be done:

- All environmental and social incidents will be appropriately documented, notified and reported in accordance with established procedures the terms and conditions by EPC to SPV,
- Incident notification and reporting to relevant Turkish regulatory bodies will be performed in line with applicable legislation in force and as stipulated in permits and licenses.
- The Lenders will be notified of incidents pursuant to the terms and conditions agreed upon in the Finance Agreements through SPV.

All personnel are encouraged to raise concerns, suggestions, or complaints related to this Plan through the established grievance mechanism by completing the grievance form. The communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

HAZARDOUS MATERIAL MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision as per comments
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

HAZARDOUS MATERIAL MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ESHS	Environmental, Social, Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
EU	European Union
HSE	Health, Safety and Environment
ICAO TI	Technical Instructions for the Safe Transport of Dangerous Goods by Air
IFC	International Finance Corporation
IMDG	International Maritime Dangerous Goods
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
MSDS	Material Safety Data Sheets
PPE	Personal Protective Equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TWSA	Temporary Waste Storage Area
WCA	Waste Collection Areas
WHO	World Health Organization
FAO	Food and Agriculture Organization

HAZARDOUS MATERIAL MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Hazardous Materials Management Plan ("the Plan") has been prepared by Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. ("AAOİAŞ" or "SPV") for the Antalya-Alanya Motorway Project ("the Project").

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The purpose of this Plan is to define the principles and procedures for the management of hazardous materials in accordance with applicable national regulations and international standards. The Plan aims to minimize risks to human health, property, and the environment arising from the use, storage, transportation, and disposal of hazardous materials during the construction phase.

This Plan outlines actions that should be done to ensure that hazardous materials are handled in a safe, compliant, and environmentally responsible manner. It also provides guidance on spill prevention and response, storage and transportation protocols, and hazardous waste disposal measures.

The Plan should be implemented by all parties involved in the construction phase, including the Project Sponsor (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. – AAOİAŞ), the Main Contractor (Limak), and all subcontractors. Roles and responsibilities regarding hazardous materials management should be clearly defined. The Plan should be reviewed and updated as necessary to reflect changes in project conditions, design, or legal requirements.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This Plan has been developed in alignment with both national legislation and internationally recognized environmental and social standards. The legal and institutional framework presented below defines the obligations and guidance applicable to the management of hazardous substances and waste during the construction phase of the Project.

II.1 National Requirements

The following Turkish laws and regulations should be used as the legal basis for the management, storage, transportation, and disposal of hazardous materials and waste during construction:

- Environmental Law (Law No. 2872)
- Occupational Health and Safety Law (Law No. 6331)
- Regulation on Waste Management
- Regulation on Waste Oil Management
- Regulation on Waste Batteries and Accumulators
- Regulation on the Transportation of Dangerous Substances by Road
- Regulation on the Control of Medical Wastes
- Regulation on the Classification, Labeling and Packaging of Substances and Mixtures
- Regulation on Occupational Health and Safety in Construction Works
- Regulation on Personal Protective Equipment Use in Workplaces
- Regulation on Emergency Measures in Workplaces

- Regulation on Occupational Health and Safety Training
- Regulation on Health and Safety Signs
- Regulation on the Use of Work Equipment
- Regulation on Fire Protection of Buildings
- Regulation on Workers' Health and Safety in Working with Chemicals
- Regulation on Preventing and Reducing the Effects of Major Industrial Accidents
- Regulation on Health and Safety Measures of Working with Asbestos
- Communiqué on Training Program of Asbestos Demolition
- Regulation on Biocidal Products

II.2 International Standards and Guidelines

The following international standards and reference frameworks should be used to align Project practices with international lender requirements and good practice environmental and social management:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 3: Resource Efficiency and Pollution Prevention
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- IFC Sector-Specific EHS Guidelines for Hazardous Materials Management
- Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH)
- European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code
- ICAO Technical Instructions (for air transport)
- Regulations concerning the International Carriage of Dangerous Goods by Rail (RID).

These standards should guide the development of site-specific procedures, monitoring strategies, and corrective actions. In cases where national legislation and international standards diverge, the stricter requirement should be adopted.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Hazardous Materials Management Plan:

- Solid Waste Management Plan
- Water Quality, Wastewater and Storm Water Management Plan
- Community Health and Safety Management Plan
- Occupational Health and Safety Plan
- Traffic Management Plan

- Construction Site Management Plan
- Environmental, Social, Management and Monitoring Plan (ESMMP)
- Labour and Working Conditions
- Fire /Emergency Response Procedure
- Subcontractor Management Plan
- Training and Communication Management Plan
- Environmental Accident and Spill Response Management Plan
- Emergency Preparedness and Response Management Plan

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards, and to minimize cumulative environmental, health, and safety risks associated with hazardous material use during the construction phase.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

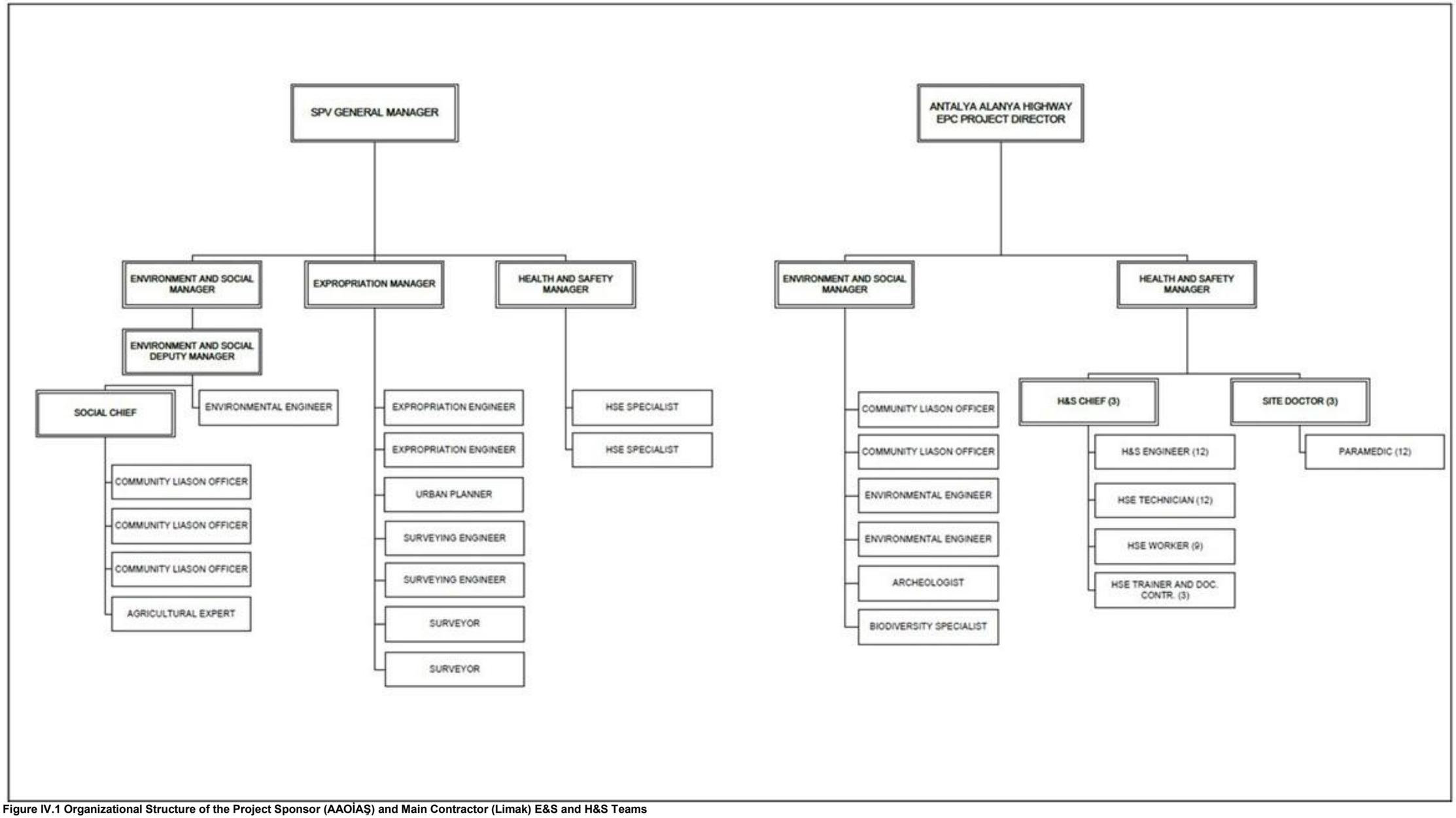

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities.

Roles	Responsibilities
	• Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions.

Roles	Responsibilities
	• Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standards, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs.

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Roles	Responsibilities
	• Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions.

Roles	Responsibilities
	• Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs).

Roles	Responsibilities
	• Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines.

Roles	Responsibilities
	• Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes.

Roles	Responsibilities
	• Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met.

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Roles	Responsibilities
	• Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection.

Roles	Responsibilities
	• Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site.

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Roles	Responsibilities
	• Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed.

Roles	Responsibilities
	• Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site.

Roles	Responsibilities
	• Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

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Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers.

HAZARDOUS MATERIAL MANAGEMENT PLAN

Roles	Responsibilities
	• Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits.

Roles	Responsibilities
	• Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up.

Roles	Responsibilities
	• Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. HAZARDOUS WASTE and HAZARDOUS MATERİAL MANAGEMENT APPROACH

Hazardous waste refers to waste materials that exhibit hazardous characteristics such as ignitability, corrosivity, reactivity, or toxicity, or possess other physical, chemical, or biological properties that may pose significant risks to human health or the environment if not managed appropriately. The hazardous waste management approach for the Antalya–Alanya Motorway Project will be based on the core principle of preventing waste generation; however, where generation is unavoidable, hazardous waste will be managed in full compliance with applicable national legislation and relevant international standards.

During the construction phase of the Project, the main types of waste that will be classified as hazardous will include, but not be limited to, the following:

- Chemical solutions used in construction and maintenance activities;
- Empty or partially full chemical containers;
- Explosive materials and residues;
- Flammable materials;
- Waste oils (both petroleum-based and vegetable-based);
- Contaminated soil and absorbent materials;
- Asphalt materials generated during construction or from scraping activities in later phases;
- Contaminated materials such as used personal protective equipment (PPE), workwear, and other construction-related materials.
- Medical wastes
- Asbestos (if any, during the demolition of the existing infrastructures)
- Pesticide products

In accordance with the Waste Management Regulation (Appendix-4), a detailed waste code classification system is used to determine whether a waste is hazardous, potentially hazardous, or requires further analysis. Table V.1 provides a comprehensive list of waste codes relevant to the Project,

including their definitions and classification remarks. This table will serve as the primary reference for identifying, recording, and verifying the nature of generated waste throughout the construction phase.

Table V.1. Indicative List of Hazardous Waste Types Potentially Generated During Land Preparation and Construction Activities

Waste Code	Waste Code Definition	Remarks
01 04 07*	Wastes containing dangerous substances from the physical and chemical processing of non-metallic minerals	M
13 01	Waste hydraulic oils	A
13 02	Waste engine, transmission and lubrication oils	A
13 03	Waste insulation and heat conduction oils	A
13 04	Bilge oils	A
13 05	Oil/water separator contents	A
13 07	Wastes of liquid fuels (fuel oil, diesel, gasoline, other fuels including mixtures)	A
15 01 10*	Packaging containing traces of hazardous materials or contaminated with hazardous materials	A
15 01 11*	Metallic packaging material containing hazardous porous solid structures (asbestos, for example), including empty pressurized containers	A
15 02 02*	Absorbents, filter materials (oil filters if not classified in any other way), wiping clothes, protective clothing contaminated with hazardous materials	M
16 01 04*	End-of-life vehicles	A
16 01 07*	Oil filters	A
16 02	Electrical and electronic equipment wastes	A
16 04	Explosive wastes	A
16 06	Batteries and accumulators	A
16 10 01*	Aqueous liquid wastes containing dangerous substances	M
16 10 03*	Aqueous concentrated substances containing hazardous substances	M
17 01 06*	Mixtures or separated groups of concrete, brick, tile and ceramic containing hazardous substances.	M
17 02 04*	Wood, glass and plastic containing or contaminated with hazardous substances.	A
17 03 01*	Mixtures with bitumen, containing coal tar	M
17 03 03*	Coal tar and products containing tar	A
17 05 03*	Soil and stones containing hazardous substances	M
17 06 01*	Insulation materials containing asbestos	A
17 06 05*	Construction materials containing asbestos	A
17 09 01*	Construction and demolition waste containing mercury	M
17 09 02*	Construction and demolition waste containing PCB (example: filling paste containing PCB, resin-based base coating material containing PCB, coated enamelling units containing PCB, capacitors containing PCB)	M
17 09 03*	Other construction and demolition waste containing hazardous substances (including mixed waste)	M
18 01 03*	Wastes whose collection and disposal is subject to special requirements in order to prevent infection	A

20 01 13*	Solvents	A
20 01 14*	Acids	A
20 01 15*	Alkalines	A
20 01 17*	Photo chemicals	A
20 01 19*	Pesticides	A
20 01 21*	Fluorescent lamps and other mercury-containing wastes	A
20 01 37*	Wood containing hazardous substances	M

Source: Waste Management Regulation, Appendix-4

(*): Indicates that the waste is either potentially hazardous or hazardous waste. (A): Indicates that the waste is a hazardous waste, there is no need for any further analysis. (M): Indicates that the waste is potentially hazardous waste. In order to determine whether the waste is hazardous or not, an analysis is carried as stipulated in Article 11 of this Regulation.

It is essential that all site teams utilize this table to ensure that waste is appropriately classified before storage, transfer, or disposal. Wastes marked with an asterisk (*) are considered hazardous or potentially hazardous. For those marked "M", a chemical analysis will be conducted as per Article 11 of the Waste Management Regulation to confirm hazard status. Those marked "A" are confirmed hazardous and require no additional analysis.

To further support proper classification and management of hazardous materials, Table V.2 outlines the key hazardous characteristics used to define substances and materials under national and international standards. This table should be used as a complementary reference when assessing whether a substance presents a risk to human health or the environment, particularly when it is not immediately clear whether a material meets the criteria of hazardous waste.

Medical wastes from clinics, surgeries, first aid rooms etc. will be kept segregated from any other type of wastes and safely stored in dedicated containers. Containers will be color-coded according to their contents and made of a combustible material such as plastic or cardboard. These wastes will be disposed of by high temperature incineration in accordance with the requirements of the Control of Medical Waste Regulations (CoMW), therefore AAOİAŞ will only use the licensed authorities take these wastes and disposed accordingly.

AAOİAŞ will ensure that, Limak will create Temporary Waste Storage Areas (TWSA) where the wastes are generated (e.g. close to construction activities). Waste from construction sites will be transported each day to TWSAs within the Main Camp Site Area, Camp Site Area-2 and Camp Site Area-3, where wastes are safely stored before disposal. However, until the mobilization of the mentioned camp areas is completed, TWSA will be constructed in the Temporary Construction Site area in Taşağıl. Storage for longer than six months will not be permitted in the TWSA area, and at the latest by the end of this period, the waste will be sent to the relevant licensed recycling or disposal facility.

Waste will be collected separately according to type in separate waste collection bins placed on construction sites and transferred to TWSA on a daily basis for temporary storage. Suitable waste containers will be provided for each type of waste and clearly labelled according to the content of the containers. AAOİAŞ will ensure that waste is effectively contained and is protected by Limak against wind, rain and vermin. There will be separate storage containers for recyclables (plastics, glass, ferrous metals, metals, and papers/cupboards etc.). Incompatible chemicals and oils will be kept in separate containers in order to avoid a chemical reaction. Other hazardous wastes (e.g. batteries, contaminated soil, etc) will also be stored in separate containers. The wastes collected in TWAs for safe storage until they are sent for disposal to licensed waste facilities.

TWSAs will have sufficient areas for handling waste containers. The areas will be concrete lined, equipped with separate drainage with spillage control channels and sumps. The hazardous waste storage areas will have their own spillage control bund. The areas will be protected against wind and rain, securely fenced and access to this site will be provided only for authorized persons. These areas will also be labelled as hazardous waste storage areas. There should be a secure section to keep personal protection equipment, spill kits (e.g. absorbents), emergency equipment (for firefighting), eyewash and emergency shower and also the Safety Data Sheets (SDSs) for storaged hazardous chemicals as wastes. Waste segregation will be maintained at all times, separate storage areas/containers will be provided to ensure continued segregation of wastes. Temporary Waste Storage Areas for hazardous wastes are subject to a permit to be issued by the relevant Governorship as required by Waste Management Control Regulation (Official Gazette Date/Number: 02.04.2015/29314). AAOİAŞ will ensure all such permits are taken and applied. Construction of the 6-compartmant TWSA is currently underway in the temporary construction site area. As work on the project has only just begun, hazardous waste weighing around 150-200 kg has been stored in separate containers in a container, and will be transferred to the TWSA once it is ready.

The waste containers and TWSAs will be clearly labelled with EU Waste Codes for each type of waste. The labels on the containers will as a minimum indicate the type of the waste, where it was originated and where it will be sent e.g. for recycling, treatment or disposal purposes. The hazardous waste containers will also indicate the hazard type.

The transportation of hazardous waste will be undertaken using licensed transportation companies, in accordance with national regulations. Waste will be transported in leak-proof, securely closed, and clearly labeled containers to prevent spillage, leakage, or human exposure. All transport activities will ensure the protection of personnel and environmental integrity throughout the process.

Final disposal of hazardous waste will be carried out at licensed treatment and disposal facilities, based on the classification and properties of the waste. The disposal methodology will be selected in accordance with the relevant legal framework and waste type. Full documentation and traceability of all hazardous waste movements will be maintained.

The following management practices will be used during the disposal of hazardous and nonhazardous wastes:

- Protocols will be signed with the licensed facilities for the disposal of hazardous and nonhazardous wastes.
- Hazardous wastes will be securely packed and labelled prior to transportation to ensure that wastes can be transported safely to the approved disposal site without risk to those handling the waste or to the environment.
- Licensed disposal facilities will be used for transfer and disposal of hazardous wastes. However, the list of licensed disposal/recovery facilities is given in Appendix-A, it will be updated by the E&S Manager every 6 months. In addition, the license of the recovery/disposal and transportation company will be checked from the Ministry of Environment, Urbanization and Climate Change on-line system (MoTAT) before each waste transportation.

Waste oils will be transported to the licensed processing and disposal/recover facilities. Waste Oil Declaration Form in Appendix of Regulation on Management of Waste Oils will be filled and sent to the Provincial Directorate of Environment, Urbanization and Climate Change until the end of February of the following year.

Separately collected waste batteries and accumulators will be delivered to the collection points established by enterprises engaged in the recovery, distribution and sales of battery products; or by municipalities.

All transferred hazardous and non-hazardous waste loads will be documented with a numbered Waste Transfer Document containing the following information:

- Waste type and amount
- Waste Code
- Transfer Date
- Carrier License Plate Number
- Disposal place and method
- Waste producer and carrier responsible person information.

The Waste Transfer Document will be used by the waste management personnel for all nonhazardous waste shipments and in addition, the MOTAT system will be used over the electronic environment information system for hazardous wastes, special wastes and medical wastes. The Non-Hazardous Waste Acceptance Form to be filled by the final destination site will be sent to the AAOİAŞ to prove that the sent wastes are safely received for recycling and/or disposal.

Within the scope of the project, hazardous chemicals and substances will be stored in chemical storage areas in accordance with the storage conditions specified in their MSDSs. There will be at least one hazardous material storage area in every construction site. These storage areas will be properly ventilated in accordance with the MSDSs, protected from moisture, humidity, and sunlight, equipped with the necessary fire extinguishing systems, and fitted with spill kits for use in the event of a spill. Chemicals will be stored separately according to their types, and their placement will be determined based on their properties such as flammability, combustibility, corrosiveness, acidity, etc. The hazardous characteristics of substances and materials are summarized in Table V.2.

Table V.2 Hazardous Characteristics of Substances and Materials

Characteristic	Definition
Explosive	Substances and preparations that can explode in the presence of a flame or are more sensitive to shock and friction than dinitrobenzene.
Oxidizing	Substances and preparations that, in contact with other materials, especially flammable ones, cause strongly exothermic reactions.
Highly Flammable	Substances and preparations that (i) in liquid phase have a flash point below 21°C or spontaneously ignite in air, (ii) in solid phase ignite easily and continue burning, (iii) in gas phase are flammable under normal pressure, or (iv) produce flammable gases upon contact with water or moist air.
Flammable	Liquid substances and preparations with a flash point equal to or greater than 21°C and equal to or less than 55°C.
Irritant	Non-corrosive substances and preparations that may cause inflammation upon immediate, prolonged, or repeated contact with skin or mucous membranes.
Harmful	Substances and preparations that may pose limited but significant risks when inhaled, ingested, or absorbed through the skin.
Toxic	Substances and preparations that may cause serious, acute or chronic health risks, or death when inhaled, ingested, or absorbed through the skin (including highly toxic substances).
Carcinogenic	Substances and preparations that may cause or increase the risk of cancer when inhaled, ingested, or absorbed through the skin.
Corrosive	Substances and preparations that can destroy living tissue upon contact.
Infectious	Substances containing microorganisms or their toxins known to cause disease in humans or other organisms, or with a reasonable assumption of such risks.
Reproductive Toxic	Substances and preparations that may cause or increase non-hereditary adverse effects in offspring or impair reproductive functions and capabilities.
Mutagenic	Substances and preparations that may cause or increase the frequency of heritable genetic disorders when inhaled, ingested, or absorbed through the skin.
Reactive with Water	Substances and preparations that release toxic or highly toxic gases upon contact with water, air, or acids.
Sensitizing	Substances and preparations that may cause hypersensitivity when inhaled or absorbed through the skin, so that repeated exposure leads to harmful effects.
Eco toxic	Substances and preparations that pose actual or potential immediate or delayed risks to one or more environmental components.
Dangerous to the Environment	Substances and preparations that, upon disposal, may exhibit one or more hazardous characteristics by any pathway (e.g., via leachate or breakdown products).

VI. MITIGATION MEASURES FOR IMPACTS OF HAZARDOUS WASTE and MATERIALS

The following mitigation measures will be implemented under the Hazardous Waste Management Plan to ensure proper handling, storage, transportation, and disposal of hazardous waste generated during the construction phase of the Project.

General Principles

- All necessary measures will be taken to prevent or reduce the generation of hazardous waste and minimize its environmental impact.
- Hazardous waste will not be disposed of on-site (e.g., incineration, burial) and will not be discharged into surface water, groundwater, or any area where it could cause environmental harm.
- Oil and oily wastes will be collected and disposed of according to the measures specified in this section. Selling these wastes to authorized facilities that use waste oil in manufacturing processes will be considered where appropriate. Waste oil for recycling will not be mixed with degreasers, solvents, antifreeze, or brake fluid.
- Regular inspection and maintenance of construction machinery and equipment will be conducted to prevent pollution of water sources.
- Material Safety Data Sheets (MSDS) containing information on the environmental, health, and safety risks of hazardous substances (e.g., petroleum, chemicals) will be obtained and made available at the storage area and working area.
- Compliance with all relevant national regulations will be ensured.
- Hazardous waste in solid or liquid form will be stored in appropriate containers with clear labeling indicating the type, source, quantity, and storage date of the waste.
- Hazardous waste will only be transferred to licensed third-party facilities authorized for handling, recovery, recycling, and disposal.
- Proper labeling will be applied to hazardous products as required by national regulations.
- Hazardous waste containers will be labeled with content descriptions, quantity, and storage dates, with labels secured on visible surfaces to prevent detachment.
- Personnel handling hazardous waste will wear appropriate Personal Protective Equipment (PPE).
- Corrosive liquids will be stored separately from flammable materials.
- Information posters regarding hazardous materials will be displayed in accessible locations.
- Regular inspections will be conducted by the E&S Manager and its team to ensure compliance with hazardous waste management procedures.
- Medical waste generated from on-site medical facilities will be temporarily stored in sealed and labeled containers until properly disposed of per the Turkish Medical Waste Control Regulation.
- Materials potentially containing hazardous substances (e.g., detergents, gypsum plaster, petroleum products, asphalt, and concrete compounds) will be handled and stored to prevent their release into the environment.
- A hazardous materials minimization program focusing on lifecycle management principles will be implemented.
- Substitution methods will be applied where possible, replacing hazardous substances with safer alternatives.
- Proper engineering controls and technological improvements will be implemented to mitigate risks from hazardous chemical use in maintenance and repair activities.

- Site-specific risk assessments will be conducted for hazardous chemicals, ensuring all identified risks are addressed before starting operations.
- Individual risk assessments will be conducted for each hazardous chemical, ensuring compliance with regulatory requirements.
- Collective protective measures (e.g., adequate ventilation, work process modifications) will be prioritized to minimize worker exposure.
- Personal protective measures will be implemented where collective protection is insufficient.
- All control measures will be regularly monitored to ensure their continued effectiveness.
- Working alone with hazardous chemicals will be strictly prohibited.
- Eating, drinking, and smoking will not be allowed in hazardous material handling or storage areas.
- All workers must receive hazardous chemical handling training before starting work.

Classification and Labeling of Hazardous Materials

- Hazardous chemicals will be classified based on their physical, toxicological, and environmental risks. This information will be available in Material Safety Data Sheets (MSDS) and on chemical labels.
- Classification aims to identify the risks of chemicals during handling and usage. Once classified, hazardous substances will be properly labeled to inform workers, the public, and the environment.
- Project suppliers will be required to comply with REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) regulations for hazardous material supply.
- Labels will include the chemical's common and trade names, potential physical and health hazards, the manufacturer's name, and relevant pictograms and warning signs.
- Labels must be applied to all primary and secondary containers to ensure proper identification.
- MSDS will be obtained before hazardous materials arrive on-site.
- Hazardous material storage risks will be assessed beforehand to prevent irreversible damage.
- MSDS will be provided to relevant personnel, including environmental specialists, safety officers, and emergency response teams.
- All hazardous substances will be labeled as "hazardous" and stored accordingly.
- MSDS will be regularly updated and revised as needed.
- Chemical storage risks will be identified in advance to prevent accidents.

Transportation of Hazardous Chemicals

- Hazardous chemicals transported via road, sea, air, or rail will comply with the ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road), the IMDG Code (International Maritime Dangerous Goods Code), ICAO Technical Instructions (for air transport), and RID (Regulations concerning the International Carriage of Dangerous Goods by Rail).
- Hazardous material transportation will be conducted by licensed transport companies and comply with legal requirements.
- Spill prevention kits and secondary containment systems will be available at all hazardous material transfer points.
- Proper documentation for transportation will be completed by trained personnel.
- Hazardous substances will be transported in approved, labeled containers.
- Drip trays and spill containment kits will be used to prevent leaks during material transfers.

Storage of Hazardous Materials

- Chemicals will be classified and segregated to prevent hazardous reactions.
- The priority order for hazardous material storage will be as follows: infectious materials, radioactive materials, explosive materials, compressed, liquefied and dissolved gases and pressurized small gas containers, self-igniting materials, materials that emit flammable gas upon contact with water, organic peroxides, oxidizing materials, flammable solids, flammable liquids, flammable liquids, flammable toxic materials, non-flammable toxic materials, flammable corrosive (corrosive) materials, non-flammable corrosive (corrosive) materials, flammable liquids that do not fall under Class 3A or 3B, flammable solids, non-flammable liquids, and non-flammable solids.
- Flammable, oxidizing, and toxic materials will be stored separately.
- Storage areas will be fire-resistant, ventilated, and clearly marked.
- Secondary containment systems will be used to prevent spills.
- Regular safety inspections will be conducted on storage areas.
- Chemical inventory records will be maintained.
- Proper fire prevention measures (e.g., fire extinguishers, emergency exits) will be in place.

Fire Safety and Emergency Response

- Fire safety measures will include the identification of hazardous materials storage areas, the designation of safe fuel transfer locations, and the strict control of ignition sources along with smoking restrictions.
- Fire extinguishers will be strategically placed near hazardous material storage areas.
- Emergency response drills will be conducted regularly.
- Fire exits will remain unobstructed at all times.
- All personnel will be trained in hazardous material fire response procedures.
- Only authorized personnel will handle hazardous substances.

Disposal of Hazardous Waste

- Chemical residues, contaminated containers, and absorbents will be treated as hazardous waste and disposed of per national waste regulations.
- Waste will be classified and characterized before disposal.
- Hazardous waste will be disposed of at licensed facilities.
- Incompatible wastes will not be mixed.
- Properly labeled waste containers will be used.
- A licensed contractor will collect and dispose of hazardous waste.
- All waste will be documented, and transportation records will be maintained.
- Preventive measures will be implemented to avoid leaks and spills.
- Spill kits and containment trays will be available at hazardous waste storage areas.

Safety of Working with Asbestos

Before demolition works of the existing infrastructure, such as houses, industrial buildings etc. A Surveying Engineer will conduct a site survey to identify the suspicious buildings. If any old

infrastructure has been observed, Surveying Engineer will be informed the E&S Manager. E&S Manager and H&S Manager will coordinate an independent external certified Asbestos Expert to conduct a site investigation to evaluate any suspicious asbestos material. A suspicious material sample will be collected and analyzed by the independent third parties. If the results of the analyses indicate the presence of asbestos, a site-specific Method of Statement and risk assessment process will be held in compliance with the local regulatory requirements.

Safety of Pesticide Products Usage

Use of pesticide products must be permitted by the H&S and E&S Manager, Agricultural Expert and Biodiversity Specialist before the procurement of the chemicals.

Chemical MSDS will be shared by the certified Biocidal Company with the Procurement Specialist.

Before the selection of any pesticide, herbicide or fungicide chemical, EPC's Biodiversity Expert will check at least the FAO web page (https://www.fao.org/pesticide-registration-toolkit/information-sources/restrictions-and-bans/en/), ILO and WHO restrictions for safe usage on environmental and human health. Hazard class 1a (extremely hazardous) and 1b (highly hazardous) chemicals, as classified by the WHO, must not be used at the site. All approved biocidal products will be listed and reviewed under the hazardous materials inventory, which is specified under this Plan.

After the site acceptance of these chemicals, all necessary training and safety rules will be followed up by the related parties as indicated in this Plan.

All site applications for biocidal products shall be applied by the competent and licensed bodies in compliance with the local regulatory requirements.

As per the Regulation on the Classification, Labeling and Packaging of Substances and Mixtures, biocidal products listed below are strictly prohibited at the site.

- Classified as acute oral toxicity category 1, 2, or 3; acute dermal toxicity category 1, 2, or 3; acute inhalation toxicity (gas and dust/mist) category 1, 2, or 3; acute inhalation toxicity (vapor) category 1 or 2; specific target organ toxicity – single or repeated exposure – category 1; carcinogenicity category 1A or 1B; mutagenicity category 1A or 1B; and reproductive toxicity category 1A or 1B
- Containing or producing persistent, bioaccumulative and toxic (PBT) substances or very persistent and very bioaccumulative (vPvB) substances.
- Classified as endocrine disruptors
- Substances exhibiting developmental neurotoxicity or immunotoxicity

VII. TRAINING

Upon hiring, all staff will receive structured training addressing the risks associated with hazardous waste generation, hazardous waste and chemicals handling, storage, transportation, and disposal, as well as the corresponding mitigation strategies applicable to their responsibilities within the Project. This training will include guidance on appropriate use of personal protective equipment (PPE), spill prevention techniques, labeling and segregation requirements, and proper waste disposal procedures. In addition, personnel assigned to hazardous waste management and monitoring will be provided with specialized training to ensure accurate and compliant execution of their duties.

As part of the hazardous materials management requirements, targeted training will also be provided as outlined below:

- All personnel involved in the handling, storage, use, and transportation of chemical substances will be trained by qualified professionals and will be required to understand the potential hazards associated with these activities. Only trained and experienced personnel selected by authorized experts will be permitted to carry out these tasks.
- Individuals will not be authorized to undertake responsibilities involving chemical substances unless they have completed the required chemical handling training program in accordance with this standard.
- Chemical handling training will be provided at least once to all employees throughout the Project duration, with refresher training delivered as necessary. This training will also be mandatory for contractor and all subcontractor personnel employed on the Project.
- The training and awareness sessions will include information obtained from risk assessments; identification and recognition of hazardous chemical substances present or potentially arising in the workplace, associated health and safety risks, occupational illnesses, occupational exposure limit values, and applicable legal requirements; precautionary measures and safe practices to prevent endangering oneself or others; information on Material Safety Data Sheets (MSDS) provided by the supplier in the language understood by workers; and labeling and lockout/tag out requirements for areas, containers, piping systems, and similar installations containing hazardous chemical substances in accordance with relevant regulations.

The overall training framework will be developed by the E&S and/or H&S Manager and disseminated to all relevant Project stakeholders for implementation. Training records will be maintained, and continuous monitoring of staff competency will be ensured to verify effective understanding and application of safe hazardous waste management practices.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of hazardous materials management and associated mitigation measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific conditions, waste generation trends, stakeholder concerns, or updates in applicable environmental and health and safety regulations.

Monitoring activities will be coordinated by the E&S Manager, in close collaboration with the H&S Manager and General Manager. Key responsibilities will include verifying the implementation of hazardous materials storage and handling protocols, inspecting temporary waste storage areas, reviewing documentation on chemical inventories, and ensuring the consistent application of safety measures near sensitive receptors such as work camps, storage yards, and worker accommodation units.

Regular inspections will be conducted by E&S Specialist at designated locations across all worksites to evaluate compliance with national hazardous waste regulations and Project-specific management procedures. This will include review and control of the following:

- The list of hazardous materials and chemicals supplied, stored, and used on-site, including information on their type, quantity, and volume.
- Hazardous waste management and disposal agreements with licensed companies to ensure legal compliance and traceability.
- Waste Management Plans, including hazardous waste-specific procedures and practices, for adequacy and implementation status.
- Hazardous waste compartments within Temporary Waste Storage Areas to confirm compliance with storage and containment requirements.

- Site practices related to hazardous waste management—including general housekeeping rules, source separation practices, container integrity, and containment infrastructure.

In addition, a daily general site overview will be conducted by the E&S Specialist to observe construction progress, site organization, and general environmental conditions. Monthly coordination meetings will also be held with project management teams to report on the key findings from monitoring activities and to provide feedback on overall environmental performance.

The performance of contractors and subcontractors in implementing hazardous materials management requirements will be reviewed through environmental audits, site supervision reports, and field observations. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to confirm the effectiveness of implemented measures and ensure recurrence is prevented.

In addition to internal monitoring, inspections may also be carried out by relevant public institutions, including the Ministry of Environment, Urbanization and Climate Change, the Ministry of Health, and the Ministry of Labor and Social Security, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the competent authorities and may include on-site assessments, documentation review, and verification of compliance with hazardous waste management standards.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of inspections, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of hazardous materials management and ensuring full compliance with national regulations and Project-specific requirements.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
The list of hazardous materials and chemicals supplied, stored, and used on-site, including information on their type, quantity, and volume	Camp sites, road construction sites, quarries	Site audit, document review	Monthly	SPV E&S Engineer EPC E&S Engineer
Soil contamination risk from hazardous substances (e.g., fuel oil, antifreeze, lubricants)	Project area and sensitive receiving environments (e.g., soil, surface water)	Visual inspection for signs of leakage or spills; inspection of storage and handling practices; MSDS and training record review	Daily	AAOİAŞ / Subcontractors
Waste generation, sorting, and temporary storage practices	Construction sites, camps, and waste collection points	Visual inspections; review of waste separation and storage practices; review of disposal records and site housekeeping practices	Daily	AAOİAŞ / Subcontractors
Hazardous and non-hazardous waste quantities	Project area	Review of MoTAT (Mobile Waste Tracking System) records; supporting waste transfer documentation	Per delivery operation	AAOİAŞ / Subcontractors
Compliance of Waste Management Plans with hazardous materials procedures	Project office	Review and update of plan content; assessment of implementation during internal audits	Quarterly	AAOİAŞ, Independent Environmental Experts

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
The list of hazardous materials and chemicals supplied, stored, and used on-site, including information on their type, quantity, and volume	Camp sites, road construction sites, quarries	Site audit, document review	Monthly	SPV E&S Engineer EPC E&S Engineer
Integrity of hazardous waste compartments in Temporary Waste Storage Areas	Designated hazardous waste storage locations	On-site inspections for containment conditions, labeling, and signage	Monthly	AAOİAŞ, Independent Environmental Experts
General site practices related to hazardous materials management	Entire construction corridor	Field observations on container integrity, spill kits, PPE use, and storage conformity	Weekly	AAOİAŞ, Independent Environmental Experts
Environmental enforcement actions and non-compliance records	Project area	Review of regulatory audit reports, notifications, and enforcement communications	Monthly	AAOİAŞ, Independent Environmental Experts
The list of licensed disposal/recovery facilities is given in Appendix-A,	Project office	Document Review	Bi-annually	SPV & EPC E&S Manager

In the event that non-compliance is identified through internal oversight or external audits, AAOİAŞ will ensure that all corrective and preventive measures are promptly implemented in coordination with the Main Contractor (Limak) and all relevant subcontractors.

All hazardous materials-related findings, including non-compliance incidents, inspection results, or grievances received, will be documented in accordance with national environmental legislation and Project procedures. In the case of significant violations—such as mismanagement of hazardous waste or failure to follow approved storage practices—AAOİAŞ will ensure timely reporting to the competent authorities and initiate all necessary technical, procedural, and contractual measures to ensure legal and environmental compliance.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Percentage of inspections completed compared to those planned	100%	Monthly	AAOİAŞ Subcontractors
Percentage of hazardous materials management training sessions completed as planned	100%	Monthly	AAOİAŞ / Subcontractors
Hazardous waste generated	Reduce hazardous waste per working hour by 2%	Semi-year	AAOİAŞ / Subcontractors
Percentage of construction and demolition waste, waste re-used, recycled, or recovered	%70	Quarterly	AAOİAŞ / Subcontractors
Non-conformities related to hazardous materials management	Less than five	Monthly	AAOİAŞ / Subcontractors

Complaints related to hazardous materials management	Less than five	Monthly	AAOİAŞ / Subcontractors
Number of legal penalties issued by authorities in relation to environmental requirement	0	Monthly	AAOİAŞ / Subcontractors
Number of training on hazardous material management for all employees	At least 1 times in a year	Yearly	AAOİAŞ / Subcontractors

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities related to hazardous materials management should be documented and reported as outlined in this Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's environmental, health, and safety procedures. Records to be reviewed during hazardous materials audits will include, but are not limited to, chemical inventory logs, MSDS, waste transfer and disposal documentation, training attendance records related to hazardous substances, inspection and maintenance checklists, non-conformity and incident reports, storage area inspection records, and relevant environmental permits. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary to ensure full compliance with national regulations and applicable international standards regarding hazardous materials management.

XI. REPORTING

Regular reporting will be conducted to ensure the effective implementation and continuous improvement of solid waste management activities throughout the construction phase of the Project. Reporting will be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions will be identified, and the required updates will be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Regular audits and visual inspections will be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Quarterly Environmental and Social Monitoring Report will cover at least, but not limited to, the following items. The report will be prepared by the SPV with input data provided by EPC to evaluate the Project performance and compliance of the related plans.

- Incident reporting;
- Emergency response reporting;
- Records of annual emergency response training exercises;
- KPIs and performance trends (see Table XI.1) ;
- Current situation Key Monitoring Activities (see Table XI.2)
- Relevant training activities completed and attendance registers to be maintained;
- Legal Authorities Audit reports;
- Site Inspection logs

In addition, the following external reporting will be done:

- All environmental and social incidents will be appropriately documented, notified and reported in accordance with established procedures the terms and conditions by EPC to SPV,
- Incident notification and reporting to relevant Turkish regulatory bodies will be performed in line with applicable legislation in force and as stipulated in permits and licenses.
- The Lenders will be notified of incidents pursuant to the terms and conditions agreed upon in the Finance Agreements through SPV.

All personnel are encouraged to raise concerns, suggestions, or complaints related to this Plan through the established grievance mechanism by completing the grievance form. The communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

APPENDIX-A: Licensed Waste Management Facilities Located in Antalya

No	ID No	Name	Adres
1	289358100	ITC-KA ENERJİ ÜRETİM SAN. VE TİC. A.Ş. - ALANYA ŞUBESİ	TÜRKLER Mahallesi, KÖLEHASANLI CADDE, No: 45 -, ALANYA, ANTALYA, Türkiye
2	257927338	SIR PLASTİK SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Yeşilkaraman Mahallesi, 16003 Sokak, No: 40, Aksu / ANTALYA
3	284796758	DURO PLASTİK SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Yeşilkaraman Mahallesi, 16003 Sokak, No: 40 B, Aksu / ANTALYA
4	232445796	ADAM PLAST TARIM LİMİTED ŞİRKETİ	AOSB 1. Kısım Mahallesi, 10. Cadde, No:3 Döşemealtı/ANTALYA
5	1701881232	TEMİZ ÇEVRE ATIK VE ENERJİ SİSTEMLERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ ANTALYA ŞUBESİ	EMİNCELER MAHALLESİ, EMİNCELER SOKAK, ASAT SİTESİ ASAT BLOK NO:176, SERİK, ANTALYA
6	252444034	TUNA GERİ DÖNÜŞÜM PLASTİK AMBALAJ ATIK NAKLİYE SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Kömürcüler Mahallesi, 2900 Sokak, No:5-7 ve 2901 Sokak No:8-, Döşemealtı/ANTALYA
7	231586612	SER-MA SERA MALZEMELERİ TİCARET VE SANAYİ LTD.ŞTİ.	Şafak Mahallesi, 5005 Sokak, No: 49-, Kepez/ANTALYA
8	232752876	ORCAN GERİ DÖNÜŞÜM PLASTİK KAUÇUK ELEKTRİK SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Kömürcüler Mah. 2861 Sokak No:4/1, Döşemealtı/ANTALYA
9	280853152	KALIRLAR PLASTİK NAK İNŞ.İML.GE.DÖ.SAN. VE TİC.LTD.ŞTİ.	Kömürcüler Mahallesi, 2876 Sok. No:1 ve 2878 Sok. No:8, Döşemealtı/ANTALYA
10	261393576	ERİNCİ PLASTİK SERA TARIM YAŞ MEYVE SEBZE GIDA İNŞAAT VE YAPI MALZEMELERİ TAŞIMACILIK TURİZM SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Antalya Organize Sanayi Bölgesi 2.Kısım Mahallesi 24.Cadde No:17 Döşemealtı/ANTALYA

11	226627500	ANTALYA AKYILDIZ HURDA PLASTİK İMALAT NAKLİYE TURİZM SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Yeşil Antalya Sanayi Sitesi 3189 Sokak No:13-66 Kepez/ANTALYA
12	231388982	EKER TARIM ÜRÜNLERİ TURİZM İNŞAAT PAZARLAMA TİCARET VE SANAYİ LİMİTED ŞİRKETİ	Turunçova Mahallesi, Hal Cadde, No: 22 A-, Finike/ANTALYA
13	292658114	GÜLŞEN ZOR	Kürüş Mahallesi, Kürüş 6 Sokak, No: 11 -, Serik, ANTALYA
14	225372146	KIZILCA PLASTİK SANAYİ İNŞAAT TARIM TURİZM VE TİCARET ANONİM ŞİRKETİ FİNİKE ŞUBESİ	İskele Mahallesi, Ova Mevkii, 430 Sokak, No:17 A-1 Finike/ANTALYA
15	1005501686	ŞAKİ GERİ DÖNÜŞÜM TİCARET VE SANAYİ LİMİTED ŞİRKETİ	Gaziler Mahallesi 247 Sokak No: 3 A Kepez / ANTALYA
16	950651628	SENGIL SANAYİ TİCARET İNŞAAT VE TURİZM LTD. ŞTİ. ORGANİZE SANAYİ FABRİKA ŞUBESİ	Antalya Organize Sanayi Bölgesi, 3. Kısım Mahallesi, 29. Cadde, No:5 Döşemealtı/ANTALYA
17	231741648	SBC GERİ DÖNÜŞÜM SANAYİ VE TİCARET ANONİM ŞİRKETİ	Kömürcüler Mahallesi, 2878 Sokak, No:6. Döşemealtı/ANTALYA
18	810401682	OKTAYLAR MÜHENDİSLİK ALÜMİNYUM DÖKÜM SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Kömürcüler Mahallesi, 2868 Sokak, No: 12 -, Döşemealtı/ANTALYA
19	1140461670	MÜDÜROĞLU GERİ DÖNÜŞÜM TAŞIMACILIK TURİZM TİCARET VE SANAYİ LİMİTED ŞİRKETİ	Altınova Orta Mah. Altınova Blv. 88 Kepez/ ANTALYA
20	226463452	HAMBURGER RECYCLING TURKEY ATIK YÖNETİMİ A.Ş.- ANTALYA ŞUBESİ	Altıayak Mahallesi 8408 Sokak No:22. Kepez/ANTALYA
21	232479018	NN METALÜRJİ ANONİM ŞİRKETİ	AOSB1.Kısım Mahallesi. Antalya Bulvarı. No:23. Döşemealtı/ANTALYA

22	231926384	07 GERİ DÖNÜŞÜM NAKLİYAT İNŞAAT SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Şafak Mahallesi, 5015 Sokak, No: 19-, Kepez/ANTALYA
23	230801576	YAMAN CAM SANAYİ VE TARIM ÜRÜNLERİ TİC. LTD. ŞTİ. ORGANİZE SANAYİ ŞUBESİ	AOSB 1.Kısım Mahallesi, 2. Cadde, No: 34 Döşemealtı / ANTALYA
24	228715522	KÖRÜCÜMEHMET CEMAL	Karşıyaka Mahallesi, Barbaros Cad., No: 10 B-1, Kumluca/ ANTALYA
25	233234232	ALTUNDAŞ PLASTİK GERİ DÖNÜŞÜM SİSTEMLERİ NAKLİYAT İNŞAAT VE İNŞAAT MALZEMELERİ TARIM EMLAK TURİZM SANAYİ İTHALAT İHRACAT VE TİCARET LİMİTED ŞİRKETİ	Antalya Organize Sanayi Bölgesi 3.Kısım Mahallesi 37.Cadde No:11 Döşemealtı/ANTALYA
26	280146090	PİRSAN ENERJİ SANAYİ VE TİCARET LİMİTED ŞİRKETİ	UZUNOLUK MAHALLESİ, MEHMET AKİF ERSOY BULVAR, NO: 137 -, KORKUTELİ / ANTALYA
27	305446990	TEMPO KLİPS PLASTİK SANAYİ VE TİCARET LİMİTED ŞİRKETİ	AOSB 3.Kısım Mahallesi, 25 CADDE, No: 32 Döşemealtı/ ANTALYA
28	304542716	FİKRET ÖZCAN	Altınova Sinan Mahallesi Hanımeli Sokak No: 240 Kepez/ANTALYA
29	304207152	BETAR PLASTİK SANAYİ TİCARET LİMİTED ŞİRKETİ	Kömürcüler Mahallesi, 2862 Sokak, No: 6-1, Döşemealtı/ANTALYA
30	232031382	ÇIĞLI-MER ME.HU.PL.T.G.D.S.İ.VE İ.M.T.T.S.İ.İ.VE TİC.LTD.ŞTİ	Kepez Mahallesi 5066 Sokak No:8 Kepez/ANTALYA
31	304010840	TOROS ATIK YÖNETİMİ GERİ DÖNÜŞÜM PLASTİK TİCARET ANONİM ŞİRKETİ	Kömürcüler Mah. 2901 Sokak SS Yeni Hurdacılar Koop. Sitesi No:6 Döşemealtı / ANTALYA
32	274926336	TORUNOĞLU PLASTİK SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Gaziler Mahallesi, 252 SOKAK, No: 2 F Kepez/ANTALYA

33	232481954	U2 OTELCİLİK TURİZM VE TİCARET LİMİTED ŞİRKETİ	Yeşilova Mahallesi, 1679 Sokak, No: 20 B- Muratpaşa/ANTALYA
34	299524854	ARİA ÇEVRE GERİ DÖNÜŞÜM OTELCİLİK TİCARET ANONİM ŞİRKETİ	Altıayak Mahallesi, Recep Gürbüz Caddesi, No:5 Kepez/ANTALYA
35	305628262	KAPET GERİ DÖNÜŞÜM TURİZM İNŞAAT SANAYİ TİCARET LİMİTED ŞİRKETİ	Zeytinlik Mahallesi, 7641 Sokak, No: 22 Kepez/ANTALYA
36	250072286	ERGÜL ÇIĞLI	Kepez Mahallesi, 5070 SOKAK, No: 9 Kepez/ANTALYA
37	294003716	YILDIZ GERİ DÖNÜŞÜM PLASTİK TİCARET SANAYİ LİMİTED ŞİRKETİ	Sanayi Mahallesi, 2060 Sokak, No: 12 -, Manavgat / ANTALYA
38	229750432	ECİRLİLER METAL HURDACILIK VE PLASTİK İNŞ. NAK. TUR. İTH. İHR. SAN. TİC. LTD. ŞTİ. KEPEZ ŞUBESİ	Kepez Mahallesi, 5062 Sokak, No:17, Kepez/ANTALYA
39	230262926	ALFYHAA PLASTİK AMBALAJ SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Antalya Organize Sanayi Bölgesi, 2. Kısım, 25. Cadde, No:9 Döşemealtı/ANTALYA
40	228742218	KEMALETTİN ÇİTGEZ	ANTALYA,SANAYİ Mahallesi, 2071 SOKAK, No: 7-Z01, MANAVGAT,Türkiye
41	260936758	F2 GERİ DÖNÜŞÜM SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Altınova Sinan Mahallesi, Hanımeli Sokak, No: 90/1 Kepez/ANTALYA
42	284790550	İSMAİL SARI	Menderes Mahallesi, Uzun Sokak, No: 5, Kepez / ANTALYA
43	224256270	ÇAĞLAYAN SERA PLASTİK YATIRIM MALZEMELERİ.SANAYİ VE TİCARET VE TİCARET LİMİTED ŞİRKETİ ORGANİZE SANAYİ ŞUBESİ	Antalya Organize Sanayi Bölgesi 1. Kısım Mahallesi, 1. Cadde No: 5 Döşemealtı/ANTALYA
44	285942392	MEHMET AĞYURT MM GERİ KAZANIM TİCARETİ	Ayanoğlu Mahallesi 1900 Sokak No:24 Kepez/ANTALYA

45	223699506	SERTKAYA İNŞAAT TURİZM MAD.YAY.MAT.SAN.TİC.LTD.ŞTİ.	Bereket Mahallesi, Merkez Sokak, No:206 /1 Manavgat/ANTALYA
46	223342646	ANTALYA AKYILDIZ HURDA PLASTİK İML.SAN.TİC.LTD.ŞTİ. ORGANİZE SANAYİ ŞUBESİ	Antalya Organize Sanayi Bölgesi 3. Kısım Mah. 37. Cadde No:15 Döşemealtı/ANTALYA
47	227471946	EKODEN ENERJİ SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Kömürcüler Mah. 2869 Sok. SSKuzeyAkdeniz Sit No:17 Döşemealtı-ANTALYA
48	260793568	ANTALYA ERDOĞANLAR GERİ DÖNÜŞÜM HURDACILIK OTOMOTİV İTHALAT VE İHRACAT LİMİTED ŞİRKETİ	Kömürcüler Mahallesi, 2872 Sokak, NO: 5-, Döşemealtı / ANTALYA
49	226522032	TURKUAZ ATIK YÖNETİMİ YAKIT VE ENERJİ ANONİM ŞİRKETİ MANAVGAT SALUR ŞUBESİ	Salur Mahallesi, Güğükısalar Sokak, No:5-, Yalamuklu, Manavgat / ANTALYA
50	231598828	SERAPSU PLASTİK İMALAT İNŞAAT EMLAK SANAYİ VE TİCARET LİMİTED ŞİRKETİ	Emişbeleni Mahallesi, Kesmekoyak Çıkmaz Sokak, No: 32 Alanya/ANTALYA
51	229235722	KEMALETTİN ÇİTGEZ BİRİNCİ ŞUBESİ	Sanayi Mahallesi, 2060 Sokak, No:4-Z01 Manavgat/ANTALYA
52	227005646	BÜLBÜL PLASTİK GERİDÖN.TEK.SAN.İNŞ.G.N.T.LTD.ŞTİ.	Organize Sanayi Bölgesi 1.Kısım Mah. 8.Cad. No:5. Döşemealtı/ANTALYA
53	267940110	MİSTALYA ARITMA TESİSLERİ MATBACILIK YAYINCILIK ENERJİ ÜRETİM REKLAM İNŞAAT TAŞIMACILIK OTO KİRALAMA SANAYİ VE TİCARET LİMİTED ŞİRKETİ - KORKUTELİ ŞUBESİ	İmecik Mahallesi, 30000 Sokak No:259, Korkuteli / ANTALYA
54	281565984	KÖPÜKCÜM GERİ DÖNÜŞÜM NAKLİYAT OTOMOTİV TİCARET LİMİTED ŞİRKETİ	Zeytinlik Mahallesi, Atatürk Cadde, NO:138 Kepez/ANTALYA
55	226383464	ÖZEN CAM GERİ DÖNÜŞÜM KAZANIM VE İNŞ.SAN. LTD. ŞTİ. MANAVGAT ŞUBESİ	Sanayi Mahallesi, 2063 Sokak, No: 20-, Manavgat / ANTALYA

56	222924540	SÜREKO ATIK YÖNETİMİ NAKLİYE LOJİSTİK ELEKTRİK ÜRETİM ANONİM ŞİRKETİ KULA ŞUBESİ	SANDAL Mahallesi, Atatürk Cadde, No: 283 -, Kula, MANİSA

SOLID WASTE MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision as per comments
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
IFC	International Finance Corporation
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
MoTAT	Mobile Hazardous Waste Tracking System
MSDS	Material Safety Data Sheets
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
WEEE	Electrical and Electronic Equipment
WHO	World Health Organization

SOLID WASTE MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Solid Waste Management Plan ("the Plan") has been prepared by Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. ("AAOİAŞ" or "SPV") for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan is to identify the main sources of solid waste generated during the construction phase and to outline the measures that should be implemented to prevent, minimize, reuse, and recycle waste in accordance with applicable national legislation and international standards. This Plan aims to support sustainable waste management practices and promote circular economy principles throughout construction activities.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

Waste types include but are not limited to domestic/residential waste from construction personnel, excavation waste from earthworks and site arrangements (e.g., base layers, shoulders, slope shaping), construction waste from material use and installation processes, and packaging waste generated from the consumption of goods and materials (e.g., construction materials, food, clothing).

This Plan should be implemented by the Project Sponsor, Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ), the Main Contractor (Limak or EPC) all subcontractors involved in the construction phase. Roles and responsibilities for waste management, monitoring, and reporting should be clearly defined, and this Plan should be reviewed and updated in line with changes in project activities or legal requirements.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

The Plan has been developed in alignment with applicable national legislation and international standards to ensure that solid waste generation, segregation, collection, storage, transportation, reuse, recycling, and final disposal during the construction phase of the Project are conducted in an environmentally sound manner. The references listed below should be used as the legal and procedural basis for implementing the waste management practices outlined in this Plan.

II.1 National Requirements

The following Turkish laws and regulations should be used as the primary legal framework for solid waste management:

- Environmental Law (Law No. 2872)
- Regulation on Waste Management
- Regulation on the Control of Excavation, Construction, and Demolition Wastes
- Regulation on the Control of Packaging Waste
- Regulation on the General Principles for Waste Pre-Treatment and Recovery Facilities
- Regulation on the Management of Waste Oils
- Regulation on the Management of Waste Electrical and Electronic Equipment
- Regulation on the Control of Waste Batteries and Accumulators
- Regulation on the Control of End-of-Life Tires
- Regulation on the Control of End-of-Life Vehicles
- Regulation on the Control of Vegetable Waste Oils

- Regulation on the Control of Medical Wastes
- Regulation on Mining Wastes,
- Regulation on Landfilling of Waste
- Regulation on Waste Incineration
- Regulation on Zero Waste Management
- Regulation on Recycling Contribution Fee
- Communiqué on the Transport of Waste by Road
- Circular on the Preparation of Implementation Project for Landfills,
- Circular on Landfill of Mining Wastes and Technical Arrangement of Other Landfills,
- Water Pollution Control Regulation,
- Surface Water Quality Regulation,
- Regulation on the Control of Pollution Caused by Dangerous Substances in and around the Water Bodies,
- Regulation Concerning Protection of Groundwater against Pollution and Deterioration,
- Ordinance on Groundwater Resources,
- Regulation on Safety Data Sheet on Harmful Substances and Mixture
- Regulation on the Preparing and Distributing Safety Data Sheets Regarding Dangerous Materials and Preparations,
- Regulation on the Classification, Labelling and Packaging of Materials and Mixtures,

Regulation on Transportation of Hazardous Goods on Highways,

These regulations should be used as the legal basis for waste segregation, temporary storage, transport, recycling, recovery, and disposal activities at all construction sites and associated facilities.

II.2 International Standards and Guidelines

In addition to national legislation, the following international standards should be taken into account to ensure alignment with best practices, project financing requirements, and sustainability principles:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
  - Performance Standard 3: Resource Efficiency and Pollution Prevention
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- European Union Requirements- Waste Frameworks Directives (2008)
- Equator Principles (EPs) IV,
- World Business Council for Sustainable Development (WBCSD), December 2011
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These international references provide the broader sustainability framework and technical benchmarks to be integrated into solid waste management procedures, particularly in relation to source reduction, reuse and recycling targets, occupational health and safety, and environmental protection.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Solid Waste Management Plan to ensure consistency in environmental and social performance and regulatory compliance throughout the construction phase:

- Environmental Accident and Spill Response Management Plan
- Water, Wastewater, and Storm Water Management Plan
- Hazardous Materials Management Plan
- Construction Camp Site Management Plan
- Occupational Health and Safety Management Plan
- Community Health and Safety Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to maintain alignment with Turkish legislation, IFC Performance Standards, and other international best practices. Cross-plan coordination is essential for minimizing cumulative impacts, supporting resource efficiency, and enhancing overall environmental and social risk management during the construction phase.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

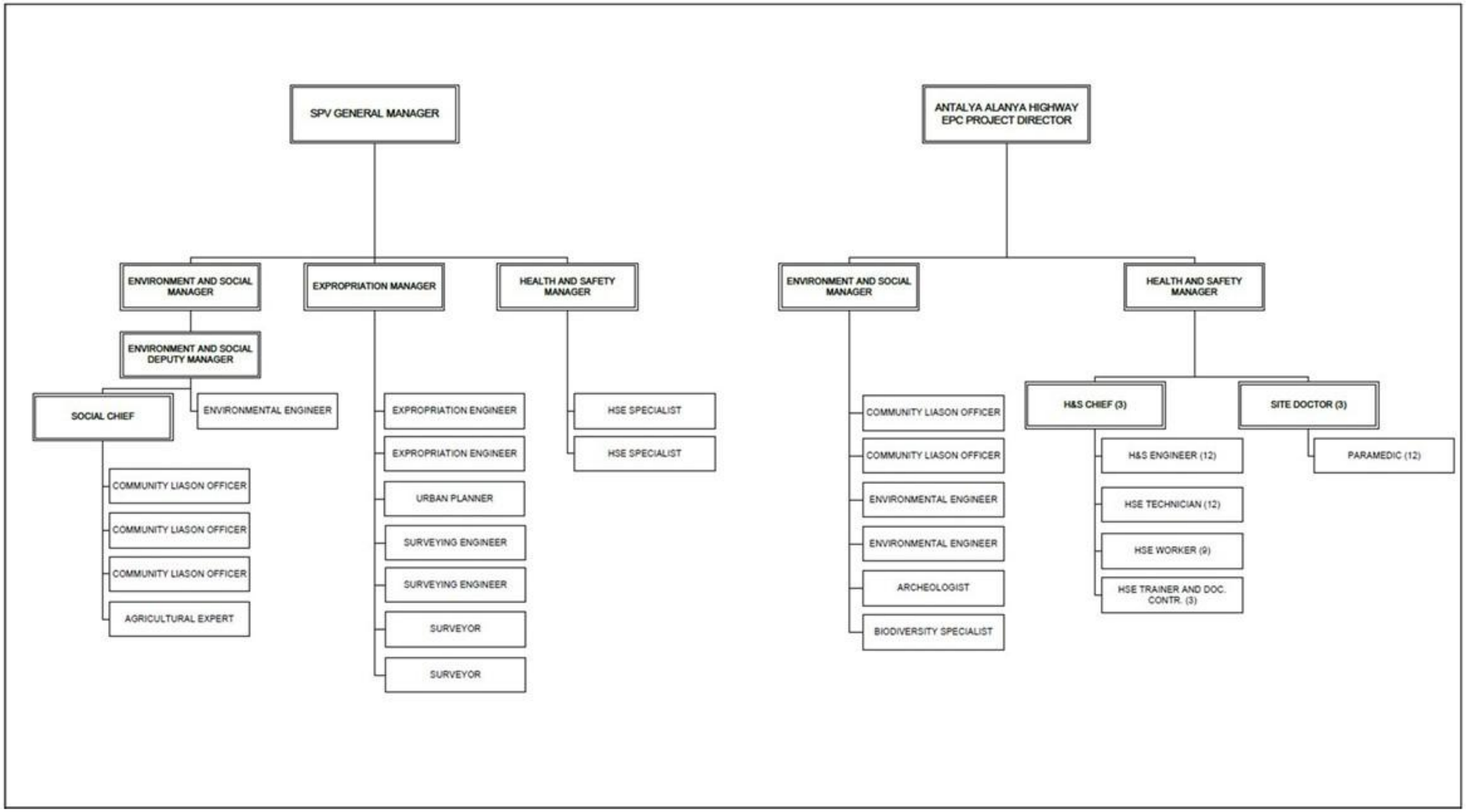

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances.

Roles	Responsibilities
	• Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded.

Roles	Responsibilities
	• Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standards, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements.

Roles	Responsibilities
	• Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities.

Roles	Responsibilities
	• Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution, and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators.

Roles	Responsibilities
	• Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews.

Roles	Responsibilities
	• Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors.

Roles	Responsibilities
	• Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety.

Roles	Responsibilities
	• Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies.

Roles	Responsibilities
	• Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager.

Roles	Responsibilities
	• Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers.

Roles	Responsibilities
	• Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments.

Roles	Responsibilities
	• Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately.

Roles	Responsibilities
	• Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. SOLID WASTE MANAGEMENT AND RECYCLING APPROACH

Solid waste generated during the construction phase of the Project will originate from various activities, including construction operations, excavation works, material usage, accommodation facilities, and routine consumption of goods and supplies such as paper, plastic, metal, and glass containers. All solid waste streams will be classified and managed in accordance with their physical and chemical characteristics to enable effective separation, reuse, recycling, and disposal.

The fundamental principle of solid waste management is to prevent waste generation at the source and, where prevention is not possible, to minimize, reuse, or recycle waste to the greatest extent practicable. All waste management activities will be carried out in compliance with relevant Turkish legislation and applicable international standards.

Waste types expected to be generated during the construction phase include excavation materials (soil, rock, inert debris), construction wastes (such as concrete remnants, packaging materials, and surplus materials), domestic and residential waste from worker accommodation and administrative areas, packaging waste (paper, plastic, metal, glass), reusable components (such as timber, metal, and topsoil), and recyclable materials including waste tires and electrical or electronic equipment.

Further detail on the expected waste types, their regulatory codes, and associated management considerations is provided in Table V.1. This table presents an indicative list of potentially generated wastes during land preparation and construction activities, based on the classifications in the Waste Management Regulation (Annex-4). The list includes excavation waste, construction and demolition debris, packaging materials, vehicle and equipment maintenance waste (e.g., waste oil, filters), and municipal-type waste from camp areas. Each waste stream is categorized with its six-digit waste code and marked according to whether it is classified as hazardous (A) or potentially hazardous (M). These classifications are critical for determining appropriate handling, temporary storage, transportation, and

final treatment or disposal methods, in alignment with the mitigation and monitoring strategies outlined in this Plan.

Table V.1. Indicative List of the Potentially Generated Wastes Types During the Land Preparation and Construction Activities

Waste Code	Waste Code Definition	Remarks
01	Wastes Generated During the Exploration, Extraction, Operation and Physical or Chemical Processing of Ores	
01 01	Wastes generated due to mining excavations	
01 01 02	Wastes due to non-metallic ores	
01 04	Wastes from physical and chemical processing of non-metallic minerals	
01 04 07*	Wastes containing dangerous substances from the physical and chemical processing of non-metallic minerals	M
01 04 09	Waste sand and clays	
01 04 13	Wastes from stone chipping and cutting operations other than those mentioned in 01 04 07	
01 04 99	Wastes that not otherwise specified	
13	Oil Wastes and Liquid Fuel Wastes (Excluding Renewable Oils)	
13 01	Waste hydraulic oils	A
13 02	Waste engine, transmission and lubrication oils	A
13 03	Waste insulation and heat conduction oils	A
13 04	Bilge oils	A
13 05	Oil/water separator contents	A
13 07	Wastes of liquid fuels (fuel oil, diesel, gasoline, other fuels including mixtures)	A
15	Waste Packaging and Absorbents, Wiping Clothes, Filter Materials and Protective Clothing Not-Classified Under Other Waste Types	
15 01	Packaging (including packaging material collected by the municipality separately)	
15 01 01	Paper and cardboard packaging	
15 01 02	Plastic packaging	
15 01 03	Wood packaging	
15 01 04	Metallic packaging	
15 01 05	Composite packaging	
15 01 06	Mixed packaging	
15 01 07	Glass packaging	
15 01 09	Textile packaging	
15 01 10*	Packaging containing traces of hazardous materials or contaminated with hazardous materials	A
15 01 11*	Metallic packaging material containing hazardous porous solid structures (asbestos, for example), including empty pressurized containers	A
15 02	Absorbents, filter materials, wiping clothes and protective clothing	
15 02 02*	Absorbents, filter materials (oil filters if not classified in any other way), wiping clothes, protective clothing contaminated with hazardous materials	M

Waste Code	Waste Code Definition	Remarks
15 02 03	Absorbents, filter materials, wiping clothes and protective clothing excluding 15 02 02	
16	Wastes not Classified under any other Type of Waste in the List	
16 01	Wastes generated due to vehicle maintenance (excluding 13, 14, 16 06 and 16 08), end-of-life vehicles and the dismantling of end-of-life vehicles (including construction machinery) in various transportation categories	
16 01 03	End-of-life tires	
16 01 04*	End-of-life vehicles	A
16 01 06	End-of-life vehicles that do not contain liquids or hazardous substances	
16 01 07*	Oil filters	A
16 02	Electrical and electronic equipment wastes	A
16 04	Explosive wastes	A
16 06	Batteries and accumulators	A
16 10	Aqueous liquid wastes to be sent to off-site treatment	
16 10 01*	Aqueous liquid wastes containing dangerous substances	M
16 10 02	Aqueous liquid wastes other than those mentioned in 16 10 01	
16 10 03*	Aqueous concentrated substances containing hazardous substances	M
16 10 04	Aqueous concentrates other than 16 10 03	
17	Construction and Demolition Wastes (Including Excavations Conducted at Contaminated Sites)	
17 01	Concrete, brick, tile and ceramic	
17 01 01	Concrete	
17 01 02	Bricks	
17 01 03	Tiles and ceramic	
17 01 06*	Mixtures or separated groups of concrete, brick, tile and ceramic containing hazardous substances.	M
17 01 07	Mixtures or separated groups of concrete, brick, tile and ceramic, excluding 17 01 06	
17 02	Wood, glass and plastic	
17 02 01	Wood	
17 02 02	Glass	
17 02 03	Plastic	
17 02 04*	Wood, glass and plastic containing or contaminated with hazardous substances.	A
17 03	Mixtures containing bitumen, coal tar and products containing tar	
17 03 01*	Mixtures with bitumen, containing coal tar	M
17 03 02	Mixtures containing bitumen, excluding 17 03 01	
17 03 03*	Coal tar and products containing tar	A
17 04	Metals (including their alloys)	
17 04 01	Copper, bronze and brass	

Waste Code	Waste Code Definition	Remarks
17 04 02	Aluminium	
17 04 03	Lead	
17 04 04	Zinc	
17 04 05	Iron and steel	
17 04 06	Tin	
17 05	Soil (including excavations conducted in contaminated sites), stones and dredging mud	
17 05 03*	Soil and stones containing hazardous substances	M
17 05 04	Soil and stones excluding 17 05 03	
17 06 01*	Insulation materials containing asbestos	A
17 06 05*	Construction materials containing asbestos	A
17 09	Other construction and demolition waste	
17 09 01*	Construction and demolition waste containing mercury	M
17 09 02*	Construction and demolition waste containing PCB (example: filling paste containing PCB, resin-based base coating material containing PCB, coated enamelling units containing PCB, capacitors containing PCB)	M
17 09 03*	Other construction and demolition waste containing hazardous substances (including mixed waste)	M
17 09 04	Mixed construction and demolition waste, excluding 17 09 01, 17 09 02 and 17 09 03	
18	Healthcare Waste	
18 01 03*	Wastes whose collection and disposal is subject to special requirements in order to prevent infection*	A
19	Materials from waste and water treatment	
19 08 05	Sludges from treatment of urban waste water	
19 13 08	Concentrated liquids and aqueous liquid wastes due to groundwater rehabilitation, excluding 19 13 07	
20	Municipal Waste including Separately Collected Fractions (Household Waste and Similar Commercial, Industrial and Institutional Waste)	
20 01	Separately collected fractions (excluding 15 01)	
20 01 01	Paper and cardboard	
20 01 02	Glass	
20 01 08	Biodegradable kitchen and canteen wastes	
20 01 10	Clothing	
20 01 11	Textile products	
20 01 13*	Solvents	A
20 01 14*	Acids	A
20 01 15*	Alkalines	A
20 01 17*	Photo chemicals	A
20 01 19*	Pesticides	A

Waste Code	Waste Code Definition	Remarks
20 01 21*	Fluorescent lamps and other mercury-containing wastes	A
20 01 37*	Wood containing hazardous substances	M
20 01 38	Wood excluding 20 01 37	
20 01 39	Plastics	
20 01 40	Metals	
20 02	Garden and park wastes (including cemetery wastes)	
20 02 01	Biodegradable wastes	
20 02 02	Soil and stones	
20 02 03	Other non-biodegradable wastes	
20 03	Other municipal wastes	
20 03 01	Mixed municipal waste	
20 03 04	Septic tank sludge	

Source: Waste Management Regulation, Appendix-4

(*): Indicates that the waste is either potentially hazardous or hazardous waste.

(A): Indicates that the waste is a hazardous waste, there is no need for any further analysis.

(M): Indicates that the waste is potentially hazardous waste. In order to determine whether the waste is hazardous or not, an analysis is carried as stipulated in Article 11 of this Regulation.

Wastes ending with 99: Wastes ending with the six-digit waste code 99 define wastes that are not classified as hazardous or non-hazardous waste and are not otherwise defined in the list. "Waste Code Determination Hierarchy" and the provisions of Article 12 of this Regulation shall be applied in the use of this waste code.

According to the TurkStat data (2022), the average daily amount of municipal solid waste per capita in Türkiye is 1.03 kg, while this amount is 1.37 kg in Antalya. Most of the municipal solid waste generation due to the Project will be in the campsites. The amount of domestic solid waste to be produced in the campsites is estimated by multiplying the average daily municipal solid waste production per capita of Antalya province by the number of personnel employed due to the Project. The information on maximum number of personnel to be employed and estimated amount of municipal waste to be generated is summarized in Table V.2. Assuming 20% (Ministry of Environment, Urbanization and Climate Change, 2020) of the municipal solid wastes (by weight) is formed of packaging wastes, estimated amount of packaging wastes within the total municipal wastes to be produced is also provided in the last column of the table. For the handling of the municipal solid wastes, municipalities' landfills and disposal sites, and licensed waste transportation trucks will be utilized. The facilities that are suitable and close to the campsites will be prioritized if possible, for fuel and time efficiency.

Table V.2. Estimated Solid Municipal Waste Generation of the Campsites

Number of Personnel* (cap)	Daily Municipal Waste Generation (kg/day/cap)	Daily Packaging Waste Generation (kg/day/cap)
3,300	1.37	0.27

** Maximum Project related employee number including subcontractors; provided by the Project Sponsor.*

During the construction phase, if the waste generating amount reaches 1,000 kilograms or more of hazardous waste per month, a temporary storage permit from the provincial directorate for the areas/containers will be obtained. If any changes are made to the temporary storage area, the temporary storage permit will be renewed. Excluding medical waste, hazardous waste may be temporarily stored in the temporary storage area for a maximum of 6 months, while non-hazardous waste may be stored for a maximum of 1 year.

Construction of the Project and related structures such as the cuttings, earthworks, etc. will generate significant volumes of material from earthmoving and site clearance. The cut and fill balances along the Project route indicates that total amount of surplus material to be disposed will be around 10,8 million m^3. 22 surplus material dumpsites are planned to be used for the Project which are listed below.

Table V.3 The List of Dumpsites and Capacities

Location		Description of the Site	Capacity Information (m^3)	Planned Capacity Usage (m^3)
Km 52+544	Antalya, Serik	D-2	736,660.28	470,850.34
Km 59+580	Antalya, Serik	D-3	2,111,705.36	56,553.44
Km 61+500	Antalya, Manavgat	D-6	4,378,853.62	156,734.25
Km 64+160	Antalya, Manavgat	D-7	3,327,945.41	615,670.09
Km 71+800	Antalya, Manavgat	D-10	7,516,026.00	184.77
Km 74+360	Antalya, Manavgat	D-11	1,037,880.08	149,039.49
Km 76+240	Antalya, Manavgat	D-14	371,940.90	160,175.41
Km 78+790	Antalya, Manavgat	D-15	1,261,077.59	223,457.91
Km 86+340	Antalya, Manavgat	D-16	4,869,058.60	1,050,435.77
Km 87+800	Antalya, Manavgat	D-17	2,504,385.12	262,361.54
Km 95+410	Antalya, Manavgat	D-18	1,124,258.46	73,868.29
Km 95+410	Antalya, Manavgat	D-19	1,522,633.16	162,563.18
Km 98+290	Antalya, Manavgat	D-20	711,115.13	41,87.43
Km 100+000	Antalya, Manavgat	D-21	1,648,102.37	2,174.86
Km 107+850	Antalya, Manavgat	D-22	1,222,720.44	301,963.83
Km 110+820	Antalya, Manavgat	D-23	20,093,692.94	584,686.39
Km 113+050	Antalya, Manavgat	D-24	2,552,495.14	205,287.40
Km 123+000	Antalya, Alanya	D-26	5,638,396.17	871,743.65
Km 124+250	Antalya, Alanya	D-27	1,926,864.50	1,297,126.46
Km 127+000	Antalya, Alanya	D-28	3,763,723.90	383,579.61
Km 130+400	Antalya, Alanya	D-29	1,991,642.98	1,625,062.08
Km 132+720	Antalya, Alanya	D-30	3,307,202.05	2,132,211.56

AAOİAŞ will need to take opinion from relevant authorities (such as Ministry of Agriculture and Forest, municipality of the relevant district and/or province, and/or other authority which has responsibility on possible storage area in any manner) and the material will be stored accordingly. The statutory process is that the relevant authority will determine where the surplus materials are to be deposited (e.g. in

abandoned quarries or borrow pits), and these instructions must be followed by AAOİAŞ and the subcontractors. In addition to local regulations, Project's ESHS requirements will be followed by AAOİAŞ during management of surplus material and dumpsites.

Where technically and economically feasible, reusable materials such as wood, metal, topsoil, and excavation waste will be repurposed for use in other construction activities or site restoration works. This approach will contribute to minimizing the volume of waste requiring off-site disposal.

Recyclable materials such as uncontaminated paper, plastic, metal, and glass will be collected separately at the source and stored in appropriately labeled recycling containers. Separate bins will be strategically placed at worksites, accommodation units, and administrative facilities. Recyclables will be transported regularly to licensed recycling or recovery facilities in an environmentally sound manner. Waste tires will also be collected and sent to authorized recycling facilities.

Non-recyclable domestic waste that cannot be reused or recovered will be collected separately and transported to licensed landfill sites in accordance with Turkish legislation, which aligns with European Union (EU) requirements. There are four landfills in Antalya province. Their names are Patara Solid Waste Landfill, Manavgat Solid Waste Energy Recovery and Landfill Facility, Alanya Integrated Solid Waste Recycle and Disposal Facility, and Kızıllı Integrated Solid Waste Recycle and Landfill Facility (see Table V.4). Generated solid wastes are collected by the waste trucks of district municipalities, transferred to one of the six solid waste transfer stations, and disposed of at these landfills, which are designed in accordance with the requirements of the Regulation on the Landfill of Wastes. In this context, landfills have proper impermeability layers and the leachate collected at the landfills is treated by means of physical, chemical, and anaerobic processes.

Table V.4. Landfills and Transfer Stations in Antalya Province for non hazardous wastes

Landfills
Patara Solid Waste Landfill
Manavgat Solid Waste Energy Recovery and Landfill Facility
Alanya Integrated Solid Waste Recycle and Disposal Facility
Kızıllı Integrated Solid Waste Recycle and Landfill Facility
Transfer Stations
Elmalı Transfer Station
Kumluca Transfer Station
Serik Transfer Station
Kemer Transfer Station
Korkuteli Transfer Station
Manavgat Transfer Station

The closest and appropriate landfills, Manavgat Solid Waste Recovery and Landfill Facility and Alanya Integrated Solid Waste Recycle and Disposal Facility, will be used for the management of Project-sourced wastes. Required agreements will be made with the municipalities and the facilities for the transfer, recovery, disposal and landfill services.

To ensure effective implementation, awareness-raising and training activities on solid waste management practices will be conducted by the Project Sponsor, AAOİAŞ. Workers will be informed of

waste segregation procedures, proper disposal methods, and the environmental significance of waste minimization and recycling through regular environmental training programs.

All waste management efforts will aim to reduce environmental risks, support circular economy principles, and ensure compliance with both national and international environmental and social performance standards throughout the construction phase. All waste will be recycled or disposed of by the licensed companies. The potential licensed companies has been listed under Hazardous Material Management Plan.

AAOİAŞ will ensure that, Limak will create Temporary Waste Storage Areas (TWSA) for non-hazardous wastes where the wastes are generated (e.g. close to construction activities). Wastes except domestic solid wastes from construction sites will be transported each day to TWSAs within the Main Camp Site Area- 1 (Main) at Km 64+400, Camp Site Area-2 at Km 87+500 and Camp Site Area-3 at Km 124+300, where wastes are safely stored before disposal. However, until the mobilization of the mentioned camp areas is completed, TWSA will be constructed in the Temporary Construction Site area in Taşağıl.

The construction site non-hazardous and hazardous separate containers can be listed as below;

- ✓ Borrow pits : Sarıabalı (AO-1) Borrow Pit at Km 53+800 and the Dikmen Borrow Pit at Km 83+000.
- ✓ Quarries: Çakış (TOY4a) Quarry at Km 56+500, the Kuruçay (TOY4b) Quarry at Km 58+500, the Bademliyar (TO2) Quarry at Km 104+750, the Uzunlar (TOY5) Quarry at Km 106+000, the Karakaya Quarry at Km 114+200, the Saburlar Quarry at Km 117+000, the Karamanlar Quarry at Km 119+500, and the Soğukpınar Quarry at Km 134+000.
- ✓ Asphalt plants: Asphalt Plant-1 at Km 59+400, Asphalt Plant-2 at Km 87+700, and Asphalt Plant-3 at Km 124+300.
- ✓ Concrete plants include; Concrete Plant-1 at Km 55+450, Concrete Plant-2 at Km 59+400, Concrete Plant-3 at Km 80+400, Concrete Plant-4 at Km 87+700, Concrete Plant-4a at Km 89+700, Concrete Plant-5 at Km 99+200, and Concrete Plant-6 at Km 124+300.
- ✓ Mechanical plants: Mechanical Plant-1 at Km 59+400, Mechanical Plant-2 at Km 87+700, and Mechanical Plant-3 at Km 124+300.

Suitable waste containers will be provided for each type of waste and clearly labelled according to the content of the containers. AAOİAŞ will ensure that waste is effectively contained and is protected against wind, rain and vermin. There will be separate storage containers for recyclables (plastics, glass, ferrous metals, metals, and papers/cupboards etc.).

TWSAs will have sufficient areas for handling waste containers. The areas will be concrete lined, equipped with separate drainage with spillage control channels and sumps. The areas will be protected against wind and rain, securely fenced and access to this site will be provided only for authorized persons. These areas will also be labelled as hazardous waste storage areas. There should be a secure section to keep personal protection equipment, spill kits (e.g. absorbents), emergency equipment (for fire fighting), eyewash and emergency shower. Waste segregation will be maintained at all times, separate storage areas/containers will be provided to ensure continued segregation of wastes.

VI. MITIGATION MEASURES FOR SOLID WASTE-RELATED RISKS AND IMPACTS

Although the primary principle of solid waste management is to prevent waste generation at the source, mitigation measures should be implemented to minimize the adverse environmental and social impacts of the solid waste generated during the construction phase. These measures are designed in accordance with the waste management hierarchy—prevention, minimization, reuse, recycling, recovery,

and safe disposal—and are essential to ensure full compliance with Turkish legislation and international standards.

Waste management should follow the principles of the waste hierarchy, as outlined below:

- **Avoidance/Prevention:** Measures should be taken to reduce the quantity of materials used and waste generated from the outset.
- **Reuse:** Materials such as surplus construction materials, excavation soil, timber, and metal should be reused on-site or externally, where technically feasible.
- **Recycling and Recovery:** Separate collection and recycling should be done for paper, cardboard, glass, metal, plastics, tires, electronic waste, batteries, and similar materials. These should be temporarily stored in labeled containers and sent to licensed recycling/recovery facilities.
- **Safe Disposal:** Disposal should only be applied where other management options are not viable. Disposal should be conducted in line with regulatory requirements and environmental best practices.

Construction and associated camp operations will generate both hazardous and non-hazardous waste streams, primarily resulting from material used during construction works, earthworks, packaging materials, and the daily activities of on-site personnel. Effective implementation of the Solid Waste Management Plan and associated procedures should be done to minimize the quantity of waste requiring off-site disposal and to ensure environmentally sound management of all waste streams.

Mitigation measures for solid waste management include the following:

- Cooperation should be ensured with licensed local service providers (private licensed waste transportation/recycling/recovery firms), and written agreements or protocols should be established regarding the regular and sound management/disposal of Project-generated wastes.
- The amount of waste to be sent to off-site management should be minimized through the implementation of the Solid Waste Management Plan based on the waste management hierarchy.
- Sites should not be located in dense forest areas with primary ecological functions.
- Proper temporary waste storage areas should be constructed.
- No waste will be burned, illegally dumped or buried on site
- Training should be provided to Project personnel regarding the proper implementation of waste management procedures in line with the requirements of national legislation and good site practices.
- All waste containers should be labeled with waste type, source, volume, and date. Containers should be corrosion-resistant, sealed, and suitable for waste characteristics. Old or conflicting labels must be removed or covered to avoid confusion.
- All waste (hazardous and non-hazardous) should be transported using licensed vehicles and delivered to authorized facilities. Transfer should be documented using Waste Transfer Notes (for non-hazardous waste) and the Mobile Hazardous Waste Tracking System (MoTAT) System (for hazardous waste).
- Annual waste declarations should be submitted by the end of March each year using the Ministry's Environmental Information System. Records of all waste movements and quantities should be retained and submitted in accordance with legal requirements.
- Temporary waste storage areas (for hazardous and non-hazardous areas) should be designed with secure fencing, lockable gates, and appropriate signage, lighting, and pest deterrents. Fire safety equipment and spill containment kits should be provided, and segregated storage zones should be established for incompatible waste types. Inventory logs and emergency response plans should be clearly documented and implemented.

The following are specific measures to be applied for different types of waste:

- The measures taken for solid waste management should ensure the reduction of environmental pollution and the efficient use of natural resources such as energy and raw materials by minimizing the negative effects of solid waste on the environment. Solid waste generated at construction sites and camps (e.g., packaging, food waste, office waste) should be separated at source and sent to licensed disposal or recycling facilities. Waste types must be matched with suitable treatment and disposal options as per local legislation and site-specific waste categorization.
- Excavated materials should primarily be reused on-site. Remaining excess materials should be managed in accordance with project-specific reuse or disposal plans. Excess material, will be around 10,8 million m^3, should be repurposed where possible, including for landscape restoration or structural fill. Excavated materials should be disposed of at designated storage sites only. The amount of excavated materials to be sent to disposal should be minimized by reusing them as fill material in the construction of road bases, shoulders, side slope arrangements, etc., to the extent the quality and quantity of materials allow.
- Hazardous waste generated from construction and maintenance activities—including chemical containers, contaminated soil, solvents, oils, filters, and fluorescent tubes—should be identified, labeled, stored in compliant containers and temporary storage area, and transferred to licensed facilities in accordance with applicable regulations, such as the Waste Management Regulation (Official Gazette: 02.04.2015 – No. 29314). Management measures should include clear labeling and the use of color-coded containers for each hazardous waste type, provision of spill containment kits and fire prevention systems, establishment of secure fenced storage areas with impermeable flooring, availability of Material Safety Data Sheets (MSDS) on site, regular training of workers on hazardous waste handling, and maintaining hazardous waste liability insurance to ensure safe and compliant management practices.
- Medical waste from clinics and first aid units should be stored in red biohazard bags or color-coded rigid containers labeled with “Biohazard – Medical Waste” symbols. Bags should be double-layered if necessary and stored at ≤+4°C until transfer to authorized medical waste disposal facilities. Collection must occur within 48 hours (or one week if proper storage conditions are ensured). Waste collection and transfer must follow the Regulation on Medical Waste Control.
- Waste Electrical and Electronic Equipment (WEEE) should be stored separately and transferred to authorized recovery facilities. Waste should not be handed over to informal or unlicensed collectors. Compliance with the Regulation on the Management of Waste Electrical and Electronic Equipment (Official Gazette: 22.05.2012 – No. 28296) is mandatory.
- Waste oils generated from equipment maintenance should be collected in leak-proof containers and sent to licensed waste oil recovery/refining facilities in accordance with the Regulation on the Management of Waste Oils (Official Gazette: 21.12.2019 – No. 30985). MSDS must be available on site.
- Waste batteries should be collected in designated boxes and delivered to collection points established by municipalities or licensed distributors in line with the Regulation on the Control of Waste Batteries and Accumulators (Official Gazette: 31.08.2004 – No. 25569).
- End-of-life tires should be collected separately and delivered to authorized recycling facilities in accordance with the Regulation on the Control of End-of-Life Tires (Official Gazette: 25.11.2006 – No. 26357).
- Waste oils from catering activities should be collected in sealed, impermeable containers and stored in closed temporary storage areas before being transferred to licensed recovery or interim storage facilities.
- Sludge from wastewater treatment and concrete batching plants should be analyzed for hazardous characteristics and managed accordingly. Inert wastes (e.g., stone, processed aggregates) should be reused wherever possible and stored to prevent contamination.

The AAOİAŞ will be deemed to be the “owner” of the solid waste that will be created and will be responsible for its management in accordance with the provisions of the Environment Law and its relevant regulations.

The solid waste management measures will be implemented throughout the construction phase. The on-site specification, implementation, and supervision of these measures will follow by the responsible parties, as indicated the related part of this Plan..The Project will also be required to comply with national legal requirements relating to solid waste management.

VII. TRAINING

Upon hiring, all staff will receive structured training addressing sources of waste management hierarchy, measures of waste generation reduction,, environmental and health risks associated with improper waste handling and storage, and the corresponding mitigation strategies applicable to their responsibilities within the Project (e.g., waste segregation at source, proper use of labeled containers, safe storage practices). In addition, personnel assigned to waste management activities will be provided with specialized training to ensure the accurate, safe, and compliant execution of their duties in accordance with the Solid Waste Management Plan and relevant legal requirements.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of solid waste management mitigation measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific conditions, waste generation trends, stakeholder concerns, or changes in applicable environmental regulations.

Monitoring activities will be coordinated by the E&S Manager, in close collaboration with the Management teams. Key responsibilities will include reviewing the type and quantity of waste generated and disposed (e.g., municipal, packaging, waste oil), verifying the implementation of waste segregation at source, inspecting the condition and use of temporary waste storage areas, and ensuring the consistent application of solid waste management measures, including compliance with general housekeeping and containment practices.

Regular inspections will be conducted across all worksites to evaluate compliance with national solid waste regulations and Project-specific waste management requirements. This will include the review of waste records, control of agreements with licensed waste contractors, inspections of labeled containers and containment structures, and verification of source separation and waste handling practices.

The performance of contractors and subcontractors in implementing solid waste management requirements will be reviewed through environmental audits, site supervision reports, and field observations. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to confirm the effectiveness of implemented measures and to ensure recurrence is prevented.

In addition to internal monitoring, inspections may be carried out by relevant public institutions, including the Ministry of Environment, Urbanization and Climate Change, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may include review of monitoring data, on-site waste handling practices, and documentation of compliance.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of inspections, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of solid waste mitigation measures and ensuring full compliance with national regulations and Project standards.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
List of hazardous materials/chemicals supplied, stored, and used (including type and amount/volume)	Camp sites, road construction sites, quarries	Site audit, document review	Monthly	AAOİAŞ, EPC, Environmental Independent Experts
Type and amount of wastes produced/disposed of (e.g., municipal, packaging, waste oil)	Camp sites, road construction sites, quarries	Site audit, document review	Monthly	AAOİAŞ, EPC, Environmental Independent Experts
Validity and completeness of waste management/disposal agreements with licensed companies	Camp sites, road construction sites, quarries	document review	Before every waste transfer	AAOİAŞ, EPC Environmental Independent Experts
Review and implementation consistency of Waste Management Plans	Camp sites, road construction sites, quarries	Site audit, document review	Yearly	AAOİAŞ, EPC, Environmental Independent Experts
Inspection and condition of Temporary Waste Storage Areas	Camp sites, road construction sites, quarries	Site audit, document review	Monthly	AAOİAŞ, EPC, Environmental Independent Experts
Site practices on waste management (e.g., source separation, labeling, containers, containment, housekeeping)	All active construction and camp areas	Visual inspection	Daily	AAOİAŞ, EPC, Environmental Independent Experts

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All solid waste-related findings, including violations of handling protocols, non-compliance, incidents, or complaints received from surrounding communities, will be documented in accordance with national environmental regulations and Project plans. In the event of serious violations—such as illegal disposal or mismanagement of hazardous waste—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Number of trainings conducted under the Waste Management Plan	All relevant personnel trained regularly	first acceptance of the Site and at least yearly	AAOİAŞ, Environmental Independent Experts SPV E&S Engineer

			EPC E&S Engineer
Number of non-conformities and spill/accident records	Less than five	Monthly	AAOİAŞ, Environmental Independent Experts
Number of complaints received related to waste management	Less than five	Quarterly	AAOİAŞ, Environmental Social Experts
Compliance with Solid Waste Management Plan (recording waste types, quantities, classification, storage area management, license verification)	Full compliance with waste classification and licensed firm engagement	Quarterly	AAOİAŞ, Environmental Independent Experts
Percentage of key environmental monitoring activities completed under the program	100%	Quarterly	AAOİAŞ, Environmental Independent Experts
Trend of hazardous and non-hazardous waste generation	Reduce hazardous waste per working hour by 2%	Semi-year	AAOİAŞ, Environmental Independent Experts
Percentage of reused, recycled, or recovered waste	70%	Monthly	AAOİAŞ, Environmental Independent Experts
Percentage of environmental audits completed and corrective actions closed	100%	Monthly	AAOİAŞ, Environmental Independent Experts
Obtaining a waste storage permit	100%	Quarterly	AAOİAŞ, EPC
Obtaining waste management plan approval	100%	Yearly	AAOİAŞ, EPC

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities should be documented and reported as outlined in the Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established plans and procedures. Relevant records that will be reviewed during solid waste management audits may include the external grievance and suggestion tracking database related to waste management issues, the internal grievance and suggestion tracking database concerning solid waste handling and site practices, solid waste management training records, waste inventory logs, contractor waste transfer documentation, and non-conformity records related to solid waste segregation, storage, or disposal. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary.

XI. REPORTING

Regular reporting will be conducted to ensure the effective implementation and continuous improvement of solid waste management activities throughout the construction phase of the Project. Reporting will be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions will be identified, and the required updates will be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Regular audits and visual inspections will be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Quarterly Environmental and Social Monitoring Report will cover at least, but not limited to, the following items. The report will be prepared by the SPV with input data provided by EPC to evaluate the Project performance and compliance of the related plans.

- Incident reporting;
- Emergency response reporting;
- Records of annual emergency response training exercises;
- KPIs and performance trends (see Table XI.1) ;
- Current situation Key Monitoring Activities (see Table XI.2)
- Relevant training activities completed and attendance registers to be maintained;
- Legal Authorities Audit reports;
- Site Inspection logs

In addition, the following external reporting will be done:

- All environmental and social incidents will be appropriately documented, notified and reported in accordance with established procedures the terms and conditions by EPC to SPV,
- Incident notification and reporting to relevant Turkish regulatory bodies will be performed in line with applicable legislation in force and as stipulated in permits and licenses.
- The Lenders will be notified of incidents pursuant to the terms and conditions agreed upon in the Finance Agreements through SPV.

All personnel are encouraged to raise concerns, suggestions, or complaints related to this Plan through the established grievance mechanism by completing the grievance form. The communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

ENVIRONMENTAL ACCIDENT and SPILL RESPONSE MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision as per comments
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

ENVIRONMENTAL ACCIDENT and SPILL RESPONSE MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ER	Employee Relations
ERT	Emergency Response Team
ESHS	Environmental, Social, Health And Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
EU	European Union
IFC	International Finance Corporation
ISO	International Organization for Standardization
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
MSDS	Material Safety Data Sheet
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
RCA	Root Cause Analysis
SEP	Stakeholder Engagement Plan
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
SRP	Spill Response Personnel
WHO	World Health Organization

ENVIRONMENTAL ACCIDENT and SPILL RESPONSE MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Environmental Accident and Spill Response Management Plan ("the Plan") has been prepared for the Antalya–Alanya Motorway Project ("the Project").

The purpose of this Plan is to define response strategies and mitigation measures for managing environmental accidents, spillages of hazardous and non-hazardous substances, and unexpected pollution events that may occur during the construction phase. This includes fuel, oil, chemicals, or process-related spills that could adversely impact human health or the environment.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The Plan has been developed in alignment with applicable national environmental legislation and international standards, including those of international financial institutions. It provides a framework that should be followed to ensure spill preparedness, timely intervention, and proper containment and cleanup procedures.

This Plan should be implemented by all construction-phase parties, including the Project Sponsor (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. – AAOİAŞ), the Main Contractor (Limak), and all subcontractors. Responsibilities related to implementation, training, monitoring, and reporting should be clearly defined and communicated across all relevant levels. In case of changes in project design, materials used, or construction methodology, this Plan should be reviewed and updated accordingly.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This Plan has been structured to align with applicable national legislation and relevant international standards and frameworks that govern environmental accident preparedness, hazardous material handling, and spill response during construction activities. Accordingly, the following legislative and institutional references should guide the implementation, compliance, and performance monitoring procedures throughout the construction phase of the Project.

II.1 National Requirements

The following Turkish laws and regulations provide the legal foundation for managing environmental accidents, hazardous material spills, and associated risks during the construction phase of the Project:

- Environmental Law (Law No. 2872)
- Regulation on the Control of Soil Pollution and Sites Contaminated by Point Sources
- Regulation on the Control of Pollution Caused by Hazardous Substances in Water and its Environment
- Regulation on the Control of Water Pollution
- Regulation on Test Methods for Determining the Physicochemical, Toxicological and Eco toxicological Properties of Substances and Mixtures
- Regulation on Classification, Labelling and Packaging of Substances and Mixtures
- Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals
- Regulation on Persistent Organic Pollutants
- Regulation on Prevention and Mitigation of Major Industrial Accidents
- Waste Management Regulation

- Regulation on Control of Packaging Waste
- Regulation on the Control of Waste Electrical and Electronic Equipment
- Regulation on General Principles of Waste Pre-Treatment and Recovery Facilities
- Regulation on the Control of Waste Batteries and Accumulators
- Waste Oil Management Regulation
- Regulation on the Landfilling of Waste
- Regulation on Incineration of Waste
- Regulation on the Control of Waste Vegetable Oils
- Regulation on the Control of Excavation Soil, Construction and Demolition Waste
- Regulation on the Control of End-of-Life Vehicles
- Regulation on the Control of End-of-Life Tires
- Regulation on the Control of Polychlorinated Biphenyls and Polychlorinated Terphenyls
- Regulation on the Control of Medical Waste
- Zero Waste Regulation

II.2 International Standards and Conventions

In addition to Turkish national legislation, the following international standards and guidelines should be taken into account to ensure compliance with best practices and international lender requirements:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 3: Resource Efficiency and Pollution Prevention
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- ISO 14001: Environmental Management Systems – Requirements with Guidance for Use
- ISO 45001: Occupational Health and Safety Management Systems
- EU Seveso III Directive (2012/18/EU) on the Control of Major Accident Hazards
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
- Stockholm Convention on Persistent Organic Pollutants
- European Agreement Concerning the International Carriage of Dangerous Goods by Road

These references should be utilized to ensure that environmental accident and spill response procedures are implemented in a manner consistent with international expectations and that the Project remains aligned with both domestic regulatory obligations and global environmental performance standards.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Environmental Accident and Spill Response Management Plan:

- Solid Waste Management Plan

- Water, Wastewater, and Storm Water Management Plan
- Hazardous Materials Management Plan
- Occupational Health and Safety Management Plan
- Community Health, Safety, and Security Management Plan
- Traffic Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)
- Environmental Accident and Spill Response Management Plan
- Emergency Preparedness and Response Plan (EPRP)
- Excavated Material Management
- Soil Management and Erosion Control Plan
- Stakeholder Engagement Plan

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in
Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

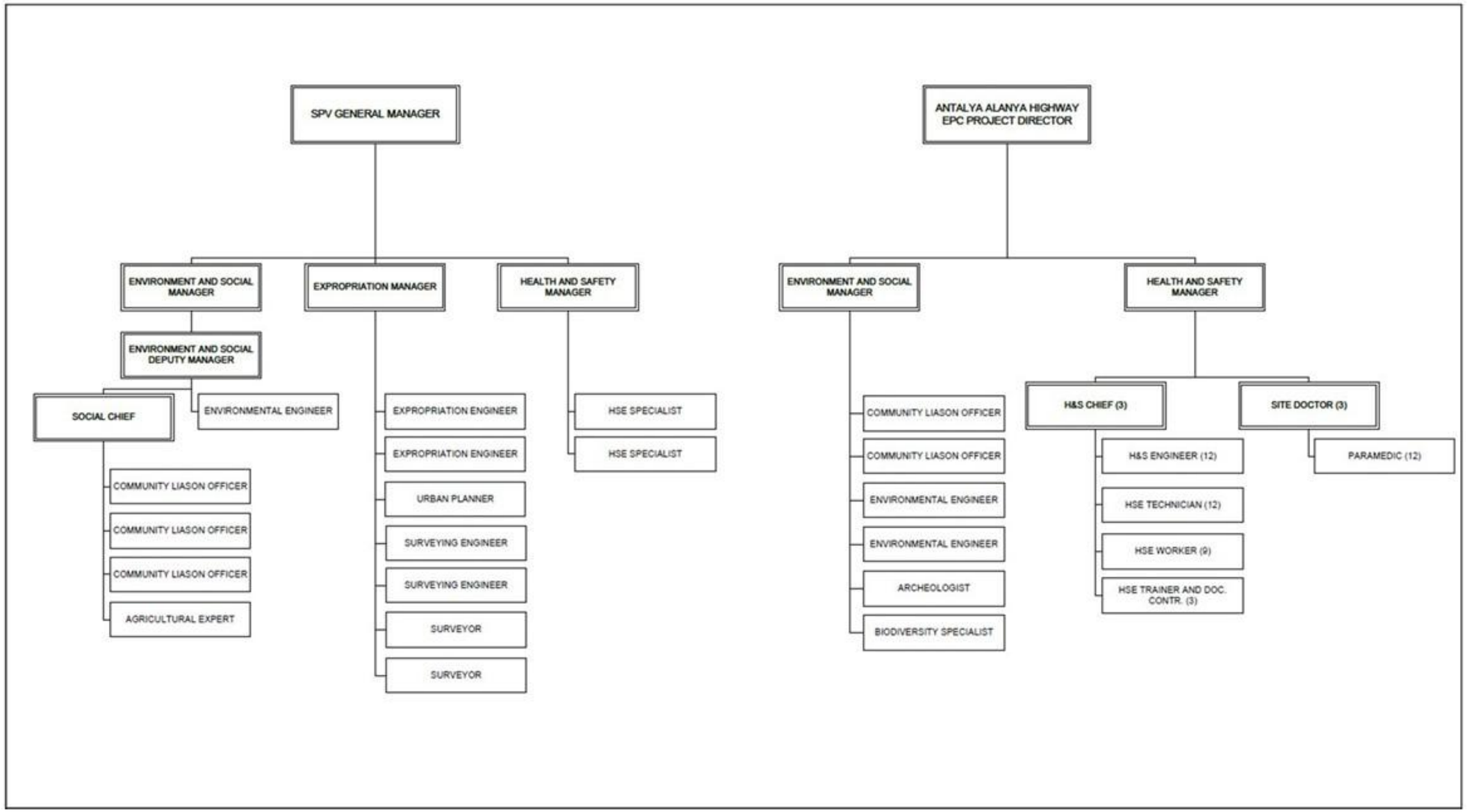

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators.

Roles	Responsibilities
	• Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs.

Roles	Responsibilities
	• Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements.

Roles	Responsibilities
	• Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities.

Roles	Responsibilities
	• Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution, and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators.

Roles	Responsibilities
	• Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews.

Roles	Responsibilities
	• Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors.

Roles	Responsibilities
	• Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety.

Roles	Responsibilities
	• Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies.

Roles	Responsibilities
	• Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager.

Roles	Responsibilities
	• Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers.

Roles	Responsibilities
	• Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments.

Roles	Responsibilities
	• Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately.

Roles	Responsibilities
	• Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. ENVIRONMENTAL ACCIDENT AND SPILL MANAGEMENT APPROACH

Environmental accidents and unintentional spills during motorway construction projects may result in the release of hazardous and non-hazardous substances such as fuel, oil, lubricants, hydraulic fluids, bitumen, chemicals, and wastewater. If not properly managed, these substances may cause contamination of soil, surface water, and groundwater, posing serious risks to both environmental and human health.

Spills may occur during storage, equipment refueling, vehicle maintenance, chemical handling, or the transportation of hazardous materials. Risk factors include improper handling practices, equipment failure, inadequate storage infrastructure, and insufficient containment systems. Adverse weather events such as heavy rainfall or flooding may further increase the likelihood of containment failure, particularly at temporary waste storage sites and fuel storage areas.

The Project corridor traverses a diverse landscape composed of agricultural lands (63.33%), forests and semi-natural areas (29.05%), meadow-pasture areas (4.94%), settlement areas (1.79%), water bodies (0.77%), and natural and semi-natural areas (0.12%). Given the ecological and economic value of these land use types, accidental spills, leakages, or the improper handling of hazardous materials during construction pose significant risks of soil contamination.

Agricultural areas, pastures, and forests are particularly sensitive to such impacts, with a high overall risk due to the potential for pollutants to degrade soil quality, harm vegetation, and disrupt agricultural productivity. In contrast, scrublands and recreational areas are considered to present a moderate risk, while artificial surfaces—such as urban fabric, industrial zones, or active construction sites—where natural soil functions are already compromised, are associated with lower risk levels. Across all land types, potential contamination is expected to remain spatially limited and short-term reversible, provided that effective spill prevention and response measures are rigorously implemented.

Spill incidents can be classified into three categories based on the estimated volume of the released substance and the spatial extent of the impact:

- **Minor Spills:** Minor spills are localized and can be addressed solely by worksite personnel using available on-site resources such as spill kits. These may include small leaks, drips, or splashes from malfunctioning hoses, fittings, or leaking vehicles and equipment. Environmental impacts are expected to be minimal, confined within the work area, and remediable within a few days or weeks. No lasting effects on terrestrial or aquatic ecosystems are anticipated. Minor spills are generally considered to involve volumes of less than 200 liters.

- **Medium Spills:** Medium spills involve larger volumes and require additional local manpower and resources. Such incidents are typically caused by failures in safety systems, structural breaches, or significant fuel losses. These spills may cause moderate, yet reversible, impacts on the environment and typically require 1–2 months for effective clean-up and remediation. The relevant authorities should be immediately notified. Indicatively, medium spills range from 200 to 5,000 liters. Remediation and monitoring will be overseen by the Environmental Engineer of the EPC under the supervision of the E&S Manager of EPC and E&S manager of the SPV, and in coordination with regulatory agencies.

- **Major Spills:** Major spills represent large-scale or crisis-level events that exceed the response capacity of local teams and require the involvement of specialized contractors and additional equipment. These events must be immediately reported to the relevant authorities. Clean-up and rehabilitation efforts may span up to one year, and significant, potentially long-term impacts on the environment may occur. Spills involving more than 5,000 liters fall within this category. Remediation and monitoring activities will be led by the environmental engineer of the EPC with supervision of E&S Manager of the EPC and carried out to the satisfaction of E&S Manager of SPV and the competent regulatory authorities.

Spill risks during the construction phase are particularly associated with the use of heavy construction equipment, mobile fuel tanks, chemical and waste storage areas, wastewater treatment plants and processing units such as asphalt and concrete batching plants. The improper handling of waste oils, chemical solvents, and other construction-related liquid wastes can lead to contamination incidents if preventive measures are not adequately implemented. Substances such as petroleum hydrocarbons, detergents, and acids may have persistent impacts on environmental media if not promptly contained and remediated.

However there will be three construction camp sites (Main Camp Site (Manavgat), Camp Site-2 (Manavgat) and Camp Site-3 (Alanya), temporary construction camp site in Taşağıl is in use. In addition to these areas, there will be usage land for mechanic and asphalt plant and concrete plant areas which are listed below (see Table V.1). In these areas, activities such as refueling and oil changes will be intensive, so the spill risk is highest. Additionally, construction activities along the route, in quarries, and during transportation are also at risk of environmental accidents and spills. In these areas, in addition to spill kits located in risky areas, extra kits will be kept for delivery to nearby construction sites in case of an emergency.

Table V.1 Information on Mechanic, Asphalt and Concrete Plant Areas

Location	Province	District	Nearest Neighborhood	Description of the Site / Plant	Area (m²)
Km 55+450	Antalya	Serik	Sarıabalı	Concrete Plant-1	13,946

Location	Province	District	Nearest Neighborhood	Description of the Site / Plant	Area (m²)
Km 59+400	Antalya	Manavgat	Taşağıl	Temporary Construction Camp Site	66,450
				Concrete Plant-2	
				Mechanical Plant-1	
				Asphalt Plant-1	
Km 64+400	Antalya	Manavgat	Taşağıl	Construction Camp Site-1 (Main)	-
Km 80+400	Antalya	Manavgat	Yeniköy	Concrete Plant-3	15,000
Km 87+500	Antalya	Manavgat	Bucakşeyhler	Construction Camp Site-2	42,371
Km 87+700	Antalya	Manavgat	Bucakşeyhler	Concrete Plant-4	
				Mechanical Plant-2	
				Asphalt Plant-2	
Km 89+700	Antalya	Manavgat	Ulukapı	Concrete Plant-4a	11,665
Km 99+200	Antalya	Manavgat	Sülek	Concrete Plant-5	11,977
Km 124+300	Antalya	Alanya	İncekum	Construction Camp Site-3	85,000
				Concrete Plant-6	
				Mechanical Plant-3	
				Asphalt Plant-3	

To prevent or minimize the environmental consequences of spills, proactive strategies should be implemented. These include proper handling, storage, and transportation of hazardous substances, the provision of appropriate containment infrastructure, and the development of robust emergency response and remediation procedures that are systematically applied throughout construction activities.

In case of a spill in any area, contaminated soil, water and used spill kits will be treated as hazardous waste. These wastes will be disposed of in hazardous waste containers in the area where the work is carried out and from there they will be transferred to the Temporary Hazardous Waste Storage Areas in Temporary Construction Camp Site, Main Camp Site, Camp Site-2 or Camp Site-3 which one is the closest, considering the spill products either hazardous or non-hazardous.

VI. MITIGATION MEASURES FOR SPILL AND ENVIRONMENTAL ACCIDENT RISKS

The following measures will be implemented throughout the Project sites to prevent or minimize the risks and impacts associated with spills and environmental accidents during the construction phase:

- All hazardous materials will be evaluated by the E&S Manager of the EPC prior to being brought to site, including their type, quantity, transfer location, and hazardous characteristics, in order to implement appropriate preventive and control measures.
- Spill prevention will be prioritized by designing and constructing storage areas in the construction site areas with impermeable flooring, secondary containment (e.g., bunds, drip trays), and secure enclosures. These areas will be evaluated by the E&S Manager of the EPC with the approval of the E&S Manager of the SPV.

- Storage areas will be located at least 10 m. away from drainage lines and environmentally sensitive zones to prevent the spread of contamination during accidental releases.
- Fuel and chemical storage tanks, containers, and drums will be designed and labeled in accordance with the stored material's characteristics and legal requirements. They will be kept upright and closed at all times when not in use.
- All tanks, containers, and drums will be regularly inspected for damage or leakage. Any corroded, worn, or damaged equipment will be promptly repaired or replaced.
- Incompatible hazardous substances will be stored separately, and material safety data sheet (MSDS) requirements will be taken into account in designing storage arrangements.
- Storage facilities will be covered to protect materials from rain and snow, and secured with fencing and locks to restrict unauthorized access.
- Storage structures will include sufficient open space to allow for visual inspection and monitoring of stored materials.
- Fire extinguishers will be available in also all hazardous and non-hazardous material storage areas.
- Refueling will be carried out only by trained operators using hoses with automatic shut-off nozzles. Fueling tankers will be equipped with spill kits and/or drip trays for use during refueling. Drip trays or absorbent materials will be placed under refueling points.
- Maintenance activities that may result in spills will be conducted in designated areas which will be constructed in construction site areas equipped with containment systems and spill kits.
- Spill kits, absorbents (pads, socks, booms), and fire extinguishers will be located at all spill-prone locations, including fuel tanks, maintenance areas, and material storage areas.
- All refueling, maintenance, or chemical handling activities will be carried out with spill prevention in mind and with contingency equipment immediately accessible.
- During any maintenance activity with spill risk, spill kits will be positioned near the work zone and equipment will be placed within containment barriers or over drip trays.
- A trained fuel operator will maintain hose contact with the equipment during refueling. Fueling will not begin without placing drip trays under the vehicle or machinery.
- Spill response responsibilities will be assigned to designated personnel, including environmental engineers, and the Emergency Response Team (ERT) which is specified in Emergency Response Plan.
- The ERT contact information and emergency numbers will be clearly posted at work sites and storage areas.
- In case of any emergency (e.g., spill, fire), any staff member must immediately notify the ERT and provide the following: name, location, type of incident (e.g., chemical or fuel spill), and its severity.
- If a worker detects a spill, they must alert nearby personnel, inform environmental staff, and provide a brief description of the situation to facilitate a timely response.
- Small spills will be cleaned immediately by the operator using spill kits. Clean-up materials will be disposed of as hazardous waste.
- If a spill is large, unmanageable by one person, poses health risks (e.g., toxic vapors), or spreads rapidly, the ERT will take over and initiate containment and clean-up actions.
- The severity of a spill will be assessed based on chemical type, physical state, potential for spread, weather conditions, and area affected—not solely by surface area.
- For spills on soil, the source will be shut or isolated, and the substance contained using earthen bunds, booms, or absorbent materials. Contaminated soil will be excavated and disposed of at licensed hazardous waste facilities.
- For spills into surface water, floating barriers (booms) will be used to contain the release. Free product will be collected using pumps and absorbents. Any grease, solvent, or oil spills in maintenance areas will be cleaned using sorbents and placed in appropriate hazardous waste containers. No spills will be hosed into the environment.

- Spills of dangerous substances will be reported by E&S Manager of the EPC to the E&S Manager of the SPV and documented on site.
- Contaminated materials (e.g., soil, cloth, barrels) will be transported to licensed disposal facilities using authorized vehicles.
- Used absorbents will be placed in black-colored hazardous waste containers marked appropriately.
- Absorbent pads will be placed on spills and left for 5–10 minutes. If residues remain, a second pad will be applied. Each pad can absorb up to 17 times its weight.
- Absorbent socks ("sausages") will be used as perimeter controls to contain spreading spills. These will also be disposed of as hazardous waste.
- All spill control materials (kits, extinguishers) will be kept near high-risk locations and clearly marked.
- Fire extinguishers will be placed strategically and regularly inspected.
- All employees will be trained on spill prevention, response procedures, and their respective responsibilities.
- Regular inspections will be carried out on tanks, bunds, supports, and connections by environmental staff. All findings will be recorded.
- Internal haul roads will be inspected for structural integrity, and repairs will be conducted promptly to minimize vehicle-related spill risks.
- All spill events will be recorded, investigated, and followed up with corrective actions. Lessons learned will be incorporated into updated response plans.
- EPC's Environmental engineer will coordinate all major spill responses in accordance with Turkish legislation and notify the EPC's E&S Manager and SPV's E&S Manager accordingly. The SPV E&S Manager will coordinate the documentation of corrective actions for these incidents and their submission to the Antalya Provincial Directorate of Environment, Urban Planning, and Climate Change, as required.

VII. TRAINING

All personnel will receive structured training upon hiring as part of the Project's onboarding and orientation program. This training will cover the prevention and management of environmental accidents and hazardous material spills, including identification of potential spill sources, associated risks to human health and the environment, and appropriate response actions.

The training program will include the following core elements:

- General environmental awareness and potential impacts of spills;
- Applicable national legislation and international standards related to hazardous material handling and spill response;
- Where this Plan and other relevant procedures (e.g., Hazardous Materials Management Plan, Solid Waste Management Plan) can be accessed;
- Typical sources of spills on construction sites, such as equipment failure, leaks during fuel transfer, and improper storage of chemicals or lubricants;
- Precautionary measures for spill prevention;
- Use, location, and application of spill kits and absorbent materials in various work areas;
- Spill containment and control procedures;
- Proper use of personal protective equipment (PPE) during spill response;
- Procedures for clean-up, recovery, and appropriate disposal of contaminated materials;
- Replenishment of spill kits following use or routine inspection.

Training will be primarily delivered through practical demonstrations to ensure staff understands how to respond effectively in the event of a spill. Specialized training will be provided to designated personnel, including members of the ERT, with additional focus on spill response leadership, containment strategies, clean-up coordination, and documentation.

Subcontractors will be responsible for ensuring that their employees receive equivalent training, consistent with Project requirements and aligned with the overall ESMS.

All personnel will receive refresher training at regular intervals, and additional training will be provided to newly hired staff. The E&S Manager will prepare a detailed training schedule, which will be reviewed and approved by the Project Manager.

Spill response drills will be conducted at least once annually to test readiness and build confidence among construction teams and the ERT. Before the drills, ERT team will be trained in waste disposal intervention and management in accordance with national and international standards. Drill performance will be documented in accordance with the ESMS protocols. Drill records will be submitted to the Project Manager for approval and archived as per ESMS protocols.

Attendance and completion of all training sessions will be documented through the Training Participation Form. These records will be managed and retained by the ESHS team, and subject to periodic audits to verify compliance with training and preparedness requirements.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of environmental accident and spill response measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific risks, incident trends, stakeholder concerns, or changes in applicable environmental regulations.

Monitoring activities will be coordinated by the E&S Manager, in close collaboration with the H&S Manager. Key responsibilities will include verifying the proper storage and handling of hazardous materials, monitoring implementation of spill prevention measures, checking the availability and condition of spill response kits, and ensuring that spill containment practices are consistently applied across critical work areas such as fuel storage sites, maintenance zones, and material handling areas.

Regular inspections will be conducted at designated locations across all worksites to evaluate compliance with national environmental regulations and Project-specific spill prevention requirements. This will include visual inspections for potential leaks or spill risks, control of secondary containment systems, checks on the use of drip trays and absorbent materials, and review of maintenance and inspection logs for storage tanks and hazardous material containers.

The performance of contractors and subcontractors in implementing spill management and emergency response measures will be reviewed through environmental audits, site supervision reports, and field observations. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to confirm the effectiveness of implemented measures and to prevent recurrence.

In addition to internal monitoring, inspections may be carried out by relevant public institutions, including the Ministry of Environment, Urbanization and Climate Change, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may

include review of monitoring data, inspection of hazardous material storage practices, and verification of response protocols and documentation.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of inspections, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of spill prevention and response measures and ensuring full compliance with national regulations and Project standards.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Number of trainings conducted	Project site offices	Tracking the number of trained personnel	Quarterly	AAOİAŞ, EPC, Independent Environmental Experts
Reported spill/leak incidents or non-compliance records	Site-wide	Review of non-compliance, accident, and spill records	Quarterly	AAOİAŞ, EPC Independent Environmental Experts
Number of complaints related to environmental accidents	Project site offices	Logging and reviewing records as per the Stakeholder Engagement Procedure	Quarterly	AAOİAŞ, EPC, Independent Social Experts
Hazardous materials storage conditions	Storage and handling areas of hazardous substances	Maintaining records in accordance with the Spill Response Management Plan		AAOİAŞ, EPC, Independent Environmental Experts
Spill kits number and conditions	All construction and maintenance areas and vehicles, chemical storage areas	Visual check and control list	Bi-weekly	AAOİAŞ,EPC, Limak and Subcontractors
Number of medium spill/leakage	All construction site	Visual check and incident reports	Monthly	AAOİAŞ,EPC,
Fire extinguisher check	Storage and handling areas of hazardous substances	Visual check and control list	Monthly	AAOİAŞ,EPC,
Spill response drills	Storage and handling areas of hazardous substances	Audit – Drill reports review	At least annually	AAOİAŞ,EPC,
Spill prevention and response training	All employees	Audit – training records review	Monthly	AAOİAŞ,EPC,

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All spill-related findings, including incident reports, non-compliance records, or complaints received from workers or community members, will be documented in accordance with national environmental regulations and Project plans. In the event of serious violations—such as significant releases of hazardous substances or repeated failure to implement mitigation measures—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

In cases of any medium and major spills will be reported immediately. All reporting will be conducted in accordance with the requirements of local and national authorities.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Number of spill response trainings conducted	All personnel to receive training, 100%	Monthly	AAOİAŞ,EPC, Independent Environmental Experts
Number of non-compliances with applicable standards	Less than five	Monthly	AAOİAŞ, EPC, Independent Environmental Experts
Number of complaints related to spills	Less than five	Monthly	AAOİAŞ, EPC,
Compliance with Spill Response Management Plan procedures	Less than five deviations	Monthly	AAOİAŞ, EPC, Independent Environmental Experts
Contamination on soil and/or water	0 (zero)		AAOİAŞ, EPC Independent Environmental Experts
Number of spill drills	At least 1	Yearly	AAOİAŞ, EPC

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All environmental accident and spill-related incidents and non-conformities should be documented and reported as outlined in this Plan. Contractors and subcontractors should be subject to audits conducted by the SPV within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's environmental management system and applicable regulatory requirements. Records to be reviewed during environmental audits will include, but are not limited to, incident and non-compliance records related to spills, spill response and investigation reports, training attendance logs for spill prevention and response, inspection and maintenance records of hazardous material storage areas, spill kit inventory checklists, and corrective action logs. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under corrective actions defined in Section VI. Project management will review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary to ensure full compliance with national legislation, international standards, and Project-specific environmental requirements.

XI. REPORTING

Regular reporting will be conducted to ensure the effective implementation and continuous improvement of solid waste management activities throughout the construction phase of the Project. Reporting will be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions will be identified, and the required updates will be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Regular audits and visual inspections will be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Quarterly Environmental and Social Monitoring Report will cover at least, but not limited to, the following items. The report will be prepared by the SPV with input data provided by EPC to evaluate the Project performance and compliance of the related plans.

- Incident reporting;
- Emergency response reporting;
- Records of annual emergency response training exercises;
- KPIs and performance trends (see Table XI.1) ;
- Current situation Key Monitoring Activities (see Table XI.2)
- Relevant training activities completed and attendance registers to be maintained;
- Legal Authorities Audit reports;
- Site Inspection logs

In addition, the following external reporting will be done:

- All environmental and social incidents will be appropriately documented, notified and reported in accordance with established procedures the terms and conditions by EPC to SPV,
- Incident notification and reporting to relevant Turkish regulatory bodies will be performed in line with applicable legislation in force and as stipulated in permits and licenses.
- The Lenders will be notified of incidents pursuant to the terms and conditions agreed upon in the Finance Agreements through SPV.

All personnel are encouraged to raise concerns, suggestions, or complaints related to this Plan through the established grievance mechanism by completing the grievance form. The communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

WATER QUALITY, WASTEWATER AND STORM WATER MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision as per comments
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

WATER QUALITY, WASTEWATER AND STORM WATER MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
BOD_5	Biological Oxygen Demand
CLO	Community Liaison Officer
COD	Chemical Oxygen Demand
DO	Dissolved Oxygen
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
HSE	Health, Safety and Environment
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
NH_4^+	Ammonium
NO_3^-	Nitrate
OHS	Occupational Health and Safety
o-PO_4^{3-}	Orthophosphate
SEP	Stakeholder Engagement Plan
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
TKN	Total Kjeldahl Nitrogen
TN	Total Nitrogen
TP	Total Phosphorus

WATER QUALITY, WASTEWATER AND STORM WATER MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Water Quality, Wastewater and Storm Water Management Plan ("the Plan") has been prepared for the Antalya-Alanya Motorway Project ("the Project").

The aim of this Plan is to establish effective procedures and control mechanisms for managing and monitoring water use, wastewater and storm water generated throughout the construction phase, including those arising from construction zones, maintenance areas, rest facilities, and toll booth operations. The Plan has been developed in line with relevant national legislation and international standards, including requirements set by international financial institutions.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The ultimate responsibility for its implementation resides with AAOİAŞ, Limak and AAOAİŞ's sub-contractors & suppliers will be required to demonstrate compliance of their activities against this plan. This plan is intended to be 'living document' that can be refined and modified as situations change.

The Special Purpose Vehicle (SPV) (AAOİAŞ) will have the main role in monitoring of E&S performance of all project participants during implementation of works and services.

This Plan outlines procedures, responsibilities, and control measures that should be done to minimize adverse impacts on water resources, water consumption, safeguard water quality, and ensure environmentally sound wastewater and storm water handling. It serves as a guiding framework for identifying potential risks, implementing mitigation measures, and establishing monitoring protocols throughout construction activities.

The Plan should be adopted by all construction-phase stakeholders, including the Project Sponsor (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. – AAOİAŞ), the Main Contractor (Limak), and all subcontractors. Each party should ensure compliance with the procedures defined in this Plan. Adequate training, infrastructure, source, equipment, and capacity should be provided to ensure effective implementation. Regular reviews and updates should be conducted to reflect changes in design, construction approach, or applicable legislation.

During the construction phase of the Project, the following types of wastewater are expected to be generated:

- Black water (sewage) from flushable toilets and portable/chemical toilets;
- Grey water from sinks, showers, canteens and laundry facilities (at the worker camp);
- Other wastewater from equipment/vehicle washing, concrete washout, wastewater from concrete batch plants, Quarry and Material Extraction Activities deep excavation, blasting, blockage of permeable layers etc.; and
- 'Dirty' run-off water from impermeable surfaces (e.g. concrete paved areas).

This Plan covers the various aspects pertaining to the water consumption (uses, quantities, source and quality etc.) of water, the safe and environmentally acceptable handling, treatment and discharge of wastewater and management of ambient water quality during the Site construction and related humanitarian activities ("the Project Activities"). The following key objectives apply:

- Identify potential water sources
- Identify potential water users with the required quality and amount
- Identify potential sources of wastewater and any key risks to the environment;

- Identify and control key potential pollution risks;
- Cover both accidental and intended impacts on the aquatic environment;
- Identify and ensure that the relevant requirements of national and international standards are complied with during the project (i.e. IFC Performance Standards);
- Outline actions and measures necessary for the effective management of wastewater;
- Define measures to address potential pollution or contamination of the aquatic environment should this arise from the Project Activities or accidental incidents;
- Define the duties and responsibilities of the key personnel involved; and
- Ensure that the necessary equipment, training, capacity needs are known and provided to ensure efficient implementation of the plan.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

The Plan has been structured to align with both national and international requirements, including legislation, guidelines, and sectoral standards that define permissible emission levels and water quality thresholds. Accordingly, the following sources of reference should be used to guide the implementation and compliance procedures:

II.1 National Requirements

The following Turkish laws and regulations should be used as the legal basis for managing water quality during construction:

- Environmental Law (Law No. 2872)
- Regulation on Control of Water Pollution,
- Regulation on Protection of Groundwater Against Pollution and Deterioration,
- Regulation on Surface Water Quality,
- Regulation on the Protection of Drinking Water Basins,
- Regulation on the Collection, Storage, and Discharge of Storm water Systems,
- Regulation on Urban Wastewater Treatment,
- Regulation on Wetland Conservation,
- Regulation on Drinking Water Intended for Human Consumption,
- Regulation on the Control of Pollution Caused by Hazardous Substances in Water and the Environment,
- Regulation on Waste Management,
- Zero Waste Regulation,
- Regulation on Environmental Permit and License,
- Groundwater Law (Law No.167)
- Circular Notice on Waste Water Treatment Plant Registration Certificate (Numbered 2015/06) and
- Regulation on the Control of Soil Pollution and Contaminated Sites from Point Sources.

II.2 International Standards and Conventions

In addition to national requirements, the following international guidelines and agreements should be considered to ensure alignment with best practices and financial institution requirements:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 3: Resource Efficiency and Pollution Prevention

- Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC EHS Guidelines for Cement and Lime Manufacturing: Occupational Health and Safety (2007)
- IFC General EHS Guidelines: Wastewater and Ambient Water Quality
- IFC General EHS Guidelines: for Construction Materials Extraction Construction and Decommissioning
- Equator Principles IV (2020)
- EU Urban Wastewater Treatment Directive (2024/3019/EC)
- World Health Organization (WHO) Guidelines for Drinking-Water Quality (2022 and 2024)

These references should be used to guide the implementation, monitoring, and performance evaluation of water pollution and mitigation on-site throughout the construction phase.

II.3 Project Domestic Waste Water Standards

To determine the discharge limits for domestic wastewater, the limit values specified in national and international standards are provided below (see Table II.1). It is stated in the IFC EHS General Guidelines, Wastewater and Ambient Water Quality document, “Compliance with national or local standards for sanitary wastewater discharges or, in their absence, the indicative guideline values applicable to sanitary wastewater discharges shown in Table 1.3.1”. Accordingly, domestic wastewater discharge standards are determined as follows.

Table II.1 Project Discharge Standards for Domestic Wastewater

Parameter	Turkish Legal Requirement ([a])	IFC ([b])	Project Standards
Biochemical Oxygen Demand (BOD_5) (mg/L)	50	30	50
Chemical Oxygen Demand (COD) (mg/L)	160	125	160
Total Suspended Solids (TSS) (mg/L)	60	50	60
pH	6-9	6-9	6-9
Total Nitrogen (mg/L)	-	10	10
Total Phosphorus (mg/L)	-	2	2
Oil and Grease (mg/L)	-	10	10
Total Coliform Bacteria MPN([c])/100 ml	-	400	400

([a]) Water Pollution Control Regulation, Table 21.1 Domestic Wastewater Discharges (Class 1: BOD load 5-120 kg/day, Population: 84-2000)
([b]) Table 1.3.1-Indicative Values for Treated Sanitary Sewage Discharges, IFC Environmental, Health, and Safety General Guidelines, April 30, 2007.

III. Water Usage

III.1 Potential Water Sources

- The Project will supply water from groundwater and surface water resources. The water use of project activities would be planned to be limited and would be done only after getting relevant permissions from the authorities. Periodical potable water analysis will be conducted by independent parties according to relevant standards for human usage. In any case of noncompliance with parameters for potable water, appropriate water treatment facilities will be furnished to comply with relevant standards. Drinking water will be supplied as bottled water for all site areas. If water is to be procured through suppliers for usage purposes, the suppliers' water availability and capacity should be confirmed via official letters.

III.2 Potential water users with the required quality

- Considering that groundwater could be used as domestic water needs at campsite facilities the nearest groundwater resources were studied within the Project ESIA.

Table III.1 General Water Usage

Water User	Water consumption amount
Humanitarian	806.2 tons/day
Dust Suppression	26.4 m^3 /day

Table III.2 Water Consumption in Concrete Plants and Mechanical Plant Manufacturing

Motorway Km	Facilities Name	Area (m^2)	Maximum Hourly Capacity (m^3/h)	Water Consumption in Concrete Plants and Mechanical Plant Manufacturing (m^3)
55+450	Concrete Plant-1	13,946	140	66,667.05
59+400	Concrete Plant-2	66,450	140	81,020.94
	Mechanical Plant		550	73,601.07
	Asphalt Plant-1		240	-
80+400	Concrete Plant-3	15,000	140	56,391.94
87+700	Concrete Plant-4	42,371	140	42,943.78
	Mechanical Plant-2		550	64,216.74
	Asphalt Plant-2		240	-
89+700	Concrete Plant-4a	11,665	140	28,701.11
99+200	Concrete Plant-5	11,977	140	73,368.82
124+300	Concrete Plant-6	85,000	140	83,610.62
	Mechanical Plant-3		550	86,669.95
	Asphalt Plant-3		240	-
				-

IV. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Water Quality, Wastewater and Storm water Management Plan:

- Solid Waste Management Plan
- Community Health and Safety Management Plan
- Communication and Training Plan
- Hazardous Material Management Plan
- Construction Campsite Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)
- Environmental Accident And Spill Response Management Plan

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

V. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure V.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

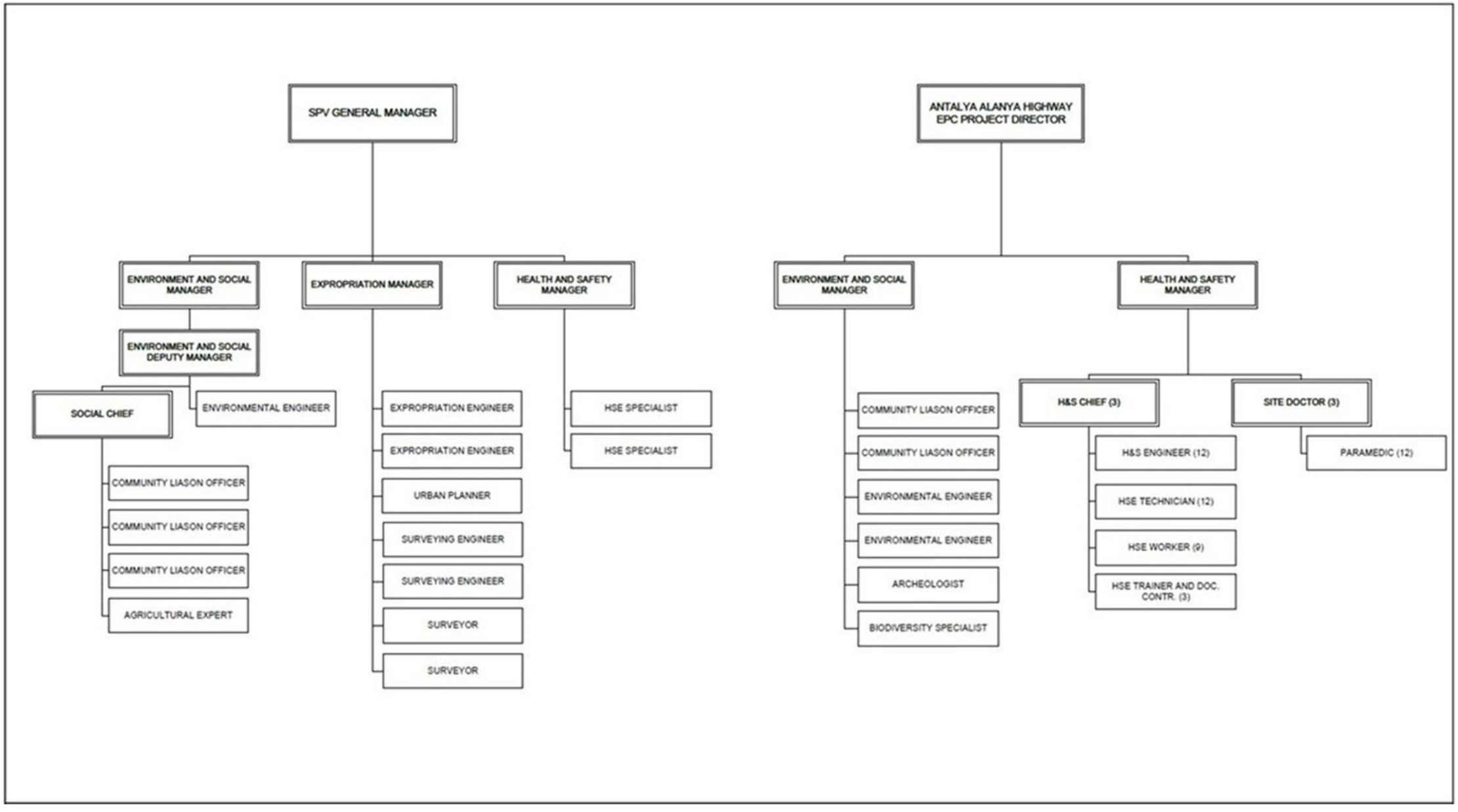

Figure V.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table V.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators.

Roles	Responsibilities
	• Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs.

Roles	Responsibilities
	• Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements.

Roles	Responsibilities
	• Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities.

Roles	Responsibilities
	• Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution, and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators.

Roles	Responsibilities
	• Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews.

Roles	Responsibilities
	• Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors.

Roles	Responsibilities
	• Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S on boarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety.

Roles	Responsibilities
	• Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies.

Roles	Responsibilities
	• Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artefacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager.

Roles	Responsibilities
	• Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers.

Roles	Responsibilities
	• Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments.

Roles	Responsibilities
	• Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately.

Roles	Responsibilities
	• Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

VI. WATER QUALITY, WASTEWATER AND STORM WATER MANAGEMENT APPROACH

The Antalya Basin, within which the Project is located, is one of Türkiye's richest regions in terms of water resources, with a usable water potential of 12,283.44 hm³. A total of 155 surface water bodies have been identified in the Antalya Basin, including 109 rivers, 32 lakes, 11 transitional water bodies, and 3 coastal water bodies.[1] Accordingly, water quality risks related to Project activities will be managed with particular sensitivity, given the ecological importance and diversity of these resources.

Among the major rivers and streams in proximity to the Project corridor are Köprüçay Stream, Manavgat River, Alara (Ulugüney) Stream, and Karpuz Stream. These water bodies are already under pressure from point and diffuse sources such as domestic wastewater, tourism facilities, agriculture, fish farming, and sand and gravel extraction. Table V.1 below summarizes these pressure factors and their types based on regional water protection studies.

Table VI.1 Pressures and Impacts on Rivers/Streams on the Route

River name	Pressure Factor	Pressure Type
Köprüçay Stream	Domestic Wastewater Discharges Tourism Facilities Fish Farms	Point, Diffused
Manavgat River	Domestic Wastewater Discharges Agriculture Activities	Point, Diffused
Alara (Ulugüney) Stream	Pollutants from agricultural activities Water use for agricultural purposes	Diffused

[1] *MoEUCC, April 2024, River Basin Management Plan Strategic Environmental Assessment Scoping Report*

Karpuz Stream	Sand and gravel purchase	Diffused

Given these existing pressures, it is critical that all project-related activities are planned and executed in a way that prevents further deterioration of these already sensitive and impacted water bodies. In this context, the following sections outline the overall approach of the Project to the management of water, wastewater and storm water during the construction phase, in line with applicable environmental standards and best practices.

Water-related impacts associated with motorway projects primarily involve the generation and management of wastewater, storm water runoff, and potential risks to both surface and groundwater quality. During the land preparation and construction activities, wastewater will be generated from construction sites and accommodation facilities for workers (campsite, kitchen, cafeteria, etc.).

Throughout the project construction phase, package WWTPs will be used for domestic wastewater management during construction phase of the Project. In addition, impermeable septic tanks also will be utilized at the campsites, if/when necessary. Although it is accepted that 1,100 people are planned to work in a campsite during the construction period of the project, each package WWTP will have a capacity equivalent to the maximum number of people, 1,250 people (including personnel of contractor and sub-contractors).

The basic approach will be to reuse the wastewater generated by project activities in the activity cycle during construction. This approach will not require any water discharge to environmental media. Especially for the reuse of wastewater generated in concrete batching plants, three-compartment settling ponds will be constructed. In order to reuse the water used during vehicle washing operations, vehicle washing stations will be established and the necessary settlement pools and installations will be constructed for the reuse of water at these stations.

Treated wastewater will be analyzed to ensure compliance with relevant quality limit as defined in regulatory frameworks. The Project's approach to water management focuses on minimizing adverse environmental impacts and ensuring that all discharges meet established regulatory thresholds.

To prevent or minimize the environmental consequences of spills, proactive strategies should be implemented. These include proper handling, storage, and transportation of hazardous substances, the provision of appropriate containment infrastructure, and a roof for large-scale chemical storage areas and waste storage areas to prevent stormwater contamination. The robust emergency response and remediation procedures are systematically applied throughout construction activities.

Additionally, the completed motorway structure will increase impermeable surface area, leading to elevated surface runoff rates. This may result in erosion, localized flooding, and increased water flow in receiving bodies, especially during periods of heavy rainfall. Infrastructure components such as bridges, culverts, and diversion channels may alter natural water flows and cause localized increases in upstream water levels during flood events.

The construction of viaducts, bridges, and culverts may temporarily alter the hydrological regime, leading to effects such as scour, erosion, and sediment deposition in riverbeds and banks. Improper design and installation of temporary structures (e.g., culverts or roadways) may further exacerbate such impacts by disrupting natural stream flows. Measures will be taken to ensure that surface water management complies with national and international standards, mitigating both temporary and permanent risks.

Groundwater resources may also be at risk, particularly in areas with shallow overburden, where accidental discharges of hazardous substances could contaminate aquifers. Construction activities such as site clearance, earthworks, vehicle refueling, and wastewater discharge (both sanitary and industrial)

pose potential threats to groundwater quality if not properly managed. Some excavation works may require groundwater dewatering, which could have implications for local aquifer levels. Additionally, earthworks in bedrock or shallow overburden areas may lead to blockage of fissure permeability by infiltrating fines or sediments.

The increase in impermeable surface area will raise runoff rates, and high storm water flows may cause erosion and flooding. During flood events, infrastructure elements like bridges and culverts may impede water flow, resulting in increased upstream water levels. Accordingly, mitigation measures will be developed and implemented to manage drainage and flooding risks throughout the construction phase.

VII. MITIGATION MEASURES FOR IMPACTS ON WATER QUALITY and CONSUMPTION

This Plan focuses exclusively on measures applicable to the construction phase. The following measures should be implemented to manage wastewater, control storm water, minimize sedimentation and pollution, and protect both surface and groundwater resources during construction activities.

General Implementations

- No direct discharge of wastewater or water containing waste to the environment is permitted unless legally allowed and allowed by Project Standards (See Section I) and in this case all wastewater discharges (all domestic) from all construction components must comply with all relevant legal requirements;
- During site planning and arrangement, the potential wastewater sources from camp/site and facilities, and quarries will be defined;
- All wastewater discharges must comply with relevant Turkish legal requirements (Water Pollution Control Regulation 2004, No. 25687) and Project Standards before disposal, and relevant permits and monitoring shall be in place;
- The AAOİAŞ will have responsibility for the full chain of custody and will retain original invoices for any and all wastewater collection and disposal by third-party service providers;
- All appropriate permits need to be sought by AAOİAŞ from the local authorities; notifications filed, and discharges need to be made within the conditions of the permit;
- Periodic monitoring will be a requirement of the permit conditions;
- Precautionary measures must be taken to minimize possible impacts to surface water infrastructure. Any damage caused to surface water infrastructure such as supply systems, irrigation systems, flood defenses and drainage ditches must be rectified by the AAOİAŞ;
- All construction equipment, vehicles and plant will be cleaned away from surface waters and wash water captured for reuse or treatment off site (only authorized discharge to permitted standards of treated wastewater to be allowed as per local permit/license conditions);
- All facilities and structures will be regularly inspected and maintained to ensure proper and efficient operation at all times.

Domestic Wastewater

- Depending on the availability of wastewater treatment facilities, these sources can be connected to the local sewerage system where possible;
- Wastewater from all construction compounds and the associated buildings will either be discharged into the local/municipal sewage network or treated on site before discharge to a suitable receiving environment (as allowed for under permit conditions) or collected on site and transported by tanker for disposal at the local sewage treatment works;
- Where wastewater is to be produced and treated at camp sites, this will be treated via a suitable wastewater treatment plant system, to comply with the limit values for wastewater quality given

in IFC General Environmental, Health and Safety Guidelines and/or the "Average Discharge Standards to Receiving Environment for Domestic Waste Water" given in "Regulation on Water Pollution Control (RWPC)" numbered 25687 and dated 31.12.2004, whichever standard is strictest will be followed;

- For onsite wastewater treatment plants/units, an approval will be obtained as per Wastewater Treatment/Deep Sea Discharge Project Approval Circular dated 04.03.2014 and numbered 2014/07;
- Additionally, a wastewater discharge permit according to the provisions of the "Environmental Permit and License Regulation" (Official Gazette: 10.09.2014-29115) will be secured before operation of the plant;
- AAOAİŞ will retain a licensed and approved management service for the collection and transportation of wastewater generated and temporarily stored onsite in conservancy tanks, to be transported to a licensed treatment/disposal facility;
- All wastewater produced during construction activities will be temporarily stored on site in suitable, leakage-proof and spill-proof above-ground storage tanks or similar containers based on available technology (non-corrosive and suitable for storing wastewater) and periodically collected by licensed companies appointed by AAOAİŞ and trucked to appropriate and licensed wastewater treatment/disposal facility authorized according to national regulations;
- Portable chemical toilets will be provided during construction as necessary and will be maintained and serviced by an external contracted service provider on a regular basis;
- The AAOİAŞ will appoint local authorized transport companies to collect and transport all sewage and grey water to offsite facilities as well as any other wastewater under its responsibility.
- Rain water harvesting/recovery off of rooftops for example, for domestic use (e.g. for toilet flushing/washing, soil wetting, etc.) is permitted;
- AAOİAŞ will implement technically and financially feasible and cost-effective measures for improving efficiency in its consumption of water, with a focus on areas that are considered core business activities (where benchmarking data are available, a comparison to establish the relative level of efficiency will be made).

The below figure shows the treated water discharge point after the completion of the WWTP installation will be updated (see Figure VII.1).

Figure VII.1: Temporary Construction Site Area Discharge Point

Waste Water Treatment Plant (WWTP) Maintenance

Maintenance intervals may be shortened based on the results of the previous maintenance and the characteristics and quantity of the wastewater.

General cleaning and maintenance

- General cleaning and maintenance should be carried out twice a year.
- This interval may be shortened depending on the pollution and density of the incoming water.
- No chemicals that may damage the system equipment should be used during cleaning.
- If the pumps remain unused for a long time, the suction and discharge lines should be checked before operation, and the pump should be dismantled, cleaned, and then operated.
- The accumulation of dirt or residue inside the pump must be prevented; no residue or debris should be left inside the pump.
- For cleaning the manometer, Solvents and chemicals that could damage the acrylic material should not be used. It should be cleaned using only water and soap.

Routine Inspection and Maintenance

Whenever routine inspections are performed, the following steps should be followed:

- Electrical cable connections should be checked.
- Check for any abnormal noise or vibration.
- Check for any leakage in the pump and pipeline.
- Check for any corrosion on the pump or its components.

The following checks should be performed every three months in accordance with the instructions below:

- Connections should be inspected.
- O-rings and gaskets should be checked to ensure that there are no leaks.

Yearly Inspection and Maintenance

- Pump capacity is checked (as specified on the equipment nameplate).
- Pump pressure is checked (as specified on the equipment nameplate).
- Pump power is checked (as specified on the equipment nameplate).

If the system requirements have not changed and the discharge or wastewater pump performance does not meet the process needs, follow the instructions below. Same control and steps will be followed up for the aeration and disinfection pump etc.

1. Remove the pump from its installation location.
2. Inspect the pump.
3. Replace any worn-out parts.

In addition to general risks during operation, there are specific risks associated with the characteristics of this system.

The system may create conditions that adversely affect human health, particularly due to chemical (such as chlorine) and electrical hazards. To minimize these risks, attention should be paid to the following points:

- Considering the possibility of exposure to chemicals, appropriate protective clothing and equipment must be used during chemical refilling, equipment inspection, or any work involving the container.
- Individuals other than authorized personnel must not interfere with the facility, especially the dosing system, and must not be allowed to climb onto the tank under any circumstances.
- No intervention should be made inside the electrical panel without the knowledge and approval of the manufacturer.

Industrial Wastewater (Sourced from Concrete Batch Plants)

- To reuse of wastewater generated in concrete batching plants, three-compartment settling ponds that each compartment will be 1 m depth, 2 m width and 3 m length should be constructed. The settlements in the settling ponds will be removed bi-weekly. In order to reuse the water used during vehicle washing operations, vehicle washing stations will be established and the necessary pools and installations should be constructed for the reuse of water at these stations.
- No washing out of any plant used in concrete transport or concreting operations will be allowed on-site unless this wash-water is directed to a dirty water collection and treatment system or stored for approved reuse on site;
- No discharge of cement contaminated waters to the construction phase drainage system or directly to any natural watercourse will be allowed;
- Any water containing cement-based products that cannot be reused or recycled on site must be collected within a suitable wastewater collection system and then transported by tanker offsite for treatment and disposal at a reputable and licensed facility;
- Following completion of the concrete works, water contained within the washout sump of the concrete batch plant will need to be pumped to a tanker and removed from site to a licensed waste facility and the washout area will then be cleared and fully reinstated.

Mitigation Measures for Surface and Groundwater Quality

- In the selection of temporary storage sites for oil, fuel and chemicals, the location of the water resources will be taken into consideration. Handling of all hazardous materials will be supervised. Impervious bunds and other containment techniques will be used where hazardous materials are handled.
- Waste oils will be stored in tanks/containers located on impervious surfaces.
- Secondary containment will be provided (on concrete surfaces) for all the storage tanks/barrels containing chemicals including diesel fuels or hazardous liquid wastes. Absorbents will be kept available at storage sites, if necessary. The volume of containment structures allocated for the storage of fuel, oil or other chemicals will be sufficiently greater than the volume of contained liquid.
- Fueling of equipment and vehicles will not be conducted within excavated areas. Equipment and vehicles will get their fuels at designated areas.
- Hazardous materials will not be stored within excavated areas. Supervision will be used during the handling of all hazardous materials. Impervious bunds and other containment techniques will be used where hazardous materials are handled.
- All wastewater discharges from all components of the construction must comply with relevant legal requirements. Treated water will be reused for planting purposes where possible and feasible. When water quality criteria allow, storm water will be managed as a resource for meeting the Project's water needs whenever feasible.

- For facilities with a small number of workers where a treatment plant is not feasible, septic tanks will be used, and these tanks will be frequently emptied by vacuum trucks.
- The disposal of the wastewater collected by the vacuum trucks will be carried out at appropriate district municipal treatment facilities under a contractual agreement. The frequency of vacuum truck wastewater removal will be recorded.
- Biodegradable cleaning agents will be used to remove the asphalt residues.
- Quarry pond dredging activities will be designed and implemented in material quarries to minimize drawdown with consideration of potential impacts to surface and groundwater resource flow and availability.
- When water quality criteria allow, storm water also will be managed as a resource for meeting water needs of the Project whenever feasible.
- Before discharging according to relevant legal requirements, drainage from excavations will be collected and treated to remove contaminants. Perimeter drains will be constructed around all working areas to collect potentially contaminated run-off and direct it to a system of settlement tanks before discharge in accordance with required permits.
- Direct discharge of contaminated run-off from work sites will not be allowed.
- In order to provide direct run-off to the collection system; channels, bunds and sandbag barriers will be used.
- In order to keep roads and other surfaces clear of dust, sweeping will be used rather than washing.
- In order to ensure a proper and efficient construction process, maintenance and inspection of all facilities and structures will be done regularly; especially heavy rainfall. Sediment deposits will be regularly removed and disposed of either by spreading on site (if uncontaminated) or at a suitably licensed facility.
- High sediment generating activities such as road paving will be avoided and exposed surfaces and stored materials covered if necessary to reduce erosion of sediments into surface waters.
- During construction, an Emergency Preparedness and Response Plan will be implemented for any spills and leakages.
- Exposure to areas of open ground will be kept minimum in size and duration.
- The regular cleaning, maintenance, and inspection of package wastewater treatment plants will be ensured.
- The pipeline from the wastewater source to the package wastewater treatment plant will be robust enough to withstand heavy vehicle loads. This will prevent blockages and/or leaks.

Mitigation Measures for Surface Water Bodies and Channels

- Whenever and wherever possible; construction of bridges, viaducts, retaining walls and other structures will be carried out during lean water season months.
- Fencing will be used at sensitive areas of rivers and drains for protection.
- Isolation techniques such as beaming or diversion during construction to limit the exposure of disturbed sediments to moving water will be used during in-stream works.
- In order to protect small drains within the construction areas, they will be covered with metal plates which can be passed over by construction machines.
- For Stream crossings the work will be carried out from the banks above the channel and avoiding direct intervention in the watercourse unless the existing bank reinforcement needs to be replaced. The works will be undertaken during periods of low flow. Duration of in-stream activities will also be restricted.
- Use of grass turf from adjacent areas to cover the soil surface, use of erosion control blankets or mats and other relevant soil erosion prevention measures will be implemented after the finalization of earthwork.
- Groundwater from dewatering will be drained to a near-surface water course.

- The turbidity has to be monitored and if needed a settling tank would be established.

Mitigation Measures for Water Ingress into the Tunnels

- The expected volume of water ingress into the tunnels will be calculated prior to the layout of construction sites being defined.
- Tunnel water settlement ponds will be conservatively sized taking that calculation and best practice guidance on settlement pond sizing into account.
- Mitigation to avoid cement contamination of tunnel waters will be defined and detailed. The waters coming out of tunnels will be diverted to sedimentation ponds adequately sized for receiving the whole flow.
- After sedimentation ponds, in accordance with the measured parameters, the effluent will be discharged if the limits are met.

Mitigation on water usage amount

- During the land preparation and construction activities, wastewater will be generated from construction sites and accommodation facilities for workers (campsite, kitchen, cafeteria, etc.). The basic approach will be to reuse the wastewater generated by project activities in the activity cycle during construction. This approach will not require any water discharge to environmental media. Especially for the reuse of wastewater generated in concrete batching plants, three-compartment settling ponds will be constructed. In order to reuse the water used during vehicle washing operations, vehicle washing stations will be established and the necessary pools and installations will be constructed for the reuse of water at these stations. It is planned to reuse treated water to prevent dusting. Water used in concrete plants will be filtered in watertight sedimentation ponds and reused. These ponds will be frequently cleaned by the responsible person(s) according to the plan, thus preventing overflow.

- A separate vehicle washing station will be established, and the used water will be reused after passing through a sedimentation pond. The cleaning of the sediment that accumulates at the bottom of this pond will be scheduled.

The Project Sponsor (AAOİAŞ) is responsible for overseeing wastewater and storm water management in line with national regulations. The Environmental Department of the Contractor is responsible for on-site implementation, supervision, and inspection of mitigation measures. Compliance with all legal requirements related to water management should be ensured throughout the construction phase.

VIII. TRAINING

Upon hiring, all staff will receive structured training on potential environmental and social impacts relevant to their roles, including the sources, consequences, and associated risks (e.g., emissions, pollution, noise, vibration, waste, or safety hazards), as well as the corresponding mitigation measures applicable to their responsibilities (e.g., proper use of protective equipment, safe operation of machinery, implementation of control measures). In addition, personnel assigned to monitoring activities will be provided with specialized training to ensure accurate, effective, and compliant performance of their duties.

IX. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of water quality mitigation measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary,

based on site-specific conditions, water quality trends, stakeholder concerns, or changes in applicable environmental regulations.

Monitoring activities will be coordinated by the E&S Manager, in close collaboration with the E&S team and Construction Management teams. Key responsibilities will include verifying the implementation of water pollution prevention practices, monitoring wastewater discharge points, evaluating the maintenance status of wastewater treatment systems, and ensuring the consistent application of mitigation measures near sensitive water bodies such as streams, wetlands, and groundwater recharge zones.

Regular water quality monitoring will be conducted at designated locations across all worksites to evaluate compliance with national surface and groundwater quality standards and Project-specific discharge limits. This will include the measurement of key parameters such as pH, COD, BOD, TSS, oil and grease, and heavy metals, as well as visual inspections of discharge outlets and checks on containment systems for fuel and chemical storage.

The performance of contractors and subcontractors in implementing water quality management requirements will be reviewed through environmental audits, site supervision reports, and field observations. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to confirm the effectiveness of implemented measures and to ensure recurrence is prevented.

In addition to internal monitoring, inspections may be carried out by relevant public institutions, including the Ministry of Environment, Urbanization and Climate Change, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may include review of monitoring data, on-site water pollution control practices, and documentation of compliance.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of measurements, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of water quality mitigation measures and ensuring full compliance with national regulations and Project standards.

Table IX.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
suppliers' water availability and capacity	Project office	Document review	Monthly	AAOİAŞ,EPC
Discharge water analysis (BOD, COD, TSS, pH, Total Nitrogen, Total Phosphorus, Oil and Grease, Total Coliform Bacteria	Camp Sites(Km 64+500, Km 87+800, Km 124+300)	Water quality sampling, laboratory analyses	In every 3 months or in the period to be specified in the environmental permit	AAOİAŞ,EPC, Accredited Laboratories
Sources and amount of water supply;	Project Office; Camp Sites	Document review	Monthly	AAOİAŞ,EPC, Independent Environmental Experts
Water supply permit from surface and groundwater	Project Office	Document review	Quarterly	AAOİAŞ,EPC
Environmental permits, wastewater disposal agreements, channel connection permits,	Package domestic wastewater treatment plants	Document review	Quarterly	AAOİAŞ,EPC,

treatment plant capacity, discharge volumes				
Water quality	Water supply point for humanitarian usage	Water quality sampling, laboratory analyses	Quarterly	AAOİAŞ,EPC, Community Health Laboratory
Wastewater management practices at concrete plants	Camp Sites; Concrete Plant locations	Site audit; document review	Quarterly	AAOİAŞ,EPC,
Waste water treatment plant maintenance and inspection records	Project Office	Document review	Quarterly	AAOİAŞ,EPC
Baseline monitoring surface and ground water quality measurement (Table 5, the Annex.5 of Regulation on Surface Water Quality, and IFC EHS Guideline Environmental Waste water and Ambient Water Quality)	ESIA baseline sampling points	Laboratory analyses	Quarterly	AAOİAŞ, EPC
(WWTP) Maintenance	WWTPs (Camp Sites(Km 64+500, Km 87+800, Km 124+300))	as per the Plan relevant part	Yearly	AAOİAŞ, EPC

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All water quality-related findings, including exceedance of limit values, non-compliance incidents, or complaints received from surrounding communities, will be documented in accordance with national environmental regulations and Project procedures. In the event of serious violations—such as significant exceedance of discharge limits or pollution of natural water bodies—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

X. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table X.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Implementation of Wastewater Management Plan and performance monitoring	Proper management of wastewater in accordance with the plan	Monthly	AAOİAŞ EPC, Independent Environmental Experts
Obtained of all obtained and valid permits for waste water discharge and water supply	Obtaining necessary permits for all treated discharges	Annually	AAOİAŞ, EPC, Independent Environmental Experts
Fulfillment of wastewater discharge standards	Compliance with discharge standards	Monthly	AAOİAŞ, EPC, Independent Environmental Experts, Accredited Laboratories
Zero illegal discharges to receiving environment	Zero illegal wastewater discharge to receiving environment	Monthly	AAOİAŞ,EPC, Independent Environmental Experts
Zero - medium spill/pollution incidents	Zero spill/pollution incidents	Monthly	AAOİAŞ,EPC, Independent Environmental Experts
No water pollution detected in surface or groundwater through sampling and testing	Proper management of any identified water pollution	Monthly	AAOİAŞ,EPC, Independent Environmental Experts, Accredited Laboratories

Full compliance with relevant procedural and plan requirements	Prevention of pollution from plants and operations	Monthly	AAOİAŞ,EPC, Independent Environmental Experts
All records maintained and kept up to date	Recordkeeping of off-site wastewater transfers	Quarterly	AAOİAŞ,EPC, Independent Environmental Experts
Provision of general (and where necessary, specialized) training to relevant staff	Provision of relevant training to employees	Monthly	AAOİAŞ,EPC, Independent Environmental Experts
Complaints related to water quality	Less than five	Monthly	AAOİAŞ, EPC, Independent Social Experts

XI. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities should be documented and reported as outlined in the plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established plans and procedures. Relevant records that should be reviewed during audits may include the external grievance and suggestion tracking database, internal grievance and suggestion tracking database, training records, non-conformity records, water sampling and analysis reports, wastewater discharge logs, storm water management inspection checklists, and environmental permit documentation related to water use and discharge. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary.

XII. REPORTING

Regular reporting will be conducted to ensure the effective implementation and continuous improvement of solid waste management activities throughout the construction phase of the Project. Reporting will be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions will be identified, and the required updates will be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Regular audits and visual inspections will be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Quarterly Environmental and Social Monitoring Report will cover at least, but not limited to, the following items. The report will be prepared by the SPV with input data provided by EPC to evaluate the Project performance and compliance of the related plans.

- Incident reporting;
- Emergency response reporting;
- Records of annual emergency response training exercises;
- KPIs and performance trends (see Table XII.1) ;
- Current situation Key Monitoring Activities (see Table XII.2)
- Relevant training activities completed and attendance registers to be maintained;
- Legal Authorities Audit reports;
- Site Inspection logs

In addition, the following external reporting will be done:

- All environmental and social incidents will be appropriately documented, notified and reported in accordance with established procedures the terms and conditions by EPC to SPV,
- Incident notification and reporting to relevant Turkish regulatory bodies will be performed in line with applicable legislation in force and as stipulated in permits and licenses.
- The Lenders will be notified of incidents pursuant to the terms and conditions agreed upon in the Finance Agreements through SPV.

All personnel are encouraged to raise concerns, suggestions, or complaints related to this Plan through the established grievance mechanism by completing the grievance form. The communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

NOISE and VIBRATION MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision as per comments
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

NOISE and VIBRATION MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health and Safety
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
IFC	International Finance Corporation
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
OHS	Occupational Health and Safety
RCA	Root Cause Analysis
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
WHO	World Health Organization

I. PURPOSE AND SCOPE

This Noise and Vibration Management Plan ("the Plan") has been prepared by ENCON Environmental Consultancy Co. ("ENCON" or "ESIA Consultant") as part of the Environmental and Social Impact Assessment (ESIA) studies for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan is to identify significant noise and vibration sources associated with construction activities and to define the necessary mitigation, control, and monitoring measures to minimize potential impacts on the surrounding environment, including both human receptors and wildlife.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress

The Plan has been developed in line with applicable Turkish regulations and relevant international standards, including the requirements of international financial institutions. The measures described in this Plan should be implemented to ensure that noise levels remain within acceptable limits throughout the construction phase.

This Plan should be implemented by all relevant parties, including the Project Sponsor, Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ), the Main Contractor (Limak), and all subcontractors. Responsibilities for implementation, monitoring, and reporting should be clearly defined. Revisions to the Plan should be made if there are changes in site operations, regulatory updates, or project modifications.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This Plan has been structured to comply with national legislative requirements and relevant international standards that regulate permissible noise and vibration levels for infrastructure projects. Accordingly, the following references should guide the implementation, monitoring, and performance evaluation of noise and vibration control measures during construction phase.

II.1 National Requirements

The following Turkish laws and regulations form the legal basis for the management of noise and vibration impacts arising from project activities:

- Environmental Law (Law No. 2872)
- Regulation on Environmental Noise Control (Official Gazette: 30.11.2022 – No. 32029)
- Regulation on Noise Emissions to the Environment by Equipment Used in Open Areas (Official Gazette: 30.12.2006 – No. 26392)

Noise limits applicable to project activities are defined under the Regulation on Environmental Noise Control. These limits are summarized in Table II.1.

Table II.1 Reference Limits and Standards for Monitoring and Mitigation

Noise Source	Measured Parameter	Environmental Noise Level		
		Daytime	Evening	Night
Industrial facilities, transport sources	LAeq,5min.	65 dB(A)	60 dB(A)	55 dB(A)
Establishments with music broadcasting (1)	LAeq 63-250 Hz	60 dB(A)	55 dB(A)	50 dB(A)

Workplaces (including those with music) (2)	LAeq,5min.	Background + 5 dBA	Background + 3 dBA
Multiple workplaces (3)	LAeq,5min.	Background + 7 dBA	Background + 5 dBA
All sources	LCmax	100 dBC	

(1): These limit values are valid as of 31.12.2023. These limit values are provided in each 1/3 octave band of the specified frequency range. In the acoustic reports prepared until this date; environmental noise measurement results and measures determined as a result of the measurement results taken are included.
(2): Workplaces broadcasting music and marine vessels are included.
(3): Each workplace that contributes to the background noise level is equally responsible for ensuring this limit value. Each workplace takes the necessary measures according to their contribution to noise.

In addition, operating hours for construction activities have been defined to limit noise disturbances, as shown in Table II.2.

Table II.2 Time period permitted for outdoor activities in residential areas

Activity	Working Hours
Construction site activities	10:00 – 22:00
Blasting activities in quarries/mines	10:00 – 20:00
Use of fireworks	20.00-22.00
Blasting activities in mines, quarries, and other areas	10.00-20.00

Note: For public interest projects such as dams, bridges, tunnels, highways, and urban roads, working hours may be revised by the Provincial Environmental Board.

Regulations on vibration impacts are also included in the Environmental Noise Control Regulation. The limits are defined for various types of structures and activities as presented in Table II.3, Table II.4, and Table II.5.

Table II.3 The maximum permissible values of the ground vibrations caused by the vibrations caused by blasting in mines, quarries and similar areas on the nearest structure

Structure Type	Max Vibration Velocity at Foundation (mm/s)			Max at Top Floor (mm/s)(2)
	f= 1-10	f=10-50	f=50-100(1)	
Industrial buildings	20	40	50	40
Residential buildings	5	15	20	15
Sensitive, historical/natural structures(3)	2	8	10	8

(1) For frequencies greater than 100 cycles/sec, a large vibration level is permissible.
(2) For buildings with more than one story, measurements should be taken both at the foundation of the building and at the slab of the top floor.
(3) These limit values for historical and natural structures may be limited by precise, comprehensive vibration measurements and scientific studies to be carried out on-site.

Table II.4 The maximum permissible values of ground vibrations generated by rail and road transportation vehicles, workplaces and industrial facilities in the nearest building and ground vibrations generated by machinery and equipment inside the building

Structure Type	Frequency Range (Hz)	Permissible Vibration Velocity (rms, mm/s)
Residential buildings	1(1)	1.5
	8-100	0.3
Office buildings	1(2)	3.5
	8-100	0.6
Historical/natural buildings(4)	1(3)	0.8
	8-100	0.1

(1) :The maximum permissible vibration speed is determined according to the vibration frequency in the graph drawn logarithmically with the specified values.
For example, between 1 Hz-8 Hz, it decreases linearly from 1.5 mm/sec to 0.3 mm/sec in a logarithmic graph.
(2) :The highest permissible vibration speed is determined according to the vibration frequency in the graph drawn logarithmically with the specified values.
For example, between 1 Hz-8 Hz, it decreases linearly from 3.5 mm/sec to 0.6 mm/sec in a logarithmic graph.
(3) :The highest permissible vibration speed is determined according to the vibration frequency in the graph drawn logarithmically with the specified values.
For example, between 1 Hz-8 Hz, it decreases linearly in the graph drawn logarithmically from 0.8 mm/sec to 0.1 mm/sec.
(4) :These limit values determined for historical and natural structures may be limited by precise, comprehensive vibration measurements and related scientific studies to be carried out on site.

Table II.5 The maximum permissible values of ground vibrations caused by pile driving and similar vibration-generating operations in construction and construction machinery outside the nearest structure (in frequency bands between 1 Hz and 80 Hz)

Area Type	Max Vibration Velocity (Peak Value – mm/s)	
	Continuous Vibration	Intermittent Vibration
Residential Areas	5	10
Commercial Areas	15	30
Historical/Natural Structures(1)	2	5

(1) :These limit values determined for historical and natural structures may be limited by sensitive, comprehensive vibration measurements and scientific studies to be carried out on-site.

II.2 International Standards and Conventions

The following international guidelines and conventions should be considered to ensure alignment with global best practices and lender requirements:

- IFC Performance Standards and Sectoral Guidelines (2012)
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- World Health Organization (WHO) Guidelines for Community Noise
- European Landscape Convention (entered into force in 2000, ratified by Türkiye in 2003)

The IFC EHS Guidelines recommend noise limits for sensitive receptors, as presented below.

Table II.6 The Noise Level Guidelines (IFC General EHS Guidelines – Noise Management

Receptor	One-Hour LAeq (dBA)	
	Daytime (07:00–22:00)	Night (22:00–07:00)
Residential, institutional, educational	55	45
Industrial, commercial	70	70

As per IFC requirements, noise impacts should not exceed these thresholds or result in an increase of more than 3 dB over baseline levels at the nearest off-site receptor.

II.3 Project Standards

The Project will adopt the most stringent limits between national regulations and international standards to ensure effective management of noise and vibration impacts throughout the construction phase. The reference levels presented in the tables above will be used for monitoring and mitigation planning. In case of exceedances, corrective measures should be implemented immediately. Noise and vibration limits for road construction activities are summarized in Table II.7. Similarly, limits for vibration levels generated by construction machinery are given in Table II.8.

Table II.7 Project Construction Noise Standards

Receptor	One-Hour LAeq (dBA)	
	Daytime (07:00–22:00)	Night (22:00–07:00)
Residential, institutional, educational	55	45
Industrial, commercial	70	70

Table II.8 Project Construction Vibration Standards

Land Use Type	Max Vibration Velocity (Peak Value – mm/s)	
	Continuous	Intermittent
Residential Areas	5	10
Commercial Areas	15	30
Historical/Natural Structures	2	5

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Noise and Vibration Management Plan:

- Community Health and Safety Management Plan
- Occupational Health and Safety Plan
- Traffic Management Plan
- Solid Waste Management Plan
- Hazardous Materials Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

Each of these plans is linked to the Noise and Vibration Management Plan by addressing sources or impacts of construction-related noise and vibration. The Community Health and Safety Plan manages risks to nearby residents. The Occupational Health and Safety Plan protects workers from noise exposure. The Traffic Management Plan regulates vehicle-related noise. The Solid Waste Management Plan considers noise from waste handling. The Hazardous Materials Management Plan ensures the safe handling of sensitive materials in noisy environments. The ESMMP monitors compliance with noise and vibration controls across all activities.

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

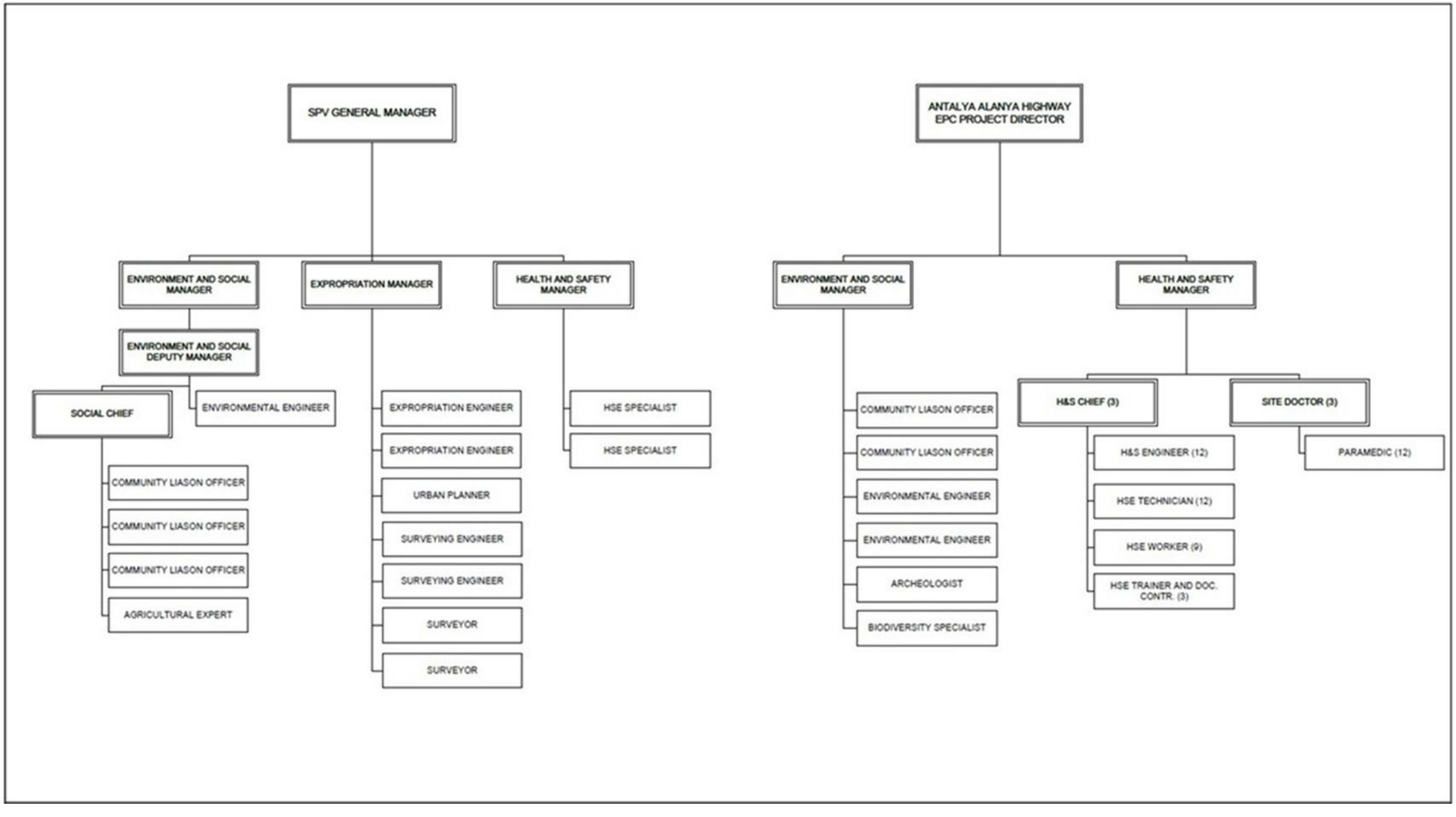

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities.

Roles	Responsibilities
	• Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders.

Roles	Responsibilities
	• Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standards, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication.

Roles	Responsibilities
	• Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GM) at community and project levels.

Roles	Responsibilities
	• Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts.

Roles	Responsibilities
	• Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.

Roles	Responsibilities
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.

Roles	Responsibilities
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities.

Roles	Responsibilities
	• Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance.

Roles	Responsibilities
	• Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis.

Roles	Responsibilities
	• Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks.

Roles	Responsibilities
	• Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artefacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations.

Roles	Responsibilities
	• Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements.

Roles	Responsibilities
	• Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.

Roles	Responsibilities
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks.

Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space).

Roles	Responsibilities
	• Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness.

Roles	Responsibilities
	• Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations.

Roles	Responsibilities
	• Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. NOISE AND VIBRATION MANAGEMENT APPROACH

Noise and vibration impacts associated with motorway projects primarily arise during the construction phase from activities such as excavation works, use of heavy machinery and equipment, piling, blasting operations, material transportation, and the operation of batch plants. These sources generate intermittent and continuous noise and ground-borne vibrations, particularly affecting nearby sensitive receptors such as residential areas, schools, hospitals, and ecological habitats.

Vibration impacts during construction are typically associated with activities such as blasting, piling, and the use of vibratory machinery. These operations may result in ground vibrations that can potentially affect structural integrity and human comfort in nearby buildings and facilities. Sensitive receptors, including historical or cultural structures, require particular attention due to their susceptibility to even low levels of vibration.

These impacts should be assessed in the context of current baseline conditions, which show that ambient noise levels in certain areas are already near or above guideline thresholds. As shown in Table XI.6 **Geographical and Environmental Information of Noise Measurement Points**

ood	Coordinates	Corresponding Motorway (KM)	Environmental Activities	Distance t Alignm

	393414/4055623	127+000	Greenhouses, residential areas, a school, and a mosque near a road with vehicle traffic	380
	389720/4055765	123+400	Greenhouses, residential areas, and hotels near a road with vehicle traffic.	640
	389655/4072729	115+000	The Bademliyar quarry is located near the receptor along the Konya-Manavgat D695 highway	11,980
r	363395/4078780	86+500	Residential areas, tourism facilities, and greenhouses near a road with vehicle traffic.	190
	386572/4060940	117+100	Residential areas and roads	230
i	334640/4094389	52+000	Greenhouses and residential areas near a road with vehicle traffic.	350
	399364/4055198	133+000	Greenhouses and residential areas near a road with vehicle traffic.	75
	370544/4070725	97+750	Greenhouses, residential areas, and a school near a road with vehicle traffic.	560
	373104/4065985	Manavgat East Access Road 1+000	Greenhouses and residential areas near a road with vehicle traffic.	100
	353691/4080989	76+300	Greenhouses and residential areas near a road with vehicle traffic.	490
	385356/4061872	115+500	Greenhouses and residential areas near a road with vehicle traffic.	410
	401287/4049717	140+600	Greenhouses and residential areas near a road with vehicle traffic.	550
	339819/4095932	56+700	Greenhouses, Köprüçay stream, and residential areas near a road with vehicle traffic.	2,860
	341974/4097230	57+250	Residential areas, tourism facilities, a school, and a river near a road with vehicle traffic.	4,890
	360448/4076493	83+500	Greenhouses, Borrow Pit, and residential areas near a road with vehicle traffic.	2,335
	337884/4093014	55+400	Greenhouses, Köprüçay stream, and residential areas near a road with vehicle traffic.	0
	330608/4089427	Serik Access Road 7+000	Greenhouses and residential areas near a road with vehicle traffic.	690
	371900/4068786	100+000	Residential areas near a road with vehicle traffic.	620
	343326/4087476	Taşağıl Access Road 2+500	Antalya-Konya D687 highway and residential areas	310
	365551/4075913	90+300	Greenhouses and residential areas near a road with vehicle traffic.	425
	376876/4066570	105+400	Greenhouses, Çenger stream, and residential areas near a road with vehicle traffic.	1,330

Table V.1 and Figure V.1, baseline measurements indicated that sound levels at several locations were close to or exceeded the threshold values set by the Regulation on Environmental Noise Control and IFC EHS Guidelines. This is primarily due to the proximity of 21 main and state roads, 20 settlements, 15 agricultural businesses, 3 tourism spots, 3 schools, 1 mosque, and 4 rivers. No significant existing sources of vibration were identified during baseline assessments.

Table XI.6 Geographical and Environmental Information of Noise Measurement Points

Neighborhood	Coordinates	Corresponding Motorway (KM)	Environmental Activities	Distance to Project Alignment (m)
Akdam	393414/4055623	127+000	Greenhouses, residential areas, a school, and a mosque near a road with vehicle traffic	380
Avsallar	389720/4055765	123+400	Greenhouses, residential areas, and hotels near a road with vehicle traffic.	640
Bademliyar	389655/4072729	115+000	The Bademliyar quarry is located near the receptor along the Konya-Manavgat D695 highway	11,980
Bucakşeyhler	363395/4078780	86+500	Residential areas, tourism facilities, and greenhouses near a road with vehicle traffic.	190
Çakallar	386572/4060940	117+100	Residential areas and roads	230
Deniz Tepesi	334640/4094389	52+000	Greenhouses and residential areas near a road with vehicle traffic.	350
Emişbeleni	399364/4055198	133+000	Greenhouses and residential areas near a road with vehicle traffic.	75
Hacıali	370544/4070725	97+750	Greenhouses, residential areas, and a school near a road with vehicle traffic.	560
Hacıobası	373104/4065985	Manavgat East Access Road 1+000	Greenhouses and residential areas near a road with vehicle traffic.	100
Kalemler	353691/4080989	76+300	Greenhouses and residential areas near a road with vehicle traffic.	490
Karakaya	385356/4061872	115+500	Greenhouses and residential areas near a road with vehicle traffic.	410
Konaklı	401287/4049717	140+600	Greenhouses and residential areas near a road with vehicle traffic.	550
Köprüçay	339819/4095932	56+700	Greenhouses, Köprüçay stream, and residential areas near a road with vehicle traffic.	2,860
Sağırin	341974/4097230	57+250	Residential areas, tourism facilities, a school, and a river near a road with vehicle traffic.	4,890
Sarılar	360448/4076493	83+500	Greenhouses, Borrow Pit, and residential areas near a road with vehicle traffic.	2,335
Sarıabalı	337884/4093014	55+400	Greenhouses, Köprüçay stream, and residential areas near a road with vehicle traffic.	0
Serik	330608/4089427	Serik Access Road 7+000	Greenhouses and residential areas near a road with vehicle traffic.	690
Sülek	371900/4068786	100+000	Residential areas near a road with vehicle traffic.	620
Taşağıl	343326/4087476	Taşağıl Access Road 2+500	Antalya-Konya D687 highway and residential areas	310
Ulukapı	365551/4075913	90+300	Greenhouses and residential areas near a road with vehicle traffic.	425
Uzunlar	376876/4066570	105+400	Greenhouses, Çenger stream, and residential areas near a road with vehicle traffic.	1,330

Table V.1. Noise Measurement Results

Districts	Measurement Date	Environmental Conditions During Sampling	Coordinates (UTM WGS84-Zone 35)		RENC Noise Levels			IFC EHS Guidelines Noise Levels	
			X (North)	Y (East)	L_{eq} Day (7:00–19:00)	L_{eq} Evening (19:00-23:00)	L_{eq} Night (23:00-07:00)	L_{eq} Day (07:00-22:00)	L_{eq} Night (22:00-07:00)
Sarıabalı	16-17.09.2024	Sunny	337884	4093014	62.4	56.2	53.6	61.5	53.2
	21-22.09.2024	Sunny			61.9	55.7	55.6	61.2	55.5
Sarılar	16-17.09.2024	Sunny	360448	4076493	65.5	63.7	62.0	65.1	62.5
	21-22.09.2024	Sunny			63.1	63.0	59.0	63.2	59.3
Bucakşeyhler	16-17.09.2024	Sunny	363395	4078780	70.3	56.3	55.0	69.3	55.6
	21-22.09.2024	Sunny			65.7	64.3	58.7	65.5	59.3
Kalemler	16-17.09.2024	Sunny	353691	4080989	57.6	52.7	45.7	57.1	45.6
	21-22.09.2024	Sunny			66.0	61.7	60.8	65.5	60.6
Köprüçay	16-17.09.2024	Sunny	339819	409532	63.9	58.6	58.5	63.2	58.8
	21-22.09.2024	Sunny			64.0	62.9	62.8	64.0	62.4
Bademliyar	16-17.09.2024	Sunny	389655	4072729	71.8	56.9	55.5	70.9	55.3
	21-22.09.2024	Sunny			63.3	61.7	61.6	63.2	61.2
Ulukapı	16-17.09.2024	Sunny	365551	4075913	60.2	59.8	59.4	60.4	59.0
	21-22.09.2024	Sunny			62.7	57.9	54.9	62.1	55.0
Taşağıl	16-17.09.2024	Sunny	343526	4087476	79.1	68.5	56.4	78.3	56.5
	21-22.09.2024	Sunny			68.8	65.5	65.3	68.4	65.1
Hacıali	16-17.09.2024	Sunny	370544	4070725	73.1	45.6	43.9	72.2	43.5
	21-22.09.2024	Sunny			68.5	67.2	66.0	68.4	65.9

Districts	Measurement Date	Environmental Conditions During Sampling	Coordinates (UTM WGS84-Zone 35)		RENC Noise Levels			IFC EHS Guidelines Noise Levels	
			X (North)	Y (East)	L_{eq} Day (7:00–19:00)	L_{eq} Evening (19:00-23:00)	L_{eq} Night (23:00-07:00)	L_{eq} Day (07:00-22:00)	L_{eq} Night (22:00-07:00)
Deniz Tepesi	16-17.09.2024	Sunny	334640	4094389	63.9	55.2	54.8	63.1	54.8
	21-22.09.2024	Sunny			67.0	61.1	57.8	66.3	57.4
Serik	16-17.09.2024	Sunny	330608	4089427	64.4	63.0	60.4	64.3	60.2
	21-22.09.2024	Sunny			66.6	62.2	60.3	66.1	59.9
Konaklı	17-18.09.2024	Sunny	401287	4049717	56.3	52.4	51.6	55.6	51.4
	21-22.09.2024	Sunny			64.4	63.0	60.4	64.3	60.2
Çakallar	17-18.09.2024	Sunny	386572	4060940	58.3	56.5	41.9	57.9	48.7
	21-22.09.2024	Sunny			62.2	62.7	60.7	61.9	61.7
Avsallar	17-18.09.2024	Sunny	389720	4055765	57.2	54.2	53.9	56.8	53.6
	21-22.09.2024	Sunny			61.6	61.5	55.4	61.9	54.9
Akdam	17-18.09.2024	Sunny	393414	4055623	64.4	62.3	61.5	63.8	62.1
	21-22.09.2024	Sunny			62.1	60.2	57.4	62.0	56.9
Emişbeleni	17-18.09.2024	Sunny	399364	4055198	59.8	59.0	52.2	59.8	52.2
	21-22.09.2024	Sunny			71.6	69.5	66.7	71.3	66.6
Karakaya	17-18.09.2024	Sunny	385356	4061872	68.7	66.2	62.7	68.5	62.4
	21-22.09.2024	Sunny			73	72.8	63.8	73.2	63.6
Hacıobası	17-18.09.2024	Sunny	373104	4065985	55.9	50.3	50.2	55.3	50.2
	21-22.09.2024	Sunny			61.2	60.2	43.9	61.2	47.6

Districts	Measurement Date	Environmental Conditions During Sampling	Coordinates (UTM WGS84-Zone 35)		RENC Noise Levels			IFC EHS Guidelines Noise Levels	
			X (North)	Y (East)	L_{eq} Day (7:00–19:00)	L_{eq} Evening (19:00-23:00)	L_{eq} Night (23:00-07:00)	L_{eq} Day (07:00-22:00)	L_{eq} Night (22:00-07:00)
Uzunlar	17-18.09.2024	Sunny	376876	4066570	62.9	60.6	60.1	62.6	59.8
	21-22.09.2024	Sunny			74.5	62.3	53.5	73.6	54.3
Sülek	17-18.09.2024	Sunny	371900	4068786	57.9	50.5	50.0	57.2	49.8
	21-22.09.2024	Sunny			68.6	66.8	62.4	68.2	63.5
Sağırin	17-18.09.2024	Sunny	341974	4097230	70.7	64.6	64.3	70.1	64.0
	21-22.09.2024	Sunny			67.6	67.0	66.0	67.3	66.5

Table V.2. Sensitivity of Settlements to Vibration along the Motorway Route

Blasting Location	KM	Nearest Settlement/Cultural Heritage Sites	Distance to Settlement (m)	Air Shock Impact	Rock Throw Impact	Vibration Impact	Airshock threshold for 140 dB (m)	Rock Throw influence distance (m)	15 mm/s vibration velocity threshold (m)
Tunnel 1	Start Km: 54+311	Sarıabalı	158	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	End Km: 55+378		40	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	56. km Viaduct-4	HRM 8*	177	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Tunnel 2	Start Km: 57+366	Çakış	215	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	End Km: 57+985		750	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	56. km Viaduct-4	HRM 8*	53	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
Tunnel 3	Start Km: 60+935	Taşağıl	195	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	End Km: 62+477		80	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8

Blasting Location	KM	Nearest Settlement/Cultural Heritage Sites	Distance to Settlement (m)	Air Shock Impact	Rock Throw Impact	Vibration Impact	Airshock threshold for 140 dB (m)	Rock Throw influence distance (m)	15 mm/s vibration velocity threshold (m)
	Km: 62+750	HRM 11*	196	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Tunnel 4	Start Km: 70+131	HRM 16*	**163**	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	End Km: 70+475		**60**	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km: 70+400		**60**	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
Tunnel 5	Start Km: 89+671	Ulukapı	150	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	End Km: 89+544		110	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km: 89+800	HRM 36*	248	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Sarıabalı (AO-1) Borrow Pit	Km 53+800	Sarıabalı	63	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
Çakış (TOY4a) Quarry	Km 56+500	Çakış	180	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Kuruçay (TOY4b) Quarry	Km 58+500	Sağırin	800	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
		HRM 8*	720	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Dikmen Borrow Pit	Km 83+000	Sarılar	100	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
		HRM 20*	0	**Potential Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
Bademliyar (TO2) Quarry	Km 104+750	-	-	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Çenger Stream Material Quarry	Km 105+000	Uzunlar	105	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Uzunlar (TOY5) Quarry	Km 106+000	Uzunlar	910	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Karakaya Quarry	Km 114+200	Karakaya	460	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Saburlar Quarry	Km 117+000	Saburlar	71	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Karamanlar Quarry	Km 119+500	Karamanlar	366	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Soğukpınar Quarry	Km 134+000	Toslak	326	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
Cut and Foundation	Serik Access Road Km 2+000	Sarıabalı	30	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8

Blasting Location	KM	Nearest Settlement/Cultural Heritage Sites	Distance to Settlement (m)	Air Shock Impact	Rock Throw Impact	Vibration Impact	Airshock threshold for 140 dB (m)	Rock Throw influence distance (m)	15 mm/s vibration velocity threshold (m)
	Serik Access Road Km 1+700	HRM 58	0	**Potential Impact**	**Potential Impact**	**Potential Impact**			
	Km 52+500	Deniztepesi	125	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 52+500	HRM 5*	0	**Potential Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 53+500	Sarıabalı	60	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 58+800	HRM 9*	0	**Potential Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 66+200	Hocalar	91	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 66+500	HRM 12*	332	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 73+500	Yavrudoğan	32	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 76+500	Kalemler	26	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 79+000	Yeniköy	110	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 84+000	Yukarıışıklar	62	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 85+000	Dikmen	65	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
		HRM 27*	166	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 94+500	Karaöz	57	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 95+500	Aksaz	44	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
		HRM 38*	0	**Potential Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 97+500	Hacıali	51	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 100+500	Hacıaisalı	56	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 104+500	Uzunlar	121	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8

Blasting Location	KM	Nearest Settlement/Cultural Heritage Sites	Distance to Settlement (m)	Air Shock Impact	Rock Throw Impact	Vibration Impact	Airshock threshold for 140 dB (m)	Rock Throw influence distance (m)	15 mm/s vibration velocity threshold (m)
		HRM 41*	20	**Potential Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 105+500	Uzunlar	144	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 112+000	Yalçıdibi	35	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
		HRM 45*	30	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 116+000	HRM 47*	258	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 116+500	Çakallar	53	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 118+500	Çakallar	55	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 124+000	Avsallar	211	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 125+500	HRM 57	0	**Potential Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 126+500	Akdam	30	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 130+000	Türkler	130	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 133+000	Soğukpınar	39	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 133+800	HRM 50*	74	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 136+000	Toslak	65	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
		HRM 51*	100	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
		HRM 52*	106	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8
	Km 140+000	Konaklı	27	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
		HRM 53*	26	**No Impact**	**Potential Impact**	**Potential Impact**	21.8	65.3	66.8
	Km 141+500	Konaklı	180	**No Impact**	**No Impact**	**No Impact**	21.8	65.3	66.8

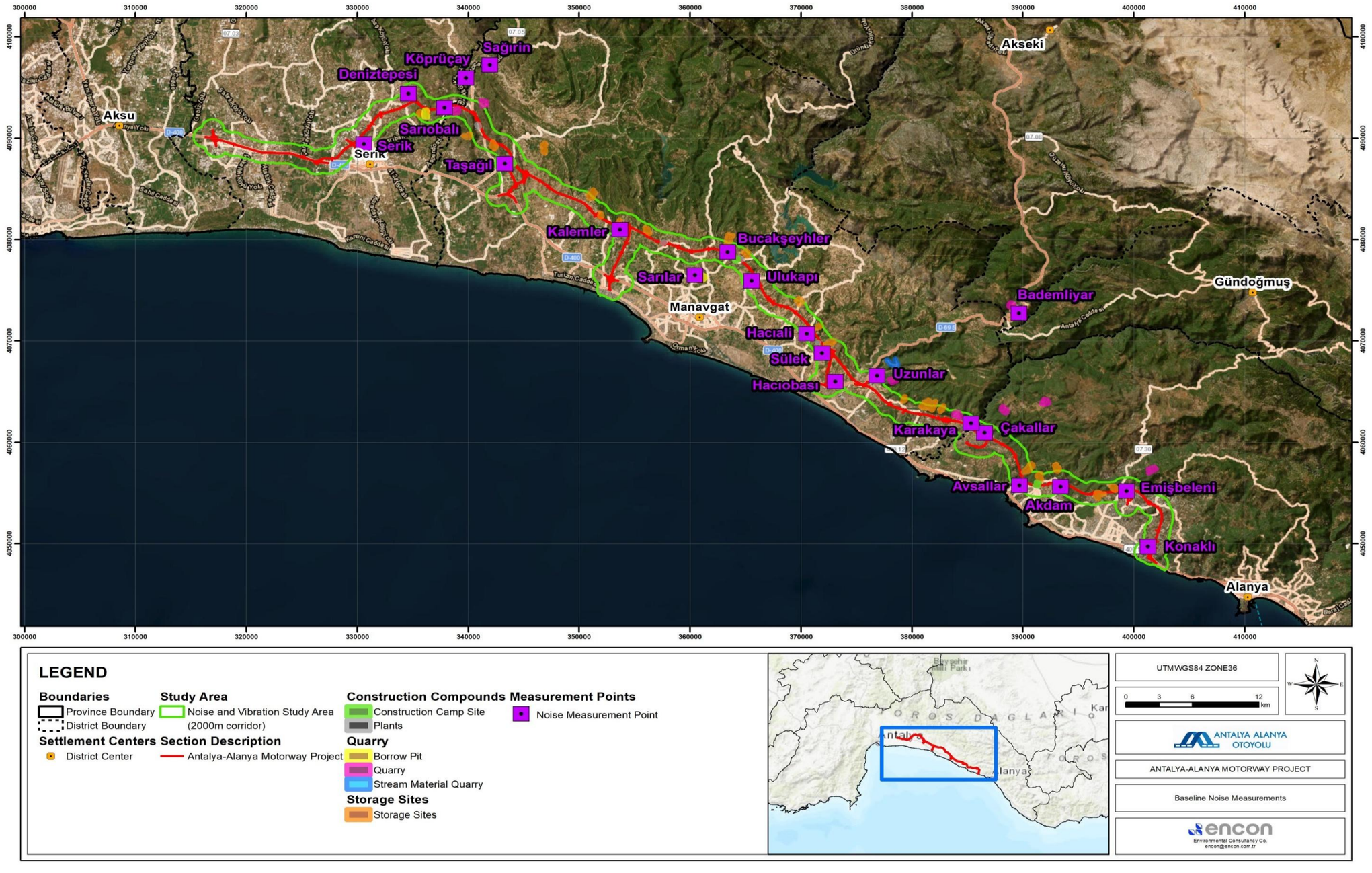

Figure V.1 Baseline Noise Measurements

To ensure compliance with applicable standards and to minimize adverse impacts on the surrounding environment and communities, appropriate noise and vibration prevention and mitigation measures will be implemented throughout the Project area.

Sensitive receptors, including residential neighborhoods, schools, healthcare facilities, and recreational areas, are locations where vulnerable populations may be more susceptible to the adverse effects of noise and vibration. Within the scope of this Project, several residential areas across the Serik, Manavgat, and Alanya districts have been identified in close proximity to the motorway construction corridor and are listed in Table V.3. Due to their location near heavy equipment operations, material transport routes, and potential blasting or piling activities, these areas require careful monitoring and targeted mitigation. All measures will be implemented to ensure that noise and vibration levels at the nearest sensitive receptors remain below threshold values established by national regulations and international guidelines. These measures will be further detailed in this Plan and will be regularly reviewed in response to site conditions and stakeholder feedback.

Table V.3 Settlements Located in The Vicinity of the Motorway Components

Districts	Neighborhoods		
Serik	• Aşağıçatma • Aşağıkocayatak • Burmahancı • Çandır	• Cumalı • Deniztepesi* • Dikmen • Kayaburnu	• Kökez • Merkez • Sarıabalı • Üründü • Yukarıkocayatak
Manavgat	• Aksaz • Aşağıışıklar • Bucakşeyhler* • Çakış • Çavuşköy • Cevizler • Demirciler • Dikmen • Dolbazlar • Evrenleryavşı • Gültepe • Gündoğdu	• Hacıali* • Hacıisalı • Hacıobası • Hatipler • Hocalar • Ilıca • Kadılar • Kalemler* • Karacalar • Karakaya* • Karaöz • Kızılot • Odaönü	• Örenşehir • Sağırin* • Sarılar* • Side • Şişeler • Sülek* • Taşağıl* • Ulukapı • Uzunlar • Yalçıdibi • Yavrudoğan • Yeniköy • Yukarıışıklar
Alanya	• Akdam • Alara • Avsallar	• Çakallar • Elikesik • Emişbeleni* • İncekum	• Konaklı • Soğukpınar • Toslak • Türkler

**Settlements located in areas with significant baseline noise.*

Noise and vibration impacts during construction are closely associated with the location and operation of key project components along the motorway corridor. These include construction camp sites, borrow pits, quarries, stream material quarries, asphalt plants, concrete batching plants, and mechanical plants. The locations, operational capacities, and durations of these facilities are provided in Table V.4, and their spatial distribution is illustrated in Figure V.2. Spread across the Serik, Manavgat, and Alanya districts, many of these facilities are located near settlements identified as sensitive receptors.

Construction camp sites at Km 64+400, 87+500, and 124+300 will generate continuous background noise due to generators, vehicle activity, and workshops. Concrete and asphalt plants will

contribute high operational noise from mixers, conveyors, and loaders. Mechanical plants are expected to produce intense machinery noise, especially during peak use. Quarries and borrow pits such as Soğukpınar, Karakaya, and Dikmen may involve blasting and rock breaking, which generate both peak noise and ground-borne vibration. The Çenger Stream Material Quarry poses additional sensitivity due to its proximity to open terrain and watercourses. Given the closeness of these components to residential areas, a targeted monitoring and mitigation strategy will be essential. Measures such as activity scheduling, equipment maintenance, and temporary barriers will be applied as needed. The layout shown in Figure V.1 will support the planning of site-specific controls to minimize community exposure.

By aligning targeted noise monitoring with the spatial distribution of sensitive receptors and integrating feedback from community stakeholders, the Project will be better equipped to maintain compliance with national and international standards, while also safeguarding the health and well-being of local communities.

Table V.4 Locations of Borrow Pits / Quarries and Plants

Location	Province	District	Nearest Neighborhood	Description of the Site / Plant	Area (m²)	Capacity Information / Operation Period
Km 53+800	Antalya	Serik	Sarıabalı	Sarıabalı (AO-1) Borrow Pit	249,000	375 m³/hour 36 months
Km 55+450	Antalya	Serik	Sarıabalı	Concrete Plant-1	13,946	140 m³/hour 36 months
Km 56+500	Antalya	Manavgat	Çakış	Çakış (TOY4a) Quarry	247,300	375 m³/hour 36 months
Km 58+500	Antalya	Manavgat	Taşağıl	Kuruçay (TOY4b) Quarry	243,000	375 m³/hour 36 months
Km 59+400	Antalya	Manavgat	Taşağıl	Concrete Plant-2	66,450	140 m³/hour 36 months
				Mechanical Plant-1		550 tonnes/hour 16 months
				Asphalt Plant-1		240 tonnes/hour 16 months
Km 64+400	Antalya	Manavgat	Taşağıl	Construction Camp Site-1 (Main)	-	
Km 80+400	Antalya	Manavgat	Yeniköy	Concrete Plant-3	15,000	140 m³/hour 36 months
Km 83+000	Antalya	Manavgat	Sarılar	Dikmen Borrow Pit	244,000	375 m³/hour 36 months
Km 87+500	Antalya	Manavgat	Bucakşeyhler	Construction Camp Site-2	-	
Km 87+700	Antalya	Manavgat	Bucakşeyhler	Concrete Plant-4	42,371	140 m³/hour 36 months
				Mechanical Plant-2		550 tonnes/hour 16 months
				Asphalt Plant-2		240 tonnes/hour 16 months
Km 89+700	Antalya	Manavgat	Ulukapı	Concrete Plant-4a	11,665	140 m³/hour 36 months
Km 99+200	Antalya	Manavgat	Sülek	Concrete Plant-5	11,977	140 m³/hour 36 months
Km 104+750	Antalya	Manavgat	Gençler	Bademliyar (TO2) Quarry	178,000	375 m³/hour 36 months
Km 105+000	Antalya	Manavgat	Uzunlar	Çenger Stream Material Quarry	190,000	375 m³/hour 36 months
Km 106+000	Antalya	Manavgat	Uzunlar	Uzunlar (TOY5) Quarry	246,000	375 m³/hour 36 months
Km 114+200	Antalya	Manavgat	Karakaya	Karakaya Quarry	249,100	375 m³/hour 36 months
Km 117+000	Antalya	Alanya	Saburlar	Saburlar Quarry	249,400	375 m³/hour 36 months
Km 119+500	Antalya	Alanya	Karamanlar	Karamanlar Quarry	311,900	375 m³/hour 36 months

Location	Province	District	Nearest Neighborhood	Description of the Site / Plant	Area (m²)	Capacity Information / Operation Period
Km 124+300	Antalya	Alanya	İncekum	Construction Camp Site-3	-	
				Concrete Plant-6	85,000	140 m^3/hour
						36 months
				Mechanical Plant-3		550 tonnes/hour
						16 months
				Asphalt Plant-3		550 tonnes/hour
						16 months
Km 134+000	Antalya	Alanya	Soğukpınar	Soğukpınar Quarry	251,000	375 m^3/hour
						36 months

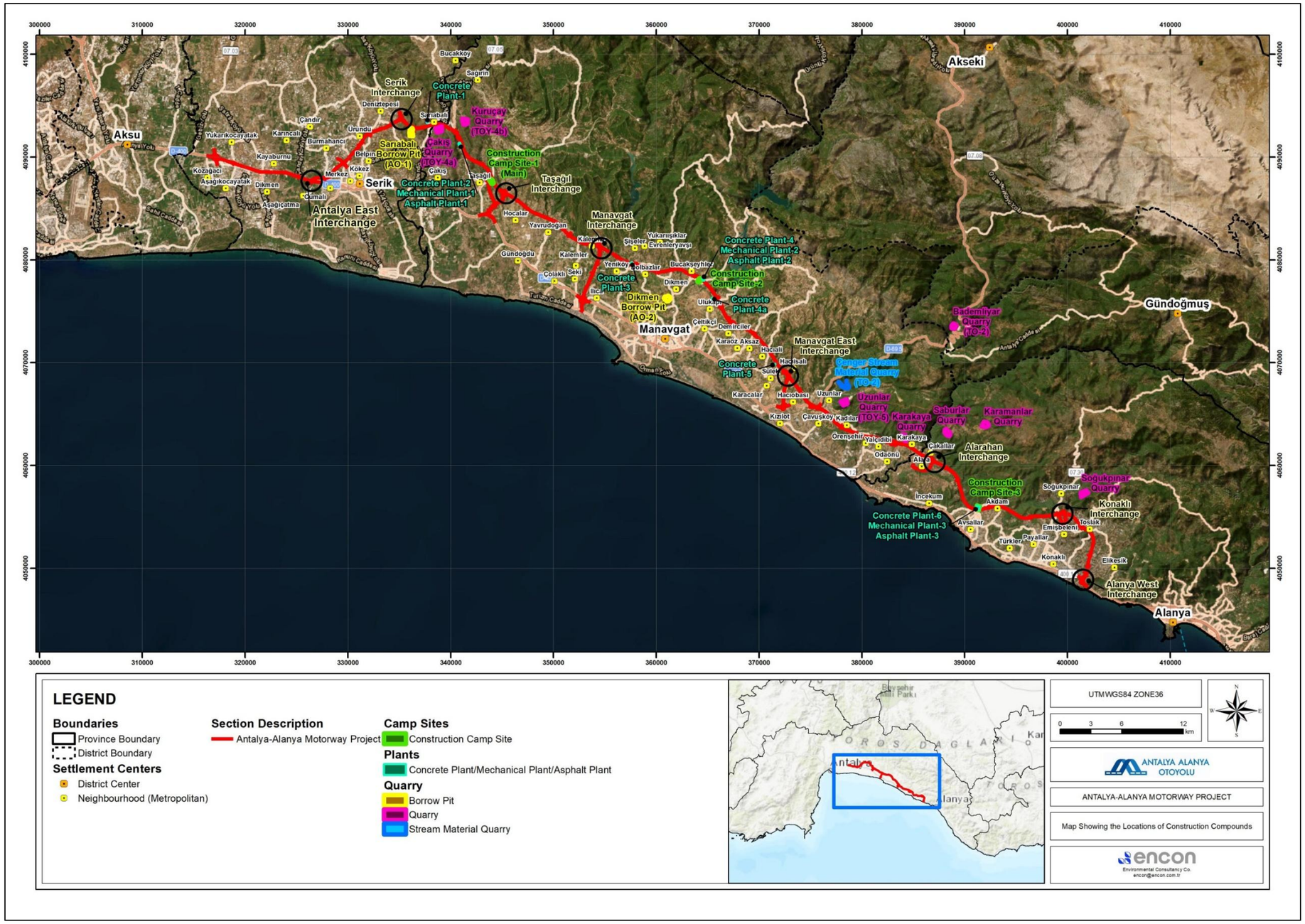

Figure V.2. Spatial Distribution of Construction Camp Sites, Plants, and Material Sources along the Project Route

VI. MITIGATION MEASURES FOR IMPACTS OF NOISE AND VIBRATION

AAOİAŞ will be responsible for managing noise and vibration in accordance with the provisions of the Environmental Law (Law No. 2872) and its relevant implementing regulations. Mitigation measures will be implemented during the construction phase of the Project. On-site specification, implementation, and supervision of these measures will be under the responsibility of the Environmental Department.

To minimize noise and vibration impacts on nearby sensitive receptors and to ensure compliance with applicable legal limits, the following mitigation measures should be implemented throughout the construction phase:

- Construction machinery and equipment with low sound power levels and noise-reduction specifications should be selected.
- New and well-maintained vehicles, machinery, and equipment should be used.
- Maintenance of construction machinery and equipment will be carried out regularly.
- Exhaust silencers should be installed on construction vehicles and mechanical equipment, including mechanical plants machinery and construction vehicle exhausts.
- Portable noise barriers and acoustic enclosures should be used around high-noise equipment such as generators and compressors.
- Ancillary components in campsites, such as power generators, will be placed with consideration of potential noise disturbances.
- Noise-emitting equipment should be located as far as practicable from sensitive receptors and oriented away from them.
- Equipment not in use should be turned off or idled at low throttle settings.
- Generators, compressors, and pumps should be housed in acoustically insulated enclosures; all equipment covers should remain closed during operation.
- Maintenance activities should include regular inspection and servicing of silencers and enclosures.
- Vehicles and equipment should be fitted with manufacturer-recommended silencers and mufflers.
- Cab doors and seals of enclosed cabins should be checked regularly for integrity and effective closure.
- Site personnel should be trained to operate machinery and perform tasks using low-noise techniques.
- Construction traffic should be routed to avoid residential areas whenever possible. Designated site access roads should be used to access camps, storage areas, and quarries. Where necessary, new access roads should be constructed to avoid disturbance to residential areas. The planned routes and assessment of traffic impacts, along with measures to mitigate these impacts, are specified in the Traffic Management Plan, which will be implemented as part of the project.
- Speed limits should be defined and enforced for construction vehicles, especially near sensitive receptors (e.g., 30 km/h general, 20 km/h in residential/village roads).
- Traffic through residential areas will be minimized wherever possible. Dedicated site access roads will be constructed to reach Project components (campsites, the Motorway, quarries etc.) to avoid disturbances in residential areas when necessary.
- Areas sensitive to noise should be identified at least one month before construction begins, and restrictions on work hours should be applied accordingly. In addition the plans obtained from the construction teams will be evaluated by the EPC's E&S Manager, and measures related to the areas to be worked on and any preventive measures that need to be implemented on site will be determined.
- Engine idling of construction vehicles and machinery while waiting on-site or outside the site should be strictly prohibited.

- Ancillary facilities, including generators and other auxiliary units at camp sites, should be located considering potential noise impacts.
- Roadways used during construction should be kept in good condition to minimize additional noise and vibration.
- Construction material stockpiles between work areas and receptors may be used as temporary noise barriers, and natural topography should be utilized where feasible.
- Drop heights for materials should be minimized to reduce impact noise.
- Where noise effects are expected in residential areas (e.g., Bucakşeyhler neighborhood and Karakaya neighborhood crossings), activities should be limited in duration, with evening noise not exceeding 55 dB LAeq and night-time noise not exceeding 45 dB LAeq.
- Noise monitoring should be conducted at pre-determined locations in accordance with the Environmental and Social Monitoring Plan. If exceedances occur, corrective actions should be implemented immediately.
- Potentially affected structures such as hospitals should be identified in advance, and nighttime works near these locations should be minimized or avoided.
- A community engagement program should be implemented to inform residents, businesses, and stakeholders in areas where construction activities may cause elevated noise levels. In this context, methods such as routine meetings with neighborhood representatives, posting informational posters in residential areas, and improving the functionality of the grievance mechanism provided in the SEP should be implemented.
- Construction vehicles will not be permitted to keep engines running while waiting to enter the site or waiting on-site
- Site personnel will be trained to undertake construction activities using methods to reduce noise.
- The Motorway alignment will be used for transportation whenever possible.
- Noise-related complaints received through the Project Grievance Mechanism should be recorded, evaluated, and addressed through appropriate corrective actions.
- Construction machinery and equipment should be distributed across the site to avoid concentrated high-noise zones.
- High-noise temporary energy sources or auxiliary equipment such as generators should be installed considering potential disturbances to nearby receptors.
- Service and access roads used during construction and operation should be regularly maintained to minimize noise generation.
- Vegetated buffer zones should be established between service areas and the road corridor to provide natural noise barriers.
- Blasting operations should be managed to minimize noise and vibration impacts, including measures such as monitoring and revising the blasting design when necessary, using proper charge quantities, simulating and testing delay sequences in advance to control detonation timing, informing the local community before blasting, and considering meteorological conditions (e.g., wind, temperature inversion) to decide whether to proceed or postpone operations.
- Prior to the blasting operations, the sensitivity of nearby settlements/buildings against noise and vibration will be assessed. Aboveground blasting operations will not be conducted in close vicinity (within a 100 meter radius area) of the residential areas/neighborhoods if alternative construction methods are feasible at that location
- During the construction phase of the motorway in the Sarıabalı region, it was determined that the background noise levels increased by more than 7 dB(A) during daytime hours. It is therefore recommended that machinery and equipment to be used in this area be selected based on low noise emission criteria, and that regular noise monitoring be conducted to ensure compliance with applicable noise limits.

To minimize vibration impacts and ensure compliance with regulatory thresholds, the following measures should be implemented:

- Buildings located within 50 meters of major vibration sources should be identified and assessed for vibration sensitivity prior to construction. Structural conditions of buildings located within 50 meters of the motorway alignment should be recorded before and after construction works to assess any possible vibration-induced damage.
- Documentation should be prepared for each identified structure, including photographs and assessment outcomes.
- Vibration monitoring should be conducted during activities such as piling and blasting, particularly in sensitive areas. Where exceedances are observed, equipment and methodologies generating lower vibration levels should be adopted.
- To prevent excessive vibration, alternative piling methods (e.g., bored piles instead of driven piles) should be used where feasible.
- Temporary impacts on buildings located within 50 to 100 meters of the construction corridor are expected to be minor, but vibration mitigation measures should be implemented in accordance with best international practices.
- The Construction Noise and Vibration Guide (NSW Government, Transport, Roads and Maritime Services, 2016) recommends minimum working distances from sensitive receptors for vibrating construction equipment (see Table VI.1). Recommended working distances should be taken into account.

Table VI.1 Recommended Minimum Working Distances for Vibratory Equipment from Sensitive Receptor

Equipment	Description	Minimum Working Distance	
		Cosmetic Damage	Human Response
Vibratory Roller	<50 kN (typically 1-2 tons)	5 m	15 m to 20 m
	<100 kN (typically 2-4 tons)	6 m	20 m
	<200 kN (typically 4-6 tons)	12 m	40 m
	<300 kN (typically 7-13 tons)	15 m	100 m
	<300 kN (typically 13-18 tons)	20 m	100 m
	<300 kN (>18 tons)	25 m	100 m
Small Hydraulic Hammer	(300 kg - 5 to 12t excavator)	2 m	7 m
Medium Hydraulic Hammer	(900 kg – 12 to 18t excavator)	7 m	23 m
Large Hydraulic Hammer	(1600 kg – 18 to 34t excavator)	22 m	73 m
Vibratory Pile Driver	Sheet piles	2 m to 20 m	20 m
Pile Boring	≤ 800 mm	2 m	4 m
Jackhammer	Hand held	1 m	2 m

Table VI.1 provides a summary of the noise and vibration assessments. The significance of identified impacts before and after the implementation of mitigation measures is presented in the table. During the land preparation and construction phase, noise levels in certain areas—such as Sarıabalı—were found to exceed national daytime limits by up to 7 dB(A), also surpassing IFC's 55 dB(A) threshold. With the implementation of noise control measures, such as proper scheduling, equipment maintenance, and where necessary, temporary barriers, these impacts are expected to be reduced to acceptable levels. Vibration impacts during construction are expected to cause short-term disturbances, particularly near sensitive receptors, but are anticipated to remain within medium to low levels after mitigation. It should be noted that high baseline noise levels in some locations contribute significantly to the overall impact, underscoring the need for continued mitigation and monitoring throughout the Project lifecycle.

Table VI.1. Summary of Noise and Vibration Assessments

Definition of Potential Impact	Affected Ecosystem Component	Type of Impact	Impact Magnitude						Sensitivity/Value of Resource/Receptor	Impact Significance (Before Mitigation)	Measures to be Taken	Significance of Residual Impacts
			Geographic Extent	Duration	Magnitude	Reversibility	Frequency	Overall Magnitude				
Land Preparation and Construction Phase												
Increase in noise levels due to Project activities	Local Communities: Deniztepesi, Konaklı, Çakallar, Avsallar, Akdam, Karakaya, Hacıobası, Uzunlar, Sarıabalı, Sarılar, Bucakşeyhler, Kalemler, Ulukapı, Taşağıl,	Adverse	Local	Medium	Low	Short term reversible	Intermittent	Medium (B)	High (3)	High (B3)	• Equipment and machinery with lower sound power levels and noise-reduced models will be prioritized when possible and feasible. • Newer and/or well-maintained vehicles, machinery and equipment will be preferred for procurement. • Maintenance of construction machinery and equipment will be carried out regularly. • Silencers will be installed on appropriate machinery and equipment, including mechanical plants machinery and construction vehicle exhausts. • Portable barriers and acoustic enclosures will be installed around noise-generating stationary machinery, such as power generators, if necessary. • Speed limits for construction vehicles will be enforced, particularly near sensitive areas. • Traffic through residential areas will be minimized wherever possible. Dedicated site access roads will be constructed to reach Project components (campsites, the Motorway, quarries etc.) to avoid disturbances in residential areas when necessary. • According to the environmental monitoring plan under Project ESMS, noise monitoring will be conducted during the construction phase and the effect of noise in near neighborhoods will be controlled regularly. In case of any inconsistencies with regulation limits, measures will be immediately taken to diminish the noise levels and to satisfy the standards. • Potentially affected buildings sensitive to nighttime disturbances will be identified prior to construction, and nighttime construction works will be limited accordingly. • Any noise related complaints received through the Project's Grievance Mechanism will be assessed, and corrective actions will be implemented as necessary. • Construction vehicles will not be permitted to keep engines running while waiting to enter the site or waiting on-site. • Ancillary components in campsites, such as power generators, will be placed with consideration of potential noise disturbances. • The Motorway alignment will be used for transportation whenever feasible. • Roads used during the construction of the Motorway will be well maintained. • Site personnel will be trained to carry out construction activities using noise-reduction methods. • During the construction phase of the motorway in the Sarıabalı region, it was determined that the background noise levels increased by more than 7 dB(A) during daytime hours. It is therefore recommended that machinery and equipment to be used in this area be selected based on low noise emission criteria, and that regular noise monitoring be conducted to ensure compliance with applicable noise limits. • A community consultation program will be initiated to inform the nearby residents, businesses and the local community when noise impacts are anticipated according to construction schedule.	Medium
	Local Communities: Serik, Emişbeleni, Sülek, Sağırin, Köprüçay, Bademliyar, Hacıali	Adverse	Local	Medium	Low	Short term reversible	Intermittent	Medium (B)	Moderate (2)	Medium (B2)		Low
Increase in vibration emissions due to Project activities Blasting operations in quarries.	Local Communities Sarıabalı (AO-1) Borrow Pit Dikmen Borrow Pit	Adverse	Restricted	Medium	High	Short term irreversible	Intermittent	Wide (A)	High (3)	High (A3)	• Prior to the blasting operations, the sensitivity of nearby settlements/buildings against noise and vibration will be assessed. Aboveground blasting operations will not be conducted in close vicinity (within a 100 meter radius area) of the residential areas/neighborhoods if alternative construction methods are feasible at that location. • Explosive charges will be optimized accordingly. Detailed records of blasting operations will be kept and blasting related impacts will be closely monitored.	Medium

Definition of Potential Impact	Affected Ecosystem Component	Type of Impact	Impact Magnitude						Sensitivity/Value of Resource/Receptor	Impact Significance (Before Mitigation)	Measures to be Taken	Significance of Residual Impacts
			Geographic Extent	Duration	Magnitude	Reversibility	Frequency	Overall Magnitude				
Increase in vibration emissions due to Project activities Blasting operations in Tunnels	Local Communities Tunnel 1, Tunnel 2, Tunnel 4	Adverse	Restricted	Medium	High	Short term irreversible	Intermittent	Wide (A)	High (3)	High (A3)	• Modern blasting techniques will be employed to minimize vibration, including the use of millisecond delays with low charge weights, which will be determined based on geological formation and rock density. • The number of blasted holes per shot and total charge amounts per shot will be optimized to comply with the regulatory limit values and minimize fly rock incidents. All blast vibrations will be monitored by using vibrometers to be placed at appropriate locations, with records kept on charge amounts, delays, distance to blast sites, and resulting vibration levels. • Blasting activities will adhere to the limit values specified in the Regulation on Environmental Noise Control for ground vibrations. Records of air shock and vibration measurements will be maintained, and compliance with regulatory limit values will be monitored to minimize impacts on local residents. • The Project's grievance mechanism will be active for any complaints related to vibration impacts. Complaints will be thoroughly evaluated, and corrective actions will be implemented as necessary. • Construction works will be designed and scheduled to minimize vibration and its adverse effects. • Blasting will be carried out at designated times in order to prevent disturbance. • In areas with identified or potential archaeological risk, archaeological excavations must be conducted and completed before the start of construction activities. Furthermore, all necessary documentation must be thoroughly prepared and submitted to the relevant authorities as part of the permitting process prior to initiating any excavation work. • To minimize the potential impact of blasting activities on ecologically sensitive areas, protective berms (shelters/sütre) shall be constructed at appropriate locations to shield these zones from blast pressure, flying debris, and dust. • Construction machinery and equipment will be operated by taking into account the recommended minimum working distances presented in **Error! Reference source not found.**.	Medium
Increase in vibration emissions due to Project activities Blasting operations in Cut and Foundation	Local Communities Sarıabalı, HRM 5, Sarıabalı, HRM 9, Yavrudoğan, Kalemler, Yukarıışıklar, Dikmen, Karaöz, Aksaz, HRM 38, Hacıali, Hacıaisalı, HRM 41, Yalçıdibi, HRM 45, HRM 57, HRM 58, Çakallar, Çakallar, Akdam, Soğukpınar, Toslak, Konaklı, HRM 53	Adverse	Restricted	Medium	High	Short term irreversible	Intermittent	Wide (A)	High (3)	High (A3)		Medium
Increase in vibration emissions due to Project activities : Blasting operations for motorway excavation.	Local Communities	Adverse	Restricted	Medium	Medium	Short term irreversible	One-off	Medium (B)	Moderate (2)	Medium (B2)		Low
	Local Communities	Adverse	Restricted	Medium	Medium	Short term irreversible	One-off	Medium (B)	Low (1)	Low (B1)		Low
Increase in vibration emissions due to Project activities : Operation of heavy construction vehicles.	Local Communities	Adverse	Restricted	Medium	Low	Short term irreversible	Intermittent	Restricted (C)	High (3)	Medium (C3)		Low
	Local Communities	Adverse	Restricted	Medium	Low	Short term irreversible	Intermittent	Restricted (C)	Moderate (2)	Low (C2)		Low
	Local Communities	Adverse	Restricted	Medium	Low	Short term irreversible	Intermittent	Restricted (C)	Low (1)	Low (C1)		Low
Operation Phase												

Definition of Potential Impact	Affected Ecosystem Component	Type of Impact	Impact Magnitude						Sensitivity/Value of Resource/Receptor	Impact Significance (Before Mitigation)	Measures to be Taken	Significance of Residual Impacts
			Geographic Extent	Duration	Magnitude	Reversibility	Frequency	Overall Magnitude				
Increase in noise levels due to vehicle traffic	Local Communities Bucakşeyhler, Sarıabalı, Çakallar, Emişbeleni	Adverse	Local	Long	High	Irreversible	Continuous	Wide (A)	Low (1)	Medium (A1)	• A green buffer strip will be formed at the service areas between the outer lane of the Motorway and the facilities. This strip will be properly planted (e.g. with shrubs that start growing from the base and are resistant to dust and gaseous emissions as well as noise) to act as a barrier against noise from the Motorway traffic. • During the design phase of the Project, natural topography will be utilized as a noise buffer where possible. • The Motorway route through residential areas will be minimized to the greatest extend feasible. • The implementation of action plans near locations identified by the noise modeling study will be evaluated during later stages of project development. In addition, establishment of noise barrier will be considered based on noise monitoring results at specified locations, after the approval of KGM, as detailed in the Environmental and Social Monitoring Plan (see Chapter XX). • Action plans will be developed and implemented in accordance with Technical Specifications of KGM where applicable. • Any noise-related complaints received through the Project's Grievance Mechanism will be evaluated and corrective actions will be implemented as necessary. • Annual noise measurements will be conducted at critical receptors determined by noise modeling throughout operation phase. If measurements approach the thresholds specified in RENC, noise barriers will be installed upon KGM approval. If noise barriers prove insufficient, additional measures such as landscaping will be implemented. Noise modeling and critical receptor assessments will be revised based on design changes or other mitigation measures applicable at critical locations • For the Bucakşeyhler and Emişbeleni regions, a total of 3,750 meters of noise barriers, each 4.5 meters high, are proposed 750 meters at Bucakşeyhler and 3,000 meters at Emişbeleni. • Monitoring points will be established in the neighborhoods of Bucakşeyhler and Emişbeleni.	Low
	Local Communities Akdam, Avsallar, Bademliyar, Hacıali, Deniztepesi, Hacıobası, Kalemler, Karakaya, Konaklı, Sarılar, Taşağıl, Ulukapı, Uzunlar, Köprüçay, Sağırin, Serik, Sülek	Adverse	Local	Long	Low	Irreversible	Continuous	Wide (A)	Low (1)	Medium (A1)		Low
Increase in vibration emissions due to vehicle traffic	Local Communities	Adverse	Restricted	Long	Low	Irreversible	Intermittent	Medium (B)	High (3)	High (B3)		Medium
Increase in vibration emissions due to vehicle traffic	Local Communities	Adverse	Restricted	Long	Low	Irreversible	Intermittent	Medium (B)	Moderate (2)	Medium (B2)	• If any complaint related with vibration is received through Project's Grievance Mechanism, the complaint will be evaluated and where necessary, corrective actions will be planned and implemented.	Medium
	Local Communities	Adverse	Restricted	Long	Low	Irreversible	Intermittent	Medium (B)	Low (1)	Low (B1)		Low

VII. TRAINING

Upon hiring, all staff will receive structured training addressing sources of noise and vibration, associated health and environmental risks, and potential impacts on nearby sensitive receptors, along with the corresponding mitigation strategies applicable to their responsibilities within the Project (e.g., appropriate use of protective equipment, operation of low-noise equipment, and adherence to designated work hours). In addition, personnel assigned to noise and vibration monitoring will be provided with specialized training to ensure accurate, effective, and compliant performance of their duties.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of the noise and vibration mitigation measures outlined in this Plan during the construction and operation phases of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific conditions, noise and vibration trends, stakeholder concerns, or changes in applicable environmental regulations.

Monitoring activities will be coordinated by the Environmental and Social (E&S) Manager (SPV) in close collaboration with the Health and Safety (H&S) Manager (SPV) and the Engineering, Procurement and Construction (EPC) Contractor Director. Key responsibilities will include verifying the implementation of noise and vibration mitigation measures, evaluating the proper functioning and maintenance of construction machinery, and ensuring the consistent application of noise control strategies near sensitive receptors such as residential areas, schools, and healthcare facilities.

Environmental noise level (dBA) will be measured at selected settlements during construction (quarterly or upon complaint) and operation (annually) and compared with legal limit values and Project-specific standards. These measurements will be used to evaluate compliance and identify any needs for corrective actions.

Monitoring activities will include site inspections, review of non-conformance records, and collection of feedback through the Project's Grievance Mechanism. In addition, personnel will be trained to carry out monitoring responsibilities and respond to identified issues.

Performance of contractors and subcontractors in implementing noise and vibration management requirements will be reviewed through environmental audits, site supervision reports, and field observations. Any non-conformities will trigger corrective and preventive action plans. Follow-up assessments will be carried out to confirm the effectiveness of the implemented measures and to prevent recurrence.

In addition to internal monitoring, inspections may be conducted by public institutions, including the Ministry of Environment, Urbanization and Climate Change, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may include review of monitoring records, implementation practices, and compliance documentation.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, monitoring methods, frequency, and responsible parties. These monitoring activities are essential for evaluating the effectiveness of noise and vibration control measures and ensuring full compliance with national regulations and Project standards.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Environmental noise level (dBA)	Construction camp sites[(1)], borrow pits [(2)], quarries [(3)], stream material quarries [(4)], asphalt plants[(5)], concrete plants[(6)], mechanical plants[(7)], and nearby residential areas[(8)]	Site measurements (24-hour average)	Quarterly and upon grievance	Environmental Specialist (EPC)
Environmental noise level (dBA)	Construction camp sites[(1)], borrow pits [(2)], quarries [(3)], stream material quarries [(4)], asphalt plants[(5)], concrete plants[(6)], mechanical plants[(7)], and nearby residential areas[(8)], grievance point[(9)]	Site Measurement, Nearest settlement measurement, Grievance point measurement	When the authority requests noise measurement	Environmental Specialist (EPC)
Ground vibration value	Construction camp sites[(1)], borrow pits [(2)], quarries [(3)], stream material quarries [(4)], asphalt plants[(5)], concrete plants[(6)], mechanical plants[(7)], and nearby residential areas[(8)]	Measurement with vibrometer	Quarterly	Environmental Specialist (EPC)
Number of training sessions conducted	Project personnel and contractor workers	Tracking and recording training delivery	Quarterly	Environmental and Social (E&S) Manager (SPV)
Number of non-conformance records	Project construction and operation areas	Review and control of non-conformance logs	Quarterly	Environmental Specialist (SPV) and Environmental Engineer (EPC)
Number of complaints related to noise emission management	Communities and stakeholders in project vicinity	Documentation under the Grievance Mechanism Procedure	Quarterly	Community Liaison Officer (CLO, SPV), and Social and Specialist (EPC)

[(1)] Construction camp sites include Camp Site-1 (Main) at Km 64+400, Camp Site-2 at Km 87+500, and Camp Site-3 at Km 124+300.
[(2)] Borrow pits include the Sarıabalı (AO-1) Borrow Pit at Km 53+800 and the Dikmen Borrow Pit at Km 83+000.
[(3)] Quarries include the Çakış (TOY4a) Quarry at Km 56+500, the Kuruçay (TOY4b) Quarry at Km 58+500, the Bademliyar (TO2) Quarry at Km 104+750, the Uzunlar (TOY5) Quarry at Km 106+000, the Karakaya Quarry at Km 114+200, the Saburlar Quarry at Km 117+000, the Karamanlar Quarry at Km 119+500, and the Soğukpınar Quarry at Km 134+000.
[(3)] Quarries include the Çakış (TOY4a) Quarry at Km 56+500, the Kuruçay (TOY4b) Quarry at Km 58+500, the Bademliyar (TO2) Quarry at Km 104+750, the Uzunlar (TOY5) Quarry at Km 106+000, the Karakaya Quarry at Km 114+200, the Saburlar Quarry at Km 117+000, the Karamanlar Quarry at Km 119+500, and the Soğukpınar Quarry at Km 134+000.
[(4)] Stream material quarry includes the Çenger Stream Material Quarry at Km 105+000.
[(5)] Asphalt plants include Asphalt Plant-1 at Km 59+400, Asphalt Plant-2 at Km 87+700, and Asphalt Plant-3 at Km 124+300.
[(6)] Concrete plants include Concrete Plant-1 at Km 55+450, Concrete Plant-2 at Km 59+400, Concrete Plant-3 at Km 80+400, Concrete Plant-4 at Km 87+700, Concrete Plant-4a at Km 89+700, Concrete Plant-5 at Km 99+200, and Concrete Plant-6 at Km 124+300.
[(7)] Mechanical plants include Mechanical Plant-1 at Km 59+400, Mechanical Plant-2 at Km 87+700, and Mechanical Plant-3 at Km 124+300.
[(8)] Nearby residential areas are identified based on their proximity to emission sources and are listed in Table V.1 Settlements Located in the Vicinity of the Motorway Components. In particular, residential areas such as Bucakşeyhler, Deniztepesi, Hacıali, Kalemler, Karakaya, Emişbeleni, Sağırın, Sarılar, Sülek, and Taşağıl have been assessed as having higher baseline noise levels, increasing their sensitivity to additional noise and vibration impacts from construction and operation activities.
[(9)] Represents the location where the complaint was filed. The suitability of the limit values in the area where the complainant is located is checked.

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All noise and vibration-related findings, including exceedances, non-compliance incidents, or complaints received from surrounding communities, will be documented in accordance with national environmental regulations and Project procedures. In the event of serious violations—such as significant

exceedance of regulatory limits—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Percentage of noise monitoring results in compliance with standards referenced in Chapter II.	100%	Quarterly	Environmental Specialist (EPC)
Percentage of vibration monitoring results in compliance with standards referenced in Chapter II.	100%	Quarterly	Environmental Specialist (EPC)
Inspection report coverage for buildings within 50 meters of major vibration sources	100%	Monthly	Environmental Specialist (EPC) and Environmental Engineer (EPC)
Number of penalties issued by authorities related to noise exceedances	< 20	Monthly	Environmental and Social (E&S) Manager (SPV)
Complaints related to noise	90% of complaints resolved within two weeks	Continuous (upon each complaint)	Community Liaison Officer (CLO, SPV), and Social Chief (EPC)
Complaints related to vibration	90% of complaints resolved within two weeks	Continuous (upon each complaint)	Community Liaison Officer (CLO, SPV), and Social Chief (EPC)

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All noise- and vibration-related non-conformities, incidents, and complaints should be documented and reported as outlined in this Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor, in line with the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's environmental and social management procedures. Records to be reviewed during noise and vibration audits will include, but are not limited to, the external and internal grievance and suggestion tracking databases, records of training sessions related to noise and vibration management, non-conformity and incident records, noise and vibration monitoring results, and any documentation of mitigation measures applied near sensitive receptors. Observations and deficiencies identified during audits should be documented in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary to maintain compliance with national regulations and international performance standards on noise and vibration management.

XI. REPORTING

Regular reporting should be conducted to ensure the effective implementation and continuous improvement of noise and vibration management activities throughout the construction phase of the Project. Reporting should be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions should be identified, and any required updates should be incorporated into this Plan. The training program will also be revised accordingly to address observed gaps. Regular audits and site inspections should be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Reports should be prepared using data gathered through noise and vibration monitoring activities defined under this Plan. The results and supporting evidence of these monitoring activities (e.g., noise level measurements, vibration monitoring logs, and photographs) should be documented in detail using standardized reporting formats. This section of the Plan outlines the instructions and requirements for implementing these reporting activities.

Reporting activities under this Plan will include noise monitoring data (e.g., dBA levels), the number and nature of vibration-related inspections, training records, mitigation measures implemented at noise-sensitive receptors, and any non-compliance findings. In the event of significant environmental incidents related to noise or vibration (e.g., complaints from sensitive receptors, exceedance of permissible noise or vibration limits), an incident report including root cause analysis (RCA), mitigation, and corrective actions will be prepared.

All monitoring data, together with the outcomes of inspections and audits, will be summarized in the noise and vibration section of the Environmental and Social Monitoring Report prepared on a quarterly basis. This report will include any non-compliances identified, corrective actions taken, and recommendations for time-bound corrective measures. All findings should be supported with documentary evidence, such as site photos, field logs, and measurement results.

All personnel are encouraged to raise concerns, suggestions, or complaints related to noise and vibration management through the established grievance mechanism by completing the designated grievance form. Public grievances regarding construction or traffic noise, ground-borne vibration, or any other related disturbances should also be addressed promptly and followed up accordingly. The available channels for submitting grievances are outlined in the Stakeholder Engagement Plan.

Throughout the construction phase of the Project, this Plan will be reviewed quarterly by the Environmental and Social (E&S) Manager (SPV), based on the results of audits, incident reports, and any significant changes in site activities or conditions. Updates to the Plan will be agreed upon between the Environmental and Social (E&S) Manager (SPV), , ensuring that it remains responsive to evolving project risks and compliance requirements.

CHANGE MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.04.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

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- **LIST OF ABBREVIATIONS**

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
EU	European Union
IFC	International Finance Corporation
KGM	General Directorate of Highways
LACRP	Land Acquisition and Compensation/Resettlement Plan
SEP	Stakeholder Engagement Plan

CHANGE MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Change Management Plan ("the Plan") has been prepared for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan is to define the procedure that should be followed for identifying, documenting, evaluating, approving, and implementing changes that may arise during the construction phase of the Project. The Plan aims to ensure that any proposed changes to the Project—especially those that deviate from the scope and commitments defined in the ESIA—are managed systematically and transparently.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

This Plan should be implemented by all relevant parties, including the Project Sponsor (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. - AAOİAŞ), the Main Contractor (Limak), and all subcontractors involved in the construction phase. Responsibilities for change identification, assessment, mitigation planning, and documentation should be clearly defined.

To ensure that the potential environmental and social risks associated with changes are adequately managed, the procedure described in this Plan incorporates applicable Turkish legislation as well as relevant international standards and requirements of international financial institutions. Necessary updates to the Plan should be made when there are modifications to the project design, construction methodology, or legal framework.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

The Plan has been structured to align with both national and international requirements, including legislation, guidelines, and sectoral standards that govern project change processes and environmental compliance obligations. Accordingly, the following sources of reference should be used to guide the implementation and compliance procedures.

II.1 National Requirements

The following Turkish laws and regulations should be used as the legal basis for managing project changes during construction:

- Environmental Law
- Electricity Market Law
- Energy Efficiency Law
- Expropriation Law
- Forestry Law
- Groundwater Law
- Labor Law
- Law on the Conservation of Cultural and Natural Assets
- Law on Improvement of Olive Cultivation and Budding of Wild Species
- Law on Soil Protection and Land Use
- Municipality Law
- National Parks Law
- Occupational Health and Safety Law
- Pasture Law

- Public Hygiene Law
- Resettlement Law
- Highway Traffic Law

II.2 International Standards and Conventions

In addition to national requirements, the following international guidelines and agreements should be considered to ensure alignment with best practices and financial institution requirements:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)

These references should be used to guide the implementation, monitoring, and performance evaluation of change management procedures throughout the construction phase.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with this Plan:

- Environmental Accident and Spill Response Management Plan
- Cultural Heritage Management Plan
- Air Pollution and Emissions Management Plan
- Noise and Vibration Management Plan
- Traffic Management Plan
- Community Health and Safety Management Plan
- Occupational Health and Safety Management Plan
- Hazardous Material Management Plan
- Water, Wastewater, and Storm Water Management Plan
- Solid Waste Management Plan
- Training and Communication Management Plan
- Subcontractor Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure

that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

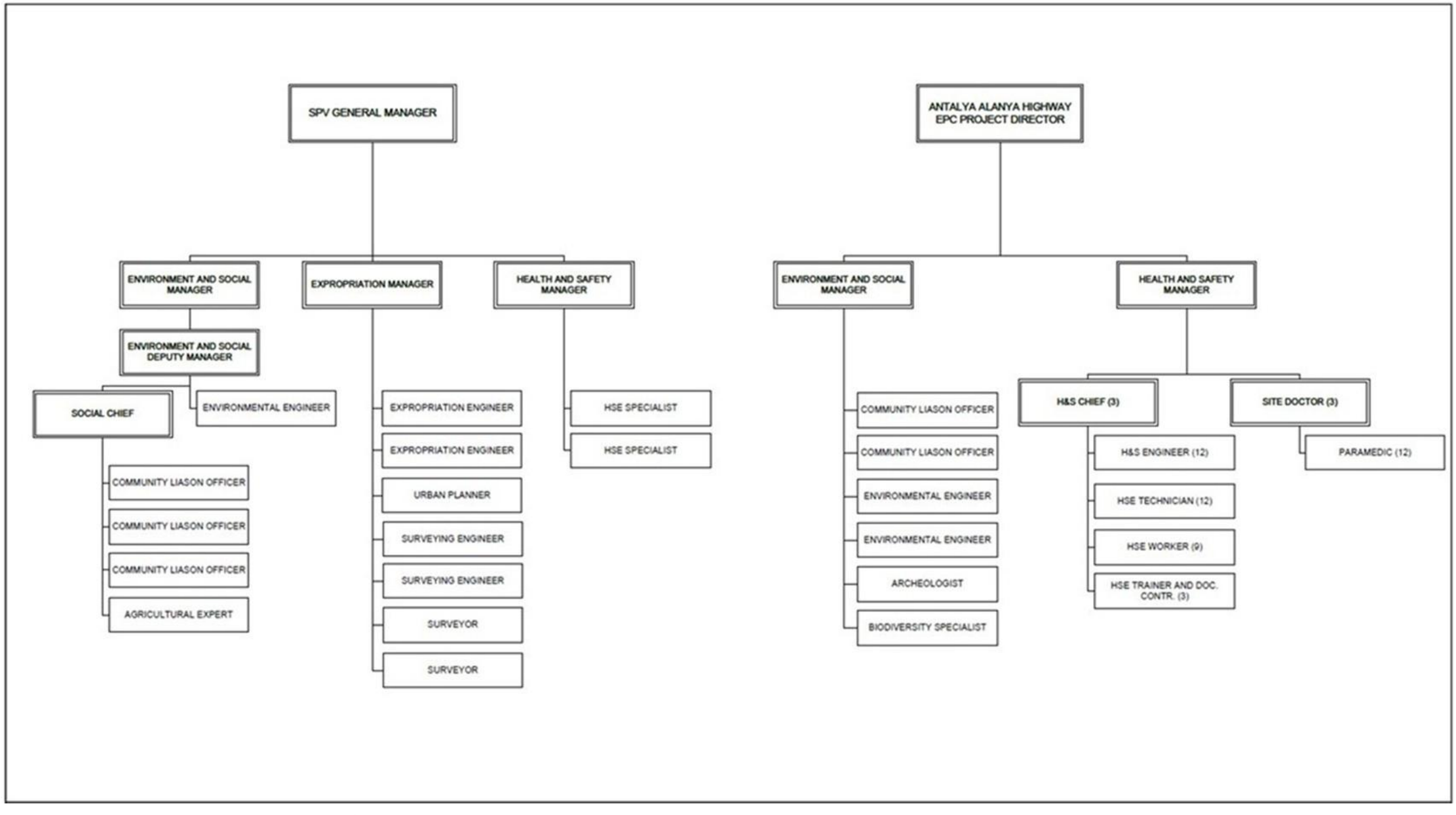

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances.

Roles	Responsibilities
	• Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded.

Roles	Responsibilities
	• Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements.

Roles	Responsibilities
	• Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities.

Roles	Responsibilities
	• Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators.

Roles	Responsibilities
	• Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews.

Roles	Responsibilities
	• Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors.

Roles	Responsibilities
	• Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety.

Roles	Responsibilities
	• Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies.

Roles	Responsibilities
	• Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager.

Roles	Responsibilities
	• Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers.

Roles	Responsibilities
	• Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments.

Roles	Responsibilities
	• Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately.

Roles	Responsibilities
	• Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. CHANGE MANAGEMENT APPROACH

Changes in such infrastructure projects are considered typical, within this regard there might be changes required for the design and construction methods of the Project. While the most of the changes will be technical with little to no ESIA relevance, the others are expected to be issues that are already covered by the ESIA studies and the Resettlement Action Plan (RAP). An overview of the Change Management Procedure is provided in Figure V.1.

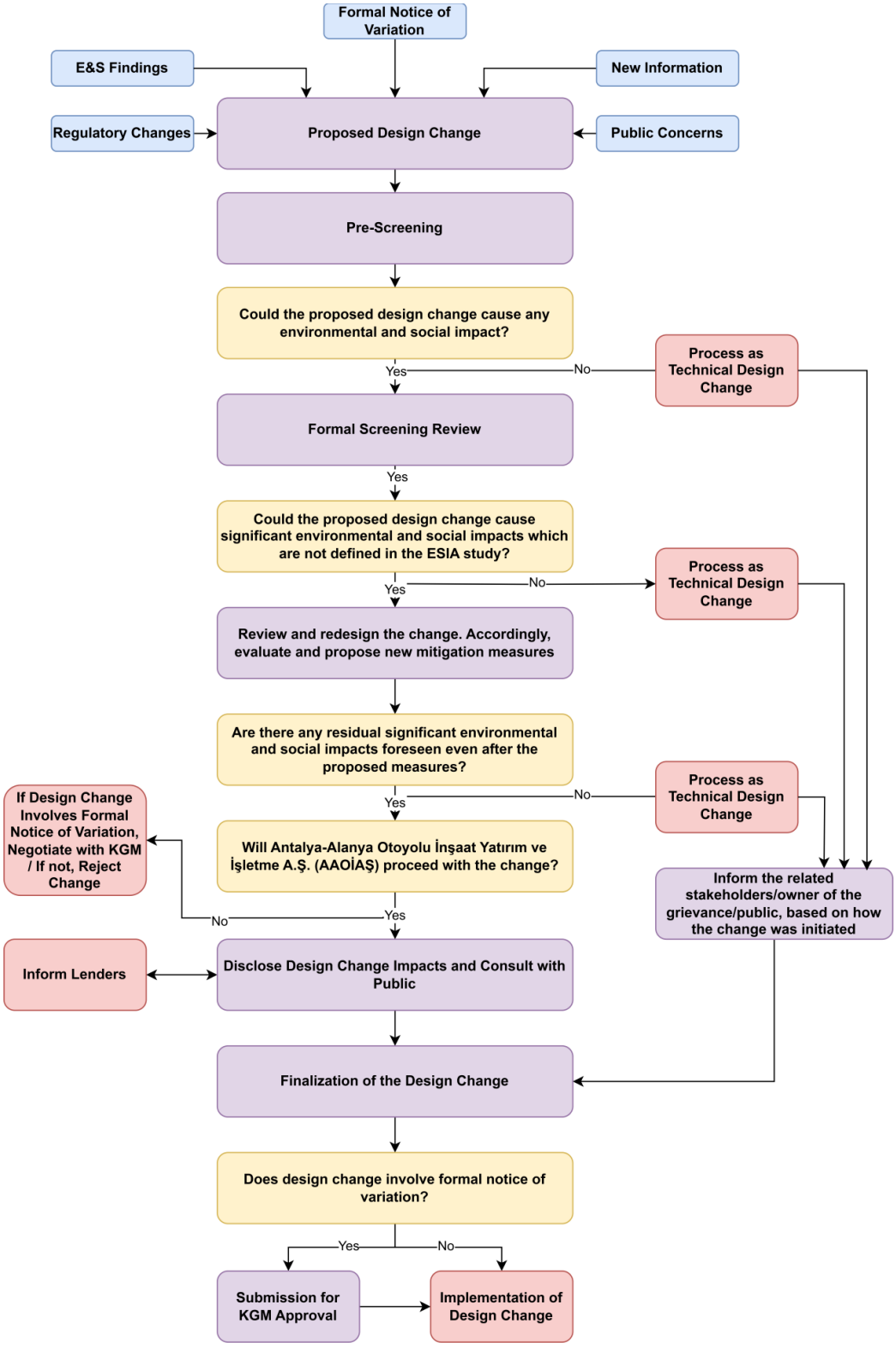

Figure V.1 Overview of Change Management Approach

V.1 Sources for Consideration of Change

Possible design changes might occur due to various reasons given below:

- Requests from KGM;
- Detailed design development;
- Changes in construction methodologies;
- Changes in regulations;
- The accepted considerations of the stakeholders raised through the grievance mechanism,
- Concerns expressed by public/stakeholders/lenders; and
- Results of field surveys and monitoring activities.

In addition to the above given cases, change management procedure must be processed formally regardless of the case.

V.2 Pre-Screening

Pre-screening will ensure that proposed design changes that are not related with the environmental and social issues or that are low in significance in terms of project implementation, will not be evaluated for further screening. If the proposed design changes will not be subjected to further screening, the change will be processed as technical design change. Pre-screening will be performed by Environmental and Social Interaction Department of the AAOİAŞ with the support from independent experts, if needed.

V.3 Screening

For any proposed design changes that could result in new or additional significant impacts which are not defined in the ESIA study, the screening will cover the following process:

- Compliance with Turkish and international regulations and standards;
- Compliance with ESIA-related legal standards and permitting requirements;
- Any new impacts on current stakeholders and impact to new/additional stakeholders which are not considered in ESIA study;
- Any expansion of Project's footprint that requires additional land acquisition and expropriation;
- Impacts on cultural heritage/archaeology; and
- Any additional/different ESIA-related topics that are not evaluated in the ESIA studies.

The screening will be performed by Environmental and Social Interaction Department of the AAOİAŞ with the support from independent experts, if needed. Screening results will be logged and recorded in a suitable format (to be determined by AAOİAŞ and Lenders). The screening results will be available for review by the Lenders.

The potential outcomes of the screening of design changes can be grouped as given below:

- **No Significant Environmental and/or Social Impacts:** No significant implications or additional negative impacts are identified compared to the evaluations performed in the ESIA study and change does not require any additional or new mitigation measures. Within this case, the change will be processed as technical design change.
- **Significant Environmental and/or Social Impacts:** Significant or potentially significant implications with respect to ESIA-related topics that could not be mitigated without any additional mitigation and were not evaluated in the ESIA studies. Within this case, screening results will be logged and Change ESIA Review process will be undertaken.

V.4 Review and Redesign of Change

For the proposed changes that could have significant/potentially significant ESIA-related impacts, Environmental and Social Interaction Department of the AAOİAŞ will undertake consultation internally and with independent experts regarding any further mitigation or other measures such as design review, to comply with the relevant ESIA commitments. The significance of a potential impact will be determined based on the corresponding definitions in the ESIA studies for the relevant environmental and social topics. If no further residual significant environmental and social impact is foreseen, the change will be processed as technical design change.

V.5 Stakeholder Engagement

AAOİAŞ will directly inform relevant stakeholders in writing when a proposed design change is initiated based on their suggestions, complaints, or feedback collected through the Project's grievance mechanism or engagement processes.

If a proposed change is anticipated to result in significant environmental and/or social impacts that cannot be addressed through existing mitigation measures, or if it introduces impacts on stakeholders not previously considered in the ESIA, additional public disclosure and stakeholder engagement should be undertaken. These efforts should be tailored based on the significance, scale, and geographic extent of the anticipated impacts.

While the Project involves a wide range of stakeholders, community-related engagement should particularly focus on the settlements located in the vicinity of the motorway components, as outlined in Table V.1.

Table V.1 Settlements Located in The Vicinity of the Motorway Components

Districts	Neighborhoods		
Serik	• Aşağıçatma • Aşağıkocayatak • Burmahancı • Çandır	• Cumalı • Deniztepesi • Dikmen • Kayaburnu	• Kökez • Merkez • Sarıabalı • Üründü • Yukarıkocayatak
Manavgat	• Aksaz • Aşağıışıklar • Bucakşeyhler • Çakış • Çavuşköy • Cevizler • Demirciler • Dikmen • Dolbazlar • Evrenleryavşı • Gültepe • Gündoğdu	• Hacıali • Hacıisalı • Hacıobası • Hatipler • Hocalar • Ilıca • Kadılar • Kalemler • Karacalar • Karakaya • Karaöz • Kızılot • Odaönü	• Örenşehir • Sağırin • Sarılar • Side • Şişeler • Sülek • Taşağıl • Ulukapı • Uzunlar • Yalçıdibi • Yavrudoğan • Yeniköy • Yukarıışıklar
Alanya	• Akdam • Alara • Avsallar	• Çakallar • Elikesik • Emişbeleni • İncekum	• Konaklı • Soğukpınar • Toslak • Türkler

The type and extent of stakeholder consultation should correspond to the nature of the change and may include public meetings, direct engagement with affected communities, and updates via the Project website. A feedback period of no more than 30 calendar days should be provided to enable meaningful stakeholder input. All regulatory requirements and formal procedures related to stakeholder engagement will be fulfilled during this stage.

AAOİAŞ will also notify the Lenders of any design changes associated with significant environmental and social impacts and will share the relevant supporting documentation, including stakeholder consultation materials and updated mitigation measures.

Following agreement with the Lenders on the reporting and notification procedures, this Plan will be revised by the Environmental and Social Interaction Department of AAOİAŞ, with the support of independent experts, to reflect the final approach to change-related stakeholder communication.

A summary of the proposed change, the stakeholder feedback received, and the planned mitigation measures will be included in public disclosure materials and made available on the official Project website to ensure transparency and accountability.

V.6 Finalization of the Design Change

Environmental and Social Interaction Department of the AAOİAŞ, with the support from independent experts, will review and compile any feedback received from Lenders, public and other affected parties, and will prepare a final design change version that incorporates consideration of the feedback and comments received. Further evaluations of the measures may be needed based on the stakeholder engagement findings.

V.7 Submission for KGM Approval

If the change is related to a KGM-approved change, then formal notice of variation will be prepared that includes relevant mitigation measures and considerations, and will be submitted to KGM for their approval. After the approval, AAOİAŞ will implement the agreed changes.

If the change is not related to a KGM-approved change, then AAOİAŞ will implement the changes defined in finalized version of the design change.

VI. MONITORING

Monitoring activities under this Plan should be implemented on a case-by-case basis, triggered by the initiation or implementation of changes during the construction phase of the Project. A structured approach should be followed to evaluate whether each proposed or executed change has been properly screened, documented, and managed in accordance with the Change Management Procedure and in line with the commitments outlined in the ESIA, as well as relevant national and international standards.

Monitoring should be coordinated by the E&S Team of AAOİAŞ, in collaboration with the Contractor (Limak) and relevant subcontractors. Key responsibilities include verifying whether proposed changes have undergone formal screening, ensuring the appropriate implementation of additional mitigation measures, and confirming the completeness of all supporting documentation, such as screening records, stakeholder engagement logs, and revised mitigation plans.

Since monitoring is event-based rather than periodic, its scope should reflect the nature, scale, and complexity of the change in question. Special attention should be given to changes that may result in environmental or social risks not previously evaluated in the ESIA, or that affect previously unassessed stakeholders.

In cases of non-compliance—such as the execution of unapproved changes, inadequate documentation, or failure to notify stakeholders—corrective and preventive actions should be initiated without delay. Follow-up assessments should be conducted to evaluate the effectiveness of these measures and to prevent recurrence.

Monitoring outcomes and related documentation should be made available to regulatory authorities or international financial institutions upon request, particularly in the context of audits, inspections, or project-level reviews.

VII. AUDIT AND REVIEW

The implementation of the Change Management Plan should be subject to periodic audits and internal reviews in accordance with the ESMMP. These audits should evaluate the effectiveness of the change screening, review, and documentation processes, and confirm alignment with ESIA commitments, stakeholder engagement requirements, and applicable legislation.

Audits should be conducted by the E&S teamt of AAOİAŞ, with support from independent experts when necessary. Contractors and subcontractors should also be evaluated for their compliance with change-related responsibilities, including notification, mitigation implementation, and recordkeeping.

Audit findings should be formally documented and shared with Project management and, where appropriate, Lenders and regulatory authorities. Any deficiencies or non-conformities should be recorded, followed by corrective actions with defined timelines and responsibilities. Where recurring issues are observed, the Plan should be revised accordingly to close procedural gaps and improve effectiveness.

The Change Management Plan should be reviewed quarterly or in response to major incidents, design updates, or regulatory amendments. Outcomes of the audit process should inform necessary updates to the Plan, training programs, or related management systems.

VIII. REPORTING

Effective reporting is essential to ensure transparency, accountability, and traceability in the management of changes during the construction phase of the Project. Reporting under this Plan should address internal monitoring and auditing outcomes, stakeholder engagement related to changes, and compliance with external requirements.

Change-related reports should include:

- A register of all proposed changes screened during the reporting period, including outcomes and categorization (technical vs. ESIA-relevant);
- Documentation of stakeholder engagement related to design changes, including grievances or feedback received;
- Details of any approved changes that resulted in updates to environmental or social mitigation measures;
- Records of corrective actions taken in cases of procedural non-compliance; and

- Notifications submitted to KGM, regulatory authorities, or Lenders, where applicable.

These reports should be incorporated into the quarterly Environmental and Social Monitoring Report, under a dedicated section for Change Management. Supporting documentation—including screening checklists, audit forms, stakeholder communication records, and photographic evidence—should be annexed to the report.

Where significant changes with potential ESIA implications are proposed or implemented, incident reports should be submitted to the Ministry of Environment, Urbanization and Climate Change, in accordance with national regulations.

All personnel should be encouraged to report any unapproved changes, risks, or improvement suggestions through the Project's grievance mechanism. The grievance channels for change-related concerns are outlined in the Stakeholder Engagement Plan (SEP), and all feedback received should be evaluated and integrated into the Plan's continuous improvement process.

COMMUNITY HEALTH AND SAFETY MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

COMMUNITY HEALTH AND SAFETY MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CLO	Community Liaison Officer
CSOs	Civil Society Organizations
CHS	Community Health and Safety
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
GBVH	Gender-Based Violence and Harassment
HR	Human Resources
IFC	International Finance Corporation
KPIs	Key Performance Indicators
Limak	Limak İnşaat Sanayi ve Ticaret A.Ş.
OHS	Occupational Health and Safety
RCA	Root Cause Analysis
SEP	Stakeholder Engagement Plan
WHO	World Health Organization

COMMUNITY HEALTH AND SAFETY MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Community Health and Safety Management Plan ("the Plan") has been prepared for the Antalya–Alanya Motorway Project ("the Project").

The purpose of this Plan is to assess the potential impacts of construction activities on the health, safety, and security of communities and to outline the measures that should be done to prevent, reduce, or manage these risks. It aims to ensure that the Project's construction phase is implemented in a manner that safeguards the well-being of the public in the surrounding area.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

This Plan has been developed in accordance with applicable national legislation and the requirements of relevant international standards, including those of international financial institutions. It sets forth the responsibilities of the Project Sponsor, the Main Contractor, and subcontractors; outlines the procedures for risk mitigation, monitoring, emergency response, and community engagement; and provides guidance on grievance mechanisms relevant to community health and safety.

The Plan should be implemented by all parties involved in the construction phase, including Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ) as the Project Sponsor, the Main Contractor (Limak), and all subcontractors. Revisions to the Plan should be done when significant changes occur in project design, construction activities, or regulatory requirements.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This Plan has been structured in accordance with both national legal requirements and internationally recognized standards concerning community health, safety, and security. These references form the foundation for defining the necessary measures that should be done during the construction phase to ensure effective risk management, impact mitigation, and compliance with best practices.

II.1 National Requirements

The following Turkish legislation and regulations should be considered in the implementation of community health and safety measures during construction:

- Environmental Law (Law No. 2872)
- Public Hygiene Law (Law No. 1593)
- Occupational Health and Safety Law (Law No. 6331)
- Regulation on Occupational Health and Safety Services
- Regulation on Health and Safety Measures in Construction Works
- Regulation on the Control of Environmental Noise
- Regulation on the Transport of Dangerous Goods by Road
- Road Traffic Law
- Regulation on Fire Protection of Buildings

II.2 International Standards and Conventions

In addition to national requirements, the following international standards and guidelines should be followed to ensure that community health and safety measures are consistent with international good practices:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- IFC Good Practice Note: Addressing Gender-Based Violence and Harassment (GBVH)
- European Landscape Convention (entered into force in 2000, ratified by Türkiye in 2003)

These references should be used to guide the implementation, monitoring, and periodic updating of community health and safety measures throughout the construction phase of the Project.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other thematic management plans and procedures prepared under the Environmental and Social Management System (ESMS) of the Project. These complementary documents collectively guide the implementation of mitigation and monitoring measures during the construction phase. The following plans and procedures are particularly relevant and should be implemented in coordination with the Community Health and Safety Management Plan:

- Traffic Management Plan
- Occupational Health and Safety Plan
- Environmental Accident and Spill Response Management Plan
- Noise and Vibration Management Plan
- Hazardous Materials Management Plan
- Solid Waste Management Plan
- Water Quality, Wastewater and Storm Water Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

Effective coordination among these plans should be ensured to prevent duplication, close any procedural gaps, and minimize cumulative health and safety risks to the community throughout the construction phase.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The able clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

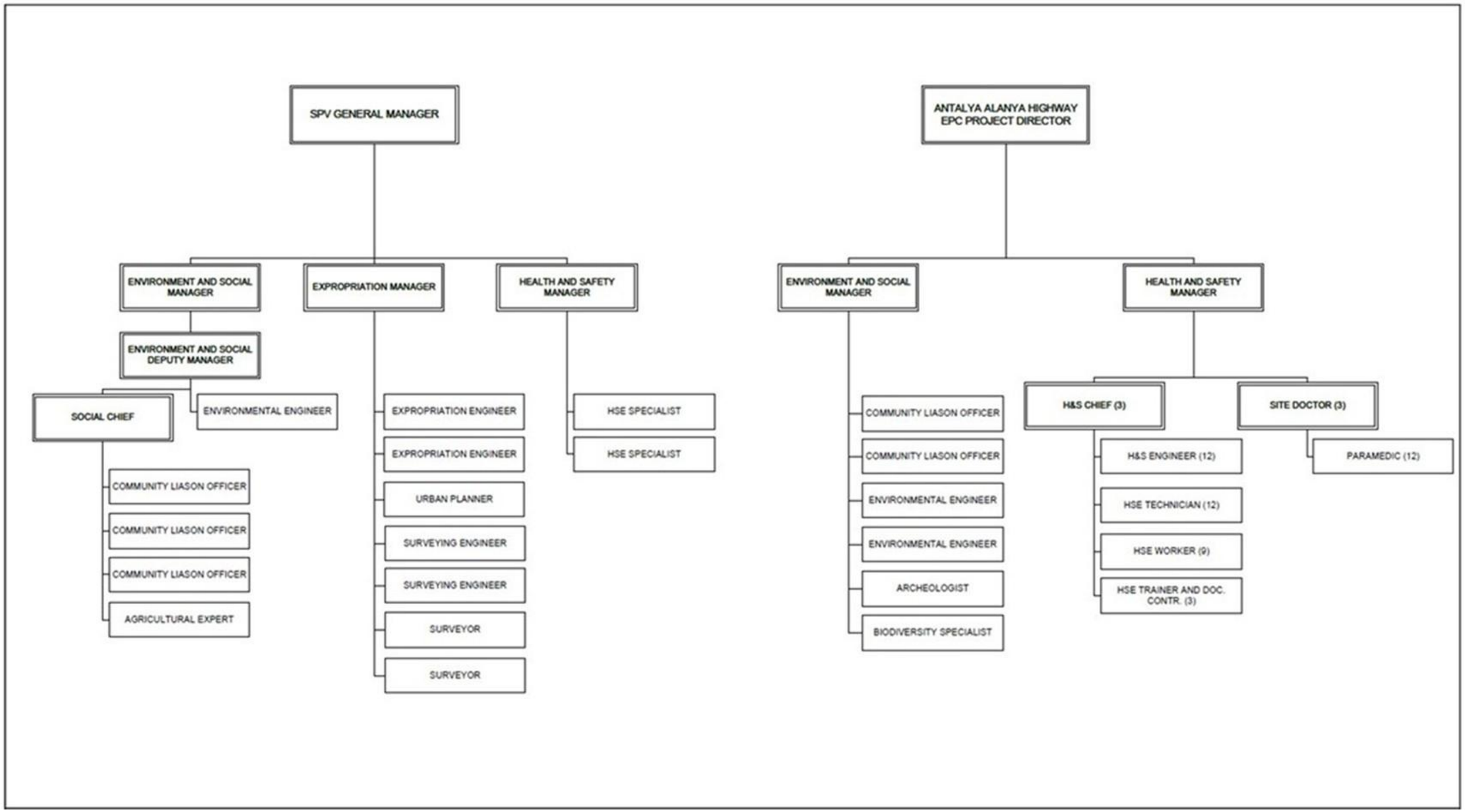

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators.

Roles	Responsibilities
	• Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs.

Roles	Responsibilities
	• Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements.

Roles	Responsibilities
	• Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities.

Roles	Responsibilities
	• Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators.

Roles	Responsibilities
	• Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews.

Roles	Responsibilities
	• Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors.

Roles	Responsibilities
	• Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety.

Roles	Responsibilities
	• Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies.

Roles	Responsibilities
	• Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager.

Roles	Responsibilities
	• Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers.

Roles	Responsibilities
	• Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments.

Roles	Responsibilities
	• Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately.

Roles	Responsibilities
	• Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. COMMUNITY HEALTH AND SAFETY MANAGEMENT APPROACH

Community health and safety risks associated with motorway construction projects primarily arise from increased construction traffic, the operation of heavy machinery, exposure to hazardous substances, elevated levels of noise and dust, and the potential occurrence of accidental events such as vehicle collisions, fuel or chemical spills, and fires. These risks are particularly pronounced in areas where construction activities are carried out in close proximity to residential settlements or areas with public access, including schools, clinics, or marketplaces.

During the construction phase, significant concerns include the increased likelihood of traffic accidents due to the movement of heavy vehicles along access roads and within settlements; the exposure of sensitive receptors to construction-related dust, noise, and vibration; and the risk of disease transmission associated with the influx of non-local workers and the establishment of temporary campsites. Moreover, the close interface between construction areas and local communities can result in physical safety hazards, particularly in cases where access to hazardous zones is not adequately restricted or where fencing and warning signage are insufficient. The improper handling, storage, or disposal of fuels, chemicals, and construction materials may also pose direct and indirect health risks to surrounding populations.

The Antalya–Alanya Motorway Project passes through multiple districts—Serik, Manavgat, and Alanya—where several residential settlements are located within the Project's area of influence. These neighborhoods are listed in Table V.1. The presence of residences, schools, health centers, agricultural lands, and public access areas in or near these neighborhoods requires heightened attention to community health and safety. Specific risks related to dust, noise, vibration, blasting, construction traffic, and restricted access to hazardous areas must be carefully managed in coordination with the affected communities such as Serik (Üründü, Burmahandi, Cumali), Manavgat (Taşağıl, Hocalar, Kalemler,Yukarıışıklar, Hacıobası, Yalcıdibi, Karakaya) and Alanya (Alara, Çakallar, Akdam, Emişbeleni,Toslak).

Table V.1 Settlements Located in The Vicinity of the Motorway Components

Districts	Neighborhoods		
Serik	• Aşağıçatma • Aşağıkocayatak • Burmahancı • Çandır	• Cumalı • Deniztepesi • Dikmen • Kayaburnu	• Kökez • Merkez • Sarıabalı • Üründü • Yukarıkocayatak
Manavgat	• Aksaz • Aşağıışıklar • Bucakşeyhler • Çakış • Çavuşköy • Cevizler • Demirciler • Dikmen • Dolbazlar • Evrenleryavşı • Gültepe • Gündoğdu	• Hacıali • Hacıisalı • Hacıobası • Hatipler • Hocalar • Ilıca • Kadılar • Kalemler • Karacalar • Karakaya • Karaöz • Kızılot • Odaönü	• Örenşehir • Sağırin • Sarılar • Side • Şişeler • Sülek • Taşağıl • Ulukapı • Uzunlar • Yalçıdibi • Yavrudoğan • Yeniköy • Yukarıışıklar
Alanya	• Akdam • Alara • Avsallar	• Çakallar • Elikesik • Emişbeleni • İncekum	• Konaklı • Soğukpınar • Toslak • Türkler

To minimize these impacts, construction activities should be planned and executed in a manner that prioritizes the protection of public health and community well-being. Preventive measures such as physical access control to construction sites, the implementation of dust and noise suppression strategies, and the safe design of traffic routes should be undertaken. Public information campaigns and worker-community interaction protocols should be developed to raise awareness among both construction personnel and community members regarding potential risks and acceptable behavior standards.

In cases where risks escalate or complaints are received, mitigation strategies should be reviewed and strengthened. Coordination with local authorities, emergency response units, and public health institutions should be done to ensure timely and effective responses to any incident that may impact community health and safety. Community Liaison Officers will ensure communication with project-affected communities and support grievance management processes.

The overall goal should be to ensure that construction activities do not generate health and safety risks that exceed acceptable thresholds, in line with Turkish legislation and relevant international good practices, and to maintain open communication and responsiveness to the concerns of affected communities.

VI. MITIGATION MEASURES FOR COMMUNITY HEALTH AND SAFETY RISKS

The construction phase of the Antalya Alanya Motorway Project presents several health and safety risks to the community. These include increased noise, vibration, and dust levels, as well as disturbance to the public and grazing animals due to blasting activities. Construction traffic, including heavy machinery, is expected to elevate road safety risks. The risk of communicable disease

transmission may increase due to worker-community interactions, while the potential for gender-based violence and harassment (GBVH) may also rise. To address these risks, the following mitigation measures will be implemented during the construction phase.

Public Health and Worker Well-Being Measures

- Pre-employment health screenings will be conducted in accordance with Turkish regulations, and workers will undergo regular medical check-ups throughout their employment on the Project.
- Public health campaigns within local communities will be supported as part of the Project's community engagement and health risk mitigation efforts.
- Access to healthcare services will be facilitated for individuals from local communities who may be adversely affected by construction activities. Measures will be taken to ensure that emergency medical care is available and reachable when needed.
- Primary healthcare services and basic first aid will be made available to all workers at construction sites. Medical care will be provided by qualified personnel to ensure timely response to injuries and health issues.
- All Project workers will be provided with routine medical check-ups and centralized access to medical treatment as needed. These services will help monitor workforce health and ensure early response to health concerns.
- An occupational physician will be responsible for maintaining health records for all workers. These records will be reviewed regularly using a sickness monitoring chart to identify recurring or serious health conditions, and findings will be addressed through training sessions and health-focused toolbox meetings.
- Health awareness training will be provided to all workers, including contractors and subcontractors. The training will include briefings on hygiene practices such as handwashing, prevention of communicable and infectious diseases, and key facts on transmission routes and symptoms of high-risk illnesses.
- Infectious disease screening protocols will be implemented for all workers, including those of subcontractors, particularly at the time of initial recruitment. All protocols will comply with the most up-to-date national health guidelines issued by the relevant authorities.
- An effective waste management system will be implemented to prevent the creation of new vector breeding grounds and to deter rodents from being attracted to worker accommodations or construction sites. Waste will be regularly removed and disposed of in accordance with environmental and health standards.
- Measures will be taken to reduce the presence of stagnant water at construction sites through environmental controls and source reduction strategies. These actions will prevent the formation of breeding areas for bacteria and disease-carrying insects.
- Worker camps will be maintained in a clean and sanitary condition, free of waste accumulation. Access to safe and clean drinking water will also be ensured at all accommodation and work areas.
- Safe food preparation practices will be followed, and food storage and handling will be monitored to ensure compliance with relevant food safety standards. Regular inspections will be carried out to verify adherence to hygiene protocols in food services.
- The basic approach will be to reuse the wastewater generated by project activities in the activity cycle during construction. This approach will not require any water discharge to environmental media. Especially for the reuse of wastewater generated in concrete batching plants, three-compartment settling ponds will be constructed. In order to reuse the water used during vehicle washing operations, vehicle washing stations will be established and the necessary pools and installations will be constructed for the reuse of water at these stations.

- Storm water collected on construction sites may become contaminated with pollutants such as chemicals, sediments, and construction debris due to runoff. To prevent or minimize the discharge of such polluted storm water into receiving water bodies, appropriate control measures will be implemented.
- Groundwater resources may also be at risk, particularly in areas with shallow overburden, where accidental discharges of hazardous substances could contaminate aquifers. Construction activities such as site clearance, earthworks, vehicle refueling, and wastewater discharge (both sanitary and industrial) pose potential threats to groundwater quality if not properly managed. Some excavation works may require groundwater dewatering, which could have implications for local aquifer levels. Additionally, earthworks in bedrock or shallow overburden areas may lead to blockage of fissure permeability by infiltrating fines or sediments.
- The Project Sponsor (AAOİAŞ) is responsible for overseeing wastewater and storm water management in line with national regulations. The Environmental Department of the Contractor is responsible for on-site implementation, supervision, and inspection of mitigation measures. Compliance with all legal requirements related to water management should be ensured throughout the construction phase.

Noise, Vibration, and Blasting Risk Management

- Blasting warning signs will be placed prominently along the perimeter of the blasting area and in zones where the effects of blasting, such as flying debris, may pose a risk. The signs will be clear, highly visible, and positioned to alert both workers and nearby community members.
- Access to blasting areas will be strictly controlled to prevent the entrapment of animals or unauthorized entry by individuals during blasting operations. The area will remain restricted until a designated representative of the Contractor confirms that no unusual hazards—such as slope instability or unexploded materials—are present and that access and movement within the area can safely resume.
- Residents of nearby communities will be informed in advance of any scheduled blasting activities. Notifications will include the blasting schedule, identification of areas where blasting will take place, the expected date and time range for detonations, the access control methods to be used, and descriptions of the audible warning and all-clear signals that will be employed before and after the event.
- Truck movements will be routed to avoid residential settlements and noise-sensitive areas to the greatest extent possible as a key avoidance and mitigation measure for protecting community safety. Haulage routes will be scheduled to prevent passage through villages or populated areas, and additional measures such as speed restrictions, regular vehicle maintenance, and safe driving practices will be implemented. Truck operations along routes passing through villages or towns will be strictly avoided during nighttime hours, specifically between 10:00 p.m. and 5:00 a.m.
- Noise monitoring should be conducted at pre-determined locations in accordance with the Environmental and Social Monitoring Plan. If exceedances occur, corrective actions should be implemented immediately.
- Potentially affected structures such as hospitals should be identified in advance, and nighttime works near these locations should be minimized or avoided.
- A community engagement program should be implemented to inform residents, businesses, and stakeholders in areas where construction activities may cause elevated noise levels.

Traffic Safety and Management Measures

- A Traffic Management Plan will be implemented to manage traffic-related risks throughout the construction phase. This plan will include the enforcement of appropriate speed limits, driver

safety training, advance warnings of detours and closures, and other measures to reduce the risk of accidents involving drivers, passengers, and other road users.

- Drivers of Project vehicles will be trained and informed on safe driving practices, with a specific focus on minimizing risks to other drivers, pedestrians, and livestock. Awareness will be promoted to reduce the likelihood of road-related incidents in and around construction areas. Detailed information can be seen in Traffic Management Plan.
- All Project vehicles, including those operated by subcontractors, will be clearly identifiable. This will be ensured through the display of visible markings or symbols that indicate their association with the Project and facilitate accountability.
- Monthly Road Safety Audits will be conducted in accordance with Project design documentation and in alignment with Directive 2008/96/EC on road infrastructure safety management. These audits will help identify and address potential safety hazards along construction-related routes.
- Construction equipment and machinery will be secured when not in use to prevent unauthorized access. Fuel tanks and storage areas will be locked and clearly marked to avoid tampering and reduce the risk of fire, explosion, or injury.
- Access to construction sites will be controlled to prevent unauthorized or accidental entry by members of the public. Entry points will be monitored and physical barriers such as fences and gates will be installed where necessary.
- An Intelligent Traffic System (ITS) will be established under the scope of the Project. Through ITS, real-time alerts and signage will be used to warn drivers of congestion, accidents, adverse weather and road conditions, and other potential hazards along the route.

Security

- A Security Management Plan will be implemented to ensure that all security-related risks during the construction phase are systematically identified, mitigated, and monitored. The Plan will be developed in accordance with national legislation and international good practice.
- Certified security personnel will receive comprehensive training on security protocols, with a focus on the Voluntary Principles on Security and Human Rights. Training will emphasize respect for the rights of workers and community members, and the prohibition of excessive use of force under all circumstances.
- All instructions to security personnel will be based on applicable Turkish legal requirements and will be formally incorporated into their employment terms. In light of their regular interaction with local communities, security staff will also be trained on the Project's Grievance Mechanism, including procedures for addressing complaints in a respectful, timely, and effective manner.
- In cases of non-compliance with defined standards and codes of conduct, corrective actions will be taken. These may include termination of subcontracts with private security providers. All security personnel will receive clear instructions regarding acceptable conduct and authorized actions, with such training reinforced through ongoing professional development initiatives.

Social Conduct, Community Engagement, and GBVH Prevention

- All employees and contractors will be required to acknowledge and adhere to the Project's environmental and social work practices, including all community health and safety (CHS) procedures, the Code of Conduct for Workers, and the Zero Tolerance Policy and Policy on Gender-Based Violence and Harassment (GBVH). They will also be expected to report any safety hazards, unsafe practices, unacceptable conditions, or environmental and social concerns observed on-site.
- All contractor agreements will include clear references to compliance with applicable Turkish health and safety laws, as well as relevant national and international standards and policies. Contracts will also require explicit commitment to the Project Sponsor's Zero Tolerance Policy

and Policy on GBVH, and will outline identified GBVH risks along with agreed prevention and response measures.

- Employment contracts will include a requirement for all workers to be informed of, and to sign, the Code of Conduct for Workers at the time of recruitment.
- Training and orientation programs will be provided with a specific focus on gender sensitivity, human rights, and GBVH risk awareness. These sessions will include clear guidance on respecting local communities and vulnerable groups, and will emphasize the importance of maintaining a safe environment for women and children. Actions such as catcalling or inappropriate behavior toward community members or other workers will not be tolerated.
- A functioning and accessible grievance mechanism will be maintained throughout the Project. All relevant personnel will be made fully aware of their roles in the grievance resolution process to ensure timely and effective responses to concerns raised by local stakeholders. A dedicated and confidential grievance mechanism will be established to address GBVH complaints. This system will include anonymous reporting options, access to referral pathways, and a support structure for workers. All GBVH-related complaints will be managed by a trained gender focal point with expertise in GBVH investigations and appropriate response protocols.
- Awareness campaigns will be carried out to inform local communities about the risks of blasting activities and entering construction zones. These campaigns will include educational sessions on the meaning of warning signs, the dangers of playing near equipment, and the importance of using designated pedestrian paths. Presentations will be delivered at all primary and secondary schools within the area of influence.

VII. TRAINING

As part of the Communication and Training Plan, all personnel will receive structured training upon hiring, which will cover topics related to community health and safety risks and their potential consequences. The training will include an overview of legal obligations, roles, and responsibilities under applicable legislation, as well as specific mitigation measures relevant to each worker's duties (e.g., use of personal protective equipment, appropriate behavior near local communities, and adherence to site access protocols). Topics will also include recognizing and responding to situations that may endanger public health and safety, such as unsafe equipment operations, community exposure to dust or noise, or improper handling of hazardous materials. Training records will be maintained by the Human Resources Department in coordination with the Environmental and Social Team. This training will be reinforced through regular refresher sessions throughout the construction phase.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of community health and safety mitigation measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific conditions, observed risks or incidents, stakeholder concerns, or changes in applicable national regulations and international standards.

Monitoring activities will be coordinated by the Corporate Communication, in close collaboration with the Environmental, Occupational Health and Safety (OHS), and Construction Management teams. Key responsibilities will include verifying the implementation of community access control measures, ensuring the visibility and condition of safety signage, reviewing traffic safety measures around construction zones, and assessing adherence to blasting protocols and emergency response readiness near sensitive receptors such as residential areas, schools, and healthcare facilities.

Regular site-level monitoring will be conducted to evaluate compliance with national legislation and Project-specific community health and safety requirements. This will include visual inspections, review of site access logs, observation of construction traffic behavior near populated areas, tracking of safety-related grievances, and assessment of community outreach and awareness activities conducted under the Stakeholder Engagement Plan (SEP).

The performance of contractors and subcontractors in implementing community health and safety measures will be reviewed through internal audits, site supervision reports, and direct observations in the field. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to verify the effectiveness of implemented measures and ensure that risks are mitigated without recurrence.

In addition to internal monitoring, inspections may be carried out by relevant public institutions, such as the Ministry of Health or local municipal authorities, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may include review of community complaints, inspection of construction site boundaries, and evaluation of compliance with emergency preparedness procedures.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines key parameters to be monitored, relevant locations, monitoring methods, frequency, and responsible parties. These monitoring activities are essential for evaluating the effectiveness of community health and safety mitigation efforts and ensuring full compliance with applicable regulations and Project standards.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Number of Trainings Conducted	Project personnel and contractor workers receiving training	Review of training records	Quarterly	AAOİAŞ, Independent Environmental Experts
Compliance with Plan Implementation	Availability of relevant records in the system	Review of documented compliance with Plan procedures	Quarterly	AAOİAŞ, Independent Environmental Experts
Number of Complaints Related to the Plan	Records kept under the Grievance Mechanism Procedure	Review of grievance registration and resolution logs	Quarterly	AAOİAŞ, Independent Social Experts

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All air quality-related findings, including exceedance of limit values, non-compliance incidents, or complaints received from surrounding communities, will be documented in accordance with national environmental regulations and Project procedures. In the event of serious violations—such as significant exceedance of short-term or long-term limit values—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Number of trainings conducted	All personnel to receive training	Quarterly	AAOİAŞ, Independent Environmental Experts
Non-conformities with standards	Less than five	Monthly	AAOİAŞ, Independent Environmental Experts
Complaints related to community health and safety	Less than five	Monthly	AAOİAŞ, Independent Social Experts

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the Environmental and Social Management and Monitoring Plan (ESMMP). All incidents and non-conformities related to community health and safety should be documented and reported as outlined in this Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established plans and procedures. Records to be reviewed during community health and safety audits will include, but are not limited to, the External and Internal Grievance and Suggestion Tracking Databases, records of community health and safety training sessions, non-conformity and incident records, emergency drill evaluations, and site-specific environmental and social monitoring data such as dust, noise, or vibration measurement reports. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary.

XI. REPORTING

Regular reporting should be conducted to ensure the effective implementation and continuous improvement of community health and safety management activities throughout the construction phase of the Project. Reporting should be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions should be identified and the required updates should be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Regular audits and visual inspections should be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Reports should be prepared using data gathered through community health and safety monitoring activities defined under this Plan. The results and supporting evidence of these monitoring activities (e.g., observations, grievance logs, community engagement records, and photos) should be documented in detail within appropriate reporting formats. This section of the Plan outlines the instructions and requirements for implementing these reporting activities.

Reporting activities under this Plan mainly relate to community grievances, implementation of awareness and training programs, performance of emergency response drills, monitoring of blasting activities and road safety measures near populated areas, and access control around high-risk construction zones. In the event of significant community health and safety incidents (e.g., injuries, unauthorized site access, unannounced blasting), an incident report including root cause analysis (RCA), mitigation and compensation measures should be submitted to the relevant authorities in accordance with Turkish legislation and Project procedures.

All data, together with the results of inspections and audits, should be summarized in the dedicated community health and safety chapter of the Environmental and Social Monitoring Report prepared on a quarterly basis. This report will include any non-compliances identified, corrective actions taken, and any recommended time-bound corrective measures. These should be supported with documentary evidence such as photographs, checklists, and field logs.

All personnel are encouraged to raise concerns, suggestions, or complaints related to community health and safety through the established grievance mechanism by completing the grievance form or using designated communication channels. Public grievances regarding safety, access, noise, blasting, or other community-related risks should also be addressed and followed up accordingly. The available communication channels for submitting grievances are outlined in the Stakeholder Engagement Plan.

Throughout the construction phase of the Project, this Plan will be reviewed quarterly by the E&S Manager, based on the results of audits and any community health and safety incidents or changes in site activities. Updates to the Plan will be agreed upon between the E&S Manager and the Site Manager.

CONSTRUCTION CAMP SITE MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

CONSTRUCTION CAMP SITE MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CLO	Community Liaison Officer
CO	Carbon Monoxide
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
IFC	International Finance Corporation
ITS	Intelligent Transportation Systems
KPIs	Key Performance Indicators
Limak	Limak İnşaat Sanayi ve Ticaret A.Ş.
NO_x	Nitrogen Oxides
OHS	Occupational Health and Safety
PM_{10}	Particulate Matter with a diameter of 10 micrometers or less
SEP	Stakeholder Engagement Plan
SEP	Stakeholder Engagement Plan
VOC	Volatile Organic Compounds
WHO	World Health Organization

CONSTRUCTION CAMP SITE MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Construction Camp Site Management Plan ("the Plan") has been prepared for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan is to identify the environmental, health, safety, and social risks associated with temporary construction camps and to outline mitigation, control, and monitoring measures to minimize adverse impacts during the construction phase.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The Plan has been developed in alignment with applicable national legislation and relevant international standards, including the requirements of international financial institutions. It outlines actions that should be done to ensure safe, compliant, and sustainable operation of construction camps, including worker accommodation, site hygiene, waste management, and community interface. This Plan will provide mitigation alternatives and an impact monitoring schedule in accordance with Turkish and international regulations and standards.

This Plan should be applied by all parties involved in the construction phase, including the Project Sponsor, Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ), the Main Contractor (Limak), and all subcontractors. Responsibilities for implementation, monitoring, and reporting of camp-related activities should be clearly assigned. Necessary updates to the Plan should be considered in case of changes in project design, construction methodology, or regulatory requirements.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This Plan has been prepared in alignment with relevant national legislation and international reference standards that regulate environmental protection, occupational health and safety, and social management during construction activities. The Plan aims to ensure compliance with applicable legal requirements and best practice standards set by international financial institutions.

II.1 National Requirements

The following national laws and regulations provide the legal basis for the establishment, operation, and management of temporary construction camps during the construction phase:

- Occupational Health and Safety Law (Law No. 6331)
- Labor Law (Law No. 4857)
- Environmental Law (Law No. 2872)

II.2 International Standards and Conventions

The following international standards and conventions should be considered to ensure that construction camp site activities are implemented in accordance with international good practice and the requirements of international financial institutions:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
  - Performance Standard 2: Labor and Working Conditions
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)

- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- European Landscape Convention (entered into force in 2000; ratified by Türkiye in 2003)

These references should guide the development, implementation, and monitoring of all environmental and social measures associated with temporary construction camp facilities. Compliance with these standards should be ensured throughout the construction phase, especially in areas such as worker accommodation, sanitation, resource use, safety, and community health.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Construction Camp Site Management Plan:

- Human Resources and Labor Management Plan
- Subcontractor Management Plan
- Solid Waste Management Plan
- Water, Wastewater, Storm Water Management Plan
- Hazardous Materials Management Plan
- Air Quality and Emissions Management Plan
- Noise and Vibration Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction camp operations during the construction phase.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

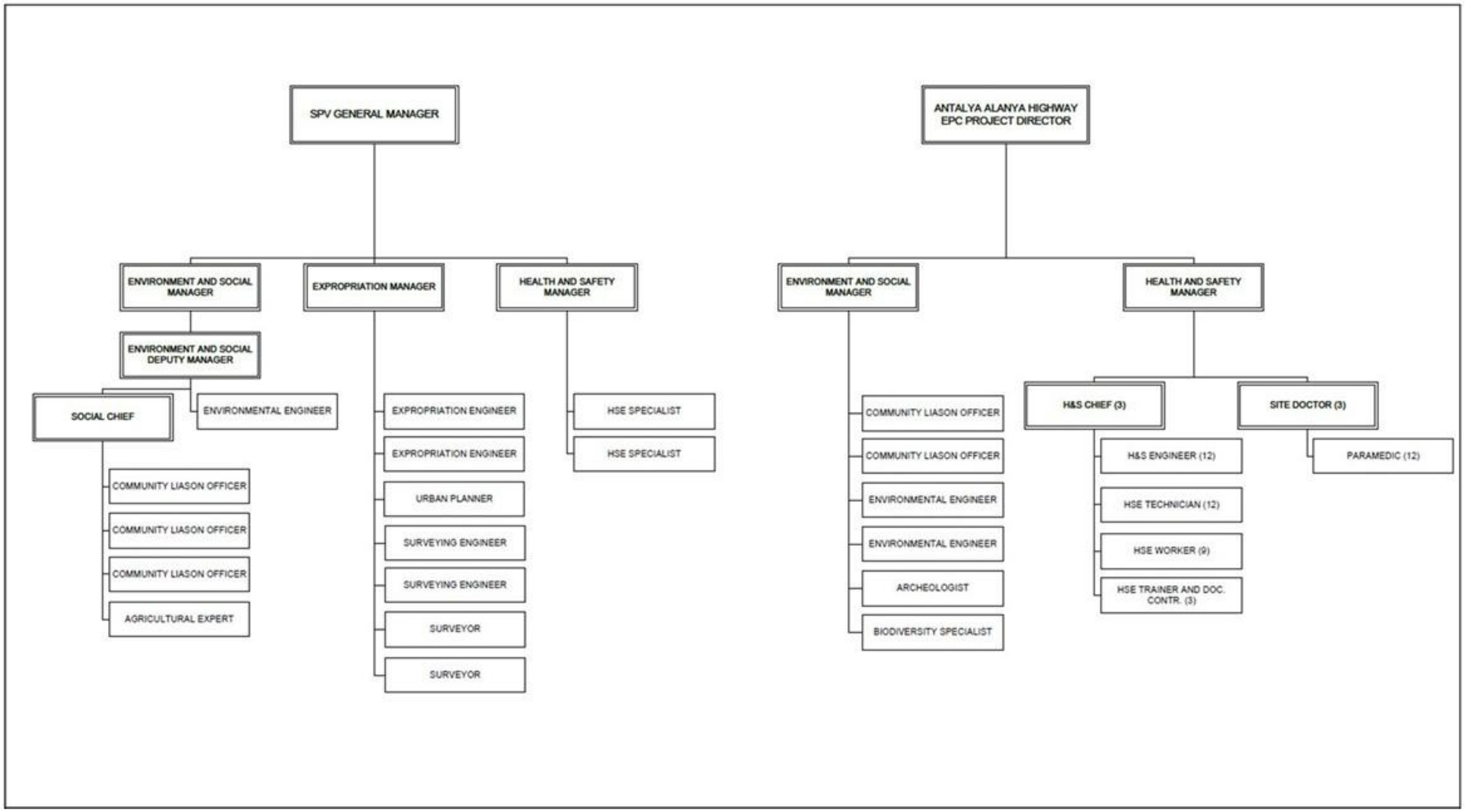


Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators.

Roles	Responsibilities
	• Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety.

Roles	Responsibilities
	• Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management.

Roles	Responsibilities
	• Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams.

Roles	Responsibilities
	• Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments.

Roles	Responsibilities
	• Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews.

Roles	Responsibilities
	• Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements.

Roles	Responsibilities
	• Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.

Roles	Responsibilities
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards.

Roles	Responsibilities
	• Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.

Roles	Responsibilities
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements.

Roles	Responsibilities
	• Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks.

Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise.

Roles	Responsibilities
	• Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies.

Roles	Responsibilities
	• Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks.

Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks.

Roles	Responsibilities
	• Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors

Roles	Responsibilities
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs.

Roles	Responsibilities
	• Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.

Roles	Responsibilities
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. CONSTRUCTION CAMP SITE MANAGEMENT APPROACH

Construction camps are critical support facilities during the construction phase of large-scale infrastructure projects. If not properly managed, these sites can result in a range of environmental, health, and social impacts. Key issues associated with construction camps include improper solid and liquid waste management, inadequate sanitation, occupational health and safety risks, pressure on local resources (e.g., water, land), and poor accommodation and hygiene conditions for workers.

The most significant environmental concerns include the generation of domestic and operational waste, improper storage of hazardous materials, and potential contamination of soil and water sources through leaks, spills, or uncontained runoff. Social impacts may arise from worker-community interactions, insufficient grievance mechanisms, and non-compliance with labor standards. In addition, increased demand for water, energy, and waste treatment capacity can place stress on local infrastructure.

Construction camps are also expected to contribute to emissions through the use of fossil fuel-based generators and heating systems. These systems can emit pollutants such as particulate matter (PM_{10}), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOCs), particularly in the absence of proper maintenance or emission controls. Noise and vibration disturbances may also occur due to the operation of heavy equipment, vehicle traffic, and power generation units.

To mitigate these risks, construction camps should be sited, designed, and operated in accordance with applicable national regulations and international best practice standards. Camp layouts should incorporate designated areas for accommodation, dining, hygiene facilities, waste storage, hazardous materials, and emergency response. Adequate infrastructure should be provided to ensure the provision of potable water, safe sanitation, reliable electricity, and effective drainage.

As of the current planning phase, three primary construction camp sites have been identified along the Antalya–Alanya Motorway Project corridor. These camps will be established to support key segments of the construction works, provide accommodation and welfare services to workers, and house essential facilities and equipment. Table V.1 presents the locations of the proposed construction camps.

Table V.1 Proposed Construction Camp Site Locations

Location (Km)	Province	District	Nearest Neighborhood	Description
Km 59+400	Antalya	Manavgat	Taşağıl	Temporary Construction Camp Site
Km 64+500	Antalya	Manavgat	Taşağıl	Construction Camp Site-1 (Main)
Km 87+800	Antalya	Manavgat	Bucakşeyhler	Construction Camp Site-2
Km 123+000	Antalya	Alanya	İncekum	Construction Camp Site-3

Temporary Construction Camp Site is located near Km 59+400 in the Taşağıl neighborhood of Manavgat district. The site is approximately 1 km from the center of the Taşağıl neighborhood. This site is planned to be used until the Main Construction Camp Site No.1 is constructed. Once the main camp site is established, one asphalt plant, one mechanical plant, and one concrete plant will be installed in this area. A general view of the site is shown in Figure V.1

Construction Camp Site-1

General View

Figure V.1 Satellite Image and Photograph of the Temporary Construction Camp Site (Km 59+400)

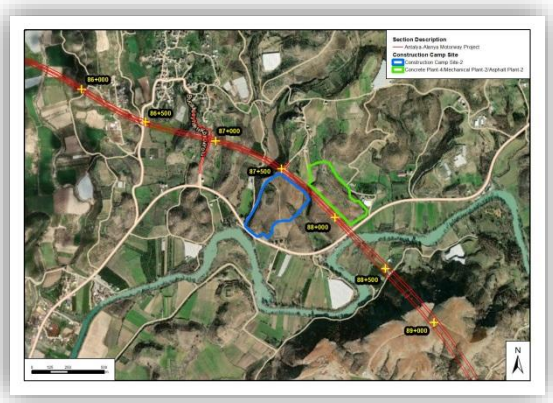
Main Construction Camp Site No. 1 is located near Km 64+500 in the Taşağıl neighborhood of Manavgat district. The site is approximately 1 km from the center of the Taşağıl neighborhood. This site is planned to remain in use as a maintenance and operation area following the construction phase. A general view of the site is shown in Figure V.2.

Construction Camp Site-1

General View

Figure V.2 Satellite Image and Photograph of the Construction Camp Site-1 (Km 64+500)

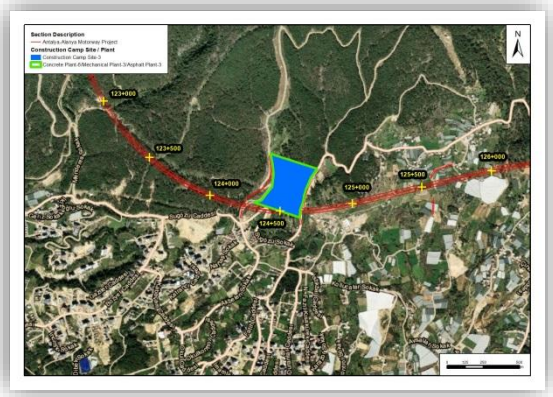
Construction Camp Site No. 2 is located near Km 87+800 in the Bucakşeyhler neighborhood of Manavgat district. Concrete Plant-4, Mechanical Plant-2, and Asphalt Plant-2 are located to the west of the site. The site is approximately 1.1 km from the center of the Bucakşeyhler neighborhood. A general view of the camp site is shown in Figure V.3.



Construction Camp Site-2 General View

Figure V.3 Satellite Image and Photograph of the Construction Camp Site-2 (Km 87+700)

Construction Camp Site No. 3 is located near Km 124+300 in the forest area between Avsallar and İncekum neighborhoods of Alanya district. The site is approximately 500 m from the center of the İncekum neighborhood. A general view of the camp site is shown in Figure V.4.



Construction Camp Site-3 General View

Figure V.4 Satellite Image and Photograph of the Construction Camp Site-3 (Km 124+300)

The maximum number of personnel anticipated across the three construction camps is 3,300, with Camp Site-1 expected to accommodate up to 1,300 individuals, and Camp Sites 2 and 3 each designed for up to 1,000 individuals. These figures include both contractor and subcontractor staff.

All activities associated with camp construction, operation, and decommissioning would be conducted under strict health, safety, and environmental management procedures. Implementation of this Plan would be closely coordinated with relevant management plans, including those on waste, wastewater, health and safety, and subcontractor oversight.

All activities associated with camp construction, operation, and decommissioning should be conducted under strict health, safety, and environmental management procedures. Implementation of this Plan should be closely coordinated with relevant management plans, including those on waste, wastewater, health and safety, and subcontractor oversight.

Monitoring of camp conditions should be carried out regularly to ensure compliance with the ESMS, and corrective actions should be taken promptly where non-conformities are identified. Worker welfare standards and community relations should be continuously monitored and improved throughout the construction phase.

VI. MITIGATION MEASURES FOR IMPACTS OF CONSTRUCTION CAMPS

The following measures will be implemented to prevent or minimize environmental, occupational health and safety, and social risks associated with the construction and operation of camp facilities during the construction phase:

- Camp-related waste will be managed in accordance with relevant Waste Management Plans (e.g., solid waste, wastewater, hazardous waste, zero waste).
- Emergency response equipment will be available on-site in compliance with legal requirements to respond to fire, medical, and environmental emergencies.
- Access to and from the camp site will be controlled in accordance with the provisions outlined in the Security Management Plan.
- Hygienic and legally compliant meal service areas will be established within the camp to meet workers' nutritional and health needs.
- Adequate quantities of safe and hygienic drinking water will be supplied and maintained at all times in compliance with national health regulations.
- Toilet, shower, laundry, changing, and dressing areas will be provided in sufficient quantity, in hygienic conditions, and in accordance with legal requirements.
- Comfort conditions (ventilation, lighting, heating, etc.) in on-site office buildings will be ensured in line with applicable occupational health and safety regulations.
- A drainage system will be installed across the camp site to prevent water accumulation and runoff, in accordance with relevant legislation.
- Legally compliant medical units and first-aid equipment will be established within the camp site and made readily accessible to all personnel.
- Workshop areas (such as those used for equipment maintenance and repair) within the camp will be managed to prevent adverse impacts on the environment, community, and worker health.
- Waste and hazardous materials generated in these areas will be stored separately in sealed, leak-proof containers and in designated enclosed areas, in line with related management plans.
- Measures will be taken to prevent the release of contaminants into soil and water, including the implementation of spill containment protocols and secondary containment systems.
- Building materials used in worker accommodation will comply with applicable fire safety and hygiene regulations.
- Accommodation units will be positioned at a reasonable distance from active construction zones to ensure worker safety and comfort.
- Legally compliant drainage and wastewater collection systems will be installed to prevent contamination risks within worker living areas.
- Safe, clean, and adequate drinking water will be provided in all worker accommodation areas in line with national hygiene standards.
- Comfort conditions—such as ventilation, lighting, and heating—will be ensured in worker housing to meet seasonal needs and legal requirements.

- Systems for the organized collection and disposal of domestic and operational waste will be established, including clearly designated bins and regular collection services.
- Routine pest control will be implemented to maintain sanitary conditions in worker accommodation facilities.
- Each worker will be assigned a personal bed, and all rooms will be equipped with operable windows, secure door locks, and pest prevention measures.
- Separate storage areas for personal protective equipment, including boots and other gear, will be provided to avoid cross-contamination and ensure organization.
- Regular cleaning of sleeping quarters and bedding will be carried out to maintain hygiene and prevent health issues.
- Toilets and sleeping quarters will be located within the same building to enhance accessibility, safety, and convenience for workers.
- There will be a recreation room for workers to rest and spend their free time.
- Basketball and volleyball courts will be built in the camp areas for workers to play sports.
- There will be a Wi-Fi network in the recreation room and rooms for workers to access the internet.
- Catering services will be provided in the camp areas to ensure that workers eat regularly and healthily.
- A shuttle service will be provided to the nearby town center at certain times of the day.
- All camp areas will be inspected and fumigated at regular intervals by companies authorized by the Ministry of Health.
- Mechanical maintenance workshops, warehouses, and other such facilities will be separated from accommodation and rest areas in the camp areas.
- Waste management in camp areas will be carried out in accordance with the guidelines provided in the Hazardous Waste and Material Management Plan and the Solid Waste Management Plan, with separate areas for hazardous and non-hazardous waste collection.
- Sufficiently sized and numbered places of worship will be established for workers, and in necessary cases, places of worship for all religious beliefs will be provided.
- Transportation services will be provided for workers who prefer to stay in their own homes or hotels in city centers.
- In order to implement the internal complaint mechanism, complaint boxes will be placed in areas without camera surveillance, and the requests, suggestions, and complaints collected will be evaluated and resolved by management.
- Workers will have access to hot water 24 hours a day.
- Camp rules will be clearly communicated to workers, and necessary measures and incentives will be implemented to ensure compliance with camp rules.
- Access to camp areas from outside will be restricted, and security will be ensured.

VII. TRAINING

When evaluating training needs for the implementation of this procedure, several key considerations will be addressed. All Project personnel, including contractor staff, will be informed of basic hygiene practices, safety rules, emergency response procedures, pollution prevention, waste management procedures, and other requirements outlined under the Project. Personnel responsible for the management, security, cleanliness, and maintenance of the camp site and accommodation areas, including those employed by contractors, will be required to hold professional training certifications in accordance with applicable legislation. It will also be ensured that a sufficient number of staff trained in first aid is present at all times. Training records will be maintained by the Human Resources and/or the Environment and Social team.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of campsite management measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific conditions, health and safety observations, worker feedback, or changes in applicable legislation and Project requirements.

Monitoring activities will be coordinated by the Environmental Department in close collaboration with the OHS, Human Resources, and Camp Management teams. Key responsibilities will include verifying the adequacy of accommodation standards, monitoring sanitation and hygiene conditions, ensuring the proper functioning of wastewater and solid waste management systems, and confirming that food preparation and storage practices meet health and safety requirements.

Regular inspections will be carried out at all worker accommodation and support facility areas to ensure compliance with national standards, IFC/EBRD requirements, and Project-specific campsite management criteria. This will include checks on room occupancy, cleanliness of common areas (e.g., kitchens, dining halls, toilets, and showers), availability of drinking water, adequacy of waste segregation and disposal practices, and implementation of vector and pest control measures.

The performance of contractors and subcontractors in meeting campsite management standards will be assessed through audits, supervision reports, worker interviews, and grievance records. Any identified non-conformities will trigger the preparation and implementation of corrective and preventive action plans. Follow-up inspections will be conducted to confirm the resolution of issues and ensure ongoing compliance.

In addition to internal monitoring, inspections may be conducted by relevant public institutions, such as the Ministry of Health, Provincial Directorates, or the Ministry of Environment, Urbanization and Climate Change. The frequency and scope of these inspections will be determined by the competent authorities and will cover environmental health, hygiene, and worker welfare aspects of the campsites.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the specific parameters to be monitored, their corresponding locations within the campsite, monitoring frequency, and responsible parties. These activities will be essential for ensuring that campsite facilities remain safe, hygienic, and compliant with national regulations and international best practices.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Number of trainings conducted	Construction camp sites* and administrative offices	Tracking the number of Project personnel and contractor workers who have received training	Quarterly	AAOİAŞ, Independent Environmental Experts
Compliance with Plan implementation	Project documentation and management system	Review of records and documents uploaded to the system in accordance with the Plan	Quarterly	AAOİAŞ, Independent Environmental Experts
Complaints related to camp site management	Public relations records and grievance system	Logging and monitoring of grievances as per the Grievance Mechanism Procedure	Quarterly	AAOİAŞ, Independent Social Experts
Compliance with Plan implementation	Worker Rooms, cafeterias, social areas, bathrooms, toilets, etc.	Visual inspection, check-lists	Daily	AAOİAŞ, Limak, Independent Social Experts

Compliance with Plan implementation	Worker Rooms, cafeterias, social areas, bathrooms, toilets, etc.	Visual inspection, check-lists, hygiene controls	Weekly	AAOİAŞ, Limak, Independent Social Experts
Compliance with Plan implementation	Whole camp site areas	Visual inspection, hygiene controls and methods for detecting insects, pests, and reptiles	Weekly	AAOİAŞ, Limak, Independent Social Experts

** Construction camp site locations have been discussed in detail under Chapter V. Construction Camp Site Management Approach*

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All campsite-related findings—including hygiene deficiencies, overcrowding, inadequate waste or wastewater management, food safety violations, or grievances rose by workers—will be documented in accordance with national legislation and Project procedures. In the event of serious violations, such as confirmed breaches of minimum accommodation standards, health and sanitation failures, or conditions posing risks to worker welfare, AAOİAŞ will ensure that the issue is reported to the relevant authorities and that appropriate technical, procedural, and contractual actions are undertaken without delay.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Monitoring Frequency	Target	Responsible Party
Number of trainings conducted	Continuous	All personnel to receive training	AAOİAŞ, Independent Environmental Experts
Non-compliance with standards	Monthly	Less than five	AAOİAŞ, Independent Environmental Experts
Number of complaints received	Monthly	Less than five	AAOİAŞ, Independent Social Experts

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities should be documented and reported as outlined in the plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established plans and procedures. Records that may be reviewed during audits include cleaning logs, accommodation records, drinking water quality analysis reports, waste disposal documentation, wastewater discharge records, employee complaints, and laboratory measurement reports. Observations and deficiencies identified during audits will be included in formal audit reports, and any required improvements will be registered under Corrective Actions. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary.

XI. REPORTING

Regular reporting will be carried out to ensure the effective implementation and continuous improvement of environmental and social (E&S) site management practices throughout the construction phase of the Project. Reporting will address both internal monitoring and auditing results, as well as external compliance and stakeholder communication obligations related to site operations.

Based on the monitoring results, necessary corrective and preventive actions will be identified and required changes will be reflected to this Plan. Training program will also be updated accordingly. Regular audits and visual inspections shall be conducted in order to ensure all activities are being undertaken according to this Plan.

These monitoring results, along with data obtained through inspection and audit activities, will be consolidated under a dedicated section related to site management in the Environmental and Social Monitoring Reports, which are prepared on a quarterly basis. All observed non-compliances, corrective actions taken, and recommended time-bound corrective measures will be documented and supported with relevant records, including photographs or other verifiable materials.

All personnel may submit concerns, suggestions, or complaints in accordance with the Project's Grievance Mechanism, by completing a grievance form. Communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan (SEP).

This Plan will be reviewed on a quarterly basis by the Environmental and Social Expert, following site audits or after any incident or significant change in site activities. Any updates to the Plan will be developed in coordination with the Site Manager and agreed upon accordingly.

EMERGENCY PREPAREDNESS AND RESPONSE MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.03.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

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DEFINITIONS AND ABBREVIATIONS

Terms, definitions and abbreviations used in this document are listed below:

ERP	Emergency Response Plan
ERT	Emergency Response Team
Project	Antalya Alanya Motorway Project
IFC	International Finance Corporation
PS	Performance Standard
AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (“SPV”)
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
EHS	Environment, Health and Safety
HSE	Health & Safety and Environment
ESMP	Environmental and Social Management Plan
EHS-MS	Environmental, Health and Safety – Management Plans
SEP	Stakeholder Engagement Plan
EU	European Union
OHS	Occupational Health and Safety
CLO	Community Liaison Officer

1. INTRODUCTION

1.1. Purpose

The purpose of the Emergency Preparedness and Response Plan (EPRP) is to define the actions and measures necessary for the overall management of and response to emergencies within the Antalya Alanya Motorway Project specific activity area of influence. The Plan aims to:

- Outline the applicable legislation and standards relevant to this Plan;
- Define roles and responsibilities;
- Incorporate the requirements of the Regulatory Environmental Impact Assessment (EIA) findings, the Environmental and Social Impact Assessment (ESIA), international standards, Turkish legislation, Lenders requirements and any Project specific permits: and
- Provide procedures of action for foreseeable emergency scenarios
- Define the lines of communication to be followed during emergencies.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

1.2. Scope and Validity

The present ERP scope covers the construction phase of the Antalya Alanya Motorway Project only and applies to all AAOİAŞ and its subcontractors' activities (including third party subcontracted sites (quarries, borrow pits etc.). The area of influence is therefore limited to all Project activities related to the motorway construction process. The ERP will be further updated one month before slope-earth cut excavation activities), which can be assumed as the beginning of the Motorway Construction. The updated ERP scope will take into account all of the Project Area of influence and all motorway construction activities.

The Plan incorporates the requirements of the Antalya Alanya Motorway Turkish EIA Report findings, the Antalya Alanya Motorway ESIA Report findings, IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts, IFC Performance Standard 4: Community Health, Safety and Security, Turkish Legislation, Project Lenders requirements and any Project specific permits.

2. LEGISLATION AND STANDARDS

ISO 45001:2081, ISO 14001:2015, Applicable IFC standards include, IFC Performance Standard (PS) 1: Assessment and Management of Environmental and Social Risks and Impacts IFC Performance Standard (PS) 4: Community Health, Safety and Security, IFC General Environmental Health and Safety (EHS) Guidelines and IFC EHS Guidelines for Toll Roads which sets out a range of recommendations with regards to emergency management. LIMAK will comply with these requirements when implementing the Project. Key requirements of these standards include:

- Establishment of an Emergency Response System so that the LIMAK, in collaboration with appropriate and relevant third parties, will be prepared to respond to accidental and emergency

situations associated with the project in a manner appropriate, to prevent and mitigate any harm to people and/or the environment.

- Where applicable, LIMAK will also assist and collaborate with the potentially Affected Communities and the local government agencies in their preparations to respond effectively to emergency situations, especially when their participation and collaboration are necessary to ensure effective response. If local government agencies have little or no capacity to respond effectively, the EPC will play an active role in preparing for and responding to emergencies associated with the project.

In addition to the above, the following impact assessment reports prepared for the Project will be used as reference documents:

- Antalya Alanya Motorway Project ESIA Report;
- Antalya Alanya Motorway Project EIA Report; and

The requirements of the Turkish laws and regulations with regards to emergencies in accordance with the Project design and construction will be implemented including the following regulations:

- Regulation on Emergencies in Worksites
- Regulation on Structures to be Built in Disaster Areas
- Regulation on Buildings to be Built in Earthquake Areas

The following AAOİAŞ plans, procedures and policies related to engagement with emergencies will also be used as reference documents:

- Stakeholder Engagement Plan
- Environmental and Social Management Plan
- Traffic Management Plan
- Project HSE Policy
- Employment Policy

It should be noted here that; where two or more of the identified standards are inconsistent or contradictory, unless otherwise justified, the EPC will adopt the more stringent.

3. ENVIRONMENTAL HEALTH AND SAFETY-MANAMENT SYSTEMS (EHS-MS) INTERACTION

The ERP forms part of the Project EHS-MS and therefore should be read in conjunction with the related EHS-MS elements. These elements include the overarching ESMP and individual EHS Management Plans and Procedures. The ERP will therefore be implemented together with the related plans and procedures in order to manage emergencies. The plans and procedures which are relevant to ERP include:

- Occupational, Health, Safety and Environment Plan
- Stakeholder Engagement Plan – Grievance Mechanism
- Hazardous Materials Management Plan

- Traffic Management Plan
- Biodiversity Action Plan
- Community Health and Safety Management Plan
- Environmental and Social Management Plan (ESMP) of the Antalya Alanya Motorway Project together with the Commitments Register (See Annex A for commitments on emergency response together with how the commitments will be implemented)

4. GENERAL ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

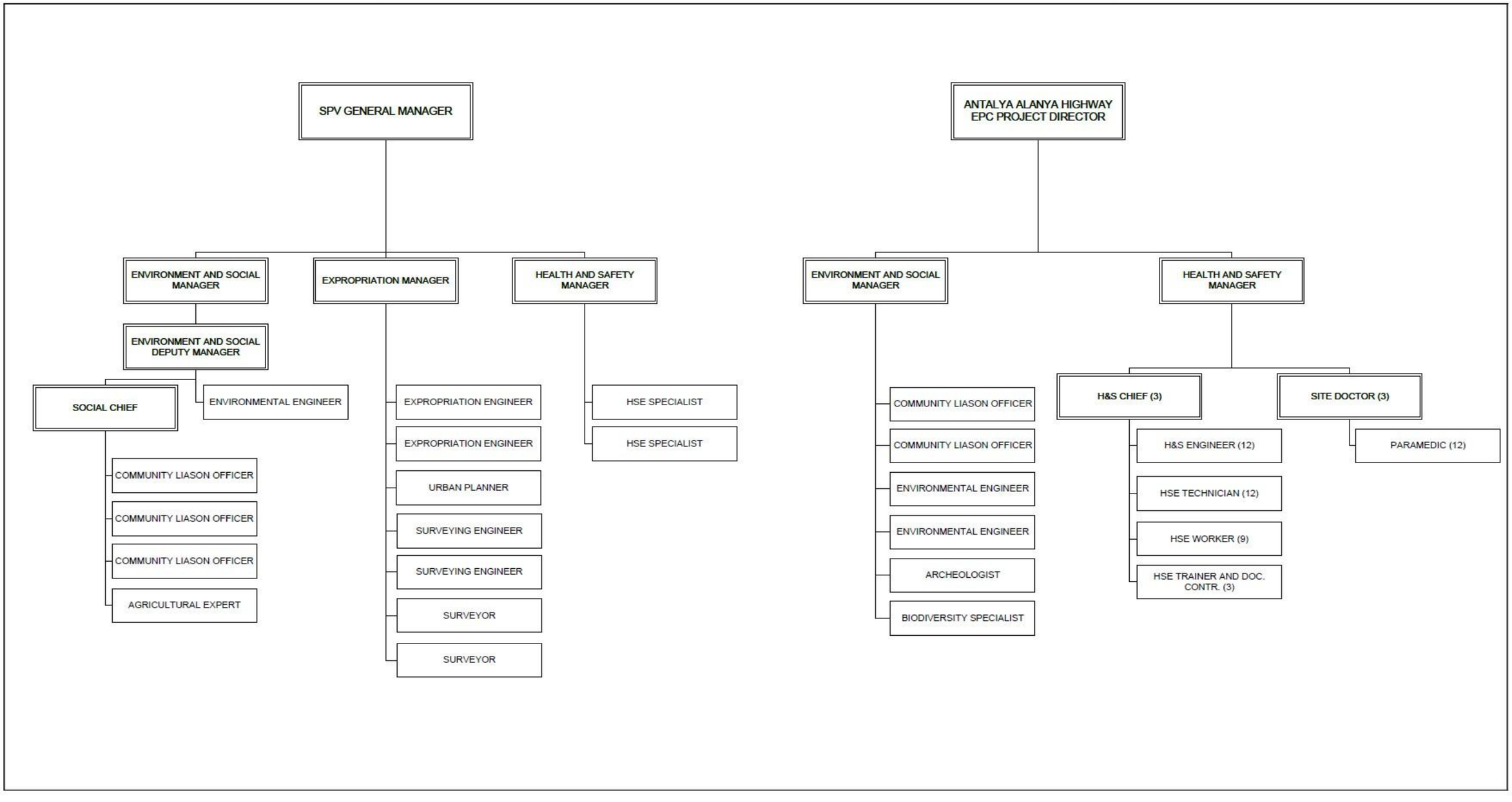


Figure 4.1: Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table 4.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators.

Roles	Responsibilities
	• Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs.

Roles	Responsibilities
	• Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements.

Roles	Responsibilities
	• Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities.

Roles	Responsibilities
	• Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators.

Roles	Responsibilities
	• Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews.

Roles	Responsibilities
	• Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors.

Roles	Responsibilities
	• Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety.

Roles	Responsibilities
	• Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies.

Roles	Responsibilities
	• Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager.

Roles	Responsibilities
	• Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers.

Roles	Responsibilities
	• Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments.

Roles	Responsibilities
	• Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately.

Roles	Responsibilities
	• Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

AAOİAŞ shall:

- Ensure sufficient resources are allocated on an ongoing basis to meet the requirements of this ERP,
- Describe the resources allocated to and responsible for the execution of each task and requirement contained therein,
- Describe how roles and responsibilities are communicated to relevant personnel,
- Ensure all subcontractors and relevant third parties are bound by this plan and briefed on its content
- Regularly review the implementation and effectiveness of this plan and make adjustments where necessary
- Ensure that all personnel responsible for the execution of the tasks and requirements contained within this plan are competent on the basis of education, training and experience, and
- Undertake the training and awareness requirements necessary for the effective implementation of ERP.

5. EMERGENCY ROLES AND RESPONSIBILITIES

In addition to broad roles and responsibilities in accordance with this Plan, which are outlined in Section 4; roles and responsibilities in the event of any emergency are detailed below. Names and other details of the personnel who are appointed for these roles and responsibilities are presented in Annex B. This contact list will be reviewed monthly by the HSE Manager. Access to internal contact information will be restricted to

authorized personnel only. Updated versions will be redistributed after any personnel changes. Contact details of external authorities / agencies are submitted in Annex C.

5.1. Emergency Controllers

Leading responsible employees (2 persons working together or may split according to situation) on the site regarding emergency situations. Take control of the emergency situation and direct the emergency response team, sub-contractors, supervisors, visitors and all other personal. Arrange relevant management and emergency services to be contacted. Direct and liaise with the emergency services. Additionally, are responsible for initiating an evacuation process if needed, and securing a practical perimeter around the incident location. Emergency Controllers have responsibility for reporting relevant developments to the Project Manager.

5.2. Administrative Assistant

Mainly responsible for communicating with and informing the Project Manager and Emergency Services (fire department, police, ambulance, etc.). Also assists the Emergency Controller. The Administrative Assistant has responsibility for reporting relevant developments to the Emergency Controllers.

5.3. Emergency Response Team

They are the first personnel to respond to the emergency before any emergency services arrive at the site. They conduct basic emergency response actions such as fire-fighting, rescue and hazardous material mitigation under the command of the Emergency Controller. Assist in emergency notification and public protective actions, accounting for personnel outside the hazard zone or implementing In-Place Protection (IPP) within the workplace, and assist the emergency services (fire department, police, etc.) on arrival to the site. The Emergency Response Team has responsibility for reporting relevant developments to the Emergency Controllers

5.4. First Aid Personnel

Provide first aid treatment to casualties. Liaise with and assist ambulance service on arrival on site. First Aid Personnel have responsibility to report relevant developments to site doctor.

Paramedics/ambulance staff shall be stationed at designated locations within the Project (near the infirmary), and shall be responsible for the following:

- Providing first aid treatment to workers, local community members, or site visitors in case of an emergency, when needed,
- Conducting routine site patrols within the Project,
- Referring the worker to the nearest hospital or infirmary after administering the necessary first aid treatment, if deemed necessary,
- Performing 24-hour checks to ensure that all medical equipment in the on-site ambulance is complete and reporting any missing items to the H&S team,
- Reaching the incident site in the shortest possible time by using the designated route after the emergency is reported,
- Conducting daily patrols on site and maintaining familiarity with the traffic plan on open road.

Sufficient number of certificated first aid personnel will be employed according to the total personnel number during the construction phase

5.5. Security

In case of an emergency controls the traffic, directs vehicle away from the incident area and escorts emergency vehicles. Security has responsibility to report relevant developments to Emergency Response Team

5.6. Environmental Engineer

Assess extent of environmental threat and/or contamination and liaise with Emergency Controller to minimize effects. Informs Provincial Directorate of Environment and Urbanisation / Fisheries Authorities. Environmental Engineer has responsibility to report relevant developments to Emergency Controllers

5.7. Emergency Wardens

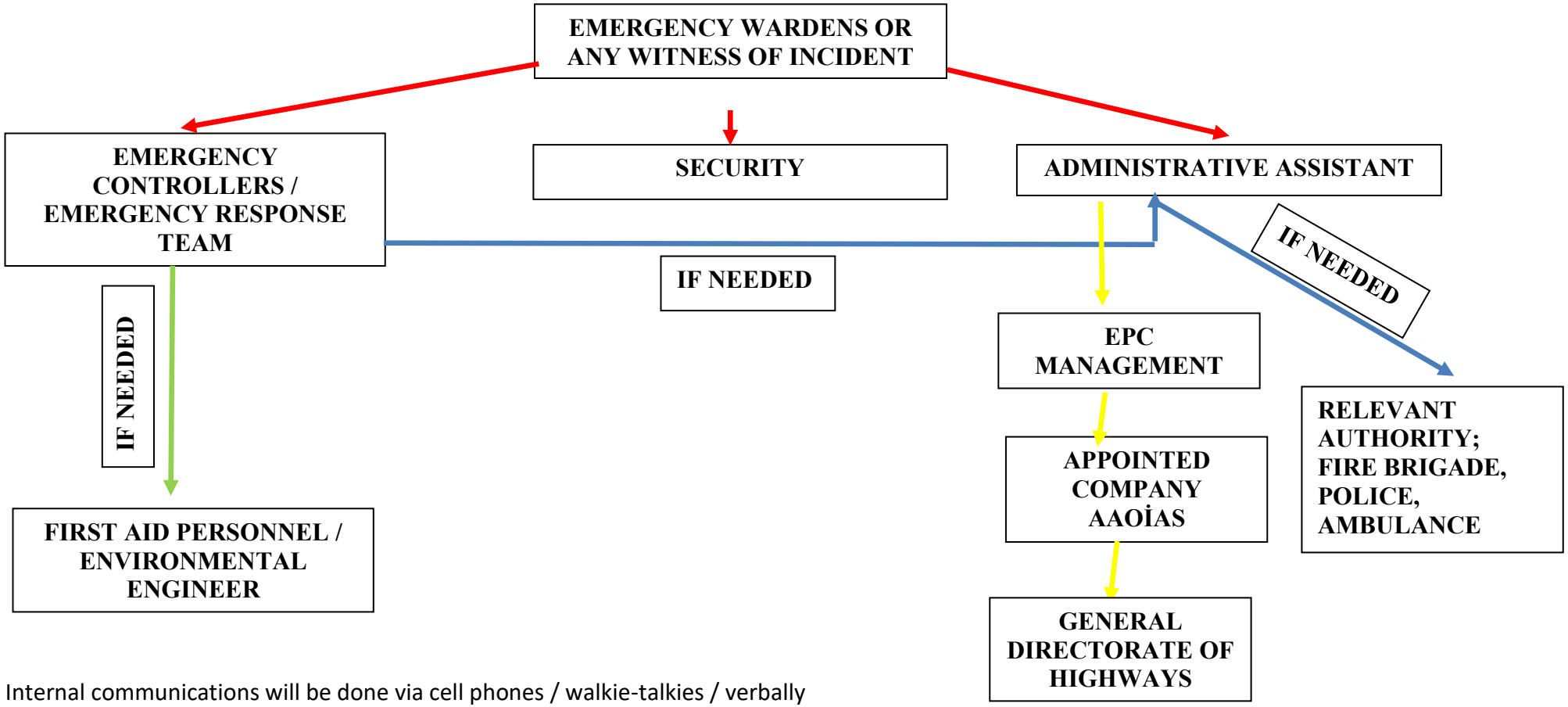
They will be chosen by the Emergency Controller and will be present in every work area. The Emergency Wardens will evaluate the emergency and evacuate the work area if needed. They will conduct a head count at Assembly Points, and account for all personnel, subcontractors and visitors. Reports personnel and visitors who are missing to the Emergency Response Team and H&S Manager. Restricts entry into affected areas to emergency personnel only. Assists the Emergency Controller as needed. Emergency Wardens have responsibility for reporting relevant developments to the Emergency Response Team.

5.8. Site Doctor

Administers relevant treatment to patients and follows the Emergency Controller's and Emergency Response Team's instructions on other issues.

6. COMMUNICATION

In any emergency, communication flow presented below will be followed:



- Internal communications will be done via cell phones / walkie-talkies / verbally
- External communications will be done via cell phones / e-mail

7. RISK ASSESSMENT

Relevant Health & Safety risk assessment studies have been conducted already for Motorway construction. Risks assessments have been conducted in accordance with the method submitted in Occupational Health and Safety Plan. Main topics and findings of onshore risk assessment studies are:

Site excavation works risk assessment

Main consequences of hazards of site excavation works are:

- Physical injury
- Environmental pollution – spills
- Overturn of equipment

Lifting risk assessment

Main consequences of hazards of lifting works are:

- Falling – physical injury
- Overturn of equipment

Jet grout risk assessment

Main consequences of jet grout works are:

- Chemical burns – physical injury
- Overturn of equipment
- Environmental pollution – spills

Based on site-specific risk assessments and operational configurations, the following zones within the Project are identified as high-risk areas requiring special control and emergency readiness measures:

- **Tunnel portals and interior segments** – due to limited egress, poor ventilation, and risk of collapse or equipment fire.
- **Fuel and chemical storage areas** – due to flammability, spill potential, and environmental contamination risks.
- **Bridge decks and viaducts under construction** – due to height-related hazards and fall risks.
- **Electrical distribution zones (e.g., transformer areas, substations)** – due to arc flash and electrocution risk.
- **Heavy equipment and crane operation zones** – risk of mechanical failure, struck-by incidents, and collapse.
- **Confined spaces (e.g., stormwater culverts, manholes)** – due to oxygen deficiency, toxic gases, and limited rescue options.
- **Excavation edges and unstable slopes** – due to fall or collapse hazard.

All high risks shall be clearly marked with hazard signage, physically restricted where possible (e.g., barriers, fencing), regularly monitored and reviewed by the H&S team and included in emergency response drills.

8. INCIDENT CLASSIFICATION

8.1. Level 1 Incident (High)

Level 1 incidents are incidents that cannot be managed using normal EPC resources; i.e. the capabilities of the EPC to respond are exceeded by the initial impacts of the event. This type of incident would necessitate a direct call to local emergency authorities by the administrative assistant under the supervision of the Emergency Controller and/or Project manager and initiation of evacuation procedures outlined in Annex E. A Level 1 incident will require significant resources and multiple operational periods until containment/control is achieved.

Examples of a Level 1 incident in the context of this Plan are:

- Terrorism
- Major fire or explosion – Catastrophic fire & explosion events which cannot be managed using normal EPC resources. Incidents which have possibility to spread all construction site quickly.
- Earthquake

8.2. Level 2 (Medium) and Level 3 (Low) Incident

Level 2 and Level 3 incidents require a response from EPC emergency responsible persons. In the event of a Level 2 incident additional resources and services from local emergency authorities will be needed but EPC emergency responsible persons have duties until local emergency authorities arrive.

Examples of a Level 2 & 3 incident in the context of this Plan are:

- Physical injuries
- Minor Fire or Explosion – Fire and/or explosion events which can be managed with EPC resources until local emergency authorities arrive. Incidents which can be confined in a specific area.
- Overturn of equipment

Level 3 incidents can be managed by EPC's emergency responsible persons only. Section 7 below outlines the response procedures for Level 2 and Level 3 incidents.

9. EMERGENCY RESPONSE PROCEDURES FOR LEVEL 2 AND LEVEL 3 INCIDENTS

Response procedures for Level 2 and 3 emergencies are outlined in this section. Material requirements (e.g. PPEs, adsorbents, walkie-talkies etc.) for emergencies are provided in ANNEX D. Evacuation procedures for relevant emergencies which can be distributed to relevant locations of construction site are submitted in ANNEX E.

9.1. Physical Injuries

Emergency Wardens or any witness to the incident can start the response procedure by alerting relevant responsible persons. Minor cuts and/or bruises can be treated by a ***First Aid Personnel*** or be taken along to

the site medical clinic for treatment. In the event of a significantly injured individual on site at any time of day or night;

- Contact must be made with the ***Emergency Controller*** by ***Administrative Assistant***.
- ***First Aid Personnel*** will inform the site doctor
- ***Site doctor*** will assess the patient's situation:

  (i) If the patient should not be moved; an ambulance will directly be called by the ***Administrative Assistant*** and relevant treatment will be administered by the ***site doctor*** until an ambulance arrives.

  - ***Security*** will be informed by the ***Administrative Assistant*** on the issue
  - ***Security*** will direct the ambulance to the injured person

  (ii) If moving the patient does not have any risk; the patient will be treated until stable enough to travel and will then be transferred to the site medical clinic

  - ***Site doctor*** will assess the patient's condition and decide if they can be cared for at the site clinic or if they require transfer to the hospital.
  - Ambulance will be called by the ***Administrative Assistant*** or any witness
  - ***Security*** will be informed by the ***Administrative Assistant*** on the issue
  - ***Security*** will direct the ambulance to the injured person

9.2. Minor Fire or Explosion

Anybody who discovers indication of a fire such as smell, smoke, if it is not unsafe to respond, should try to extinguish the fire by using the nearest fire extinguisher – all employees shall be subject to training on the use of fire extinguishers-. In the event of any fire OR explosion;

- ***Emergency Wardens*** or the witness(es) will sound the alarm to alert all personnel
- ***Emergency Wardens*** will evacuate the area if needed and will direct personnel to the assembly point.
- ***Administrative Assistant*** will notify the fire brigade
- ***Emergency Controller*** and ***Emergency Response Team*** will eliminate flammable material (e.g. fuel) sources and will de-energize power supply if necessary
- Without endangering their safety; ***Emergency Controller*** and ***Emergency Response Team*** will try to control the fire until the fire brigade arrives the site.
- ***Security*** will be informed by ***Administrative Assistant*** on the issue
- ***Security*** will direct the fire brigade to the fire scene.
- Fire brigade on arrival will be in charge of fighting the fire.
- The process of response in relation to a physical injury **(see section 6.)** will be implemented for any causalities.

9.3. Collapse of Equipment / Structure / Excavation

In case of any collapse,

- The priority will be for the ***Emergency Controller*** to make the area safe.
- The damaged zone must be barricaded, and non-authorized access shall be prohibited by the ***Emergency Controller***. Response and rescue shall be implemented after evaluating all risks.
- ***Emergency Response Team*** will be directed to the area by ***Emergency Controller***
- ***Emergency Response Team*** and ***Emergency Controller*** will evaluate the situation and while doing that; they direct ***Security*** in order to set up an exclusion zone.
- ***Emergency Response Team*** will develop a rescue plan under the supervision of the ***Emergency Controller.***
- The final plan will be discussed with ***Emergency Controller*** for its approval
- Local Search and Rescue authority will be contacted by ***Administrative Assistant*** if needed. If Search and Rescue authority are called on to attend the scene:
    - ***Security*** will be informed by Administrative Assistant on the issue
    - ***Security*** will direct Search and Rescue authority to the scene.
    - Search and Rescue authority on arrival will be in charge
- If the rescue plan is considered as appropriate; it can be implemented by internal resources
    - All staff in the area of incident should be considered as trapped
    - Rescue plan will be implemented
- During this process; relevant flow of physical injury response (***See Section 7.1***) will be implemented for causalities.

9.4. Overturn of Equipment

It should be noted here that, in the event of equipment overturning outside of the construction site, the incident will be considered as “road traffic accident”. See Section 8.5 please.

- ***Emergency Wardens*** or any witness can inform the ***Emergency Controller*** about the incident
- ***Administrative Assistant*** will inform the ***Project Manager*** about the incident
- The stability of the equipment will be considered by the ***Emergency Controller*** together with experienced riggers and operators before the appropriate response is initiated
- The definite weight of the equipment and centre of the gravity will be checked from operator manual.
- Rescue operation will be supported by experienced riggers and operators
- To rescue any turned over equipment or vehicle, proper capacity crane and hoisting gears will be provided by Project Manager.
- Possible oil and/or fuel leakages will be considered, and necessary precautions will be taken.

- Smoking and the use of any open flames will be prohibited
- Around the equipment, a safety zone will be established, and the surrounding area will be barricaded for non-authorized access by ***Security***.

9.5. Road Traffic Accident

In case of a road traffic accident within the construction site boundaries; the relevant procedure(s) clarified in this Plan must be implemented. For instance; the procedure for physical injuries and/or the procedure for overturn of equipment may need to be followed.

In case of a road traffic accident outside of the construction site, the instruction for drivers is given below:

- Use caution exiting your vehicle. Other vehicles may still be trying to pass or come to a stop.
- Check to see if anyone is injured. If someone is injured, request medical assistance immediately. Perform first aid, if necessary, within the limits of your training and experience.
- Call the police immediately, even if the accident appears to be minor. And then notify your supervisor. During notifying your supervisor; briefly describe what has happened and state if you need assistance.
- Secure the site with warning signs.
- Put out safety cones in relevant locations in order to attract the attention of other drivers
- Do not speak with the media or other parties at the scene.
- Do not argue with the others involved, do not admit liability for the accident or do not make any comments on the causes of the accident with anyone except the police.
- Gather as much information about the accident as possible.
- If possible; write down the names, addresses and phone number of everyone involved.
- Get the automobile insurance company names and policy numbers of all vehicle owners.
- Write down the year, model and plate number of all vehicles
- Note the location and extent of all the damage to all vehicles.
- Write down the names, addresses and phone numbers of any witnesses.
- Note the location of the accident - street names, cross streets, landmarks, route or exit numbers.
- For each vehicle, note the direction of travel, road signs or signals, and the number of lanes.
- Note the time of day, weather conditions, and road conditions.
- If a camera is available, take a photo of the scene from four directions. Also, take a photo of the location of the damage of each vehicle.
- Write a brief description of the accident and sketch the scene if possible.
- Ask the police officer where and when you can get a copy of the report. Note the badge number and name of the officer, as well as the report number.
- Follow instructions given by the police.

9.6. Falling into the Water

- In the event of anybody falling into the water; The Medical Team should be notified immediately about the incident
- Emergency Wardens or any witness can throw the rescue wheel
- The person will be pulled to land or onto a vessel if it is safe to do so. If not you should wait for the Coast Guard to arrive.
- The physical injury response procedure (See Section 6.) will be implemented if necessary.

9.7. Confined Space Rescue

If a person in a confined space gets into trouble, the stand-by employee must inform the ***Emergency Controller*** so the necessary support can be sent. The stand-by employee must never enter the confined space to assist. When ***Emergency Controller*** and ***Emergency Response Team*** arrive;

- ***Emergency Controller*** and ***Emergency Response Team*** will check the atmosphere and ventilate the area as needed in accordance with Occupational Health and Safety Plan
- The possibility for collapsing will be considered
- Safety harnesses, lifeline tripods etc. will be used to access the confined space
- The safety of the ***Emergency Response Team*** must not be endangered
- ***First Aid Personnel*** will be informed by ***Administrative Assistant***
- The physical injury response procedure (***See Section 7.1***) will be implemented if necessary

9.8. Spills

In case of any spill incident; the ***Emergency Controller*** can be informed ***by Emergency Wardens*** or any witness.

- ***Emergency Controller*** and ***Emergency Response Team*** will assess the situation for the possibility of a fire breaking out, the location will be evacuated immediately, and the incident area will be isolated by ***Security.***
- Local Communities will be alerted and informed by appropriate means including telephone, audible alarms and vehicle mounted speakers via supervision of CLOs.

As spill responses need different approaches according to the type of the material; instructions in accordance to the type of the material are submitted below sections:

9.1.1. Diesel Fuel and Gasoline Spills

- Avoid inhalation of any vapours by staying upwind. Use chemical-resistant personal protective equipment (gloves, boots and safety glasses) during clean-up activities,
- Gasoline and gasoline vapours are highly flammable. Remove sources of heat, sparks, flame, and electricity. Gasoline may create an explosive atmosphere,
- Stop the source of the spill/leak and contain (isolate) it as soon as possible; move leaking equipment away from drains and surface waters if needed,

- Apply absorbents (sheets or granular material). Dike the area with absorbent or soil if needed; prevent liquid from spreading and entering drains or surface waters. Allow time for the absorbent material to soak up the spilled material. Restrict access to the area,
- Once the spill is contained and free product is absorbed, put the used absorbent (contaminated absorbent) in a plastic bag, secure the bag with a metal tie, and place the bag in a labelled container with a secure lid,
- Shovel any contaminated soil into drums with secure lids. Pump any free product into a separate and secure drum or appropriate holding tank. Label containers/drums with the date, location of spill, name of product spilled, approximate quantity, and type of material recovered,
- Used absorbents and contaminated soils should be classified and treated as waste.
- Dispose of all free products as either hazardous waste or as material to be recycled,
- Environmental Engineer will supervise the process,
- Implement Environmental Accident and Spill Response Plan.

9.1.2. Hydraulic Fluid, Lubricant and Oil Spills

- Avoid inhalation of any vapours by staying upwind. Use chemical-resistant personal protective equipment (gloves, boots, and safety glasses) during clean-up activities. Restrict to use open flames close to the spill area,
- Stop the source of the spill/leak and contain (isolate) it as soon as possible; move leaking equipment away from drains and surface waters if needed,
- Apply absorbents (sheets or granular material). Dike the area with absorbent or soil if needed; prevent liquid from spreading and entering drains or surface waters. Allow time for the absorbent material to soak up the spilled material. Restrict access to the area,
- Once the spill is contained and free product is absorbed, drain absorbents of any free product and place them in a plastic bag, secure the bag with a metal tie, and place the bag in a labelled container with a secure lid. Shovel any contaminated soil into drums with secure lids. Pump any free product into a separate and secure drum or appropriate holding tank. Label containers/drums with the date, location of spill, name of product spilled, approximate quantity, and type of material recovered,
- Used absorbents and contaminated soils should be classified and treated as waste.
- Dispose of all free product as either hazardous waste or as material to be recycled,
- Environmental Engineer will supervise the process,
- Implement Environmental Accident and Spill Response Plan.

9.1.3. Chemical Spills (e.g. acid caustics)

- Avoid inhalation of any vapours by staying upwind. Use chemical-resistant personal protective equipment (gloves, boots, safety glasses) during clean-up activities. Restrict open flames from the spill area.
- Stop the source of the spill/leak and contain (isolate) it as soon as safely possible.

- Refer to Material Safety Data Sheets (MSDS) for any special hazards and clean up procedures associated with the spilled chemical, especially for reactivity with other substances in the spilled area,
- Apply absorbents. Dike the area with absorbent or soil if needed; prevent liquid from spreading and entering drains or surface waters.
- Once the spill is contained and free product is absorbed, drain absorbents of any free product and place them in a plastic bag, secure the bag with a metal tie, and place the bag in a labelled container with a secure lid. Shovel any contaminated soil into drums with secure lids. Pump any free product into a separate and secure drum or appropriate holding tank. Label containers/drums with the date, location of spill, name of product spilled, approximate quantity, and type of material recovered,
- Used absorbents and contaminated soils should be classified and treated as waste.
- Determine if free product that cannot be used must be classified as hazardous waste. Similarly, determine if used absorbents are hazardous waste. Dispose of hazardous and non-hazardous waste, separately, offsite using a licensed disposal company and to a licensed landfill,
- Environmental Engineer will supervise the process,
- Implement Environmental Accident and Spill Response Plan.

9.9. Flooding

During a flood incident;

- Emergency Wardens or any witness can start evacuation for all personnel who are not involved in flood emergency situations
- If necessary and safe to do so; Emergency Controller and Emergency Response Team will arrange de-energizing any electrical equipment and outlets in the affected areas. Relevant electricians will supervise the process
- Emergency Controller and Emergency Response Team will take measures to stop the flow of water through the buildings by using diver pumps
- If safe to do so; any equipment or supply will be relocated to an unaffected area of the site

9.10. Earthquake

In case of an earthquake, everybody must follow the instructions listed in the “Evacuation Procedure in the Event of Earthquake” which is included as ANNEX E to this Plan. After the shaking stops the Emergency Controller will brief the below mentioned instructions/reminders to personnel at the Assembly point:

- Do not use matches/lighters or other sources of ignition
- Power outages may occur; fire alarms and sprinkler systems may be activated
- If possible, provide assistance to individuals with disabilities who may need it or alert emergency responders to their location
- Do not enter any building that has been deemed or appears to be unsafe
- Leave the area if you smell gas or chemical fumes

- Be prepared for aftershocks
- If you are properly trained and able, provide first aid to victims
- Do not move the seriously injured unless they are in immediate danger of further injury
- Open doors carefully
- Watch for falling objects
- Use radios for internal communications where possible and avoid using telephones except where necessary, e.g. to contact the emergency services.

9.11. Adverse Weather and Storm Preparedness

To ensure preparedness for adverse weather conditions and climate-related events, the following preventive and response measures will be implemented across all construction sites under the Project;

- Meteorological alerts issued by the Turkish State Meteorological Service (MGM) will be continuously monitored and used to trigger site-level emergency notifications.
- Work at height, crane operations, and tunnel activities will be temporarily suspended when wind speeds exceed 70 km/h or lightning is observed within a 5 km radius of the construction site. All personnel will be promptly notified through internal communication channels.
- Drainage systems will be designed and maintained to prevent flooding and erosion.
- Sump pumps and sandbags will be used to prevent water accumulation during rain.
- Hazardous material storage areas will be sealed.
- During storm-prone seasons (e.g., late summer, early winter), high-risk activities such as lifting operations, material transport, or exposed electrical works will be scheduled for early morning or low-risk weather windows.
- Backup power generators will be made available at key operation centres in anticipation of grid outages due to storms.
- All personnel working in exposed outdoor areas will be directed to designated shelter locations in the event of a storm. These shelters will be adequately equipped and maintained to accommodate emergency situations.
- Post-storm clean-up will involve safe collection and separation of debris (metal sheets, cables, etc.) to prevent further hazards or environmental contamination.
- Following any storm event, a detailed inspection of the site will be conducted to assess physical damage, environmental impacts, and structural integrity. Work will only resume after safety conditions are verified and documented.
- A table top exercise and field practice with a storm/emergency weather scenario will be conducted. All personnel will be informed in accordance with these scenarios.

This Emergency Preparedness and Response Management Plan will be updated after each adverse weather incident, as necessary.

In addition to the preventive measures listed above, the Project's emergency planning considers recovery and continuation of operations following climate-related incidents. This includes:

- Controlled shutdown of operations in the event of site-wide safety risks due to extreme weather conditions.
- Safe evacuation of personnel from affected zones using pre-identified muster points and evacuation routes.
- Rapid assessment and reactivation of essential systems and access roads to enable phased return to normal operations.

9.12. Terrorism and Security Threat

- In the event of an armed conflict, or suspected terrorist activity, the following actions shall be taken:
- Emergency Wardens or any witness shall immediately inform the Emergency Controllers of the suspected threat.
- Emergency Controllers will assess the situation and activate the evacuation plan if deemed necessary.
- Evacuation will be carried out under the coordination of Security personnel and in close communication with the Gendarmerie or Police authorities.
- All personnel shall follow the instructions of Emergency Controllers and shall not attempt to intervene under any circumstances.
- The Administrative Assistant will notify relevant external authorities (Police, Gendarmerie) and inform the Project Director.
- Internal communication will be restricted to authorized personnel to avoid misinformation or panic.
- Security personnel will secure the area, restrict access to the threat zone, and support emergency services upon arrival.
- The Emergency Response Team will be on standby to assist with evacuation and first aid if required.
- Assembly Points will be used as temporary gathering areas until the threat is fully cleared by security authorities.
- No personnel shall return to the workplace until official clearance is given by law enforcement and confirmed by the Emergency Controller.

9.13. Site-Type Specific Emergency Consideration

Emergency preparedness and response procedures must consider site-specific characteristics due to the varied nature of construction activities within the Project. The following principles shall guide site-type differentiated response planning:

➢ **Tunnel Areas:**

- Emergency exits, lighting and ventilation systems must be operational at all times.
- Tunnel-specific muster points shall be designated outside tunnel portals.

- Radios or communication lines must be redundant due to poor signal inside tunnels.
- Fire and smoke response must consider limited escape routes and toxic atmosphere risk

➢ **Construction Camps:**

- Evacuation maps must be posted in each sleeping and dining area.
- Emergency drills (especially fire) must be performed during both day and night shifts.
- Utility shut-off points (electricity, gas, water) must be clearly marked and accessible

➢ **Open Construction Sites:**

- Muster points should be identified for each working zone and updated as construction progresses.
- Overhead work, excavation, and equipment operation must have risk-specific emergency triggers (e.g. crane collapse, fall hazards).

➢ **Bridges, Viaducts, Elevated Structures:**

- Fall protection systems must include emergency descent devices.
- In case of structural instability, immediate clearance radius must be observed as per engineering advice.
- Emergency access must be available from both ends of the elevated structure

9.14. Emergency Infrastructure Controls

Emergency utility shut-off points will be provided to ensure timely and effective response to various emergency scenarios such as fire, electrical hazard, fuel spill or flooding.

- *Electrical Panels:* Marked with the symbol “E”, all main power panels are labelled and equipped with lock-out capability to isolate circuits during fire, flooding, or electrical hazard scenarios.
- *Fuel Shut-Off Valves:* Located at diesel and fuel storage tanks, marked “F”, these valves are accessible without requiring entry into the tank containment area and include visual signage in both Turkish and English.
- *Water Main Valves:* Marked “W”, primary water supply shut-off points are located near accommodation blocks, canteens, and equipment washing areas.

To ensure rapid and effective emergency response, Project, site-wide emergency equipment and location information are shown in the tables below.

Detailed Emergency Equipment List

Equipment	Quantity	Maintenance Frequency
Tunnel Ventilation System	2 system per tunnel	Daily test, annual maintenance

Emergency Exit Guidance Lights	1 every 25 meters	Monthly inspection
Fire Cabinets and Hose Reels	1 every 50 meters	Monthly inspection, biannual maintenance
Smoke Detectors (Tunnel)	1 every 50 meters	Monthly functionality test
Emergency Alarm Buttons	1 every 100 meters	Monthly inspection
Vibration and Strain Sensors	1 set per viaduct	Test every 3 months
Wind Speed Measurement Device	1 per viaduct	Monthly inspection, annual calibration
Seismic Activity Sensor	1 per viaduct	Test every 6 months
Smoke Detectors (Accommodation)	1 per room, corridors, common areas	Monthly inspection
Fire Alarm System	1 system / camp	Monthly inspection
Emergency Lighting	1 system per building	Monthly inspection
First Aid Kits	1 per 20 people	Monthly stock check
Portable Fire Extinguishers	1 per 100 m²	Monthly inspection, annual maintenance
Emergency Communication Devices	1 per shift supervisor	Weekly test
Chemical Spill Kit	1 per storage unit	Inspection every 3 months
Eyewash and Emergency Shower Unit	1 per chemical area and tunnels	Weekly functionality test
Fire Detection and Alarm System	1 per facility/corridors	Monthly inspection
Personal Protective Equipment (PPE) Set	1 per worker	Daily user check/ Monthly stock check
Emergency Exit Signs	1 per Exit	Monthly inspection
Automated External Defibrillators (AEDs)	1 per 100 people	Monthly inspection

Location Information of Emergency Equipment

Equipment	Location
Portable Fire Extinguishers	Each accommodation block entrance and dining hall
Smoke Detectors	Each room, corridors, and common areas
First Aid Kits	1 per 20 workers, placed in visible common areas
Emergency Lighting & Exit Signs	Staircases and exits of all buildings
Automated External Defibrillators (AEDs)	Camp infirmary and ambulance
Fire Cabinets and Hoses	Every 50 m inside tunnel
Emergency Exit Guidance Lights	Every 25 m along tunnel base
Portable Gas Detectors (CO, CH4, O2)	Tunnel maintenance points and ventilation control rooms
Thermal Cameras	Tunnel entry points and ERT vehicles
Wind Speed Measurement Device	Midspan or tower locations
Vibration Sensors	Main structural columns
Portable Fire Extinguishers	Maintenance zones and bridge approaches
Chemical Spill Kits	Inside each chemical storage unit, tunnels and maintenance area at each camp sites
Eyewash and Emergency Shower Units	Next to hazardous material storage and one per chemical area
Gas Dispersal Equipment	Chemical handling rooms
Portable Lighting Units	Night shift work zones (excavation, paving)
Reflective Warning Signs	Road junctions and worksite boundaries
Mobile Barriers with Impact Absorbers	High-risk road segments

10. EMERGENCY DRILLS AND TRAINING &UPDATE

10.1. Drills

10.1.1. Fire Drill

Two times in a year, a fire drill will be conducted involving all employees. The scenario will be prepared and implemented by *Emergency Response Team*. Every employee including subcontractors' employees must have experience of using a fire extinguisher at least once. Fire Drills will be recorded, and the response time and effectiveness will be evaluated. Faults will be determined, and corrective actions will be planned, and related revisions will be done on this Plan.

10.1.2. Evacuation Drill

Two times in a year, an evacuation drill will be conducted, unannounced, to test the real response of the employees in case of an emergency. The duration times will be observed for the gathering of all employees at muster point and the full evacuation of the workplace. The gathered personnel will be listed, and the muster sheet compared with the normal working daily list. Faults will be determined, and corrective actions will be planned, and related revisions will be done on this Plan.

10.1.3. Environmental Accident Drill

To achieve the target of no harm to environment, including from any possible release of any hazardous material to environment, Emergency Response Team will conduct an environmental accident drill twice in a year to demonstrate how to use a spill kit effectively. The scenario will be prepared and implemented by the *Environmental Engineer*. The environmental accident drill will be recorded, and the response time and effectiveness will be evaluated. Faults will be determined, and corrective actions will be planned, and related revisions will be done on this Plan.

10.2. Training & Update

Necessities of the Training Program including, but not limited to:

- Firefighting, spill response, evacuation, rescue and internal radio usage for Emergency Response Team
- First Aid for First Aiders
- Training will be repeated two times in a year. Training exercises to allow personnel the opportunity to test emergency preparedness will be provided, including:
    - Desktop exercises with emergency responsible persons, where the contact lists are checked, and the facilities and communication assessed
    - Drills (See Section 10.1) for testing of equipment and logistics
- Upon completion of a training exercise; Emergency Controller will review the effectiveness of the exercise to assess what worked well and what aspects require improvement
- This Emergency Response Plan will be updated as required after each exercise. Elements of the Plan subject to significant change (such as contact lists) will be replaced
- Training activities and outcomes of the training will be recorded

- Participation in drills is mandatory for all personnel present on-site during the scheduled activity.
- Attendance sheets and drill evaluation forms shall be completed for each event and archived by the HSE Document Controller.
- Drill outcomes shall be reviewed by the HSE Manager, and improvement actions shall be documented and followed up.

11. EMERGENCY REPORTING

Emergency reporting will be according to Accident and Event Reporting Procedure.

12. KEY PERFORMANCE INDICATORS

In order to check efficiency and implementation of emergency response activities and commitments listed in Annex A, determination of key performance indicators and relevant targets are needed. So, key performance indicators according to this procedure in general and targets are given in below table

ID	KPI	Target
KPI-1	Number of reported non-compliances with the requirements of this Procedure. This will be determined during drills for response capability of personnel and by daily site tours for equipment availability	Zero per three months
KPI-2	Number of non-compliances closed due to corrective actions being taken within the defined timeframe (set on a case by case basis).	100% of all non-conformities remedied within the defined timeframe
KPI-3	% of all relevant community who have received relevant community awareness training	100% compliance with training requirements
KPI-4	% of all staff who have received relevant and adequate training	100% compliance with training requirements
KPI-5	% of all staff who have participated emergency drills	100% compliance with drill requirements
KPI-6	Number of reports of near misses reviewed for root cause and a corrective action identified and shared across the Project construction sites within 48 hours to prevent future occurrence.	100% of near miss reports reviewed and shared
KPI-7	Success of training tests	Expected average 85%

It is not always possible to achieve relevant targets, but continuous improvement will be the major principle in accordance with KPIs.

13. MONITORING, REVIEW AND UPDATE

To ensure the continued relevance and effectiveness of the Emergency Preparedness and Response Plan (EPRP), the following measures shall be implemented:

- The EPRP shall be formally reviewed at least once per year by the EPC H&S Manager in coordination with the SPV H&S team.
- Additional reviews shall be conducted following any major incident, regulatory change, or organizational restructuring that may affect emergency response capacity.
- All changes and updates shall be logged in a revision control table and archived by the HSE Document Controller.
- The updated version of the plan must be submitted for approval by the SPV H&S Manager before dissemination.
- A summary of key findings and improvements from each annual review shall be documented and communicated during toolbox talks and safety briefings.

ANNEX A COMMITMENT REGISTER IMPLEMENTATION

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Monitoring and Assurance
Local emergency services will be alerted in event of emergency that risks collateral damage to the local communities. As part of the community engagement process, details regarding the nature of emergencies and their response plans (e.g. Emergency Prevention and Response Plan) will be shared with the local communities. Channels of communication will be established and agreed upon, and in event of emergency, the communities will be alerted and informed by appropriate means including telephone, audible alarms and vehicle mounted speakers, for example.	The Emergency Action Plan will be accessible through local village mukhtar offices and relevant municipalities – Alanya, Manavgat, Serik.	Start of construction and whenever the Emergency Action Plan is updated	• ***HSE Manager***	• HSE Manager and/or its representatives will control relevant locations monthly to check Emergency Action Plan is present or not.
Provisions of the Turkish 'Regulation on Structures to be Built in Disaster Areas and Turkish 'Regulation on Buildings to be Built in Earthquake Areas will be adhered to during construction.	Any structure to be built	During design and construction of any structure	• ***Project manager*** will enforce • ***HSE Manager*** will supervise	• HSE Manager will monitor design and construction
Provisions of the 'Disaster Regulation on Engineering Structures Along Highways' will be complied with. The Project will undertake consultation with the relevant authority before the design is finalised and request the input of the regulators who are responsible for the Disaster Regulation on Engineering Structures Along Highways.	Any structure to be built	During design and construction of any structure	• ***Project manager*** will enforce • ***HSE Manager*** will supervise	• HSE Manager will monitor design and construction
The Motorway and its structures will need to be designed to meet Turkish and international standards for design and operation to minimise the risks and provide appropriate response in the event of an incident occurring. With adoption of the AAO A.S. EPR Policy, AAO A.S. will commit to set-up and implement: (1) measures to prevent emergencies; (2) measures to respond to emergencies; and (3) measures to assess damages and recover after emergencies.	Any structure to be built	During design and construction of any structure	• ***Project manager*** will enforce • ***HSE Manager*** will supervise	• HSE Manager will monitor design and construction
Coordinate with emergency responders to ensure that appropriate first aid is provided in the event of accidents.	Location of accident	In the event of an accident	• ***Emergency Coordinator***	• Renewal of first aid certificates whenever needed • First aid drills
Project Sponsors will require all contractor and sub-contractor personnel to take necessary measures to avoid forest fires and immediately respond to any fire event that could not be avoided by measures taken, including - o Project personnel will be trained to immediately inform forestry authorities about the location and scale of any fire incident. o Fire fighting equipment will be provided at construction sites (as relevant for different types of fires), inspected regularly and staff trained to use the equipment.. o Proper fire extinguishers will be kept ready at site where hot/welding works will be performed. o Smoking will only be permitted in designated, safe areas. o Staff will be trained on fire protection awareness and response.	Location of the incident	In the event of an incident	• ***Emergency Coordinator***	• Emergency drills • HSE Manager will ensure relevant equipment and training is provided
The key mitigation to be implemented involves the adoption of road traffic management measures, including an effective spill containment and clean-up plan, as per the EPR Plan specified in the ESMP. The EPR Plan will be prepared for the construction stage, and then updated later to apply to Motorway and Bridge operations.	• Nearby schools - Alanya, Manavgat, Serik. • Construction sites	Starting from 2018	• ***CLOs will conduct the work*** • ***HSE Manager will supervise***	• CLOs will monitor communities and HSE manager will monitor workers
Measures will be in place to prevent members of the local community, especially children, from unauthorised entry to Project-related	• Construction sites	Construction phase	• ***CLOs*** • ***H&S manager***	• CLOs will monitor communities and HSE manager will monitor workers

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Monitoring and Assurance
sites/installations, thus prevent or lower the risks of accidents, as well to the AAO Project employees and contractors in order to prevent the spread of STDs and other cummunicable diseases in local communities. Such measures will include, e.g.: • Awareness training about construction site hazards to children/youths in nearby village schools; •training of health workers in disease treatment and the provision of health services for the workers •performing immunisation programmes for workers • Placement of fencing or other barricades around dangerous construction installations with warning signs of the hazards; • Use of professionally trained security guards at construction sites.				

ANNEX B INTERNAL EMERGENCY CONTACT NUMBERS

SITE PERSONNEL ROLE	NAME	EXT	MOBILE	LOCATION
Emergency Controller	Selda GÜRSEL		0530 643 72 29	
Administrative Chief	Mehmet KOPAR		0532 711 87 44	
Environmental Engineer	Hüseyin YILDIRIM		0554 128 82 62	
ERT Member	Ekrem GÜMÜŞ		0533 531 56 70	
ERT Member	Emre ISTANBULLU		0534 867 53 65	
ERT Member	Kemal ÖZYİĞİT		0535 032 89 42	
ERT Member	Hasan ÖZKAN		0537 664 43 75	
ERT Member	Hüseyin BALIKÇI		0540 177 63 02	
ERT Member	Mehmet Ali ÖZER		0536 495 40 08	
ERT Member	Mehmet KEKİK		0536 034 71 75	
ERT Member	Reşit ÇELİK		0539 268 75 73	
ERT Member	Yaşar BOZKURT		0536 059 13 10	
ERT Member	M. Seçkin ADAM		0544 791 98 50	
Ambulance	Site Doctor		0505 669 67 68	
First Aid Personnel	Cemil ARSLAN		0538 032 25 03	
First Aid Personnel	Zekeriya YONCA		0546 549 31 39	
First Aid Personnel	M. Faruk AKYOL		0545 251 19 80	
First Aid Personnel	Yüksel BİLGİLİ		0535 956 33 48	
First Aid Personnel	İdris BALABAN		0544 556 23 88	
First Aid Personnel	Ümit Evren SEVİMLİ		0545 839 66 64	
First Aid Personnel	Fatih DERDİYOK		0532 056 95 08	
First Aid Personnel	Furkan İĞİT		0541 519 07 25	
Emergency Warden	Selda GÜRSEL		0530 643 72 29	
Emergency Warden	Murat TÜTÜNCÜ		0533 551 69 88	
Security Manager	Ali Osman AYDIN		0505 776 04 69	

ANNEX C EXTERNAL EMERGENCY CONTACT NUMBERS

CONTACT	TELEPHONE	SPEED DIAL MOBILE	FAX
Ambulance		112	
Fire Service		110	
Health & Safety Authority		112	
Environment Authority	0242 237 00 10		
Gendarme		156	
Police		155	
ASAT (Water)	0242 310 12 00	185	
AEDAŞ (Electricity)	0242 320 36 00		
Antalya Devlet Hastanesi	0242 455 53 53		
Antalya Eğitim ve Araştırma Hastanesi	0242 249 44 00		
Antalya Atatürk Devlet Hastanesi	0242 345 45 50		
Akdeniz Üniversitesi Tıp Fakültesi	0242 249 60 00		
Kepez Devlet Hastanesi	0242 339 11 00		
Serik Devlet Hastanesi	0242 722 13 40		
Manavgat Devlet Hastanesi	0242 746 11 17		
Alanya Eğitim ve Araştırma Hastanesi	0242 513 48 41		
AFAD Afet ve Acil Durum Yönetimi	0242 243 02 55		

ANNEX D EMERGENCY EQUIPMENTS

EQUIPMENT	TYPE	QUANTITY	KEPT IN
AMBULANCE	TRANSFER	1	MAIN CAMP SITE

ANNEX E EVACUATION PROCEDURES

EVACUATION PROCEDURE IN THE EVENT OF EARTHQUAKE

In case of the earthquake, EVERYBODY SHALL;

- **<u>If in the slip platform and on the top of the legs</u>**;
  - ✓ Only wait for the shaking stops!
  - ✓ **<u>DO NOT MAKE PANIC</u>**!!!
  - ✓ Do not jump!
  - ✓ Hold the guardrails!
  - ✓ Do not use elevator!
- **<u>If indoors during an earthquake;</u>**
  - ✓ Drop to the ground!
  - ✓ TAKE COVER by moving under a sturdy table or other piece of furniture. HOLD ON until shaking stops!
  - ✓ If you cannot take cover under a piece of furniture, tuck your head into your knees and cover your head with your arms!
  - ✓ Evacuate only after shaking has stopped and it is safe to do so!
- **<u>If outdoors during an earthquake;</u>**
  - ✓ Remain outdoor; DO NOT enter a container!
  - ✓ Move away from buildings, trees, streetlights and utility wires!
  - ✓ Drop to your knees and into fetal position, close your eyes, and cross your arms over the back of your neck for protection!
  - ✓ Remain in this position until shaking stops!
  - ✓ Stay in an open area!
- **<u>If in a vehicle during an earthquake;</u>**
  - ✓ Stop as quickly as safety permits and stay in the vehicle!
  - ✓ Avoid stopping near or under buildings, trees, overpasses, and utility wires!
  - ✓ Proceed cautiously once shaking has stopped!
  - ✓ Avoid roads, bridges, or ramps that might have been damaged by the earthquake!
- **<u>After shaking stops;</u>**
  - ✓ Go to designated **“Assembly Point”** within the site compound!
  - ✓ Remain at **“Assembly Point”** until all clear is given by the **Emergency Controller** to return to the workplace!

EVACUATION PROCEDURE IN THE EVENT OF FIRE OR EXPLOSION

If you discover an emergency (*e.g. fire*) and you are the first on the scene, carry out the following procedure:

- Shout out a warning and alert people in immediate area!
- **Contact Emergency Controller** by phone on **Ext**. … or **MOBILE** …… or **using internal radio system** to advise them of the situation.
- If you consider that you can without endangering yourself or others, contain / control the emergency you should:
  - ***Take necessary steps to control emergency***

    (e.g. Use appropriate fire extinguisher, contain leak or spillage.)
- **Leave** by nearest exit, close doors behind you.
- **Go** to designated Assembly Point within site compound.
- **Remain** at **"Assembly Point"** until all clear is given by the **Emergency Controller** to return to the workplace.

EVACUATION PROCEDURE IN THE EVENT OF NON–FIRE/EXPLOSION

If you discover an emergency other than fire or explosion (*e.g.* ***Spill or Flood***) and you are the first on the scene, carry out the following procedure:

- Shout out a warning and alert people in immediate area!
- **Contact Site Emergency Controller** by phone on **Ext**. … or **MOBILE** …… or **using internal radio system** to advise them of the situation.
- If you consider that you can without endangering yourself or others, contain / control the emergency you should:
  - ***Take necessary steps to control emergency***

    (e.g. Use appropriate fire extinguisher, contain leak or spillage, use pumps.)
- **Leave** by nearest exit, close doors behind you.
- **Go** to designated Assembly Point within site compound.
- **Remain** at **"Assembly Point"** until all clear is given by the **Emergency Controller** to return to the workplace.

EVACUATION PROCEDURE IN THE EVENT OF TERRORISM

If you discover an emergency (e.g. terrorism) and you are to carry out the following procedure:

- Keep Calm down!
- **Contact Emergency Controller** by phone on **Ext**. …or **MOBILE** ……. or **using internal radio system** to advise them of the situation.

EVACUATION PROCEDURE IN THE EVENT OF FIRE – WORKER CAMP / ACCOMMODATION

If you discover a fire within the camp facility (sleeping quarters, dining hall, etc.):

- Shout out a warning and activate the nearest fire alarm.
- **Contact Emergency Controller** by phone on **Ext**. …or **MOBILE** ……. immediately.
- Attempt to extinguish small fires using a nearby extinguisher only if safe to do so.
- Do not stop to collect personal items.
- Evacuate using marked exit doors and follow escape route signage.
- Proceed to the Camp Muster Point (outside the main dining facility).
- Camp personnel must not return until declared safe by the Emergency Controller and/or Fire Brigade.

EVACUATION PROCEDURE IN THE EVENT OF EMERGENCY – TUNNEL WORK AREA

If an emergency (e.g. fire, gas leak, collapse) occurs in a tunnel area, follow the steps below:

- Shout out a warning and alert all personnel in the tunnel.
- Immediately inform the Emergency Controller via radio or internal communication system.
- Do NOT use any electrical equipment unless instructed.
- Use designated tunnel escape routes (as marked) and proceed on foot to the tunnel portal.
- If available, activate emergency lighting and ventilation systems.
- Assist any injured person only if safe to do so.
- Exit through the nearest safe egress point.
- Once outside the tunnel, proceed to the designated Tunnel Assembly Point located near the portal entrance.
- Remain at the Assembly Point until clearance is given by the Emergency Controller.

EVACUATION PROCEDURE IN THE EVENT OF STRUCTURAL INCIDENT – BRIDGES OR ELEVATED WORK ZONES

In case of suspected collapse, movement, or instability on a bridge, viaduct or similar structure:

- Evacuate immediately using access ladders or ramps if available.
- Do NOT attempt to retrieve tools or materials.
- Alert others verbally and notify the Emergency Controller by radio.
- Emergency personnel will restrict entry until structural stability is confirmed.
- Assemble at the nearest safe open area as defined in bridge-specific signage plans.
- Follow instructions from Emergency Controllers and avoid returning to the structure until professionally inspected.

EVACUATION PROCEDURE IN THE EVENT OF GENERAL SITE INCIDENT – OPEN CONSTRUCTION AREA

If a hazardous incident occurs in the general construction site (e.g. heavy equipment failure, fuel spill, explosion):

- Warn surrounding workers loudly and clearly.
- Leave the immediate area using the safest path, avoiding machinery and excavation zones.
- Notify Emergency Controllers or Emergency Wardens.
- Do not block access routes for emergency responders.
- Proceed to the designated General Site Muster Point.
- Wait at the Assembly Point and do not return to the site unless authorized.

HUMAN RESOURCE AND LABOR MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.04.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

HUMAN RESOURCE AND LABOR MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CLO	Community Liaison Officer
CSOs	Civil Society Organizations
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
GBVH	Gender-Based Violence and Harassment
HR	Human Resources
IFC	International Finance Corporation
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
OHS	Occupational Health and Safety
RCA	Root Cause Analysis
SEP	Stakeholder Engagement Plan
WHO	World Health Organization

HUMAN RESOURCE AND LABOR MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Human Resources and Labor Management Plan ("the Plan" or "HR-LMP") has been prepared for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan is to identify labor-related risks and outline mitigation, control, and monitoring measures to minimize adverse social impacts and ensure fair and compliant workforce management during the construction phase.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The Plan has been developed in alignment with applicable national labor legislation and relevant international standards, including the requirements of international financial institutions. It outlines actions that should be done to manage recruitment, employment conditions, worker welfare, and labor rights effectively across construction-related activities and facilities. This Plan will provide mitigation alternatives and a monitoring schedule in accordance with Turkish labor law and international labor standards.

This Plan should be applied by all parties involved in the construction phase, including the Project Sponsor, Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ), the Main Contractor (Limak), and all subcontractors. Responsibilities for the implementation, monitoring, and reporting of labor-related practices should be clearly assigned. Necessary updates to the Plan should be considered in case of changes in workforce structure, construction methodology, or regulatory requirements.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This Plan has been developed to align with both Turkish legislation and international standards that govern labor rights, occupational health and safety, and overall workforce management. The references below should be used to guide the implementation and ensure that the Plan meets all required obligations during the construction phase.

II.1 National Requirements

The following primary regulations form the legal basis for labor management in Türkiye:

- Labor Law (No. 4857)
- Social Insurance and General Health Insurance Law
- Occupational Health and Safety Law
- International Labor Force Law
- Regulation on Annual Paid Leave
- Regulation on Working Hours under the Labor Law
- Regulation on Minimum Wage
- Communiqué on National Occupational Standards
- Regulation on the Procedures for Determining Loss of Working Ability and Occupational Earning Capacity
- Communiqué on Short-Time Working and Short-Time Working Allowance Pursuant to Article 65 of Labor Law No. 4857
- Regulation on the Implementation of the Law on Identity Notification
- Regulation on Workplace Physician Work Approval by the Turkish Medical Association

Compliance with these regulations is mandatory, and ongoing monitoring and reporting should be conducted to verify adherence throughout the construction phase.

II.2 International Standards and Conventions

In addition to national regulations, the Plan relies on internationally recognized standards to ensure comprehensive labor management and protection of workers' rights:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 2: Labor and Working Conditions
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- Equator Principles IV (2020)
- Promotional Framework for Occupational Safety and Health Convention (2006)
- Worst Forms of Child Labor Convention (1999)
- Safety and Health in Mines Convention (1995)
- Safety and Health in Construction Convention (1988)
- Health Services Convention (1985)
- Termination of Employment Convention (1982)
- Occupational Safety and Health and the Working Environment Convention (1981)
- Tripartite Consultation (International Labor Standards) Convention (1976)
- Human Resources Development Convention (1975)
- Minimum Age Convention (1973)
- Workers' Representatives Convention (1971)
- Equality of Treatment (Social Security) Convention (1962)
- Discrimination (Employment and Occupation) Convention (1958)
- Abolition of Forced Labor Convention (1957)
- Social Security (Minimum Standards) Convention (1952)
- Equal Remuneration Convention (1951)
- Right to Organize and Collective Bargaining Convention (1949)
- Labor Clauses (Public Contracts) Convention (1949)
- Protection of Wages Convention (1949)
- Minimum Age (Industry) Convention (Revised) (1937)
- Forced Labor Convention (1930)

These references will be used to guide the implementation, monitoring, and performance evaluation of labor practices across the construction phase of the Project, ensuring compliance with international labor rights, occupational standards, and ethical employment principles.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Human Resources and Labor Management Plan:

- Occupational Health and Safety Management Plan
- Community Health and Safety Management Plan
- Subcontractor Management Plan
- Traffic Management Plan
- Construction Campsite Management Plan
- Environmental Accident and Spill Response Management Plan
- Security Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

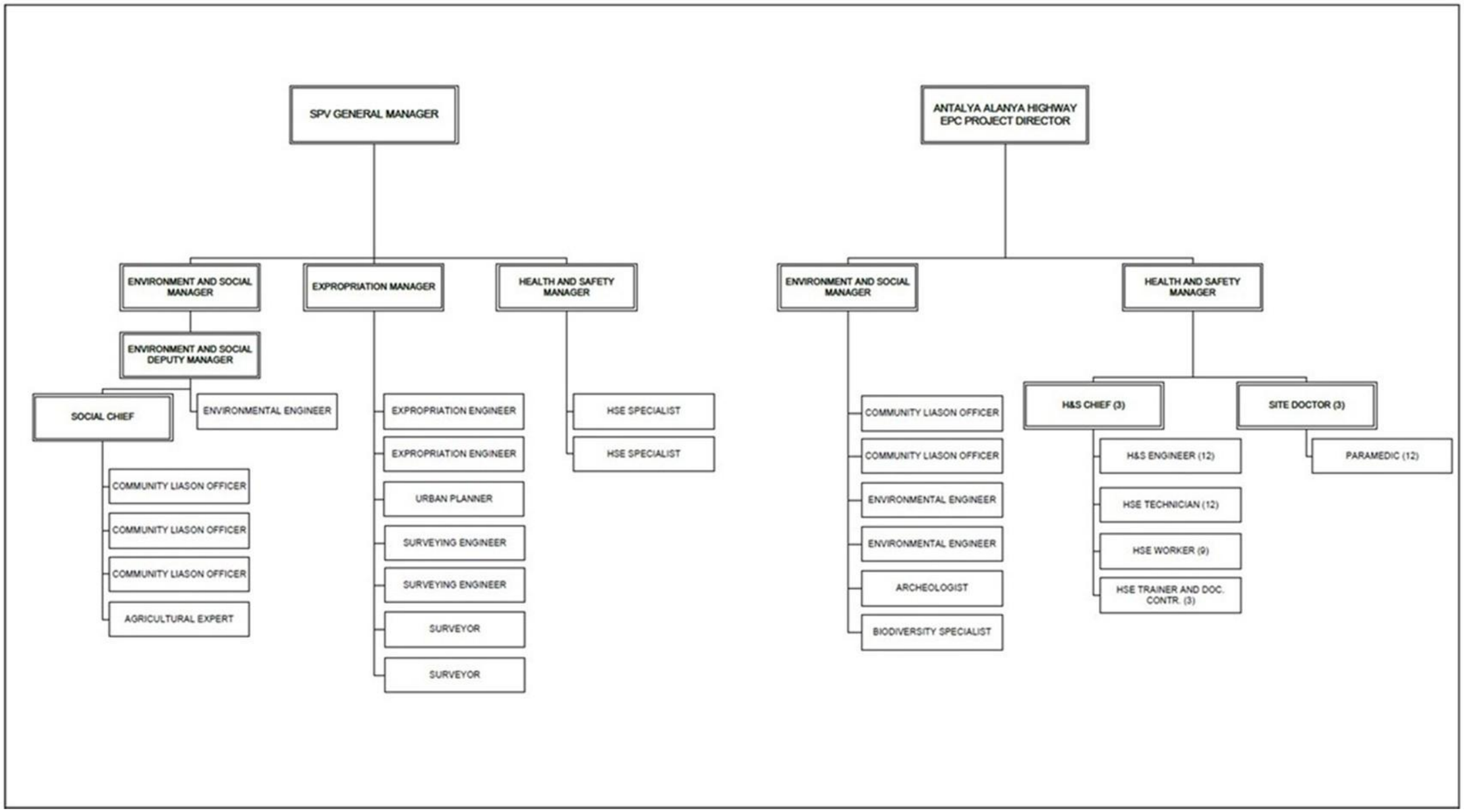

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators.

Roles	Responsibilities
	• Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety.

Roles	Responsibilities
	• Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management.

Roles	Responsibilities
	• Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams.

Roles	Responsibilities
	• Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments.

Roles	Responsibilities
	• Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews.

Roles	Responsibilities
	• Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements.

Roles	Responsibilities
	• Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.

Roles	Responsibilities
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards.

Roles	Responsibilities
	• Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.

Roles	Responsibilities
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements.

Roles	Responsibilities
	• Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks.

Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise.

Roles	Responsibilities
	• Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies.

Roles	Responsibilities
	• Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks.

Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks.

Roles	Responsibilities
	• Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean up efforts as guided by supervisors

Roles	Responsibilities
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs.

Roles	Responsibilities
	• Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.

Roles	Responsibilities
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. HUMAN RESOURCES AND LABOR MANAGEMENT APPROACH

The effective management of human resources during the construction phase of the Project is critical to ensuring fair labor practices, the protection of workers' rights, and the promotion of safe, equitable, and respectful working conditions in alignment with both national labor legislation and IFC Performance Standard 2 requirements. The construction workforce will include both directly employed personnel and subcontracted workers, who will be engaged in diverse activities such as earthworks, material handling, structural installation, and operations at supporting facilities including camps, administrative units, and batching plants.

Key labor-related risks anticipated during the construction phase include non-transparent or unfair recruitment practices, as through unauthorized agencies or lack of proper contracts, insufficient clarity regarding terms of employment, limited occupational health and safety protections, discriminatory practices, and the potential for forced or child labor, particularly in contexts where subcontractors are engaged. Additionally, restricted access to effective grievance mechanisms and the absence of collective bargaining provisions may further exacerbate vulnerabilities among the workforce particularly in subcontractor-led employment contexts

Additionally, since the construction activities will be completed in 3 years, retrenchment will be an issue at the end of the construction phase that needs proper management and will require compliance with Turkish Labor Law regarding notification, severance, and fair dismissal practices. To minimize the adverse socioeconomic impacts of workforce downsizing following the completion of the construction phase, a Retrenchment Plan will be prepared in line with IFC Performance Standard 2.

To address these risks, the human resources and labor management approach for the Project will be grounded in full compliance with applicable Turkish labor legislation and aligned with international standards, particularly the International Finance Corporation (IFC) Performance Standards—most notably, Performance Standard 2 on Labor and Working Conditions. This approach aims to ensure transparent hiring processes through job announcements, documented eligibility, and objective interviews, equal treatment and non-discrimination in recruitment, wages, and promotion decisions, the prohibition of forced and child labor including strict monitoring of subcontractor practices and zero tolerance for ID retention, the provision of fair wages, regulated working hours and leave entitlements with overtime monitored to remain within national legal limits and reported monthly, and the maintenance of safe and healthy working conditions in line with OHS planning, PPE provision, and risk-based training. It also includes the protection of workers' rights to freedom of association and collective bargaining recognized for both directly hired and subcontracted personnel and access to functional and confidential grievance mechanisms supported by worker training and anonymous reporting channels.

All parties involved in construction activities—including the Project Sponsor (AAOİAŞ), the Main Contractor (Limak), and all subcontractors—are expected to incorporate these principles into their labor management systems and ensure their practical implementation in the field through site-specific procedures, performance monitoring, and regular internal audits. Labor-related risks and impacts will be prevented or minimized through proactive planning, regular monitoring, and timely corrective actions where necessary including contractor non-compliance escalation procedures.

It is important to note that this Plan has been specifically developed for the construction phase of the Project. Labor-related issues associated with the operational phase fall outside the scope of this Plan.

The AAOİAS has published its human resources policy on its website and will implement the Human Resources Policy as outlined below. Within the scope of the project, the EPC contractor Limak

and its subcontractors will work in accordance with this policy ensuring full horizontal and vertical alignment across all entities responsible for labor and workforce management.

"The Human Resources Policy of Antalya Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş adopts a participatory and value-creating Human Resources Management approach based on the principles of change and transformation within the scope of the vision, mission, competencies and ethical values of Limak Group of Companies.

In the light of the Corporate Equality Policy, it is aimed to raise awareness in every employee through providing a fair, transparent, efficient, healthy and development-oriented work environment supporting gender equality this includes gender-sensitive hiring, inclusive communication, and promotion of women into leadership roles*. Within the framework of the principles of equality and inclusion, we are completely against to discriminatory factors based on all individual characteristics such as gender, age, marital status, religion, language, ethnicity, pregnancy status or pregnancy possibility and disciplinary practices which all attitudes and behaviors that may harm human dignity such as corporal punishment, physical/psychological pressure, insults and ill-treatment in our entire practices starting from the recruitment process to training, promotion, performance management, career management and remuneration* all aligned with IFC PS2 expectations regarding fair treatment and non-discrimination*. An egalitarian and inclusive communication language which the skills and competencies are supported is used for all written and verbal communication within and outside of the company.*

Antalya Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş acts with the awareness of social responsibility in preventing the employment of persons under the age of 18 and/or child labor in accordance with laws, legislations and regulations this includes age verification practices, ID checks, and zero tolerance for informal recruitment pathways*. Due to its working principles, it pays attention not to exceed the working hours stipulated in the legal legislation, excluding short term extraordinary business conditions* with overtime monitoring integrated into monthly subcontractor reports*. In recruitment processes, we prioritize female candidates among female and male candidates with equal qualifications. Positive approaches and practices such as providing positions to female employees with a decision-making authority in middle and senior management, encouraging female employees to return to work after childbirth and preventing potential losses in their career development, representation of women in jobs, professions and sectors traditionally dominated by men and involving more men in jobs, professions and sectors traditionally dominated by women, ensuring a balance between the professional and private life and encouraging the sharing of the unpaid workload in the house equally between women and men, including childcare and involved fatherhood (fathers as parents take an active role/responsibility in childcare and development) are fully supported* in alignment with international gender equality standards

Based on the positions at the organizational level and the competencies of the employees, we pay regard to a fair remuneration system which is compatible with competition and market conditions, fair and sensitive to the principles of equality including the principle of equal pay for work of equal value as defined under Turkish labor law and IFC PS2*. The entire rights of the employees are protected in accordance with the principle of equal pay for the work of equal value. By applying a fair, transparent, inclusive and egalitarian performance evaluation system that measures the knowledge, experience, effort and behavior, system outputs are ensured to form the basis of development and promotion processes. The career paths of all employees are managed with the development-oriented principle and the employees are encouraged to participate in personal, technical and vocational training programs in accordance with their development requirements* supported by structured and documented training programs outlined in this Plan*. Internship programs are provided to students in order to motivate them to gain experience in their professional development processes.*

"Zero Tolerance Policy" is adopted against violence, domestic violence and/or violation of sexual inviolability among employees, between employees and stakeholders and/or among stakeholders at the work environment and in possible cases, all the sanctions related to the Zero Tolerance Policy are put into practice this includes cases of sexual harassment, GBVH, and workplace retaliation and ensures clear disciplinary enforcement mechanisms*. Incentives are provided to increase the motivation of the*

employees and to strengthen the organizational commitment in accordance with the findings obtained from the practices aimed at increasing employee satisfaction throughout the group companies. It is important to establish the balance between the private and professional lives of the employees through the effective implementation of policies and procedures within the scope of work life balance which includes psychosocial risk mitigation and staff retention."

VI. MITIGATION MEASURES FOR LABOR-RELATED RISKS AND IMPACTS

The following measures will be implemented across all Project sites to prevent or minimize labor-related risks and ensure fair, safe, and compliant workforce management throughout the construction phase:

Recruitment and Hiring Procedures

- Workforce requirements for unskilled, semi-skilled, and skilled positions will be forecasted systematically and in a timely manner during the planning stage of each project unit. Sufficient time and internal resources will be allocated to identify suitable local and regional candidates.
- A standardized recruitment process will be followed, including the identification of staffing needs, development and approval of job descriptions, and definition of qualifications and competencies required for each position. These steps will ensure consistency, transparency, and fairness across all hiring practices.
- Job descriptions will be developed based on a standard template and finalized by the relevant unit managers, reflecting competency-based criteria. This process will help define roles clearly and align them with project requirements.
- Recruitment advertisements will be posted after obtaining the necessary internal approvals from the Project Sponsor (AAOİAŞ) and will be announced by the Contractor (Limak) and all subcontractors. Advertisements will include application procedures and employment conditions.
- Job vacancies will be announced through accessible channels, including local newspapers, online job portals, municipal and community boards, and in coordination with local leaders (e.g., village heads or muhtars) to reach residents in nearby settlements. For specialized roles, professional recruitment firms will be engaged as needed.
- All applicants will be required to submit a completed application form and/or a résumé summarizing their relevant experience and qualifications. As a minimum eligibility requirement, all candidates must be at least 18 years old at the time of employment and pass a health examination in accordance with applicable occupational health standards.
- The recruitment process will be open, fair, and non-discriminatory, and will be free from bias based on ethnicity, gender, age, disability, sexual orientation, or religious and political beliefs. All Project participants—including the Project Sponsor, the Contractor, and subcontractors—will be required to comply with these principles.
- If labor intermediaries or recruitment agencies are used, they will be required to ensure fair and transparent practices, including the prohibition of recruitment fees and adherence to this Plan's standards. Reasonable efforts will be made to verify their compliance with these requirements.
- Information about workers' rights will be provided to all new hires at the time of onboarding. All employment will be conducted in accordance with Turkish Labor Law and relevant international labor standards.
- Where accommodation or worker camps are provided, these facilities will be managed in line with national legislation and international standards for worker welfare and living conditions. The management of such facilities will be overseen by the Contractor in coordination with the Project Sponsor.

- The Project will ensure equal employment opportunities for women and men. If qualifications are met, female candidates will be given preference in hiring, and wage structures will be based on the principle of equal pay for work of equal value.

- Specific measures will be implemented by subcontractors to enhance employment access for vulnerable groups, including women and youth. These measures may include gender quotas in candidate pools, use of inclusive language in job postings, and collaboration with local employment agencies.
- Priority will be given to applicants residing in directly affected settlements or the nearby project area, in line with the local employment commitment of the Project. Employment opportunities will be accessible to all eligible persons regardless of their background.
- A phased recruitment approach will be adopted to prioritize candidates from directly affected settlements during the initial hiring process. If the required qualifications or experience cannot be met locally, the search will be extended to the regional and national labor markets.
- During the hiring process, the Project Sponsor (AAOİAŞ), the Contractor (Limak), and subcontractors will ensure that local communities are informed about job opportunities and application procedures in a timely and transparent manner. Public announcements will be made using accessible communication channels such as village heads (muhtars), bulletin boards in common gathering places, and other appropriate methods.
- A functioning grievance mechanism will be made available to all workers to raise concerns related to recruitment, employment conditions, or discrimination. The system will allow anonymous submissions and will be responsive, confidential, and free from retaliation.
- A Stakeholder Engagement Plan (SEP) will be implemented to ensure open and transparent communication with all project stakeholders, including local communities. Stakeholders will be encouraged to share their feedback, concerns, and expectations regarding employment through the Project's Grievance Mechanism.
- To maximize local capacity building, knowledge transfer, and workforce development, formal training programs will be designed. On-the-job training will be institutionalized wherever possible, with defined learning objectives and performance monitoring criteria.
- No child labor will be used in any phase or assignment of the project, and the minimum working age will be 18.
- Within the scope of the project, sectoral and regional labor force planning will be carried out according to labor demand.
- Labor recruitment from the region will be kept at the highest possible level.
- The demographic structure of the region for workers coming from outside Antalya to work within the scope of the project will not disrupt the socio-economic structure.

Employment Conditions

- All employees will be hired under written employment contracts, whether for a fixed or indefinite duration. These contracts will clearly state all terms of employment, including working hours, leave entitlements, and other relevant conditions, in accordance with national labor legislation and the Project's human resources policies.
- If the Project Sponsor, the Contractor, or any subcontractor becomes party to a collective bargaining agreement with a recognized labor organization, the provisions of that agreement will be honored. In the absence of such an agreement, or where working conditions are not specified, the Project will ensure reasonable and fair working conditions are established and maintained.
- All applicable leave entitlements—including annual leave, sick leave, and other statutory or contractual leave types—will be explicitly included in individual employment agreements. Leave

policies will comply with the Turkish Labor Law and will be communicated to all personnel at the time of hiring.

- In cases where accommodation is provided for workers, the Project will implement specific worker camp management plans to ensure safe, adequate, and hygienic living conditions. These plans will be aligned with national requirements and international standards on worker welfare.
- Accommodation services will be managed in accordance with the principles of non-discrimination and equal opportunity. The provision of housing will not restrict the freedom of movement, privacy, or freedom of association of employees.
- Transportation between accommodation sites and work locations will be arranged and provided by the Project Sponsor to ensure safe and reliable commuting for all workers. These services will be provided at no cost to employees.
- Salaries and wages paid to direct employees and subcontractor personnel will be consistent with the Company's human resources policies and compliant with national labor laws. Wages will be aligned with prevailing market rates and designed to ensure a living wage that meets the cost of living in the region.
- All personnel will be covered under the national social security system, including health insurance, workers' compensation, disability, and unemployment insurance schemes. These entitlements will be reflected in the written employment contracts and administered in compliance with the requirements of the Turkish Social Security Institution.

In line with Turkish Labor Law and IFC Performance Standard 2, the Project will ensure that overtime is performed on a voluntary basis and compensated in accordance with legal provisions. A system will be implemented to monitor overtime hours on a monthly and annual basis to ensure that national legal limits are not exceeded. All contractors and subcontractors will be required to submit disaggregated overtime records as part of monthly labor performance reports. Workers shall not be coerced into working overtime, and overtime arrangements will be reviewed regularly to assess potential risks to worker health, safety, and well-being.

Procedures for Termination and Workforce Reduction

- All dismissals and contract terminations will be carried out in full compliance with Turkish Labor Law and the internal human resources policies of the Project Sponsor (AAOİAŞ), the Main Contractor (Limak), and all subcontractors. The rights and entitlements of affected employees will be respected throughout the termination process.
- Employment terms, including duration of employment, dismissal procedures, and demobilization conditions, will be clearly communicated to all employees at the time of hiring. These conditions will be explicitly stated in individual employment contracts.
- In the event of demobilization at the completion of the construction phase or workforce downsizing due to unforeseen circumstances, termination procedures will be implemented with transparency and fairness. The Human Resources Unit will be responsible for overseeing and further developing these procedures where necessary.
- Project scheduling and potential demobilizations, especially for temporary construction roles, will be regularly discussed with worker representatives during meetings organized by the Human Resources Unit. This will ensure workers are adequately informed in advance and prepared for planned employment transitions.
- The Project will make all reasonable efforts to avoid mass dismissals. Where unavoidable, such as in cases of workforce demobilization or restructuring, a formal downsizing and dismissal plan will be prepared and implemented to mitigate negative social and economic impacts.

- Prior to any collective dismissal, the Project will explore alternative options to reduce the need for job losses. If no viable alternatives are identified, a termination plan will be developed in line with national legislation and international good practice.
- The collective dismissal plan will include provisions to ensure compliance with non-discrimination principles, reflect consultations held with labor unions or worker representatives, and adhere to any existing collective bargaining agreements.
- If collective dismissal becomes necessary, a 30-day prior notice will be submitted to İŞKUR. Consultations will be held with unions or, if absent, elected worker representatives to review dismissal reasons, scheduling, compensation, and mitigation of social impacts.
- Legal obligations regarding notifications to authorities, consultations with stakeholders, and provision of accurate information to workers will be fulfilled. This includes advance notice to unions or representatives and timely reporting to formal government institutions such as İŞKUR.
- Severance pay will be provided in accordance with the requirements of Turkish Labor Law or as agreed with labor unions or representatives. As a minimum, employees will receive severance equivalent to one month's base wage per year of service.
- All unpaid dues, including delayed salary payments, social security contributions, and retirement entitlements, will be settled on or before the termination date. Payments will be made directly to the employees or to relevant institutions in line with legal requirements or collective agreements.
- Transparent and objective criteria will be used in determining employees subject to dismissal. These criteria will include length of service, technical skills, performance evaluations, disciplinary records, and attendance history.
- A formal dismissal plan will be prepared and communicated to affected employees, including key information such as reasons for dismissal, the timeline of implementation, selection criteria, severance calculation methods, and possible support for re-employment or retraining.
- The termination process will be designed to avoid gender bias and ensure equal treatment for all employees. Fair consultation and grievance mechanisms will be made available throughout the process to address worker concerns promptly and effectively.
- The implementation of all dismissal-related actions will be closely monitored to ensure compliance with legal requirements, Project standards, and resolution of any grievances submitted by affected employees.

Freedom of Association and Collective Bargaining Rights

- All workers will be treated fairly and respectfully, regardless of their union membership status. The Project Sponsor (AAOİAŞ), the Main Contractor (Limak), and all subcontractors will act in accordance with Turkish labor law and international standards to ensure non-discriminatory and equitable behavior toward all personnel.
- Workers will be granted the right to freely associate and to form or join labor unions of their choice without interference, intimidation, or retaliation. The freedom to organize will be protected, and no punitive actions will be taken against workers who exercise this right.
- Collective bargaining rights will be respected, whether exercised through registered unions or elected worker representatives where unions are not present. Representatives will be selected through transparent, democratic processes, and their roles will be formally acknowledged across project worksites.
- In cases where a collective bargaining agreement exists or is negotiated during the Project, its terms will be implemented without exception. Renegotiation processes will be conducted in accordance with the Turkish Labor Law, with sufficient notice provided to representatives before initiating formal discussions.

- The Project will establish cooperation with local municipalities, civil society organizations (CSOs), labor associations, and local employment offices to promote and support workers' rights, including the right to organize and bargain collectively.
- Under no circumstances will the Project obstruct, discourage, or restrict the rights to freedom of association or collective bargaining. A culture of open dialogue and constructive engagement between management and workers will be promoted across all Project sites.

Internal Worker Grievance and Suggestion System

- A dedicated Grievance and Suggestion Mechanism will be established and made available to all workers to express their concerns, requests, suggestions, or complaints related to workplace conditions. The system will be formally introduced to employees and its accessibility will be ensured throughout the construction phase.
- Contractors and subcontractors will also be required to implement similar internal communication mechanisms for their workforce. Alignment with the Project's overarching grievance procedures will be monitored to ensure consistency and fairness across all levels of the workforce.
- During onboarding, all employees will be informed about the Grievance and Suggestion Mechanism, including how to access it and submit feedback. Continuous awareness-raising will be conducted to ensure that all workers understand the purpose and functionality of the mechanism.
- The mechanism will follow a transparent, fair, and accessible process for all employees. Every submission will be reviewed in detail, and necessary actions will be taken to ensure that comprehensive investigations and appropriate resolutions are provided in a timely manner.
- Relevant departments and designated management representatives will be involved in the resolution process, depending on the nature and scope of the issue. All grievances will be addressed promptly, and feedback will be shared with the submitters without fear of retaliation.
- Confidentiality will be strictly maintained where required, especially in cases involving sensitive or personal issues. Anonymous submissions will also be accepted and treated with equal seriousness and commitment to resolution.
- The Grievance and Suggestion Mechanism will not replace or restrict access to legal remedies under applicable national legislation, nor will it override any provisions established under collective bargaining agreements. Instead, it will function as a complementary internal tool to address workplace concerns effectively and proactively.

Safeguarding Labor Rights

- Forced Labor and Modern Slavery will not be tolerated in any form throughout the Project. All labor will be freely chosen, and workers will not be subject to coercion, bonded labor, trafficking, or the withholding of personal documents. Employment terms will be clearly communicated in writing, recruitment fees will not be charged to workers, and subcontractors will be monitored and contractually obligated to comply with national laws and international labor standards.
- The prohibition of forced labor, modern slavery, and coercive employment practices, the Project is developed a stand-alone Code of Conduct (CoC) document applicable to all EPC and subcontractor personnel. This document will outline behavior expectations, reporting responsibilities, and a zero-tolerance stance on retaliation, harassment, and discrimination. A specific training module on the CoC will be incorporated into the onboarding process for all new hires and reinforced through annual refresher sessions. Signed acknowledgments from workers will be collected and retained on site to ensure traceability and compliance.

- Child Labor will be strictly prohibited across all Project activities, in full compliance with Turkish legislation and international standards. No individual under the age of 18 will be employed by the Project Sponsor (AAOİAŞ), the Main Contractor (Limak), or any subcontractor. Age verification through official documentation (e.g., national ID, passport, birth certificate) will be mandatory, and if underage employment is identified, immediate and responsible termination of the employment will be done in the best interest of the child.
- Occupational Health and Safety (OHS) measures will be implemented to ensure a safe and healthy working environment for all Project personnel, with specific attention to industry-specific and gender-related risks. All foreseeable hazards will be assessed and mitigated, and an Emergency Preparedness and Response Plan will be enforced in line with national regulations and international best practices. The Project will take all reasonable steps to prevent work-related accidents, injuries, and illnesses during construction activities.

Oversight of Subcontractor and Supplier Labor Practices

- All subcontractors working within Project sites will be required to comply with the labor, health, safety, environmental, and social standards defined in this Plan and relevant contractual documents. Where necessary, subcontractors will be required to develop their own labor management procedures or systems in line with the Project's standards.
- Subcontractors will prioritize the hiring of local labor wherever possible. In cases where external labor is used, accommodations will be provided near the Project area to help support the local economy. All working and living conditions will comply with applicable Turkish legislation and international standards adopted by the Project.
- The working conditions of subcontractors and their employees will be monitored monthly by Human Resources, Procurement–Technical Office, and Environmental and Social Units. Monitoring will focus on compliance with labor laws, occupational health and safety (OHS), and human rights standards.
- All subcontractor and supplier contracts will explicitly reference compliance with Turkish labor law, ILO conventions, and IFC Performance Standards, including provisions on freedom of association, non-discrimination, and the prohibition of child labor and forced labor. Contracts will also state the consequences of non-compliance and the Project's right to audit and enforce corrective measures.
- The Project Sponsor (AAOİAŞ), Main Contractor (Limak), and subcontractors will be required to commit to responsible sourcing and anti-corruption principles. Subcontractors will be asked to sign declarations affirming adherence to these standards.
- Prior to onboarding any new subcontractor, the Human Resources Department will assess the subcontractor's past performance in labor and OHS management. The subcontractor will be required to provide labor policies, procedures, and evidence of internal systems that comply with this Labor Management Plan.
- A formalized screening procedure shall be implemented specifically for labor intermediary agencies (e.g., recruitment firms, manpower suppliers) engaged by EPC contractors or subcontractors.
- Pre-engagement verification of licenses, registrations, and certifications in accordance with Turkish labor legislation will be conducted.
- Public record and media screening to identify any past human rights violations or reputational risks will be performed.
- Mandatory commitment from intermediaries not to retain workers' identification documents, in alignment with the prohibition of forced labor will be obtained.
- Standardized compliance checklist covering requirements under Turkish Labor Law and IFC Performance Standard 2, prior to contract finalization will be completed.

- Subcontractors will be required to submit records, including employment contracts, grievance resolution logs, and OHS audit reports, records of training and certifications, and documentation of social security payments. These records will be reviewed by the Human Resources (HR) and OHS departments and will serve as the basis for compliance verification.
- Subcontractors will be subject to periodic audits, inspections, and spot checks by the Project's HR Chief to ensure alignment with Project requirements. Labor audits will also be conducted quarterly and documented for transparency and continuous improvement.
- The Procurement and Technical Office will verify subcontractors' previous contracts and licenses and ensure that IFC PS2-compliant clauses are included in agreements. Suppliers' qualifications, registrations, and relevant permits will also be reviewed prior to contract approval.
- If forced labor or child labor risks are identified in the primary supply chain or reported in lower-tier suppliers, appropriate corrective actions will be taken in line with IFC Performance Standard 2. Where resolution is not feasible, suppliers may be replaced to ensure compliance with international labor standards.
- Subcontractors will be expected to provide evidence that their workforce management systems include policies on non-discrimination, human rights, OHS, and freedom of association. They will also be responsible for ensuring their workers have valid certifications or permits for performing technical tasks.
- Subcontractors must ensure their workers have full access to grievance mechanisms, and all complaints—including those related to GBVH (gender-based violence and harassment)—must be recorded and addressed appropriately. Compliance with grievance protocols will be reviewed as part of the monthly labor performance evaluation.
- To ensure consistent ethical standards across the workforce, the CoC will be made binding for all EPC and subcontractor employees. Signed acknowledgments will be collected and stored at site level and included in subcontractor audit reviews.

Capacity Building and Employee Development

- The training needs of Project employees will be accurately assessed to support the development of both personal and technical competencies. Suitable training programs and qualified trainers will be identified, and the effectiveness of training will be objectively measured to support continuous performance improvement.
- Training plans will be developed by individual departments in accordance with the Project's Communication and Training Plan. These plans will be reviewed and implemented on an annual basis to ensure their alignment with the evolving needs of the construction phase.
- The Project will aim to ensure that employees are equipped to perform their tasks with maximum efficiency and satisfaction. Through structured training opportunities, workers will be supported in developing the skills and motivation necessary for high performance.
- All training records will be securely maintained by the Human Resources Department and/or the Environmental and Social Interaction Department. Proper documentation will support monitoring, internal tracking, and compliance with external reporting requirements.
- Training programs will be designed to enhance the personal and technical competencies of Project personnel, with a focus on continuous performance improvement. The accurate assessment of training needs, selection of appropriate trainers, and measurement of outcomes will be prioritized to ensure meaningful capacity development.
- Training planning will be developed by individual departments and implemented annually, in accordance with the Communication and Training Plan. This approach will ensure that training activities are tailored to evolving site-specific requirements and performance feedback.
- The Project aims to ensure that employees not only perform their duties effectively but also remain motivated and engaged through relevant and high-quality training. Training will contribute to a culture of professional growth and job satisfaction.

- All training records will be maintained by the Human Resources Department and/or the Environmental and Social Interaction Department. Proper documentation of training will support internal monitoring and external reporting obligations.
- In collaboration with local authorities and organizations, training opportunities targeting local communities and potential workers will be identified and promoted. These efforts will help improve local capacity and expand the pool of qualified candidates for Project-related employment.
- Prior to the commencement of construction, and following the selection of main contractors, targeted training sessions will be delivered to contractors and subcontractors. These trainings will cover the Project's environmental and social (E&S) requirements, including occupational health and safety (OHS), gender equality, GBVH (gender-based violence and harassment), socioeconomic policy awareness, and worker welfare standards.
- Recruitment and orientation programs will include essential information about the Project's health and safety systems, gender-specific occupational risks, and expected conduct on and off duty. This will support the internalization of E&S culture and ensure a consistent understanding of safety and behavior protocols.
- To promote the participation of women in the workforce, targeted training will be provided where necessary, along with measures such as flexible work arrangements or job-sharing options for women with childcare responsibilities. The Project Sponsor (AAOİAŞ) and the Main Contractor (Limak) will require subcontractors to adopt measures such as gender quotas, collaboration with local employment institutions, and the use of inclusive language in job advertisements to enhance access to employment for women and vulnerable groups.
- A dedicated gender training program will be implemented for team leaders and gender focal points to support the operationalization of the Gender Strategy. These sessions will ensure gender-sensitive leadership and inclusive team management across the Project.
- A GBVH policy will be enforced, and all Project workers will be informed of the expected standards of behavior, both during and outside working hours, through onboarding and awareness sessions. Disciplinary procedures, including termination in cases of unacceptable behavior, will also be clearly communicated.
- Occupational health and safety (OHS) training programs will include not only standard safety protocols but also behavior expectations and discipline procedures. The training content will align with the requirements of the Project's OHS plans and procedures, covering all personnel involved in construction works.
- All personnel involved in grievance management will receive specialized training, which will include key concepts related to gender (such as gender sensitivity, GBVH, and inclusive terminology), procedures for managing worker complaints, referral pathways, defined roles and responsibilities, and monitoring and reporting obligations. This will ensure that grievance cases—especially those involving sensitive issues—are handled effectively and respectfully.

VII. TRAINING

Upon hiring, all personnel will be provided with structured training to ensure they are fully informed about the Project's labor standards, expectations, and procedures. Trainings will include key topics such as labor rights, workplace responsibilities, grievance mechanisms, acceptable conduct, and occupational health and safety. These sessions will help ensure that all employees understand their rights and obligations under Turkish labor law and international labor standards.

In accordance with the Communication and Training Plan, training programs will be implemented to support the effective application of the Human Resources and Labor Management Plan. At a minimum, these will cover the purpose, scope, and content of the Plan, implementation procedures,

responsible parties, worker rights, and fundamental human rights. Additional training will also address gender equality, non-discrimination, freedom of association, prevention of child and forced labor, and codes of conduct related to workplace behavior, including off-duty expectations.

Refresher trainings will be conducted periodically to reinforce key messages and address updates in legislation or internal procedures. All training activities will be designed to support continuous improvement, raise awareness, and strengthen the overall performance of workforce management systems. Training records will be maintained systematically by the Human Resources Department and/or the Environmental and Social Interaction Departments for verification, monitoring, and reporting purposes.

Level 1 Training

Level 1 Training, which will last at least 2 hours, is also called “OHS Initial Training” and is given by the EPC’s H&S Manager/Chief/Expert to cover all Antalya-Alanya Motorway Project, subcontractor and supplier employees. Those who have not received this training are not allowed to enter the construction site or work in the field. The content of the training and revisions are subject to the approval of the H&S Manager/Chief.

The topics covered in this training are as follows:

- Integrated Management System Policy
- OHS and Environmental Principles
- OHS and Environmental standards, rules and practices
- Risk assessment
- Emergency preparedness and response
- Any special hazards associated with activities
- Incident/accident management, near-misses
- Traffic safety
- Environmental awareness
- Pollution prevention
- Waste management
- Proper use and maintenance of personal protective equipment (PPE)
- Proper use of machinery and electrical equipment
- Brief description of the project and Project subject works
- Basic legal requirements related to OHS
- Legal rights and responsibilities of employees
- OHS rules of the Antalya-Alanya Motorway Project
- Project OHS Plan
- Project OHS rules and responsibilities of employees
- Project emergency management practices

For short-term visitors who will not be working on the construction site, OHS This training program is subject to the short version (initial briefing) given by the Manager/Chief/Expert. Visitors who do not attend this briefing session cannot enter the construction site.

Level 2 Training

Level 2 Training programs are also called “job specific OSH training” and are provided due to the risks associated with the work to be performed. Subcontractors and suppliers are responsible for providing these training programs for their own employees and training records will be submitted to the H&S Manager of EPC.

Level 3 Training

Level 3 Training includes “advanced OSH training programmes” that are required for advanced qualifications or are specific to the task to be performed (first aid personnel or emergency management team member training, and similar training).

Annual planning covering all the above mentioned training programs will be made by the OHS Manager/Chief using the Annual OHS Training List which will be reviewed by the OHS Department every January and submitted to the Project Manager for approval. Similarly, the same planning will be requested from subcontractors.

In order to receive feedback from the participants, a training evaluation form will be used for half-day or longer programs. Subsequent activities will be followed up by the OHS Manager/Chief after analyzing this feedback. Following the training programs, relevant tests will be applied to measure the understanding level of the participants.

Competency Assessment

To ensure that relevant training programs are effective and that workers have the skills, experience, abilities and knowledge required to perform their jobs safely, their competence should be assessed. Methods for this assessment include:

● Training Tests: Following all training, tests will be distributed to assess participants’ understanding and knowledge. The main topics of the tests will be:

o What the hazards are
o The range of hazards and how they can affect people
o How to assess risks and decide on appropriate controls
o Key elements of this plan
o How occupational health and safety legislation applies to the workplace

● Daily Field Observations: The H&S Manager and representatives will conduct daily field observations. While conducting these observations, they will check whether the employees are performing their duties in accordance with the occupational health and safety rules and measures. If a non-conformity is detected, they will warn the employee and may also instruct the relevant training to be given again. In addition, they will randomly ask questions to the employees about the occupational health and safety rules and measures and conduct interviews with them.

● Identified Hazards: Employees will be encouraged to report the hazards they detect during work. These hazards will be evaluated by the H&S Manager/ E&S Manager and representatives, and the quantitative and qualitative identification of the hazards will be an indicator of competence.

Toolbox Trainings

When a new job starts on site or when site conditions or hazards/risks change significantly; Site managers and supervisors or OHS and Environmental Manager/Engineer will conduct toolbox training to announce job-related information and instructions, job-specific hazards/risks and necessary control

measures to eliminate/reduce these risks. Training is conducted among small groups of employees assigned to perform specific jobs and the content of the training covers the following:

- Hazards/risks associated with the jobs in question and necessary control measures to eliminate/reduce these risks
- Deficiencies or negligence detected in site OHS and environmental inspections
- Use of PPE
- Any past accidents/incidents and lessons learned
- General order and organization
- Acting in accordance with warning signs and cautionary signs/labels.

It is always preferred and encouraged for employees to share their past experiences related to the job.

Basic OHS and Environmental Training

It is mandatory to receive Basic OHS and Environmental Training before being assigned to any work site. Employees who do not attend these trainings, including subcontractor employees, will not be allowed to work on site. Basic OHS and Environmental Trainings will be renewed periodically in order to refresh the information.

Visitor Training will also be provided to visitors before they enter the site, which includes basic topics such as general field OHS and Environmental rules, emergency preparation, use of PPE on site, etc.

All OHS and Environmental trainings to be given to employees are planned and recorded in the Annual Training Plan. Each training conducted will be recorded and evaluated. All records will be kept by the OHS and Environment unit.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of labor management and workforce-related mitigation measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific conditions, labor performance trends, stakeholder concerns, or changes in applicable labor legislation.

Monitoring activities will be coordinated by the Human Resources Department, in close collaboration with the Occupational Health and Safety (OHS), Environmental, and Construction Management teams. Key responsibilities will include verifying the implementation of recruitment procedures, monitoring working conditions and accommodations, evaluating compliance with labor rights and protections, and ensuring the consistent application of measures aimed at promoting fair employment practices and protecting vulnerable workers.

Regular labor monitoring will be conducted across all Project sites to evaluate compliance with national labor laws, IFC Performance Standards, and Project-specific employment requirements. This will include the review of key records such as employment contracts, social security registrations, wage and working hour records, training documentation, and grievance resolution logs.

The performance of contractors and subcontractors in implementing labor management requirements will be reviewed through human resources audits, site supervision reports, and field inspections. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to confirm the effectiveness of implemented measures and to ensure recurrence is prevented.

In addition to internal monitoring, inspections may be carried out by relevant public institutions, including the Ministry of Labor and Social Security, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may include review of employment records, on-site labor practices, and documentation of compliance with labor and social protection regulations.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of monitoring, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of human resources and labor mitigation measures and ensuring full compliance with national regulations and Project standards.

Table VIII.1 Key Monitoring Activities

Monitoring Parameter	Method	Frequency / Timing	Responsible Parties
Gender-disaggregated workforce records (female/male employment ratio)	Record review	Quarterly	AAOİAŞ, Independent Social Experts
Local/regional workforce participation tracking	Record review	Quarterly	AAOİAŞ, Independent Social Experts
Number of Project and contractor personnel who received training	Record review	Quarterly	AAOİAŞ, Independent Social Experts
Review of non-conformity records	Document review	Quarterly	AAOİAŞ, Independent Social Experts
Documentation of grievances under the Grievance Mechanism	Grievance log	Quarterly	AAOİAŞ, Independent Social Experts
Employment agreements and contract compliance	Document review	Quarterly	AAOİAŞ, Independent Social Experts
Number of work-related incidents, accidents, and near misses	Incident reporting	Quarterly	AAOİAŞ, Independent Environmental Experts
Number of personnel affected by infectious diseases	Health records	Quarterly	AAOİAŞ, Independent Environmental Experts
Source and quality of drinking water in worker camps and offices	Site inspections	Quarterly	AAOİAŞ, Independent Environmental Experts

In cases of non-compliance identified through internal oversight or external audits, Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ) will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All labor-related findings, including non-compliance incidents, grievances, or issues related to employment terms and working conditions, will be documented in accordance with national labor legislation and Project procedures. In the event of serious violations—such as confirmed cases of child labor, forced labor, or discrimination—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate legal, contractual, and procedural actions are taken.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Number of Trainings Conducted	All personnel to receive training	Quarterly	AAOİAŞ, Independent Environmental Experts
Non-Conformities with Standards	Less than five	Monthly	AAOİAŞ, Independent Environmental Experts
Number of complaints received	Less than five	Monthly	AAOİAŞ, Independent Social Experts

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All labor-related incidents and non-conformities should be documented and reported as outlined in the Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established human resources and labor-related procedures. Records to be reviewed during labor and workforce audits will include, but are not limited to, the external and internal grievance and suggestion tracking databases, records of labor-related training sessions, non-conformity and incident records, employment contracts, payroll and attendance records, and social security registration documents. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary to ensure full compliance with labor legislation and international standards.

XI. REPORTING

Regular reporting should be conducted to ensure the effective implementation and continuous improvement of human resources and labor management activities throughout the construction phase of the Project. Reporting should be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions should be identified and the required updates should be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Regular audits and inspections should be conducted to verify that all labor management practices are being implemented in accordance with the provisions of this Plan.

Reports should be prepared using data gathered through labor-related monitoring activities defined under this Plan. The results and supporting evidence of these monitoring activities (e.g., documentation, logs, training records, and photos) should be documented in detail within appropriate reporting formats. This section of the Plan outlines the instructions and requirements for implementing these reporting activities.

Reporting activities under this Plan mainly relate to labor data such as employment ratios (e.g., female and local employment), training participation records, grievance submissions and resolution

rates, working hours, contract compliance, and occupational health and safety performance. In the event of serious labor-related incidents (e.g., child labor, forced labor, discrimination, major grievances), an incident report including root cause analysis (RCA), mitigation and compensation measures should be submitted to the relevant authorities in accordance with Turkish labor legislation.

All data, together with the results of inspections and audits, should be summarized in the dedicated human resources and labor management chapter of the Environmental and Social Monitoring Report prepared on a quarterly basis. This report will include any non-compliances identified, corrective actions taken, and any recommended time-bound corrective measures. These should be supported with documentary evidence such as photographs and official records.

All personnel are encouraged to raise concerns, suggestions, or complaints related to labor and employment practices through the established grievance mechanism by completing the grievance form. Grievances received from workers, subcontractor employees, or community members regarding labor issues should be addressed and followed up in a timely and transparent manner. The communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

SECURITY MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.04.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

SECURITY MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CCTV	Closed-Circuit Television
CLO	Community Liaison Officer
E&S	Environmental and Social
EBRD	European Bank for Reconstruction and Development
EHS	Environmental, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
IFC	International Finance Corporation
KGM	General Directorate of Highways
KPIs	Key Performance Indicators
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
SEP	Stakeholder Engagement Plan
UNGA	United Nations General Assembly
WHO	World Health Organization

I. PURPOSE AND SCOPE

This Security Management Plan ("the Plan") has been prepared for the Antalya–Alanya Motorway Project ("the Project").

The purpose of this Plan is to define the necessary measures, roles, and responsibilities for managing security risks and incidents during the construction phase of the Project. The Plan has been developed in accordance with applicable national legislation and the requirements of international financial institutions, including the Equator Principles, IFC Performance Standards and the Voluntary Principles on Security and Human Rights.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The Plan outlines procedures that should be done to prevent, monitor, and respond to potential security risks associated with construction activities and facilities. It provides a framework for identifying and mitigating security-related threats that may impact project workers, subcontractors, local communities, and assets.

This Plan should be applied by all parties involved in the Project, including the Project Sponsor (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. – AAOİAŞ), the Main Contractor (Limak), and all subcontractors. Responsibilities related to implementation, monitoring, incident reporting, and staff training should be clearly defined. Updates to this Plan should be undertaken in response to changes in site conditions, project design, regulatory requirements, or evolving security risks.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This Plan has been developed in line with national legislative requirements and international standards that establish protocols for managing security risks and ensuring the safety of workers, communities, and assets during the construction phase. The following regulations and frameworks should be used to guide implementation, monitoring, and compliance.

II.1 National Requirements

The national legislative framework for security management applicable to the Project includes the following laws and regulations:

- Law on Private Security Services (Law No. 5188; Official Gazette No. 25504, 26.06.2004)
- Labor Law (Law No. 4857; Official Gazette No. 25134, 10.06.2003)
- Regulation on the Implementation of the Law on Private Security Services (Official Gazette No. 25606, 07.10.2004)
- Tariff and Instruction on Private Security Liability Insurance (Official Gazette No. 26123, 29.03.2006)

These legal documents should be considered in the selection, employment, and oversight of security personnel during the construction phase.

II.2 International Standards and Conventions

In addition to national legislation, the following international frameworks and guidance documents should be considered to ensure consistency with best practices and compliance with international financing institutions:

- IFC Performance Standards (2012), specifically:

  - Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- IFC Good Practice Handbook on the Use of Security Forces
- Equator Principles IV (2020)
- UN Basic Principles on the Use of Force and Firearms by Law Enforcement Officials (1990)
- UN Code of Conduct for Law Enforcement Officials (UNGA Resolution 34/169, 17 December 1979)
- IFC and EBRD Guidance on Worker Accommodation (August 2009)

These references should be used to ensure that security risks are identified, assessed, and managed in a manner that protects the workforce and local communities, particularly vulnerable groups.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Security Management Plan:

- Subcontractor Management Plan
- Environmental Accident and Spill Response Management Plan
- Community Health and Safety Management Plan
- Occupational Health and Safety Management Plan
- Traffic Management Plan
- Hazardous Material Management Plan
- Construction Camp Site Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

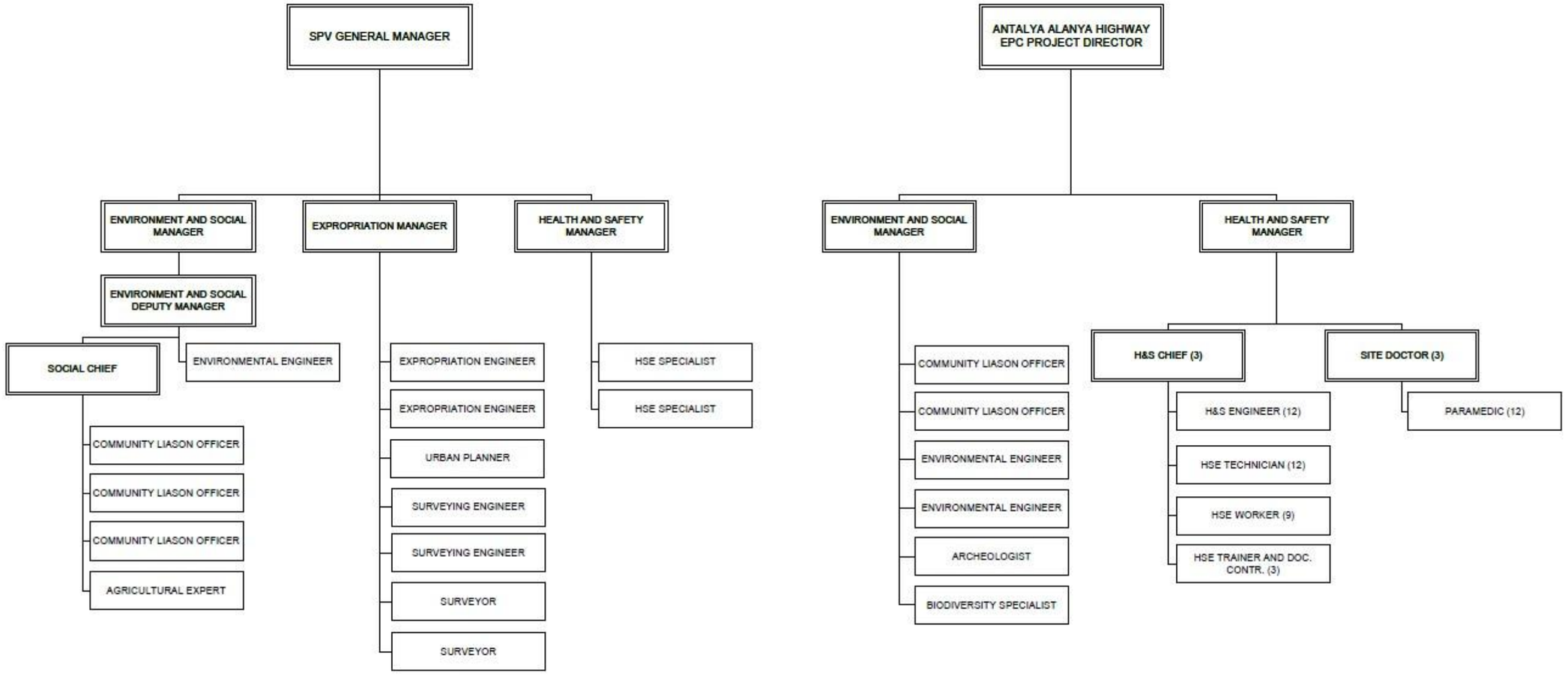

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances.

Roles	Responsibilities
	• Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded.

Roles	Responsibilities
	• Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements.

Roles	Responsibilities
	• Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities.

Roles	Responsibilities
	• Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators.

Roles	Responsibilities
	• Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews.

Roles	Responsibilities
	• Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors.

Roles	Responsibilities
	• Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety.

Roles	Responsibilities
	• Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies.

Roles	Responsibilities
	• Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager.

Roles	Responsibilities
	• Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers.

Roles	Responsibilities
	• Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments.

Roles	Responsibilities
	• Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately.

Roles	Responsibilities
	• Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. SECURITY MANAGEMENT APPROACH

Security risks associated with motorway construction projects primarily stem from the presence of large workforces, valuable equipment, materials, and machinery, as well as the geographical dispersion of construction sites. During the construction phase of the Project, potential security threats may include unauthorized site access, theft of assets or equipment, vandalism, conflict among workers or with local communities, and risks arising from interactions between private security personnel and the public. In high-risk areas or periods of heightened local tensions, there may also be elevated risks of civil unrest or deliberate sabotage.

A comprehensive security risk assessment will be conducted prior to mobilization, considering site-specific threats, socio-political dynamics, and risks to workers, communities, and assets.

Security-related incidents can have significant implications on worker safety, construction progress, community relations, and the Project's social license to operate. Therefore, a proactive and structured approach to security management should be adopted across all construction sites and associated facilities. Security measures should be preventive in nature, with an emphasis on de-escalation, respect for human rights, and the use of force only as a last resort and in accordance with national laws and international best practices.

The Project's security management approach should include clearly defined roles and responsibilities for security service providers, contractors, subcontractors, and Project personnel. Security staff should be appropriately vetted, licensed, and trained in line with national regulations and international frameworks such as the Voluntary Principles on Security and Human Rights, and the IFC Good Practice Handbook on the Use of Security Forces. If public security forces are engaged, roles and interaction protocols will be documented to ensure accountability and compliance with the Voluntary Principles on Security and Human Rights. All security arrangements should ensure that the dignity, safety, and rights of all individuals—particularly vulnerable groups—are respected. Security risks to

vulnerable groups (e.g. women, children, elderly, minorities) shall be identified through targeted assessments and community consultations. These groups will be protected through the implementation of mitigation actions, including but not limited to the following measures:

- Gender-sensitive conflict de-escalation and response training will be mandatory for all security personnel.
- Confidential reporting mechanisms tailored to women and minors will be established with female grievance officers where feasible.
- Security patrols will be planned to avoid sensitive areas occupied by vulnerable populations, particularly during evening hours.
- Any incident involving vulnerable individuals will trigger an immediate independent review and corrective actions.

Key components of the security management approach should include access control systems, perimeter fencing and lighting, incident reporting mechanisms, and procedures for managing public protests, threats, or escalations. Coordination between private security personnel and local law enforcement should also be established, with clear protocols to guide engagement and response. In addition, grievance mechanisms should be made available to affected communities and workers to report security-related concerns.

Security risks will be continuously assessed and monitored throughout the construction phase to ensure the adequacy and effectiveness of measures. Site-specific security plans should be prepared where needed, based on evolving risk contexts and stakeholder dynamics.

While certain security risks may also arise during the operation phase, the scope of this Plan covers only the construction phase of the Project. Accordingly, all recommendations and mitigation measures presented herein are tailored exclusively to construction-phase activities and facilities.

Security for the project will be provided by EPC (Limak) using its own personnel. Certified personnel who have received special security training will be employed for this security, and the necessary permits will be obtained from the Antalya Governor's Office. Security personnel will be unarmed and will receive training in public relations, communication methods, emergency procedures, and communication effectiveness in addition to special security training.

All permits required under the Law on Private Security Services will be obtained by EPC, and a detailed security plan will be prepared and submitted to the Antalya Governor's Office.

However there will be three construction camp sites (Main Camp Site (Manavgat), Camp Site-2 (Manavgat) and Camp Site-3 (Alanya), temporary construction camp site in Taşağıl is in use. In addition to these areas, there will be usage land for mechanic and asphalt plant and concrete plant areas and quarries which are listed below (see Table V.1). At least two security personnel will be present 24 hours a day in all of these areas.

Table V.1 Locations of Borrow Pits / Quarries and Plants

Location	Province	District	Nearest Neighborhood	Description of the Site / Plant
Km 53+800	Antalya	Serik	Sarıabalı	Sarıabalı (AO-1) Borrow Pit
Km 55+450	Antalya	Serik	Sarıabalı	Concrete Plant-1
Km 56+500	Antalya	Manavgat	Çakış	Çakış (TOY4a) Quarry

Location	Province	District	Nearest Neighborhood	Description of the Site / Plant
Km 58+500	Antalya	Manavgat	Taşağıl	Kuruçay (TOY4b) Quarry
Km 59+400	Antalya	Manavgat	Taşağıl	Concrete Plant-2
				Mechanical Plant-1
				Asphalt Plant-1
Km 64+400	Antalya	Manavgat	Taşağıl	Construction Camp Site-1 (Main)
Km 80+400	Antalya	Manavgat	Yeniköy	Concrete Plant-3
Km 83+000	Antalya	Manavgat	Sarılar	Dikmen Borrow Pit
Km 87+500	Antalya	Manavgat	Bucakşeyhler	Construction Camp Site-2
Km 87+700	Antalya	Manavgat	Bucakşeyhler	Concrete Plant-4
				Mechanical Plant-2
				Asphalt Plant-2
Km 89+700	Antalya	Manavgat	Ulukapı	Concrete Plant-4a
Km 99+200	Antalya	Manavgat	Sülek	Concrete Plant-5
Km 104+750	Antalya	Manavgat	Gençler	Bademliyar (TO2) Quarry
Km 105+000	Antalya	Manavgat	Uzunlar	Çenger Stream Material Quarry
Km 106+000	Antalya	Manavgat	Uzunlar	Uzunlar (TOY5) Quarry
Km 114+200	Antalya	Manavgat	Karakaya	Karakaya Quarry
Km 117+000	Antalya	Alanya	Saburlar	Saburlar Quarry
Km 119+500	Antalya	Alanya	Karamanlar	Karamanlar Quarry
Km 124+300	Antalya	Alanya	İncekum	Construction Camp Site-3
				Concrete Plant-6
				Mechanical Plant-3
				Asphalt Plant-3
Km 134+000	Antalya	Alanya	Soğukpınar	Soğukpınar Quarry

VI. MITIGATION MEASURES FOR SECURITY-RELATED RISKS AND IMPACTS

The following mitigation measures will be implemented across all construction-phase work sites and associated facilities of the Project to prevent or reduce security-related risks and adverse impacts on workers, communities, assets, and operations.

Security Risk Assessment and Organization

A security risk assessment will be conducted prior to mobilization to identify potential threats, vulnerabilities, and risks to personnel (employees, subcontractors, suppliers, and visitors), equipment, and infrastructure. This assessment will consider national regulations, international standards, site-specific conditions, socio-political context, existing security arrangements, and past experiences in similar projects. Based on the findings, a security organization will be established, and the following measures will be implemented:

- A dedicated Security Chief will be assigned to oversee all security-related arrangements, identify emerging threats, verify compliance with legal and procedural requirements, and ensure the adequacy of implemented control measures.
- Security services will be provided on a 24/7 basis throughout the construction phase.
- All security personnel will be free of criminal records and will be subject to psychological evaluation prior to employment.
- Personnel will receive role-specific security training and refresher training, with records maintained and regularly reviewed by the Security Chief.
- Security personnel will be hired in accordance with national legislation and must fulfill all legal qualifications.
- The use of security personnel will be governed by relevant national laws and international good practices. Proportionality, legality, and accountability principles will be followed during all engagements.

Recruitment and Vetting of Security Personnel

As part of the recruitment process, all security personnel shall be subject to a structured due diligence procedure, which includes:

- Verification of national identification and legal work eligibility documents
- Submission of up-to-date criminal background clearance issued by relevant authorities
- Completion of a psychological evaluation conducted by a licensed mental health professional
- Employment history and reference checks with previous employers
- Screening for any prior involvement in human rights abuses, misconduct, or excessive use of force
-

Personnel records must include documentation of all vetting steps. These records will be available for audit by the Project's Environmental and Social (E&S) team. The employment of individuals with unresolved allegations or records of abuse is strictly prohibited and will be considered a non-conformance under this Plan.

Zero-Tolerance Policy on Retaliation and Abuse

A strict zero-tolerance policy shall be enforced against any form of retaliation, intimidation, harassment, or abuse committed by security personnel towards community members, workers, or other stakeholders. This policy applies to both verbal and physical actions and includes acts such as threats, coercion, discriminatory behavior, and misuse of authority.

All security providers and their personnel must be informed of this policy during onboarding and training. A signed declaration of understanding and commitment to uphold this policy shall be included in the personnel file of each security employee.

Reports or complaints alleging misconduct, including retaliation by security personnel, shall be treated as serious incidents. Independent investigations will be initiated promptly by the E&S team in coordination with independent social experts. Proven violations will result in disciplinary measures including termination of employment, reporting to competent authorities, and, where applicable, contract termination with the security provider.

This zero-tolerance approach will be actively communicated to project workers and community members through trainings and the grievance mechanism.

Legal Compliance and Security Personnel Conduct

- Enforcement of access control measures such as screening individuals and inspecting personal belongings using metal detectors and X-ray scanners.
- Apprehension of individuals in accordance with the provisions of the Code of Criminal Procedure (e.g., Articles 90 and 168) and applicable civil and criminal law.
- Entry into workplaces and residences within the Project Area in emergency situations (e.g., fires, earthquakes) or when assistance is requested.
- Safekeeping of confiscated or abandoned items and the immediate reporting of criminal acts or suspicious activities to law enforcement authorities.
- Prohibition of unauthorized use of force, except where necessary and proportionate to neutralize a threat. Use of firearms will only be permitted under strictly defined legal circumstances.
- All security personnel will be required to review and sign a comprehensive Code of Conduct that reflects the Project's commitment to human rights, as outlined in the IFC Performance Standards and the Voluntary Principles on Security and Human Rights. This Code will define acceptable and prohibited behaviours, including respect for local communities, non-discrimination, proportional use of force, and engagement with grievance mechanisms. A signed copy will be maintained in each personnel file, and compliance will be monitored by the E&S team and independent social experts.

Roles and Responsibilities of the Project Sponsor (AAOİAŞ)

- Security personnel will be informed of AAOİAŞ policies and principles and trained in stakeholder engagement and the Project's grievance mechanism.
- Incidents involving the security team will be addressed promptly, and measures will be taken to resolve complaints in a timely and fair manner.
- A system will be established for the regular evaluation of security personnel performance, with emphasis on behavior, professionalism, and adherence to rules.
- Recruitment, training, equipment, and supervision of security staff will be conducted in compliance with national legislation, international standards, and best practices.
- Security personnel will receive training on appropriate conduct, proportional use of force, and interaction with workers and community members in line with human rights principles.
- No individual under the influence of alcohol or drugs, or in possession of firearms or explosives, will be permitted to enter the Project Area. Security personnel will have the authority to conduct drug and alcohol testing if required.

Access Control and Site Security Measures

- Security checkpoints will be established at all major access points, including camps, quarry ites, borrow areas, and material storage zones. A contracted EPC will manage access under the supervision of the Security Chief.
- Camp perimeters will be enclosed with fencing to prevent unauthorized entry, and security cameras will be installed to monitor sensitive areas.
- All personnel entering the site will be issued ID badges, and supplier/visitor identity verification will be required prior to entry.
- Vehicle access will be subject to a formal registration process. Entry and exit of equipment and materials will be permitted only after clearance from designated project personnel.
- Security personnel will collaborate with Procurement and EHS teams to verify hazardous material shipments and ensure proper offloading procedures. They will also direct transporters to final delivery points and coordinate with EHS during unloading operations.

Visitor Management

- All visitors will be recorded in a visitor logbook at checkpoints.
- Short-term visitors will receive orientation forms outlining workplace hazards, while long-term visitors will undergo full OHS training. Relevant training records will be maintained.
- After orientation and PPE distribution, visitors will be accompanied at all times by trained employees or security staff.
- Photography or video recording will require written permission from the H&S Manager or HR Chief.

Communication, Monitoring, and Incident Management

- Regular security patrols will be carried out, and any breaches or suspicious behavior will be reported to the Security Chief.
- Closed-circuit television (CCTV) systems will be operational 24/7, with periodic reviews of footage. Any threat or irregularity will be documented and escalated to relevant authorities as necessary.
- Community grievance mechanisms will be used to address complaints or concerns regarding security personnel. Awareness of this mechanism will be promoted among local communities.
- The Main Contractor (Limak) will be responsible for recording and investigating all security-related incidents and allegations of misconduct by security personnel.
- Any allegations of abuse or unlawful acts will be documented and reported to the competent authorities for further action, in accordance with legal and procedural standards.

VII. TRAINING

All security personnel assigned to the construction phase of the Project will receive structured training upon hiring. This training will cover Project-specific procedures, relevant legal and regulatory requirements, and mitigation measures outlined in this Plan. The training will also ensure alignment with international standards and best practices in security management. In addition to mandatory security training from certified private security agencies, training on protocol rules, stress management and effective communication, private security law, approaches to suspicious individuals and vehicles, and security systems and devices will be provided to all security personnel.

Personnel will be trained on appropriate conduct in interactions with workers, subcontractors, visitors, and community members, with particular emphasis on conflict prevention, de-escalation techniques, and human rights. Specific topics will include communication with local communities, stakeholder engagement, cultural sensitivity, gender-sensitive approaches, and the cautious and

proportionate use of force and voluntary principles on security and human rights. Training will also cover the contents and procedures of the Project's grievance mechanism, stakeholder engagement plan, and internal and external communication protocols.

Security staff will be informed of the importance of professional behavior, legal boundaries of their authority, and proper handling of potentially threatening or unlawful situations. Where applicable, training will include procedures for collaboration with law enforcement and emergency services.

Refresher trainings will be conducted at least twice per year, and immediately following any changes in project scope, security risks, or relevant legal frameworks. The effectiveness of the training program will be evaluated through performance monitoring, interviews, and feedback from community liaison personnel.

These trainings will also address emerging risks and reinforce the implementation of mitigation measures defined in this Plan.

All training activities and attendance records will be documented and maintained by the Human Resources, E&S Departments.

VIII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of security management measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on evolving site-specific risks, incident trends, stakeholder concerns, and changes in national security-related regulations or international standards.

Monitoring activities will be coordinated by the Security Chief in close collaboration with the Human Resources (HR), E&S departments. Core responsibilities will include verifying the implementation of access control procedures, reviewing security incident records, assessing the adequacy of on-site security infrastructure, and evaluating personnel compliance with recruitment and training requirements.

Monitoring measures will also include the continuous supervision of entry and exit points through established security checkpoints and Closed-Circuit Television (CCTV) systems. CCTV footage will be reviewed periodically to detect any unauthorized access or suspicious activity. Security incidents involving personnel, subcontractors, suppliers, visitors, or local community members will be logged, investigated, and analyzed to identify root causes and define corrective and preventive actions. Grievances related to the behavior or conduct of security personnel will be recorded through the Project's grievance mechanism and will be addressed in coordination with the Community Relations team.

Personnel files will be reviewed to verify that all employed security staff have undergone required background checks, psychological evaluations, and training in accordance with national regulations and Project requirements. Regular inspections will be conducted across Project sites to ensure that all security measures—including perimeter fencing, lighting, ID badge protocols, and patrolling—are adequately implemented and maintained. Identified non-conformities or lapses will trigger the development and application of corrective actions.

In addition to internal oversight, inspections may also be carried out by relevant public authorities, including the Ministry of Labor and Social Security and law enforcement agencies, in accordance with Turkish legislation. The frequency and scope of these inspections will be defined by

the respective institutions and may involve the review of security records, site conditions, and compliance documentation.

Monitoring activities will be carried out by AAOİAŞ, Independent Environmental Experts.

E&S and H&S Managers will monitor security personnel shall possess demonstrable qualifications in social performance, human rights due diligence, and community engagement. To ensure credibility and impartiality, the expert(s) may be appointed under a transparent process, hold a formal mandate authorized by the Project Company, and retain access to grievance records, training attendance logs, and incident investigation files. The expert must also hold a written authorization or assignment letter granting access to project sites and security personnel for interview and compliance verification purposes.

Their responsibilities include verifying that all security personnel comply with human rights commitments, evaluating the effectiveness of grievance response mechanisms, monitoring community perceptions and concerns related to security behavior, and contributing to corrective actions in coordination with the E&S team.

The findings and observations of the social expert shall be documented in quarterly social monitoring reports, which will be reviewed jointly by the Project Sponsor and external stakeholders as needed.

Monitoring efforts will be guided by the framework presented in Table VIII.1, which outlines the key monitoring parameters, performance indicators, responsible parties, and documentation requirements. These activities are essential for evaluating the effectiveness of security management strategies and ensuring full alignment with both national legislation and international good practice.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Employment status and background checks of security personnel	Project Office / Camp Sites	Document review	Quarterly	AAOİAŞ, Independent Environmental Experts
Completion of required trainings by security personnel	Project Office / Camp Sites	Document review	Quarterly	AAOİAŞ, Independent Environmental Experts
Grievances related to security personnel and response records	Project Office / Camp Sites	Document review	Quarterly	AAOİAŞ, Independent Social Experts

In cases where non-compliance is identified—either through internal monitoring or external audits—Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ) will ensure that corrective and preventive measures are promptly implemented in coordination with the Main Contractor (Limak) and all relevant subcontractors.

All security-related findings, including breaches, grievances, or complaints received from workers or surrounding communities, will be documented and managed in accordance with Project procedures. In the event of serious incidents—such as misconduct or unlawful acts involving security personnel—AAOİAŞ will ensure that the matter is reported to the competent authorities and that appropriate procedural, disciplinary, and contractual responses are taken.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Verification of criminal background for all security personnel	No personnel with criminal records employed	At recruitment / Annually	AAOİAŞ, Independent Social Experts
Number of planned security trainings and completed trainings	100% completion of planned trainings	At recruitment / Annually	AAOİAŞ, Independent Environmental Experts
Number of recorded security incidents involving Project personnel, subcontractors, or others	Less than five	Monthly	AAOİAŞ, Independent Environmental Experts
Number of complaints related to security personnel and security practices	Less than five	Monthly	AAOİAŞ, Independent Social Experts

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities should be documented and reported as outlined in the Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established plans and procedures. Relevant records that should be reviewed during audits may include the external grievance and suggestion tracking database, internal grievance and suggestion tracking database, training records, and non-conformity records. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary.

XI. REPORTING

Regular reporting should be conducted to ensure the effective implementation and continuous improvement of security management activities throughout the construction phase of the Project. Reporting should be structured to address internal monitoring and audit outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Serious incidents and the associated response actions will be summarized in a manner suitable for external disclosure, to promote transparency and accountability towards affected communities and stakeholders.

Based on monitoring results, necessary corrective and preventive actions should be identified, and required updates should be incorporated into this Plan. The security training program will also be revised as needed to address any identified gaps or emerging risks. Regular audits and site inspections should be conducted to verify that all security-related activities are being implemented in accordance with the provisions of this Plan.

Lessons learned from security incidents and grievance analysis will be used to improve the Security Management Plan and training content on a rolling basis.

Reports will be prepared using data collected through the security monitoring activities defined under this Plan. The results and supporting documentation (e.g., incident records, grievance logs,

inspection checklists, and photographs) should be compiled in the appropriate reporting formats. This section of the Plan outlines the instructions and requirements for implementing these reporting activities.

All reported security incidents will be classified by severity (e.g., minor, major, critical) and reviewed by an internal committee that includes the E&S Manager and, where feasible, an independent social expert to ensure impartiality and adherence to human rights obligations.

Grievances specifically related to the behaviour of security personnel shall be disaggregated from general complaints and analysed for recurring patterns, to inform corrective measures and potential retraining needs.

Reporting activities under this Plan mainly relate to the number and nature of security incidents involving Project personnel, subcontractors, suppliers, visitors, and local communities; compliance with security staffing requirements; the training status of security personnel; and the handling and resolution of grievances related to security services. In the event of a serious security incident—such as unlawful behavior, excessive use of force, or threats to personnel or communities—an incident report including root cause analysis (RCA), mitigation measures, and follow-up actions should be prepared by the Contractor and submitted to the Project Sponsor (AAOİAŞ) and, where applicable, to the relevant public authorities within the timeframe required by law.

All data, together with the results of security-related inspections and audits, should be summarized in the dedicated security chapter of the Environmental and Social Monitoring Report, prepared on a quarterly basis. This report will document any non-compliance observed, the corrective actions taken, and any recommended time-bound improvement measures, supported by relevant evidence such as site photos or formal correspondence.

All Project personnel are encouraged to raise concerns, suggestions, or complaints related to security management through the established grievance mechanism by completing a grievance form. Grievances from community members regarding the conduct or actions of security personnel will also be addressed and followed up in line with the procedures defined in the Stakeholder Engagement Plan. Accessible, inclusive, and confidential grievance mechanisms shall be maintained throughout the construction phase to enable both community members and Project workers to report security-related concerns without fear of retaliation. Multiple channels will be available, and community awareness will be promoted actively by the CLOs, with special outreach to vulnerable groups. The grievance mechanism will ensure confidentiality and protection against retaliation, especially for complaints submitted by vulnerable groups such as women or children. Reporting channels will include both verbal and written options, and community liaisons will support accessibility. Clear communication channels for submitting grievances will remain open and accessible throughout the construction period.

Throughout the construction phase of the Project, this Plan will be reviewed quarterly by the E&S manager, based on the findings of internal audits, incident reviews, or any significant changes in site security needs. Updates to the Plan will be coordinated and approved jointly by the E&S Manager and H&S Manager.

SUBCONTRACTOR MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.04.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

SUBCONTRACTOR MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
BOT	Build-Operate-Transfer
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
ESHS	Environmental, Social, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental, Social, Management and Monitoring Plan
ESMS	Environmental and Social Management System
HR	Human Resources
IFC	International Finance Corporation
KGM	General Directorate of Highways
KPIs	Key Performance Indicators
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
RfP	Request for Proposal
CLO	Community Liaison Officer

SUBCONTRACTOR MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Subcontractor Management Plan ("the Plan") has been prepared for the Antalya-Alanya Motorway Project ("the Project"), undertaken by Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ), the Project Sponsor. The Main Contractor, referred to as LİMAK, will carry out construction activities under the Build-Operate-Transfer (BOT) model contracted by the Ministry of Transport and Infrastructure, General Directorate of Highways (KGM).

The objective of this Plan is to outline key measures that should be done to manage subcontractor activities effectively during the construction phase. It aims to ensure that subcontractor operations are aligned with applicable Turkish legislation and relevant international standards, including the requirements of international financial institutions.

The Plan defines the procedures that should be done to mitigate potential adverse impacts on the health and safety of subcontractors, AAOİAŞ employees, and surrounding communities. It also outlines mechanisms that should be done to monitor subcontractor compliance and performance, promote accountability, and ensure clear communication and coordination among all stakeholders involved in construction.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

This Plan should be applied by the Project Sponsor (AAOİAŞ), the Main Contractor LİMAK, and all subcontractors engaged in the Project. Implementation, monitoring, and reporting responsibilities should be clearly assigned. The Plan is designed as a living document and should be updated in accordance with changes in project design, construction methods, or regulatory requirements.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

The Plan has been structured to align with national legislation and internationally recognized standards to ensure effective management and oversight of subcontractor activities during the construction phase. The requirements outlined herein should be used to guide the implementation, compliance monitoring, and performance evaluation processes concerning subcontractor management throughout the Project.

II.1 National Requirements

The following Turkish laws and regulations should be considered as the legal foundation for ensuring subcontractor compliance with labor rights, occupational health and safety, and environmental protection during the construction phase:

- Environmental Law (Law No. 2872)
- Occupational Health and Safety Law (Law No. 6331)
- Labor Law (Law No. 4857)
- Regulation on Risk Assessment of Health and Safety
- Regulation on Occupational Health and Safety Services
- Regulation on Occupational Health and Safety Signs
- Regulation on Emergency Situations in Workplaces
- Regulation on Health and Safety Measures to be Taken in Workplace Buildings

- Regulation on the Use of Work Equipment in Terms of Occupational Health and Safety
- Regulation on the Use of Personal Protective Equipment in Workplaces
- Regulation on Occupational Health and Safety Requirements for Temporary or Fixed-Term Employment
- Regulation on Occupational Health and Safety in Construction Works
- Regulation on the Protection of Workers from Risks Related to Noise
- Regulation on Health and Safety Measures for Working with Chemical Substances
- Regulation on Fire Protection in Buildings
- Regulation on First Aid
- Regulation on Duties, Authorities, and Responsibilities of Occupational Physicians and Other Health Personnel
- Waste Management Regulation
- Regulation on the Control of Waste Oils

These regulations define the legal obligations that should be fulfilled by subcontractors, including but not limited to occupational risk management, emergency preparedness, use of protective equipment, and general working conditions on construction sites.

II.2 International Standards and Guidelines

In addition to national legislation, the following international standards and guidelines should be taken into account to ensure alignment with best practices and financial institution requirements related to subcontractor management:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 2: Labor and Working Conditions
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)

These international references should be used to guide subcontractor selection, contract requirements, labor and working conditions, health and safety practices, and overall compliance throughout the construction phase. Subcontractors should operate in a manner consistent with international expectations regarding workforce management and risk mitigation.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are considered directly relevant and should be implemented in coordination with the Subcontractor Management Plan to ensure consistent management of subcontractor-related risks and responsibilities during the construction phase:

- Human Resources and Labor Management Plan
- Communication and Training Plan
- Occupational Health and Safety Management Plan

- Community Health and Safety Management Plan
- Environmental Accident and Spill Response Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to promote compliance with regulatory and institutional requirements and to reduce potential environmental, social, and occupational health risks associated with subcontractor operations during the construction phase.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Antalya Alanya Motorway Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

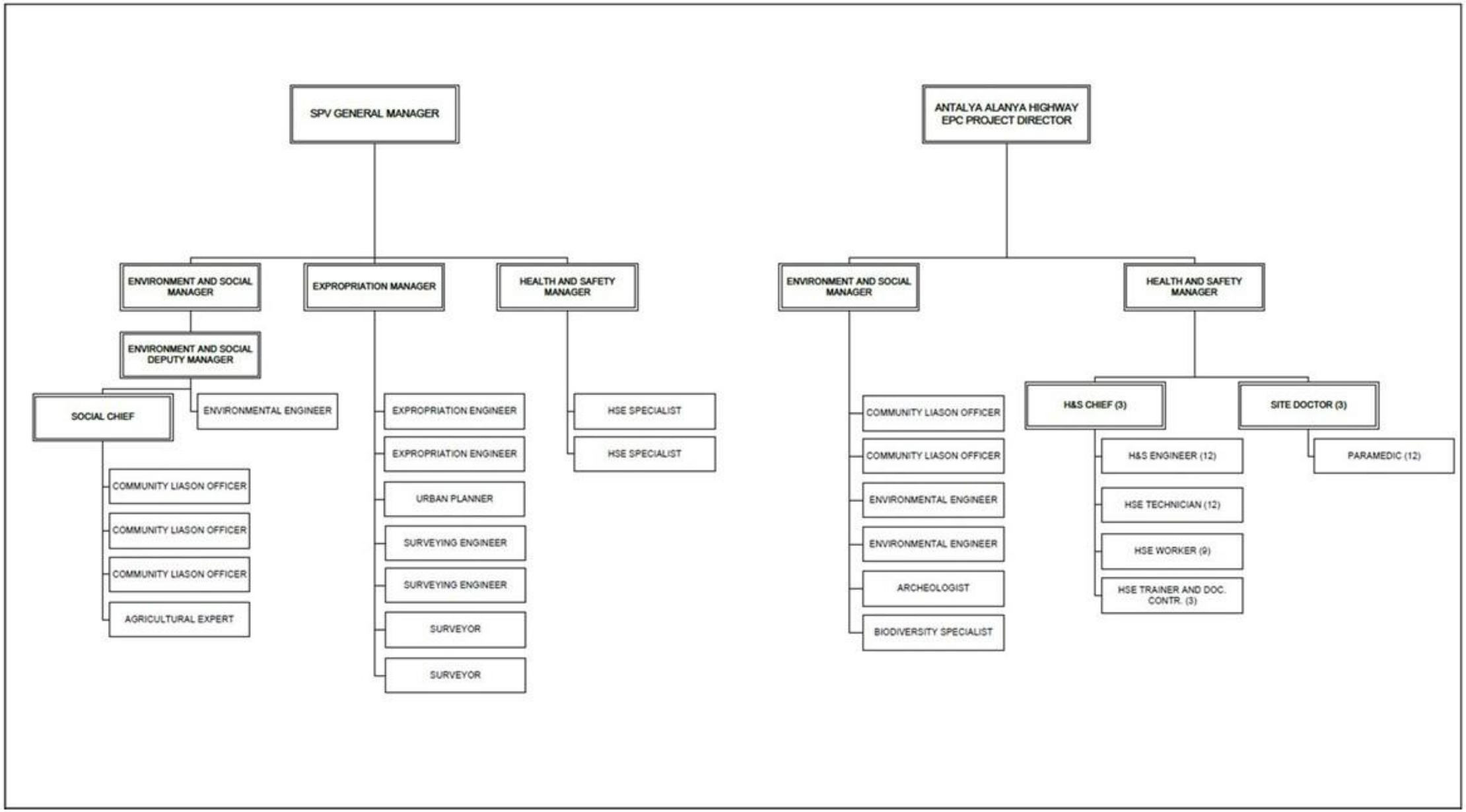

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators.

Roles	Responsibilities
	• Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety.

Roles	Responsibilities
	• Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management.

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Roles	Responsibilities
	• Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams.

Roles	Responsibilities
	• Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments.

Roles	Responsibilities
	• Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews.

Roles	Responsibilities
	• Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements.

Roles	Responsibilities
	• Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.

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Roles	Responsibilities
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards.

Roles	Responsibilities
	• Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.

Roles	Responsibilities
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements.

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Roles	Responsibilities
	• Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks.

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Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise.

Roles	Responsibilities
	• Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies.

Roles	Responsibilities
	• Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks.

Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks.

Roles	Responsibilities
	• Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors

SUBCONTRACTOR MANAGEMENT PLAN

Roles	Responsibilities
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs.

Roles	Responsibilities
	• Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.

Roles	Responsibilities
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. SUBCONTRACTOR MANAGEMENT APPROACH

All subcontractors will be responsible of full compliance with the legislation, standards, procedures, rules and objectives identified in detail in of this Plan. Within this scope, LİMAK will manage the subcontractor and supplier evaluation mechanism with criteria targeting the assessment of sufficiency and compliance of existing environmental and social management structure and labor practices of the subcontractor/supplier that is being considered. Following selection of the subcontractors and suppliers, the Scope of Work to be agreed on will ensure compliance of the subcontractor/supplier with Project Standards through contractual terms.

V.1 Subcontractor Selection Process

The subcontractor selection process will involve a multidisciplinary team involving Environmental and Social Interaction Manager. Primary responsibility of the team will be the project's E&S matters, including E&S performance, worker and community health, safety and security, and human resources (HR).

The participation and engagement of the Environmental and Social Interaction Manager in the subcontractor selection process is aimed at providing an early consideration of E&S matters and variables when selecting a subcontractor.

The first step in the subcontractor procurement process is the preparation of a Request for Proposal (RfP). This RfP is typically prepared by procurement staff with input from the project manager, internal counsel and legal advisor, technical specialists (for example, engineers and environmental and social experts), and lawyers.

For the contracts, "Subcontractor E&S Requirements" which is a document summarizing the general expectations in terms of occupational health and safety, and E&S, will be shared with all subcontractors. This is a common industry practice that helps clarify AAOİAŞ's main Environmental, Social, Health, and Safety (ESHS) requirements, conditions, and provisions that every subcontractor must follow when entering into an agreement with the AAOİAŞ. In this way, management of Project risks and anticipated impacts and E&S performance will be done more effectively.

A high-level definition of ESHS expectations allows the subcontractor to better understand the minimum requirements that must be met. It also helps AAOİAŞ to set basic expectations of the HSE framework that will govern the AAOİAŞ–subcontractor relationship from the outset.

The Environmental and Social (E&S) Requirements encompass all relevant obligations, commitments, and provisions derived from various source documents. These include, as applicable, the Equator Principles (EPs) IV, the IFC Environmental, Health and Safety (EHS) Guidelines for Toll Roads, IFC Performance Standard 2 (PS2), the commitments outlined in the Environmental and Social Impact Assessment (ESIA) Report and E&S-related permits, applicable legal obligations and codes and standards, as well as company policies and internal procedures.

V.2 Proposal Evaluation and Subcontractor Selection

Evaluation methodology, criteria, key performance indicators (KPIs), and weightings need to be established in discussion with the rest of the project team. The following questions should be asked when developing the weightings: "What answers are we looking for?" and "What KPI scores are acceptable?" Significant E&S records and safety metrics are important, and poor records related to these matters should preclude the subcontractor from qualifying, regardless of technical aspects or price.

The subcontractor's existing management systems, its capacity to implement E&S requirements and the subcontractor-supplied information on past E&S performance will be among the key criteria used to evaluate subcontractors. Capacity may be judged by past performance, existing or projected management, technical ability, and resources. The latter can include solutions or options proposed by the subcontractor to implement the mitigations described in the E&S documentation, such as management plans that are contained in the bid package. A lack of capacity to establish an ESMS (if one does not exist), implement E&S requirements, and meet applicable standards will disqualify a subcontractor from further consideration. Referees should be asked to validate claims regarding E&S performance.

In addition, all recruitment agencies and labor providers must be approved, licensed, and have no past violations or associations with child or forced labor. Due diligence documentation, including license verification and labor law compliance records, must be submitted as part of the subcontractor prequalification process. This criterion is considered mandatory and non-negotiable for selection eligibility.

As AAOİAŞ evaluates proposals, past E&S performance and key personnel of bidders can be evaluated on a numerical basis, which can then be included in overall comparisons (including technical and financial).

While the evaluation methodology varies according to the project, scope of work of the activity, and any project-specific feature, it will need to be agreed on by the project team. The following will be considered grounds for disqualification:

- Failure to provide information on past E&S performance, including health and safety records;
- Reports of past performance deemed unacceptable for the current project;
- Notices of material labor issues between workers and management;
- Fines and sanctions imposed by E&S and labor regulators and authorities;
- Poor security management records from previous projects; and
- Material community grievances and high profile adverse press reports on E&S matters.

The team evaluating proposals will include at least one qualified and experienced E&S professional, who has been involved in the tendering processes and the establishment of the criteria that will be used to evaluate bidders' E&S qualifications.

If a prospective subcontractor propose to substitute personnel for any proposed key E&S position(s) at any stage of the selection and or contract negotiation process, AAOİAŞ may require that the replacement(s) have at least equivalent qualifications and experience of the previous professional and that they be approved by AAOİAŞ, or the entire proposal may be re-evaluated using the substitute personnel.

At the end of the evaluation and selection process, AAOİAŞ will issue a letter of intention to place a contract subject to certain conditions, including E&S requirements and conditions, which should be listed. These could be over and above those in the offer, but they must have been discussed with the subcontractor during the selection process. In Figure V.1, the subcontractor management process that AAOİAŞ will comply with is presented.

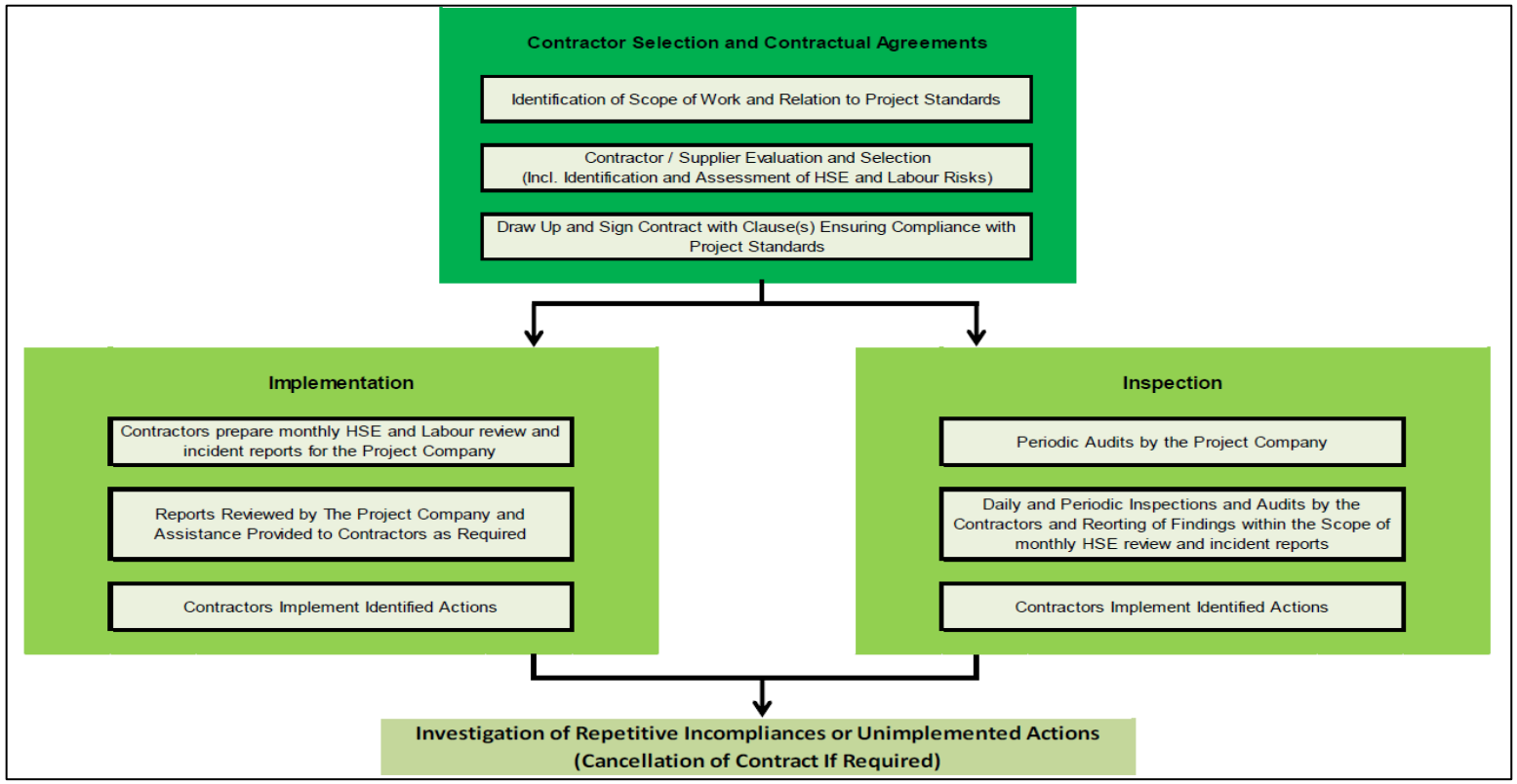

Figure V.1 Subcontractor Management Process

V.3 Subcontracting and Procurement

It is AAOİAŞ's responsibility to comply with IFC Guidelines, EHS Guidelines, loan agreement commitments, ESIA, EIA, Turkish laws and regulations, and permits and standards, ensuring that any subcontractor providing services of any kind to AAOİAŞ duly follows these requirements throughout the duration of the contract, including any activity or services performed by third parties undertaking a contract from the subcontractor.

V.4 Existing Clients – Managed Contracts (Amending Existing Contracts)

For large development projects, there may be existing, smaller contracts managed by AAOİAŞ that will continue into the construction phase alongside major contracts. For consistency, these contracts and the performance requirements associated with them shall be reviewed and, if necessary, brought in line with the other contracts through amendments to properly incorporate all applicable E&S requirements.

V.5 Project Planning

The following content outlines key planning requirements to ensure safe, coordinated, and compliant execution of subcontractor activities during the construction phase of the Project.

V.5.1 Information Exchange

In order to ensure that the project is planned and executed in a safe and controlled manner, all information related to existing hazards and risks at the project site should be exchanged mutually between the Contractor and the Project management. Similarly, any potential hazards and risks that may arise from the Contractor's scope of activities should also be communicated by the Contractor. Prior to the commencement of project activities, the Contractor should submit the necessary documentation and information to AAOİAŞ for review and verification.

The Contractor is required to provide its Occupational Health and Safety (OHS) Policy, as well as details of the designated OHS representative responsible for addressing all health and safety matters throughout the execution of the project. Documentation demonstrating the engagement of an occupational safety expert, workplace physician, and other health personnel should be presented in the form of official system records or certified copies.

In addition, method statements and detailed work instructions describing how project activities will be initiated should be submitted. The Contractor should also present risk assessments along with the proposed preventive and control measures. Information regarding the types of waste expected to be generated; methods for waste collection, and relevant waste disposal documentation should also be included.

A list of vehicles to be deployed at the project site must be provided, accompanied by copies of the drivers' licenses of those authorized to operate them. Likewise, operator certificates for machinery operators, and G-class driving licenses for those operating equipment on public roads, should be submitted.

The Contractor is also expected to provide a list of personnel to be mobilized to the site, along with copies of their identification documents and criminal background checks. Medical reports confirming fitness for duty, including suitability for night work and work at height, must also be submitted. Social security registration records should be provided in the form of system-generated documents or copies.

All contractor personnel must have received appropriate training on occupational health and safety before starting project activities, and copies of training certificates must be submitted. Evidence of the distribution and use of personal protective equipment (PPE), including signed inventory records, should also be provided.

Furthermore, the Contractor must present inspection certificates for lifting equipment, compressors, air tanks, and all pressurized vessels to be brought to the project site. A list of chemicals and other substances to be used during the project, along with Turkish versions of their Safety Data Sheets (SDS), should also be submitted.

V.5.2 Risk Management

All contractors should adopt a proactive approach to risk management, which involves identifying potential hazards in advance, planning accordingly, and implementing control measures before the start of project activities or before there is any significant exposure to risk.

The Occupational Health and Safety (OHS) Officer should ensure that the Contractor has adequately assessed risks associated with project-related activities and has submitted appropriate documentation demonstrating the implementation of control measures both prior to and during the execution of project tasks.

The OHS Manager should review the Contractor's project scope and associated risk assessments in coordination with the relevant department manager. Where necessary, required mitigation measures should be implemented, and all necessary training should be provided prior to the commencement of the project.

V.5.3 Management of Contractor During Execution

The Contractor and all subcontractors are responsible for full compliance with Project standards. In this context, a contractor evaluation mechanism will be implemented which includes criteria aiming to evaluate the competence of the contractor and compliance with environmental, social, health and safety requirements.

During the execution of the works, the contractor will monitor their monthly environmental, social, health and safety performance as well as mitigations and corrective actions, and report it to SPV on a regular basis. SPV will review these reports and, if necessary, develop further suggested actions with the relevant contractor. Further reports will also include the performance of the actions taken. When urgent action is required in case of a nonconformity, the contractor is responsible for taking the necessary actions in a timely manner and reporting the results to SPV. The following subjects will be in consideration and will be followed by SPV:

- Contractor is responsible for providing support to ensure that their subcontractors also meet the requirements set by the Project environmental and social standards. All non-compliance situations of subcontractors on E&S and OHS management will be reported to SPV. The contractor will ensure that their subcontractors take adequate mitigation and corrective/preventive actions.

- In the monthly environmental, social, health and safety reports; there will be evaluations of the performance of the project related to environmental, social, health and safety, as well as the mitigation and corrective/preventive actions implemented.
- SPV will provide assistance in the implementation of mitigation and corrective/preventive activities by auditing the monthly environmental, social, health and safety reports and is responsible for keeping the E&S and OHS performance of the Project at a level that fully complies with the project environmental, social, health and safety standards.
- The contractor and its subcontractors' personnel will have access to the Project grievance mechanism.
    - Grievance records will be checked by relevant SPV to ensure that grievances are answered adequately and satisfactorily.
    - All contracted workers will also have access to the grievance mechanism.

With the aim of monitoring E&S and OHS performance of subcontractors and suppliers, SPV will collect the following data from subcontractors and suppliers:

- Incident investigation records,
- Environmental, social, health and safety training records,
- Information on waste management, waste types, amount, disposal methods, etc.,
- Hazardous substance registration and inventory, including Material Safety Data Sheets,
- Internal and external complaint records, studies to resolve complaints,
- Stakeholder interviews and information meeting records,
- Information on the social responsibility projects carried out,
- Corrective/Preventive Action records,
- Risk analysis records,
- Emergency drill records,
- Records of environmental measurements and analysis,
- Occupational hygiene measurement records,
- Medical records,
- Labor force statistics including gender data and local employment data.

V.5.4 Periodic Review of Contractor's Performance

The contractor will be evaluated on ongoing basis in order to confirm or revoke their inclusion in the vendor list. The evaluation will be made based on the quality of products and services delivered. The evaluation will be based on a scoring scale.

For contractor, SPV will perform the evaluation and records its outcome. The evaluation will generally be performed following the below indicators:

- Compliance with delivery and quantity due dates,
- Compliance with the technical specifications,
- Level of technical assistance guaranteed.

Negative feedback may render the contractor as “unreliable” which in turn may result in removing the respective supplier from the database. The contractor may be re-included in the database upon confirmation of compliance with pre-qualification requirements.

SPV will review periodically the supplier information and updates the database accordingly on ongoing basis.

VI. TRAINING

Upon hiring, all subcontractor personnel will receive structured training on human resources, labor rights, and occupational health and safety topics relevant to their roles. This includes awareness of potential social risks such as labor violations, unsafe working conditions, discrimination, and grievances, as well as the associated mitigation measures applicable to their responsibilities (e.g., proper use of personal protective equipment, safe working practices, respectful workplace behavior, and reporting procedures). In addition, personnel assigned to monitoring or supervisory duties will be provided with specialized training to ensure accurate, effective, and compliant performance.

SPV staff will deliver E&S training to contractors. The training will cover the following topics:

Lenders E&S Requirements and Project E&S Requirements for contractors as per financing agreement conditions. The SPV will identify specific training programs and will ensure the implementation.

The SPV will ensure that E&S training programs are extended to subcontractors by contractors if they are involved in the implementation of the Project.

In addition to above, the necessary funds and scheduling time will be provided to ensure effective health and safety training is provided. This commitment will include paid work time for training and training in the language that the workers understand. Both management and employees will be involved in developing the program. To most effectively carry out their safety responsibilities, all personnel must understand (1) their role in the program, (2) the hazards and potential hazards that need to be prevented or controlled, and (3) the ways to protect themselves and others.

Training program will focus on health and safety concerns that determine the best way to deal with a particular hazard. When a hazard is identified, it shall be removed entirely. If that is not feasible, workers shall be trained to protect themselves, if necessary, against the remaining hazard.

At a minimum, employees must know the general safety and health rules and CMP of the worksite, specific site hazards and the safe work practices needed to help control exposure, and the individual's role in all types of emergency situations. SPV will ensure all employees understand the hazards to which they may be exposed and how to prevent harm to themselves and others from exposure to these hazards.

SPV will commit available resources to ensure employees receive safety and health training during the circumstances below.

- Whenever a person or contractor is hired - general safety orientation including an overview of company contractor management systems, policies, procedures and rules,
- Whenever an employee or contractor is given a new job assignment -during formal classroom training, and again, when the supervisor provides specific task training.

- Whenever new work procedures are used - during formal classroom training and supervisor on-the-job training.
- Whenever new equipment is installed - if new hazards are introduced.
- Whenever new substances are used
- To conclude, safety trainings to be conducted whenever a new hazard is introduced.

Employees and contractors must know they are responsible for complying with all company safety rules, and that most accidents will be prevented by their safe work practices. They must be very familiar with any personal protective equipment required for their jobs. They must know what to do in case of emergencies.

Each employee and contractor need to understand that they are not expected to start working a new assignment until they have been properly trained. If a job appears to be unsafe, they will report the situation to their supervisors.

All line managers must understand their responsibilities within the scope of this Plan. This may require classroom training and other forms of communication. The subject can be covered periodically as a part of regular management meetings.

Managers will be trained in the following subject areas:

- The elements of the CMP, and the positive impact the various processes within the system can have on corporate objectives,
- Their responsibility to communicate the CMP goals and objectives to their employees,
- Their role that includes making clear assignments of CMP responsibilities, providing authority and resources to carry out assigned tasks, and holding subordinate managers and supervisors accountable, and
- Actively requiring compliance with CMP, policies and rules and encouraging employee involvement in discretionary safety activities such as making suggestions and participation in the safety committee.

Training will emphasize the importance of managers' visibly showing their commitment to the safety and health and CMP. They will be expected to set a good example by scrupulously following all the safety and health rules themselves.

VII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of human resources and labor management strategies outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities may be reviewed and revised as needed, based on site-specific labor practices, performance trends, stakeholder concerns, or changes in national labor regulations and international standards.

Monitoring activities will be coordinated by the Human Resources and Environmental and Social Interaction Departments, in close collaboration with the OHS and Construction Management teams. Key responsibilities will include verifying subcontractor compliance with labor-related obligations, ensuring fair recruitment and employment practices, monitoring working conditions, verifying implementation of grievance mechanisms, and reviewing compliance with occupational health and safety requirements applicable to the workforce.

Subcontractors will be required to regularly report on labor-related performance metrics, including but not limited to working hours, contract status, wage payments, worker accommodation (where applicable), OHS training, and grievance records. AAOİS will review these submissions on a scheduled basis to ensure that performance targets are met, labor rights are upheld, and workforce-related risks are minimized. Monitoring reports should document all relevant evidence, including statistics, audit findings, and records of worker interviews or inspections.

To ensure comprehensive oversight, subcontractors must also demonstrate active implementation of Human Resources and Labor Management Plan requirements. This includes clear adherence to the Code of Conduct (CoC), provision of safe and equitable working conditions, delivery of regular health & safety and rights-based trainings, and the operation of accessible grievance mechanisms for all non-employee and third-party engaged workers. Monitoring documentation should include evidence such as worker interview summaries, training attendance logs, and grievance resolution records to verify compliance with these key requirements.

In case of actual or suspected forced/child labour incidents involving the SPV, EPC, subcontractors, or their core suppliers, specific investigation procedures will be activated immediately. These will include risk screening, immediate cessation of related work, and prioritization of the child's safety and well-being. Subcontractor Management Plan will be revised as necessary to include lessons learned and prevent recurrence. Corrective actions will be documented and tracked via the Corrective Action Plan system, and authorities will be notified in line with legal obligations.

In addition to routine internal monitoring, daily field-level site checks will be conducted by the Environmental and Social Interaction Department to gather information on site organization, workforce deployment, and general labor conditions. Monthly coordination meetings will also be held jointly by the Environmental and Social Interaction Department and the OHS Department to present the main findings of the monitoring process, identify systemic issues, and ensure that feedback is integrated into corrective action planning and performance improvement.

Subcontractor performance in implementing human resources and labor-related measures will be reviewed through regular audits, site supervision reports, and direct field observations. Any identified non-conformities—such as failure to provide contracts, non-payment of wages, unsafe working conditions, or misuse of the grievance mechanism—will trigger the preparation of corrective and preventive action plans. Follow-up monitoring will be conducted to confirm the effectiveness of implemented actions and to prevent recurrence.

In parallel to internal oversight, inspections may also be conducted by public institutions, including the Ministry of Labor and Social Security, the Ministry of Environment, Urbanization and Climate Change, the Ministry of Health, and their respective provincial directorates. The frequency and scope of such inspections will be determined by the authorities and may include review of documentation, worker interviews, and site-based compliance checks.

Monitoring efforts will be guided by the framework provided in Table VII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of measurements, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of labor and workforce management practices and ensuring full compliance with national labor laws, international standards, and Project-specific commitments.

Table VII.1 Key Monitoring Activities

Parameter	Monitoring Location	Monitoring Method	Monitoring Frequency	Responsible Parties
The composition of the workforce, including the ratio of local to non-local workers, gender distribution, and representation in supervisory roles	Construction sites and AAOİAŞ Headquarters	Review of personnel and employment records submitted by subcontractors	Quarterly	AAOİAŞ, Independent Social Experts, Subcontractors
The number of labor-related grievances submitted, resolved, and pending, including grievance resolution times	Construction sites and grievance registry	Review and analysis of grievance logs, resolution documentation, and interview feedback	Monthly	AAOİAŞ, Independent Social Experts, Subcontractors
The percentage of workers who have completed mandatory occupational health and safety and project-specific trainings	Construction sites and training venues	Review of attendance records, training logs, and cross-checking with annual training plans	Quarterly	AAOİAŞ, Independent Social Experts, Independent Environmental Experts, Subcontractors
Reported cases of discrimination, harassment, or other violations of equal opportunity principles	Construction sites and AAOİAŞ Headquarters	Review of incident reports, complaint investigations, and confidential interviews where applicable	Quarterly	AAOİAŞ, Independent Social Experts, Subcontractors
The extent to which labor policies and procedures are being implemented as per the Project's Labor Management Plan	Construction sites	Field inspections, document checks, and subcontractor interviews	Monthly	AAOİAŞ, Independent Social Experts, Subcontractors
Subcontractor compliance with national labor legislation and contractual labor obligations	Subcontractor offices and construction sites	Labor audits, payroll record reviews, and compliance inspections	Quarterly	AAOİAŞ, Independent Environmental Experts, Subcontractors

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor and relevant subcontractors.

All labor-related findings, including violations of labor rights, non-compliance with working conditions, or complaints received from workers or other stakeholders, will be documented in accordance with national labor legislation and Project procedures. In the event of serious violations—such as repeated wage payment issues, lack of employment contracts, or unsafe working conditions—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

VIII. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table VIII.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Percentage of local employment	Up to 50% of the workers will be hired from the local population	Quarterly	AAOİAŞ, Independent Social Experts
Percentage of workers from directly project-affected areas	At least 50% of the workers will be hired from directly affected communities	Quarterly	AAOİAŞ, Independent Social Experts
Percentage of women employees	Priority will be given to hiring women; targets to be adjusted based on workforce requirements	Quarterly	AAOİAŞ, Independent Social Experts
Number of worker grievances	Less than five	Monthly	AAOİAŞ, Independent Social Experts
Percentage of employee complaints resolved	100% of complaints received will be concluded within the designated resolution timeframe	Monthly	AAOİAŞ, Independent Social Experts

IX. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities related to subcontractor and labor management will be documented and reported as outlined in this Plan. Subcontractors will be inspected by the EPC Environmental Engineer and H&S Chief. Both EPC and subcontractors will also be subject to audits and oversight by the SPV Environmental and Social (E&S) Manager, H&S Manager and relevant are assigned by them in line with the scope and schedule defined under the Subcontractor Management Plan. These audits and associated records should be managed in compliance with the Project's approved plans and procedures. Relevant documents that should be reviewed during audits may include subcontractor-specific records such as the external and internal grievance and suggestion tracking databases related to subcontracted personnel, subcontractor labor and employment records (e.g., worker contracts, payroll), training attendance logs for subcontractor staff, non-conformity and incident reports, and subcontractor performance evaluation forms prepared. Observations and deficiencies identified during the audit process should be documented in formal audit reports, and all findings requiring improvement should be tracked under the Corrective Action system. Project management should regularly review audit results and corrective action records, ensure timely follow-up, and implement additional measures as needed to maintain full compliance with labor and subcontractor management requirements.

X. REPORTING

Regular reporting should be conducted to ensure the effective implementation and continuous improvement of subcontractor management activities throughout the construction phase of the Project. Reporting should be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions should be identified, and required updates should be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps related to subcontractor performance, occupational health and safety, or compliance with Project requirements. Regular audits and site observations should be carried out to verify that all subcontractor-related activities are implemented in accordance with the provisions of this Plan.

Reports should be prepared using data gathered through the subcontractor monitoring activities defined under this Plan. The results and supporting documentation (e.g., grievance records, attendance

logs, training records, and interview notes) should be clearly documented within appropriate reporting formats. This section of the Plan outlines the instructions and requirements for implementing these reporting activities.

Reporting activities under this Plan primarily relate to subcontractor workforce composition, grievances and resolution status, training participation rates, working hours compliance, registration with the Social Security Institution, and adherence to occupational health and safety procedures. In the event of serious subcontractor-related incidents—such as confirmed cases of discrimination, wage violations, or occupational accidents—an incident report including root cause analysis (RCA), corrective measures, and follow-up actions should be submitted to the relevant authorities, including the Ministry of Labor and Social Security, within 30 business days.

All data, together with the results of inspections and audits, should be summarized in the subcontractor management chapter of the Environmental and Social Monitoring Report, prepared on a quarterly basis. This report will document any identified non-compliances, corrective actions taken, and recommended time-bound improvements. Reporting should be supported by documentary evidence such as signed attendance forms, site inspection photographs, and subcontractor interviews.

All personnel are encouraged to raise concerns, suggestions, or complaints related to subcontractor operations through the established grievance mechanism by completing a grievance form. Grievances submitted by subcontractor workers regarding contracts, wages, working conditions, or other concerns should be addressed and followed up appropriately. Communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

Throughout the construction phase of the Project, this Plan will be reviewed quarterly by the SPV Environmental and Social (E&S) Manager and H&S Manager, based on audit results, subcontractor performance findings, and any major changes in site operations. Updates to the Plan will be coordinated between the E&S Manager and H&S Manager.

ANTALYA-ALANYA MOTORWAY PROJECT

Revision No: 2 **Date:** 16.06.2025

TRAFFIC MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.04.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per ESDD Report comments

TRAFFIC MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
BOT	Build-Operate-Transfer
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
ENCON	ENCON Environmental Consultancy Co.
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
HSE	Health, Safety and Environment
H&S	Health and Safety
IFC	International Finance Corporation
ITS	Intelligent Transportation Systems
KGM	General Directorate of Highways
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
OHS	Occupational Health and Safety
PCE	Passenger Car Equivalents
RCA	Root Cause Analysis
SEP	Stakeholder Engagement Plan
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
WHO	World Health Organization

I. PURPOSE AND SCOPE

This Traffic Management Plan ("the Plan") has been prepared for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan is to identify and mitigate traffic-related risks and impacts that may arise during the construction phase of the Project. This includes preventing, minimizing, and managing adverse impacts on community health and safety, environmental conditions, and worker safety caused by project-induced traffic activities. The Plan defines the key principles, mitigation measures, and monitoring requirements that should be done to ensure effective traffic management throughout the construction works.

This Plan has been developed in line with national legal requirements and applicable international standards, including those of international financial institutions. It aims to provide a structured framework for minimizing traffic-related risks resulting from driver behavior, vehicle conditions, road design, construction works, and site-specific traffic intensity.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The scope of this Plan includes all construction-related traffic activities and associated facilities of the Project. It outlines responsibilities, procedures, and control mechanisms that should be implemented by the Project Sponsor (AAOİAŞ), the Main Contractor LİMAK, and all subcontractors. Updates to the Plan should be made when necessary, particularly in response to design changes, modifications in construction methods, or evolving legal requirements.

The purpose of this plan is to ensure the safe management and control of trucks, cars and earth moving machines including all vehicles to be used for transportation of humans, materials and equipment during the execution of construction activities carried out on the Project..

The Plan applies to:

- Access roads to construction sites, manufacturing sites, active work fronts, quarries, borrow pits and dump sites, camp sites, etc.
- Delivery of machinery, equipment and materials,
- Movement of machinery and equipment within the manufacturing sites such as beam production facilities, batching plants and asphalt plants,
- Interaction with third party pedestrians and vehicle traffic

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

The Plan has been structured to align with both national and international requirements, including legislation, guidelines, and sectoral standards that govern road safety, traffic regulation, and transport risk management. Accordingly, the following sources of reference should be used to guide the implementation, monitoring, and compliance procedures related to traffic management activities during the construction phase of the Project.

II.1 National Requirements

The following Turkish laws and regulations form the legal framework for traffic management and occupational safety throughout the construction activities of the Project:

- Highway Traffic Law (Law No. 2918)
- Regulation on Highway Traffic
- Regulation on Traffic Signs
- Regulation on the Transportation of Hazardous Goods by Highway
- Regulation on Health and Safety Signs
- Regulation on the Use of Personal Protective Equipment in Workplaces
- Labor Law (Law No. 4857)
- Regulation on Procedures and Principles of Health and Safety Training for Employees
- Regulation on the Control of Exhaust Gas Emissions
- Regulation on Monitoring of Greenhouse Gas Emissions
- Regulation on Decreasing Ozone Depleting Substances
- Regulation on Reduction of Sulphur Content of Certain Fuels
- Regulation on Control of Excavation Soil and Construction Debris
- Regulation on the Evaluation and Management of Environmental Noise

These legal instruments define the mandatory requirements for traffic safety, signage, emissions control, workplace protective measures, and occupational health training that should be implemented throughout the construction phase.

II.2 International Standards and Conventions

In addition to national legislation, the Project should be implemented in accordance with internationally recognized guidelines and performance standards. These standards are essential for meeting the expectations of international financial institutions and ensuring best practice application in traffic management and community safety:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 3: Resource Efficiency and Pollution Prevention
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- World Bank Environmental and Social Standard 4 (ESS4): Community Health and Safety (2017)
- European Union Road Safety Policy Guidelines and Directives

These international references should guide the planning and execution of traffic safety measures and support continual improvement in managing risks associated with Project-related traffic during the construction phase.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are directly relevant to the implementation of the Traffic Management Plan and should be

applied in coordination to ensure comprehensive environmental and social risk management throughout the construction phase:

- Environmental Accident and Spill Response Management Plan
- Subcontractor Management Plan
- Construction Camp Site Management Plan
- Noise and Vibration Management Plan
- Labor Management Plan
- Community Health and Safety Management Plan
- Occupational Health and Safety Management Plan
- Communication and Training Plan
- Emergency Preparedness and response Plan

The effective integration of these plans should be ensured to maintain alignment with national legislative requirements and international best practice standards. Coordination among these plans will help mitigate cumulative risks and enhance the efficiency and safety of construction operations.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

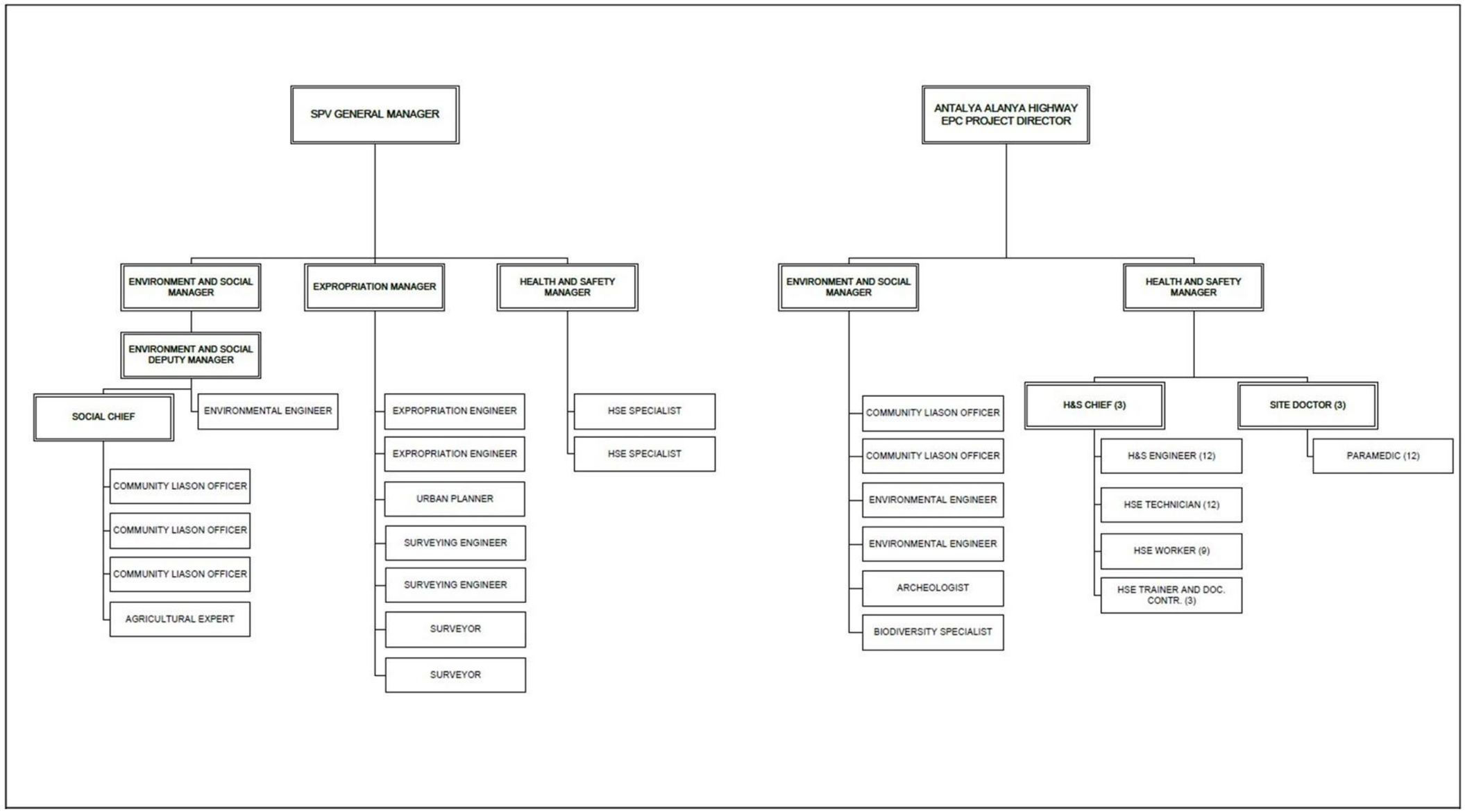


Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts.

Roles	Responsibilities
	• Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities.

Roles	Responsibilities
	• Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions.

Roles	Responsibilities
	• Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs.

Roles	Responsibilities
	• Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions.

Roles	Responsibilities
	• Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution, • and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related • impacts. • Support alignment between community concerns and project execution through proactive communication with • technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project.

Roles	Responsibilities
	• Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures.

Roles	Responsibilities
	• Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies.

Roles	Responsibilities
	• Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities.

Roles	Responsibilities
	• Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.

Roles	Responsibilities
	• Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs.

Roles	Responsibilities
	• Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected.

Roles	Responsibilities
	• Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project.

Roles	Responsibilities
	• Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities.

Roles	Responsibilities
	• Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager.

Roles	Responsibilities
	• Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space).

Roles	Responsibilities
	• Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices.

Roles	Responsibilities
	• Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM).

Roles	Responsibilities
	• Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

In addition to the key management roles which are given in Figure IV.1 and Table IV.1, roles and responsibilities of key workers such as flagmen, drivers and operators are given below.

Flagmen

The responsibilities of the flagmen are as follows:

- Giving signals to the driver-operator to ensure safe movement of vehicle-equipment in work areas,
- Making directions to prevent drivers and operators from hitting people and other equipment,
- Supervising the operation of vehicles and equipment in the field and ensuring their safe parking,

- Guiding vehicles and equipment to reverse maneuver when necessary,
- Guiding in order to reduce pedestrian and vehicle interaction in areas where vehicles and equipment are busy,
- To act in line with the direction and administration of the H&S Engineer and/or H&S Chief,
- To use and maintain the PPE provided to him, indicating that he is the Flagman.
- The duties and responsibilities of the employees who will serve as the flagman are notified against signature.
- To regulate construction site traffic and third-party vehicle traffic at points where third-party vehicle traffic inevitably intersects.

Drivers and Operators

The responsibilities of drivers and operators are as follows:

- Having knowledge of the traffic rules in and out of the field (areas in interaction with third parties),
- To ensure that the vehicle or equipment used is maintained and in good condition,
- Wearing the seat belt while using the vehicle or equipment, ensuring that all other passengers wear seat belts, not moving until the other passengers are wearing their seat belts,
- To comply with the speed limits determined on and off the field,
- Complying with all traffic signs, signals and mandatory directions on and off the field,
- To use the vehicle or equipment with its headlights on, motion signals and alarms (reverse gear alarm, beacon lamp and alarms that work with the movement of pallets in tracked work machines),
- Vehicle – not to disable the safety equipment of the equipment,
- Not reversing where the flagman is not present,
- To comply with the flags' signs and warnings,
- Parking in designated places only.
- Not to close or block in-field transition routes unplanned,
- Not to carry any unauthorized person in the vehicle or equipment,
- To make pre-use checks before using all vehicles and equipment,
- To use all PPE required by the project when going out of the cabin in the field,
- Not smoking in vehicle or equipment cabins,
- Keeping vehicle and equipment cabins clean and tidy,
- Not to consume food or drink in vehicle and equipment cabins,
- Not using materials that will reduce the field of view on vehicle and equipment cabin windows (curtains, paper, cardboard, etc.)
- Not to leave the cabin while the vehicle or equipment is in operation,
- Stopping the engine of the vehicle or equipment when not in use,
- Not to use mobile phones and other communication tools while the vehicle or equipment is in operation
- Not to move unless the transported load is safely loaded,

V. TRAFFIC MANAGEMENT APPROACH

The traffic management strategy for the Project has been developed to ensure the safe and efficient movement of personnel, materials, and equipment while minimizing adverse impacts on community health, safety, and the environment during the construction phase. The approach incorporates both statutory requirements and international best practices to reduce traffic-related risks and disturbances throughout the Project lifecycle.

In accordance with the relevant provisions of the Build-Operate-Transfer (BOT) contract, the guaranteed minimum traffic for the Project has been set at 100,000 passenger car equivalents (PCE) per day. Further traffic projection studies supporting the long-term feasibility and operational optimization of the motorway are being carried out by the Project Sponsor (AAOİAŞ). These projections will inform traffic flow expectations, capacity planning, and design-stage adjustments relevant to construction-phase routing and traffic management strategies.

Beyond the mitigation of potential environmental and social impacts, the Project is expected to generate significant benefits, including the alleviation of existing traffic congestion in Antalya and surrounding provinces such as Burdur, Muğla, Konya, Isparta, Karaman, and Mersin. Anticipated benefits also include reduced travel times, enhanced transportation comfort, and employment opportunities arising during both the construction phase and subsequent operation of service areas, maintenance activities, and toll-related functions.

Key objectives of the Traffic Management Plan ("the Plan") include:

- Ensuring the safe movement of equipment, materials, and personnel to and from construction areas;
- Facilitating the secure transport of construction equipment and workforce to support Project-related activities;
- Establishing and maintaining access routes for traffic generated by the Antalya Alanya Motorway Project;
- Identifying baseline traffic conditions and minimizing disruption, congestion, and delays caused by construction activities;
- Clearly defining the roles and responsibilities for the planning and implementation of traffic management measures;
- Developing a program to monitor and audit traffic-related impacts and associated mitigation performance;
- Addressing stakeholder concerns and incorporating feedback into traffic planning activities;
- Ensuring compliance with all applicable traffic regulations and statutory requirements during construction;
- Minimizing traffic-related environmental impacts, including emissions, noise, and dust, through regulated transportation schedules and vehicle standards;
- Supporting the effective integration of environmental management measures during material and equipment transport;
- Minimizing the impact of Project-related traffic on adjacent land uses and the local community.

In line with these objectives, traffic rules and site-specific measures will be implemented to minimize the risk of road accidents, emissions, and excessive noise. Safety awareness among drivers and Project personnel will be emphasized through targeted trainings and on-site enforcement of transport regulations. Transportation activities will be planned in consideration of road safety risks, vehicle compliance standards, and mitigation requirements outlined in the relevant ESIA documentation. The effective implementation of this traffic management approach will help reduce traffic-induced risks, maintain regulatory compliance, and protect surrounding communities and environments throughout the construction phase.

Access roads to construction sites, plant areas, active work fronts, quarries, borrow pits and camp sites and the transportation routes of construction materials are listed in Table V.1 and satellite views of the roads are given in Appendix A. Table v.1 shows the transportation routes from Toy-4a, Karamanlar and Çenger quarries, where route studies have been completed, to the facility areas (camp site areas, concrete plants, mechanical plants, asphalt plants) and from these facility areas to the

relevant construction sites. In addition when new routes are needed, this plan will be revised before the relevant route is put into use.

In addition, construction materials such as cement and rebar will be supplied from production factories. Since different suppliers can be used in the supply of construction materials and therefore transportation will be carried out via the existing state road network up to Antalya Province, the starting point in the material supply route planning was taken as the D-685 exit of the Antalya Ring Road (see Table V.2 and Appendix A).

Table V.1: Site Access Roads

Road ID	Start	End	Location	Closest Neighborhood
Yol-1	Concrete Plant 1	T1-Entrance (Structures)	Between 52+000–55+000	Sarıabalı
Yol-2	Concrete Plant 1	Serik Interchange	Between 52+000–55+000	Sarıabalı, Deniztepesi
Yol-3	Concrete Plant 1	Between T1 Exit and Viaduct-1	Between 52+000–55+000	No settlement
Yol-4	Concrete Plant 1	T1 Entrance Section	Between 52+000–55+000	Sarıabalı
Yol-5	TOY4a Rock Quarry	Concrete Plant 1	Between 52+000–55+000	Belkıs, Taşağıl, Sarıabalı
Yol-6	Concrete Plant 2 Mechanical Plant-1 Asphalt Plant-1 Temporary Camp Site	Viaduct 1 Exit	Between 55+000–68+000	No settlement
Yol-7	Concrete Plant 2 Mechanical Plant-1 Asphalt Plant-1 Temporary Camp Site	T2 Entrance	Between 55+000–68+000	No settlement
Yol-8	Concrete Plant 2 Mechanical Plant-1 Asphalt Plant-1 Temporary Camp Site	T2 Exit	Between 55+000–68+000	No settlement
Yol-9	Concrete Plant 2 Mechanical Plant-1 Asphalt Plant-1 Temporary Camp Site	T3 Exit	Between 55+000–68+000	Taşağıl
Yol-10	Concrete Plant 2 Mechanical Plant-1 Asphalt Plant-1 Temporary Camp Site	T3 Exit–Main Camp Area	Between 55+000–68+000	Taşağıl
Yol-11	Concrete Plant 2 Mechanical Plant-1 Asphalt Plant-1 Temporary Camp Site	Taşağil K1 Interchange	Between 55+000–68+000	Taşğıl, Bereket, Hocalar
Yol-12	Concrete Plant 2 Mechanical Plant-1 Asphalt Plant-1 Temporary Camp Site	Km:68+500 Structures	Between 55+000–68+000	Taşğıl, Bereket, Hocalar
Yol-13	Concrete Plant 2 Mechanical Plant-1 Asphalt Plant-1 Temporary Camp Site	Km:65+800 Structures	Between 55+000–68+000	Taşğıl, Bereket, Hocalar
Yol-14	Toy4a Rock Quarry	Concrete Plant 2	Between 55+000–68+000	No settlement
Yol-15	Concrete Plant 3	Viaduct 4 Entrance And Structures	Between 68+000–83+000	Yeniköy
Yol-16	Concrete Plant 3	Viaduct 3 And Structures	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Çolaklı, Yavrudoğan

Road ID	Start	End	Location	Closest Neighborhood
Yol-17	Concrete Plant 3	Km:75+000 Structures	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Yavrudoğan
Yol-18	Concrete Plant 3	T4	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Çolaklı, Yavrudoğan
Yol-19	Concrete Plant 3	Km:68+500 Structures	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Çolaklı, Gündoğdu, Hocalar
Yol-20	Concrete Plant 3	Km:68+500 Structures	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Çolaklı, Gündoğdu, Hocalar
Yol-21	Concrete Plant 3	Taşağil K1 Interchange	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Çolaklı, Gündoğdu, Hocalar
Yol-22	Concrete Plant 3	Km:75+000 Structures	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Yavrudoğan
Yol-23	Concrete Plant 3	Km:73+000 Structures	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Yavrudoğan
Yol-24	Concrete Plant 3	Km:71+850 Structures	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Çolaklı, Yavrudoğan
Yol-25	Concrete Plant 3	Km:75+750 Structures	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Çolaklı, Yavrudoğan, Kalemler
Yol-26	Toy4a Rock Quarry	Concrete Plant 3	Between 68+000–83+000	Yeniköy, Gültepe, Hatipler, Ilıca, Evren, Seki, Çolaklı, Gündoğdu, Bereket, Taşağıl
Yol-27	Concrete Plant 4a	Km:90+000 Structures	Between 89+000–94+000	Ulukapı
Yol-28	Concrete Plant 4a	Km:89+000 Structures	Between 89+000–94+000	Ulukapı
Yol-29	Concrete Plant 4a	Km:91+000 Structures	Between 89+000–94+000	Ulukapı, Aşağıışıklar
Yol-30	Concrete Plant 4a	Km:92+500 Structures	Between 89+000–94+000	Ulukapı, Aşağıışıklar
Yol-31	Concrete Plant 4a	Km:92+750 Structures	Between 89+000–94+000	Ulukapı, Aşağıışıklar
Yol-32	Concrete Plant 4a	Km:93+500 Structures	Between 89+000–94+000	Ulukapı, Aşağıışıklar, Demirciler
Yol-33	Çengel Stream Material Quarry (Remote)	Concrete Plant 4	Between 89+000–94+000	Uzunlar, Çavuşköy, Kızlot, Çavuşköy, Kızılağaç, Karacalar, Seydiler, Doğançam, Aksaz, Karaöz, Demirciler, Aşağıışıklar, Çeltikçi, Ulukapı
Yol-34	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Viaduct 7	Between 83+000–89+000	Bucakşeyhler
Yol-35	Çengel Stream Material Quarry (Remote)	Concrete Plant 4a	Between 83+000–89+000	Uzunlar, Çavuşköy, Kızlot, Çavuşköy, Kızılağaç, Karacalar, Seydiler, Doğançam, Aksaz, Karaöz, Demirciler, Aşağıışıklar, Çeltikçi, Örnek, Eskihisar, Bahçelievler, Aydınevler, Mimar Sinan, Sorgun, Hatipler, Sarılar, Dikmen, Bucakşeyhler

Road ID	Start	End	Location	Closest Neighborhood
Yol-36	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Km:87+000 Structures	Between 83+000–89+000	Bucakşeyhler
Yol-37	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Viaduct 6	Between 83+000–89+000	Bucakşeyhler
Yol-38	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Viaduct 6	Between 83+000–89+000	Bucakşeyhler
Yol-39	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Km:84+750 Structures	Between 83+000–89+000	Bucakşeyhler, Dikmen
Yol-40	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Manavgat K1 Interchange	Between 83+000–89+000	Bucakşeyhler, Dikmen, Yukarıışıklar
Yol-41	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Km:81+000 Structures	Between 83+000–89+000	Bucakşeyhler, Dikmen, Sarılar, Dolbazlar, Evrenleryavşı
Yol-42	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Km:82+000 Structures	Between 83+000–89+000	Bucakşeyhler, Dikmen, Sarılar, Dolbazlar, Evrenleryavşı
Yol-43	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Km:83+000 Structures	Between 83+000–89+000	Bucakşeyhler, Dikmen, Yukarıışıklar
Yol-44	Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	Viaduct 8	Between 83+000–89+000	Ulukapı
Yol-45	Çengel Stream Material Quarry (Remote)	Concrete Plant 5	Between 94+000–111+000	Uzunlar, Çavuşköy, Kızlot, Çavuşköy, Kızılağaç, Karacalar, Seydiler, Sülek
Yol-46	Concrete Plant 5	Viaduct 13	Between 94+000–111+000	No settlement
Yol-47	Concrete Plant 5	Viaduct 12	Between 94+000–111+000	Sülek, Cevizler, Hacıali
Yol-48	Concrete Plant 5	Viaduct 13	Between 94+000–111+000	Sülek, Cevizler
Yol-49	Concrete Plant 5	Km:97+200 Structures	Between 94+000–111+000	Sülek, Cevizler, Hacıali
Yol-50	Concrete Plant 5	Viaduct 11	Between 94+000–111+000	Sülek, Cevizler, Hacıali
Yol-51	Concrete Plant 5	Viaduct 10	Between 94+000–111+000	Sülek, Cevizler, Hacıali
Yol-52	Concrete Plant 5	Km:95+450 Structures	Between 94+000–111+000	Sülek, Cevizler, Hacıali, Seydiler, Aksaz
Yol-53	Concrete Plant 5	Viaduct 9	Between 94+000–111+000	Sülek, Cevizler, Hacıali, Seydiler, Aksaz, Karaöz

Road ID	Start	End	Location	Closest Neighborhood
Yol-54	Concrete Plant 5	Manavgat East K1 Interchange	Between 94+000–111+000	Sülek
Yol-55	Concrete Plant 5	Km:105+000 Structures	Between 94+000–111+000	Sülek, Seydiler, Kızıağaç, Karacalar, Kızılot, Hacıobası, Uzunlar
Yol-56	Concrete Plant 5	Km:104+950 Structures	Between 94+000–111+000	Sülek, Seydiler, Kızıağaç, Karacalar, Kızılot, Hacıobası
Yol-57	Concrete Plant 5	Viaduct 14	Between 94+000–111+000	Sülek, Seydiler, Kızıağaç, Karacalar, Kızılot, Hacıobası
Yol-58	Concrete Plant 5	Km:102+100 Structures	Between 94+000–111+000	Sülek, Seydiler, Kızıağaç, Karacalar, Kızılot, Hacıobası
Yol-59	Concrete Plant 5	Km:105+900 Structures	Between 94+000–111+000	Sülek, Seydiler, Kızıağaç, Karacalar, Kızılot, Hacıobası
Yol-60	Concrete Plant 5	Km:107+550 Structures	Between 94+000–111+000	Sülek, Seydiler, Kızıağaç, Karacalar, Kızılot, Hacıobası, Kadılar
Yol-61	Concrete Plant 5	Km:110+850 Structures	Between 94+000–111+000	Sülek, Seydiler, Kızıağaç, Karacalar, Kızılot, Çenger, Örenşehir
Yol-62	Concrete Plant 5	Km:109+150 Structures	Between 94+000–111+000	Sülek, Seydiler, Kızıağaç, Karacalar, Kızılot, Çenger, Örenşehir, Kadılar
Yol-63	Karamanlar Rock Quarry	Concrete Plant 6	Between 111+000–141+000	No settlement
Yol-64	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:124+250 Structures	Between 111+000–141+000	Avsallar, İncekum, Okurcalar, Örenşehir, Boztepe, Odaönü, Yalçıdibi
Yol-65	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:120+000 Structures	Between 111+000–141+000	Avsallar
Yol-66	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:115+200 Structures	Between 111+000–141+000	Avsallar, İncekum, Okurcalar, Örenşehir, Boztepe, Odaönü, Karakaya
Yol-67	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:115+950 Structures	Between 111+000–141+000	Avsallar, İncekum, Okurcalar, Örenşehir, Boztepe, Odaönü, Karakaya
Yol-68	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:114+000 Structures	Between 111+000–141+000	Avsallar, İncekum, Okurcalar, Örenşehir, Boztepe, Odaönü
Yol-69	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:112+700 Structures	Between 111+000–141+000	Avsallar, İncekum, Okurcalar, Örenşehir, Boztepe, Odaönü, Yalçıdibi
Yol-70	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3	Km:119+000 Structures	Between 111+000–141+000	Avsallar, İncekum, Okurcalar, Alara, Çakallar

Road ID	Start	End	Location	Closest Neighborhood
	Construction Camp Site-3			
Yol-71	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:133+400 Structures	Between 111+000–141+000	Avsallar, Türkler, Payallar, Emişbeleni, Soğukpınar
Yol-72	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Viaduct 15	Between 111+000–141+000	Avsallar, Türkler, Akdam
Yol-73	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Viaduct 16	Between 111+000–141+000	Avsallar, Türkler, Payallar, Emişbeleni
Yol-74	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Alanya West K1 Interchange	Between 111+000–141+000	Avsallar, Türkler, Payallar, Konaklı
Yol-75	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:136+550 Structures	Between 111+000–141+000	Avsallar, Türkler, Payallar, Emişbeleni, Toslak
Yol-76	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:139+700 Structures	Between 111+000–141+000	Avsallar, Türkler, Payallar, Emişbeleni, Toslak
Yol-77	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:140+150 Structures	Between 111+000–141+000	Avsallar, Türkler, Payallar, Konaklı
Yol-78	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:141+100 Structures	Between 111+000–141+000	Avsallar, Türkler, Payallar, Konaklı
Yol-79	Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	Km:140+550 Structures	Between 111+000–141+000	Avsallar, Türkler, Payallar, Konaklı

Table V.2: Transportation Routes

Road ID	Start	End	Road
Yol-1	Antalya Ring Road	Concrete Plant 1	D685 D400 Sarıabalı Rural Road / Forest Road / Field Road

Yol-2		Concrete Plant 5	D685 D400 Karacalar Rural Road / Forest Road / Field Road
Yol-3		Concrete Plant 4a	D685 D400 Ulukapı and Demirciler Rural Road / Forest Road / Field Road
Yol-4		Concrete Plant 4 Mechanical Plant-2 Asphalt Plent-2 Construction Camp Site-2	D685 D400 Manavgat Urban Road Dikmen Rural Road / Forest Road / Field Road
Yol-5		Concrete Plant 3	D685 D400 Manavgat Urban Road Dolbazlar Rural Road / Forest Road / Field Road
Yol-6		Concrete Plant 2 Mechanical Plant-1 Asphalt Plent-1	D685 D400 Taşağıl Rural Road / Forest Road / Field Road
Yol-7		Concrete Plant 6 Mechanical Plant-3 Asphalt Plent-3 Construction Camp Site-3	D685 D400 Avsallar Urban Road

The routes given in Table V.2, which will be used for both access to the sites and material transportation, are asphalted and generally D-600 state road and district roads. There will be an increase in truck traffic due to material transportation on the roads between the quarries and plant areas (ready-mixed concrete plant, asphalt plant, mechanical plant). Transportation of cement and rebar, etc., which are the main material items, will generally be provided via D400, which is used for transportation to district settlements and roads, and there will be an increase in truck traffic on these roads.

Since the roads to be used within the scope of the project pass through many district centers, settlements and villages, there are sensitive receiving points such as schools and mosques on these roads.

Within the scope of the project, personnel, machinery/equipment and heavy machinery transfers will be made. The following points will be taken into consideration when transfers are made.

Personnel Transportation

Service minibuses will be used for transferring personnel from their accommodation areas to the work area or between work areas. (Appendix B)

Service minibuses used;

- Service minibuses have the necessary legal documents and certificates.
- The driver has the appropriate driver's license and the necessary legal documents.

- The vehicle interior must be covered with safe material against slipping and falling.
- Thermal air conditions are provided in the vehicle.
- The daily vehicle checklist must be approved.
- Smoking is strictly prohibited in the vehicle.
- Appropriate lighting must be available and working in the vehicle.
- All personnel must be seated. There must be no standing personnel.
- All seats must have seat belts and everyone must wear seat belts while driving.
- Routine maintenance of the vehicles is carried out and recorded.

Heavy Vehicle Transportation

Guidelines shall be followed when transferring supplies, machinery, etc.;

- The relevant units decide which equipment and materials need to be moved, and the manager in charge of the transfer receives comprehensive information.
- The General Directorate of Highways issues a "Special Load Transport Document" (Attachment 10.3) for the vehicle to be transported.
- The vehicle to be transported is covered by an insurance document.
- To maintain road safety, a lead vehicle is maintained in front of or behind the vehicle while it is being transported.
- The "Special Load Transport Document" specifies the path that must be followed during transportation.
- The route specified in the "Special Freight Transport Document" is followed.

Light Vehicles

All Light vehicles that are required access past to site areas will require the following items;

- Flashing Light
- Reversing Alarm

Prior to entering gates for the first time all light vehicles will be required to be inspected to ensure that the vehicle is equip with all of the mandatory requirements.

Oversized and Heavy Vehicle Access

Rules to be applied when high capacity and heavy loaded vehicles will be used;

- An authorized person inspect the vehicles to look for any damage sustained during transit.
- The vehicles are parked in a secure location, and the required document checks are completed.
- The car is securely unloaded and stored in the parking lot following the receipt of the required approvals. (Appendix B)

This Plan will be updated for each phase of the works and will show the preferred travel paths for vehicles associated with the works and will include details of how construction traffic will safely enter and leave the work site.

The preferred travel paths for vehicles associated with the works and will include details of how construction traffic will safety enter and leave the worksite.

These will be updated when required and shown during induction and on notice boards. VMPs are included in Appendix B.

This Traffic Management Plan will detail the signs, devices and traffic controllers required to warn approaching vehicles of the works, and guide the traffic through or around the worksite.

Temporary roadways and works will be designed to minimize adverse changes to existing property access arrangements and road functionality for other road users. All temporary traffic diversions and controls will be completed before the construction activities interfere with the current traffic arrangements. Any temporary roads will be removed and the area restored to its original condition upon completion of the works.

Travel lanes, their widths, road geometry and configuration will be in accordance with national highway legislation and traffic law. These indicate design travel speed of 40 km/h, traffic lane widths of 3.5m

Signposting (Traffik Signs) will be in accordance with road design guidelines and national highway legislation and traffic law.

This requires marking and signposting shall be reflected in the temporary works design and construction staging plans. Signs will be new, markings will be appropriate for the speed and the works.

Informing the Public - Variable Message Signs

Portable Variable Message Signs will be installed at each end of the Project, prior to any changed traffic conditions due to construction activity. These will be used to inform the public where any road changes as a result of the construction works.

Additionally, project signboards will be located at each end of the Project. Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (“AAOİAŞ” or “SPV”) will liaise with the public through the Construction Liaison Officer (CLO), traffic management will be an agenda item for each of these meetings.

Site Speed Limit

The speed limit in the construction site will be 20km/h,

All public temporary roadways will have a design travel speed of 40 km/h.

This information will be included in the induction presentation and any changes will be updated at Toolbox Meetings.

Access Roads/Haul Roads

Persons inducted onto the project will be informed of the need to only use existing access roads and to not travel off the existing pavement and into other grassed areas or on the shoulders of the road.

All haul roads will be constructed to ensure that safe traffic operation can be maintained at all times. Haul roads will be constructed to the following standard:

- Roads will be constructed with sound material.
- All bends or corners in haul roads will be constructed to maintain the stability of equipment regularly using the corner or bend.
- A windrow the height of the largest vehicles axle shall be constructed where the difference in level between a haul road and an adjacent surface is greater than 1,5 m.
- One way haul roads will have a minimum width that is 1,5 times the maximum truck width.
- Two-way haul roads will have a minimum width that is 3 times the maximum truck width.
- Haul roads will be inspected on a regular basis to ensure they are in a satisfactory condition and comply with national and international standards and lender requirements.
- When working in stockpile areas non-essential plant will be restricted to the cleared area in these locations.

Maximum Loads

Loading plant operators are to load trucks in such a manner that the load is safely distributed and the likelihood of spillage is minimized.

The driver of the truck being loaded shall remain inside the cab while loading is taking place, or must leave the operating area to a place of safety before loading commences.

VI. MITIGATION MEASURES FOR TRAFFIC-RELATED RISKS AND IMPACTS

General Rules

Following measures will be taken in accordance with the KGM's Technical Specifications for Motorways and relevant international standards to ensure traffic safety at the construction sites and minimize the risk of accidents:

- Significant numbers of trucks and other construction machinery will be involved in the land preparation and construction activities. Since the heavy machinery will work within the construction corridor, the risks posed on the users of public roads would be insignificant. On the other hand, delivery of the construction materials extracted at the quarries and material borrow sites to the construction site and transportation of the unused excavated materials from the work sites to the storage sites by means of trucks, delivery of construction materials (steel, beams, concrete, etc.) by means of trailers and trucks, transportation of personnel accommodating at campsites to the work sites will be the main activities associated with increased traffic.
- Roads and intersections with heavy construction traffic will be supported with additional safety measures such as traffic control personnel, speed reduction systems, warning signage, and awareness initiatives for drivers. The safety of the local population and road users will be prioritized. Details on traffic signage to be used at the construction site are provided in Table V.1
- Construction activities on existing roads will not commence until all necessary traffic safety measures, including traffic signage and placement of control equipment, are implemented to protect both pedestrians and vehicles. During construction, some public roads will be diverted to another route or closed for a certain period of time. During the works, road signs will be installed and adequate lighting measures will be taken at night to minimise the risk of accidents. The passage of trucks and other construction machinery through residential areas with alternative routes will be kept to a minimum. A service road will be constructed to provide access to campsites, and there will be no interaction with nearby residential areas.
- Limak and all subcontractors and other Project road users will be required to comply with this plan,
- Road signage for nighttime traffic will be provided through the use of reflectors and flashing lights. Upon completion of construction works, temporary signage will be promptly removed and replaced with standard permanent signage.
- All roads designated for Project vehicle use will be assessed beforehand to ensure they are suitable for the movement of heavy and oversized vehicles.
- Where alternative routes are available, construction traffic will be rerouted to avoid passing through residential areas. Hazardous or unsuitable routes will be identified, and dedicated service roads will be constructed wherever feasible, including where temporary diversions are needed. These service roads will be used for the transport of machinery, equipment, and materials.
- Valid licenses for all drivers and machinery operators will be required and verified.

- Drivers and operators will be trained in traffic safety, with emphasis on recognizing and complying with signage, respecting speed limits, and anticipating high-traffic areas. Training will include preparation for both on-road and off-road conditions.
- Transport schedules, particularly for large vehicles, will be arranged to avoid peak traffic hours (07.30-09.00 and 17.00-18.00) and minimize conflicts with community use of roads.
- Traffic delays caused by construction activities will be minimized. Traffic flow will be allowed to proceed at intervals of no more than 30 minutes.
- Limits on daily working and trip durations for drivers and operators will be established to prevent fatigue. These limits will be managed and monitored in accordance with Article 98 of the Motorway Traffic Regulations and will not exceed 9 hours.
- Construction materials, machinery, or equipment will not be left on active roads. All unused items will be stored in designated, secure areas to prevent obstruction and accidents.
- Necessary training and awareness training will be given to heavy vehicle drivers,
- A follow-up technic will be established to continuously monitor and inspect the speed control of heavy vehicles, the routes they use, and the transportation routes,
- Regulations and laws regarding the transportation of materials and loads by heavy vehicles will be implemented and additional measures will be taken in accordance with national legislation, if required. Tarpaulin, closed transport, load limits, maintenance and measurements of vehicles will be checked, environmental and social security measures will be taken,
- The grievance mechanism will be used effectively, and traffic related complaints will be recorded, evaluated, resolved and managed.
- Safe work zones will be established to physically separate workers on foot from the traffic;
- The timing for works implementation (Traffic management) will be optimized to minimize traffic delays due to rehabilitation, widening or maintenance work zones on existing road sections. Activities, e.g., maintenance, that affect traffic will, if possible, be conducted during low traffic hours in order to avoid affecting local traffic.
- For the construction works to be conducted at locations where traffic exists, Limak will establish safe work zones by taking relevant measures (closure of roads, diversion of traffic, use of protective barriers, cones, warning lights, etc.) in consultation with the pertinent authorities (police, traffic authorities, local authorities, etc).
- Weather forecasts will be monitored to provide advance warning of extreme weather to drivers and schedule the work accordingly.
- Temporary traffic control devices, such as signage, warning devices, paddles, and concrete barriers will be set up where required in a consistent manner throughout the work zone to provide passing motorists with advanced warning of upcoming work zones;
- Traffic control workers will be trained in topics such as traffic flow, work zone setup, and proper placement of channelizing devices.
- All workers will wear high-visibility safety apparel.
- Speed limits (40 km/h) will be implemented for trucks travelling to and from construction sites (within built-up areas and on village roads of poor condition: 20 km/h). For monitoring purposes, a truck speed report will be regularly required to the companies responsible for the transportation.
- Slow driving rules in villages (e.g., max. speed 20km/h) will be implemented, particularly near sensitive use areas which will be identified (at least one month) prior to start of construction related activities;
- Project traffic routing through community areas will be reduced wherever possible. Optimum traffic routes will be identified and communicated to the drivers (both heavy and light vehicle drivers)
- The motorway alignment will be used for transportation whenever possible.

Mitigation Measures for the Impact on the Local Road Network:

- Ongoing stakeholder engagement will include consultation with authorities, local communities and any other relevant stakeholders, as per the SEP and additional stakeholders are to be identified in the course of the project as necessary, with regard to Traffic Management. Any grievances received from stakeholders will be managed in accordance with the Grievance Mechanism as detailed in the Project SEP
- Roads will be assessed to ensure suitability for heavy and large vehicles prior to use by Project vehicles
- Engagement will be made with local authorities on the issue of traffic movement during the construction phase.
- Residents in nearby communities will be informed about the transport routes to be used. Signage will be erected in the weeks prior to any works commencing along and on adjacent roads to the Project area, notifying the public of the construction activity and related transportation to take place and the timing thereof, including contact details of AAOİAŞ and Limak,
- In cases where transit from existing settlements is inevitable, AAOİAŞ and Limak will take all necessary precautions (speed limits, traffic signs, driver trainings) to prevent safety risks that concern the public, and will contact the public representatives to plan the traffic by taking into account the daily life of the people and by appropriate means such as brochures, notices, signs, etc, it will inform the public about the construction program, activities to be carried out and safety measures taken.
- Supervision and escort for heavy machinery (which requires escort and permit in line with national Legislation) will be provided.
- Supervision for vehicles carrying construction materials and equipment that pass over public or private roads and motorway crossings will be provided.
- Project related traffic will be regulated during certain dates and times where local community will require to commute (to/from schools, commercial areas etc.) or take on any agricultural activity (animal grazing or other farming activities etc.).
- Limak will evaluate and approve subcontracted site locations considering the potential impacts of site-related traffic on nearby communities.
- Limak will clearly identify construction zones with appropriate visual means such as reflective barriers and flashing signs.
- Temporary access to private property or appropriate accessing alternatives will be determined in consultation with the land owners or users.
- Local authorities and communities will be provided with detailed information on the planned closure of roads at least 2 week in advance by the communication channels defined in the SEP such per email, signage boards, traditional media (newspapers, radio), etc. as applicable. Routes envisaged for construction traffic and critical places (including sensitive receptors such as hospitals, schools) will be determined and agreed upon in consultation with relevant authorities and, if necessary, local people.
- Methods for every road crossing will be determined and agreed upon with authorities prior to taking any action. All methods and construction techniques proposed by Limak will aim to minimize possible disruptions caused by road crossings.
- Limak will ensure that road safety training will be provided to employees.
- The schools nearby the Project site will be informed about the peak movements of the vehicles and vehicle traffic will be avoided during hours when children are traveling to and from school.
- Heavy machinery and vehicles utilized in transportation activities (including transportation of personnel) will be used by qualified and licensed drivers.
- All drivers will know and comply with all traffic signs, will be made aware of hotspots of intense

traffic that are expected along the route and are trained properly for on and off-road conditions.

- Managing and monitoring of working and resting hours drivers will be undertaken according to national legislation.
- Monitoring security arrangements for loads, vehicles and drivers will be undertaken according to national legislation.
- All project work sites, Project Facilities, temporary roads, and traffic management works will be signposted in line national legislation and as required by the Plan
- Night drive/transportation will be limited as much as possible to reduce the risk of accidents and obtaining necessary permits shall night transportation be required.
- Compensating damages caused by an accident due to project activities will be undertaken according to national legislative requirements and the Grievance Mechanism defined in the Stakeholder Engagement Plan (SEP) of the Project.
- A Grievance Mechanism set up for communities and individuals to formally communicate their concerns, complaints and grievances and facilitate resolutions that are mutually acceptable by the parties.
- The routes of the roads that will be used and the peak hours of the usage of the roads will be shared with village heads and management of the schools by the communication channels defined in the SEP such as email, as applicable.
- The CLOs of the AAOİAŞ and Limak will arrange awareness training for schools, to be given by the HS Manager or H&S Engineer, if there is a school located on the route of the roads that will be used.
- Installation of barriers (e.g. fencing,) to prevent pedestrian access to the Project construction area except at designated crossing points.
- Landfill irrigation system will be applied to prevent dust formation on the road. Regular and frequent irrigation will be applied especially in the dry period for dust reduction. Where there are sensitive products, dust screening measures will be applied.
- The grievance mechanism will be strengthened and operated along the entire route, all complaints will be recorded and resolved in accordance with the Grievance Mechanism,
- In case of complaints, additional measurements will be made and the results will be shared with the complainant.
- Road improvement/rehabilitation will be implemented when necessary.
- The level crossings used for livestock breeding and for passing to pasture areas will be determined and signposted, indicating an approaching speed limit of 10 km/h and installing a Stop signal at the crossing point.
- During the construction period, a passageway will be left at certain intervals for animal passages,
- It will be determined in consultation with the villagers so that the animal crossings do not cause difficulties in their livelihoods and do not lengthen the roads,
- Where necessary, safe and functional passageways or underpasses etc. will be constructed.

Mitigation Measures for the Impact on the Community Health and Safety:

- In terms of children's health, taking dust-preventing screening measures to prevent dust towards schools, in order to prevent the schools from being affected by dust during the construction process and the security problems that may arise from the construction activities, the existing firewalls and wires should be developed and strengthened with more functional and protective measures.
- Continuous monitoring and reporting of social and environmental impacts around schools, by means of signage boards and email and other appropriate communication channel as defined in the SEP.

- The security measures and lighting of the passages should be taken at a sufficient level and they should be accessible; it will be built in accordance with the use of children, elderly, disabled and parents with children,
- The construction activities on the existing roads will only start after the relevant permits are obtained, and signage, barrier, fence, lighting, etc. will be completed in cooperation with the relevant authorities. All necessary precautions will be taken. Limak will clearly identify construction zones with appropriate visual means such as reflective barriers and flashing signs. Routes envisaged for construction traffic and critical places (including sensitive receptors such as hospitals, schools) will be determined and agreed upon in consultation with relevant authorities and, if necessary, local people. Construction vehicles will only operate within these regions and routes.
- Limak will evaluate and approve subcontracted site locations considering the potential impacts of site-related traffic on nearby communities.
- Considering the pedestrian traffic, the construction will continue without closing the pedestrian crossing routes or by providing alternative crossings,
- Heavy vehicle offsite traffic will be planned in such a way that it does not coincide with the entrance and exit times of the schools.
- Necessary training and awareness training will be given to heavy vehicle drivers,
- Pits, splits and deteriorations that may pose danger will be maintained immediately. Road improvement works to prevent risks arising from weather conditions will be carried out.
- Considering that the traffic from villages to districts will increase on the days when the district market is established, heavy vehicle traffic will be kept under control in order to prevent risks these days.
- Duration of traffic density and dense points etc information will be given to the local people by mukhtars or by holding safety meetings.
- The grievance mechanism will be used to ensure traffic-related complaints are recorded, evaluated, resolved and managed. Steps and time scales for managing grievances will follow the Grievance Mechanism provisions included in the Stakeholder Engagement Plan (SEP).
- A shuttle bus will transport the project workers from the workers camp to the project construction site.
- Movement of delivery and private vehicles will be limited to predefined areas and routes. One-way circulation systems will be implemented where feasible to improve traffic safety and flow.
- Rigid objects will not be used for diverting traffic. Only approved, flexible traffic control equipment will be utilized to ensure safe redirection.

Table VI.1 Construction Site Signage

Typical Signs	Translation	Locations
	Warning – Construction Vehicles	Installed at site access points
	All visitors must report to site office	Installed at site access points

Typical Signs	Translation	Locations
	20 km/h Speed Restriction Sign	Installed at construction site access point
	50 km/h Speed Restriction Sign	Installed at site access point and along site roadway
	Stop Sign	Installed at site road intersections if required
	No Entry	Installed at main access
	Parking Sign	Installed at entrance to site parking
	Roadwork Sign	Installed at the beginning of the access roads if required

VII. TRAINING

The overall training process to be implemented for the Project activities will address the identification of training requirements by job description and will provide basic procedures for conducting and documenting training activities.

As part of their standard job-specific training, employees who will directly engage in transportation and vehicle operation will also receive specific training on how their job responsibilities must be performed to prevent accidents, and to minimize related risks to their own health and safety and the health and safety of their co-workers and the general public. Training topics will, at a minimum include a general introduction to this Plan, the standard operating procedures applicable to individual

work assignments. Training will include recognition of the general traffic rules and traffic safety. The documents will be made available to all Project staff via the controlled document distribution to be developed.

Required trainings will be provided by H&S Manager and E&S Manager and Operation Environmental Engineer during construction and operation phases, respectively. If the Environmental and Social Expert and the Operation Environmental Engineer deem it necessary, Safe Driving training will be given by the Safety Driving Expert appointed by the consultant firm. Refresher training on traffic rules and traffic safety will also be conducted for all workers on at least an annual basis.

VIII. MONITORING

As part of this Plan, regular monitoring activities will be conducted to assess the implementation of mitigation measures during the construction phase. To support continuous improvement, monitoring and reporting mechanisms will be established throughout the Project. For the overarching monitoring strategy, please refer to the Environmental and Social Management and Monitoring Plan (ESMMP).

Monitoring efforts will include on-site inspections to verify the implementation of traffic flow arrangements, signage, and temporary traffic control measures. The application of traffic safety measures at construction sites and along the motorway alignment will be closely observed.

Automated systems and communication links will be used for obtaining, recording and reporting the traffic weather and road conditions, as well as traffic incidents. Any adverse conditions, accidents and/or illegitimate incidents will be recorded and monitored by the personnel in charge of traffic management during the construction phase.

Real-time traffic data, including speed, density, and flow, will be continuously monitored through the use of Intelligent Transportation Systems (ITS), where applicable. Additional inputs such as incident records, driver feedback, and field assessments will also be gathered and reviewed on a regular basis.

Traffic accident rates and their underlying causes will be systematically analyzed to identify patterns and areas in need of improvement. Based on these findings, necessary revisions will be made to traffic routing and management plans to enhance safety and operational efficiency.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of measurements, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of air quality and emissions mitigation measures and ensuring full compliance with national regulations and Project standards.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Number of trainings conducted	Construction camp and administrative offices	Tracking the number of Project personnel and contractor workers who have received training	Quarterly	AAOİAŞ, Independent Environmental Experts
Compliance with Plan implementation	Project documentation and management system	Review of records and documents uploaded to the system in accordance with the Plan	Quarterly	AAOİAŞ, Independent Environmental Experts

Number of complaints received	Public relations records and grievance system	Logging and monitoring of grievances as per the Grievance Mechanism Procedure	Quarterly	AAOİAŞ, Independent Social Experts

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Contractor (Limak) and relevant subcontractors.

All traffic-related findings, including safety incidents, traffic flow disruptions, or complaints received from surrounding communities, will be documented in accordance with national regulations and Project procedures. In the event of serious violations—such as major accidents, repeated safety breaches, or significant obstruction of public roads—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Number of reported accidents and incidents	Zero major accidents; decreasing trend in minor incidents	Monthly	AAOİAŞ, Independent Environmental Experts
License / Medical surveillance	100% of drivers/operators compliant with licensing and health checks	Annually	AAOİAŞ, Independent Environmental Experts
Condition of the access roads	Access roads in safe and serviceable condition	Monthly	AAOİAŞ, Independent Environmental Experts
Maintenance records of vehicles	All vehicles maintained as per schedule	Annually	AAOİAŞ, Independent Environmental Experts
Speed control devices	All trucks equipped and devices functioning	Monthly	AAOİAŞ, Independent Environmental Experts
Weather forecast	Weather-related risks identified and communicated daily	Daily	AAOİAŞ, Independent Environmental Experts

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities should be documented and reported as outlined in the Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established human resources and labor-related procedures. Records to be reviewed during traffic management audits will include, but are not limited to, traffic incident and accident reports, driver license and medical surveillance records, maintenance records of vehicles and equipment, speed control monitoring logs, traffic signage and control measures documentation, and traffic-related grievance logs. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary to ensure full compliance with labor legislation and international standards.

XI. REPORTING

Regular reporting should be conducted to ensure effective implementation and continuous improvement of E&S management activities throughout the construction phase of the Project. Reporting should be structured to address both internal monitoring and auditing results, as well as external compliance and stakeholder reporting obligations.

Based on the monitoring results, necessary corrective and preventive actions will be identified and required changes will be reflected to this Plan. Training program will also be updated accordingly. Regular audits and visual inspections shall be conducted in order to ensure all activities are being undertaken according to this Plan.

Reports will be produced by using the findings of the monitoring programs for each issue regarding this Plan. Evidences and results of the monitoring (measurements) activities have to be described in detail in appropriate monitoring reports. This section of the Plan provides instructions and requirements for this reporting activity.

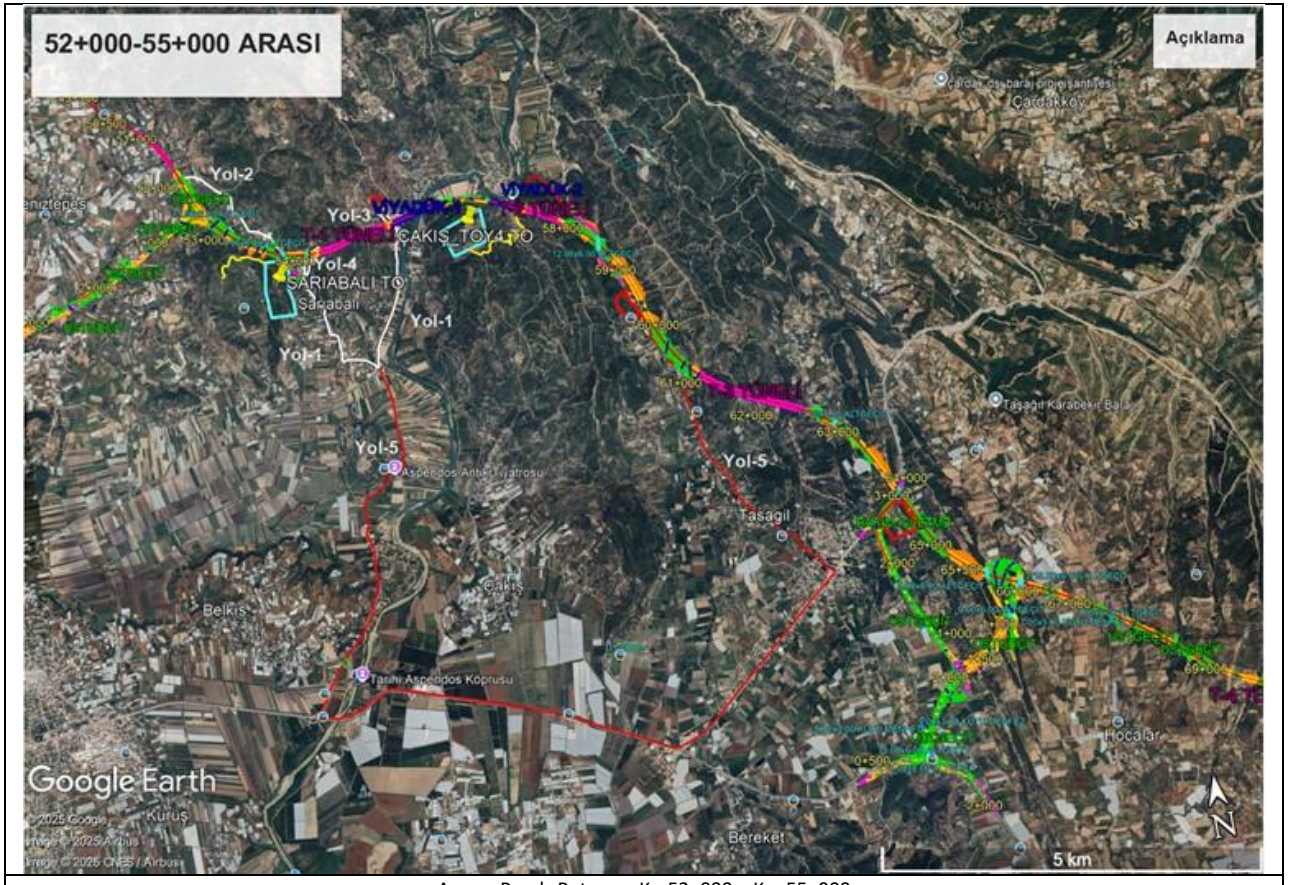
Reporting activities for this Plan is mainly related to data on accident/incident records, license and medical surveillance of the drivers/operators, and maintenance records of vehicles. In case of injury in traffic accidents, reporting is required according to local legislation. Any significant incidents will be immediately reported to local authorities and an incident report, including root cause analysis (RCA), precautions and compensation measures taken will be submitted to local authorities within 30 business days.

These data together with the results of the inspection and audit activities will be summarized in a dedicated chapter to traffic management in the Environmental and Social Monitoring Report to be prepared on quarterly basis. Any non-compliance observed, corrective actions taken and/or recommended time-bound corrective actions to be taken will be included to Report, and these will be supported with documentary proofs such as photos in the report.

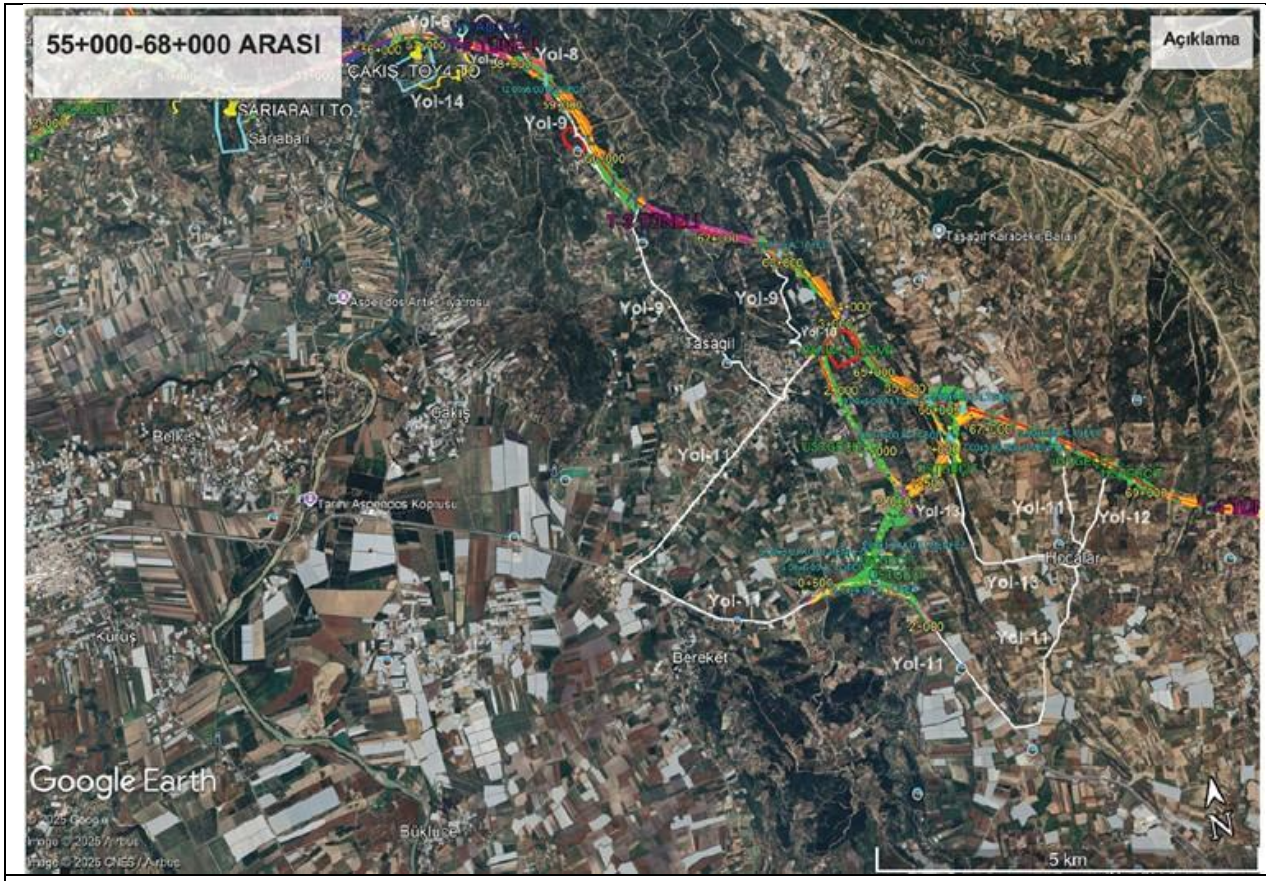
All personnel can raise their concerns, suggestions and complaints according to grievance mechanism by filling grievance form. In addition, grievances from public regarding traffic issues will also be followed. Communication channels could be used for lodging grievances are explained in the Stakeholder Engagement Plan.

During construction phase of the Project, this Plan will be reviewed by E&S Manager quarterly following the audits and also following any incidents on-site or changes in site activities. The updates will be agreed between the Environmental and Social Expert and Site Manager.

APPENDIX A

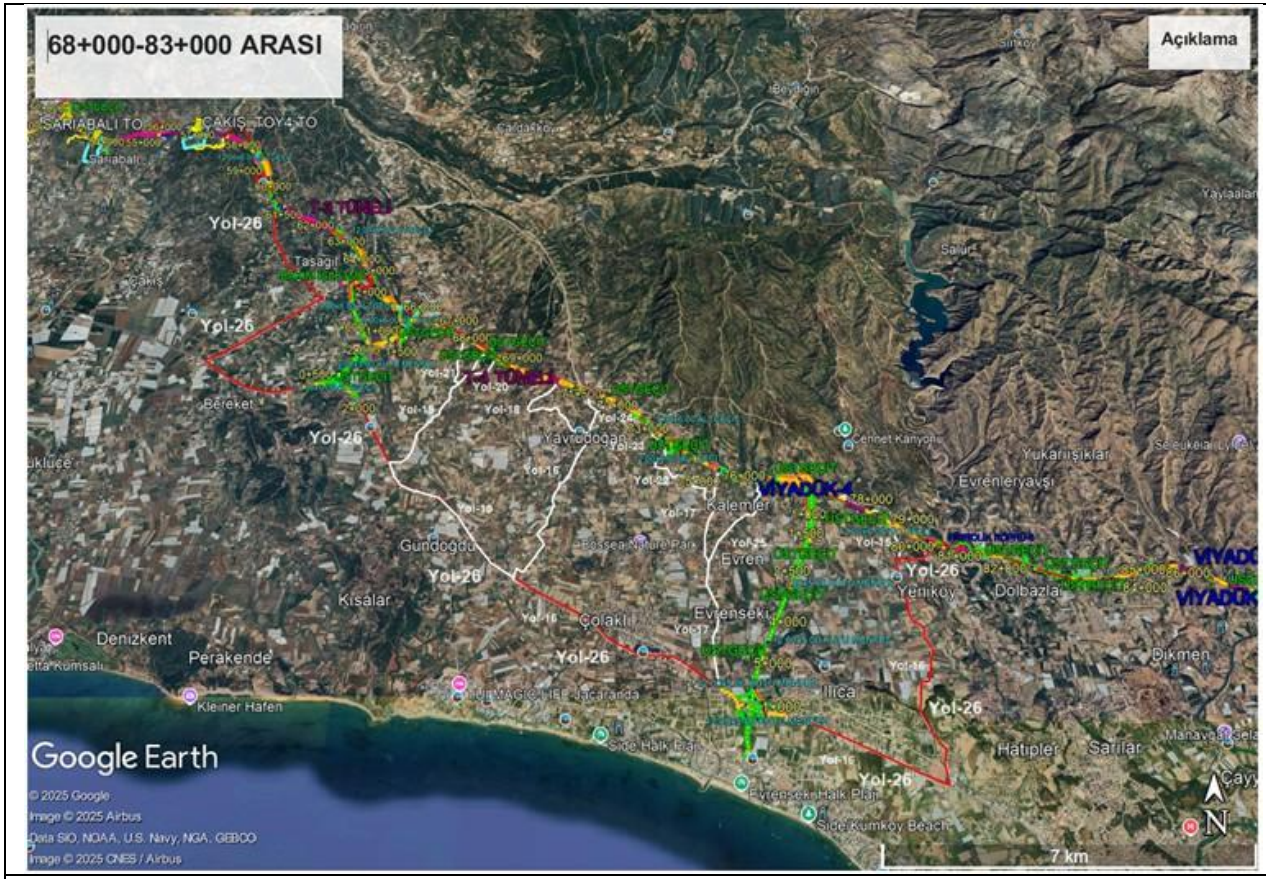


Access Roads Between Km52+000 – Km 55+000



Access Roads Between Km:55+000 – Km:68+000

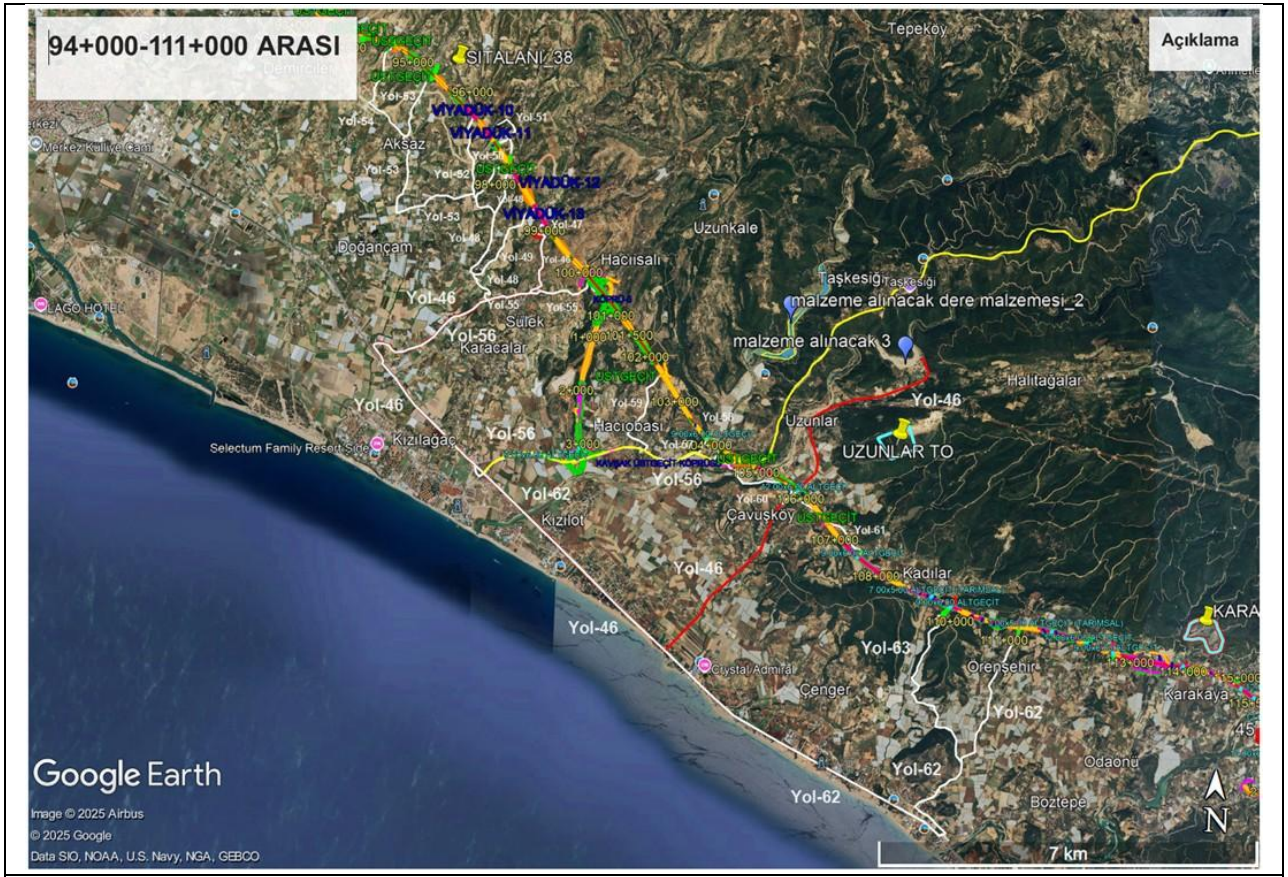
TRAFFIC MANAGEMENT PLAN


68+000-83+000 ARASI
Açıklama
Yol-26
Yol-26
Yol-26

TRAFFIC MANAGEMENT PLAN

Access Roads Between Km:83+000 – Km:89+000

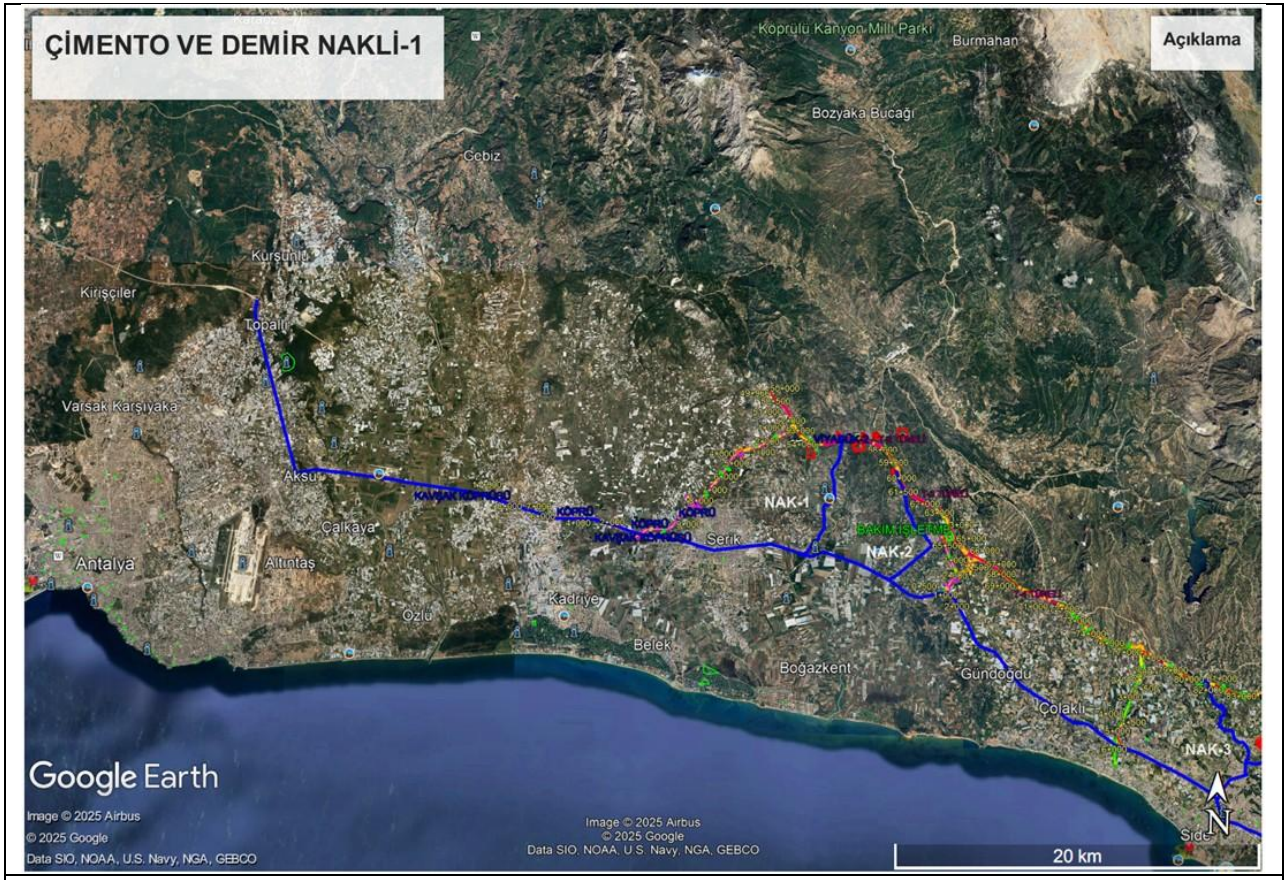
Access Roads Between Km:89+000 – Km:94+000



Access Roads Between Km:94+000 – Km:111+000

Access Roads Between Km:111+000 – Km:141+000

TRAFFIC MANAGEMENT PLAN



Transportation Routes of Construction Materials

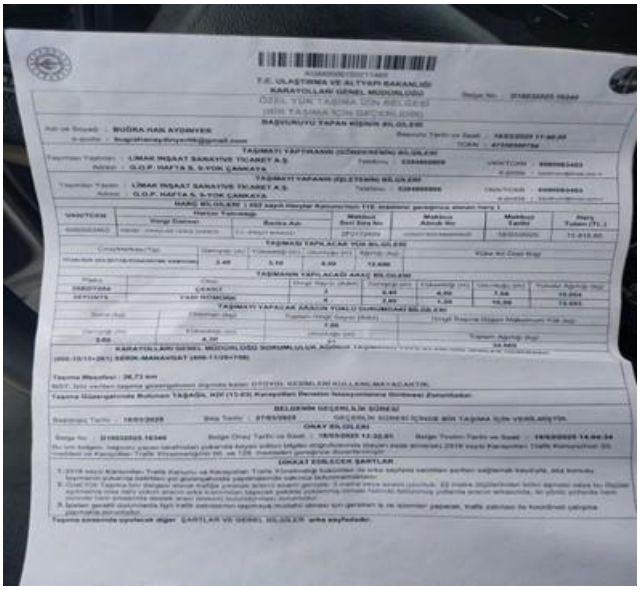
TRAFFIC MANAGEMENT PLAN

Transportation Routes of Construction Materials

APPENDIX B

PERSONNEL TRANSPORTATION VEHICLE

HEAVY VEHICLE TRANSPORTATION VEHICLE



TRAFFIC SIGNS SAMPLES FROM PROJECT SITE

Gözcü
V-8 giden yol
T-5 Tünel giden yol 4

TRAFFIC MANAGEMENT PLAN

Cami 2
20
T-5 Tünel giden yol 2

Okul tabelası

ANTALYA-ALANYA MOTORWAY PROJECT

Revision No: 2 **Date:** 16.06.2025

TRAINING AND COMMUNICATION MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
01.04.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards
23.05.2025	01	Revision
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant

TRAINING AND COMMUNICATION MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
IFC	International Finance Corporation
ILO	International Labor Organization
KPIs	Key Performance Indicators
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
SEP	Stakeholder Engagement Plan
WHO	World Health Organization

TRAINING AND COMMUNICATION MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Training and Communication Management Plan ("the Plan") has been prepared for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan is to outline the procedures and responsibilities necessary to ensure that all personnel—including direct employees, subcontracted workers and site visitors—receive adequate Occupational Health and Safety (OHS) training and information during the construction phase. The Plan aims to ensure that all individuals possess the required knowledge and competencies to carry out their duties safely and effectively, thereby minimizing occupational risks on-site.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

This Plan defines procedures for planning, implementing, and monitoring OHS training programs that are responsive to site-specific risks, task modifications, technological changes, equipment updates, and workplace relocations. Specialized training should be provided for personnel assigned to emergency response roles, including first-aid and rescue duties. In parallel, visitor orientation and access control protocols should be established to prevent unauthorized access to hazardous areas and to safeguard both workers and visitors.

Training obligations should also be extended to subcontractors and service providers through appropriate contract provisions and active performance monitoring. AAOİAŞ, as the Project Sponsor, should ensure that all contracted entities fulfill these training requirements before assignment commencement.

This Plan should be implemented by all relevant Project stakeholders, including AAOİAŞ (Project Sponsor), the Main Contractor Limak, and all subcontractors. Roles and responsibilities related to implementation, monitoring, and reporting should be clearly defined. The Plan should be revised as necessary to accommodate changes in construction methodologies, organizational structures, or regulatory frameworks.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This Plan has been structured in accordance with relevant national legislation and aligned with international standards and guidelines. These references should be used to guide the development, implementation, and monitoring of training programs and communication practices throughout the construction phase of the Antalya Alanya Motorway Project.

II.1 National Requirements

The following Turkish laws and regulations should form the legal basis for ensuring OHS training and communication throughout construction activities:

- Environmental Law (Law No: 2872)
- Labor Law (Law No. 4857)
- Occupational Health and Safety Law (Law No. 6331)

- Regulation on Occupational Health and Safety Training of Employees
- Regulation on Health and Safety Measures in Construction Works
- Regulation on the Duties, Authority, and Responsibilities of Occupational Safety Experts
- Regulation on the Procedures and Principles of Occupational Health and Safety Services

These legal instruments provide the foundation for planning and executing adequate training strategies for workers and site visitors, including requirements for risk-based training, emergency preparedness, and employer obligations in occupational health and safety.

II.2 International Standards and Conventions

In addition to national legislation, the following international standards and agreements should be considered to ensure consistency with best practices and compliance with requirements of international financial institutions:

- IFC Performance Standards (2012), specifically:
  - Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
  - Performance Standard 2: Labor and Working Conditions
  - Performance Standard 4: Community Health, Safety, and Security
- IFC Environmental, Health and Safety (EHS) General Guidelines (2007)
- IFC EHS Guidelines for Toll Roads (2007)
- IFC Guidance Notes (2012)
- Equator Principles IV (2020)
- International Labor Organization (ILO) Occupational Safety and Health Convention (No. 155)
- ILO Occupational Health Services Convention (No. 161)
- ILO Convention on Vocational Guidance and Training (No. 142)

These standards and conventions should be used to guide the planning, implementation, and periodic evaluation of OHS training and communication measures on-site. The Project Sponsor (AAOİAŞ), the Main Contractor (Limak), and all subcontractors should ensure that all training activities reflect the principles outlined in these documents.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Training and Communication Plan:

- Human Resources and Labor Management Plan
- Subcontractor Management Plan
- Community Health and Safety Management Plan
- Occupational Health and Safety Management Plan
- Traffic Management Plan
- Hazardous Material Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)
- Security Management Plan

The effective integration of these plans should be ensured to maintain consistency in training delivery, enhance health and safety awareness, ensure subcontractor compliance, and support alignment with national regulations and international standards throughout the construction phase of the Project.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Antalya Alanya Motorway Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

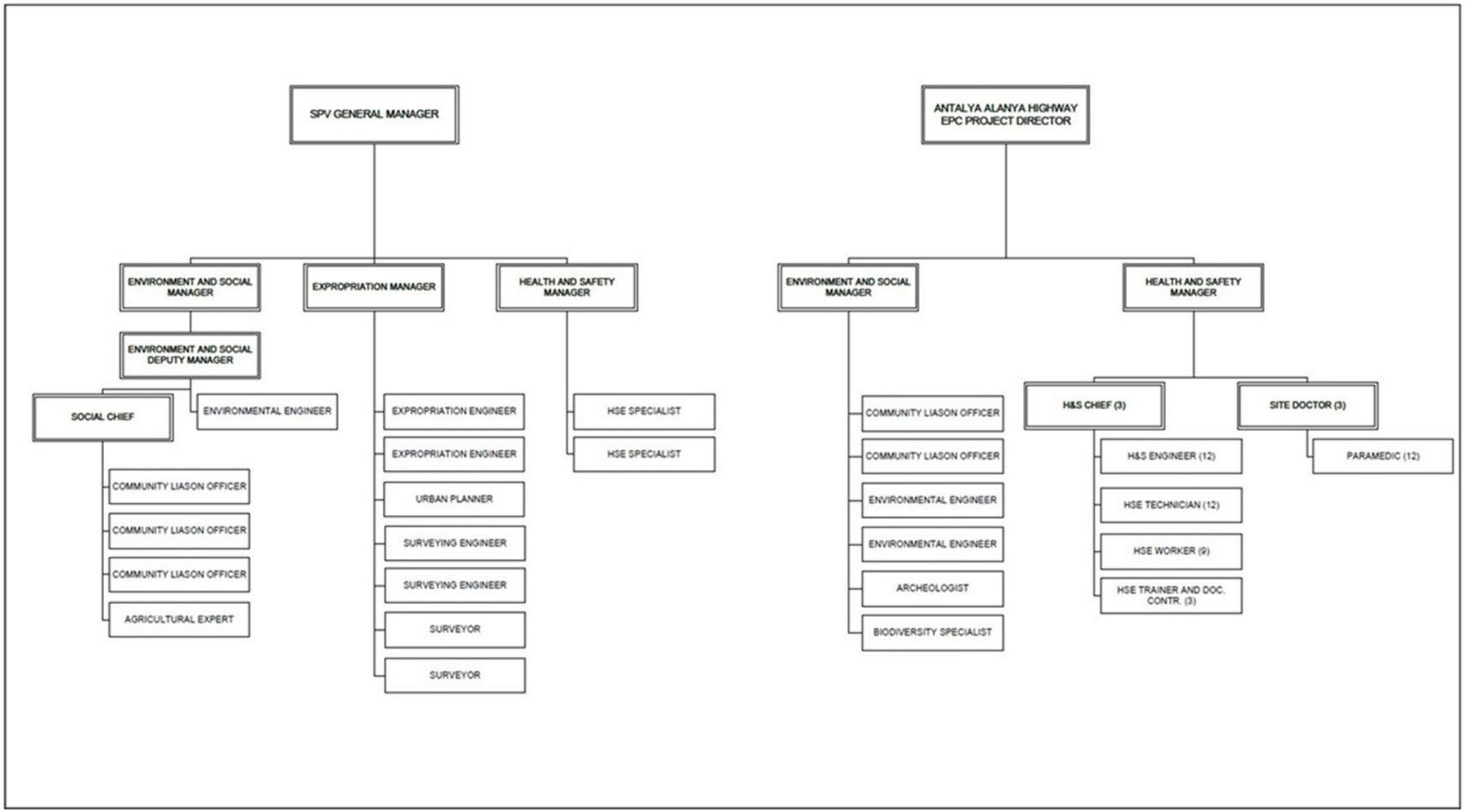

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations.

Roles	Responsibilities
	• Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities. • Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents.

Roles	Responsibilities
	• Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites.

Roles	Responsibilities
	• Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans.

Roles	Responsibilities
	• Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions.

Roles	Responsibilities
	• Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles).

Roles	Responsibilities
	• Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.

Roles	Responsibilities
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.

Roles	Responsibilities
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area.

Roles	Responsibilities
	• Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy.

Roles	Responsibilities
	• Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance.

Roles	Responsibilities
	• Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities.

Roles	Responsibilities
	• Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.

TRAINING AND COMMUNICATION MANAGEMENT PLAN

Roles	Responsibilities
	• Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures.

Roles	Responsibilities
	• Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports.

Roles	Responsibilities
	• Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities.

Roles	Responsibilities
	• Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks.

Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented.

Roles	Responsibilities
	• Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records.

Roles	Responsibilities
	• Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements.

Roles	Responsibilities
	• Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans.

Roles	Responsibilities
	• Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.

Roles	Responsibilities
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. COMMUNICATION AND TRAINING MANAGEMENT APPROACH

Effective communication and systematic occupational health and safety (OHS) training are critical components for minimizing occupational accidents and promoting a safe working environment throughout the construction phase of the Antalya-Alanya Motorway Project. The accident rate on construction sites is significantly influenced by the awareness and attentiveness of personnel regarding task-specific hazards. Therefore, ensuring that all individuals involved in construction activities—whether directly employed, subcontracted, or visiting the site—receive appropriate training and safety information should be prioritized.

A comprehensive OHS Training Program specific to the Project will be developed and implemented in accordance with a predefined schedule. This program should cover all essential safety aspects and be adapted to address site-specific conditions, emerging risks, and technological developments. Training should be provided to all categories of personnel, including direct and contracted workers, management and supervisory staff, and visitors.

Training modules should include the following key topics:

- Basic site rules and hazard awareness;
- Hygiene requirements and practices;
- Identification of site-specific hazards and associated health risks;
- Safe work practices and procedures;
- Proper use and maintenance of materials, tools, and equipment;
- Selection and use of appropriate personal protective equipment (PPE);
- Safety protocols for working near machinery and moving vehicles;
- Prevention of injury to co-workers and self;
- Safe working practices under low-visibility conditions (e.g., nighttime operations, use of high-visibility apparel, adequate lighting with minimal glare);
- Emergency response procedures for incidents such as fires and natural disasters.

In addition, refresher and task-specific training should be conducted under the following conditions:

- Prior to the commencement of work for newly recruited project personnel;
- When a worker's task or assigned work location is modified;
- Upon the introduction of new equipment, tools, or construction techniques;
- When new occupational hazards are identified.

To ensure the safety of non-operational personnel, a Visitor Orientation and Control Program should be established. Visitors should not be allowed to access hazardous zones unescorted. This program should include checkpoint monitoring, entry restrictions, safety briefings, and proper record-keeping practices to safeguard both workers and visitors.

Training sessions provided to both contracted and subcontracted employees, as well as site visitors, should ensure that participants acquire an understanding of:

- Materials, equipment, and tools used at the site;
- Recognized operational hazards and control measures;
- Exposure risks and mitigation strategies;
- Required hygiene standards and practices;
- Correct use of PPE;
- Causes and consequences of incidents and near-misses.

Communication tools such as warning signs and hazard labels should be designed in accordance with international standards to ensure they are universally understandable and visible to workers, visitors, and emergency responders. A standardized hazard coding system should be visibly displayed in key locations, including emergency entrances and fire safety systems.

Additionally, information regarding the nature of hazardous materials stored, handled, or used at the construction site should be communicated proactively to emergency services and security personnel. This will ensure timely and efficient response actions in the event of an emergency and contribute to overall risk reduction.

The successful implementation of the Training and Communication Program should be supported through routine monitoring, performance reviews, and periodic updates to training content in alignment with evolving construction practices and legal requirements.

VI. MITIGATION MEASURES TO ADDRESS TRAINING AND COMMUNICATION RISKS

The following measures, focusing on structured training planning, training formats and content, and training documentation practices, should be implemented to mitigate risks associated with training and communication throughout the construction phase of the Project. These measures are described in detail in the subsequent subsections of this Plan.

VI.1 Training Planning

Training planning should form the foundation of effective occupational health and safety practices and overall capacity development during the construction phase of the Project.

In this context, an annual training needs analysis should be carried out to identify priorities for both mandatory and non-mandatory training programs. Based on the identified development requirements, an individual development plan should be prepared for each employee. This plan should be developed through mutual agreement between the employee and their direct supervisor, reviewed regularly, and updated as necessary in line with evolving Project requirements.

A comprehensive Training Matrix should be used to support the structured planning and scheduling of these programs. Trainings should be repeated periodically, taking into account emerging and changing risks. Employees who have been absent from work for more than six months, regardless of the reason, should be provided with refresher training before resuming their duties.

If new training needs arise during the year, additional training requests from department managers should be submitted through the same process using the Training Request Form. The comments and justifications of the requesting manager should be documented in the Training Request Form and forwarded sequentially to the Project Manager, and ultimately to the General Manager for approval.

The main sources used to identify training needs include legal training requirements, the company's strategies and objectives, job descriptions outlining key duties and required competencies, performance evaluation results, internal and external audit findings, the effectiveness of previous trainings, changes in legislation and technological developments, and feedback from clients, subcontractors, and employees.

The feasibility of delivering the requested training, considering company objectives and available resources such as budget, time, and physical capacity, should be assessed by the relevant unit manager.

Approved Training Request Forms should be used as the basis for preparing the Draft Annual Training Plan. This plan should document key information related to all scheduled training activities throughout the year, including training topics, content, target participants, training type (in-house or external), training duration, trainer or training provider, training location, and training date.

The training matrix to be implemented within the scope of the project is presented in Appendix A, and Limak and its subcontractors will provide training for the relevant positions in accordance with this matrix. In addition, the annual training plan to be implemented in the Project is provided in Annex B. As the project progresses, revisions may be made to this training matrix and annual training program in line with new training requirements and position requirements that may arise.

VI.2 Training Formats and Content

The Annual Training Plan should include a comprehensive range of core training content applicable to the construction phase of the Project. These training topics should cover the following areas:

- Use of Personal Protective Equipment (PPE)
- Emergency procedures
- Working at height, excavation safety, and heavy equipment operations
- Waste management
- Water and air pollution control
- Noise and vibration management
- Erosion and sediment control
- Construction procedures and techniques
- Quality control and inspection procedures
- Traffic management and temporary road arrangements

- Rules for interacting with local communities
- On-site and off-site safety precautions
- Public relations and grievance mechanism procedures

Trainings should be conducted in appropriate and adequately equipped venues that allow for practical applications. Training venues should meet acceptable thermal comfort conditions and provide adequate lighting to support effective learning.

Training sessions should be implemented in three main formats: internal in-house training conducted by company personnel using company facilities; internal external training conducted at company premises by external experts such as training institutions, consultants, suppliers, or subcontractors; and external training held outside company premises by third-party training providers, public institutions, or suppliers/subcontractors. In-house training should be prioritized, and internal trainers should be identified in consultation with department managers. Employees who attend external training may be requested to share the key knowledge gained with their colleagues upon returning to work.

Occupational health and safety trainings should be delivered by workplace safety experts and occupational physicians assigned to the Project. Additionally, such trainings may also be provided by institutions including labor, employer, and public service organizations; training foundations and centers established by such organizations; universities; training units of public institutions; professional associations with public institution status; and training institutions or joint health and safety units authorized by the Ministry. Trainers should be selected based on their subject-matter expertise relevant to the topics included in the training program.

The following categories represent the primary types of training to be implemented under the Training and Communication Plan. These training types should be designed to foster continuous learning, maintain compliance with applicable legislation, and improve employee competencies during the construction phase of the Project:

- **Personnel Training and Development:** Includes all activities intended to maintain, update, and improve employee knowledge, skills, and capabilities. This encompasses formal, informal, and on-the-job training, as well as e-learning, self-learning, participation in conferences, mentoring and coaching, job shadowing, and job rotation.
- **Mandatory Training:** Refers to employer-required training to ensure that employees are competent to perform their roles. This includes general skill training applicable to all workers and specific training tailored to certain staff groups.
- **Legal Training:** Encompasses training programs that are legally required to ensure the health, safety, and security of employees and all individuals interacting with the worksite. This includes mandatory EHS training.
- **Training for New Employees:** Covers orientation and role-specific training provided to newly hired personnel. Each new employee will follow a personal training plan, including both on-the-job training and general induction, prepared by the relevant department supervisor.

Employees who wish to participate in congresses, conferences, seminars, or similar professional development activities, outside the scope of company-planned trainings, may do so with

the prior approval of their respective department manager, provided these activities are offered free of charge and contribute to professional knowledge enhancement.

VI.3 Evaluation of Training Effectiveness

The effectiveness of trainings should be assessed through two complementary methods, and the outcomes should be taken into consideration by managers during the planning and implementation of future training programs. Following each training session—whether conducted internally or externally—participants should be asked to complete a Training Evaluation Form to assess the training content, trainer performance, and suitability of the training venue. The results of these forms should be reviewed and recorded for reference in future training planning and implementation processes.

Additionally, the impact of training on employee development should be evaluated by supervisors, who should monitor participant progress based on specific criteria. These criteria include the extent to which the training is reflected in job performance, behavioral changes and interpersonal interactions, improvements in motivation levels, contributions to personal development, and readiness for future responsibilities. The evaluation results should be used in revising the Annual Training Plan and planning subsequent training activities. Relevant findings regarding training effectiveness should also be communicated to the E&S Manager, as appropriate.

VI.4 Training Documentation

All training activities conducted under the scope of the Project should be properly documented, and training records should be maintained in the personnel files of each employee. Each training record should include the full name of the participant, job title, subject and duration of the training, the name, title, and signature of the trainer, as well as the training date. In cases where the training is delivered by an external provider, the name of the institution should also be clearly indicated on the issued certificate.

VII. MONITORING

A structured internal monitoring program should be implemented to assess the effectiveness of the training and communication measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities should be reviewed periodically and revised where necessary, based on site-specific observations, feedback from stakeholders, the results of internal audits, or changes in applicable legal or institutional requirements.

Monitoring activities should be coordinated by the Human Resources (HR) or Training Department, in close collaboration with the OHS and Construction Management teams. Key responsibilities should include verifying the timely implementation of training sessions, reviewing attendance and certification records, evaluating the relevance and quality of training content, and ensuring the consistent application of training requirements across contractors and subcontractors, particularly in high-risk work areas.

Regular monitoring should be conducted across all worksites to ensure that planned trainings are delivered as scheduled, participants are properly recorded, and feedback is systematically collected. This includes reviewing records such as the Annual Training Plan, Training Attendance Forms,

Evaluation Forms, and issued Certificates. Spot checks and field verifications should be conducted to confirm that trained personnel are applying learned practices on-site.

The performance of contractors and subcontractors in fulfilling training-related obligations should be reviewed through internal audits, site supervision reports, and direct observations. Any identified non-conformities should trigger the preparation and implementation of corrective and preventive action plans. Follow-up monitoring should be carried out to verify the effectiveness of these measures and to ensure continuous improvement and avoidance of repeat deficiencies.

In addition to internal monitoring, inspections may also be conducted by relevant public institutions, including the Ministry of Labor and Social Security or other competent authorities, in accordance with Turkish legislation. The scope and frequency of these inspections will be determined by the relevant authority and may include review of training records, on-site verification of trained personnel, and compliance with mandatory training standards.

Monitoring efforts should be guided by the framework provided in Table VII.1, which outlines the training-related parameters to be monitored, the locations where records are held or verified, methods of monitoring, the frequency of monitoring activities, and the responsible parties. These activities are essential for evaluating the overall performance of the Training and Communication Plan and ensuring full compliance with national regulations and Project-specific commitments.

Table VII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsibility
Number and scope of trainings, number of participants, training hours per employee, training materials, and trainings provided to subcontractors	Project office	Document review	Quarterly	AAOİAŞ, Independent Environmental Experts
Complaints related to training	Project office	Document review	Quarterly	AAOİAŞ, Independent Environmental Experts

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ should ensure that corrective and preventive measures are promptly implemented in coordination with the Main Contractor (Limak) and relevant subcontractors. Any training-related gaps or deficiencies—such as missing records, low participation rates, or failure to meet legal training obligations—should be documented and addressed through appropriate management actions.

All findings related to training implementation, including unresolved grievances, non-compliance with training schedules, or absence of certification where required, should be recorded in accordance with national legislation and internal Project procedures. In the event of serious violations—such as systemic failure to provide mandatory training or recurrent non-compliance—LİMAK should notify the relevant authorities and initiate appropriate technical, procedural, or contractual remedies to ensure compliance and prevent recurrence.

VIII. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table VIII.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Number of trainings conducted	All personnel should receive training	Monthly	AAOİAŞ, Independent Environmental Experts
Complaints related to training	Less than five	Monthly	AAOİAŞ, Independent Social Experts
Non-compliance with standards	Less than five	Monthly	AAOİAŞ, Independent Environmental Experts

IX. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities should be documented and reported as outlined in the Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established plans and procedures. Relevant records that should be reviewed during audits may include the external grievance and suggestion tracking database, internal grievance and suggestion tracking database, training records, and non-conformity records. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary.

X. REPORTING

Regular reporting should be conducted to ensure the effective implementation and continuous improvement of training and communication activities throughout the construction phase of the Project. Reporting should be structured to reflect internal monitoring and audit findings, as well as external compliance obligations and stakeholder engagement feedback related to capacity-building efforts.

Based on monitoring results, necessary corrective and preventive actions should be identified, and corresponding updates should be incorporated into this Plan. The training program should be revised accordingly to address observed implementation gaps or unmet performance targets. Periodic audits and field verifications should be conducted to ensure that all training-related activities are carried out in accordance with the provisions of this Plan.

Reports should be prepared using data gathered through training monitoring activities defined in this Plan. This includes reviewing the status of implemented trainings, participation rates, evaluation outcomes, grievances received, and actions taken in response. All supporting documentation—such as training logs, attendance records, evaluation forms, and photographs of training activities—should be compiled in appropriate reporting formats.

Reporting activities under this Plan should focus on key performance indicators such as the number of trainings conducted, the percentage of trained personnel, the frequency of refresher trainings, and the responsiveness to training-related grievances. In the event of critical non-compliance—such as failure to provide legally required training or repeated complaints about inadequate safety awareness—

an incident report, including root cause analysis and corrective measures, should be submitted to the relevant department within 30 business days.

All relevant data, including findings from audits, performance monitoring, and field observations, should be consolidated within the training section of the Environmental and Social Monitoring Report, prepared on a semi-annual basis. These reports should summarize non-compliance issues, detail corrective actions taken, and outline any time-bound improvement measures, supported by documentary evidence such as signed attendance sheets, certificates, and photographic documentation.

All personnel should be encouraged to raise concerns, suggestions, or complaints related to training and communication practices through the established grievance mechanism by submitting a grievance form. Internal and external grievances about training delivery, participation, or effectiveness should be recorded, addressed, and followed up as per the procedures defined in the Stakeholder Engagement Plan.

This Plan should be reviewed semi-annually by the E&S Manager and H&S Manager, based on the results of audits, employee feedback, and any significant changes in site operations or training requirements. Updates to the Plan should be approved in coordination with the relevant Managers and the Project Sponsor to ensure it remains aligned with national legislation, international standards, and Project-specific objectives.

APPENDIX-A: TRAINING MATRIX

AAO PROJECT TRAINING MATRIX

No	Position	OHS Mandatory Legal legislation Trainings																																Awareness Training												
		Induction			Health and Safety																								Environmental Trainings							Emergency Response													
		HSE Site Induction	Visitors Induction(Incl. Non working, Vendors)	Apprentice & trainee trainings	Risk Management (RA, JSA)	Labor legislation and employee rights	Housekeeping	Incidents/Accidents and occupational diseases	Personel Protective Equipments	Health & Safety rules and Safety Culture	First Aid	Smoking	Biological and psychological risk factors	Physical, Chemical and Ergonomic Risk Factors	Flash, Explosion, Fire and fire protection	Safety and Health Signs	Manual Handling	Safe Use of Work Equipment	Electrical safety and Electrical tools	Working at height	Confined Space	Hot works (Welding, Cutting)	Radiographic studies	Lifting & Rigging	Working with Carcinogenic Substances	Night Works	Excvation and Trenching Safety	Safety in tunnel works	Environmental Cleaning and Waste Management	Environmental Emergency Management	Biodiversity information and code of conduct	Water and energy efficiency	Society and Energy Efficiency	Communication rules with society	Complaint Mechanism	Emergency Response	First Aider competency training	Fire Prevention	Evacuation and Rescue awareness training	Hygiene Training	Employee Representatives Training	OHS Committee Training	Vehicle Safety and Safe Driving	Leadership and Safety culture development	Fire Watcher	Flagman & Operator Coordination	PTW System	Inspection (Machine & Equipment)	Fuelling and Refuelling	Dust, Noise and Vibration Awareness	Line of Fire	Traffic Management Plan	Heat Stress
	Training Duration (HOURS)	2H	2H	2H	1H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	0.5H	1H	1H	2H	2H	2H	1H	1H	1H	2H	1H	1H	1H	2H	1H
1	Project Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X	X	X	X
2	Site Engineers (Mechanic)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
3	Site Engineers (Electric)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
4	Site Engineers (Survey)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
5	Site Engineers (Soil &Excavation)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
6	Site Engineers (Civil)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
7	Charge Hand/Foreman	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
8	Helpers/Labors (Soil,Excavation)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
9	Helpers/Labors (Steel)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
10	Helpers/Labors (Tunneling)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
11	Helpers/Labors (Civil)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X			X	X	X	X	X
12	Helpers/Labors (Concrete)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X			X	X	X	X	X
13	Crane Opeators	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X				X	X	X	X
14	Riggers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X				X	X	X	X
15	Flagman/Bangsman	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X				X	X	X	X
16	Welders	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X				X	X	X	X
17	Carpenters	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X				X	X	X	X
18	Painters	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X				X	X	X	X
19	Electrician	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
20	Blasters	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				X				X	X	X	X
21	HSE Officers/Engineers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X		X	X	X	X	X	X
22	Fuelling/Refuelling	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X						X		X	X	X	X
23	Heavy Equipment & Truck Operator	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X					X	X		X	X	X	X
24	Drivers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X					X	X		X	X	X	X
25	Medical Staff	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X						X	X	X	X
26	Office Staff	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											X	X	X
27	Security Guards	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X			X				X	X	X	X
28	Visitors		X																																			X											X	X	X
29	Vendors		X																																			X											X	X	X
30	Cleaning Staff	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								X			X	X	X	X	X			X	X	X	X	X					X				X	X	X	X
31	Storekeepers/ Warehouseman	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X					X					X	X	X
32	Food Handers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							X			X	X	X	X	X			X	X	X	X	X										X	X		
33	Emergency Responders	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							X			X	X	X	X	X			X	X	X	X	X				X		X				X	X		

APPENDIX-B: TRAINING PROGRAMME

ANTALYA-ALANYA HIGHWAY PROJECT
OHS ANNUAL GENERAL TRAINING PLAN 2025

Form No: F_001-084-1002-010-025.2
Rev:00

Name of Education	Subject of Education	Participants	Educational Document	Duration of Training	Months												Place of Education	Goal and Purpose
					January	February	March	April	May	June	July	August	September	October	November	December		
1. Induction Training																		
Job Initiation Training	1-Introduction of the project 2-Project OHS and Environmental Rules 3-Duties, authorities and responsibilities 4-Emergencies, emergency response methods and what to do in emergencies. 5- Hazards and risks in the work area, precautions to be taken against these hazards and risks, safe working methods and creation of safe working environments.	All new employees	Visual Training Presentation (Before each new worker starts working in the field)	2 Hours			x	x	x	x	x	x	x	x	x	x	Education Hall	Until basic OHS training is given, employees are informed about the Project, employees are informed about the OHS and Environmental rules and instructions that must be applied in the project, and employees are aimed to be informed about the hazards and risks in the work areas, the precautions to be taken against these hazards and risks, and what to do in case of emergency.
2.Occupational Health and Safety Basic Trainings																		
General Topics	a) Information on labor legislation, b) Legal rights and responsibilities of employees, c) Workplace cleanliness and order, d) Legal consequences arising from work accidents and occupational diseases, d) Use of Personal Protective Equipment e) General rules of Occupational Health and Safety and safety culture	New employees starting work	Relevant Legal Requirements and Procedures	2 Hours			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	The specified trainings on General Occupational Health and Safety are given to employees at the start of the job (formal/distance) and in 1-year periods and are recorded. After the training, it is expected that there will be a change in the behavior of the employees regarding occupational health and safety information and safe working methods and the employees are subject to surveillance.
		All Employees	On-the-job Conversations															
Health Topics	a) Causes of occupational diseases, b) Application of disease prevention principles and protection techniques, c) Biological and psychological risk factors, c) First aid d) Harms of tobacco products and passive smoking	New employees	Special Education Documents				x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	
		All Employees	On-the-job Conversations															
Technical Topics	a) Chemical, physical and ergonomic risk factors, b) Flashing, explosion, fire and fire protection, c) Working with screen devices, d) Safety and health signs, e) General rules of occupational health and safety, safety culture and behavior-oriented OHS	New employees	Special Education Document				x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	
		All Employees	On-the-job Conversations															
	Safe lifting and carrying by hand	New employees and All Employees	Special Education Documents	0.5 Hours			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about the dangers and risks in manual lifting and carrying operations, the OHS measures to be taken against these dangers and risks, and safe working methods in manual lifting and carrying, and a change in behavior is expected.
			On-the-job Conversations	15 min.														
	Safe Use of Work Equipment	New employees and All Employees	Special Education Documents	0.5 Hours			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Work equipment users are informed about the hazards and risks that may occur in the use of work equipment, the OHS measures to be taken against these hazards and risks, and safe working methods by referring to the work equipment user manual, and are expected to use the equipment safely.
			On-the-job Conversations	15 min.														
	Electrical hazards, risks, precautions, power tools and cable management	New employees and All Employees	Special Education Documents	0.5 Hours			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Power tool users are informed about electrical hazards and risks in their work areas and the safe use of power tools.
			On-the-job Conversations	15 min.														
	Causes of Work Accidents, Legal Responsibilities and Reporting,	New employees and All Employees	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about the causes of work accidents, the legal responsibilities of managers and employees, and the legislation regarding reporting work accidents.
			On-the-job Conversations	15 min														
	Evacuation and Rescue	New employees and All Employees	Special Education Documents	0.5 Hours			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	In situations requiring evacuation, employees are informed about what needs to be done to get from the work area to the assembly point as quickly as possible.
			On-the-job Conversations	15 min														

Other Topics	Safe Working at Height	New employees and All Employees	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about the existing dangers and risks in work at heights, the OHS measures to be taken against these dangers and risks, and safe working methods at heights, and are expected to comply with the rules and instructions.
			On-the-job Conversations	15 min.														
	Safe Working in Confined/Restricted Areas/Environments	New employees and All Employees	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about the existing hazards and risks in closed/restricted areas, the OHS measures to be taken against these hazards and risks, and safe working methods in closed/restricted areas, and compliance with the instructions is expected.
			On-the-job Conversations	15 min.														
	Safe Working in Hot Work (Welding, Grinding, Cutting, etc.)	New employees and All Employees	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about the existing hazards and risks in hot works (welding, grinding, cutting), the OHS measures to be taken against these hazards and risks, and safe working methods in hot works.
			On-the-job Conversations	15 min.														
	Working Safely with Chemicals	New employees and All Employees	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about the hazards and risks of the chemical substances used according to their SDS forms and the OHS measures to be taken against these hazards and risks, and compliance with the instructions is expected.
			On-the-job Conversations	15 min.														
	Safe Working in Areas with Radiation Risk	New employees and All Employees	Special Education Documents	0.5 Hours			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about radiation-related hazards and risks, OHS measures to be taken against these hazards and risks, and safe working methods in radiation areas.
			On-the-job Conversations	15 min.														
	Safe working in lifting operations	New employees and All Employees	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about the hazards and risks caused by load lifting machinery and equipment or the load lifting process, the OHS measures to be taken against these hazards and risks, and safe working methods in load lifting operations.
			On-the-job Conversations	15 min.														
	Working with Special Risk Equipment	New employees and All Employees	Special Education Documents	0.5 Hours			x	x		x		x		x	x		Training Hall, Work area	Users of special risk/specific work equipment are informed about the safe use of the machinery/equipment they will use before work.
			On-the-job Conversations	15 min.														
	Possible health risks caused by carcinogenic substances	New employees and All Employees	Special Education Documents	0.5 Hours			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Lists of carcinogenic materials are created, SDS forms of these materials are provided, and employees are given training on safe working methods.
			On-the-job Conversations	15 min.														
	Safe Working at Night/Darkness	New employees and All Employees	Special Education Documents	1 Hour			x	x		x		x		x		x	Training Hall, Work area	Employees are informed about the dangers and risks that may occur in dark environments without daylight, the OHS measures to be taken against these dangers and risks, and safe working methods at night/in the dark.
			On-the-job Conversations	15 min.														
	Safe working in excavations	New employees and All Employees	Special Education Documents	1 Hour			X	X	X	X	X	X	X	X	X	X	Training Hall, Work area	Employees are informed about the hazards and risks in all excavation works and the measures to be taken to eliminate these hazards and risks or reduce them to an acceptable risk level, and they are expected to apply this information.
			On-the-job Conversations	15 min.														
	Safe work in tunnel works	New employees and All Employees	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	Employees are informed about the existing hazards and risks in energized areas (Mechanical, Electrical), the precautions to be taken against these hazards and risks, and safe working methods.
			On-the-job Conversations	15 min.														
	Return to work training for employees who have had a work accident or suffered an occupational disease.	Personnel who have a work accident or have an occupational disease	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	The root causes of the work accident or occupational disease are explained to the employees who have had a work accident or contracted an occupational disease, and the employees are informed to prevent similar accidents from occurring.
			On-the-job Conversations	15 min.														

3.Emergency Trainings																	
Emergency General Training	1-Emergency response plan 2-Education of emergency teams 3-Emergency intervention methods training 4- Testing of intervention plans (drill) and subsequent performance evaluation.	All employees, Emergency teams	Special Education Documents On-the-job Conversations	1 Hour 15 min.			x	x	x	x	x	x	x	x	x	x	Training Hall, Work area	According to the emergency response plan, emergency teams are informed about their duties, authorities and responsibilities in possible emergencies, and training is reinforced through field practice drills.
First aid competency training	First aid training (Certified)	First aiders	Legal Requirements	3 days					x		x			x			Education Hall	First aid personnel are informed and documented about their duties, authorities and responsibilities.
Fire Safety	Fire Formation, Fire Extinguishers Types and Usage	All employees	Special Education Documents On-the-job Conversations	1 Hour 15 min.						x	x	x	x				Training Hall, Work area	Employees are informed about fire formation, flammable materials and methods of preventing fire formation, types of fire extinguishers and fire extinguishing methods, and are expected to know the methods of intervention in the event of any fire formation.
4. Risk Assessment Trainings																	
Assessment of Risks	1- The concept of hazard and risk 2- Identification of hazards in work areas 3- Evaluation of risks that hazards will create 4- Evaluation of risks 5- Elimination of risks or reduction to acceptable risk levels	Risk Assessment Team and all employees	Special Education Document On-the-job Conversations	1 Hour 15 min.			x	x	x	x	x	x					Training Hall, Work area	The risk assessment team and employees are informed about identifying, analyzing and evaluating the hazards and risks that may arise in all current works in the project and taking OHS measures, and it is expected that the OHS perception will change.
6. Special Trainings																	
Guest/Visitor Education	Hazards and risks that guests and visitors may encounter in the work area, precautions to be taken to protect against these hazards and risks, safe work and safe working environments.	Guests and visitors	Special Education Documents	1 Hour			x	x	x	x	x	x	x	x	x	x	Education Hall	Personnel coming to the work area as visitors, guests, etc. are informed about the hazards and risks in the work area, the measures to be taken to protect against these hazards and risks, and safe working environments.
Training of apprentices/trainees and people requiring special policies	Informing apprentices, trainees and people requiring special policies about the project, informing employees about the rules to be followed in the project, their own rules and instructions, working conditions and hazards and risks in their work areas.	Apprentices and Trainees	Special Education Documents	2 Hours			x	x	x	x	x	x	x	x	x	x	Education Hall	The hazards and risks in the work area, the OHS measures to be implemented against these hazards and risks, and the safe working methods are informed by the relevant persons when apprentices, trainees and people requiring special policies start working.
Hygiene Education	Informative training for personnel involved in cleaning, food and beverage operations against infectious diseases and skin diseases	Kitchen and cleaning staff	Authorized organization/person	8 hours					x								Education Hall	Dining Hall, Tea Room and Cleaning staff are expected to comply with hygiene rules.
Employee Representative/ Support staff	Duties, powers and responsibilities of Employee Representative and Support Staff	Employee representative , Support staff	Special Education Documents	1 Hour			x	x									Education Hall	Designated employee representatives and support staff are informed about their duties, authorities and responsibilities.
Occupational Health and Safety (OHS) Board Training	1- Duties and powers of the Board 2-National legislation and standards on OHS issues, 3- Frequent work accidents and their causes, 4-Basic principles of occupational hygiene 5-Communication techniques 6-Emergency measures 7-Occupational diseases, 8-Special risks related to workplaces, 9-Risk assessment.	OHS Board Members	Relevant legal requirements and special education documentation	2 hours				x									Education Hall	The Occupational Health and Safety committee members are informed about their duties, authorities and responsibilities in the relevant legislation, and they are expected to fulfill their duties and practices throughout the committee, and to fulfill their duties as specified.
Safe Driving Training	Project rules and instructions regarding the safe use of company vehicles	All personnel using vehicles	Relevant legal requirements and special training documents	1 Hour			x	x	x			x		x			Training Hall, Work area	All personnel using vehicles in the project are informed about the driving rules they must follow and are expected to comply with the specified rules and instructions.
7. Environmental Education																	
Environmental Cleaning and Waste Management	Legal regulations and project plans and procedures regarding environmental cleaning and waste management	All Employees	Documents to be prepared specifically for training content. Solid Waste Management Plan and Hazardous Materials Management Plan Legal regulations on the subject Project EIA and ESIA Report	1 Hour		x	x	x	x	x	x	x	x	x	x	x	Education Hall	Current procedures regarding disposal of waste in the work area, tidiness and waste management in work areas are explained to employees and employees are informed. A change in behavior is expected.
	What are environmental emergencies? Which procedure is not performed? What actions need to be taken?	All Employees	Documents to be prepared specifically for training content.	1 Hour		x	x	x	x	x	x	x	x	x	x	x	Education Hall	Communication and intervention methods in environmental emergencies are explained.

Environmental Emergency Management	What are the duties, authorities and responsibilities of employees?		Emergency Management Plan Legal regulations on the subject Project EIA and ESIA Report															
Biodiversity Information and Code of Conduct	What are the sensitive areas and species that may be encountered in project areas? What should be the rules for working in a natural environment? What should be done when encountering fauna species on the construction site or during transportation? What are the endemic species in the project area and its surroundings? What needs to be done to protect natural life?	All Employees	Documents to be prepared specifically for training content. Biodiversity Action Plan Legal regulations on the subject Project EIA and ESIA Report	1 Hour		**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	x	Education Hall	The precautions to be taken in the field work are explained according to the Biodiversity Management Plan prepared for the project.
Water and Energy Efficiency	What is efficiency in water consumption? What is efficiency in energy consumption? What is the importance of water and energy saving for the Project, the country and the world? How can an individual contribute to water and energy efficiency?	All Employees	Documents to be prepared specifically for training content. Water, Wastewater and Surface Runoff Management Plan Legal regulations on the subject Project EIA and ESIA Report	1 Hour		**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	x	Education Hall	It is explained what actions should be taken regarding Water and Energy Efficiency both in the field and in the camp areas during the project.
Rules of communication with the society	What are the general characteristics of the people one can encounter in the region? What are the points to be considered when communicating with the society? Are there any indigenous communities in and around the project area? If so, what are the points to be considered when communicating with these communities? What are the correct communication methods on site?	All Employees	Documents to be prepared specifically for training content. Stakeholder Engagement Plan Public Health and Safety Management Plan Human Resources and Employee Management Plan Legal regulations on the subject Project EIA and ESIA Report	1 Hour		**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	x	Education Hall	The rules of communication with the community are explained throughout the project.
Complaint Mechanism	What is the complaint mechanism? What is the purpose of the complaints mechanism? Who are the people responsible for the complaints mechanism? Explaining how employees can convey all their wishes/desires and complaints to the company, including their personal rights and living standards.	All Employees	Documents to be prepared specifically for training content. Stakeholder Engagement Plan Legal regulations on the subject Project EIA and ESIA Report	1 Hour		**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	x	Education Hall	It explains how both project employees and stakeholders affected by the project can report their complaints about the project and follow up on the results.

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REVISION STATUS		
Revision Date	**Rev. No**	**Description**
01.03.2025	00	Revised and made compliant with the TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015 and Occupational Health and Safety Standards.
23.05.2025	01	Job descriptions have been added.
16.06.2025	02	Revision as per revision made under ESDD submitted by the Lender consultant.

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1. PURPOSE

The purpose of the Occupational Health and Safety Plan (OHSP) is to identify the actions and measures required for the general management of factors affecting the health and safety of the Project employees. This plan aims to:

- Provide general information about the applicable legislation and standards related to this procedure;
- Define roles and responsibilities;
- Incorporate the findings of the Environmental Impact Assessment (EIA, dated 17.08.2018), requirements foreseen by the Environmental and Social Impact Assessment (ESIA), international standards, the legislation of the Republic of Türkiye, requirements set by lenders, and project-specific permits into the procedure;
- Identify impact sources and mitigation measures;
- Define risk management;
- Define communication and training programs.

This plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

1.1 Scope and Validity

This OHSP document covers only the construction phase of the Antalya-Alanya Motorway Project and applies to all activities of Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOIAS), main contractor Limak İnşaat Şanayi ve Tic. A.Ş. (Limak) and its all subcontractors (including third-party-contracted sites such as quarries, borrow pits, etc.). Therefore, its scope is limited to all Project activities related to the construction process. The OHSP will be updated following the start of slope excavation works, which can be considered the beginning of motorway construction. The updated OHSP will consider the entire impact area of the Project and all highway construction works.

The Project includes the findings of the Antalya-Alanya Motorway Project ESIA Report, the requirements anticipated in the report, IFC Performance Standard 2: Labor and Working Conditions, the legislation of the Republic of Türkiye, lender requirements, and project-specific permits. It also clarifies whether it is applicable to third-party subcontracted areas (e.g., quarries, borrow pits, etc.).

2. LEGISLATION AND STANDARDS

The applicable IFC standard includes IFC Performance Standard (PS) 2: Labor and Working Conditions, the IFC General Environmental, Health and Safety (EHS) Guidelines, and the IFC EHS Guidelines for Toll Roads, which provide several recommendations concerning occupational health and safety. The Antalya-Alanya Motorway Project will ensure compliance with these requirements during implementation.

In addition to the above, the following impact assessment reports prepared for the Project shall be used as reference documents:

- Antalya-Alanya Motorway ESIA Report;
- Antalya-Alanya Motorway EIA Report;
- The Environmental and Social Management Plan (ESMP) of the Antalya-Alanya Motorway Project, along with the Commitment Register (including information on how commitments will be fulfilled, particularly those related to occupational health and safety—see Annex 1).

The occupational health and safety requirements during the design and construction stages, including but not limited to the following Turkish laws and regulations, will be implemented:

- Occupational Health and Safety Law
- Occupational Health and Safety Regulations
- Regulation on Water Intended for Human Consumption
- Regulation on the Use of Personal Protective Equipment at Workplaces

The occupational health and safety participation plans and procedures for the Antalya-Alanya Motorway Project will also be used as reference documents:

- Solid Waste Management Plan
- Hazardous Material Management Plan
- Environmental Accident and Spill Response Management Plan
- Community Health and Safety Management Plan
- Construction Camp Site Management Plan
- Air Pollution and Emission Management Plan
- Water Quality, Wastewater and Storm Water Management Plan
- Noise and Vibration Management Plan
- Change Management Plan
- Emergency Response and Management Plan
- Human Resources and Labour Management Plan
- Security Management Plan
- Subcontractor Management Plan
- Training and Communication Management Plan
- Resource Efficiency Management Plan
- Excavated Material Management Plan
- Soil Management and Erosion Control Plan
- Stakeholder Engagement Plan
- Employment Policy

Environmental and Social Management Plan As part of the occupational health and safety management systems, the ISO 45001:2018 standard will be used as a reference document.

Unless otherwise stated, where two or more of the listed standards are inconsistent or conflicting, the Antalya-Alanya Motorway Project shall apply the standard that contains the most stringent requirements.

3. POLICY AND PRINCIPLES

AAOIAS INTEGRATED MANAGEMENT SYSTEM POLICY

As Antalya Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş,

The purpose of our Integrated Management System, which encompasses all construction and maintenance activities related to Quality, Environment, Occupational Health and Safety, and Road Traffic Safety, is to meet the needs and expectations of our stakeholders, fulfill our responsibilities to society, the environment, and our employees, and continuously improve our service quality.

To hereby commit that:

- *We will adopt high-quality production / service and customer-oriented work as a basic principle in all our projects,*
- *We will create a positive impact for our society and our world with a holistic approach to sustainability wherever we operate and in all areas where we operate with the awareness of our strategic and environmental and social responsibilities.*
- *We will fulfil the obligations of the Quality, Environment, Occupational Health and Safety, Road Traffic Safety regulations,*
- *We will establish and increase the awareness of Quality, Environment, Occupational Health and Safety, Road Traffic Safety of our employees, stakeholders and society,*
- *We will provide safe and healthy working conditions to prevent injuries and health deterioration related to work and/or traffic accidents,*
- *We will undertake activities to overcome hazards and mitigate all risks,*
- *We will ensure sustainable resource utilization for prevention of pollution and protection of the environment,*
- *We will provide the resources needed for the mitigation of climate change and the protection of biodiversity and ecosystems,*
- *We will use energy and natural resources efficiently,*
- *We will continuously improve our Integrated Management System performance,*
- *We will establish and adopt the awareness that all activities related to Quality, Environment, Occupational Health and Safety, Road Traffic Safety are shared responsibility of all employees, and also ensure the consultation and participation of all employees,*
- *Knowing that our most important asset is the human resources, we will keep the quality and satisfaction of our employees at the highest level by employing highly competent employees and continuously investing in our employees.*

The Occupational Health, Safety and Environmental Plan fully defines the actions to be taken in relation to the matters specified in this policy.

Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. has adopted **the Occupational Health, Safety and Environmental Principles** described below.

OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENTAL PRINCIPLES

- *To ensure the health and safety of all employees and the other persons who may be influenced by the activities.*
- *To implement control measures to prevent accidents/incidents and occupational diseases and/or to minimize the risk as low as possible by managing occupational health and safety risks in the workplace by risk assessments.*
- *To provide clear instructions, information and adequate training to ensure that all personnel are competent to carry out their works.*
- *To ensure that all employees are provided with active training to increase their awareness and participation in Occupational Health, Safety and Environment practices.*
- *To ensure and maintain safe and healthy working conditions - to provide equipment and facilities, carry out their maintenance operations and to ensure safe use, storage and disposal of all materials.*
- *To apply emergency response and evacuation procedures in case of fire, earthquake, landslide etc.*
- *To ensure that occupational health and safety conditions and standards are constantly updated and improved.*
- *To promote a culture that promotes occupational health and safety as its primary goal and aims to eliminate the hazards and health risks associated with its activities, by ensuring that Occupational Health and Safety is an essential part of every operation.*
- *To give priority to environmental protection and to ensure the prevention and/or proper mitigation of adverse environmental impacts associated with its activities through the implementation of effective environmental management practices.*
- *To conduct all of its activities in compliance with applicable environmental legislation and regulations as well as international standards and best practices that support the protection and improvement of environment.*
- *To sustain the commitment to reduce wastes at their own sources and prevent pollution and to implement these principles while carrying out its activities.*
- *To identify, evaluate and manage environmental risks and their impacts and minimize the likelihood of adverse environmental impacts.*

4. ORGANIZATION AND RESPONSIBILITIES

The organizational structure presented in Annex-B outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

Table 4.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities.

Roles	Responsibilities
	• Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyze safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders.

Roles	Responsibilities
	• Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication.

Roles	Responsibilities
	• Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels.

Roles	Responsibilities
	• Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs) • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts.

Roles	Responsibilities
	• Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.

Roles	Responsibilities
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.

Roles	Responsibilities
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities.

Roles	Responsibilities
	• Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance.

Roles	Responsibilities
	• Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director

Roles	Responsibilities
	• Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented.

Roles	Responsibilities
	• Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required.

Roles	Responsibilities
	• Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.

Roles	Responsibilities
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security.

Roles	Responsibilities
	• Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks.

Roles	Responsibilities
	• Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager.

Roles	Responsibilities
	• Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project.

Roles	Responsibilities
	• Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums.. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences.

Roles	Responsibilities
	• Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

5. LEGAL LEGISTATION AND STANDARDS

The following criteria shall be taken into consideration in all the operation to be carried out within LİMAK.

- Legal Regulation Requirements
- Technical and administrative specifications made with the customer
- ISO 14001:2015 Environmental Management System standard
- ISO 45001:2018 Occupational Health & Safety Management System standard
- IFC Performance Standards

The **" Environmental Legal Requirements Monitoring and Evaluation Procedure"** and the **" Occupational Health and Safety Legal Compliance and Evaluation Procedure"** will be implemented to ensure the continuous monitoring of legal regulations related to occupational health, safety, and environment, and to ensure that site practices are carried out in compliance with the relevant legislation. In order to evaluate compliance with applicable and current legal requirements in relation to the project activities. The performance regarding legal compliance is assessed based on this form, and the HSE Committees are informed and consulted accordingly.

6. COMMUNICATION

6.1. Relations with Legal Authorities

Official correspondence related to OHS shall be submitted to the H&S Chief by the Project Manager. The initial evaluation regarding the subject will be carried out by the H&S Manager, who will verbally inform the Project Manager, and further actions will be decided accordingly.

6.2. OHS Department Meetings

OHS personnel (H&S Manager, Environmental Engineers, H&S Specialists, HSE Foremen, and Community Liaison Officers) shall organize monthly internal meetings.

The decisions taken will be documented through a **Meeting Minutes Form** and distributed to all members and responsible parties. Follow-up of these decisions will be carried out by the H&S Chief.

AAOIAS shall be invited to the Antalya-Alanya Motorway Project OHS Department meetings via email notification that includes the meeting date, location, and agenda.

6.3. Complaints and Suggestions friom Relevant Stakeholders

Complaints and suggestions received from relevant stakeholders (client, neighboring facilities, citizens, all workers, etc.) shall be processed by the H&S Chief, and related correspondence will be handled by the Project Manager. All workers shall be adequately informed about the scope of occupational health and safety legislation and their rights. Suggestion boxes will be placed at specific points on the construction site, allowing workers to submit complaints or feedback. All complaints and suggestions will be recorded and tracked.

6.4. Communication and Meetings with Subcontractors, Suppliers and Employees

Initial OHS Meeting: An initial OHS meeting will be held with all new subcontractors (represented by their own management teams), attended by the relevant Department Manager/Chief and the H&S Manager/Specialist. The agenda for these meetings will include:

- Project OHS Rules
- HSE Requirements per the Contract
- Project HSE Plan
- HSE organizational structure
- Documentation requirements (employees, equipments, materials, etc.)
- Employees onboarding and assignment procedures
- Provision of protective controls and necessary resources for high-risk activities (qualified personnel for OHS topics, supervision and inspection requirements, emergency equipment, etc.).

Biweekly Antalya-Alanya Motorway Project – Subcontractor OHS Meetings: These meetings will be held following the weekly OHS site visits. The agenda will include current OHS issues, observations from site visits, and OHS topics for upcoming tasks.

Limak will ensure that all subcontractors comply with the Occupational Health and Safety (OHS) requirements outlined and in applicable national and international standards. Prior to mobilization, subcontractors shall submit their site-specific OHS plans and risk assessments for review and approval. Limak HSE Department shall conduct on boarding audits and site inspections to verify readiness. During construction, subcontractor performance shall be monitored through regular inspections, safety performance evaluations, participation in joint toolbox talks, and review of incident records. Non-conformities shall be documented and followed by time-bound corrective actions. Repeated or serious non-compliance may result in work suspension or termination in accordance with contractual provisions. Monthly compliance reports shall be submitted by each subcontractor and consolidated by Limak for reporting to lenders and relevant authorities. All contractor-related HSE documents shall be kept on file for a minimum of five years and made available upon request.
In addition, all subcontractors shall prepare and submit their site-specific Occupational Health and Safety (OHS) Plans prior to mobilization for review and approval by the Limak's HSE Department. These plans must align with the overarching Project OHS Management Plan, relevant Turkish legislation (6331 sayılı Kanun), and applicable international standards including IFC EHS Guidelines. The review process shall assess risk identification, mitigation measures, emergency preparedness, training plans, and roles and responsibilities. Subcontractors shall not commence any site activities without formal written approval of their OHS Plans. Once approved, subcontractors are required to submit monthly OHS compliance reports, including leading and lagging indicators (e.g., training sessions conducted, near misses, incidents, inspections, and non-conformities). These reports shall be reviewed by the Limak HSE Department, consolidated, and included in periodic lender reporting. Limak reserves the right to suspend or terminate subcontractor operations in case of serious or repeated non-compliance.

6.5. Pre-Work and Safety Meetings

To increase OHS awareness and enhance the effectiveness of training programs, a daily pre-work meeting will be conducted. The pre-work meeting will be organized by the H&S Manager/Chief and subcontractor representatives for their respective workers. In the absence of the H&S Manager/Chief, the responsibility for conducting the meeting will rest with the OHS personnel, whose main responsibility includes supporting the H&S Manager/Chief. The H&S Manager/Chief must notify their absence at least two days in advance.

In addition to the daily pre-work meeting, a weekly safety meeting (at least 20 minutes) will be held for all workers and documented using the OHS Safety Meeting Form. The safety meeting agenda will be distributed by the H&S Manager/Chief at the beginning of each week to all parties.

Subcontractors shall submit their own safety meeting forms to the H&S Manager/Chief on a weekly basis.

7. TRAINING

7.1 Level 1 Training Programs and Visitor Information

Level 1 Training, which will last at least 2 hours, is also called "OHS Initial Training" and is given by the H&S Manager/Chief/Expert to cover all Antalya-Alanya Motorway Project, subcontractor and supplier employees. Those who have not received this training are not allowed to enter the construction site or work in the field. The content of the training and revisions are subject to the approval of the H&S Manager/Chief.

The topics covered in this training are as follows:

- Integrated Management System Policy
- OHS and Environmental Principles
- OHS and Environmental standards, rules and practices
- Risk assessment
- Emergency preparedness and response
- Any special hazards associated with the activities
- Incident/accident management, near misses
- Traffic safety
- Environmental awareness
- Pollution prevention
- Waste management
- Proper use and maintenance of personal protective equipment (PPE)
- Correct use of machinery and electrical equipment
- Brief description of the project and the works covered by the project
- Basic legal requirements regarding OHS
- Legal rights and responsibilities of employees
- Antalya-Alanya Project's HSE rules
- Project OHS Plan
- Project OHS rules and employees' responsibilities
- Project emergency management practices

Short-term visitors who will not be working on the construction site are subject to the short version of this training program (initial briefing) given by the H&S Manager/Chief/Expert. Visitors who do not attend this briefing session cannot enter the construction site.

7.2 Level 2 Training Programs

Level 2 Training programs are also called "job-specific OSH training" and are provided due to the risks associated with the work to be performed. Subcontractors and suppliers are responsible for providing these training programs for their own employees and training records will be submitted to the OSH Manager/Chief.

7.3 Level 3 Training Programs

Level 3 Training includes "advanced OSH training programmes" that are required for advanced qualifications or are specific to the task to be performed (first aid personnel or emergency management team member training, etc.).

Annual planning covering all the above mentioned training programs will be made by the H&S Manager/Chief using the Annual OHS Training List which will be reviewed by the OHS Department every January and submitted to the Project Manager for approval. Similarly, the same planning will be requested from subcontractors.

All training activities, including Initial Training and Visitor Information, will be recorded.

In order to obtain feedback from the participants, a training evaluation form will be used for half-day or longer programs. Subsequent activities will be monitored by the H&S Manager/Chief after analyzing this feedback. Following the training programs, relevant tests will be applied to measure the level of understanding of the participants.

7.4 Qualification Assessment

To ensure that relevant training programs are effective and that workers have the skills, experience, abilities and knowledge required to perform their jobs safely, their competence should be assessed. The methods for this assessment are:

Training Tests: After all trainings, tests will be distributed to measure the understanding and knowledge level of the participants. The main topics of the tests will be:

- What are the dangers
  - The impact of hazards and how they can affect people
  - How to assess risk and decide on appropriate controls
  - Basic elements of this plan
  - How occupational health and safety law applies to the workplace

- Daily Field Observations: The H&S Manager/Chief and representatives will conduct daily field observations. While conducting these observations, they will check whether the employees are performing their duties in accordance with the occupational health and safety rules and measures. If a non-conformity is detected, they will warn the employee and may also instruct the relevant training to be given again. In addition, they will randomly ask questions to the employees about the occupational health and safety rules and measures and conduct interviews with them.
- Identified Hazards: Employees will be encouraged to report any hazards they identify during work. These hazards will be assessed by the H&S Manager/Chief and their representatives, and the quantitative and qualitative identification of hazards will be an indicator of competence.

7.5 Toolbox Trainings

When a new work commences on the site or when the site conditions or hazards/risks change significantly; Site chiefs and supervisors or the OHS and Environment Manager/Engineer shall provide toolbox training to announce the work-related information and instructions, the work-specific hazards/risks and control measures necessary to eliminate/mitigate these risks. Training shall take place between small groups of employees assigned to carry out a private work and the content of the training shall include the following:

- The hazards/risks associated with such works and the control measures necessary to eliminate/mitigate these risks
- The deficiencies or omissions identified on site OHS and environment audits
- Use of PPE
- Any accidents/incidents in the past and the lessons learned from them
- General arrangement and organization
- Acting in accordance with the warning signs and warning signboards/tags.

The employees are always preferred and encouraged to tell about their past experience regarding the work.

The records for each toolbox training shall be kept indicating that it is a toolbox training and shall be maintained by the OHS and the Environment unit.

7.6 Basic OHS and Environmental Training

It is mandatory to receive Basic OHS and Environmental Training before being assigned to any work site. Employees who do not attend this training, including Subcontractor employees, will not be allowed to work on site. Basic OHS and Environmental Training will be renewed periodically to refresh the information.

Visitors will also be given a Visitor Training covering basic topics such as general field OHS and Environmental rules, emergency preparation, use of PPE in the field, etc. before entering the field. The safety rules that all visitors to the work areas must follow are defined in **the Visitor Safety Instruction.**

All OHS and Environment related trainings to be given to employees are planned and recorded in **Annual Training Plan**. Each training conducted will be recorded and evaluated with **Training Participation Form**. All records will be kept by OHS and Environment unit.

All safety training programs, including site inductions, task-specific training, toolbox talks, and emergency response drills, shall be provided to all personnel—including subcontractor and third-party workers—in a language they fully understand. Limak shall ensure that all training materials, verbal instructions, and written assessments are delivered in the worker's native language or in a language that ensures full comprehension. Where diverse languages are spoken on-site, multilingual trainers or interpreters shall be engaged to prevent any misunderstanding of critical safety procedures. Attendance and comprehension shall be verified through sign-in sheets and, where applicable, practical demonstrations or assessments. Training records shall be maintained for each individual and subject to audit by the HSE Department. No worker shall be allowed to commence site activities without having completed the mandatory safety training in an appropriate language.

8. GENERAL MANAGEMENT OF HAZARDS AND RISKS

The purpose of the Risk Assessment is to define the hazards related to the operations and work activities within the Antalya Alanya Motorway Project, to determine the risks for each hazard and to rate the risk magnitudes with the risk analysis method explained in **Occupational Health And Safety Risk Analysis Procedure**; to determine the relevant risk control methods and improvements to be made in order to eliminate or reduce the risks in question and to reduce the risks to an acceptable level.

Risk analyses cover the activities of all departments, supplier and subcontractor activities, and the hazards that all employees, visitors and those in neighboring areas may be exposed to.

8.1. Potential Hazards

According to the Project ESIA Report, hazards and risks to occupational health and safety are defined as follows:

- **Health and safety risks due to general occupational health and safety hazards:** A large workforce will be employed during the site preparation and construction phase of the Project. The activities of field personnel will carry the typical construction risks encountered on construction sites, such as risks arising from moving equipment, working at heights, working on water, excavation, confined spaces, working with electricity, etc.

- **Health and safety risks due to physical and chemical hazards:** Physical hazards refer to the possibility of accidents, injuries or illnesses that may occur due to repeated exposure to mechanical movement or work activity. Construction and maintenance personnel may be exposed to physical hazards during the land preparation and construction phase of the Project. Dust generated during excavation works, exhaust emissions produced by numerous construction machines, and harmful substances used for

painting and paving activities are among the main sources of chemical hazards for the workforce carrying out construction work.

- **Health and safety risks from construction traffic:** Poorly trained or inexperienced drivers will increase the risk of accidents with other vehicles, pedestrians and equipment. In addition, heavy equipment operators have very limited visibility near the machines they are using and may therefore not see pedestrians in the vicinity of their vehicles.
- **Health and safety risks due to emergencies:** Emergency situations such as accidents, fires, natural disasters, etc. may occur during the land preparation and construction phase of the Project. If these are not managed appropriately, risks related to the health and safety of personnel working in the Project may cause concern.
- **Health and safety risks due to poor accommodation conditions:** No significant number of workers, including permanent or contracted workers, will be used in the land preparation and construction phase. Accommodation will be provided in the Camp Sites within the scope of the Project. Therefore, the promotion of safe and healthy working conditions and the provision of good working and accommodation conditions will be important in this phase of the Project

8.2 Mitigation Measures

Potential hazards will be managed appropriately during the construction phase by implementing risk mitigation measures for each hazard as outlined below.

8.2.1 General Occupational Health and Safety Measures

- Project Sponsor will ensure that qualified first-aid can be provided at all times at the working/construction sites.
- Adequate lightning (that would not distract drivers' sight) will be provided for works to be conducted at night-time. Lightning system will be moved forward in parallel to the progress of works.
- Good cooperation will be ensured with local medical services.
- A system will be established for the reporting and recording of occupational accidents and dangerous occurrences/incidents.Personal protective equipment will be selected based on the specific hazards and risks involved in the task to be performed and will be properly maintained to ensure that they are effective and functional throughout their lifespan. It should be noted that personal protective equipment should be considered as a last resort. All other necessary active and embedded control measures should be taken first. The approach of the Antalya-Alanya Motorway Project envisages not to rely solely on personal protective equipment.
- Personal protective equipment/devices (PPE/PPD) and seasonal working outfits, meeting the requirements of the relevant Turkish regulations and good site practices, will be provided to all construction personnel by the Project Sponsor at no cost. Effective use of the PPEs/PPDs by the construction personnel will be monitored and ensured by the Project Sponsor.
- Sub-contractor workers will also be strictly required to use necessary PPEs/PPDs by means of contractual stipulations to be done with the sub-contracting companies.
- Orientation training will be given to all newly hired personnel.
- In addition to orientation training, all permanent and contract workers will receive relevant training before starting their new duties (change of workplace/task, change of machinery and equipment worked on, introduction of new technologies, etc.).
- Employees assigned to rescue and first aid will be given special training on this subject.

- In addition to having first aid equipment and a doctor in the campsite, it is recommended to make agreements with private hospitals in the surrounding area, as these measures may not be enough in possible situations.
- Through appropriate contract specifications and monitoring, service providers and contract and subcontracted workers will be ensured to receive adequate training before starting work.
- A visitor orientation and control program will be established to ensure that visitors do not enter danger zones without an escort. In this regard, relevant checkpoints and record keeping practices will be used to ensure the safety of both business and visitors.
- Properly maintained construction machinery, equipment and vehicles shall be used to ensure that all alarms, brakes, lights, seat belts and other general safety devices are operating normally and that tyre pressures, windows, mirrors and closed circuit camera systems (if any) are in working order. Accordingly, relevant users shall perform quick checks prior to use, for example by testing the brakes for operation and checking that lights are on.
- Construction equipment will not be left in any enclosed space close to the work area. Concrete pumping operations shall be conducted under a valid Permit to Work (PTW)**,** particularly in areas near excavations, live traffic, or overhead power lines.
- All operators must be trained, competent, and certified**,** and possess equipment-specific knowledge (in line with EN 12001 and ISO 21573)
- Concrete pump trucks must be parked on stable, level ground, with outriggers fully deployed on load-distributing plates to ensure stability.
- Daily pre-operation checks will be conducted and recorded, including inspection of pump stability systems, hoses, clamps, and couplings, remote controls and emergency stop buttons.
- All maintenance or cleaning of the hopper must be performed only after power is locked out, and hopper guards must never be bypassed or removed.
- Warning signs and physical barriers will be placed around the boom's swing radius to restrict unauthorized access.

8.2.2 Measures againts Physical Hazards

- Safe work zone will be established to separate workers on foot from the traffic.
- For the construction works to be conducted at location where traffic exists, safe work zones will be established by taking relevant measures (closure of roads, diversion of traffic, use of protective barriers, cones, warning lights, etc.)
- Dedicated traffic management plans shall be developed and implemented
- Unauthorized entry will be prevented by barricading the area where elevated work is being done, and personnel on elevated structures will avoid working underneath them.
- Cranes and lifting equipment shall be classified and properly maintained, and operators shall be trained in their use. Lift platforms shall be maintained and operated in accordance with established safety procedures, including the use of fall protection measures (e.g., guardrails), equipment movement protocols (e.g., moving only when the lift is in the retracted position), ensuring repairs are performed by qualified personnel, and the installation of locks to prevent unauthorized use by untrained persons.
- Ladders shall be used in accordance with established safety procedures regarding proper placement, climbing, standing and use of extension pieces.
- When working at heights, appropriate fall protection measures shall be applied. Safety belts of suitable thickness and made of suitable materials providing sufficient strength shall be used. Rope safety belts shall be replaced before signs of wear and fraying become too apparent. When operating power tools at heights, workers shall use a second (spare) safety belt.
- Personnel exposed to high levels of noise will be required to use personal hearing protection devices/equipment, which will be provided free of charge. If required for specific tasks, job rotation programs will be implemented to reduce cumulative exposure.
- Weather forecasts will be monitored for outdoor work to provide early warning of unusual weather conditions and plan work accordingly. Protective clothing will be used when necessary.

- Work above 2 meters must not be performed without a valid Permit to Work (PTW) and fall protection measures.
- Use of full-body harnesses connected to certified anchor points is mandatory.
- Scaffolding must be erected, inspected, and certified by competent personnel before use (in line with Turkish Regulation on Work Equipment).
- All trenches deeper than 1.2 meters must have shoring, benching, or sloping based on soil classification (per Regulation on Occupational Health and Safety in Construction Works).
- A competent person must inspect excavations daily and after any weather event.
- Access and egress ladders must be provided every 7 meters.
- Confined spaces shall be identified, registered, and marked with appropriate warning signs at all entry points.
- Entry is only permitted under a valid Confined Space Entry Permit (CSEP) issued by a competent person, and the permit must be renewed daily.
- All personnel involved (entrant, attendant, supervisor) must be trained and authorized for confined space operations.
- Entry points must be unobstructed and large enough to allow for emergency rescue, as per Turkish regulations.
- A trained attendant shall remain outside the confined space at all times, maintaining communication with the entrant.
- A dedicated Confined Space Rescue Plan shall be prepared for each space, and rescue drills shall be conducted at least every 6 months.
- An entry logbook shall be maintained at each entry point, showing times of entry/exit and atmospheric test results
- All trenches deeper than 1.2 meters must have shoring, benching, or sloping based on soil classification (per Regulation on Occupational Health and Safety in Construction Works).
- A competent person must inspect excavations daily and after any weather event.
- Access and egress ladders must be provided every 7 meters
- Life vests must be worn near open water.
- Emergency rescue equipment for working over/near water (lifebuoys, throw ropes) will be available.
- Rescue drills for working over/near water will be conducted.
- All tools and equipment must have CE certification and maintenance records.
- Only trained personnel are authorized to operate tools/machinery.
- Daily pre-use checks for tools/machinery will be logged.
- Lone workers must carry emergency communication devices.
- In ısolated works "check-in/check-out" protocol will be implemented by supervisors.
- High-risk lone work is prohibited unless supervised or with a buddy system
- Hot work permits are required and will be issued daily.
- Fire watch and fire extinguishers will be present.
- Gas cylinders will be stored upright, away from ignition sources, and fitted with flashback arrestors
- For cold or hot weather, work-rest cycles will be defined.
- Shade and hydration will be provided in summer; thermal clothing and warm shelters in winter.
- Concrete pump boom arms and delivery lines must not operate within 5 meters of overhead power lines unless officially isolated and confirmed by utility authorities.
- All pipes and hoses for concrete pump will be securely clamped and equipped with restraint cables or chains to prevent hose whipping or accidental disconnection.
- Concrete pump operators will test emergency stop devices and pressure release valves before beginning operations.
- In case of pipe blockage for concrete pump; pumping will stop immediately, pressure will be relieved before disconnection or flushing and only trained personnel may intervene using proper tools and PPE.
- Concrete pump’s vertical delivery systems will include non-return valves and support structures to prevent collapse or uncontrolled material discharge.

- Mechanical and hydraulic components for concrete pump (hoses, cylinders, fittings) will be inspected regularly for wear, corrosion, and leaks.
- All electrical systems associated with the pump shall comply with EN 60204-1 and include fail-safe remote control systems.

8.2.3 Measures againts Chemical Hazards

- Properly maintained construction machinery, equipment and vehicles will be used to minimize air emissions.
- Engine idling time will be reduced in construction sites.
- Direct diesel exhaust will be properly disposed of to minimize operator exposure.
- Interior work areas where vehicles or engines will be operated shall be ventilated or exhaust gases shall be diverted appropriately.
- Lead-containing paints containing shall be avoided and appropriate respiratory protection shall be worn when cutting galvanized steel
- Dust masks will be used by relevant personnel in work areas where dust levels are excessive.
- Hazardous materials will be replaced with a less hazardous substitute whenever feasible.
- Engineering and administrative control measures will be performed in order to prevent or reduce the release of hazardous materials into the work site. Level of exposure will be kept below internationally established or recognized limits.
- The number of workers to be exposed will be kept in minimum.
- Hazardous materials will be labelled and marked properly considering national and international regulations and guidelines. Materials Safety Data Sheets (MSDS) will be prepared. All written communication will be readable and available to workers to be exposed and first-aid personnel.
- Workers will be trained in use of information related to hazardous materials (MSDSs etc.), safe work practices and appropriate use of PPE.
- Before entry, atmospheric testing shall be performed using calibrated detectors by trained personnel.
- Continuous gas monitoring is required during confined space activities, with immediate evacuation if limits are exceeded.
- Mechanical forced ventilation must be used to control the concentration of hazardous gases and ensure adequate oxygen levels. Personnel working in atmospheres with residual chemical vapors or insufficient oxygen shall use SCBA (Self-Contained Breathing Apparatus) or equivalent.
- Containers or vessels previously used for storing hazardous substances must be cleaned, inerted, and certified gas-free before entry.
- SDSs (Safety Data Sheets) for all chemicals used or previously stored in the confined space must be reviewed before work begins.

8.2.4 Measures againts Emergencies

- An Emergency Response Plan will be prepared and implemented that includes:
    - Emergency response in cases such as spills, accidents, earthquakes, floods
    - Procedure for reporting incidents for staff and subcontractors and investigation, correction and protective actions for such incidents
    - Regular emergency response training, including on the use of spill response equipment
    - Emergency Communication Procedure, including with local communities and authorities

8.2.5 Measures againts Construction Traffic

- A safe work area will be created to separate walking workers from traffic.

- For construction work to be carried out in areas with traffic, safe working areas will be created by taking the relevant measures (closing roads, directing traffic to another direction, using protective barriers, cones, warning lights, etc.).
- Weather forecasts will be monitored to provide drivers with early warning of unusual weather conditions and plan work accordingly.

8.2.6 Measures againts Workers Accommodation Conditions

- The accommodation provided will be clean and safe, will meet the basic needs of the workers and will provide each worker with a minimum amount of space for sanitation, laundry and cooking facilities. Overcrowding will be avoided.
- Heating, air conditioning and ventilation facilities will be suitable for climatic conditions and will provide a comfortable and healthy environment for workers to rest and spend their free time.
- The drinking water to be provided for the project workforce and the water to be supplied for food preparation, washing and bathing areas will meet the requirements stipulated in the Regulation on Water Intended for Human Consumption.
- Sufficient toilet facilities (toilet, urinal, sink and shower) shall be provided according to the number of people expected to work in the facility and signs shall be available indicating whether the toilet facility is “Occupied” or “Vacant.” Toilet facilities shall also be equipped with sufficient hot and cold water, soap and hand drying devices.
- Domestic wastewater and wastes from the Camp Sites will be managed and disposed of in accordance with the requirements set forth in the relevant Turkish regulations and good site practices.
- First aid and medical facilities as well as safety equipment against possible dangers (fire, etc.) will be provided in the Camp Sites.
- Residents of the Camping Sites will be informed about the rules regarding accommodation.
- There will be an infirmary, a domestic wastewater processing facility and a social facility in the construction site.
- Project’s Grievance Mechanism to be established will provide means to the Project personnel to express their complaints. Project Sponsor will ensure that the workers are informed of the grievance mechanism at the time of recruitment and make it easily accessible to them.

9. GENERAL RISK MANAGEMENT

The OHS management process of the Antalya-Alanya Motorway Project is implemented in accordance with the document Risk Assessment Procedure.

According to the Risk Assessment Procedure, OHS hazards will be determined from mobilization to job completion; relevant risks for jobs and facilities will be analyzed, relevant risk control methods will be determined and will be implemented on site and in relevant places accordingly.

Throughout the project, the risk assessment process will be carried out in 4 categories:

- General OHS risks (known risks, facilities, etc.)
- Risk assessments related to field works of Antalya-Alanya Motorway Project
- Risk assessments related to activities performed by subcontractors (prepared by the subcontractor and submitted to the Antalya-Alanya Motorway Project)
- OHS risk assessments related to non-routine field activities before the start of the field activity

- The risk assessment process will be recorded using the risk assessment form and will be communicated to the Antalya-Alanya Motorway Project subcontractor and supplier responsible persons.

9.1. Risk Assessment Method

The risk assessment methodology is based on the ISO 31000:2018 guide.

The risk score is calculated using the following basic risk assessment approach:

Risk Score (Risk) (R) = Likelihood of Occurrence (L) * Consequence (C)

Both likelihood of occurrence and consequence parameters are set to 5*5 quantitative grading method such that:

Scale of Likelihood of Occurrence (L):

Value	Level	Definitions / Criteria
A	Very unlikely	Not any event of this kind is known to have occurred but may rarely happen
B	Unlikely	The detected failure may cause damage in case of a simultaneous occurrence of several hardly probable independent events.
C	Possible	The detected failure may cause a damage only in the event of possible circumstances
D	Likely	The detected failure may cause a damage, even though not automatically or directly
E	Very Likely	There is a direct relation between the failure detected and the occurrence of assumed damage to the workers

Scale of Severity (S):

Değer	Seviye	Definitions / Criteria
1	*Negligible*	*Only first aid or near miss cases*
2	*Slight*	*No lost work day cases*
3	*Moderate*	*Lost work day cases*
4	*High*	*Injury or acute exposure event with effects of partial invalidity* *Chronic exposure with irreversible and/or partial invalidation effects*
5	*Very High*	*Injury or acute exposure event having lethal effects or total invalidity* *Chronic exposure with lethal and/or total invalidation effects*

The representation of the risk matrix is as follows:

LIKELIHOOD	CONSEQUENCES				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
(E) Very Likely	M 11	H 16	H 20	E 23	E 25

(D) Likely	**M 7**	**M 12**	**H 17**	**H 21**	**E 24**
(C) Possible	**L 4**	**M 8**	**H 14**	**H 18**	**H 22**
(B) Unlikely	**L 2**	**L 5**	**M 9**	**M 13**	**H 19**
(A) Very Unlikely	**L 1**	**L 3**	**M 6**	**M 10**	**H 15**

As indicated in above matrix, risks are classified in three levels and subsequent actions are as follows:

Very High Risk (Red Area): Stop work; immediate action required

High Risk (Yellow Area): Proceed work short time according to procedure under close supervision

Medium Risk (Blue Area): Corrective and/or preventive actions to be scheduled in the short-term

Low Risk (Green Area): Acceptable risk, existing risk control methods are to be and reviewed

9.2. Risk Activities and Management

As stated in Section 1.1, this Plan document covers only the construction phase of the Antalya Alanya Motorway Project and is valid for all activities of the Antalya-Alanya Motorway Project and its subcontractors (including sites subcontracted to third parties (quarries, borrow pits, etc.)). Therefore, the scope of influence is limited to all Project activities related to the construction process.

10. MONITORING- MEASUREMENT AND INSPECTIONS

10.1. Monitoring and Measurement Activities

The parameters having significant impact on the OHS and environment due to the activities construction sites shall be periodically monitored, measured and/or controlled by taking into account the provisions of the legislation. The monitoring and measurements to be performed shall be recorded. The measurement period and the persons in charge shall be indicated.

The persons in charge shall convey the records established after the necessary monitoring and measurement to the OHS and Environment Unit. In external measurements, the accredited and or qualified organizations or companies shall be preferred. All monitoring and measurement records shall be kept by the persons in charge of the competent unit and the OHS and Environment Unit.

In case of a tendency to act against the legislation during the inspections carried out within the specified periods, the control frequency of such parameters may be increased by the OHS and the Environmental Unit. If significant deviations from the targets are detected as a result of the monitoring or if the results non-compliant with the legislation are obtained, the necessary actions shall be initiated by the OHS and Environment Unit

The parameters given below, which vary depending on the characteristics of the project being implemented and are not limited to these, are monitored, measured and/or controlled

- Periodic inspections of the equipment used
    - Pressure equipment: The inspections of the pressure vessels shall be carried out and reported by a qualified mechanical engineer/technician or by an accredited organization within the periods and under the conditions in accordance with the provisions of the legal legislation.
    - Lifting and moving equipment: The inspections of the lifting and moving equipment shall be carried out and reported by a qualified Mechanical Engineer/Technician or by an accredited organization within the periods and under the conditions in accordance with the provisions of

the legal legislation. The reports and periodical inspections shall be followed-up by the OHS and Environment Unit.

- Inspections of the electrical installations, lightning rods and groundings: The inspections of the electrical installations, lightning rods and groundings on the site shall be carried out and reported by a qualified Electrical or Electrical-Electronics Engineer/Electrician within the periods and under the conditions in accordance with the provisions of the legal legislation.
- Firefighting equipment: The inspections of the firefighting equipment shall be carried out and reported by a qualified Mechanical Engineer/Technician or by an accredited organization within the periods and under the conditions in accordance with the provisions of the legal legislation.
- Fire extinguishers: The inspections of the fire extinguishers shall be carried out through the **Fire Extinguishers Control Form**.

- Personal exposure measurements (personal noise, personal dust, personal vibration): Personal exposure measurements shall be carried out by accredited laboratories within the periods specified in the legislation.
- Workplace environment measurements: Workplace environment measurements such as thermal comfort, lighting, noise, dust must be carried out by authorized institutions at the beginning of the activity and compared with the limit values, and in case the results exceeding the limit are determined, necessary actions must be determined and performed to make them suitable. These measurements shall be repeated in case of changes in activities or placements.
- Environmental Measurements (Ambient noise, emission): Environmental measurements must be carried out by authorized institutions at the beginning of the activity and compared with the limit values, and in case the results exceeding the limit are determined, necessary actions must be determined and performed to make them suitable. These measurements shall be repeated in case of changes in activities or placements.
- Drinking/service water quality: Drinking/service waters shall be analyzed, monitored and controlled within the periods specified in legal regulations.
- Discharge Water Quality
- Waste quantities (Hazardous wastes, solid wastes, etc.)
- Natural resource consumption (Electricity, water, natural gas, LPG, etc)

10.2. Audits and Reporting

Audits shall be planned and applied according to the YS-P11 Internal Audit Procedure.

The F-11.1 Internal Audit Plan, including audit frequencies, shall be prepared to assess and monitor the compliance with existing policies and procedures and their effective implementation on the site.

When one or more non-conformances are detected during the audits, the process shall be started according to the YS-P12 Non-Conformity and Corrective Action Procedure. At the end of the audit, the auditors prepare the "F-11.3 Internal Audit Report".

The results of the audit shall be evaluated by the H&S Manager and be communicated to the management.

10.3. Routine Site Inspections

The OHS and Environment Unit shall routinely audit the work site.

During routine inspections, the OHS and Environmental Unit carries out procedures in accordance with the **YS-P12 Nonconformity and Corrective Action Procedure** for the nonconformities it identifies and reports the nonconformities using the **F-16.5 Weekly OHS-Environmental Activity Report Form.** Two types of actions are envisaged for identified nonconformities.

1. Elimination of detected nonconformity as soon as possible
2. Minimize the likelihood of re-encountering the nonconformity by identifying and eliminating the root cause causing the identified nonconformity.

For the nonconformities identified with the **Weekly OHS-Environmental Activity Report Form**, responsible parties are determined, and a deadline is set for the closure of the nonconformity. If the nonconformity is closed by the deadline, the closure date is recorded on the form. Nonconformities that remain unresolved are subject to the reopening of the Nonconformity Report (DFI).

10.3.1. Reporting

10.3.1.1. Daily Reporting

HSE Department will prepare a Daily **OHS-Environmental Activity Report Form** including daily HSE issues and on-site observations and submit them to HSE Manager at the end of their shifts. HSE Manager will be responsible for the follow-up of the issues specified in the report.

10.3.1.2. Weekly Reporting

Every week, one of the OHS Responsible Persons will prepare a Weekly HSE Report including weekly HSE issues and on-site observations and submit them to HSE Manager at the end of the week. HSE Manager is responsible for the follow-up of the issues specified in the report.

10.3.1.3. Monthly Reporting

Monthly Project HSE Statistical Report will be prepared by HSE Manager and sent to related department by e-mail.

10.3.1.4. Annual Reporting

As a legal requirement, in every January, **Annual OHS Assessment Report** of the previous year will be prepared by HSE Department and submitted to Project Manager for approval.

11. NONCONFORMITY AND CORRECTIVE ACTIONS MANAGEMENT

Procedures will be conducted according to the **YS-P12 Nonconformity and Corrective Action Procedure** in relation to nonconforming conditions and behaviors that may arise during the execution of tasks. In the event of nonconformity detection, the **F-12.1 Nonconformity and Corrective Action Form** will be used, and all identified nonconformities will be documented, with their root causes investigated.
Additionally, if the nonconformity poses a high risk, work in the area where the nonconformity occurred will be immediately halted until the nonconformity is rectified. Necessary safety measures will be implemented at the work site, and on-the-job training will be provided to the personnel involved in the nonconformity. Following the resolution of the nonconformity and an inspection by the Occupational Health and Safety (OHS) and Environmental Unit, work will resume.
The OHS and Environmental Unit also fills out the **Weekly OHS-Environmental Activity Report Form** for all nonconformities identified in the field.

12. REPORTING THE ACCIDENT/INCIDENT

All incidents/accidents, occupational diseases and near-miss events in the workplace shall be recorded, investigated and reported.

Incidents occurring in the workplace that have the potential to cause damage to employees, the workplace, or equipment/materials, but do not result in injury, illness, or death, and/or may cause environmental pollution,

are recorded through written statements of the victim(s) and any witnesses using the **Incident Statement Form**, and then reported using the **Near Miss Report.**

All incidents/accidents that occur in the workplace and cause injury, illness or death, damage to equipment/materials and/or environmental pollution are reported using the **Incident/Accident Investigation Report.**

The Root Cause Analysis shall be performed by using the **F-16.7 Incident/Accident Investigation Report** in order not to repeat the incidents/accidents or occupational diseases in the workplace. The following stages shall be followed during the incident/accident investigations;

Stage 1: Collection of Information

Stage 2: Analysis of information

Stage 3: Determination of primary causes and root causes as a result of analysis

Stage 4: Identification of appropriate corrective actions

Stage 5: Planning and implementation of corrective actions

The nonconformities identified as a result of the root cause analysis shall be recorded using the **F-12.1 Nonconformity and Corrective Action Form** and necessary planning shall be carried out to ensure that the nonconformity and/or corrective actions are realized and necessary measures shall be taken to prevent recurrence of similar incidents/accidents.

Information that incident/accident reports must include;

- Date and place of accident/incident
- Those involved (person and/or equipment)
- stages of occurrence accident/incident
- Accident/incident details
- Nature of injuries / damage / cost estimate
- Witness statements
- Scene of incident photos
- Immediate (primary) causes
- Root causes
- Measures to be taken
- Corrective actions

Occupational accidents shall be notified to the relevant legal authorities within the periods specified in the legislation.

All incidents/accidents, near-misses and other cumulative data related to occupational health, safety and environment shall be recorded with the **Monthly HSE Performance Indicators** form and be reported. Details of fatality cases and lost time incidents (LTI's) shall also be recorded with the **Monthly HSE Performance Indicators** form.

13. EMERGENCY MANAGEMENT

In the event of any emergencies and unexpected situations that may occur, the operations carried out in order to ensure the safety of people, workplace, environment and equipment, to minimize the effects of the situations having damage potential and to systematically perform the necessary activities are within the scope of emergency management.

The following basic principles shall be applied in emergency management and planning.

- To identify hazards and problems in advance and make necessary preparations,
- To develop effective and correct response methods in advance to minimize the effects and to be well-prepared at all times,
- To perform the necessary responses in a coordinated manner and not respectively, and to minimize the duration and effect of the incident,
- To make necessary interventions for the protection of all those concerned,
- To disseminate Corporate Culture by conveying the lessons and doctrines gained to all field personnel to prevent the recurrence of the events,
- To constantly make the necessary improvements to have a better system.

13.1. Emergency Response

The emergency response system essentially consists of 6 main elements;

1. Prevention, Minimization
2. Emergency Preparations,
3. Emergency Response Methods,
4. Emergency Exercises,
5. Rescue,
6. Briefing.

13.1.1. To Prevent and Minimize

All studies, practices and machinery and equipment used are evaluated for possible hazards and risks and a risk analysis study is conducted. As part of the risk analysis prepared, necessary measures are taken to prevent and minimize, they are continuously controlled and all legislation and standard requirements are followed and fulfilled. These studies ensure that the necessary studies are carried out systematically beforehand in order to prevent the emergence of dangerous situations.

13.1.2. Emergency Preparations

These are the preparations and measures to be carried out in order to minimize the negative effects of the emergencies that may occur and shall be coordinated by the employer or the employer representative (Project Manager/Site Chief) as the Emergency Manager. Emergency Preparations;

- Organization of Emergency Teams.
- Field personnel, emergency teams and site management to receive theoretical and practical training on emergencies, emergency plans and safety measures and exercises to be organized within particular periods.
- Supply of equipment to be used in emergencies.
- Establishment and efficient use of quality internal and external communication networks.
- Communication and coordination with external emergency teams.
- Conducting emergency exercises and identifying the deficiencies identified during exercises and making necessary improvements.

13.1.3. Emergency Response Method

Emergency response is the activities to be applied in case of unexpected situations. it involves eliminating, minimizing the source of the harmful impact and subsequently, the restoration activities when an emergency occurs. Personnel in Emergency Teams are the persons who have sufficient knowledge and experience about the

required interventions according to the type of incident. Negative harmful impacts are minimized by effective and correct interventions.

13.1.4. Emergency Drill

An important part of emergency preparedness is performed through exercise. The above-mentioned teams shall meet at least once a year and perform the exercises. Scenarios shall be built in line with natural and non-natural disasters during the exercises. As part of these scenarios, practices shall be performed and suggestions for being prepared for possible disasters, also the solution of problems that may be encountered during disasters shall be brought and evaluated and solutions shall be provided. All information about the solution shall be shared with the employees. The effectiveness assessment of emergency exercises shall be recorded by the **Training Participation Form** and the **Emergency Drill Report**.

13.1.5. Rescue

This is to intervene to the persons, equipment and buildings that are negatively affected or about to be affected as a result of emergencies, to provide necessary assistance and support, to carry out improvement works and to ensure that the effects are eliminated or minimized and taken under control. Rescue activities include the pre-planned and tested practices to minimize the duration and impact of emergencies.

13.1.6. Briefing

After each serious and dangerous incident, it is important to provide the necessary information/briefing and explain the causes and consequences. The necessary corrective and remedial activities are determined by ascertaining which systems are working properly and which deficiencies are identified in relation to the incident and all personnel are informed about this issue.

13.2. Preventive and Restrictive Measures Taken for Emergencies

The **Emergency Plan** shall be prepared in accordance with the provisions of the legislation for emergencies that may occur at the Head Office and Construction Sites considering the characteristics of the activities and the site.

All personnel are given the **"Things to Do In Case Of Emergency and the Measures to Be Taken"** training once a year about identified emergencies. It is ensured that Emergency teams receive the necessary trainings (certified first aid trainings, etc.) through authorized institutions. Emergency exercises are recorded at least once a year, the deficiencies are identified and the response and performance of the personnel in case of extraordinary situations are measured. Firefighting equipment, first aid equipment and alarm systems are checked once a month and their competencies are reviewed. The machinery and equipment that may cause emergencies are subject to measurement and assessment every year and additional maintenance is performed when necessary. Emergency direction signs and emergency exit doors being opened outward and their inspections are performed in accordance with the provisions of the legislation.

13.3. Emergencies Determined

The emergencies that may occur in the workplace have been determined by taking into account the following:

a) Risk assessment results.
b) Emission and explosion probability arising from fire and hazardous chemicals
c) Incidents requiring first aid and evacuation.
d) Probability of natural disasters.
e) Probability of sabotage.
f) Wild animal attack, snake bite, scorpion sting.

Emergency situations that may occur in the company according to the mentioned issues,

Natural Disasters *Other Emergency Situations*

a. Earthquake
b. Flood-Water Deluge
c. Lightning
d. Avalanche
e. Landslide
f. Storm

a. Fire
b. Natural Gas Fire
c. LPG Fire
d. Electricity Fire
e. Burst and Explosion
f. Sabotage, Terror and War
g. Spillage of Chemicals
h. Epidemics
i. Traffic Accident
j. Poisoning
k. Electric Leakage
l. Work-related accidents

13.4. Emergency Teams

13.4.1. Organization of Emergency Teams

The employer, under the legal legislation, shall establish teams for the following matters consisting of appropriately equipped persons considering the number of employees.

a) Emergency response and firefighting,
b) Search, rescue and evacuation,
c) First aid,
d) Protection

Those assigned for these teams shall be listed in the **Emergency Team List** and **Emergency Plan** posted in areas where everyone can see and reach them.

13.4.2. Duties of Emergency Teams

Emergency Teams;

- Participating in training and drills related to emergencies.
- Calling the Emergency Manager when an emergency alarm is heard to obtain information about the situation and coordinate.
- To carry out the necessary interventions in the most effective and correct way in line with the training they have received until the professional teams arrive.
- Coordinating the people in the assembly area and directing people to the assembly areas.
- To fulfill the responsibilities in the job descriptions.

Emergency Response and Fire Fighting Team: They are supposed to make the first response to emergencies that may occur in the workplace, to respond immediately in case of fire and prevent the expansion of fire, to completely or partially disable electricity, natural gas and similar systems that may create a danger to intervene in the fire and to extinguish fire if it is capable.

Search, Rescue and Evacuation Team: They are assigned to determine the places of the persons and materials which need to be removed from the site during fire and other emergencies, remove the determined elements from the scene of accident, ensure that all employees reach to emergency gathering points in a controlled way and take the necessary precautions to prevent the emergency from growing and evacuate persons safely.

First Aid Team: They are supposed to inform the medical teams and to apply the necessary first aid interventions to the wounded brought to the safe zone by the search, rescue and evacuation team until the medical teams arrive. The team consists of employees with First Aid Certificates.

Protection Team: They are supposed to protect the materials and documents recovered by the search, rescue and evacuation team in an emergency, to prevent possible panic and confusion.

Security Officers:

- To inform the emergency manager when witnessing events that occur in the field or that may occur outside and affect the site,
- To inform professional teams (ambulance, fire department, police),
- To meet the out-of-site teams and accompany them on site,
- To guide the vehicles and people in the most proper manner until the emergency event ends,
- To bring the exit-entry points under control,
- To serve in assistant position to emergency teams,
- To participate in emergency trainings and exercises.

13.5. Emergency Assembly Area

It is a pre-determined assembly area as a safe area for the employees to gather in case of emergency. Emergency assembly area:

- Shall be designated as a place where the employees shall not be harmed by environmental conditions in emergency situations,
- The movement of response vehicles such as ambulance and fire brigade shall not be restricted,
- People shall not be exposed to electrical and chemical hazards,
- Which can be quickly evacuated in case of mass evacuation,
- All employees can locate with the help of emergency signs.

Depending on the works, the number of employees in the workplace, the differences in the work locations and the emergency hazards in the workplace, more than one emergency assembly area shall be determined if necessary.

Emergency exits within the working area shall be determined under the legal legislation.

The evacuation arrangements, emergency exits, emergency response and first aid equipment, alarm systems and emergency assembly areas that can be monitored to ensure that personnel can go to a safe place in case of emergencies shall be shown in the **Emergency Equipment and Evacuation Plan** and they shall be hung on the suitable places so that employees can easily see them.

13.6. Emergency Equipment

13.6.1. Fire Cabinet

Fire cabinets to be used in the workplace and construction site shall be selected suitable for the need and in sufficient numbers and be placed in the required places in accordance with the provisions of the legislation.

13.6.2. Fire Extinguishers

Considering the possibility of fire in the workplace, fire extinguishers and their number shall be determined based on fire classes and be placed in appropriate places. The locations of fire extinguishers are specified in the **Emergency Equipment and Evacuation Plan**.

The inspections of the fire extinguishers shall be carried out through the **Fire Extinguishers Control Form**.

Class A Fires

These are the solid matter (wood, paper, cotton etc.) fires. These are controlled and extinguished by cooling and removal of combustible material. Multi-purpose dry chemical powder or water fire extinguishers are used in this kind of fires.

Class B Fires

These are the fires caused by combustible liquids (petrol, benzene, oils, oil paints, tar, etc.). Dry chemical powder, carbon-dioxide or foamy fire extinguishers are used in this kind of fires.

Class C Fires

These are the fires caused by combustible gases (Methane, propane, LPG, acetylene gas etc.). Dry chemical powder or carbon-dioxide fire extinguishers are used in this kind of fires.

Class D Fires

These are the fires caused by flammable light metals and alloys (sodium, potassium, titanium, magnesium, etc.). Dry metal powder fire extinguishers are used in this kind of fires.

Class E Fires

These are electrical fires. For fires caused by electricity, a fire extinguisher shall be used according to the type of objects burning after the electrical current is cut.

13.6.3. First Aid and Medicine Cabinet

First aid and/or medicine cabinets shall be available in the facility for emergency use. The contents of the cabinets are arranged according to the working conditions and the work performed.

The locations of fire cabinets are specified in the **Emergency Equipment and Evacuation Plan**. The contents of the medicine cabinets shall be checked by the Administrative Supervisor and Workplace Physician at regular intervals.

13.7. Emergency Equipment and Evacuation Plan

The **Emergency Equipment and Evacuation Plan** shall be prepared on the layout plan according to the sections of the workplace and construction site and shall be hung on suitable places for the employees to see them easily. In this evacuation plan;

- Locations of firefighting vehicles,
- Emergency equipment and their locations,
- Locations of the first aid materials,
- Evacuation roads and emergency exits,
- Emergency assembly areas

shall be shown.

13.8. Emergency Flow Diagrams

The **Emergency Flow Diagrams** have been prepared concerning the following subjects according to the sections of the workplace and construction site.

- Earthquake flow diagram,
- Work accident flow diagram,
- Sabotage flow diagram,
- Leakage and spillage flow diagram,

- Fire flow diagram,
- Explosion flow diagram,
- Flood and landslide flow diagram,
- Terrorist attach flow diagram,
- Poisoning flow diagram

14. HEALTH SERVICES

The **Occupational Hygiene Instructions** has been prepared to provide a healthy working environment to the employees, to identify and control the health hazards and risks in the workplace, and which includes hygiene conditions related to the working environment and personal hygiene issues for the employees.

1. The provision of the personnel health files in accordance with the legislation is essential. Employees shall be subjected to general health examinations under the following circumstances;
   a) Upon recruitment.
   b) In work changes.
   c) When they request to return to work after recurrent suspensions form work due to work accident, occupational disease and health status.
   d) They must be renewed periodically during the course of the work.
2. The personnel cannot be hired without a health report showing that they are suitable for the job.
3. Health examinations shall be performed and reported by the Workplace Physician.
4. It is important for the health personnel to be involved in night works to indicate that "they are suitable for night work".
5. Hygiene trainings shall be given to all personnel working in the work area such as tea-makers, camp staff, cooks etc. and their records shall be kept. The trainings received shall be checked by the Workplace Physician.
6. The Inspection reports shall be treated as confidential information. Access other than the units/persons responsible for monitoring and control is prohibited.

14.1. Monitoring Health Status of Employees

1. The personnel to be employed shall be examined by the Workplace Physician before the work and be recorded in the **Pre-Employment/Periodic Examination Form**.
2. Employees are required to be examined by the Workplace Physician within the periods specified in the legislation.
3. Medical examination of the employees who come to orientation training must be completed in order to be accepted.
4. The personnel who have lost their workforce must be examined by the Workplace Physician before starting the work again and the **Pre-Employment/Periodic Examination Form** must be renewed.
5. In the case where those who left the job starts to work again, the examination procedures must be repeated again even if the interval is short.

14.2. Workplace Health Unit

A workplace health unit (infirmary) shall be established in the company and construction site close to the office area, which shall be equipped with medical equipment and materials in accordance with the legislation. A Workplace Physician in compliance with the requirements of the legislation and, if necessary, a nurse or health officer shall be appointed to the health unit.

Hospitals and ambulance services in the region shall be used until the health unit is established. Necessary contact information for the nearest hospitals and ambulance services shall be provided to the employees.

Health units, together with occupational safety specialists, shall each year prepare the **Workplace Health and Safety Unit Annual Work Plan and Assessment Report** regarding the health services carried out in the workplace.

In addition to the health units, a sufficient number of personnel complying with the requirements of the legislation shall be certified by receiving "First Aid Training" from the authorized institutions.

15. GRIEVANCE MECHANISM

15.1. Recording Grievances

Communication Procedure has been established for written and/or verbal grievances (complaints and suggestions) from employees, visitors, subcontractors, suppliers, customers, legal and other authorities within the scope of Quality, Environment, Occupational Health and Safety. **Complaint and Suggestion Form** is used for complaints and suggestions. Received complaints and suggestions are evaluated by the Project Manager, Site Manager and OHS and Environment unit. Complaint and Suggestion status are evaluated by the person who fills out the form.

Depending on the severity of the grievance, the following actions are taken in the Complaint Status section:

- If the grievance is caused by a non-conformity which harms the property and/or health of the parties concerned, creates financial loss, damages the environment and is caused by the products and services, then its severity is marked as "**high**". A corrective action (CAR) is initiated, actions are planned and realized as soon as possible.

- If the grievance is caused by a non-conformity arising as a result of the non-satisfaction of the requirements of the parties concerned, then its severity is marked as "**moderate**". A corrective action (CAR) is initiated and action will be taken depending on its urgency.

- If the grievance is caused by a very rare non-conformity that does not belong to the system, then its severity is marked as "**low**". No corrective action is initiated for the grievances with low severity.

Grievances are recorded in **Complaint and Suggestion Follow-up List**" and evaluated at regular intervals. Complaints with high and moderate severity and suggestions to be answered must be recorded in the follow-up list. The parties concerned are notified verbally and in writing.

15.2. Closing Grievances

Complaints recorded in the Complaint and Suggestion Tracking List are followed up with the opened DFIs. If the person following the complaint finds the activity sufficient, he/she closes the record. If he/she does not find it sufficient, he/she marks the "Needs Monitoring" section and assigns a responsible person and continues to monitor the nonconformity that the complaint originates from. Complaints and suggestions are discussed and evaluated in the Management Review meetings, OHS and Environmental Board Meetings.

15.3. Reporting Grievances

OHS and Environment Unit shall assess and report the Complaints and Suggestions records every 6 months regarding the receipt of grievances, severities, CAR's initiated and closing of grievances.

16. REWARD AND PUNISMENT PRACTICES

16.1. Punishment Practice

In case of non-compliance with the OHS and Environment rules and practices in the work are, verbal and written warnings shall be given to inappropriate employees and sub-employers based on the determinations to be made by the OHS and Environment Unit. The employees and sub-employers who do not take verbal and written warnings seriously shall be fined by the OHS and Environment Committee. Such penalties shall provide deterrence for the individuals and organizations against non-compliance with the most common rules on construction sites and the challenges faced by the OHS and Environment Unit. The OHS and Environment Unit

shall notify the supervisor of the relevant unit and the sub-employer agent in writing about the termination of the employment contract of the employees who receive three warnings during the year. However, the persons who show the behaviour that jeopardizes the safety of themselves or their colleagues are strictly not allowed to work and if such an act is detected, their employment contract shall be terminated immediately.

The authority on how to use the financial income obtained after the penalty deduction has been given to the OHS and Environment Committee within the scope of legal legislation. The Committee shall decide on the use of the income obtained by paying regard to the legal requirements. The list of penalty imposition shall be established and applied by the OHS and the Environment Committee.

16.2. Reward Practice

In addition to penalties, the employees are given Reward practice for their strict observance of all Occupational Health, Safety and Environment rules and practices and working without jeopardizing the safety of others and themselves.

For the reward practice, the "OHS EMPLOYEE OF THE MONTH" shall be selected among all employees, including the sub-employer employees. The reward to be given shall be discussed in the OHS and Environment Committee and be unanimously decided. The selection criteria are listed below.

1. Not to be subjected to verbal warnings and penalties by the OHS and Environment Unit with zero nonconformity in monthly studies,
2. Not to act in any way that may jeopardize the safety of others or him/herself,
3. To inform the OHS and Environment Unit about occupational safety's inappropriate conditions and behaviours that occur on the site,
4. To use the personal protective equipment delivered to him on the site completely and continuously,
5. To participate fully and actively in the OHS and Environment trainings

17. PERSONAL PRPTECTIVE EQUIPMENT (PPE)

Personal protective equipment (PPE) is used where the risks cannot be prevented or fully limited by technical measures to ensure collective protection or by work organization and working methods. PPE is used to prevent occupational accidents or diseases, to protect employees from health and safety risks, and to improve health and safety conditions.

The procurement unit must receive information from the OHS and the Environment Unit concerning the minimum characteristics and standards of the PPE to be supplied. The conformity of the PPE to the standards shall be controlled by the OHS and Environment Unit. The use of the PPE without CE marking is strictly forbidden. The PPE conforming to the legislation and standards, the works to be carried out and the work environment, material safety Data Sheets and the risk assessments shall be delivered to the employees with the **Submission Form.**

All employees are provided with training on the correct use and maintenance of PPE in accordance with **the Annual Training Plan**. In these trainings, employees are informed that they must replace PPE that is worn out and has lost its properties by reporting it to the OHS and Environment Unit. In addition, warning labels and signs indicating which type of PPE should be used are hung in work areas.

As a rule of thumb, the helmets, protective footwear and reflective vests, are mandatory in the work areas, including the visitors. If necessary, additional PPE shall be provided in accordance with the work to be performed, the work environment and the climatic conditions. These are:

- Eye and face protectors: The goggles, face shields and masks are used for welding, chemical work, grinding, etc., where there is a risk of part jumping.
- Ear protectors: Earplugs and earmuffs are used for high-noise work.
- Head protectors: Hardhats, caps and helmets are used to protect against falling objects and strike.
- Respiratory system protectors: The equipment such as respirators, gas and dust masks are used in dusty, confined environments, where oxygen is insufficient.
- Foot and leg protectors: Shoes, boots, leggings and knee guards, etc. are used to protect against electricity, temperature, slip, and the objects falling, splashing and stinging.
- Hand and arm protectors: Gloves and armbands are used to protect against the risks such as the cuts, puncture and burns that might be caused by the elements like chemicals, electricity, temperature, vibration.
- Body protectors: Protective clothing, vests and safety belts are used as protectors against dust, temperature, electricity, radiation, chemicals and falling down from height Protective clothing (overalls, coats, aprons, etc.) and vests must be of high visibility to ensure that users are recognized in their environment.
- Full body harness: These are protective equipment consisting of full protection body-type belts and ropes that are used to prevent the worker from falling down from height and to protect against falling in places where there is a risk of falling.
- Parachute type safety belt: These are protective equipment consisting of fully protected body type belts and ropes used to prevent workers from falling from heights and to protect against falls in places where there is a risk of falling.

All PPE is regularly inspected, properly maintained, and replaced when damaged, worn, or expired. PPE items must meet applicable national and international standards (e.g., EN or ISO) and be matched to the specific task and risk level. A PPE register shall be maintained to track issuance, inspections, and replacement intervals. Supervisors are responsible for monitoring PPE compliance during routine worksite inspections, and all personnel shall be subject to disciplinary action in cases of non-compliance. PPE refresher training shall be provided as part of periodic safety training, and proper use and maintenance shall be verified through visual checks and record reviews. Subcontractors shall be held to the same PPE standards and will be subject to regular audits.

18. GENERAL WARNING SIGNS AND LABELS

The warning signs and labels to be used in the work areas are listed below in subject headings.

18.1. Color Codes for Warning and Labels

Importance and/or purpose	Instruction and information
Prohibited	Hazardous action or behavior
Hazard	Stop, shut down, activate emergency stop, evacuate
Fire fighting equipment	Indication of equipment location
Warning	Be cautious, inspect, take precautionary measures
Mandatory,Order	Specific behavior or action required
	Use personal protective equipment (PPE)
Safe to use	Can be used appropriately for its intended purpose
No hazard	No harm under normal conditions
Emergency escape, First aid	Emergency exits, First aid equipment

18.1.1. Mandatory

18.1.2. Warning

Flammable

Explosive Material

Toxic

Corrosive Substance

Radioactive Material

Overhead Load

High Voltage

Heavy Machinery Operating

18.1.3. Prohibition

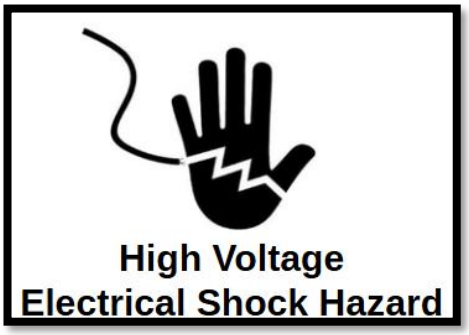
Smoking and
Naked Flames Forbidden

No Smoking

No Entry

Not Drinkable

Hot Surface
Do Not Touch



High Voltage
Electrical Shock Hazard

Inhalation Hazard

Do Not Extinguish
With Water

Do Not Touch

18.1.4. Informing

18.2. Color Codes Regarding Monthly Inspections

The devices and equipment listed below are routinely checked every month and are labeled every 3 months with labels prepared in easily visible sizes in the month color specified below or are taped with tape appropriate to the color code. Labeling means that the control for that month has been performed. In this regard, the OHS and Environment Unit checks whether the labeling has been done in routine controls. In case of any non-conformity detected during the controls, the **General Safety Instruction for Power Tools** is followed.

Device type	Description	The personnel in charge of control
Lifting equipment	Strap, chain, lifting eye etc.	The operator of the lifting equipment in which the equipment is used
Electrical panel/panelboards	Main distribution boards, sub-boards, on-machine panelboards, etc.	Electrical technical personnel responsible for its maintenance and installation
Scaffolding, Platform and stairs	-	The personnel responsible for its maintenance and installation

Color Codes

January-February-March		Blue
April-May-June		Yellow
July-August-September		Green
October-November-December		White
Out of use, faulty or scrap		Red

The personnel performing the inspection will stick labels with the color of the month in which the inspection was carried out, in a clearly visible manner, on the devices/equipment that they have checked and have not detected any problems.

19. LOCK OUT TAG OUT

Lock Out Tag Out: It is a method developed to correctly disconnect or isolate the connection to the energy source, to provide a safe working environment, to prevent unauthorized persons from interfering during these operations, or to prevent the use of unsuitable facilities, machinery or equipment in case of any maintenance, repair, installation, facility addition etc. operation on the facility, machinery or equipment.

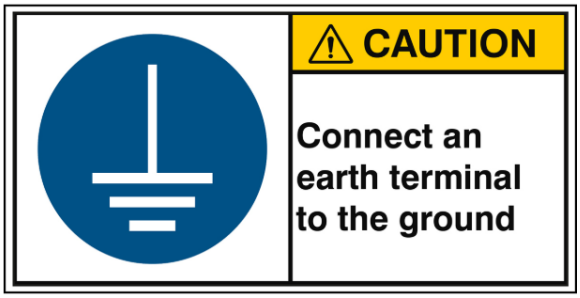
The plates and tags to be used as part of the Lock Out Tag Out system are indicated below.

Safe for use label

Unsafe for use label

Out-of-use label for maintenance

Connect an earth terminal to the ground



Mandatory labels;

20. WORK PERMIT SYSTEM

The matters subject to the work permit system are as follows.

A. Working with electricity
B. Hot Works
C. Working at height
D. Excavation works
E. Working in enclosed areas

The work permits related to the aforementioned matters are issued through work permit forms, the details of which are explained below. The relevant checks are carried out and recorded by the OHS and Environment Unit. The work permit forms are also signed by the responsible supervisor.

20.1. Electricity Work Permit

Since electrical works are under the high-risk activities group, they must be carried out under a permit audit. The yellow colored **Electrical Work Permit Form** shall be used for Electrical Works. Such tasks may be one of the following;

- Studies related to isolated electrical equipment
- Installation
- Grounding
- Maintenance and repair

20.2. Hot Works

The Hot Work permit is issued for the tasks to be performed using open flame or ignition sources. This permit shall be used if the task assigned generates a possible source of ignition or poses a risk to it.

The red coloured **Hot Work Permit Form** shall be used for Welding works. Welding may be carried out only by the personnel with the appropriate welding certificate.

The use of mobile phones in hazardous areas is strictly not permitted even if the Hot Work Permit has been obtained.

20.3. Working at Height

The works carried out at height are subject to the work permit system since they are under the high-risk activities group. The purple coloured **Working at Height Work Permit Form** shall be used in the works at the height.

Work at height work permit form shall be performed prior to operation during the installation of first scaffold/platform and the inspections shall be periodically renewed during the economic life of the scaffold/platform. When working at height work permit form is issued, a copy shall be attached to the controlled scaffold appropriately (not to be affected by environmental conditions, not to fall).

Appropriate measures shall be determined to minimize the risks involved in the structure of the work equipment, depending on the type of work equipment selected. If necessary, protectors to prevent falls shall be built. These protectors shall be of suitable structure and sufficient strength to prevent falling down from height and not to injure the employees. Protectors for collective protection which prevent falls may only be interrupted on the top of the mobile or fixed ladders.

In the cases where the protectors for collective protection to prevent falls are to be temporarily removed for the purpose of performing a particular work, other safety measures shall be taken to ensure the same protection. Work shall not be carried out until these measures are taken. Once this particular work has been completed temporarily or finally, the protectors shall be placed again.

Temporary works carried out at height shall be performed at feasible atmospheric conditions that shall not endanger the health and safety of the employees.

20.4. Excavation Work Permit

Excavation works are subject to the work permit system. The green coloured **Excavation Work Permit Form** shall be used for excavation works. This permit includes the following works;

- Deep Excavations
- Wells
- Ground openings, holes and sharp edges

20.5. Working in closed areas

The areas that are not designed for continuous operation and have limited entry/exit are considered closed areas. The term areas that require closed area permit covers the areas that are subject to health and safety hazards provided below.

- Which are dangerous or potentially dangerous,
- Which contain material/chemicals/exhaust gas to be hazardous to inhale for a person entering the environment,
- Which contain insufficient oxygen (Lack of oxygen causes loss of consciousness and death very quickly. Since the lack of oxygen can be seen in all closed spaces, it appears to be the most dangerous factor in closed spaces),
- Inward-closing doors or downward-sloping walls,
- The walls that narrow into a smaller area, which may cause the person to suffocate or get stuck,
- Temperature stress.

Working in closed spaces is subject to the work permit system. The blue coloured **Confined Space Work Permit Form** shall be used in the works carried out at closed areas.

If entry to the closed area cannot be avoided, it must be ensured that a safe system is available for working in the closed area. Risk analysis must be carried out in order to determine the existing hazards in the closed area and necessary measures must be taken according to the structure of the closed area and related risks pursuant to the risk assessment. A safe working system, including the measures taken, must be established, developed and applied. The matters that need to be considered within a safe working system are listed below.

1. Appointment of an observer
2. Suitability of the persons to work
3. Insulation
4. Cleaning before entering the closed area
5. Providing ventilation
6. Making necessary measurements in the closed area
7. Special equipment and lighting
8. Breathing apparatus
9. Emergency plans
10. Rescue harnesses
11. Work Permit System
12. Personal Protective Equipment (PPE)
13. Training of the employees

20.6. Working Over/Near Water

Working over or near water is considered a high-risk activity and shall not be carried out without a valid Work Permit. The permit shall be issued following a detailed risk assessment and approval by the H&S Manager. The work area must be clearly marked with physical barriers and warning signs to prevent unauthorized access. A life-saving plan shall be developed before work begins, and it shall include designated rescue personnel, equipment locations, and emergency communication protocols.

All personnel working near or over water shall wear EN ISO 12402-compliant life jackets, safety helmets with chin straps, high-visibility vests, and non-slip footwear. Fall protection equipment must also be used where there is a risk of falling from height. A safety standby person, trained in water rescue and first aid, must be assigned and positioned to maintain constant communication with the work team.

The permit shall only be valid for the specific time period and task defined, and weather conditions must be assessed before and during the activity. Operations must be suspended in case of strong currents, high waves, storms, or poor visibility. Rescue equipment such as lifebuoys, throw ropes, and ladders must be located within easy reach of the work area. No worker shall enter the water unless specifically authorized and properly equipped.

20.7. Working on Live Roads

Work on live roads involves construction or maintenance activities conducted in areas with ongoing vehicular traffic, posing significant risks to both workers and the public. A Work Permit is required prior to starting any such activity. The permit shall be issued only after the implementation of a site-specific Traffic Management Plan (TMP), prepared and reviewed by the H&S Manager in coordination with relevant authorities, if applicable.

Before commencing the work, appropriate traffic control measures shall be installed, including reflective road signs, warning boards, traffic cones, light beacons, and barriers. Flaggers and traffic spotters must

be assigned as needed, especially during reversing or lane closures. The work zone shall be separated from live traffic lanes with physical barricades, and alternative routes for vehicles and pedestrians shall be arranged.

All workers in the area shall wear, safety helmets, gloves, and steel-toed boots. Night work requires additional lighting and reflective gear. Activities shall be suspended during poor weather conditions that affect visibility, such as fog, rain, or snow. The Work Permit shall define the task, location, duration, and responsibilities of all parties involved. Any deviation from the approved traffic plan shall require immediate reassessment and reauthorization of the permit.

20.8. Concrete Pumping

Concrete pumping is a high-risk operation involving pressurized delivery of concrete through fixed or mobile pipeline systems, and shall not be conducted without a valid Work Permit. The permit shall be prepared in coordination with the Pump Operator, Site Engineer, and H&S Manager. Before issuing the permit, a comprehensive inspection must be conducted to confirm that the concrete pump, booms, pipes, couplings, and all safety devices are in good working condition and conform to relevant standards.

The pump shall be placed on level and stable ground with fully extended outriggers secured on base plates. The pumping area must be cordoned off with warning signs, and only authorized personnel shall be allowed to enter. A signal person shall be assigned to communicate between the pump operator and receiving crew. The hopper guard must remain in place and shall never be removed during operation. Emergency stop buttons and pressure release systems must be tested and confirmed operational.

All personnel involved in concrete pumping shall wear appropriate PPE, including safety helmets, face shields or goggles, chemical-resistant gloves, rubber boots, long-sleeved clothing, and hearing protection. In case of a blockage, pumping must be stopped immediately, pressure must be relieved, and only trained personnel shall be allowed to intervene. The Work Permit shall specify the scope of work, equipment to be used, emergency contact information, and the validity period. The permit must be signed and approved by both the Site Manager and the H&S Manager.

As part of the work permit system, the EPC Contractor shall ensure that all personnel assigned to safety-critical activities meet the required competency criteria. Competency shall include appropriate education, role-specific experience, valid licenses or certifications (e.g., for working at height, confined space entry, hot works, lifting, blasting), and completed safety training. A centralized competency tracking process shall be maintained to verify and document each worker's qualifications, training dates, and certification validity. This system shall be regularly updated and reviewed by the HSE Department. Supervisors shall confirm that assigned workers meet the competency requirements before permitting them to conduct high-risk tasks. Subcontractors shall also be required to report and maintain up-to-date competency records for their workforce.

21. VEHICLE AND ROAD TRAFFIC SAFETY

The **Road Traffic Safety Procedure and/or Traffic Management Plan** shall be applied for the implementation of vehicle and road traffic safety issues. In case of transportation work on traffic roads, sufficient safety distance shall be provided for the other persons using this road or the appropriate protective measures shall be taken. Roads shall be marked visible. Necessary markings and precautions shall be taken in relation to overhead lines and similar barriers along the route of traffic roads.

Necessary measures shall be taken by taking into account the following criteria in the areas where personnel and material transportation is carried out within the site and on the main roads and also on access roads to be used by the Project vehicles and heavy equipment.

- Drivers and operators must be licensed and certified
- Vehicles and construction equipment must be overhauled and in suitable condition for use
- Traffic safety rules must be observed:
  - Traffic signs (speed limits, other restrictions and warnings etc.)
  - Traffic control
  - Rules of night drive
  - Vehicle requirements for personnel transport
  - Maximum load, securing the load
  - Ensure access on public roads with particular attention to vulnerable road users (school children, pedestrians, bicycle riders).
- Safety standards of construction sites
  - Road width considering maximum vehicle widths and traffic direction (one/two-way)
  - Maximum slope
  - Roadside barriers
  - Protection against landslides, loose slopes, rockfalls and avalanches
- Controlled access to site roads, control of driver and vehicle standards
- Applying appropriate driving restrictions according to weather conditions:
  - Harsh weather conditions, flood, avalanche risk
  - Slope instability hazards

22. WORKS AT HEIGHT

Works at height are classified as risky activities. All personnel who shall work at height shall be provided with Working at Height Training, which includes entry-exit, safe working systems and fall protection systems (proper use, protection and maintenance of seat belts etc.).

Secure access to all business areas shall be provided. Adequate barriers shall be placed in all elevated work areas to prevent people, equipment or materials from falling. In cases where the risk of falling cannot be eliminated, the measures (safety net etc.) to minimize the fall distance and its possible consequences shall be applied.

Full body harness shall be provided to the personnel who shall work at heights and this harness shall be fastened to a secure fastening point by means of a fastening device. In severe windy and rainy weather conditions, installation/dismantling of scaffolding, platform etc. shall not be performed.

The installation, dismantling and inspection of scaffolds and platforms may be carried out by trained personnel and shall be considered safe for operation only after checking and "tagging". Scaffolds and platforms shall be checked before the use by personnel and may be used if the "suitable" (green) tag has been attached. Informing the personnel who shall work at height about tagging (where yellow, red tag attached scaffolds and the scaffolds without green tag shall not be used) is included in basic OHS training, working at height training and routine toolbox trainings.

22.1. Scaffolds and Platforms

1. The suitability of the scaffold area shall be checked before installation. Earth compaction against sinking and collapse must be performed, and if the earth is not stable, it must be strengthened by the appropriate method.
2. Installation, grounding and anchoring must be performed in accordance with its instructions and standards supplied from the manufacturer.

3. To prevent it from moving, it must be ensured that the scaffold is fastened or fixed to the building or structure at appropriate distances.
4. Grounding plate shall be hung on the grounding place.
5. The width of the work platform must be sufficient for the work to be performed on that platform.
6. Balustrades, toe boards and floorboards shall be placed in accordance with their standards.
7. A ladder must be provided for access to the work platforms and the ladder must be placed appropriately as a precaution against tipping over.
8. The scaffold must not be overloaded. No material must be loaded on the platform unless it is specifically designed for that purpose.
9. If mobile scaffold is to be installed, the appropriate wheel and lock system shall be installed. When it is required to work on the mobile scaffold, the wheels of the scaffold must be locked before starting work.
10. The mobile scaffold must never be climbed on unless its wheels are locked on a flat surface.
11. The mobile scaffold must absolutely not be moved while any work or material is carried out on it.
12. Before dismantling, the necessary measures shall be taken in accordance with its manual and the "scaffold is out of use" tag shall be attached.

22.2. Ladders

The **Ladder Use and Safety Instructions** has been prepared in order to define the proper and safe use of the ladders to be used in the work areas. All ladders must be checked before use and any ladder not deemed appropriate for use must be removed.

1. Handrails and suitable wainscots must be placed on the platforms to be climbed on for the fixed construction ladders.
2. Wooden steps to prevent slipping or falling shall be built to the reinforced concrete staircases with no steps and suitable railings shall be attached to the edges of the bucket gap.
3. Ladders steps made of flat sheet metal or metal material shall be covered with non-slip material.
4. The slope of the ladders shall be at least 20 and at most 45 degrees to the base, except those used for maintenance works. In the workplaces where a slope of less than 20 degrees from the base is required, ramps shall be constructed, and fixed ladders in the form of service stairs with railings shall be installed in the cases where a steep of more than 45 degrees is required.
5. The ladders shall have overhead gaps and the height of these gaps shall not be less than 220 centimeters.
6. The width of the steps shall not be less than 22 centimeters, except for the maintenance ladders and shall have a height of minimum 13 centimeters and maximum 26 centimeters.
7. Each ladder with more than four steps shall have a balustrade and a handrail.
8. There must be a separate handrail in the middle of the ladders exceeding 225 centimeters in width.
9. In two-hand ladders, it shall be connected by hooked iron bars or shackles on both sides so that the legs do not diverge from each other.

23. LIFTING MOVING WORKS

Lifting and moving works shall be classified as risky activities. The inspections of the lifting and moving equipment shall be carried out and reported by a qualified Mechanical Engineer/Technician or by an accredited organization within the periods and under the conditions in accordance with the provisions of the legal legislation. The reports and periodical inspections shall be followed-up by the OHS and Environment Unit.

The wind speed limit in this project is 45 km/h. It is strictly forbidden to lift loads and people above this limit. However, if the maximum working wind speed limit determined by the manufacturer is below 45 km / h for the equipment (Tower Crane, Mobile Crane etc.), work will not be carried out above the limit determined by the manufacturer. If the maximum working wind speed limit determined by the manufacturer of the equipment is

above 45 km/h, these load lifting equipment can work up to the specified limit with the approval of the project management. In any case, personnel will not be allowed to work in the Load Basket of the Cranes above 45 km/h.

1. Lifting and conveying equipment must be checked by appropriately certified operators before each start of work, steel ropes, chains, hooks, slings, brakes and automatic stoppers must be periodically reviewed and those found unsuitable for use must be removed from use immediately.
2. Since some work accidents that occur in lifting and transmission operations are the result of rope, chain and sling breaks, loads falling off the hooks, and brakes and automatic stoppers malfunctioning, these periodic checks should never be neglected and the machine should not be put back into operation before the malfunctions detected during the check are eliminated.
3. Lifting, lowering or carrying of loads on lifting machines must be done according to hand and arm signals given by trained maneuverers (signallers) or by radio assistance. In cases where more than one employee is on duty during a lifting operation or when the operator cannot see the load, a signaller must be used and the signaller must be positioned where he can be easily seen by the operator. The operator must obey every stop signal, regardless of who gives it.
4. Loads must be lifted vertically. In cases where it is necessary to lift them inclined, manoeuvres must be carried out under the supervision of a responsible person and necessary precautions must be taken against load swings and dangerous situations of the load.
5. Before giving the signal to pull the ropes that are slinging from under a lowered load, the signalman must ensure the safety of the workers. Operators must not leave their machines unattended while there is a load hanging from them.
6. When the electric magnet crane is at rest, the magnets should not be left hanging high on the crane. They should either be dropped directly onto the ground or lowered onto platforms designed for this purpose. The magnets should be removed from the crane when not in use.
7. Only authorized persons should be present in moving crane cabins or on crane cars, and crane operators should not allow anyone to ride on the load or hang on empty ropes or hooks. In cranes operating on rails in the open air, the effect of wind should be taken into account, and they should be wedged, tied and equipped with a sliding safety system.
8. In cranes operating on rails, there must be chocks at both ends of the rails on which the crane and the crane trolley travel and at least as high as the radius of the wheels. In overhead and suspended cranes, there must be appropriate hand, arm and foot protectors on the wheels of the bridge and crane trolley.
9. In case of operation of two cranes to lift the same load, each crane operator should be given command by only one signalman and special measures should be taken to ensure harmony in the movements of the cranes.
10. Signalmen and workers assigned to carry loads suspended from cranes must go in front of the loads, check the rail switches and ensure that the loads are carried at a height where they will not hit anyone or any obstacles.
11. In motorized cranes, audible and visual warnings should be given when the load is lifted or the crane is moved, their headlights and stop lights should be turned on during night work, and the cabins should be illuminated appropriately.
12. The mobile crane must be installed on solid ground and kept in a horizontal position, and load-distributing bases (wooden blocks) must be used under the crane legs. During the installation phase, appropriate safety distances must be maintained from the construction site excavation slopes and excavation edges.
13. A safety distance of half a meter must be left between the mobile crane's moving parts and the surrounding stationary objects (scaffolding, material lifts, etc.). If the safety distance cannot be maintained, the dangerous area must be closed off or the current work (scaffolding and other work) must be temporarily stopped.
14. The operator must be careful about open power lines and work with a safe distance.
15. When the load is being lifted or lowered, no one will be under the load and there will be a safety latch on the hook. Carrying people with a crane is prohibited.

24. ELECTRICAL WORKS

The periodical inspections of the electrical installations, lightning rods and groundings on the site shall be carried out and reported by a qualified Electrical or Electrical-Electronics Engineer/Electrician within the periods and under the conditions in accordance with the provisions of the legal legislation.

The potential electrical work on the site shall be carried out only by the personnel with a professional competence certificate. All electrical equipment to be used on the site must bear the CE marking. The use of electrical equipment and devices that do not comply with CE norms is prohibited.

The points that are taken into consideration in the inspections of electrical devices/equipment are as follows.

1. Particularly the parts of the electrical device/equipment that protects the electrical components shall be checked for physical deterioration. Necessary repair/maintenance works shall be initiated in case of reparable defects. Damaged devices that do not seem reparable shall be removed from the work area.
2. The Electrical cables shall be checked for signs of wear and darkening/hardening after overheating. The physically damaged cables shall not be allowed to be repaired with electrician tape, etc, and the damaged part of the cable shall be repaired by cutting and in case the cable distance does not allow, the cable shall be replaced with a cable of equivalent characteristics and cross-section.
3. Grounding connections of metal body and components shall be checked. Loose, worn connections shall be tightened or replaced.
4. Plug, socket components shall be checked for signs of wear and darkening/hardening after overheating. Worn, corroded plug/socket components shall be replaced with new plug/socket with equivalent amperage characteristics.
5. The device to be controlled shall be operated and whether it fully fulfils its functions and the presence of problems such as excessive vibration, noise and heating shall be investigated. The devices/equipment identified with such problems during normal operation shall not be allowed to be used until the malfunction is corrected. Damaged devices that do not seem reparable shall be removed from the work area.
6. Repair/maintenance works may not be carried out by anyone other than the personnel with a professional competence certificate.

Devices with a fixed energy connection (directly supplied from the panel/panel board, not using plugs/sockets) and the power panels/panel boards must be de-energized for maintenance and control. In that case, according to the lock out tag out system, the device must be directly disconnected from the switchgear (fuse, etc.) to which it is connected and the panel/panel board to which it is connected must be locked and tagged in order to prevent unauthorized operation during maintenance and control operation. Tags must be secured so that they cannot be displaced due to the environmental impacts.

The out of use tag must be affixed on the device/equipment that is not approved for use as a result of the inspections so that it can be easily seen by the authorized personnel performing the inspection. Equipment that do not seem reparable must be removed from the work area as soon as possible.

Electrical motors, transformers and fixed facilities and fixed electrical heavy equipment shall be provided with protective grounding and the efficiency of the system shall be checked by periodic measurements.

Likewise, the lightning rod grounding level must also be measured and reported periodically. The resistance value limit for the lightning rod grounding line is assumed to be 10 ohms.

During the control and maintenance of electrical equipment, the personnel with professional competence certificate shall use the following protective elements.

1. Isolated gloves (Fully insulated protective gloves that shall not limit finger and hand movements)

2. Isolated mop (The personnel in charge shall carry out all work on the isolated mop.)

Control and maintenance work shall not be carried out in rainy weather and wet areas.

25. HAND TOOLS AND ELECTRICAL HAND TOOLS

25.1. Use of Hand Tools

1. The hand tools that shall be used at the workplace shall be made of materials compatible with the work to be performed and shall only be used in works specific to their build. Their wooden handles shall be made of knot-free, good-type and fibre wood, in compatible form and dimensions, the edges shall be rounded and smooth, free from splinters.
2. Hand tools that shall be used in areas where sparks would be hazardous shall be made of materials that do not cause sparks and any tools that are not of this nature shall not be used in these areas.
3. Hammer, sledge hammer, chisel, cutter, punch and similar tools shall be made in compliance with their standards, from good quality steel and the damaged or burred heads of these shall be smoothed by honing or filing.
4. The hardening or whetting and pressing and repair works of hand tools shall be made by qualified personnel and their sharp edges of tips shall be suitably protected while they are not being used.
5. Hand tools shall not be left outside on ladders, passages or any other areas that the employees may use as passages; and suitable cabinets, hanging panels or shelves with at least 2 centimetres skirting shall be made for these.
6. These shall not be released from the hand without taking necessary precautions against falling from above the head heights.
7. Hand tools such as axes, adzes, choppers shall always be kept sharp, their handles shall be inserted into the tools tightly and sturdily and shall be kept in cases, slings, enclosures against abrasion.
8. In chisels, cutters (cutters with handles), punches and similar hand tools, the chisel tips, cutter blades and punch tips shall be in shape compatible with the work to be performed and always be sharp, and suitable shields or screens and similar protectors shall be available when these are being used.
9. Levers and similar tools shall not be left as propped on the ground or the bench or perpendicularly when they are not being used, they shall be left in the horizontal position.
10. Rasps and files shall have sturdy handles with metal rings or other types of handles, and these shall not be used without a handle.
11. Rasps and files shall not be used in operations such as opening a case, removing a nail and hitting a hard object, these shall not be hit by a hammer or a similar tool, and tools such as chisels, cutters and punches shall not be made from old rasps.
12. Handle cases made of fibre, leather or stainless steel shall be made on the handles of knives when necessary, or finger grasps or shield shall be placed.
13. The tips of knives used to cut rubber shall be compatibly rounded.
14. Lifting jacks shall be placed sturdily and perpendicularly on the ground when lifting a load and after the loads have been lifted to the desired height, any work shall not be performed under or above these loads unless the lifting jacks are supported by sturdy ad compatible wedges, and necessary precautions shall be taken while lowering loads with a lifting jack.
15. When cutting taut wires, springs or similar wires by pliers, wire cutters and nippers, one of the ends of the wire that shall be cut shall be appropriately fixed.
16. Suitable wrenches shall be used to tighten or loose nuts; pliers and similar tools shall not be used for these purposes.

b. Use of Electrical Hand Tools

1. The handles of portable electrical hand tools shall be coated by a non-conductive material of adequate type and thickness or shall be made from such materials, and there shall be circuit breakers with springs that need to be kept pressed in order to keep the circuit closed.
2. Electrical hand tools used at construction sites and other outdoor workplaces shall be operated by low voltage or voltage supplied by safety transformers (dis-connector transformer) with 1/1 ratio and separated windings, or shall be manufactured specially, with double insulation. In case a safety transformer is used, only one electrical hand tool shall be connected to the output circuit.
3. Safety automats that break the electrical circuit supplied to the hand tool before the leakage that may occur on electrical hand tools reach a hazardous level shall also be accepted as compatible occupational safety measures. On grounded hand tools, the presence of a contactor that breaks the electrical circuit in case of a break in the grounding circuit shall also be accept as applicable.
4. Grounding of portable electrical hand tools shall be made by special plugs and sockets with grounding elements, there shall also be a switch on high amperage sockets, the cables that supply current to these tools shall not be scattered and shall be routed from above in passages. Tools shall be grounded by a special grounding conductor in the supply cable
5. Electrical hand tools shall not be used in areas where flammable, explosive substances are handled and stored.
6. Portable electrical tools that are required to be used as suspended shall be suspended from the end of a spring or cable or chain and kept in balance with suitable weights.
7. Portable, heavy hand tools shall be moved from one place to another using special slings or straps and these slings, straps shall not be used during operation.
8. Workers, who work with portable hand tools, shall not wear loose apparel with wide skirts, and shall not wear any gloves other than rubber.
9. The electrical hand tools shall be checked by authorized individuals prior to use, and those with faulty grounding, with high sparking motors, with damaged sockets, plugs, switches and connection cables shall not be allowed to be used.
10. Portable electrical lamps shall only be used in areas where continuous lighting cannot be made adequately, the lamp sockets and live parts shall be inside non-conductive, protective meshes and lamps shall be inside glass protection in areas where organic dusts of explosive substances are available and in humid areas.
11. Compatible personal protective equipment must be used during operation. (Goggles and face protection against spattering substances, ear protectors against noise, dust mask against hazardous dusts, and a glove and hardhat according to the work performed).

26. EARTHWORKS AND EXCAVATION WORKS

1. On excavation areas, the presence of electrical cables, gas pipes, waterways, sewerage and similar installations shall be investigated in advance and necessary measures shall be taken accordingly.
2. If it is discovered that there is poisonous and suffocating gas during the excavation, the employees shall be removed immediately; gas shall be prevented and excavation works shall not be started unless the accumulated gas is discharged.
3. Measures shall be taken by supporting the excavation surfaces with horizontal shoring bars for collapse and demolition.
4. Bevelled excavation is necessary to prevent the collapse and demolition of soft surfaces during excavation.
5. Proper entry-exit facilities shall be provided for the employees to climb up and down in excavations exceeding 1.5 meters in depth. It is forbidden to use the shoring device and its supports for climbing up and down.

6. Personnel shall not work in case of rain during excavation works. The work can be restarted after rain stops and safety measures are taken.
7. Appropriate wellington boots shall be provided to the employees in the cases where it is necessary to work on the water. Water exceeding the length of the knee must first be drained by motors.
8. During the excavations done by excavators, bulldozers and similar machines, no personnel can be assigned within the range of motion of these machines. No one other than a licensed driver may operate on these machines.
9. Ramp slopes shall be created to enable the vehicles to carry the excavated soil out enter an exit the excavation site easily.

27. UNDERGROUND AND TUNNEL WORKS

27.1. General Tunnel Safety

Tunnelling works involve complex and high-risk operations due to confined working environments, geotechnical instability, use of heavy machinery, and potential for hazardous gas accumulation. All tunnel activities must be carried out in accordance with the national mining safety regulations and in alignment with the IFC EHS Guidelines for Construction and Hazardous Materials Management.

Method Statements shall be prepared which are include OHS measures before construction begins. This plan must identify location-specific hazards, outline mitigation measures, assign responsible personnel, and define communication and evacuation protocols. Entry to tunnel works shall be restricted to authorized personnel only, and all workers must receive tunnel safety induction and confined space training prior to mobilization.

27.2. Blasting in Tunnels

Blasting activities within tunnels must be planned and executed under strict supervision and in line with applicable laws and engineering standards. A licensed blasting engineer shall prepare a daily blasting plan specifying the charge layout, hole depth, delay timing, type and quantity of explosives, safety distances, and firing procedures.

Explosives and detonators must be transported to the site using certified vehicles and in compliance with the regulation on the transport of dangerous goods.

Before blasting, exclusion zones must be clearly marked and evacuated. Warning signals shall be given before and after firing. Misfires must be treated as emergencies, with access restricted until the area is declared safe by a blasting expert. All blasting records, including quantities used and anomalies, must be logged daily and reviewed by the HSE team.

27.3. Gas and Air Quality Monitoring

Tunnelling operations must include continuous atmospheric monitoring to ensure safe working conditions and prevent incidents related to poor air quality or gas build-up. Gas detectors (portable or fixed) shall be used to monitor for methane (CH_4), carbon monoxide (CO), hydrogen sulfide (H_2S), and oxygen levels.

Gas measurements must be taken:

- Prior to the start of each shift,
- During all confined or enclosed work,
- After blasting or ventilation stoppages.

If any measurement exceeds safe limits, work must stop immediately. The tunnel must be evacuated and ventilated before re-entry. All gas detection equipment must be calibrated regularly and operated by trained personnel. Records of all readings must be documented.

27.4. Structural Stability and Support

To prevent collapses or rock falls during tunnelling, geotechnical conditions must be assessed regularly by competent engineers. Excavation sequences shall be designed to minimize unsupported areas. Support systems—such as steel arches, rock bolts, lattice girders, and shotcrete—must be installed in accordance with geotechnical risk assessments.

Scaling of loose materials must be performed after each blast and at the beginning of every shift using long-handled tools from a safe distance. The tunnel face and roof shall be inspected continuously. Unstable areas must be closed and reinforced immediately. All support installations must be documented and reviewed periodically.

27.5. Emergency Preparedness in Tunnels

Tunnels must be equipped with clearly marked and illuminated emergency escape routes leading to safe areas or exits. At regular intervals, refuge chambers or safe havens must be installed, stocked with water, communication devices, breathing apparatus, and first aid kits.

An emergency response plan specific to tunnel works shall be developed and made available on-site. It must include evacuation procedures, roles and responsibilities, assembly points, rescue protocols for trapped or unconscious personnel, and communication flow. Workers shall be trained in tunnel-specific emergency scenarios, including blasting accidents, gas exposure, and collapse response.

Communication systems (e.g., landlines, two-way radios) must be functional throughout the tunnel at all times. Emergency drills, including evacuation and rescue simulations, must be conducted at least every six months and evaluated for improvement.

The safety measures to be taken during the tunnel works are detailed in the **Tunnel Works Safety Instructions**.

1. As for the underground works, necessary measures shall be taken against collapse and item falls and floods.
2. Adequate and appropriate ventilation installations shall be provided in underground works to protect the health and safety of workers during exerciseing and digging.
3. No open-flame lamps or devices shall be used in underground works where various gases may form an explosive mixture with air.
4. Necessary measures shall be taken in the brick walls or concrete reinforcement of wells, tunnels, galleries and similar sections.
5. In underground works requiring rock excavation, hydraulic exercise machines shall be used or other necessary measures shall be taken in order to prevent dust damage to workers' health.
6. In the roadway works carried out in the area where flooding is possible, the exit points shall be provided to ensure the quick evacuation of the workers, or appropriate measures shall be taken, such as the construction of a sufficient number of elevated cells.
7. The barriers that pose a hazard or congestion to the employees such as gaps, level differences, narrowing passages, low arches, vehicle roads used and crossings used in the roadways' bases shall be adequately and properly illuminated.

8. Indoor underground and tunnel works are subject to work permit system. Therefore, the works to be carried out in these areas may only be carried out after the necessary measurements and inspections by OHS and the Environment Unit.

28. DRILLING WORKS

1. Before starting work in the work area, natural gas, electricity, wiring, sewerage and transmission lines shall be identified and be displaced and marked by the authorities.
2. Drilling and boring machines shall be used in accordance with the rules of use specified by the manufacturer.
3. Unauthorized persons shall not be allowed in the work area. If stopping in a hazardous area is unavoidable in some cases, additional safety measures are necessary. If the machine operator does not have sufficient visibility, a banksman must be assigned.
4. When drilling on unsound surfaces, measures must be taken to prevent the materials from collapsing down.
5. It is necessary to create safe work areas and to use additional devices in order to connect the exercise pipes to each other during drilling.
6. The pile holes must be covered or surrounded by barriers after drilling against falling and there must warning sings there.
7. When using drilling machines, it is necessary to use the appropriate ear protectors, taking into account the high noise.
8. The personnel working alongside the anchorage machines shall be provided with the appropriate personal protection against dust and noise.

29. FORMWORK, CONCRETE AND IRON WORKS

a. Installation and Disassembly of Formworks

1. It shall be ensured that the metal or concrete carcasses and their parts, temporary supports and buttresses and prefabricated construction elements are planned, designed, installed and protected to withstand the loads and stresses falling on them.
2. Lifting, loading, transportation, installation and disassembly operations of metal or concrete carcasses and their parts, temporary supports and buttresses and prefabricated construction elements and steel construction elements shall be carried out by the employees who have professional competence certificate and under the supervision of competent person in accordance with the project. The cranes to be used in lifting operations must have high lifting capacities.
3. It is essential that the strength and other properties of all main carriers, subcarriers and fastening materials to be used in steel constructions comply with the standards according to the loads to be carried and that the corroded and deformed materials are not be used in such constructions unless necessary measures are taken.
4. The surrounding area of the installation site shall be marked with a safety tape. The signs indicating that installation is being made around this area shall be hung and the entrance and exit to the installation site shall be prohibited except for the employees in charge.
5. Necessary measures shall be taken to protect the employees from the risks arising from the temporary instability and fragility of the construction.
6. Work platforms must be placed in such a way that they are suitable for the nature of the work to be carried out and the load to be transported and safe works and passes shall be possible. Work platforms must not be overloaded.
7. Guardrail systems shall be installed around work platforms to prevent falling from height.
8. Access to the work platforms shall be provided with the most suitable roads and equipment (scaling ladders, etc.), taking into consideration the frequency of passes, the height of the said place and the periods of use.

9. Workers must be provided with appropriate work equipment during the disassembly of the formwork, the lowering of the formwork material or the lifting of the formwork material.
10. The person other that the employees in charge must be prevented from entering the area during disassembly.
11. The disassembled formwork materials must be stacked appropriately.
12. During the manufacturing of viaduct legs, wind speed limits will be observed. In the use of scaffolding ladders, the wind speed limits recommended by the manufacturer will be followed. If we can use scaffolding, we can also work at height.
13. During formwork installation and removal operations with cranes, work will not be carried out without providing an environment where the formwork does not oscillate.

b. Concrete Casting

1. All personnel working during concrete casting must wear appropriate personal protective equipment. In concrete castings (columns and partitions) performed higher than 3 meters and covering edges, side railings must be built against falling from height and safety harnesses must be used.
2. The vibrator used during concrete casting must be electrically grounded and the extension cables used must not be in a damaged or exposed condition.
3. The personnel must not stand under the pump during concrete casting.
4. The worker holding the hose during the concrete casting is required to use the hose after the concrete comes up. It is known that in the work done higher than the pressure to occur when the concrete comes to the end of the hose, falls occur due to loss of balance.
5. The personnel holding the hose during concrete casting shall wear protective goggles against cement splashes.
6. Adequate artificial lighting is required for night castings.
7. In balanced cantilever reinforced concrete productions, suitable lifelines will be created so that all workers are connected to horizontal lifelines independent of the formwork.

c. Iron Works

1. All personnel involved in iron works must wear appropriate personal protective equipment.
2. The irons shall be prepared and installed in accordance with their projects.
3. There shall be no more than enough iron on the formwork and the irons shall not be placed unbalanced on the formwork.
4. During the joint work with the concrete team, there shall be a cooperation in a way that shall not hinder the rise of the formwork.
5. The disarrangement of the binding wire and irons in the formwork shall be prevented.
6. It shall be checked if the iron to be used on the stand has been prepared beforehand and the formwork shall not be disrupted.
7. The workers who perform iron mounting at high places shall definitely use safety belts.

2. WELDING WORKS

1. Welding and cutting works shall not be performed near flammable, combustible and explosive materials. It shall be investigated whether there is a fire risk in the immediate environment before such works are carried out. If there is such a risk, such works shall be performed by taking special fire precautions.
2. Drums and metal cans, which have previously been put in place with flammable or combustible materials, shall never be welded or cut even if they are empty. These operations may be carried out after cleaning their interiors with hot water vapor and filling them with water or pressing gases such as carbon dioxide or nitrogen into them, and with the ventilation hatchs open.
3. Clean air shall be pressed in welding works to be done in closed places such as boilers and tanks and furthermore, welding gases and vapors heavier than air shall be sucked out near the base and discharged. In addition, the employees shall wear respirators with suitable filter elements.

4. The connections and sockets of electric welding machines shall be made or replaced only by the authorized electricians.
5. The competent welders with professional competence certificate be employed for all kinds of welding works.
6. The locations where the electric welding is performed shall be at least 2 meters above the working area of the other workers and shall be separated by fireproof and lightproof immovable or portable screens.
7. The electrical rectifiers of the electric welding and cutting machines or the metal parts of the transformers shall be properly grounded against leakage currents.
8. One pole of the output ends of the electric welding and cutting machines or the welding circuits shall be grounded in the workpiece against leakage currents.
9. In narrow and confined volumes such as boilers, as well as in the welding works in damp and wet areas, only direct current shall be used to reduce the risk of electric shock.

Measures to Be Taken in the Works Carried Out with Oxy-acetylene Welding apparatus:

1. There shall be no gas cylinders other than the gas cylinders in use present in the welding areas.
2. The gas cylinders shall be upright at the time of operation and necessary measures shall be taken by the link chain in order to prevent them from falling over and shall be tied in such a way that they can be easily dismantled in case of danger as specified in the legal legislation.
3. Special wheeled vehicles shall be used for the transport of gas cylinders and when these cylinders are not in use, their valves shall be closed and the caps protecting these valves shall be fitted. Gas cylinders shall be made under a shelter or sunshade built to avoid the sunlight
4. Oxygen cylinders shall not be held with greasy hands, and the valves, manometers and other equipment of the cylinders shall not be lubricated.
5. The gas and oxygen pipes in the workshop and the hoses that feed the welding torch shall be in separate and distinguishable from other facilities.
6. The welding torches shall not be hung on an operating gas cylinder or other equipment and shall not be left unless the gases are completely shut-off.
7. The welding torches must have check valves on them. Any gas backflow shall be prevented by a check valve placed at the gas inlet. One end shall be attached to the hose and the other end to the welding torch inlet.

Measures To Be Taken In the Works Carried Out With Welding Machine:

1. The electrical wiring shall be checked by the authorized electrician and examination shall be performed for leaks. It shall be started after making sure there are no leaks.
2. Grounding of the machine shall be checked and if grounding is connected, power shall be supplied.
3. The personnel in charge shall wear rubber shoes, rubber gloves, goggles and fireproof suit or protective clothing. The personnel using the machine shall put an insulating stand under their feet.
4. Attention shall be paid for the material ends to be welded to be clean and rust-free. The copper shoes of the welding machine shall be cleaned periodically.
5. The machine shall not subject to unnecessary over-arching.
6. The energy given to the machine shall be cut by the electrician at the end of the work; the machine shall be protected against rain and water.
7. In case a failure is detected, the related persons shall be notified.

a. Storage of Gas Cylinders

1. The oxygen cylinders in the storehouse must be kept separate from other gas cylinders.
2. Cylinders must be stocked upright and attached to the wall, lined up on the shelf or the racks.
3. One must not enter the storehouse with naked flame where the gas cylinders are kept and must not smoke, and the cylinder storehouses must be ventilated constantly.

4. In infirmaries, dining halls, social facilities and other places where LPG is used, the LPG cylinders must be kept upright outside the building and under a sunlight protection compartment, and the valves must be closed when the use of the cylinders ends.

b. Transportation of Gas Cylinders

1. Special hooks must be used for short-distance displacement of the cylinders or the cylinders must be circled on the base.
2. If the cylinders are transported over long distances, the cylinders must be tied and placed securely in the vehicle.
3. Cylinder cap must be fitted before the displacement to prevent damage to the valves.
4. Cylinders must be protected from abrasive and corrosive substances.
5. Cylinders must not be left under the impact of the sun or other heat sources.
6. Cylinders must not be used as supports, rolls or wedges and must not be dragged or rolled on the ground during transport.
7. Cylinders must be tied upright and tightly or kept inclined on a vehicle or support.
8. After a long period of operation, the valves of the cylinders must be closed. (Blow pipe may be left open).
9. Before the hood is mounted on the cylinder, it must be checked whether its screw has been loosened or not. The snow and ice of the hood must not be melted with flame.
10. Special connections must be used, these connections must be fixed with sleeves and fastened with bond or reinforcement ring.
11. No modifications on the cylinders or accessories and no maintenance and painting works on the cylinders must be performed.
12. Oxygen cylinder valves and welding torch taps must not be lubricated and must not be opened and closed with oily rags.
13. The leaks in the cylinders must not be inspected by flame.
14. The leaks in the cylinders must not be left under the influence of corrosive substances and shocks as well as sun and heat.
15. Oxygen gas must not be used to clean and blow the material and to start diesel engines.
16. In case of fire and after extinguishing the fire, the heated acetylene cylinder must be cooled by soaking for a long time with plenty of water.
17. Acetylene cylinders must not be heated to accelerate gas output at low pressure.
18. No smoking in and around the workplace.

30. MATERIAL STORAGE

The safe storage of materials and equipment in warehouses is described in the **Warehouse Safety Instructions**.

1. When stacking, piling up the materials or placing the devices, they shall be placed in such a way that they shall not fall apart.
2. The height, width and length of the stacks must be proportional.
3. Obstacles must not be created by placing material on walkways or entry-exit doors.
4. Stack spacing must be sufficient for the required works.
5. The materials shall be taken from the top row and thus they shall be prevented from falling apart. Obstacles must not be created by standing in front of the pipes and similar materials when they are being transported.
6. After a height of 120 cm, for each 30 cm height to be stacked, the stack must be 25 cm from the edge.
7. In particular, there shall be definitely no stacking in front of emergency exit doors and fire cylinders and hoses.
8. Stacking of the materials must not exceed 3 meters.
9. Heavy sacks and bags shall be stacked with four corners diagonally and minus 1 bag once every 5 rows at most.

10. Rods and pipes shall be stacked on suitable shelves or stands, or where they cannot be provided, on a base made of planks and both sides of the stack shall be supported by durable piles.
11. Large and long parts must be at the bottom when stacking.
12. Stacking and storage must be in a manner that does not constitute an impediment for production. The carrying capacity of the base on which the stacking is performed must be known.
13. The weight of the stacking load must be known. The items with the same properties must be stacked together. Stacking must not be done near electrical installations.

31. CHEMICAL SUBSTANCES AND THEIR STORAGE

The use and storage principles of the chemical substances to be used in the work areas without damaging the environment and human health and safety are specified in the **Chemical Substance Use and Storage Instructions**.

1. All chemicals shall be stored in the designated storage areas, separately, on firm grounds, and in sealed pans and tagged.
2. It shall be ensured that the safety and security measures specified in the Material Safety Data Sheets are taken for the chemical substances to be used and stored on the site.
3. It is necessary to act in accordance with the Material Safety Data Sheets and Emergency Plan concerning the storage activities and emergencies that may occur during use.
4. Special precautions against fire, spills/leaks are defined for potentially hazardous substances such as explosives, oils, petroleum products, solvents, reducing agents.
5. Flammable substances are tagged and stored in compliance with the legislation requirements in fire-proof rooms.
6. In areas where work is being conducted, the leak-eliminating equipment and the absorbent required for intervention when a spill occurs shall be kept ready in a temporary tank. The area contaminated with the chemical substance is covered with sand, sawdust or other absorbents in case of a spill.
7. Radioactive sources, if used, are tagged and stored in compliance with the legislation. The appropriate permits are obtained for the use, storage and tagging of such materials.
8. It is ensured that substances with asbestos additives are not kept on site or used as construction materials.
9. Hazardous chemical substances are stored in compliance with the legal legislation in force.

Oil and Fuel Storage Tanks

1. All oil and fuel storage tanks are placed at a distance of at least 20 meters from stream beds, surface and underground water masses and wetlands, and at least 3.5 meters or further away from buildings, borders and any type of other explosive and flammable substances.
2. A secondary reservoir is provided for all oil and fuel tanks. Such secondary reservoirs are constructed of impermeable materials or coated so as to ensure impermeability, complete with base and walls and have a capacity to hold 110% of the tank contents.
3. The tank filling and discharge connections are located within the reservoir. Wherever possible, tanks and secondary reservoirs are covered to protect them from rainwater.
4. Drainage taps shall always be kept closed and be only opened to discharge clean, uncontaminated rain water and the water is pumped outside.
5. In any event, contaminated water shall be collected and disposed of in compliance with the regulations concerning waste oils.
6. Spills that occur during filling activities shall be promptly intervened in and the materials and equipment that shall be used during intervention are stored in areas close to the tanks.
7. Compatible absorbent materials (sand, sawdust, etc.) are kept available at the area in adequate quantities.
8. A compatible, leak-proof container is provided to store oiled equipment (filters, tray contents and oil replacements, etc.). The contents shall be delivered to licensed disposal facilities.

9. Fuels and oils shall be stored in tanks or drums with tightly closed lids and protected from the effects of outdoor air. The safety and fire protection precautions shall be closely complied with.

Mobile Tanks

1. It shall be ensured that mobile oil and fuel tanks are stored and kept under control, in order to prevent seepage and spills to the soil and water sources.
2. The tank is placed on firm ground and the ground must have the adequate strength to support the weight of the tank and the tank contents.
3. Adequate precautions are taken to prevent any seepage while filling any tanks. An adequate number of fire extinguishers shall be kept at a close distance to the tank.
4. Safety signs with “No Smoking”, “Bare lights prohibited“, “Hazard” etc. inscriptions shall be provided and the requirements of the related legislation shall be complied with. The product contained in the tank shall be clearly written on the tank.

32. USE AND STORAGE OF FLAMMABLE MATERIALS

1. The acquisition and use of the explosives by persons other than the authorized persons is prohibited.
2. Use of explosives in the workplace must only be performed by the qualified persons.
3. The licensed fireman shall see the work order at the beginning of the shift and take the necessary orders. He/she shall take the necessary amount of explosives s/he takes from the warehouse to the workplace (where the explosion takes place) by filling it in his/her locked chest. He/she shall fill the prepared holes here and fire. Shall keep a record of consumables related to the explosives used and have it signed by the authorities.
4. The fireman is responsible for the tools and materials he uses, and he/she must place the dynamite only in the spot indicated by the site manager or the engineer in charge.
5. Explosives and capsules must not be transported in the same chest, and the fireman must not put anything other than explosives in their chest.
6. No one must get on the transport vehicle of the fireman carrying explosives.
7. Necessary measures must be taken to prevent the capsules from falling down or other objects falling onto them.
8. If there is no electricity in the explosives warehouse, flashlights shall used. It is also forbidden to use the flaming lighting devices such as lighters, matches and lanterns.
9. Warehouses must be ventilated in hot weathers and protected from humidity in cold weathers.
10. In warehouses, dynamite chests must not be stacked more than 2 rows, and nitrate bags more than 3 rows.
11. The first explosive material to be stored in the warehouse must be used first.
12. The warehouse record book and the stock status that must be kept in each explosive warehouse must always be kept under control.
13. Necessary safety measures must be taken when the explosives are brought to the explosion area. They must protected against sun and rain as much as possible.
14. When ignition, the area must be equipped with the guards with whistles and flags as required (Being outside the ignition range).
15. The heavy equipment shall be taken out of the impact area before ignition and their back sides shall be turned towards the ignition area.
16. Necessary safety measures shall be taken for the ignition and then, the ignition shall be done followed by an intermittent three-time siren or any other warning.
17. Ignition must be carried out during meal breaks, shift changes and in broad daylight.
18. After ignition, the site shall be examined by the fireman and with the permission to be given after the conclusion that all the holes have exploded, the operation shall be started at the explosion area. Otherwise, it is strictly forbidden to enter the site.

19. If an unexploded hole is detected in the examination after the ignition, the site chief or the engineer in charge shall be notified of the situation. First, the ignition cable shall be checked and reconnected to the unexploded holes and ignition shall be made by means of a magneto at least three times. If it does not explode this time either, if the cable is found to be broken in the hole;
    a) A new hole shall be drilled 1 m away from the unexploded hole and the explosive material shall be filled and ignited.
    b) Water amounting 2–3 tankers shall be introduced from the cracks around the hole and after the firemen have ensured that the discharged water thoroughly degrades ammonium nitrate, eliminating the possibility of detonation, the removal of the loosened portion shall begin and in the meantime, a watchman shall be assigned here, no one shall approach the loading area. First, both sides of the exploded hole shall be emptied. The work, starting from the bottom of the hole, must be carried out in such a way as to ensure that the dynamite falls into the bucket of the digger without causing the bucket tabs to touch the dynamite. This event shall be carefully observed, and if the dynamite is found, a fireman shall take out the capsule by shielding with a wooden plate without shaking the dynamite and breaking the hole into which the capsule has been placed. The capsule and dynamite shall then be disposed of in a safe pit by taking the necessary measures. These operations shall be carried out during the daylight and shall not be continued after getting dark.
    c) The material consumable report shall definitely be kept after each explosion.
    d) Explosive ignition operations shall be performed by the licensed firemen.

c. Measures To Be Taken for the Storage of Explosives

1. Residual explosives that remain after the explosive ignition shall be returned to the warehouse immediately.
2. The personnel working in the warehouse shall strictly comply with the provisions of the legislation concerning explosives.
3. Explosives may not be stored in the warehouse in the quantities more than written on the permit.
4. Lighting with open flame is not permitted in warehouses. In this respect, warning signs must be hung indicating that no one shall approach with open flame.
5. Employees are not allowed to enter the warehouse except for warehouse personnel. However, the personnel and carriers who are not the warehouse personnel may only bring explosive packs to the warehouse's door. They shall also take the ones to be removed from the warehouse from the warehouse door again.
6. Ignition of the explosives shall be performed by the licensed firemen with a fireman's certificate of competency. Ignition is prohibited for those without certificate of competency.
7. It is forbidden to store the flammable substances, such as fodder, paper, gasoline, gas, spirit and diesel, which can easily ignite on their own or by any effect.
8. It is forbidden to enter the warehouse with the materials such as lighters, matches, etc., which may create a fire at the entrance to the explosive warehouse.
9. Care shall be taken to keep the inside of the warehouses clean. It is forbidden to keep empty packages such as chests, barrels, boxes, tools and other foreign materials in the warehouse.
10. You cannot enter the store with spiked shoes. In addition, warehouse employees may not use the clothing such as nylon and perlon, which can generate static electricity.
11. Explosive material packages in warehouses shall not be disposed of, dragged, drawn, crashed, and care shall be taken not to drop them.

d. Precautions for Use of Inflammable Materials

1. Combustible, flammable and explosive materials in the places where they are necessary to be kept shall be kept away from heat and in safe containers.
2. Not flaming tools shall be used (matches, lighters, candles, etc.) during the filling or emptying of fuel tanks and in the control of gasoline and oil of motor vehicles.

3. Tanks, reservoirs and pipe connections where flammable and explosive liquids and substances are placed shall be properly grounded against static electricity.
4. Dispensing ports of the containers with hazardous liquid shall be upside and kept at cool places.
5. High voltage lines shall not be passed over the places where flammable, combustible and explosive materials are stored.
6. Special safety rules and warning signs shall be posted in the places visible to the employees in the areas where flammable, combustible and explosive materials are stored.
7. In the event of any danger in the workplace that operates with flammable, combustible, explosive, dangerous and harmful materials, measures shall be taken to ensure that the employees can be evacuated immediately, in a planned and regular manner.
8. In the buildings where flammable, combustible, explosive, dangerous and harmful materials are produced, processed and stored, operation must be stopped in whole or in part before starting construction, maintenance and repair work, such materials must be taken out of the danger zone, if any, after the proper cleaning of its residues, the construction, maintenance and repair must be provided under the constant supervision of a technical, authorized personnel in charge.
9. Whether various flammable, combustible, explosive, dangerous and harmful chemicals exceed the limit in the workplace air shall be determined by measuring at certain and required time intervals and the ventilation installation shall be checked by the authorized personnel.
10. The repair work shall be carried out under the supervision of a competent team and technical personnel in charge during elimination of the breakdowns in tools, devices and piping equipment operating with flammable, explosive and dangerous materials.
11. In the presence of flammable, combustible, explosive, dangerous and harmful materials, the appliances, devices and systems which rise to the temperature that may ignite these materials or their vapor and gases and produce sparks and high flames shall not be used.
12. Adequate amount of fire extinguishing equipment and materials shall be kept in the places where such substances are stored and necessary measures shall be taken against fire, natural disaster, theft and sabotage.

e. Precautions To Be Taken in Flammable Liquid Tanks

1. Tanks and pipe connections where flammable liquids are stored shall be properly grounded against static electricity.
2. When filling and emptying the tanks with flammable liquids, grounding line connection between the vehicle and the tank shall be made and measures shall be taken against static electricity. Tankers moving on rubber wheels shall not be entered into filling points unless they are completely free of static electricity loaded.
3. Aboveground tanks shall be placed on solid bases and surrounded by suitable safety walls.
4. The entrances and exits to the places where flammable materials are kept or stored shall be kept under control and their surroundings shall be cleaned up to 30 meters against fodders and other flammable materials
5. Persons other than the ones in charge of furnace rooms shall be prevented from entering and exiting, the operating instructions and warning signs shall be posted and adequate fire extinguishing devices shall be kept available.
6. Maximum attention shall be paid to cleanliness in furnace rooms, a minimum number of electrical appliances and devices shall be kept, and these shall be grounded.

33. HEAVY EQUIPMENT

An inspection and preventive maintenance program shall be established and implemented for all site equipment, machinery, tools, scaffolding, lifting devices, vehicles, and temporary structures. Inspection schedules shall be developed based on manufacturer recommendations, legal requirements under Turkish Regulation on Health and Safety Conditions in the Use of Work Equipment, and site-specific risk assessments. Preventive maintenance shall be conducted at defined intervals to avoid equipment failure and ensure operational safety. All inspections

and maintenance activities shall be recorded in a central register maintained by the EPC HSE Department and corrective actions arising from deficiencies shall be tracked to closure. Only certified personnel shall be permitted to carry out maintenance activities. Equipment or structures deemed unsafe shall be tagged and withdrawn from service until remedial actions are completed. Periodic internal audits shall verify compliance with the maintenance program and summary data shall be included in monthly HSE reports.

Maintenance and inspection of the Equipment (Heavy Equipment, Trucks, Vans etc.) shall be carried out by the workshop unit.

1. When riding on the machine, it must be checked for any obstructions.
2. Heavy Equipment shall not be used by the personnel without appropriate operator certificate.
3. Operation shall be performed outside the location designated on the construction site. In the event of a danger in the workplace, the supervisor must be notified of the dangerous working situation.
4. No person other than the operator must be allowed into the operator's cab during operation. No person must be allowed on the steps and the bucket while the machine is active.
5. The lubricant must not be allowed to maintain or check anything during operation. After the maintenance is complete, no movement or rotation must be made unless it is ensured that the lubricant or repairman is away from the machine.
6. Before making in a narrow space, the lubricant must check the back of the machine. Even if it is a short distance, the operator must not reverse without looking back.
7. No one must be allowed underneath when the bucket is full. When lifting or transporting, one must make sure that it is safe.
8. The works other than for construction and use purpose of the machine must not performed.
9. Traffic and road rules must be followed when on the road.
10. Machine maintenance and the control cards must be kept regularly and their periodical maintenance must be done according to these cards.

34. HOLE DRILLING AND BLASTING INSTRUCTIONS

Drilling and blasting operations are classified as high-risk activities due to the use of explosives and potential impacts on worker safety, structural stability, and nearby communities. All such activities shall be conducted in accordance with national legislation including the “Regulation on Health and Safety in Mining Workplaces,” the Explosives and Firearms Law, and in alignment with the IFC Environmental, Health and Safety Guidelines for Construction and Hazardous Materials Management.

A site-specific drilling and blasting plan must be developed and approved by a licensed blasting engineer. The plan shall include details of the blast area layout, type and quantity of explosives, initiation method, sequencing, safety distances, and communication procedures. The use, transportation, storage, and disposal of explosives must be carried out by authorized personnel only, with appropriate documentation and in secure facilities complying with legal storage requirements.

Prior to each blasting activity, exclusion zones must be established and cleared of all personnel. Adequate warning signals shall be used before and after detonation. Misfires or anomalies must be immediately reported, the area evacuated, and the issue investigated by competent personnel. Emergency response equipment and first aid provisions must be available near all blasting sites, and all staff involved in such operations must be trained in blasting safety and emergency procedures.

The following instructions shall be followed by all site personnel involved in drilling and blasting activities:

1. Procurement, transportation and use of explosives must be carried out under the supervision of the person responsible for blasting.

2. Matches, cigarettes, lighters that may create an open flame shall not be used near the explosive depot or during the transportation of explosives. The use of substances such as etc. should never be allowed.
3. Mobile phones and other radio-like devices should not be used and should be turned off during the transportation and use of explosive materials in the storage area.
4. Wooden tools should be used to open explosive crates.
5. Explosive crates or boxes should not be opened inside explosives storage or in closed areas.
6. Explosives and detonators should not be carried together.
7. Explosives and detonators should not be carried together with metallic tools.
8. Explosives and detonators must be kept separate from each other until the final ignition moment.
9. Filling of explosive materials into sewer holes will be done under the supervision of the blasting officer.
10. Explosives should not be forced into the hole.
11. Only wooden sticks should be used when filling and tightening sewer holes.
12. If a stick of dynamite gets stuck in the sewer, it should be removed using wooden materials.
13. There should be no knots or bends in the electric capsule wires. The wires should be kept away from the capsule while being straightened.
14. Before firing, a sufficient and clear warning signal must be given, a siren or whistle must be sounded to prevent anyone from entering the firing area.
15. Lookouts should be placed on all roads leading to the firing area. The fireman should fire after making sure that everyone, including himself, has entered safe places.
16. No one should enter the firing area immediately after the firings. Against unexploded manholes, this period should not be less than 5 minutes for electric firings and 30 minutes for others.
17. If safety wicks must be used, no more than 5 pieces should be used as per the legal warning.
18. The person responsible for blasting will check the sewers and give permission to work after it is seen that there is no unexploded sewer left.
19. Sewage filling and firing shall always be carried out in daylight and in weather without rain or lightning.

35. ENVIRONMENTAL PROTECTION

The main principle of environmental protection is prevention of pollution. Pollution prevention refers to the elimination, modification or reduction of operating activities that cause interference of waste to the soil, air or water.

a. Prevention of Water Pollution

All activities shall be carried out in such a way to prevent the interference of solids, contaminants, construction residues and other hazardous pollutants and wastes into surface waters or dry stream beds and groundwater resources. All necessary measures shall be taken to prevent contamination of surface waters and groundwater resources around the work site. To minimize potential negative impacts on surface waters and groundwater:

- No construction site must be located within a 10 m area (measured from the nearest shore) around a surface water and all construction works within the 30 m surrounding area of surface water must be minimized as far as possible.
- Storage areas must be located at least 50 m away from any surface water or drainage channel.
- The existing vegetation along the surface waters shall be protected as much as possible and shall function as a sediment filter.
- Refueling, washing or maintenance-repair work for any construction site or machine must not be carried out in, on and next to a drainage or surface water, or in areas where groundwater is high.
- Discharge of wet concrete or cement into or near any surface water must be prevented.

b. Prevention of Air Pollution

During the course of the work, appropriate and effective measures shall be taken as often as necessary to reduce the dust-related discomfort and prevent dust emitted from the activities carried out. Exhaust emissions above the limits must be avoided by keeping the machines in a maintained state at all times.

Dust emissions originating from the construction site activities or vehicle traffic shall be minimized by measures such as good traffic management, low speed, irrigation, dust source units and over-current activities.

Dust reduction measures shall be taken to prevent erosion and pollution originating from dust. Dust production and airborne dust level shall be monitored visually. In case of excessive dust formation in windy weather conditions or upon visual monitoring, dust preventive measures must be applied on exposed areas. Dust prevention measures shall include:

- Irrigation on bare surfaces and stone crusher operations.
- Covering the stock areas.
- The vehicles carrying dusty material (excavation soil, etc.) shall be covered in such a way as to prevent dust emission.
- The wastes originating from the activities shall not be burned on the site.
- Dusty works must be performed in the closed system according to technical facilities or such works must be isolated from the others.
- The dust amount in the workplace air must not exceed the amount specified in the legislation.
- In dust-producing works, the workplace base shall be kept wet according to the characteristics of the work and the technical possibilities; in drilling works, wet methods shall be applied to prevent the generation of dust.
- Personal protective equipment and masks shall be provided to the personnel working in dust-producing works according to the nature of the work and of the dust.

c. Prevention of Noise Pollution

The measures to be applied in the prevention of noise pollution originating from activities, not limited to the following, are:

- General construction works must be performed during agreed working hours decided as primary hours.
- The explosion activities to be carried out within the 1 km area around the villages and construction camps shall be carried out primarily during the daylight hours. The inhabitants in the area shall be informed at least 12 hours in advance that the explosion shall be carried out and information shall be provided on the estimated time and number of explosion operations.
- In case of working during the night hours, the working hours shall be determined in advance.
- All facilities and power equipment shall be maintained to minimize noise emissions and, if appropriate, silent facilities shall be selected for site use.
- Where the facilities have been designed to work with engine covers to reduce noise, the engine covers shall always be used and kept closed during the period of operation of the facility.
- All facility units that do not require continuous operation on the site shall be kept in the closed state unless they are used.
- Routine checks shall be carried out to detect equipment that causes noise emission above acceptable limits or are in an uncomfortable sound characteristic, and the noise emitted by these equipment may be reduced with appropriate maintenance and repair.
- If excessive noise emissions are detected in any facility or equipment due to a defective muffler, broken or loose engine cover, etc., the facility or equipment shall be immediately take out of service and subjected to adequate maintenance, repair or rehabilitation.

- The facilities shall be located away from residential areas as far as possible and, where necessary, sound shielding elements suitable for reducing noise levels in sensitive receiving environments shall be used. Noise barriers shall be used where severe noise effects are seen.
- Facilities that are known to generate a strong noise emission towards a particular direction shall be directed, where possible, away from noise sensitive areas.
- Trainings for proper use and maintenance of machinery and equipment and positioning of the machinery on the site in such a way as to reduce the impact of noise emissions on neighboring settlements shall be provided to the site personnel.
- Effective communication shall be established with the affected communities.

Additional noise measurements may be carried out, if necessary, in noisy activities, sensitive points and in the cases where complaints of local people are received. Additional measures shall be taken if the legal noise level limits are exceeded. If it is determined that any workplace exceeds the noise limit, ear protection devices shall be provided to the personnel working in the affected area as a short-term measure, or the operation shall be stopped until appropriate measures are taken to reduce noise levels.

d. Prevention of Soil Pollution

Matters to be taken into consideration in the prevention of soil pollution:

- All fuels, petroleum and chemicals shall be stored in protective sets capable of holding 110% of the maximum amount stored.
- All storage areas must be located in such a way that any leakage could be easily maintained and the possibility of overflow could be avoided.
- All areas that shall be affected by the storage or use of Hazardous Substances (Workshops, Repair Shops & Storage Areas) must be designed as closed areas so that they shall not affected by rain water and the drainage system must be connected to dump wells.
- Concrete wastes and the wastes originating from cleaning of concrete plants/mixers shall be disposed of in accordance with the legislation.
- Mud and debris must not be kept on highways and pedestrian roads.
- Intervention must be performed with regard to the information contained in the MSDS (Material Safety Data Sheet) regarding the cleaning of leaks/spills and the elimination of subsequent wastes.

e. Cultural Heritage

If any cultural resources or artifacts of archaeological, religious, cultural or historical value are found during the performance of the activities, the operations shall be stopped immediately and the competent authorities shall be informed. No artifacts, objects or materials in the findspot shall not be deformed or removed from the findspot. The artifact, object or material found shall be kept safe and protected until it is delivered to the competent authorities. Construction activities shall be carried out after appropriate conservation measures have been taken for the protection of cultural heritage.

36. USE OF NATURAL SOURCES

In order to reduce the environmental impacts of natural resources by increasing their use efficiency, consumption of natural resources such as energy, fuel and water are monitored and measures are being developed to encourage their efficient use.

Energy, electricity and water consumptions shall recorded, monitored and reported with the **Monthly HSE Performance Indicators** form.

Measures to be taken to increase the efficiency of natural sources:

- Taking into account the unit energy and water consumption values and energy efficiency assessments during new material, equipment purchase and/or workplace designs (including transportation and carrying) or in current material, equipment renewal
- Increasing efficiency in heating, cooling, air conditioning and heat transfer
- Minimizing heat losses with proper thermal insulation
- Prevention of losses in electricity consumption
- Minimizing human factor with automatic control applications
- Minimizing pollutant air emissions
- Using energy-saving lighting
- Using sensor lighting system
- Switching off unused lighting systems
- Use of small motor vehicles
- Shutting down unused vehicles and engines
- Closing unused taps
- Repair of dripping taps, faulty valves and pipes
- Calibration of the meters such as electricity, gas, water etc.
- Prevention and control of over-consumption of the consumables such as paper, toner, etc. and using them consciously
- Ensuring the recycling of wastes (paper, plastic, metal, etc.) as much as possible
- Supplying materials as close to the site as possible to minimize transport and transport impacts
- Placing appropriate warning signs to promote the efficient use of natural resources
- Organizing trainings on the efficient use of natural resources.

37. HOUSEKEEPING

All work areas in the field must be kept clean and tidy at all times. Entrance and exit roads must be free of construction debris and materials and all areas must be cleaned regularly to prevent waste and unused material accumulation. All waste and unnecessary materials must be disposed of in accordance with applicable legislation. All wastes suitable for reuse or recycling must be sent for reuse or recycling, and the wastes classified as hazardous must be disposed of in accordance with the legislation in force.

Housekeeping and providing a clean working environment are the responsibility of all employees.

ANNEX-A MITIGATION MEASURES - COMMITMENT REGISTER IMPLEMENTATION

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
General measures to be taken at the workers' accommodation facilities (IFC Environmental, Health, and Safety General Guidelines, 2017) will be as follows: • The accommodation to be provided will be clean and safe and meet the basic needs of workers, providing minimum amounts of space for each worker; sanitary, laundry and cooking facilities. Overcrowding will be avoided. • Heating, air-conditioning and ventilation will be appropriate for the climatic conditions and provide workers with a comfortable and healthy environment to rest and	At accommodation facilities	During construction phase	• ***Project Manager*** will enforce • ***H&S Manager*** will supervise	Worker grievances	• By implementation of this Plan

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
spend their spare time. • Drinking water to be provided to Project workforce and water to be supplied to food preparation, washing and bathing areas will meet the requirements of the Turkish Regulation Concerning Water Intended for Human Consumption. • Adequate lavatory facilities (toilets, urinals, washbasins and showers) will be provided for the number of people expected to work in the facility and allowances will make for indicating whether the toilet facility is “In Use” or “Vacant”. Toilet facilities will also be provided with adequate supplies of hot and cold running water, soap, and hand drying devices. • Domestic wastewater					

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
and waste to be produced at Camp Sites will be properly managed and disposed of in line with the requirements of relevant Turkish regulations as well as good site practices. • First aid and medical facilities as well as provisions for safety against potential hazards (fire, etc.) will be provided at the camp sites. • Residents of the Camp Sites will be made aware of any rules governing the accommodation. • Project's Grievance Mechanism to be established will provide means to the Project personnel to lodge their complaints. AAOIAS will ensure that the workers are informed of the grievance mechanism at					

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
the time of recruitment and make it easily accessible to them. • There will be infirmary and domestic wastewater treatment plant and leisure centre in the construction site. Infirmaries, medical facilities and Wastewater Treatment Plants will be available at all construction sites and compounds. These facilities will be subject to quarterly inspections to monitor their effectiveness and to maintain them in working order.					
Labour Law and Worker Health and Work Safety rules will be adhered to throughout construction and operations phases in order to prevent occupational work accidents. All necessary measures will be taken	N/A	During construction phase	• ***Project Manager*** *will enforce* • ***H&S Manager*** *will supervise*	• Accidents • Legal penalties	• By implementation of this Plan

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
to ensure compliance. All workers will be adequately informed of the scope of the legislation and rights.					
Project will provide H&S trainings for all personnel in accordance with the Turkish 'Regulation on Health and Safety'.	N/A	During construction phase	• ***H&S Manager*** and its representatives	• Success of training exams • Legal penalties	By implementation of this Plan
Regular maintenance of all equipment and machinery will be performed in accordance with the manufacturers operating manuals and warranties. A central maintenance log book for all equipment and machinery will be maintained by the Project. Defective machinery will be replaced where required.	• Construction site • Subcontractors maintenance areas	During construction phase	• ***Project Manager*** will enforce • ***H&S Manager*** will supervise	• Accidents • Excessive dust & noise emissions	By implementation of this Plan
Suitable and compliant (with Turkish	Construction site	During construction phase	• ***Project Manager*** will enforce	• Treatment records	By implementation of this Plan

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
requirements) first-aid facilities and treatment will be provided at all times at the working/construction sites.			• ***H&S Manager*** will supervise	• Worker grievances	
The construction contractors will be required to provide orientation training to their workforces that underline the potential risks/impacts that exist with respect to the relations with the local communities, and the appropriate preventive measures.	N/A	During recruitment	• ***H&S Manager*** and its representatives	• Accidents • Success of training exams • Community grievances	By implementation of this Plan
The Project will meet the requirements of Turkish Law on Occupational Health and Safety and Regulation on the Use of Personal Protective Equipment at/in Workplaces, which has been prepared in parallel with the relevant	Construction sites	During construction phase	• ***Project Manager*** will enforce • ***H&S Manager*** will supervise	• Accident reports • Worker grievances • Legal penalties	By implementation of this Plan

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
European Union Directives.					
To minimise the negative impacts caused from chemical hazards on labour, following mitigation measures will be complied with: • Properly maintained construction machinery, equipment and vehicles will be used to minimize air emissions. • Engine idling time will be reduced in construction sites. • Direct diesel exhaust will be properly removed to minimize exposure of the operators. • Indoor working areas where vehicles or engines are operated will be ventilated or the exhaust gases will be properly diverted. • Lead-containing paint will be avoided, and appropriate respiratory	N/A	During construction phase	• ***Project Manager*** will enforce • ***H&S Manager*** will supervise	• Worker grievances • Sicknesses	By implementation of this Plan

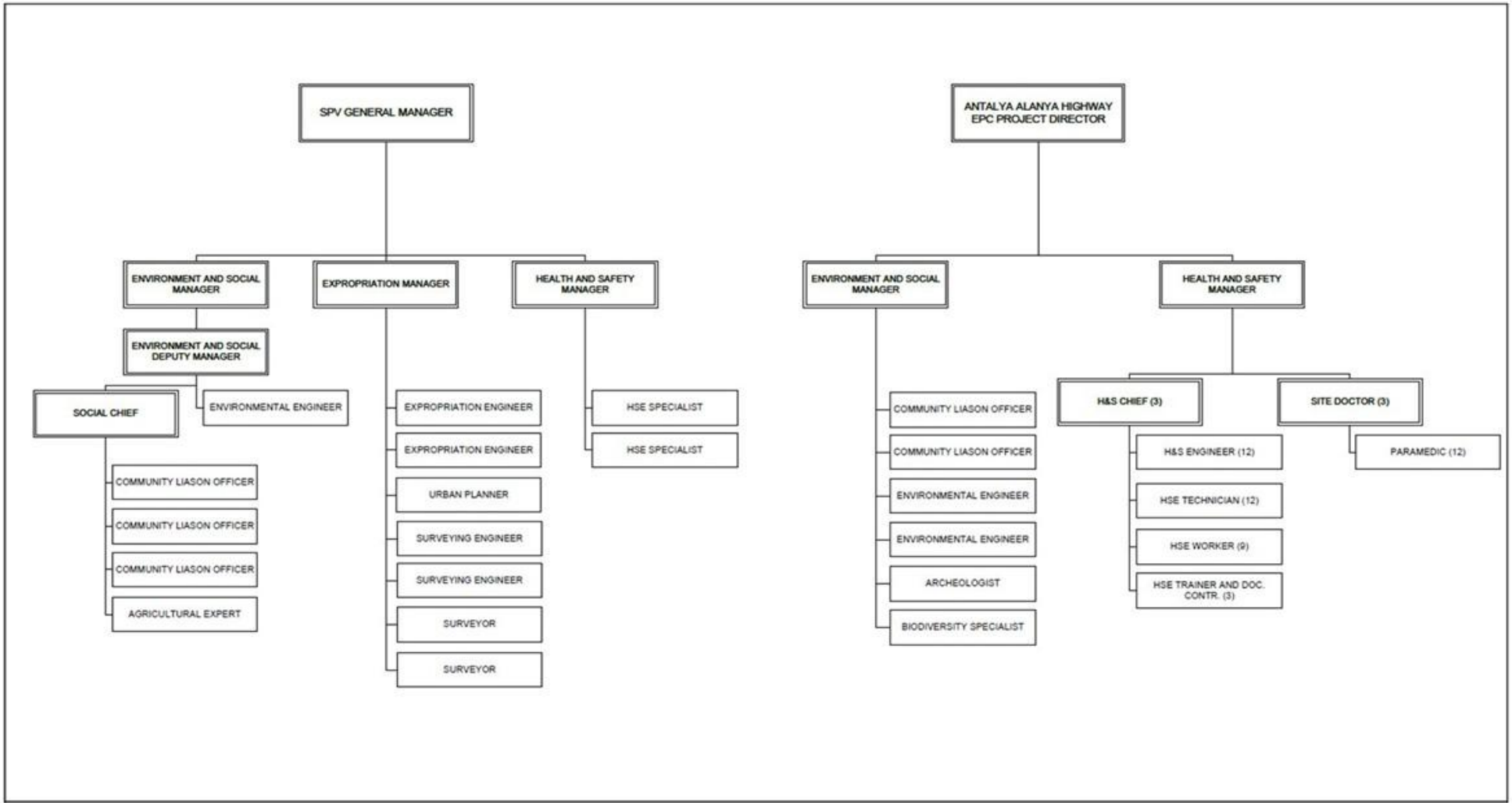
Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
protection will be used when cutting galvanized steel. • At work sites where dust levels are excessive, dust masks will be used by relevant personnel.					
To minimise the negative impacts caused from physical hazards on labour, following mitigation measures will be complied with: • The area around which elevated work is taking place will be barricaded to prevent unauthorized access and working under personnel on elevated structures will be avoided. • Hoisting and lifting equipment will be rated and properly maintained, and operators trained in their use. Elevating platforms will be maintained and	Relevant worksites	During construction phase	• ***Project Manager*** will enforce • ***H&S Manager*** will supervise	• Accidents • Accident reports • Legal penalties	By implementation of this Plan

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
operated according to established safety procedures including use of fall protection measures (e.g. railings), equipment movement protocols (e.g. movement only when the lift is in a retracted position), repair by qualified individuals, and installation of locks to avoid unauthorized use by untrained individuals. • Ladders will be used according to pre-established safety procedures for proper placement, climbing, standing, as well as the use of extensions. • When working at height, proper fall protection measures will be implemented. Fixtures will be installed on bridge components. Safety harnesses with proper thickness and of					

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
suitable materials ensuring sufficient strength will be used. Rope safety harnesses will be replaced before signs of ageing or fraying of fibres become evident. When operating power tools at height, workers will use a second (backup) safety strap. • Personnel exposed to high levels of noise will be required to use personal hearing protection devices/equipment that will be provided by AAO A.S. (or subcontractors) at no cost. Where required for specific works, work rotation programs will be implemented to reduce cumulative exposure. • Weather forecasts will be monitored for outdoor work to provide					

Commitment	Where the commitment will be implemented	When the commitment will be implemented	Who will implement the commitment	Key Performance Indicator	Monitoring and Assurance
advance warning of extreme weather and schedule the work accordingly. Protective clothing will be used where required.					

ANNEX B HSE ORGANIZATION CHART



RESOURCE EFFICIENCY MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
16.06.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards

RESOURCE EFFICIENCY MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
AQECP	Air Quality and Emissions Control Plan
CLO	Community Liaison Officer
CO	Carbon Monoxide
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
EU	European Union
HC	Hydrocarbons
HSE	Health, Safety and Environment
H&S	Health and Safety
IFC	International Finance Corporation
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
NO_x	Nitrogen Oxides (NO_2 and NO)
PM	Particulate Matter
RCA	Root Cause Analysis
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
SO_2	Sulfur Dioxide
VOCs	Volatile Organic Compounds
WHO	World Health Organization

RESOURCE EFFICIENCY MANAGEMENT PLAN

I. PURPOSE AND SCOPE

This Resource Efficiency Management Plan ("the Plan") was prepared by Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. ("AAOİAŞ" or "SPV") for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan;

- Defining country legislation and project standards,
- Defining the duties and responsibilities of the personnel, and
- Identify measures and corporate targets to reduce resource consumption, to avoid or, when avoidance is not possible, minimize and control impacts on the environment resulting from environment and greenhouse gases during the construction phase.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

The Plan has been developed to provide further details on the measures to be implemented during the construction phase of the Project to ensure that the actual environmental impacts are consistent with those evaluated in Environmental and Social Impact Assessment (ESIA) and that mitigation measures are applied as intended and effective. The requirements set out in this Plan are applied to all activities during the construction phase of the Project, including those carried out by subcontractors.

This Plan has been developed according to the Turkish regulatory framework, International Finance Corporation (IFC) Performance Standards (PSs) and IFC General and Sector Specific Environmental, Health and Safety (EHS) Guidelines, IFC Environmental, Health, and Safety Guidelines for Railways, IFC Environmental, Health, and Safety Guidelines for Construction Materials Extraction and related EU Directives.

The Plan has been developed in alignment with applicable national legislation and relevant international standards, including the requirements of international financial institutions. This plan will provide mitigation alternatives and an impact monitoring schedule in accordance with Turkish and international regulations and standards.

This Plan should be applied by all parties involved in the construction phase, including the Project Sponsor, Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ), the Main Contractor (EPC or Limak), and all subcontractors. Responsibilities for implementation, monitoring, and reporting of resource efficiency related issues should be clearly assigned. Necessary updates to the Plan should be considered in case of changes in project design, construction methodology, or regulatory requirements.

The purpose of this Plan is to identify measures and corporate targets to reduce resource consumption, to avoid or, when avoidance is not possible, minimize and control impacts on the environment resulting from environment and greenhouse gases.

This Plan applies to all Project activities under the Contractor's supervision, its subcontractors and to all employees. The Contractor is the main responsible for the implementation of this Plan. Subcontractors will be responsible to work in line with all environmental and social management systems (ESMS) of the Contractor. This Plan applies to normal conditions during the construction phase activities and it is a living document, and the responsibilities, procedures and compliance actions should be updated as appropriate.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This section includes policies, standards and requirements of reference for this Plan that are applicable for, but not limited to, construction phase of the Project. Project standards are described in the Project ESIA and are listed below:

- National legislative requirements and all permits, licenses and approvals
- IFC PSs
- Equator Principles (EPs) IV
- Other good international industry practices (GIIP) including ISO 9001:2015 - Quality Management Systems, ISO 14001:2015 – Environmental Management Systems and ISO 45001:2018 - Occupational Health and Safety Management Systems
- International Conventions and Protocols Türkiye is a party to
- The Contractor's Quality Policy, Health, Safety and Environmental Policy and related practices and procedures.

II.1 National Requirements

The following Turkish laws and regulations will be used as the legal basis:

- Environmental Law No. 2872
- Regulation on Decreasing the Ozone Depleting Materials
- Regulation on Reduction of Sulphur Content of Some Fuel Types
- Regulation on Control of Exhaust Gas Emission and Quality of Fuel and Diesel
- Regulation on Monitoring of Greenhouse Gases Emissions
- Groundwater Law, Law No: 167,
- Regulation on Management of Surface Water Quality
- Regulation on the Water for Human Consumption of the Ministry of Health of Turkey, limit values for drinking and utilization waters
- Energy Efficiency Law No. 5627 dated 18/4/2007
- Regulation on the Improvement of the Energy Sources and the Efficiency in the Energy Usage
- Regulation on Assessment and Management of Environmental Noise
- Regulation on Environmental Noise Generation due to Equipment Used in Open Space
- Law on Protection of Soil and Land Use
- Regulation on Safety Data Sheets for Hazardous Substances and Mixtures
- Regulation on Registration, Evaluation, Permitting and Restrictions of Chemicals
- Regulation on the Classification, Labelling and Packaging of Hazardous Substances and Mixtures

II.2 International Standards and Conventions

The EPs are a set of voluntary environmental and social guidelines that have been adopted by a significant number of financial institutions influential in the project finance market. The EPs comprise a set of ten broad principles that are underpinned by the environmental and social policies, standards and guidelines:

- Principle 2: Environmental and Social Assessment will require the client to conduct an appropriate Assessment process to address, to the EPFI's satisfaction, the relevant environmental and social risks and scale of impacts of the proposed Project.
- Principle 3: Applicable Environmental and Social Standards - The Assessment process should, in the first instance, address compliance with relevant host country laws, regulations and permits that pertain to environmental and social issues.

- Principle 4: Environmental and Social Management System - an Environmental and Social Management Plan (ESMP) will be prepared by the client to address issues raised in the Assessment process and incorporate actions required to comply with the applicable standards.

IFC PS 1 Assessment and Management of Environmental and Social Risks and Impacts, underscores the importance of managing environmental and social performance throughout the life of a project. An effective ESMS is a dynamic and continuous process initiated and supported by management, and involves engagement between the client, its workers, local communities directly affected by the project (the Affected Communities) and, where appropriate, other stakeholders.

IFC PS2 Labor and Working Conditions, underscores the importance of providing a safe and healthy work environment, taking into account inherent risks in its particular sector and specific classes of hazards in the client's work areas, including physical, chemical, biological, and radiological hazards. The client will take steps to prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work by minimizing, as far as reasonably practicable, the causes of hazards.

IFC PS 3 recognizes that increased economic activity and urbanization often generate increased levels of pollution to air, water, and land, and consume finite resources in a manner that may threaten people and the environment at the local, regional, and global levels.

IFC EHS Guidelines - The EHS Guidelines are technical reference documents with general and industry-specific examples of GIIP. The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs.

IFC EHS Guidelines for Railways and EHS Guidelines for Construction Materials Extraction are applicable to the Project. In addition to these, related EU directives are given below:

- Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe
- Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC
- Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer
- Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC
- 32012L0027: Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC Text with EEA relevance
- EC/JRC 2008: IPPC Reference Document on Best Available Techniques for Energy Efficiency. June 2008
- Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption
- Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council
- Council Directive of 12 June 1986 on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94

as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
- Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods
- Council Directive of 6 February 1970 on the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles
- Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000 on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors
- Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise
- Directive 2004/35/CE of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Resource Efficiency Management Plan:

- Solid Waste Management Plan
- Water Quality, Wastewater and Storm Water Management Plan
- Environmental Accident and Spill Response Management Plan
- Community Health and Safety Management Plan
- Traffic Management Plan
- Hazardous Material Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)
- Training Management Plan

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

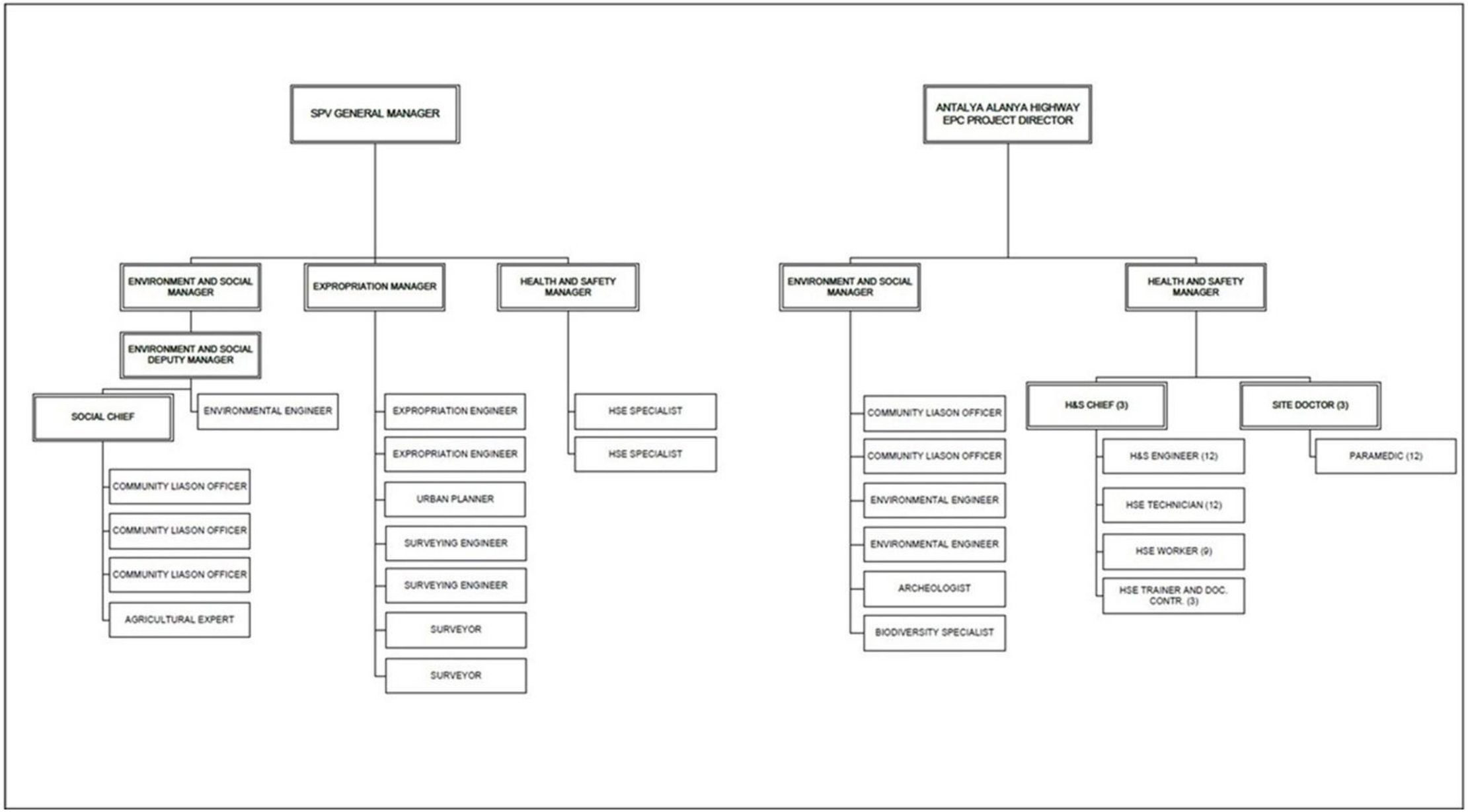

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities.

Roles	Responsibilities
	• Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions.

Roles	Responsibilities
	• Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs.

Roles	Responsibilities
	• Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions.

Roles	Responsibilities
	• Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs.

Roles	Responsibilities
	• Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation.

Roles	Responsibilities
	• Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required.

Roles	Responsibilities
	• Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings.

Roles	Responsibilities
	• Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance.

Roles	Responsibilities
	• Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness.

Roles	Responsibilities
	• Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan.

Roles	Responsibilities
	• Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements.

Roles	Responsibilities
	• Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant.

Roles	Responsibilities
	• Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented.

Roles	Responsibilities
	• Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor

Roles	Responsibilities
	• Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records.

Roles	Responsibilities
	• Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs.

Roles	Responsibilities
	• Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums..

Roles	Responsibilities
	• Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. MANAGEMENT MEASURES

The primary goal of the resource efficiency is to create opportunities for economics and efficiencies in the use of resources.

Monitoring of Resource Usage

As a main scope of this Plan, the Contractor and the subcontractors will regularly monitor the below items:

- Energy/Electricity consumption trends and identify where action can be taken to reduce energy use (e.g., Reduce loads of the energy systems, reduce losses in energy distribution, improve energy conversion efficiency)
- Water consumption trends and identify where action can be taken to reduce water use (e.g., reduce losses in water distribution, wastewater recovery)
- Material consumption and identify where action can be taken to reduce material use (e.g., reduce chemicals use, if possible)
- Fuel consumption and assess what action can be taken to reduce fuel consumption

Work Instructions

Preparation of written standard work instructions will improve the resource efficiency such as:

- Checking conditions of vehicles, tools and equipment
- Periodic maintenance of vehicles and equipment
- Turning off backup power generators when possible
- Shutting down of electronic goods when not used

GHG Management

the Project will quantify and monitor its direct Scope 1 GHG emissions as well as indirect Scope 2 emissions associated with the consumption of energy.Quantification of GHG emissions will be conducted annually in accordance with internationally recognized methodologies and good practice.

In addition, the following measures will be applied to reduce GHG emissions as much as possible:

- The Best Available Techniques will be taken into consideration in Project design as much as possible. The applicability of the Best Available Techniques (BATs) developed within the European regulatory framework [i.e., Integrated Pollution Prevention and Control, “IPPC”, BAT Reference Documents (BREFs) according to the European Directive 2010/75/EU (IED)] should been evaluated and integrated into the Project design.
- All employees will be provided climate, resource and energy efficiency awareness training.
- Maintenance of all machinery and equipment will be periodically conducted to ensure efficient fuel use and effective operation.
- All the fuels and other energy sources will be chosen among those that have the highest calorific values and minimum emissions per unit consumed.
- Efficient resource and material use will be promoted to reduce direct and indirect GHG emissions due to the Project.
- Energy consumption will be met, where possible, through the use of renewable energy sources.
- No idling and out-of-scope operation of the machinery and equipment will be allowed.

- During the closure phase, rehabilitation of land will help to recover lost carbon sink, which will act as a long-term mitigation measure.
- The increase of renewable energy production in national grid electricity may induce a decrease in Scope 2 related GHG emissions which is linked to the construction phase of the Project. However, it should be noted that this situation is out of Project control.

Energy Efficiency Design and Control Measures

Project will use energy efficient equipment (e.g., electric goods, backup power generators, lights etc.) as much as possible. The equipment purchasing process will consider the energy consumption features of the equipment.

When air conditioning systems are used, energy efficiency techniques will be considered as much as possible according to the following criteria:

- Placing air intakes and air-conditioning units in cool, shaded locations;
- Improving building insulation including seals, vents windows, and doors;
- Installing timers and/or thermostats and/or enthalpy-based control systems

Water Use Efficiency Design and Control Measures

Project will reduce, as much as possible, water use. The water distribution system at the Site (e.g. taps, toilet flushing) will be periodically checked to ensure that they are working properly and that taps are not left open.

VI. TRAINING

The employees of the Contractor and subcontractors will require to attend the new-hire induction training that includes environmental and social awareness and compliance training to be aligned with Project ESIA and ESMS.

Regular internal and external (when necessary) trainings will be given to ensure that the mitigation measures indicated in this Plan are applied during the construction phase of the Project for all involved parties. Regular internal inspections will be conducted to ensure that the mitigation measures indicated in this Plan are applied during the construction phase of the Project.

All workers will be informed about practices aimed to enhance resource efficiency. The records of resource usages (as defined above) will be announced at the information boards placed regularly and communicated to the workers.

VII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of resource efficiency mitigation measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific conditions, air quality trends, stakeholder concerns, or changes in applicable environmental regulations.

Monitoring activities will be coordinated by E&S Manager and his/her team, in close collaboration with the H&S Manager and his/her team. Key responsibilities will include verifying the implementation of dust suppression practices, monitoring equipment and vehicle emissions, evaluating the maintenance status of construction machinery, and ensuring the consistent application of mitigation measures near sensitive receptors such as residential areas, schools, and healthcare facilities.

The performance of contractors and subcontractors in implementing resource efficiency management requirements will be reviewed through environmental audits, site supervision reports, and field observations. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to confirm the effectiveness of implemented measures and to ensure recurrence is prevented.

In addition to internal monitoring, inspections may be carried out by relevant public institutions, including the Ministry of Environment, Urbanization and Climate Change, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may include review of monitoring data, on-site emission control practices, and documentation of compliance.

Monitoring efforts will be guided by the framework provided in Table VII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of measurements, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of air quality and emissions mitigation measures and ensuring full compliance with national regulations and Project standards.

Table VII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Consumption of resources	All site activities*	Quantify the resource consumption by installing appropriate devices; record and aggregate data on the consumption of the following resources: a) Water consumption (for industrial and civil purposes) b) Fuels (for heating, vehicle refuelling, equipment usages) c) Electricity (only if supplied by external sources/network using counters) d) Explosives	Monthly	AAOİAŞ and Limak
GHG Emissions	All site activities*	GHG emission levels (combined Scope 1 and Scope 2 Emissions, and, if appropriate, the GHG efficiency ratio) from the facilities owned or controlled within the physical project boundary, as well as indirect emissions associated with the off-site production of energy used by the Project during the construction and operation phases, will be quantified and reported publicly on annual basis.	Annually	AAOİAŞ, Limak
Grievances	The field subject to the complaint	Grievances are recorded regarding resource efficiency	Continuously	AAOİAŞ, Limak Independent Social Experts
Training	All site activities*	Employee training	Annually	AAOİAŞ, Limak

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Main Contractor (Limak) and relevant subcontractors.

VIII. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table VIII.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Water consumption	Minimize and continued improvement in consumption (No increase in the average consumption rate on a per capita basis)	Monthly	AAOİAŞ, Limak
Energy consumption	Minimize and continued improvement in consumption (No increase in the average consumption rate on a per capita basis)	Monthly	AAOİAŞ, Limak
Fuel consumption	Minimize and continued improvement in consumption (No increase in the average consumption rate on a per capita basis)	Monthly	AAOİAŞ, Limak
Number of non-compliances regarding resource efficiency measures identified in this Plan	Minimise the number of non-compliances and continuous improvement	Monthly	AAOİAŞ, Limak
Number of trainings planned vs completed	100%	Monthly	AAOİAŞ, Limak
Number of grievances received regarding resource efficiency	Minimise the number of grievances and continuous improvement	Monthly	AAOİAŞ, Limak

IX. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All labour-related incidents and non-conformities should be documented and reported as outlined in the Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan.

Results of the monitoring will be reported to responsible parties to ensure that the Project activities comply with the national legislation and international standards bi-annually. Depending on the monitoring results, the Plan will be reviewed and updated by Project E&S and H&S Managers.

The bi-annual internal audit will address:

- The correct implementation of this Plan;
- The correct and timely implementation of an auditing and review system;
- Each of the point indicated in the table in Section 7 (Monitoring Activities) and Section 8 (KPIs) of this Plan.

Evidence and results of the inspection and audit activities are included in the audit reports and in the “Non-Conformity and Preventive/Corrective actions” records. Project Management reviews result

of audits and inspections and the progress of the Preventive/Corrective actions and takes additional appropriate actions if necessary.

These audits and the associated records should be managed in compliance with the Project's established human resources and labour-related procedures.

Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary to ensure full compliance with labour legislation and international standards.

X. REPORTING

Regular reporting should be conducted to ensure the effective implementation and continuous improvement of resource efficiency management activities throughout the construction phase of the Project. Reporting should be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions should be identified and the required updates should be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Regular audits and visual inspections should be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Evidence of the implementation of the actions/measures and related results are collected through inspection and auditing activities as detailed in Section IIX "Audit and Review" of this Plan; these evidences are described in the audit reports.

Contractors are responsible to collect the statistics (including all types of training delivered to employees, incident records, grievance records, their own subcontractor selection processes, etc.) on a monthly basis and report to the Contractor. If any subcontractor is involved, it is responsible for duly implementing requirements included in this Plan under the Contractor supervision.

The results and supporting evidence of these monitoring activities (e.g., measurements, logs, and photos) should be documented in detail within appropriate reporting formats. This section of the Plan outlines the instructions and requirements for implementing these reporting activities.

All personnel are encouraged to raise concerns, suggestions, or complaints related to air quality management through the established grievance mechanism by completing the grievance form. The communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

Throughout the construction phase of the Project, this Plan will be reviewed quarterly by the E&S manager, based on the results of audits and any air quality incidents or changes in site activities. Updates to the Plan will be agreed upon between the E&S Manager and the Site Manager.

The following reporting requirements apply for the EPC Contractor:

- Biannual reports on KPIs and performance trends;
- Monthly reports of relevant training activities completed and attendance registers to be maintained;
- Daily/Weekly/Monthly reports of site inspection and monitoring activities;
- Audit reports;
- Inspection logs and status of non-compliances.

EXCAVATED MATERIAL MANAGEMENT PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
16.06.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards

EXCAVATED MATERIAL MANAGEMENT PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
BAT	Best Available Techniques
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
EPC	Engineering, Procurement and Construction (Limak İnşaat Şanayi ve Tic. A.Ş.)
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
IFC	International Finance Corporation
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
MoTAT	Mobile Hazardous Waste Tracking System
MSDS	Material Safety Data Sheets
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
WEEE	Electrical and Electronic Equipment
WHO	World Health Organization

I. PURPOSE AND SCOPE

This Excavated Material Management Plan ("the Plan") has been prepared by Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. ("AAOİAŞ" or "SPV") for the Antalya-Alanya Motorway Project ("the Project").

The purpose of this Plan is to identify the main sources of excavated materials generated during the construction phase and to outline the measures that should be implemented to prevent, minimize, reuse, and recycle waste in accordance with applicable national legislation and international standards. This Plan aims to support sustainable waste management practices and promote circular economy principles throughout construction activities.

The Plan has been developed to provide further details on the measures to be implemented in dumpsites during the construction phase of the Project to ensure that the actual environmental impacts are consistent with those evaluated in Environmental and Social Impact Assessment (ESIA) and that mitigation measures are applied as intended and effective.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

This Plan has been developed according to the Turkish regulatory framework, International Finance Corporation (IFC) Performance Standards (PSs) and IFC General and Sector Specific Environmental, Health and Safety (EHS) Guidelines, IFC Environmental, Health, and Safety Guidelines for Railways, IFC Environmental, Health, and Safety Guidelines for Construction Materials Extraction and related EU Directives.

This Plan should be implemented by the Project Sponsor, Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. (AAOİAŞ), the Main Contractor (Limak), and all subcontractors involved in the construction phase. Roles and responsibilities for waste management, monitoring, and reporting should be clearly defined, and this Plan should be reviewed and updated in line with changes in project activities or legal requirements.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

The Plan has been developed in alignment with applicable national legislation and international standards and requirements of reference for this Plan that are applicable for, but not limited to, construction phase of the Project.

Project standards are described in the Project ESIA and are listed below:

- National legislative requirements and all permits, licenses and approvals
- IFC PSs
- Equator Principles (EPs) IV
- Other good international industry practices (GIIP) including ISO 9001:2015 - Quality Management Systems, ISO 14001:2015 – Environmental Management Systems and ISO 45001:2018 - Occupational Health and Safety Management Systems
- International Conventions and Protocols Türkiye is a party to
- The Project Sponsor's Quality Policy, Health, Safety and Environmental Policy and related practices and procedures

II.1 National Requirements

The following Turkish laws and regulations should be used as the primary legal framework for solid waste management:

- Environmental Law (Law No. 2872)
- Regulation on Waste Management
- Regulation on the Control of Excavation, Construction, and Demolition Wastes
- Regulation on Landfilling of Waste
- Regulation on Zero Waste Management

These regulations should be used as the legal basis for waste segregation, temporary storage, transport, recycling, recovery, and disposal activities at all construction sites and associated facilities.

II.2 International Standards and Guidelines

The EPs are a set of voluntary environmental and social guidelines that have been adopted by a significant number of financial institutions influential in the project finance market. The EPs comprise a set of ten broad principles that are underpinned by the environmental and social policies, standards and guidelines:

- Principle 2: Environmental and Social Assessment will require the client to conduct an appropriate Assessment process to address, to the EPFI's satisfaction, the relevant environmental and social risks and scale of impacts of the proposed Project.
- Principle 3: Applicable Environmental and Social Standards - The Assessment process should, in the first instance, address compliance with relevant host country laws, regulations and permits that pertain to environmental and social issues.
- Principle 4: Environmental and Social Management System - an Environmental and Social Management Plan (ESMP) will be prepared by the client to address issues raised in the Assessment process and incorporate actions required to comply with the applicable standards.

IFC PS 1 Assessment and Management of Environmental and Social Risks and Impacts, underscores the importance of managing environmental and social performance throughout the life of a project. An effective ESMS is a dynamic and continuous process initiated and supported by management, and involves engagement between the client, its workers, local communities directly affected by the project (the Affected Communities) and, where appropriate, other stakeholders.

IFC PS 3 Resource Efficiency and Pollution Prevention, outlines a project-level approach to resource efficiency and pollution prevention and control in line with internationally disseminated technologies and practices. In addition, this PS promotes the ability of private sector companies to adopt such technologies and practices as far as their use is feasible in the context of a project that relies on commercially available skills and resources.

IFC EHS Guidelines - The EHS Guidelines are technical reference documents with general and industry-specific examples of GIIP. The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. General EHS Guidelines – Waste Management document is applicable for the Project.

IFC EHS Guidelines for Railways and EHS Guidelines for Construction Materials Extraction are also applicable to the Project.

In addition to these, related EU directives are given below:

- Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste
- Directive 2006/21/EC on the Management of Waste from Extractive Industries and Best Available Techniques (BAT) Reference Document
- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives

These international references provide the broader sustainability framework and technical benchmarks to be integrated into solid waste management procedures, particularly in relation to source reduction, reuse and recycling targets, occupational health and safety, and environmental protection.

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Excavated Materials Management Plan to ensure consistency in environmental and social performance and regulatory compliance throughout the construction phase:

- Environmental Accident and Spill Response Management Plan
- Solid Waste Management Plan
- Resource Efficiency Management Plan
- Traffic Management Plan
- Soil Management and Erosion Control Plan
- Water, Wastewater, and Storm Water Management Plan
- Hazardous Materials Management Plan
- Construction Camp Site Management Plan
- Occupational Health and Safety Management Plan
- Community Health and Safety Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to maintain alignment with Turkish legislation, IFC Performance Standards, and other international best practices. Cross-plan coordination is essential for minimizing cumulative impacts, supporting resource efficiency, and enhancing overall environmental and social risk management during the construction phase.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

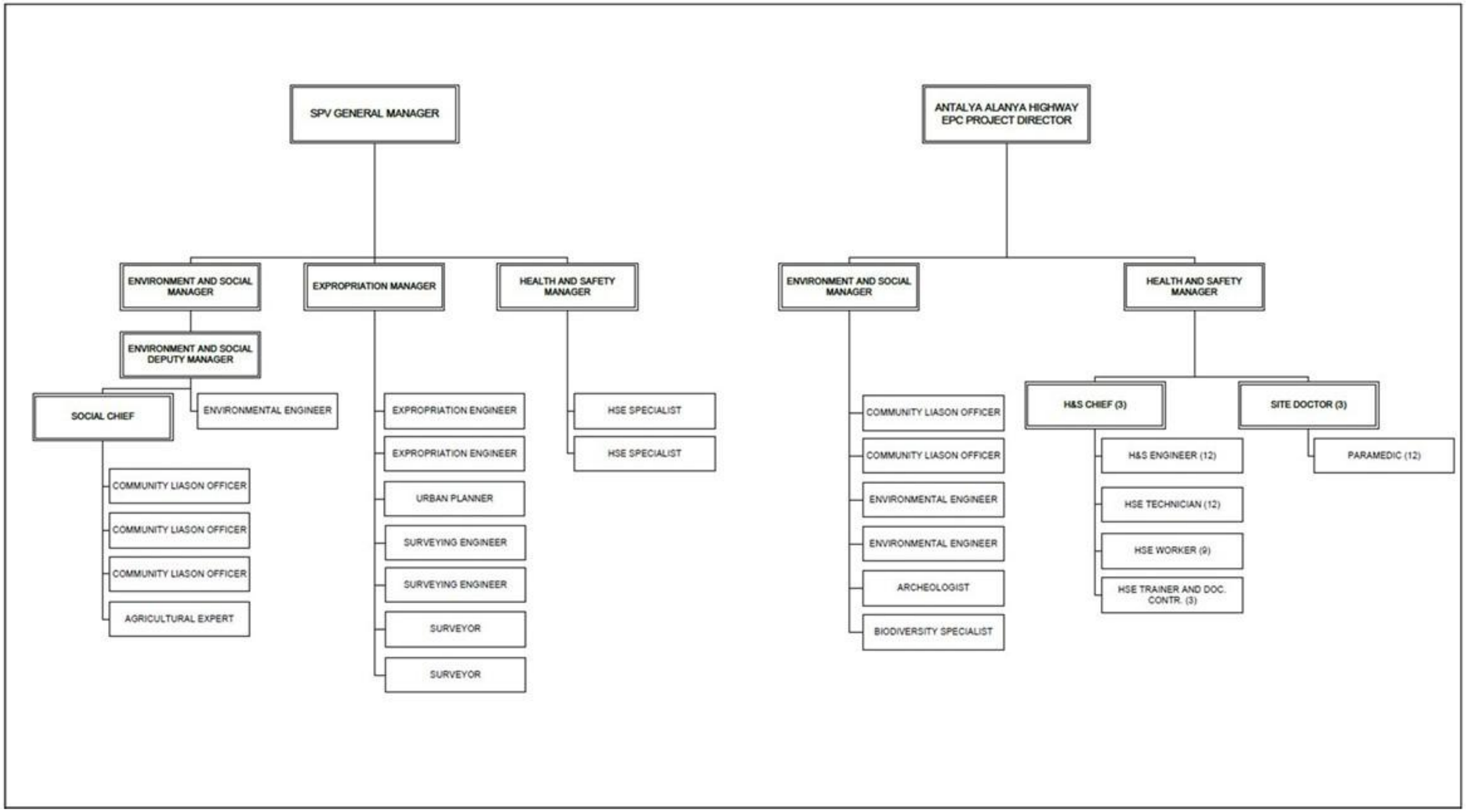

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances.

Roles	Responsibilities
	• Support stakeholder engagement activities and consultations with local communities. • Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded.

Roles	Responsibilities
	• Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders. • Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements.

Roles	Responsibilities
	• Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication. • Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities.

Roles	Responsibilities
	• Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels. • Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution, and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households.

Roles	Responsibilities
	• Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts. • Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies.

Roles	Responsibilities
	• Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators.

Roles	Responsibilities
	• Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams.

Roles	Responsibilities
	• Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities. • Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews.

Roles	Responsibilities
	• Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance. • Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors.

Roles	Responsibilities
	• Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis. • Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety.

Roles	Responsibilities
	• Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies.

Roles	Responsibilities
	• Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations. • Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager.

Roles	Responsibilities
	• Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. Contractors/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities.

Roles	Responsibilities
	• Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements.

Roles	Responsibilities
	• Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers.

Roles	Responsibilities
	• Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space). • Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments.

Roles	Responsibilities
	• Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness. • Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues.

Roles	Responsibilities
	• Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations. • Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately.

Roles	Responsibilities
	• Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. WASTE MANAGEMENT AND RECYCLING APPROACH

IFC EHS Guidelines-Waste Management document provides a waste hierarchy which lays down priorities for the best overall environmental option. Based on that, management of wastes will be carried out as following, in the order of decreasing preference:

1. Prevent waste generation where possible
2. Reduction of wastes by setting measures where possible
3. Reuse waste/excess materials where feasible
4. Recover waste materials where feasible
5. Recycle waste materials where feasible
6. Dispose waste off-site by a licensed waste company

Solid waste generated during the construction phase of the Project will originate from various activities, including construction operations, excavation works, material usage, accommodation facilities, and routine consumption of goods and supplies such as paper, plastic, metal, and glass containers. All solid waste streams will be classified and managed in accordance with their physical and chemical characteristics to enable effective separation, reuse, recycling, and disposal. The detail of management of all types of solid wastes, hazardous and non-hazardous wastes are given in Solid Waste Management Plan and Hazardous Material Management Plan.

The fundamental principle of solid waste management is to prevent waste generation at the source and, where prevention is not possible, to minimize, reuse, or recycle waste to the greatest extent practicable. All waste management activities will be carried out in compliance with relevant Turkish legislation and applicable international standards.

Waste types expected to be generated during the construction phase include excavation materials (soil, rock, inert debris), construction wastes (such as concrete remnants, packaging materials,

and surplus materials), domestic and residential waste from worker accommodation and administrative areas, packaging waste (paper, plastic, metal, glass), reusable components (such as timber, metal, and topsoil), and recyclable materials including waste tires and electrical or electronic equipment.

A Solid Waste Management Plan, Hazardous Material Management Plan, Environmental Accident and Spill Response Management Plan, and Excavated Material Management Plan will be implemented in accordance with national regulations and international standards for the management of all types of waste.

The management of excavated material, storage areas, and management strategies within the scope of national regulations and international standards are specified in this management plan.

In order to minimize and appropriately manage the wastes generated on site, following good management practices will be used:

- During the construction, Contractor and subcontractors will identify all potential waste streams at their point of generation, their nature (classification) and quantity to be generated in order to identify opportunities to apply waste management hierarchy. Types and quantities of the wastes to be generated will be monitored throughout the construction phase. A waste minimization practices will be applied during the construction activities.
- Prevention of waste generation via management practices (such as instituting procurement measures that recognize opportunities to return usable materials, avoiding or decreasing amount of excavated material by backfilling activities, etc.) will be the primary aim of this Plan.
- Reduction of waste generation (via management practices, avoiding or decreasing materials use, etc.) will be the secondary aim of this Plan.
- Waste recycling will be promoted within all Project activities and related trainings will be provided accordingly.
- Excavated material will be separated from other wastes.
- Personnel responsible from the handling of wastes will be trained regarding to proper handling and management practices.
- Dumpsites will be inspected regularly to ensure proper waste management measures are taken.
- Excavated material will not be disposed on-site under any circumstances unless it will be using during backfilling stage of the construction activities.

Construction of the Project and related structures such as the cuttings, earthworks, etc. will generate significant volumes of material from earthmoving and site clearance. The cut and fill balances along the Project route indicates that total amount of surplus material to be disposed will be around 10,8 million m^3. 22 surplus material dumpsites are planned to be used for the Project which are listed below.

Table V.1 The List of Dumpsites and Capacities

Location		Description of the Site	Capacity Information (m^3)	Planned Capacity Usage (m^3)
Km 52+544	Antalya, Serik	D-2	736,660.28	470,850.34
Km 59+580	Antalya, Serik	D-3	2,111,705.36	56,553.44
Km 61+500	Antalya, Manavgat	D-6	4,378,853.62	156,734.25
Km 64+160	Antalya, Manavgat	D-7	3,327,945.41	615,670.09
Km 71+800	Antalya, Manavgat	D-10	7,516,026.00	184.77
Km 74+360	Antalya, Manavgat	D-11	1,037,880.08	149,039.49
Km 76+240	Antalya, Manavgat	D-14	371,940.90	160,175.41

Location		Description of the Site	Capacity Information (m^3)	Planned Capacity Usage (m^3)
Km 78+790	Antalya, Manavgat	D-15	1,261,077.59	223,457.91
Km 86+340	Antalya, Manavgat	D-16	4,869,058.60	1,050,435.77
Km 87+800	Antalya, Manavgat	D-17	2,504,385.12	262,361.54
Km 95+410	Antalya, Manavgat	D-18	1,124,258.46	73,868.29
Km 95+410	Antalya, Manavgat	D-19	1,522,633.16	162,563.18
Km 98+290	Antalya, Manavgat	D-20	711,115.13	41,87.43
Km 100+000	Antalya, Manavgat	D-21	1,648,102.37	2,174.86
Km 107+850	Antalya, Manavgat	D-22	1,222,720.44	301,963.83
Km 110+820	Antalya, Manavgat	D-23	20,093,692.94	584,686.39
Km 113+050	Antalya, Manavgat	D-24	2,552,495.14	205,287.40
Km 123+000	Antalya, Alanya	D-26	5,638,396.17	871,743.65
Km 124+250	Antalya, Alanya	D-27	1,926,864.50	1,297,126.46
Km 127+000	Antalya, Alanya	D-28	3,763,723.90	383,579.61
Km 130+400	Antalya, Alanya	D-29	1,991,642.98	1,625,062.08
Km 132+720	Antalya, Alanya	D-30	3,307,202.05	2,132,211.56

Although as a worst case scenario, it was considered that all dumpsites will be used during the site preparation and excavation works of the construction phase, in practice, dumpsites will be used with the consideration of the construction schedule, project needs, backfilling capability of the excavation material etc.

As it can be seen from Table V.1, total capacity of the dump sites are two times more than project demands. Before use of new dumpsites started necessary permits and licenses will be acquired from relevant authority and AAOİAŞ will need to take opinion from relevant authorities (such as Ministry of Agriculture and Forest, municipality of the relevant district and/or province, and/or other authority which has responsibility on possible storage area in any manner) and the material will be stored accordingly. The statutory process is that the relevant authority will determine where the surplus materials are to be deposited (e.g. in abandoned quarries or borrow pits), and these instructions must be followed by AAOİAŞ and the subcontractors. In addition to local regulations, Project's ESHS requirements will be followed by AAOİAŞ during management of surplus material and dumpsites.

Where technically and economically feasible, reusable materials such as wood, metal, topsoil, and excavation waste will be repurposed for use in other construction activities or site restoration works. This approach will contribute to minimizing the volume of waste requiring off-site disposal.

VI. MITIGATION MEASURES FOR SOLID WASTE-RELATED RISKS AND IMPACTS

Although the primary principle of solid waste management is to prevent waste generation at the source, mitigation measures should be implemented to minimize the adverse environmental and social impacts of the solid waste generated during the construction phase. These measures are designed in accordance with the waste management hierarchy—prevention, minimization, reuse, recycling, recovery, and safe disposal—and are essential to ensure full compliance with Turkish legislation and international standards.

Excavated material will be collected and stored separately from other wastes in designated temporary excavated material storage areas.

Transportation and Access

The following management practices given below will be used during the transportation, reuse and disposal of excavated material.

- Protocols will be signed with the related municipalities or provincial administrations for the transfer of excavation material for the disposal. As per the clauses to be included in the protocols, when required licensed facilities will be obligated to provide relevant reports, drawings, agreements, calculations or any other related document in order for Contractor to check the suitability and capacity of the services provided. Additionally, Project personnel will be allowed to conduct periodic site visits/audits to visually confirm that the Project wastes are being managed in an environmentally responsible manner.
- The materials unearthed after the excavation will be evaluated in order to determine their technical properties. In this context, materials that meet the technical specifications, among the formations in the nature of backfilling material specified in the geotechnical report, will be used in the backfilling. Use of suitable excavation material as backfilling material will be the primary priority in backfilling works in order to maximize the reuse of the materials and reduce the amount of disposed excavated material. Based on that, the following items will be evaluated while deciding filling materials:
    - Materials that do not include the following contents:
        - Topsoil,
        - Trees, shrubs, roots and similar organic materials,
        - Materials subject to internal combustion, including coal dust,
        - Swamp or water-saturated clayey and marly soils,
        - Waste materials such as garbage, debris, etc.,
        - Snowy, icy and frozen soils, materials that will easily crumble with water and cause settlements,
        - Soils containing soluble matter more than 20% by weight such as gypsum and rock salt,
        - Highly serpentinized rocks that show clay behavior when weathered.
    - Rocks prone to weathering (marl, claystone, shale, etc.) dispersed under water and pressure will not be used in filling.
    - Materials that can be used in the fillings projected on the Project route, must meet the specifications given in UIC Code 719 R - Earthworks and Track-bed Layers for Railway Lines.

During the excavation activities, topography of the Project Area will also be taken into consideration in order to minimize the excavation amount.

For excavations that are not suitable for backfilling, will be transferred to the Excess Excavated Material Storage Areas (i.e. Dump Sites). Locations of the excavation activities that will be carried out along the Project route, and list of corresponding Excess Excavated Material Storage Areas defined in the Project ESIA Report that are determined in accordance with the locations of the excavation activities and will be used for the disposal of excess excavated materials, are given in Table V.1.

In any case, during all excavation works, Regulation on Control of Excavation Soil, Construction and Demolition Wastes will be complied with.

Records for generated excavated material, from time of generation to final destination, will be maintained. Within this regard, a sample excavated material log form is provided in Appendix A.

Daily inspections regarding on-site management of wastes will be conducted during the construction phase of the Project. A sample checklist for subjects to be covered during inspections is provided in Appendix B.

Pollution Prevention

The primary goal of the pollution prevention is to incorporate all the measures necessary to avoid or minimize the creation of costly contamination.

Air Quality:

- Use of water suppression at dump sites and transportation routes, especially in hot-dry seasons and in windy conditions,
- Loads in all trucks transporting dust-generating materials will be sprayed with water to suppress dust,
- Use of water suppression for control of loose materials on paved or unpaved road surfaces,
- Use of dust suppression techniques, such as covers, water suppression, or increased moisture content for open materials storage piles,
- In case alternative roads are present, traffic to the dump site will avoid passing through the settlements. If unavoidable, necessary measures (i.e. speed limits) will be taken to prevent/minimise transportation related emissions and inform the communities about the activities and schedule.
- Speed reduction for the means travelling inside the dump site.
- Trucks carrying fine material (excavation soil or fine material, etc.) will be covered with tarpaulin to prevent dust emissions.
- During the days of extreme wind conditions construction and material extraction works will be suspended temporarily and/or production amounts will be reduced (e.g. amount of material extracted at the quarries/borrow sites) at locations close to sensitive receptors.
- Loading and unloading of material will be carried out without scattering to the extent possible.
- Lighting of fire and burning of materials in will be prohibited.

In order to reduce the exhaust emissions from trucks using during the transportation of excavated material, the following actions shall be implemented:

- Activities will be conducted trying to use the minimum required number of means at the same time,
- Transportation distances will be minimized where possible,
- Vehicle engines and other machinery shall be kept turned on only if necessary, avoiding any unnecessary emission,
- All equipment and machinery must be maintained for compliance with standards and technical regulations for the protection of the environment and have appropriate certification,
- Machinery and equipment shall be periodically checked and maintained to ensure their good working condition.
- Monthly monitoring campaign will be conducted during the construction phase at baseline locations close to the dump sites. In case of any air quality related grievance, air quality measurement campaign (except from this plan and to be specific to the locations of the grievance) will be carried out immediately at the area where air quality related grievance is received.

Noise and Vibration Management:

Mitigation measures to be taken for noise and vibration management are given below:

- Trucks with lower sound power levels will be selected where possible.
- The sound power levels of the trucks to be used will meet the standards given in the Regulation on Machinery Safety.
- Maintenance of all the equipment / vehicles will be periodically undertaken in order to minimize the possible high noise levels generated by the equipment / vehicles.
- Suitable mufflers will be installed on engine exhausts and compressor components.
- Workers will be trained in noise abatement best practices, including avoiding unnecessary revving of engines and switching off equipment when it is not required.
- Haul routes will be well maintained and where steep gradients are required, operatives will be trained to minimize engine noise through avoiding unnecessary revving etc.
- Acoustic enclosures will be installed for equipment casing radiating noise.
- Operation hours of the specific pieces of equipment or operations, especially mobile sources operating through community areas, will be limited to hours between 7 am and 10 pm.
- Noise sources will be relocated to less sensitive areas where possible, in order to take advantage of distance and shielding.
- Project traffic routing through community areas will be reduced where possible.
- Grievance mechanism will also be used to record and respond to complaints.
- Monitoring campaigns will be performed monthly at the baseline noise measurement locations close to the dump sites.
- In case of any noise related grievance, noise measurement campaign (except from this plan and to be specific to the locations of the grievance) will be carried out immediately at the area where noise related grievance is received.

Hazardous Materials Management

In order to prevent incidents causing pollution of soil, water, groundwater and air; application of proper methods for transportation, handling, storage, usage and disposal of hazardous materials is crucial. Therefore, comprehensive measures set for management of hazardous materials in the scope of the Project are explained in Hazardous Material Management Plan and Environmental Accident and Spill Response Plan in order to ensure proper management to prevent (and/or reduce) environmental pollution and maintain health and safety in dumpsites, as well.

Rehabilitation

Rehabilitation of the dump sites will be planned with a separate Rehabilitation Plan after the completion of construction phase by AAOİAŞ.

VII. TRAINING

The employees of the Limak and subcontractors will require to attend the new-hire induction training that includes environmental and social awareness and compliance training to be aligned with Project ESIA and ESMS.

Regular internal and external (when necessary) trainings will be given to ensure that the mitigation measures indicated in this Plan are applied during the construction phase of the Project for all involved parties. Regular internal inspections will be conducted to ensure that the mitigation measures indicated in this Plan are applied during the construction phase of the Project.

Moreover, personnel responsible from the transportation of excavated material will be trained specifically in order for application of proper handling and management practices. A training on the management of excavated material will be provided to the workers. The training subjects at least includes:

- Requirements of this Plan;
- Precautions and risks when transportation of excavated material;
- Proper usage of Personal Protective Equipment (PPE);
- Excavated material minimization, segregation and storage; and
- Excavated material appropriate disposal.

VIII. MONITORING

Excavated material will be recorded on a monthly basis. Records for excavated material from time of generation to final destination, will be maintained. Within this regard, a sample waste log form is provided in Appendix A.

Daily inspections regarding on-site management of excavated material will be conducted during the construction phase of the Project. A sample checklist for subjects to be covered during inspections is provided in Appendix B.

Monitoring activities will be coordinated by the Limak's E&S Manager, in close collaboration with the Management teams. Key responsibilities will include reviewing the type and quantity of waste generated and disposed, verifying the implementation of waste segregation at source, and ensuring the consistent application of management measures.

The performance of contractors and subcontractors in implementing excavated material management requirements will be reviewed through environmental audits, site supervision reports, and field observations. Any identified non-conformities will trigger timely corrective and preventive action plans. Monitoring will also include follow-up assessments to confirm the effectiveness of implemented measures and to ensure recurrence is prevented.

In addition to internal monitoring, inspections may be carried out by relevant public institutions, including the Ministry of Environment, Urbanization and Climate Change, in accordance with Turkish legislation. The frequency and scope of these inspections will be determined by the authorities and may include review of monitoring data, on-site waste handling practices, and documentation of compliance.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of inspections, and responsible parties. These monitoring activities will be essential for evaluating the effectiveness of excavated material mitigation measures and ensuring full compliance with national regulations and Project standards.

Table VIII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Excavated Material Generation	Road construction sites, quarries	Excavated material amounts will be recorded.	Monthly	AAOİAŞ, Limak, Environmental Independent Experts
Excavated Material Management	Road construction sites, quarries, dump sites	Excavated material storage areas and site excavated material management practices (separation, storage) will be inspected	Weekly	AAOİAŞ, Limak Environmental Independent Experts

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Transfer and Disposal	Dump sites	Dump sites will be audited to confirm that the Project excavated material are being managed in an environmentally responsible manner.	Weekly	AAOİAŞ, Limak Environmental Independent Experts
Annual Excavated Material Generation	Road construction sites, quarries, dump sites	Annual waste declaration records will be checked including excavated material.	Annually	AAOİAŞ, Limak Environmental Independent Experts
Grievance	All active construction and camp areas, dump sites, settlements near the Project areas	Number of grievances received regarding to excavated material management, will be recorded.	Monthly	AAOİAŞ, Limak Environmental Independent Experts
Training	All Project Areas	Employees will be trained.	Quarterly	AAOİAŞ, Limak Environmental Independent Experts

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Main Contractor (Limak) and relevant subcontractors.

All excavated material-related findings, including violations of handling protocols, non-compliance incidents, or complaints received from surrounding communities, will be documented in accordance with national environmental regulations and Project procedures. In the event of serious violations—such as illegal disposal or mismanagement of hazardous waste—AAOİAŞ will ensure that the issue is reported to the competent authorities and that appropriate technical, procedural, and contractual actions are taken.

IX. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table IX.1 Key Performance Indicators – Construction Phase KPIs

Monitoring Parameter / Performance Indicator	Target	Frequency	Responsible Party
Excavated material amount collected of each dump site	Minimized and continued improvement in excavated material generation amounts	Quarterly	AAOİAŞ, Environmental Independent Experts
Excavated material management practices planned vs completed	100%	Quarterly	AAOİAŞ, Environmental Independent Experts
Number of non-compliances with excavated material management practices identified in this Plan	Minimized and continued improvement	Quarterly	AAOİAŞ, Environmental Social Experts
% of the validity of the agreements and protocols regarding excavated material transfer and disposal	100%	Quarterly	AAOİAŞ, Environmental Independent Experts
Annual amount of declared excavated material	Declared every year	Annually	AAOİAŞ, Environmental Independent Experts
Number of spillages / leakages resulting soil contamination	Zero per year	Annually	AAOİAŞ, Environmental Independent Experts

Number of grievances received regarding excavated material management	Minimized and continued improvement in number of grievances	Monthly	AAOİAŞ, Environmental Independent Experts
Number of trainings planned vs completed	100%	Monthly	AAOİAŞ, Environmental Independent Experts

X. AUDIT AND REVIEW

The implementation of this Plan should be regularly monitored and reviewed in accordance with the ESMMP. All incidents and non-conformities should be documented and reported as outlined in the Plan. Contractors and subcontractors should be subject to audits conducted by the Project Sponsor within the scope and schedule defined in the Contractor and Subcontractor Management Plan. These audits and the associated records should be managed in compliance with the Project's established plans and procedures. Relevant records that will be reviewed during audits may include the external grievance and suggestion tracking database related to waste management issues, the internal grievance and suggestion tracking database concerning excavated material handling and site practices, training records, waste inventory logs, contractor waste transfer documentation, and non-conformity records related to excavated material segregation, storage, or disposal. Observations and deficiencies identified during audits should be recorded in formal audit reports, and all findings requiring improvement should be registered under Corrective Actions. Project management should review audit outcomes and corrective action records, follow up on progress, and ensure that additional measures are implemented where necessary.

XI. REPORTING

Regular reporting will be conducted to ensure the effective implementation and continuous improvement of management activities throughout the construction phase of the Project. Reporting will be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Evidence of the implementation of the actions/measures and related results are collected through inspection and auditing activities as detailed in Section X "Audit and Review" of this Plan; these evidences are described in the audit reports.

Limak and Subcontractors are responsible to collect the excavated material related statistics (including all types of training delivered to employees and incident records) on a monthly basis and report to the AAOİAŞ. If any subcontractor is involved, it is responsible for duly implementing requirements included in this Plan under the Contractor's supervision.

The results of the inspection and audit activities will be summarized in a Report on a biannual basis that will be made available to stakeholders, if requested, which is under the responsibility of the Contractor. This report will constitute the basis for the monitoring report to be available for the Lenders.

The following reporting requirements apply for AAOİAŞ:

- Incident reporting;
- Emergency response reporting;
- Records of annual emergency response training exercises;
- Semi-annual reports on KPIs and performance trends;
- Monthly reports of relevant training activities completed and attendance registers to be maintained;

- Daily/Weekly/Monthly reports of site inspection activities;
- Audit reports;
- Inspection logs and status of non-compliances.

In addition, the following external reporting will be done:

- Monthly and biannual ESHS reports on KPIs and performance trends will be submitted by EPC to SPV,
- All environmental and social incidents will be appropriately documented, notified and reported in accordance with established procedures the terms and conditions by EPC to SPV,
- The Lenders will be notified of incidents pursuant to the terms and conditions agreed upon in the Finance Agreements through SPV.

Reports will be prepared using data gathered through excavated material monitoring activities defined under this Plan. The results and supporting evidence of these monitoring activities (e.g., waste quantity logs, contractor compliance records, and photographs) will be documented in detail within appropriate reporting formats. This section of the Plan outlines the instructions and requirements for implementing these reporting activities.

APPENDIX A – EXCAVATION MATERIAL LOG FORM

No	Date	Amount (ton or m^3)	Transporter	Disposer	Name of the Dumpsite
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

APPENDIX B – EXCAVATION MATERIAL MANAGEMENT INSPECTION CHECKLIST

Inspection Date:		
Inspection Location:		
Control Measure	**Compliance (Yes/No)**	**Comment**
Are excavated material being stored at separate location from other wastes?		
Has a map been produced showing the temporary excavated material storage locations at the site which are visible to all workers?		
Are all temporary excavated material storage area separated and signed to prevent cross contamination of other waste materials?		
Are licenses of companies contracted for excavated material transport and disposal valid and up-to-date?		

SOIL MANAGEMENT and EROSION CONTROL PLAN

REVISION STATUS		
Revision Date	**Rev. No**	**Explanation**
16.06.2025	00	This plan is prepared according to TS EN ISO/IEC 9001:2015, TS EN ISO/IEC ISO 14001:2015, TS EN ISO/IEC 45001:2018 and IFC Performance Standards

SOIL MANAGEMENT and EROSION CONTROL PLAN

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LIST OF ABBREVIATIONS

AAOİAŞ	Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.
CH	Critical Habitat
CLO	Community Liaison Officer
E&S	Environmental and Social
EHS	Environmental, Health, and Safety
ER	Employee Relations
ERT	Emergency Response Team
ESHS	Environmental, Social, Health And Safety
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
EU	European Union
IFC	International Finance Corporation
ISO	International Organization for Standardization
KPIs	Key Performance Indicators
Limak	Limak İnşaat Şanayi ve Tic. A.Ş.
MSDS	Material Safety Data Sheet
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
RCA	Root Cause Analysis
SEP	Stakeholder Engagement Plan
SPV	Special Purpose Vehicle (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş.)
SRP	Spill Response Personnel
WHO	World Health Organization

I. PURPOSE AND SCOPE

This Soil Management and Erosion Control Plan (SMECP) ("the Plan") has been prepared for the Antalya–Alanya Motorway Project ("the Project").

This Plan has been developed to provide further details on the measures to be implemented during the construction phase of the Project to ensure that the actual environmental impacts are consistent with those evaluated in Environmental and Social Impact Assessment (ESIA) and that mitigation measures are applied as intended and effective.

This SMECP has been developed according to the Turkish regulatory framework, International Finance Corporation (IFC) Performance Standards (PSs) and IFC General and Sector Specific Environmental, Health and Safety (EHS) Guidelines, IFC Environmental, Health, and Safety Guidelines for Railways, IFC Environmental, Health, and Safety Guidelines for Construction Materials Extraction and related EU Directives.

The purpose of this SMECP is to provide a clear set of actions and responsibilities to:

- Ensure proper topsoil stripping, stockpiling and application measures are taken, in order to achieve successful rehabilitation of the Project Area
- Prevent/minimize erosion at the Project Area
- Prevent/minimize soil pollution at the Project Area

This Plan applies to all Project activities under the Contractor's supervision, its subcontractors and to all employees. The Contractor is the main responsible for the implementation of this Plan. Subcontractors will be responsible to work in line with all environmental and social management systems (ESMS) of the Contractor.

This management plan is a living document developed with the best available information and will be reviewed and revised as necessary due to the nature of the construction and progress.

This Plan should be implemented by all construction-phase parties, including the Project Sponsor (Antalya-Alanya Otoyolu İnşaat Yatırım ve İşletme A.Ş. – AAOİAŞ), the Main Contractor (Limak), and all subcontractors. Responsibilities related to implementation, training, monitoring, and reporting should be clearly defined and communicated across all relevant levels. In case of changes in project design, materials used, or construction methodology, this Plan should be reviewed and updated accordingly.

II. LEGISLATIVE FRAMEWORK AND REFERENCE STANDARDS

This section includes policies, standards and requirements of reference for this Plan that are applicable for, but not limited to, construction phase of the Project. Project standards are described in the Project ESIA and are listed below:

- National legislative requirements and all permits, licenses and approvals
- IFC PSs
- Equator Principles (EPs) IV
- Other good international industry practices (GIIP) including ISO 9001:2015 - Quality Management Systems, ISO 14001:2015 – Environmental Management Systems and ISO 45001:2018 - Occupational Health and Safety Management Systems
- International Conventions and Protocols Türkiye is a party to

- The Contractor's Quality Policy, Health, Safety and Environmental Policy and related practices and procedures.

II.1 National Requirements

The following Turkish laws and regulations provide the legal foundation for managing environmental accidents, hazardous material spills, and associated risks during the construction phase of the Project:

- Environmental Law (Law No. 2872)
- Law on Protection of Soil and Land Use (No. 5403)
- Regulation on Reclamation of Land Deteriorated by Mining Activities
- Regulation on Control of Soil Pollution and Contaminated Lands by Point Sources
- Regulation on Waste Management
- Regulation on Mining Wastes
- Regulation on Control of Excavation Soil, Construction and Demolition Wastes
- Regulation on Contaminant Release and Transportation Record

II.2 International Standards and Conventions

In addition to Turkish national legislation, the following international standards and guidelines should be taken into account to ensure compliance with best practices and international lender requirements.

The EPs are a set of voluntary environmental and social guidelines that have been adopted by a significant number of financial institutions influential in the project finance market. The EPs comprise a set of ten broad principles that are underpinned by the environmental and social policies, standards and guidelines:

- Principle 2: Environmental and Social Assessment will require the client to conduct an appropriate Assessment process to address, to the EPFI's satisfaction, the relevant environmental and social risks and scale of impacts of the proposed Project.
- Principle 3: Applicable Environmental and Social Standards - The Assessment process should, in the first instance, address compliance with relevant host country laws, regulations and permits that pertain to environmental and social issues.
- Principle 4: Environmental and Social Management System - an Environmental and Social Management Plan (ESMP) will be prepared by the client to address issues raised in the Assessment process and incorporate actions required to comply with the applicable standards.

IFC PS 1 Assessment and Management of Environmental and Social Risks and Impacts, underscores the importance of managing environmental and social performance throughout the life of a project. An effective ESMS is a dynamic and continuous process initiated and supported by management, and involves engagement between the clients, its workers, local communities directly affected by the project (the Affected Communities) and, where appropriate, other stakeholders.

IFC PS 3 Resource Efficiency and Pollution Prevention, outlines a project-level approach to resource efficiency and pollution prevention and control in line with internationally disseminated technologies and practices. In addition, this PS promotes the ability of private sector companies to adopt such technologies and practices as far as their use is feasible in the context of a project that relies on commercially available skills and resources.

IFC EHS Guidelines - The EHS Guidelines are technical reference documents with general and industry-specific examples of GIIP. The EHS Guidelines contain the performance levels and measures

that are generally considered to be achievable in new facilities by existing technology at reasonable costs.

IFC EHS Guidelines for Railways and EHS Guidelines for Construction Materials Extraction are applicable to the Project.

In addition to these, related EU directives are given below:

- Directive 2004/35/CE of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage
- Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control

III. LINKAGE WITH OTHER PROJECT PLANS AND PROCEDURES

This Plan is supported by other management plans and procedures developed under the Environmental and Social Management System (ESMS) of the Project. The following plans and procedures are particularly relevant and should be implemented in coordination with the Soil Management and Erosion Control Plan:

- Solid Waste Management Plan
- Resource Efficiency Management Plan
- Excavated Material Management Plan
- Water, Wastewater, and Storm Water Management Plan
- Biodiversity Management Plan
- Hazardous Materials Management Plan
- Occupational Health and Safety Management Plan
- Community Health, Safety, and Security Management Plan
- Traffic Management Plan
- Environmental and Social Management and Monitoring Plan (ESMMP)

The effective integration of these plans should be ensured to maintain compliance with national regulations and international standards and to minimize the cumulative environmental and social impacts of construction activities.

IV. ROLES AND RESPONSIBILITIES

The organizational structure presented in Figure IV.1 outlines the key management roles and reporting lines for the construction phase of the Project. This structure defines the hierarchical distribution of responsibilities and facilitates coordination among various departments involved in the execution of environmental and social management plans. Each role within this structure should ensure that assigned tasks are executed in line with the Project's ESMS requirements and that inter-departmental coordination is maintained effectively.

In support of this structure, Table IV.1 is provided to outline the roles and responsibilities specifically related to the implementation, monitoring, and reporting requirements of this Plan. The table clarifies the functional duties of each party involved in ensuring the effective execution of the measures described herein and reinforces accountability across all relevant units.

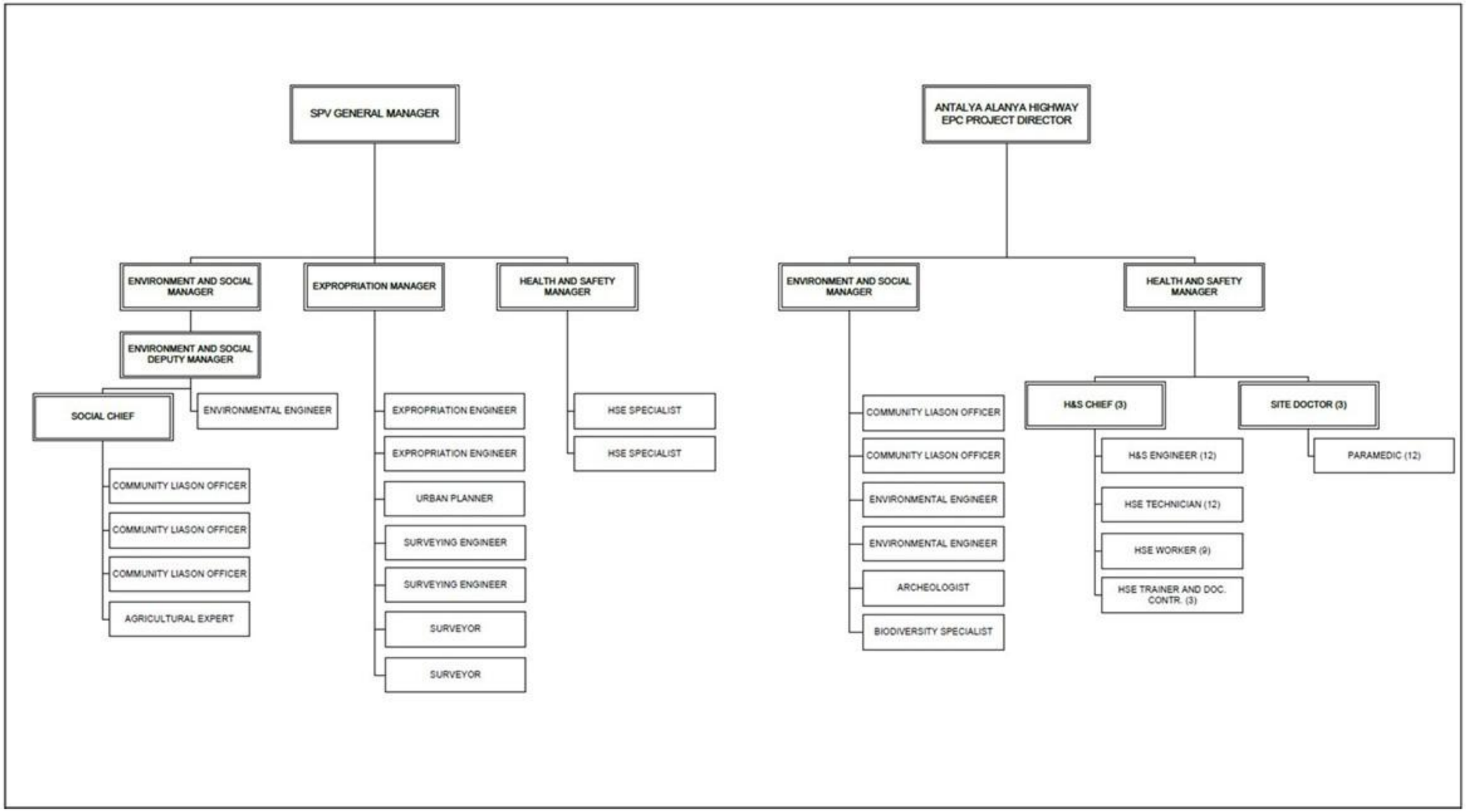

Figure IV.1 Organizational Structure of the Project Sponsor (AAOİAŞ) and Main Contractor (Limak) E&S and H&S Teams

Table IV.1 Allocation of Roles and Responsibilities for Plan Implementation

Roles	Responsibilities
General Manager (SPV)	• Define and implement the overall business strategy and direction of the SPV in alignment with shareholder and stakeholder expectations. • Ensure the development, revision, and execution of project-specific management plans, including the Environmental and Social Management Plan (ESMP) in accordance with company policies and international standards. • Ensure the provision of necessary resources and organizational support for the implementation of all SPV plans, including E&S and H&S. • Oversee the day-to-day operations of the SPV to ensure project milestones and deliverables are achieved efficiently and sustainably. • Supervise and coordinate EPC contractors and subcontractors to ensure proper execution of construction, commissioning, and operational phases. • Ensure that managerial decisions are made regarding the implementation of all SPV policies and plans by EPCs and subcontractors. • Ensure the preparation, dissemination, and implementation of the Environmental and Social Management Plan, and that it is communicated clearly to all EPC contractors and subcontractors. • Supervise and ensure contractor/subcontractor compliance with E&S and H&S plans and standards. • In case of non-compliance, ensure correct and preventive actions are taken in collaboration with the EPC, SPV's E&S Manager, and H&S Manager. • Coordinate internal intervention and emergency response procedures in case of environmental, social, or safety-related incidents. • Make executive decisions on project budgeting, resource allocation, and capital management to support project execution and sustainability, H&S and E&S compliance. • Ensure sufficient funding and personnel are dedicated to environmental, social, and H&S obligations under the project's contractual and regulatory frameworks. • Ensure the monitoring environmental, social and financial performance, reporting, and risk exposure of the SPV, ensuring transparency and accountability to stakeholders and investors. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders. • Ensure that all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Liaise with legal counsel to manage the SPV's legal framework, mitigate risks, and fulfil all contractual obligations. • Provide timely updates, reports, and presentations on the SPV's performance, risks, compliance status, and community engagement efforts. • Foster positive relationships with government agencies, financial institutions, civil society, and project-affected communities.

Roles	Responsibilities
	• Lead the development and execution of the exit strategy or asset disposal plan upon project maturity or completion. • Oversee the financial and legal wind-down of the SPV in accordance with regulatory and shareholder requirements.
E&S Manager (SPV)	• Review and ensure the preparation, revision, and implementation of E&S Management Plans in accordance with national laws, regulations, company policies, international standards and lender requirements. • Develop and manage the overall E&S management system and project-specific sub-plans. • Review and update the E&S Management Plan in coordination with the EPC's E&S Manager and construction teams. • Ensure that environmental, and community safety measures are implemented through method statements and site practices. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that EPC and subcontractors correctly implement site practices. • Provide technical support to EPC and subcontractors for the implementation of E&S Plans. • Collaborate with internal teams (e.g., H&S, Legal, Procurement) to integrate E&S criteria into project operations and contracts. • Monitor the environmental and social performance of EPC and subcontractors to ensure compliance. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Monitor EPC and subcontractor adherence to the requirements of the E&S Management Plan. • Ensure EPC and subcontractors maintain accurate records, including those of corrective and preventive actions. • Supervise the E&S Deputy Manager oversee the implementation of monitoring systems. • Ensure that EPC and subcontractors provide required E&S training. • Review and validate training records and related documentation. • Ensure effective investigation and documentation of environmental and social incidents. • Lead or support the implementation of corrective actions and incident prevention measures. • Coordinate emergency preparedness and community safety procedures. • Prepare and submit E&S compliance and performance reports to internal and external stakeholders, including lenders and regulators. • Maintain documentation related to site compliance, audits, training, and grievances. • Support stakeholder engagement activities and consultations with local communities.

Roles	Responsibilities
	• Oversee the Grievance Mechanism (GM) and ensure timely resolution of community and worker complaints. • Engage with regulatory authorities, auditors, and NGOs on E&S compliance and performance matters • Coordinate obtaining environmental related permits
H&S Manager (SPV)	• Ensure the preparation, revision, and implementation of the health, safety, community related plans and documents in accordance with company policies, regulatory obligations, international standards and lender requirements. • Ensure the conditions and obligations specified in the health, safety, community related plans and documents are implemented and adhered to by EPC and subcontractors in accordance with company policies, regulatory obligations, international standards and lender requirements. • Contribute to project risk assessments and job hazard analyses (JHAs) and ensure these are updated regularly. • Ensure that all construction site activities are carried out safely by EPC and subcontractors. • Ensure that safety, health, and community safety measures are implemented by EPC and subcontractors through appropriate method statements and site practices. • Ensure that physical site boundaries are clearly defined and maintained by EPC and subcontractors to control site access and protect public safety. • Provide technical support to EPC and subcontractors for the proper implementation of the safety, health, and community safety related plans. • Supervise the integration of safety controls into daily work permits, toolboxes, and field activities. • Monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Track and analyse safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Ensure root causes are identified, documented, and that corrective actions are implemented and verified. • Ensure timely and appropriate resolution of complaints related to public health and safety. • Support EPC and subcontractors in the development and delivery of site-specific H&S training programs. • Ensure safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Maintain accurate records of inspections, incidents, safety meetings, and corrective actions. • Report on H&S performance, non-compliance, and corrective actions to Project General Manager and external stakeholders.

Roles	Responsibilities
	• Coordinate with health and safety teams to align safety measures with broader site and community risk controls. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Expropriation Manager (SPV)	• Implement the Resettlement Action Plan (RAP) or equivalent frameworks in alignment with national regulations and international standards. • Identify affected lands, properties, and stakeholders in collaboration with survey, legal, and engineering teams. • Coordinate with government bodies and legal authorities for expropriation procedures and approvals. • Engage with landowners, occupants, and project-affected communities to explain project scope, land requirements, compensation processes, and grievance mechanisms. • Mediate and resolve disputes related to land ownership, valuation, or resettlement with tact and legal support where necessary. • Coordinate resettlement efforts where required, including livelihood restoration programs. • Maintain detailed documentation of compensation agreements, payments, and relocations. • Ensure expropriation processes comply with national laws, international standarts, lender requirements, and the SPV's internal policies. • Collaborate with E&S teams to ensure that land acquisition activities do not lead to violations of environmental or social management plans. • Track and report progress of land acquisition and resettlement activities to senior management and external stakeholders. • Provide input for audits, investor updates, and compliance reviews related to expropriation. • Identify and mitigate risks related to delayed acquisition, legal disputes, or community opposition. • Implement contingency plans to avoid disruption to project timelines due to expropriation issues.
Deputy E&S Manager (SPV)	• Lead the development, implementation, and continuous improvement of the Environmental and Social Management. • Implement all project activities comply with local laws, environmental regulations, corporate governance policies, and international best practices and lender requirements. • Provide strategic leadership and oversight to the E&S team, including Managers, Specialists, Engineers, and Community Liaison Officers, ensuring effective coordination and resource allocation. • Ensure EPC contractors and subcontractors consistently comply with E&S requirements through monitoring, audits, corrective actions and training programs. • Oversee incident and non-compliance management, including investigations, corrective/preventive measures, and stakeholder communication.

Roles	Responsibilities
	• Serve as the principal liaison for all environmental and social matters with government regulators, financial institutions, communities, NGOs, and other stakeholders. • Promote a culture of environmental and social responsibility across the SPV and its stakeholders, driving continuous improvement and risk mitigation. • Support executive decision-making by providing timely reports and insights on E&S performance, risks, and emerging trends. • Lead community engagement strategies in collaboration with the Environmental Engineer, Agricultural Expert, Social Chief and CLOs to ensure effective grievance management and positive relations with project-affected communities. • Ensure E&S considerations are integrated into project planning, budgeting, and closure activities, including restoration and post-construction monitoring. • Support the environmental and community safety measures are implemented through site practices and method statements by the EPC and subcontractors. • Ensure that the EPC and subcontractors carry out site practices correctly. • Ensure that EPC and subcontractors maintain relevant records. • Ensure that EPC and subcontractors maintain records of corrective and preventive actions. • Ensure that Management Plans are prepared, revised, and implemented in accordance with company policies. • Ensure that EPC and subcontractor provide the necessary training through the review of training records and relevant training documents. • Conduct comprehensive investigations in case of accidents and incidents. • Manage waste within the entire project footprint and area of influence, prioritizing the designated areas to be used under the scope of the Project. • Coordinate environmental and social monitoring programs
Social Chief (SPV)	• Supervise and mentor CLOs, ensuring their work aligns with project priorities and stakeholder engagement strategy. • Develop and implement work plans and schedules for the CLO team. • Ensure consistent messaging, processes, and reporting methods across all field teams. • Conduct regular team meetings to review community issues, grievances, engagement outcomes, and field updates. • Lead the implementation of the Stakeholder Engagement Plan (SEP) and ensure it reflects community realities. • Oversee the planning and execution of community consultations, public meetings, and disclosure activities. • Ensure that engagement activities are inclusive of vulnerable and marginalized groups. • Build and maintain positive, trust-based relationships with local communities, leaders, and institutions. • Supervise the effective functioning of the grievance mechanism (GRM) at community and project levels.

Roles	Responsibilities
	• Ensure all grievances are recorded, processed, and resolved in a timely and transparent manner. • Analyse grievance trends and escalate systemic issues to the E&S Manager. • Contribute to the continuous improvement of the GRM process based on community feedback and internal review. • Monitor the performance of social engagement activities and their compliance with SEP objectives. • Ensure accurate, timely, and complete reporting of CLO activities, stakeholder interactions, and grievance outcomes. • Review and validate weekly/monthly reports from CLOs and prepare consolidated updates for senior management. • Ensure all engagement activities meet national regulations and international standards (e.g., IFC PS, EBRD PR, and Equator Principles). • Identify training needs and deliver or coordinate training for CLOs on stakeholder engagement, conflict resolution, and field documentation. • Promote professional development and capacity building within the social team. • Train subcontractors and relevant staff on community interaction protocols and grievance management. • Contribute to the development, review, and periodic updating of the SEP and related social management plans. • Ensure CLOs support the implementation and documentation of these plans at the field level. • Support the integration of lessons learned into updated plans and engagement strategies. • Coordinate with the E&S Manager, E&S Specialists, H&S, legal, and construction teams to address community-related impacts. • Support alignment between community concerns and project execution through proactive communication with technical departments. • Contribute social performance inputs to reports for lenders, regulators, and corporate leadership.
Agricultural Expert (SPV)	• Assess project impacts on agricultural land, productivity, and rural livelihoods in coordination with the expropriation and E&S teams. • Support the development and implementation of livelihood restoration strategies for project-affected farmers and agricultural households. • Conduct field visits to gather agricultural baseline data, monitor changes, and evaluate effectiveness of mitigation measures. • Provide technical input to social risk assessments, Resettlement Action Plans (RAPs). • Engage with local agricultural institutions, cooperatives, and extension services to coordinate support and training programs. • Participate in community consultations with a focus on agricultural concerns and provide input into grievance resolution related to land use, crop loss, or livelihood impacts.

Roles	Responsibilities
	• Help identify and implement sustainable farming initiatives and compensation strategies aligned with local practices and market trends. • Monitor and report on agricultural livelihood indicators, ensuring alignment with project and lender requirements. • Contribute to the review and update of relevant social and livelihood management plans. • Support the Social Chief and Community Liaison Officers in field-level implementation, training, and stakeholder engagement related to agricultural matters.
Expropriation Engineer (SPV)	• Review and validate cadastral maps, land parcel data, and expropriation plans in coordination with the design and survey teams. • Prepare and update technical drawings, parcel-level expropriation maps, and cross-sections for engineering verification. • Ensure that technical documentation aligns with the project's legal, spatial requirements, international standards and lenders requirements for expropriation. • Support the preparation of expropriation folders with complete technical details for each parcel. • Conduct field inspections and site verifications to confirm parcel boundaries, existing structures, crops, and utilities. • Record and document physical conditions of affected properties, including GPS coordinates and photographic evidence. • Collaborate with surveyors, property evaluators, and legal experts during field visits and technical assessments. • Maintain a database of technical information related to affected parcels, expropriation status, and engineering reviews. • Prepare technical summaries, verification reports, and progress updates for the Expropriation Manager. • Assist in tracking parcel-by-parcel technical clearance and report on delays or technical discrepancies. • Support interactions with landowners during technical inspections, mapping explanations, and asset identification. • Coordinate with municipal engineers, cadastral offices, and other public institutions to resolve technical inconsistencies. • Assist the legal and valuation teams by providing technical input for asset valuation and compensation processes. • Ensure all engineering-related activities comply with national laws, environmental and social standards, international standards, lender requirements and project guidelines. • Support the preparation of technical annexes for land acquisition reports, grievance responses, and audit documentation. • Provide support during audits by lenders or regulatory agencies on technical matters related to expropriation.

Roles	Responsibilities
Urban Planner (SPV)	• Conduct land use assessments and spatial analysis to support expropriation, resettlement planning, and infrastructure alignment. • Identify and evaluate potential resettlement areas in collaboration with the social and engineering teams, ensuring suitability in terms of accessibility, services, and community integration. • Prepare or review layout plans for resettlement sites or impacted urban areas in compliance with national and local planning standards. • Support the preparation of expropriation and land-use strategy documents that align with municipal and regional development plans. • Ensure that project land acquisition activities are consistent with zoning, land classification, and regulatory requirements. • Liaise with urban planning authorities and municipalities to facilitate approvals, permits, and community development. • Work with the Legal and Expropriation teams to resolve spatial planning disputes or challenges related to land classification. • Participate in field visits, stakeholder consultations, and public meetings to present planning proposals and gather community feedback. • Prepare maps, presentations, and reports to communicate spatial strategies and resettlement layouts to stakeholders.
Surveying Engineer (SPV)	• Plan, coordinate, and supervise all surveying activities related to the project, including topographic, cadastral, and engineering surveys. • Review and validate survey data, maps, and drawings prepared by EPC contractors or subcontractors to ensure accuracy and compliance with project requirements. • Support the expropriation process by verifying parcel boundaries, land ownership, and physical asset inventories. • Ensure that all survey activities are conducted using appropriate instruments (e.g., GPS, total station, drones) and are aligned with national and international standards. • Coordinate with design, engineering, and legal teams to resolve discrepancies in land measurements, maps, and legal documentation. • Maintain an up-to-date geospatial database of all surveyed areas and assets affected by the project. • Participate in site inspections and field verifications alongside Expropriation Engineers, CLOs, and property evaluators. • Provide technical inputs for land acquisition documentation, grievance resolution, and community consultation processes. • Ensure survey documentation is archived properly and is accessible for audits, regulatory reviews, and internal controls. • Supervise EPC and subcontractor survey teams to ensure the implementation of safe and efficient survey operations within the project area. • Liaise with relevant public institutions (e.g., cadastral offices, municipalities) for official validation of survey outputs when required. • Contribute to the preparation of maps, cross-sections, and spatial plans for environmental, social, and engineering applications.

Roles	Responsibilities
Surveyor (SPV)	• Conduct detailed topographic and cadastral surveys of affected land parcels and assets using appropriate tools and technologies. (e.g., total stations, GPS, drones) • Mark land boundaries in coordination with landowners, communities, and relevant authorities to support clear delineation for expropriation. • Assist in preparing and verifying land acquisition maps, parcel boundaries, and infrastructure alignments based on project design and engineering data. • Support inventory of physical assets (buildings, trees, irrigation systems, crops, etc.) for compensation assessment purposes. • Ensure coordination between survey data and GIS systems, and assist in maintaining an up-to-date spatial database of all expropriation-related parcels and assets. • Work closely with the Expropriation, Legal, Social, and Civil Engineering teams to ensure consistency and technical accuracy in documentation. • Participate in site verification visits with stakeholders, ensuring transparency and consensus during boundary marking and inventory. • Provide survey data and documentation required for legal registration, compensation, and permitting processes. • Ensure the safe, efficient use and maintenance of all surveying equipment. • Maintain clear records and archives of field data, survey results, and maps in compliance with company and regulatory standards.
HSE Specialist (SPV)	• Support the execution of the safety, health and community safety related plans, and ensure site activities are carried out safely by EPC contractors and subcontractors in-line with applicable laws, international standards and lender requirements. • Conduct regular site inspections, hazard identification, and risk assessments; follow up on corrective and preventive actions. • Monitor compliance with safety protocols and ensure H&S measures are integrated into method statements and work procedures. • Maintain H&S documentation, including safety permits, incident records, and training logs, etc. • Participate in accident and incident investigations, ensuring findings are documented and lessons are communicated across teams. • Support H&S training delivery for all relevant site personnel and review contractor training records for adequacy. • Ensure the construction site is properly demarcated and safety signage and barriers are in place and maintained. • Assist in resolving complaints related to occupational health, site safety, and community safety in coordination with relevant teams. • Contribute to the review and update of safety plans and procedures based on field experience and audit findings. • Provide technical guidance to contractors and subcontractors to improve health and safety performance. • Implement the integration of safety controls into daily work permits, toolboxes, and field activities.

Roles	Responsibilities
	• Assist to H&S manager to monitor the compliance of EPC and subcontractors with the safety, health, and community safety related plans, and applicable laws, international standards and lender requirements. • Conduct regular inspections, audits, and hazard identification walkthroughs on construction sites. • Prepare safety performance metrics (e.g., LTIs, near misses, TRIR) and recommend corrective measures. • Participate in and oversee comprehensive investigations of accidents and incidents. • Implement corrective actions and conduct root causes analysis. • Prepare documentation of remedial and corrective actions. • Conduct safety inductions, toolbox talks, and job-specific training are conducted and recorded. • Engage with regulatory authorities on inspections, audits, and compliance verification.
Project Director (EPC)	• Define and oversee the implementation of the overall EPC execution strategy in alignment with contract objectives and company standards. • Lead interdisciplinary project teams, coordinating EPC functions to achieve key milestones. • Make strategic decisions regarding project resourcing, budget allocation, and the efficient use of materials and personnel. • Ensure all project personnel are fully informed of and compliant with project plans and standards. • Coordinate internal management intervention in case of emergencies. • Ensure the preparation, revision, and implementation of project management plans (HSE, E&S, QA/QC, etc.) in line with company policies, legal frameworks, international standards, SPV and lender requirements. • Communicate all relevant plans clearly to subcontractors and monitor their performance. • Approve and monitor regular site inspections and safety reviews. • Track project KPIs, timelines, and budgets to ensure performance objectives are met. • Ensure that all employees comply with the obligations specified in the project's management plans during activities. • In case of non-compliance, ensure appropriate corrective and preventive actions are taken in coordination with the E&S Manager and H&S Manager • Ensure all personnel receive necessary training in health, safety, environment, and social performance. • Approve training plans and assess their implementation across EPC and subcontractor teams. • Serve as the primary EPC representative to the SPV, client, and key stakeholders. • Maintain communication channels with project owners, subcontractors, and vendors to ensure alignment and compliance.

Roles	Responsibilities
	• Coordinate with regulatory authorities, community representatives, and auditors as required. • Address stakeholder concerns proactively and transparently, particularly those related to safety, environmental, and social matters. • Oversee risk management and mitigation strategies related to technical, health, safety, community safety, environmental, and social aspects. • Ensure quality management systems are applied consistently across project phases. • Supervise the preparation and approval of documentation related to claims, variations, and commercial issues. • Monitor third-party inspections, audits, and due diligence efforts. • Supervise and coordinate subcontractors to ensure proper execution of construction phases.
E&S Manager (EPC)	• Ensure the preparation, revision, and implementation of E&S Management Plans in accordance with company policies, international standards, and lender requirements. • Review and update the environmental and social management plans in coordination with relevant contractor specialists and construction teams. • Facilitate coordination with the SPV's E&S Manager for compliance audits and reporting. • Implement environmental and social measures through site practices and method statements. • Ensure that all conditions and obligations outlined in the environmental and social management plans are implemented and adhered to during project activities. • Ensure employees and contractors in fulfilling the requirements and relevant trainings of the environmental and social management plans. • Ensure the environmental and social management plans are communicated and implemented by Contractors/Subcontractors. • Monitor compliance of Contractors/Subcontractors with environmental and social management plans requirements. • Ensure implementation of safety measures such as traffic regulation and utility protection. • Ensure site boundaries are properly defined and monitored. • Participate in regulatory inspections and third-party assessments. • Integrate E&S KPIs into contractor evaluations and performance reviews. • Ensure all site personnel receive appropriate E&S training. • Oversee subcontractor E&S onboarding and refresher sessions. • Promote toolbox talks and informal training to reinforce E&S awareness. • Monitor E&S performance of subcontractors and ensure compliance. • Supervise the Environmental Engineers, Biodiversity Specialist, Archaeologist, CLOs and oversee monitoring systems. • Ensure the development and follow-up of corrective/improvement actions. • Lead E&S performance reporting to the Project Director • Promote continuous improvement via lessons learned and incident analysis.

Roles	Responsibilities
	• Conduct comprehensive investigations of accidents and incidents. • Ensure prompt resolution of complaints related to environmental and social issues. • Enforce behaviour protocols related to community safety. • Establish emergency preparedness and response procedures for E&S incidents. • Ensure inclusive practices by integrating gender, vulnerability, and social inclusion principles into site-level practices.
H&S Manager (EPC)	• Ensure the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Ensure the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Ensure the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Ensure that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Oversee the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Coordinate emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S Plan. • Ensure that this Plan is understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of this Plan. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks.

Roles	Responsibilities
	• Analyse trends from incidents and near-misses to identify systemic issues and develop long-term preventive strategies. • Ensure prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to Project Director summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
Site Doctor (EPC)	• Provide on-site medical care, first aid, and emergency response to site personnel. • Monitor the health status of workers through routine check-ups and assessments. • Maintain accurate and confidential health records and incident logs. • Identify and manage occupational health risks and recommend preventive measures. • Ensure availability and readiness of medical equipment, first aid kits, and emergency protocols. • Conduct health awareness sessions and support mental health and wellness programs. • Coordinate with H&S teams to implement hygiene, sanitation, and disease control measures. • Ensure compliance with local occupational health laws and project-specific health standards. • Collaborate with external hospitals or clinics for referrals and medical emergencies. • Participate in site inspections and contribute to health-related sections of HSE audits. • Provide medical input to risk assessments, method statements, and H&S Plans. • Support COVID-19 or other outbreak response procedures as needed. • Detect occupational injuries and illnesses and prepare relevant prevention plans. • Track of all health records of all employees including occupational injuries and illnesses.
Archaeologist (EPC)	• Conduct archaeological surveys and assessments within the project footprint prior to and during construction activities. • Monitor excavation and earthworks to identify and document any archaeological or cultural heritage findings. • Implement and support the continuous update of the Cultural Heritage Management Plan (CHMP) in compliance with national laws, project policies, international standards and SPV&Lender requirements. • Supervise the application of chance-find procedures across all construction areas and ensure proper documentation, preservation, or relocation of discovered artifacts. • Liaise with national and local cultural heritage authorities to secure necessary permits and approvals, and report findings as required. • Train construction personnel and subcontractors on cultural heritage awareness, including chance-find protocols and legal obligations.

Roles	Responsibilities
	• Collaborate with Environmental, Social, and H&S teams to integrate cultural heritage considerations into broader site management and daily operations. • Participate in stakeholder engagement processes where cultural heritage concerns arise. • Coordinate with external experts or labs for advanced assessment and preservation strategies, when needed. • Maintain accurate records of archaeological work, including GPS data, photos, catalogues, and reports. • Promote community awareness and sensitivity toward cultural heritage protection where applicable. • Review contractor method statements and work plans to confirm inclusion of archaeological mitigation measures.
Biodiversity Specialist (EPC)	• Conduct baseline biodiversity assessments to understand and document existing habitats, species, and ecosystem conditions in and around the project footprint. • Monitor biodiversity risks during construction activities, ensuring sensitive habitats, critical species, and ecological corridors are not adversely affected. • Ensure compliance with national environmental legislation and international biodiversity standards. • Implement Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) and associated mitigation measures in coordination with the Environmental Engineer and E&S Manager. • Implement ecological mitigation measures (e.g., habitat restoration, species relocation, buffer zones) by contractors and subcontractors. • Train construction and environmental teams on biodiversity protection requirements and promote awareness of key species and habitats on-site. • Monitor biodiversity indicators and report findings in line with project performance monitoring systems and environmental management plans. • Ensure corrective actions are taken promptly when biodiversity-related non-compliances are observed. • Liaise with local environmental authorities, consultants, and NGOs on biodiversity matters as required. • Support environmental inspections and audits related to biodiversity performance. • Maintain biodiversity records and contribute to periodic reports and updates to the E&S Manager and Project Director. • Assist with community awareness activities related to biodiversity conservation in collaboration with the Community Liaison Officer when relevant. • Ensure integration of biodiversity considerations into site planning, construction methods, and landscape rehabilitation. • Review contractor/subcontractor method statements and work plans to confirm inclusion of biodiversity mitigation measures.
H&S Chief (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements.

Roles	Responsibilities
	• Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractor. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities.rs/Subcontractors for the implementation of health and safety plans. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor. • Review and validate training records and related documentation from Contractor/Subcontractor. • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks. • Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.

Roles	Responsibilities
H&S Engineer (EPC)	• Implement the safe execution of all construction site activities in accordance with project standards, procedures, legal requirements, international standards, lender and SPV requirements. • Implement the preparation, revision, and continuous improvement of Health & Safety Management Plans in accordance with EPC and SPV policies. • Perform the implementation and compliance of the conditions and obligations specified in the H&S Plan during project activities. • Support all employees in fulfilling the conditions and obligations of this health and safety plans during project activities. • Provide technical support to Contractors/Subcontractors for the implementation of health and safety plans. • Monitor the compliance of Contractors/Subcontractors with the requirements of the health and safety plans and report non-conformities. • Maintain a site-specific risk register and ensure hazards are identified, assessed, and mitigated throughout the lifecycle of the project. • Implement health, safety and community safety measures through site practices and method statements. • Implement that construction site boundaries are well-defined, adequately marked, and routinely monitored for safety. • Ensure the enforcement of behaviour protocols and community health and safety guidelines on and around the construction site. • Perform the implementation of safety measures including traffic management, safe work zones, and protection of aboveground and underground utilities. • Perform emergency preparedness and response procedures, including drills and communication protocols, in collaboration with relevant departments. • Ensure toolbox talks, safety briefings, and daily pre-task planning meetings to reinforce safety culture and awareness on site. • Ensure that all personnel on-site, including contractors and subcontractors, receive regular and adequate safety training aligned with the obligations of the H&S plans. • Ensure that H&S plans are understood by all employees and Contractor/Subcontractor staff through regular training programs that include the obligations of H&S plans. • Review and validate training records and related documentation from Contractor/Subcontractor • Conduct and lead comprehensive investigations in the event of accidents, incidents, or near misses, ensuring findings are documented and corrective actions are implemented. • Ensure the development and follow-up of corrective and/or improvement actions to address safety-related gaps or risks. • Follow prompt and structured resolution of complaints related to public health, safety, and security. • Prepare regular reports to H&S manager summarizing H&S performance, compliance status, and key risks.

Roles	Responsibilities
	• Foster a safety-first culture by promoting active participation, feedback, and ownership of safety responsibilities at all levels of the workforce.
HSE Technician (EPC)	• Support the implementation of the Health, Safety, and Environmental (HSE) Management Plans on-site. • Conduct field-level hazard identification and risk assessments under the supervision of the HSE Engineer or H&S Manager. • Assist in the inspection of site conditions, equipment, and practices to ensure compliance with HSE protocols. • Monitor proper use of PPE by workers and subcontractors and ensure daily compliance. • Assist in the documentation of incidents, near-misses, and unsafe acts/conditions. • Support the organization of safety toolbox talks and drills, and participate in site safety briefings. • Assist in maintaining updated HSE records, permits to work, and site-specific risk registers. • Coordinate with site teams to ensure safe work zones and adherence to safety signage and barriers. • Escalate HSE issues and observations to senior HSE personnel for timely corrective actions. • Promote a proactive safety culture through daily site presence and informal engagement with workers.
HSE Worker (EPC)	• Perform routine safety checks and observations on construction activities to support accident prevention. • Support field-level enforcement of basic HSE requirements such as PPE usage, housekeeping, and emergency access. • Report unsafe behaviours, near-misses, or incidents to the HSE Technician or Engineer. • Assist with basic safety logistics such as placement of safety signs, first aid kits, and fire extinguishers. • Provide assistance during emergency drills and real-time evacuations if needed. • Participate in on-site HSE briefings and serve as a communication link between labour teams and HSE staff. • Support the distribution and collection of HSE materials, permits, and records. • Assist in controlling site entry for compliance with safety rules (e.g., helmet, vest, ID badge). • Support spill response and clean-up efforts as guided by supervisors
HSE Trainer and Document Controller (EPC)	• Develop and deliver HSE training modules tailored to job roles and risk levels in collaboration with the HSE Manager. • Maintain training matrices, attendance records, and competency certifications for all EPC and subcontractor staff. • Organize safety induction programs for new employees and visitors. • Organize refresher trainings, emergency drills, and awareness campaigns (e.g., heat stress, confined space).

Roles	Responsibilities
	• Ensure that all training materials, method statements, and HSE procedures are up-to-date and properly archived. • Manage document control systems related to HSE plans, permits, inspection reports, and safety data sheets. • Ensure traceability of document revisions and compliance with audit requirements. • Support internal and external audits by providing required HSE documentation and evidence. • Contribute to the improvement of training content based on site observations and lessons learned.
Paramedic (EPC)	• Provide immediate emergency medical care, stabilize patients, and coordinate medical evacuation when necessary. • Assist the Site Doctor in conducting health checks, maintaining patient records, and supporting follow-up treatments. • Monitor the stock and condition of emergency medical supplies, medicines, and first aid kits. • Respond to health-related incidents, accidents, or illnesses on-site and record incident details accurately. • Participate in health and safety drills and emergency response exercises. • Support hygiene monitoring and health awareness campaigns. • Maintain clean, safe, and operational medical facilities and first aid stations. • Contribute to incident investigations involving health or medical issues. • Report health risks or trends to the Site Doctor and H&S Manager.
Environmental Engineer (SPV and EPC)	• Implement the monitoring and recording of this Plan's execution (including implementation by Subcontractors). • Ensure project activities comply with national environmental legislation, permits, international standards and lender requirements. • Implement and monitor the Environmental & Social Management Plans and its site-specific sub-plans to ensure compliance with national legislation, international standards, and lender requirements. • Conduct routine environmental inspections and ensure that all site activities by contractors and subcontractors are carried out in accordance with approved method statements and mitigation measures. • Implement environmental monitoring programs. • Maintain up-to-date environmental records and databases; support preparation of reports for regulatory or lender audits. • Manage waste within the entire project footprint and area of influence, prioritizing designated areas to be used under the scope of the Project. • Monitor contractor and subcontractor adherence to approved waste storage, segregation, and disposal practices. • Provide regular training to site personnel during the construction phase. • Ensure that necessary training on environmental management is provided and that all personnel receive the required training. • Support toolbox talks and induction sessions to raise site-level environmental awareness.

Roles	Responsibilities
	• Conduct regular internal audits and report non-conformities. • Ensure that non-conformities are recorded and immediately addressed. • Participate in the development and follow-up of corrective and/or improvement actions. • Support investigation of environmental incidents and assist in root cause analysis and follow-up reporting. • Report the implementation performance of this Plan. • Support the review and update of this Plan. • Ensure lessons learned and field experiences are incorporated into plan revisions and training updates. • Collaborate with the H&S and Social teams to address cross-cutting issues. • Coordinate with subcontractors to ensure implementation of project-specific environmental measures. • Liaise with external laboratories, consultants, or regulators as needed for environmental monitoring or reporting. • Support obtaining environmental related permits • Ensure all environmental permits are obtained, renewed, and complied with throughout the project lifecycle. • Contribute to the periodic review and revision of environmental plans based on site experience, regulatory changes, and stakeholder feedback. • Prepare and submit environmental performance reports to the E&S Manager and relevant stakeholders. • Coordinate with construction teams to integrate environmental requirements into work plans. • Ensure appropriate waste management practices are applied across the site, including segregation, storage, transportation, and disposal in designated and approved facilities. • Conduct internal audits and inspections; identify non-conformities and follow up on corrective and preventive actions.
Community Liaison Officer (CLO) (SPV and EPC)	• Inform the public about the Project's scope, progress, and potential impacts. • Organize and facilitate regular community meetings, focus groups, and engagement forums. • Maintain open lines of communication with project-affected persons (PAPs), community leaders, and local institutions. • Develop and distribute communication materials tailored to various community audiences. • Ensure that all internal and external complaints, including those under the SEP, are managed in accordance with the Grievance Mechanism (GM). • Log, track, and follow up on grievances and appeals in a timely and respectful manner. • Facilitate resolution of community disputes or concerns related to project activities. • Assess how vulnerable or marginalized groups may be affected by the Project. • Propose mitigation measures or tailored engagement approaches for at-risk or underrepresented populations.

Roles	Responsibilities
	• Ensure equitable participation in consultation processes, particularly for women, youth, elders, and people with disabilities. • Support the monitoring and recording of the implementation of the social related issues, including activities carried out by subcontractors. • Support the evaluation of the SEP's implementation performance and community feedback • Contribute to regular internal audits and the reporting of non-conformities. • Ensure that relevant non-conformities are recorded and addressed immediately. • Participate in the development of corrective and/or improvement actions and support their follow-up. • Support the periodic review and update of the SEP and related procedures in coordination with the E&S Manager. • Provide input to lessons learned from engagement outcomes and grievance trends. • Maintain up-to-date records of all stakeholder meetings, grievances, resolutions, and community commitments. • Submit routine reports to the Social Chief and/or E&S Manager summarizing community feedback, grievance status, and engagement Milestones. • Ensure confidentiality and proper data handling, especially for sensitive community issues.
All Personnel (including Contractor/Subcontractor Personnel)	• Follow this Plan and all related Plans and Procedures, and carry out all activities in accordance with the requirements of this Plan. • In case of any non-compliance related to the implementation of this Plan, report it first to the CLO and the E&S Manager. • Participate in relevant trainings. • Ensure self-sufficiency in the implementation of this Plan. • Fulfil and ensure the implementation of the requirements of this Plan

V. SOIL MANAGEMENT and EROSION CONTROL MANAGEMENT MEASURES

V.1 Topsoil Management

Topsoil Stripping

Maximization of the topsoil recovery during the land preparation and construction phase is essential to ensure that sufficient topsoil would be available for use in restoration works. Within this regard, following measures will be taken:

- The boundaries of clearing and construction areas will be clearly marked or fenced to prevent impacts beyond these areas.
- Vegetation covering the topsoil, can cause difficulty in the removal of specific topsoil depths and excessive quantities of vegetative matter in stockpiles may promote chemical and biological degradation of the seed reserves that will be the future source of natural regeneration during rehabilitation process. Therefore, prior to topsoil stripping process, vegetation will be removed or reduced by grazing and/or clearing. Before the beginning of site preparation (vegetation clearing and topsoil removal) an expert botanist will perform surveys of the flowering period of the species identified as triggering Critical Habitat (CH) (from May to August) in the areas to be

cleared of vegetation and its immediate surroundings. Please refer to Biodiversity Management Plan for the actions to be taken before vegetation clearance.

- Weed control will be conducted before vegetation clearance to prevent the formation of invasive species during revegetation.
- All cleared vegetative material will be buried in-pit, or if suitable, will be placed as habitat within the conservation areas.
- Machinery used for topsoil stripping will be cleaned of weeds, plants, and diebacks before being brought to the Project Area and between operations to prevent the introduction and spread of these elements.
- Soil infected with dieback and weeds will be sent to landfill to minimize the risk of spreading these species across the Project Area.
- Topsoil will be stripped separately from subsoil, considering the soil's depth and characteristics. Topsoil will be stripped to a depth of 10 to 30 cm. In areas with little or no topsoil, the Contractor will determine the depth (if any) to be stripped.
- The stripping and handling of topsoil will be carried out when the soil moisture content is optimum for the soil texture class.
- Topsoil stripping will not be conducted during windy and rainy periods. Construction is to be delayed 24 hours following a 24-hour rainfall of 10 mm or more during the preceding day, after which soil condition will be reassessed.
- Appropriate equipment will be used for the topsoil stripping activities. Surface grading of stockpiles will be performed with lightweight tracked vehicles or wheeled vehicles to prevent soil compaction.
- Vehicular traffic on soils to be stripped will be minimized to prevent soil compaction.
- Topsoil will be stripped progressively in order to reduce erosion.

Topsoil Storage

Depending on the topsoil characteristics, stripped topsoil will be stockpiled as agricultural topsoil and forest topsoil separately. During the storage of topsoil, following measures will be taken:

- To prevent the loss of the biological fraction in stockpiled topsoil due to long storage times, additional soil amelioration measures such as seeding and fertilization will be implemented to maximize topsoil recovery for rehabilitation. If topsoil and stockpiles are stored for over a year, they will be seeded using appropriate methods to prevent erosion from wind and rain and to protect the organic matter content. Fast-growing, ground-covering flora species will be used for revegetation to minimize soil erosion. Suitable species and seed mixtures (fast-growing, local plants) will be selected in consultation with biodiversity specialists. Refer to the Biodiversity Management Plan for topsoil conservation actions.
- Topsoil stockpiles will not exceed 2 meters in height, and the lateral slopes will not exceed 45 degrees.
- The stockpile surface will be lightly compacted as needed to restrict rainfall penetration, maintain aerobic conditions, and will be protected from flooding by placing berms around the outside. Topsoil and subsoil piles will be free-draining, with gaps left in linear topsoil piles to allow access and prevent water from being held against the stack.
- The area where topsoil will be stored will have a maximum inclination of 5%.
- All stockpiles will be positioned away from drainage lines, if applicable.
- Topsoil will be stored separately from subsoil at designated storage areas along the route and other work sites under suitable conditions to preserve its vegetative properties.
- Each topsoil stockpile will have appropriate signage to ensure it is identifiable to all personnel.
- Stockpiles will be surrounded by silt fencing, temporary drainage lines, or similar erosion control devices to prevent soil erosion.

Rehabilitation

Areas cleared during construction for temporary use will be restored, as soon as possible, with the goal of producing a stable vegetative cover to minimize erosion, dust and spreading of invasive alien species, and the aim of re-establish the original habitat with a positive impact on biodiversity. Vegetation and topsoil rehabilitation activities will be performed in all temporary facilities (mobilization areas, storage areas) in order to restore their original habitat.

During the rehabilitation of the Project Area at the closure phase, it is expected that the rehabilitation will include the use of topsoil recovered from the stockpiles, ground preparation such as ripping and scarification of the top surface and the planting of local native seeds. Some degree of soil amelioration such as addition of fertilizer and/or soil pH adjustment may also be required. Within this regard, following measures will also be applied:

- Topsoil will not be used as a fill material.
- Topsoil will be respread in even layers at a thickness appropriate for the landform and capability of the area to be rehabilitated.
- Areas where topsoil is spread will be ripped while trying not to bring subsurface materials to the surface (e.g. large rocks).
- Following the respreading, topsoil will be seeded to establish revegetation cover as early as possible. Please refer to Biodiversity Management Plan for plant selection.
- Rehabilitated areas will be controlled regarding to diseased plants and weed outbreaks, and significant weed outbreaks will be taken under control by using chemical or mechanical control methods.

Rehabilitation of the land will commence immediately on removal of each individual facility. The rehabilitation condition will be to a condition at least as good as that prevailing before establishment of the facilities, depending on the post construction land use and Project's access agreement. Disturbed areas will be rehabilitated to the satisfaction of the Limak, the regulatory authority or landowner and will obtain written approval from the Limak, the appropriate regulatory authority or the landowner of the level of rehabilitation. Photographs of the condition of the area prior to construction may be used for reference.

For detailed information regarding to the rehabilitation of the Project Area at the closure phase of the Project, please refer to Biodiversity Management Plan.

V.2 Soil Management

Earthworks including excavation, backfilling and filling will be conducted through the Project. Suitable cut material will be used as backfill material for the Project. Optimization of cut and fill will be implemented during the construction process. Excess material will be hauled and stockpiled at designated areas to minimize impacts on the area of influence of the project prior to transportation to final disposal area. Storage areas to be constructed within the scope of the Project will be used for the storage of the excess excavated materials which could arise from the tunnel and route excavation works and not used as backfilling material.

Details regarding the excavation and backfilling operations within the scope of the project and the management, transportation, and final storage of the excavated material in storage areas are provided in the Excavated Material Management Plan. Following list is provided for soil management:

- Excavated material controlled and approved in terms of quality can be used as filling material.
- Designated material storage areas will be managed by dikes to prevent loss of soil.
- Observed contaminated areas at construction site will be rehabilitated in accordance with the Environmental Accident and Spill Response Management Plan.
- Disposal areas will be rehabilitated as per the regulatory requirements.
- Landscape management plan will be developed and implemented.

Spill risks during the construction phase are particularly associated with the use of heavy construction equipment, mobile fuel tanks, chemical storage areas, and processing units such as asphalt and concrete batching plants. The improper handling of waste oils, chemical solvents, and other construction-related liquid wastes can lead to contamination incidents if preventive measures are not adequately implemented. Substances such as petroleum hydrocarbons, detergents, and acids may have persistent impacts on environmental media if not promptly contained and remediated.

However there will be three construction camp sites (Main Camp Site (Manavgat), Camp Site-2 (Manavgat) and Camp Site-3 (Alanya), temporary construction camp site in Taşağıl is in use. In addition to these areas, there will be usage land for mechanic and asphalt plant and concrete plant areas which are listed below (see Table V.1). In these areas, activities such as refueling and oil changes will be intensive, so the spill risk is highest. Additionally, construction activities along the route, in quarries, and during transportation are also at risk of environmental accidents and spills. In these areas, in addition to spill kits located in risky areas, extra kits will be kept for delivery to nearby construction sites in case of an emergency.

Table V.1 Information on Camp Sites, Mechanic, Asphalt and Concrete Plant Areas

Location	Province	District	Nearest Neighbourhood	Description of the Site / Plant	Area (m²)
Km 55+450	Antalya	Serik	Sarıabalı	Concrete Plant-1	13,946
Km 59+400	Antalya	Manavgat	Taşağıl	Temporary Construction Camp Site	66,450
				Concrete Plant-2	
				Mechanical Plant-1	
				Asphalt Plant-1	
Km 64+400	Antalya	Manavgat	Taşağıl	Construction Camp Site-1 (Main)	-
Km 80+400	Antalya	Manavgat	Yeniköy	Concrete Plant-3	15,000
Km 87+500	Antalya	Manavgat	Bucakşeyhler	Construction Camp Site-2	42,371
Km 87+700	Antalya	Manavgat	Bucakşeyhler	Concrete Plant-4	
				Mechanical Plant-2	
				Asphalt Plant-2	
Km 89+700	Antalya	Manavgat	Ulukapı	Concrete Plant-4a	11,665
Km 99+200	Antalya	Manavgat	Sülek	Concrete Plant-5	11,977
Km 124+300	Antalya	Alanya	İncekum	Construction Camp Site-3	85,000
				Concrete Plant-6	
				Mechanical Plant-3	
				Asphalt Plant-3	

To prevent or minimize the environmental consequences of spills, proactive strategies should be implemented. These include proper handling, storage, and transportation of hazardous substances, the provision of appropriate containment infrastructure, and the development of robust emergency response and remediation procedures that are systematically applied throughout construction activities.

In case of a spill in any area, contaminated soil, water and used spill kits will be treated as hazardous waste. These wastes will be disposed of in hazardous waste containers in the area where the work is carried out and from there they will be transferred to the Temporary Hazardous Waste Storage Areas in Temporary Construction Camp Site, Main Camp Site, Camp Site-2 or Camp Site-3 which one is the closest.

Soil Sampling and Analyses

Most of the Motorway route passes through agricultural lands and forest areas where the historical soil contamination potential is considered to be low. However, there are quarries, and remote settlement areas close to the study area where illegal waste disposal activities could occur. Thus, such areas may include contaminated lands.

Soil contamination is evaluated as a potential risk during the land preparation and construction works, road repair and maintenance activities, and accidents/emergencies during operation phase. This potential risk may arise from accidental spills during transfer, mixing, and storage of hazardous materials or from unexpected incidents.

A soil sampling and laboratory analysis program was conducted as part of the baseline studies for the Project. Initial soil sampling and laboratory analyses were conducted as of September 2024. An additional round of soil sampling was carried out at 35 locations in May 2025 to support the baseline data set. The locations of these additional sampling points are illustrated in Figure V.1 and Figure V.2.

Figure V.1 Soil Sampling Points of the Project (September, 2024)

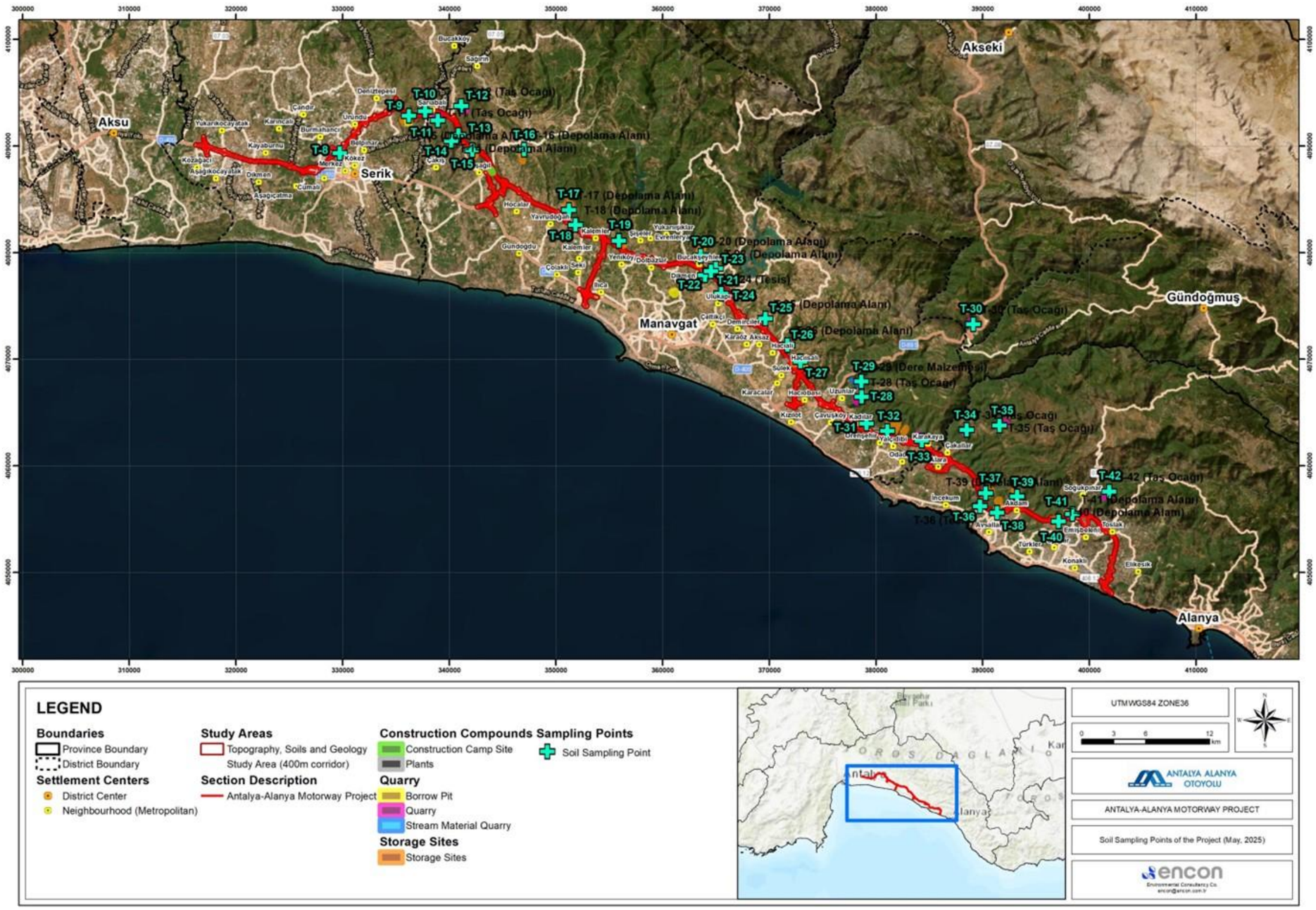

Figure V.2 Soil Sampling Points of the Project (May, 2025)

Soil Pollution Control Mitigation Measures

During construction activities soil contamination may be seen due to accidental leakages/spillages and, poor waste and wastewater management. If necessary mitigation measures will not be taken, these impacts may affect the soil quality in the Project Area. Within this regard following measures will be taken, in addition to the measures given in above sections:

- The amount of soil that could be subject to contamination/pollution and compaction will be minimized by ensuring the use of only the designated work sites and routes for the machinery, equipment and personnel.
- Related PPEs will be provided to the personnel handling the excavation soil/waste.
- The fuel required for the machinery and equipment to be used within the Project, will be supplied in accordance with the Hazardous Material Management Plan.
- Provisions of the Regulation on Control of Soil Pollution and Contaminated Lands by Point Sources, and Regulation on Contaminant Release and Transportation Record will be complied within the scope of the Project.
- In case of a spillage/leakage at the site, actions defined in the Environmental Accident and Spill Response Plan will be taken immediately.
- The soil contaminated due to spillages during handling fuel and other hazardous liquids will be removed from the site for suitable treatment and/or disposal according to the Waste Management Plan.
- No fuelling of vehicles or equipment will take place within excavated areas. If heavy equipment cannot be moved to appropriate fuelling points, an impervious surface (such as a drip-tray) has to be used for refueling this equipment to hinder accidental spillage to drain into the soil and therefore in potential groundwater aquifers.
- Wastes and wastewater to be generated within the scope of the Project, will be stored and disposed in a controlled manner in accordance with the Waste Management Plan, and Water Quality, Wastewater and Storm Water Management Plan, respectively. Thus, it will not be possible for the wastes and wastewater to be generated in the Project Area, interacting with the soil environment and cause any impacts.
- The areas, where the hazardous materials (chemicals, liquids etc.) storage tanks located (i.e., hazardous material storage areas), will be designed and constructed to avoid potential contamination into the soil (paved areas with sufficient secondary containment, proper drainage systems, storage as per Safety Data Sheet (SDS) requirements etc.). Also, the Project will comply with relevant legal and project safety requirements to avoid leakages from hazardous materials (chemicals, liquids etc.) storage facilities on-site
- Regular maintenance of vehicles and machinery/equipment will be undertaken to ensure that leakages of oil/fuel or any other hazardous material is prevented
- Safe Fueling and Gasoline Handling Guidelines will be developed in the construction areas. No fueling of vehicles or equipment will take place within excavated areas, if practically feasible. If heavy equipment cannot be moved to appropriate fueling points, an impervious surface (such as a drip-tray) has to be used for refueling this equipment to hinder accidental spillage to drain into the soil and therefore in potential groundwater aquifers
- Generators will be equipped with drip trays and to be checked regularly to prevent soil contamination
- Secondary containments, ponds and drip trays will be checked regularly, especially during extreme weather conditions
- Portable spill containment and clean-up materials (spill kits) will be made available and easily accessible at the construction site, instructions on how to use spill containment and clean-up materials will be included in the kits
- Pumps and trans mixers will be washed only at the concrete plants, concrete slurry will not be discharged into environment

V.3 Erosion Control Measures

Erosion is the process under the impact of water flow or wind consist of soil detachment, transportation and deposition of particles. Erosion control and sediment control are defined as any temporary or permanent steps used to reduce erosion and control sedimentation the process of settling or deposition of sediments due to motion through a fluid body. Proper erosion control along with sediment control reduce availability of particles for settling downstream.

Soil erosion is refers to the displacement of the upper layer of soil, leading to degradation of the land. This process can occur naturally due to factors such as weather conditions (winds, rains, ice or extreme heat), or as a result of anthropogenic activities like deforestation, agriculture, and construction. The rate of erosion is increased due to improper agricultural practices such as cultivation on relatively high slope lands, plowing through the fields in the direction of the slope, and excessive grazing on pasturelands or deforestation. The primary agents of soil erosion are water and wind, where the former is more prominent. Water erosion takes place on lands with weak or no vegetative cover where runoff can flow with sufficient energy, transporting loosened soil particles down the slope. Consequently the fertile top layer of the soil is lost from the agricultural lands resulting in reduced agricultural productivity, and water quality of the surface water resources deteriorates as a result of sedimentation and eutrophication (Former Ministry of Agricultural and Rural Services. July 2008).

Evaluation of the erosion level to which soils are exposed is done based on the erosion classification system developed by US Department of Agriculture and adopted by several state authorities including Türkiye. Erosion levels specified in this classification system are listed in Table V.2.

Table V.2. Erosion Levels according to Technical Procedure on Soil and Land Classification Standards

Erosion Level	Definition
Level 1	Low
Level 2	Moderate
Level 3	Severe
Level 4	Very severe

Source: Former Ministry of Agricultural and Rural Services. July 2008.

Following the erosion level classification, erosion potential of the soils corresponding to the study corridor (6,856 ha total area; settlement, river, river flood plain, and coastal dune areas that cover 1.1% of the study corridor and not categorized under any of the soil groups. and are not taken into consideration in the following figures) have been described based on the land use, and soil database of the former GDRS published for Antalya province in 1993. The results of the analyses done in this scope are provided in Table V.3.

As presented in the table, approximately 57% (3,933.2 ha) of the study corridor corresponds to soils with severe erosion levels (Level 3). This is followed by no or very low erosion level (Level 1), which accounts for about 25% (1,691.8 ha) of the study corridor. Soils with very severe erosion levels (Level 4) occur in about 2% of the study corridor. Soils with moderate erosion levels (Level 2) along the study corridor account for approximately 15% of the area. In addition, it should be noted that the Project area has experienced a rapid urbanization rate, especially in the last 30 years resulting in significant changes in the land use patterns and an increase in the overall area of artificial surfaces, including urban areas, industrial sites, transport networks, mine extraction sites, etc. Consequently it is likely that the erosion rate has accelerated, and the erosion exposure levels of the soils corresponding to the study corridor have increased.

Additionally, erosion levels of soils of the settlements within the study area are listed in Table V.3.

Table V.3. Erosion Potential of the Soils within the Study Corridor of the Project (GDRS. 1993)

Erosion Levels	Risks	Area (m^2)	Area (ha)	Percent (%)
None or very low	-	4,599,930.62	459.99	6.71
	Slope and erosion damage	2,107,249.47	210.72	3.07
	Soil insufficiency	553,026.62	55.30	0.80
	Drainage problems, oldness, flood damage	9,657,676.43	965.77	14.09
Sub-total (None or very low)		**16,917,883.15**	**1,691.79**	**24.67**
Moderate	Slope and erosion damage	7,656,224.52	765.62	11.17
	Slope and erosion damage Soil insufficiency	2,416,436.79	241.64	3.52
Sub-total (Moderate)		**10,072,661.30**	**1,007.27**	**14.69**
Severe	Slope and erosion damage. Soil insufficiency	39,331,463.24	3,933.15	57.37
Sub-total (Severe)		**39,331,463.24**	**3,933.15**	**57.37**
Very severe	Slope and erosion damage. Soil insufficiency	1,521,465.97	152.15	2.22
Sub-total (Very severe)		**1,521,465.97**	**152.15**	**2.22**
Settlements		184,874.57	18.49	0.27
River		44,053.60	4.41	0.06
River Flood Plain		428,820.08	42.88	0.63
Coastal Dunes		60,104.88	6.01	0.09
Total		**68,561,326.77**	**6,856.13**	**100.00**

Table V.4. Erosion Levels of Soils in the Settlements within the Study Corridor (GDRS. 1993)

Province	District	Neighborhood	Erosion Level
Antalya	Serik	Kozağacı	None or very low
		Yukarıkocayatak	None or very low
		Aşağıkocayatak	None or very low
		Kayaburnu	None or very low
		Dikmen	Moderate
		Çandır	None or very low
		Aşağıçatma	None or very low
		Cumalı	None or very low
		Burmahancı	Moderate

Province	District	Neighborhood	Erosion Level
		Merkez	None or very low
		Üründü	None or very low
		Kökez	None or very low
		Deniztepesi	Moderate
		Sarıabalı	Severe
	Manavgat	Çakış	Severe
		Sağırin	Severe
		Taşağıl	Severe
		Hocalar	Severe
		Gündoğdu	Moderate
		Yavrudoğan	Severe
		Kalemler	Severe
		Evren	None or very low
		Seki	None or very low
		Ilıca	None or very low
		Yeniköy	Severe
		Şişeler	None or very low
		Evrenleryavşı	Severe
		Dolbazlar	Severe
		Yukarıışıklar	Severe
		Dikmen	Severe
		Bucakşeyhler	Severe
		Ulukapı	Severe
		Aşağıışıklar	Severe
		Demirciler	Severe
		Karaöz	Severe
		Aksaz	Severe
		Hacıali	Severe
		Cevizler	Severe
		Sülek	Moderate
		Hacıisalı	Severe
		Hacıobası	Severe
		Karacalar	Moderate
		Kızılot	None or very low
		Uzunlar	Severe

Province	District	Neighborhood	Erosion Level
		Çavuşköy	Severe
		Kadılar	Moderate
		Örenşehir	Severe
		Yalçıdibi	Severe
		Odaönü	Severe
		Karakaya	Moderate
	Alanya	Çakallar	Severe
		Alara	Severe
		İncekum	Very severe
		Avsallar	Severe
		Akdam	Severe
		Türkler	Severe
		Soğukpınar	Severe
		Emişbeleni	Severe
		Toslak	Severe
		Konaklı	Severe
		Elikesik	Severe

Erosion control and sediment control during construction phase of the Project should mainly aim for preventing any type of erosion, ensuring interception and drainage for surface runoff, ensuring surface runoff does not cause erosion or collect sediments from disturbed areas and ensuring stabilization of disturbed slopes.

Topsoil stripping, earthworks and excavation activities will disturb and expose the soil surfaces at working areas which will be disposed to erosion due to rain and wind. Exposed working areas will be rehabilitated without delay to prevent soil erosion after completion of construction activities.

Measurements for erosion control and sediment management are provided below:

- Intercepting, diverting, conveying and discharging concentrated flows will be performed to prevent soil detachment and transport.
- To prevent off-site sediment movement, erosion control measures including geotextile filters, drainage channels, settling structures, etc. will be implemented as needed prior to the start of construction operations.
- Wherever possible, land preparation and construction activities shall be re-scheduled during extreme weather conditions to avoid risk of erosion.
- High sediment generating activities such as road paving will be avoided and exposed surfaces and stored materials covered if necessary to reduce erosion of sediments into surface waters.
- Dikes and drainage channels will be established to prevent loss of soil and runoff to water bodies around the excavated material storage areas.
- Rock breast wall will be constructed, if applicable, as a retaining wall against the toe of a slope to prevent slope damage, piping and spring sapping due to seepage from the slope surface.

- Riprap will be placed to provide resistance against concentrated runoff, to improve infiltration and to increase stability of the slopes where seepage occurs.
- Water spraying against wind erosion will be implemented to prevent migration of sediments especially in dry seasons.
- Silt fences will be used to retain the disturbed soil while filtering soil runoff in its place. A silt fence is a sediment barrier made of porous fabric that filters sediments and prevents the sediments to be washed off during runoffs.
- Sediment basins will be built, if applicable, as ponds and embankments to collect eroded and disturbed soils that are washed off. Sediment basins allows soils to settle in the pond before runoff is discharged.
- Existing drainage and irrigation channels, sediment barriers, green areas, protection strips, such as drains and drainage and erosion control pits should be protected by taking appropriate measures.
- Drainage from excavations will be collected and settled to remove suspended materials prior to discharge in accordance with required permits. Where practicable, local perimeter drains will be constructed around working areas to collect suspended run-off and direct it to a system of settlement basins before discharge in accordance with required permits.
- Channels, bunds and sandbag barriers will be provided on site to direct run-off to the collection system.
- All of the disturbed sites will be re-vegetated to the most possible extent in a timely manner following the completion of stripping and excavation works.

VI. TRAINING

The employees of the AAOİAŞ, Limak and subcontractors will require to attend the new-hire induction training that includes environmental and social awareness and compliance training to be aligned with Project ESIA and ESMS.

Regular internal and external (when necessary) trainings will be given to ensure that the mitigation measures indicated in this Plan are applied during the construction phase of the Project for all involved parties. Regular internal inspections will be conducted to ensure that the mitigation measures indicated in this Plan are applied during the construction phase of the Project.

All Project workers shall receive adequate training regarding soil and topsoil management. Specific trainings will be provided to operators and key personnel involved in activities which involve vegetation clearance, topsoil stripping, subsoil handling and rehabilitation. All personnel will receive structured training upon hiring as part of the Project's onboarding and orientation program. This training will cover the prevention and management of environmental accidents and hazardous material spills, including identification of potential spill sources, associated risks to human health and the environment, and appropriate response actions.

The training program will include the following core elements:

- General environmental awareness and potential impacts of spills;
- Applicable national legislation and international standards related to hazardous material handling and spill response;
- Where this Plan and other relevant procedures (e.g., Hazardous Materials Management Plan, Solid Waste Management Plan) can be accessed;
- Typical sources of spills on construction sites, such as equipment failure, leaks during fuel transfer, and improper storage of chemicals or lubricants;
- Precautionary measures for spill prevention;
- Use, location, and application of spill kits and absorbent materials in various work areas;

- Spill containment and control procedures;
- Proper use of personal protective equipment (PPE) during spill response;
- Procedures for clean-up, recovery, and appropriate disposal of contaminated materials;
- Replenishment of spill kits following use or routine inspection.

Subcontractors will be responsible for ensuring that their employees receive equivalent training, consistent with Project requirements and aligned with the overall ESMS.

All personnel will receive refresher training at regular intervals, and additional training will be provided to newly hired staff. The E&S Manager will prepare a detailed training schedule, which will be reviewed and approved by the Project Manager.

Attendance and completion of all training sessions will be documented through the Training Participation Form. These records will be managed and retained by the E&S team, and subject to periodic audits to verify compliance with training and preparedness requirements.

VII. MONITORING

A structured internal monitoring program will be implemented to assess the effectiveness of measures outlined in this Plan during the construction phase of the Project. The scope and frequency of monitoring activities will be periodically reviewed and revised where necessary, based on site-specific risks, incident trends, stakeholder concerns, or changes in applicable environmental regulations.

Monitoring activities will be coordinated by the E&S Manager, in close collaboration with the H&S Manager. Key responsibilities will include verifying the proper storage and handling of hazardous materials, monitoring implementation of spill prevention measures, checking the availability and condition of spill response kits, and ensuring that spill containment practices are consistently applied across critical work areas such as fuel storage sites, maintenance zones, and material handling areas.

Regular inspections will be conducted at designated locations across all worksites to evaluate compliance with national environmental regulations and Project-specific spill prevention requirements. This will include visual inspections for potential leaks or spill risks, control of secondary containment systems, checks on the use of drip trays and absorbent materials, and review of maintenance and inspection logs for storage tanks and hazardous material containers.

Monitoring efforts will be guided by the framework provided in Table VIII.1, which outlines the parameters to be monitored, the corresponding monitoring locations, frequency of inspections, and responsible parties.

Table VII.1 Key Monitoring Activities

Parameter	Monitoring Station / Location	Monitoring Method	Monitoring Frequency	Responsible Parties
Number of trainings conducted	Project site offices	Tracking the number of trained personnel	Quarterly	AAOİAŞ, Limak Independent Environmental Experts
Invasive Species	Site-wide	Weed control will be conducted to prevent the formation of invasive species during the revegetation.	Once prior to the topsoil stripping Monthly on closure phase	AAOİAŞ, Limak Independent Environmental Experts
Invasive Species	Site-wide	All machinery will be visually checked regarding to weeds, plants and diebacks sticked to them.	Once before machinery brought to the Project Area	AAOİAŞ, Limak Independent

			Between the operations	Environmental Experts
Topsoil Management	Site-wide	Amount of stripped/stored and used topsoil will be recorded	Following the topsoil stripping and rehabilitation process	AAOİAŞ, Limak Independent Environmental Experts
Soil Management	Site-wide	Amount of subsoil stored/transferred for disposal will be recorded	Following the subsoil removal and disposal process	AAOİAŞ, Limak Independent Environmental Experts
Erosion Control	Site-wide	Erosion control measures at will be visually checked.	Monthly	AAOİAŞ, Limak Independent Environmental Experts
Soil Pollution	Site-wide	Soil quality analyses will be conducted at the areas where any possible contaminated site identified during the surveys conducted under the scope of Pre-Construction Site Assessment Procedure or any spillage/leakage occurs, for the suitable parameter sets corresponding the spilled/leaked material defined in the Regulation on Control of Soil Pollution and Contaminated Lands by Point Sources	In case of any contaminated site identified during Pre-Construction Site Surveys or In case of any spillage/leakage occurs	AAOİAŞ, Limak Independent Environmental Experts
Rehabilitation	Site-wide	Areas progressively restored will be inspected	Monthly during the vegetative season (from April to October) of the first year after restoration Every 2 months during the vegetative season (from April to October) of year 2 and 3 after restoration	AAOİAŞ, Limak Independent Environmental Experts
Reported spill/leak incidents or non-compliance records	Site-wide	Review of non-compliance, accident, and spill records	Quarterly	AAOİAŞ, Independent Environmental Experts
Number of complaints related to environmental accidents	Project site offices	Logging and reviewing records as per the Stakeholder Engagement Procedure	Quarterly	AAOİAŞ, Independent Social Experts
Spill kits in work areas and on heavy machineries	All construction and maintenance areas and vehicles	Visual check and control list	Bi-weekly	AAOİAŞ, Limak and Subcontractors

In cases of non-compliance identified through internal oversight or external audits, AAOİAŞ will ensure that corrective and preventive measures are promptly implemented in coordination with the Main Contractor (Limak) and relevant subcontractors.

VIII. KEY PERFORMANCE INDICATORS

The following Key Performance Indicators (KPIs) will be monitored, verified, and evaluated.

Table VIII.1 Key Performance Indicators – Construction Phase KPIs

Key Performance Indicator	Target	Frequency	Responsible Party
Conduction of the weed controls	Weed controls are conducted according to the proposed schedule	Monthly	AAOİAŞ, Limak
Removal of weeds, plants and diebacks sticked to the Project machinery	All machinery is cleared from the weeds, plants and diebacks sticked to them	Monthly	AAOİAŞ, Limak
Performance of topsoil stripping and storage as planned	100%	Monthly	AAOİAŞ, Limak
Amount of stripped/stored and used topsoil	Topsoil amounts recorded	Monthly	AAOİAŞ, Limak
Amount of stored/transferred for disposed subsoil	Subsoil amounts recorded	Monthly	AAOİAŞ, Limak
Presence of the determined erosion control and storage measures	All erosion control and storage measures are present at the site	Annually	AAOİAŞ, Limak
Number of spillage/leakage resulted in soil contamination or number of contaminated land identified during Pre-Construction Site Surveys	Zero per year	Annually	AAOİAŞ, Limak
Vegetation cover and sign of erosion at the restored areas	Restored areas with vegetation cover and composition similar to undisturbed areas. No sign of erosion.	Semi-year	AAOİAŞ, Limak
Number of non-compliances regarding soil and topsoil measures identified in this Plan	Minimise the number of non-compliances and continuous improvement	Monthly	AAOİAŞ, Limak
Number of trainings planned vs completed	100%	Quarterly	AAOİAŞ, Limak
Number of grievances received regarding soil and topsoil management	Minimise the number of grievances and continuous improvement	Quarterly	AAOİAŞ, Limak

IX. AUDIT AND REVIEW

Results of the monitoring will be reported to responsible parties to ensure that the Project activities comply with the national legislation and international standards bi-annually. Depending on the monitoring results, the Plan will be reviewed and updated according to the Internal Audit Program that will be developed and updated by Project E&S Manager.

The bi-annual internal audit will address:

- The correct implementation of this Plan;
- The correct and timely implementation of an auditing and review system;
- Each of the point indicated in the table in Section 7 (Monitoring Activities) and Section 8 (KPIs) of this Plan.

Evidence and results of the inspection and audit activities are included in the audit reports and in the “Non-Conformity and Preventive/Corrective actions” records. Project Management reviews result of audits and inspections and the progress of the Preventive/Corrective actions and takes additional appropriate actions if necessary.

X. REPORTING

Quarterly reporting should be conducted to ensure the effective implementation and continuous improvement of this Plan throughout the construction phase of the Project. Reporting should be structured to address both internal monitoring and auditing outcomes, as well as external compliance obligations and stakeholder engagement requirements.

Based on monitoring results, necessary corrective and preventive actions which are defined in this Plan should be identified and the required updates should be incorporated into this Plan. The training program will also be revised accordingly to address any observed gaps. Monthly basis audits and visual inspections should be conducted to verify that all activities are being undertaken in accordance with the provisions of this Plan.

Evidence of the implementation of the actions/measures and related results are collected through inspection and auditing activities as detailed in Section IX “Audit and Review” of this Plan; these evidences are described in the audit reports.

Subcontractors are responsible to collect the soil, topsoil, rehabilitation and soil contamination statistics (including all types of training delivered to employees and incident records) on a monthly basis and report to the Limak and AAOİAŞ. If any subcontractor is involved, it is responsible for duly implementing requirements included in this Plan under the EPC and SPV supervision.

The results of the inspection and audit activities will be summarized in a Report on a biannual basis that will be made available to stakeholders, if requested, which is under the responsibility of the Contractor. This report will constitute the basis for the monitoring report to be available for the Lenders.

All personnel are encouraged to raise concerns, suggestions, or complaints related to environmental accident and spill response management through the established grievance mechanism by completing the grievance form. Public grievances regarding chemical spills, fuel leaks, or other contamination-related concerns should also be addressed and followed up accordingly. The communication channels available for submitting grievances are outlined in the Stakeholder Engagement Plan.

Throughout the construction phase of the Project, this Plan will be reviewed quarterly by the E&S Manager, based on the results of audits and any spill-related incidents or changes in site activities. Updates to the Plan will be agreed upon between the E&S Manager and the General Manager.

ANTALYA ALANYA MOTORWAY PROJECT

CULTURAL HERITAGE ASSESSMENT REPORT

CULTURAL HERITAGE MANAGEMENT PLAN

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APPENDIX-1: Chance Find Procedure

APPENDIX 2: CONTACT INFORMATION OF RELATED MUSEUM DIRECTORATES AND REGIONAL BOARD DIRECTORATES

ABBREVIATIONS

AD	Anno Domini
Archeo-Team	Archaeological Field Survey Team / Expert
Asst. Prof.	Assistant Professor
BC	Before Chris
CF	Chance Find
CHA	Cultural Heritage Area
CHMP	Cultural Heritage Management Plan
ICOMOS	International Council on Monuments and Sites
ICCROM	The International Centre for the Study of the Preservation and Restoration of Cultural Propert
GIS	Geographical Information System
KM	Kilometre
KML	Keyhole Markup Language
KMZ	Keyhole Markup Language Zipped
IFC	International Finance Corporation
EBRD	European Bank for Reconstruction and Development
M	Meter
No	Number
Shp (shape)	Netcad data name
Project Name	Antalya Alanya Motorway Project
UK	United Kingdom
UNESCO	The United Nations Educational, Scientific and Cultural Organization
WB	World Bank
WGS	World Geodetic System

1. PURPOSE AND SCOPE

The intention of this Cultural Heritage Management Plan (CHMP) is to preserve the archaeological and cultural heritage within the scope of Antalya Alanya Motorway Project and minimize the possible impacts. The impact mitigation considering the existing and potential archaeological sites at the project area within Project area is possible by developing a management plan. Therefore, the construction activities within the national legislation and provisions in international standards should be conducted under the scope of this management plan. In the document, a management plan is defined in general terms for the archaeological heritage within the Project area.

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Figure 1 Project Area and Findings

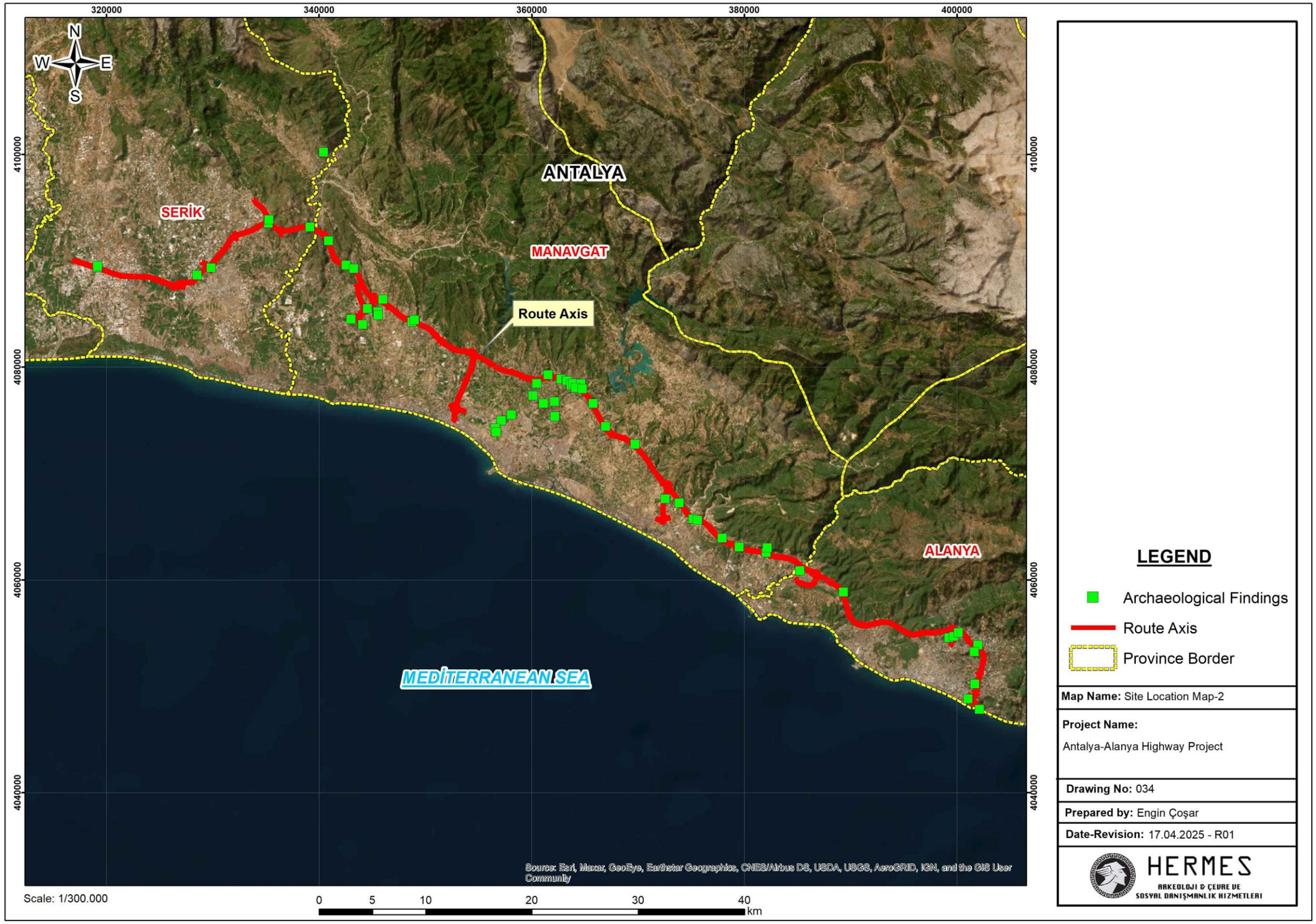

Table 1 Impact Assessment Table

No	Findings Code	Project KP	Name / Type	Period	Distance Between Route	Code Categorization (Interaction of the area with the Project)		Registration Status	Impact Analysis as per ICOMOS Guidance				Recommendation
						Ranking	Explanation		Value of Heritage Asset	Scale of Impact	Significance of Impact before Mitigation Measure	Significance of Residual Impact (After Mitigation Measures	
1	**HRM-4**	Serik K3 Connection Road	Settlement	Late Byzantion	177 m	**5**	**ABOVE 150 M. NO EFFECT**	No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
2	**HRM 23**	Manavgat K4	Cemetery	Late Ottoman	290 m			No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
3	**HRM 33**	87+700	Settlement	Roman	260 m			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
4	**HRM 55**	Alanya Batı Kol	Build Remain	Roman / Byzantion	180 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring.

													The notifications of the museum directorate should be followed.
5	**HRM 13**	Taşağıl Connection Road	Settlement	Roman	NA			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**.
6	**HRM 14**	Taşağıl Connection Road	Cemetery	Early Repuclic	NA			No	**Low**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**.
7	**HRM 18**	Manavgat K1	Mound	Roman	51 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**
8	**HRM 19**	Manavgat K3	Manavgat Waterfall Protected Area	NA	87 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**
9	**HRM 20**	Manavgat K2	Aqueduct	Roman	On the route			Yes	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a

													1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**.
10	**HRM 21**	Manavgat Connection Road	Aqueduct	Roman	On the route			Yes	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites.**
11	**HRM 22**	Manavgat K3	Aqueduct	Roman	On the route			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**.
12	**HRM 24**	Manavgat K4-K5	Mound	Roman	On the route			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**.
13	**HRM 25**	Manavgat K5	Tumuli	Roman	19 m			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**
14	**HRM 26**	Manavgat K5	Hilltop Settlement	Roman	38 m			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-

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15	**HRM 47**	Alarahan K2 Connection Road	Çardaktepe 1st Degree Archaeological Site	Roman / Byzantion	On the route			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
16	**HRM-2**	Kocayatak Köyü Güneyi	Rural Settlement	Late Byzantion	113 m	**4**	**100-150 M LOW**	No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed..
17	**HRM 17**	70+500. km	Settllement	Roman	125 m			No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
18	**HRM 30**	86+500	Fountain	Ottoman	128 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
19	**HRM 50**	134+00	Building remains	Roman / Byzantion	113 m			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant

													Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
20	**HRM 52**	136+00	Settlement	NA	128 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
21	**HRM-7**	Serik K1 Kavşağı	Tumuli	Roman	70 m			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
22	**HRM 12**	Taşağıl Kavşağı	Necropolis	Roman	95 m	**3**	**50-100 m Medium**	No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed..
23	**HRM 29**	86+500	Aqueduct	Roman	74 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.

24	**HRM 34**	87+500	Cemetery	Ottoman	77 m			No	**Low**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
25	**HRM 35**	88+200	Building remain	Ottoman	84 m			No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
26	**HRM 36**	89+800	Rural Settlement	Ottoman	65 m			No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
27	**HRM 41**	104+500	Church or Build Remains	Byzantion	61 m			No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
28	**HRM 43**	108+750	Cemetery	Early Repuclic	68 m			No	**Low**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require

												archaeological on-site monitoring. The notifications of the museum directorate should be followed.
29	**HRM 44**	109+600	Hist. Plane Tree	NA	25 m			No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
30	**HRM 46**	112+250	Yalçıdibi Waterfall	NA	55 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
31	**HRM 49**	Konaklı K1	Build Remain	Roman / Byzantion	83 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
32	**HRM 54**	Alanya Batı Kol bitiş	Build Remain	Roman / Byzantion	55 m			Yes	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. The notifications of the museum directorate should be followed.
33	**HRM-3**	8,8. km	Rural Settlement	Late Roman-Early Byzantion	5 m	**2**	**0-50 m Risky**	No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in

													mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.
34	**HRM 15**	Taşağıl Connection Road	Cemetery	Early Repuclic	18 m			No	**Low**	No change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.
35	**HRM 27**	84+400	Settlement	Roman	25 m			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.museum directorate should be followed.
36	**HRM 31**	87+00	Necropolis	Roman	On the route			No	**High**	Minor Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**.
37	**HRM 37**	92+200	Settlement	Roman	48 m			No	**Medium**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a

												1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.museum directorate should be followed.
38	**HRM 38**	95+600	Settlement	Roman	50 m			No	**High**	No Change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **A route change has been completed to avoid potential impacts on cultural heritage sites**
39	**HRM 39**	102+500	Tumuli	Roman	35 m			No	**Medium**	No change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.
40	**HRM 40**	Manavgat Doğu Kavşağı	Cemetery	Late Ottoman	32 m			No	**High**	No change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. The notifications of the museum directorate should be followed.
41	**HRM 45**	112+250	Cemetery	Late Ottoman	44 m			No	**High**	No change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require

													archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.
42	**HRM 48**	Konaklı Connection Road	Build Remain	Roman	49 m			Yes	**High**	No change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.
43	**HRM 51**	136+200	Cemetery	Early Repuclic	17 m			No	**Low**	No change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.
44	**HRM 53**	140+00	Build Remain	Roman / Byzantion	42 m			Yes	**High**	No change	Neutral	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. It should be given special attention during the Construction work. There is a high probability of chance finds in these areas. The notifications of the museum directorate should be followed.
45	**HRM-1**	Kocayatak Köyü Güneyi	Cemetery	Late Ottoman	On the route	**1**	**On The Route Axis** **High Risk**	No	**Low**	Negligible Change	Neutral/Slight	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a

													1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
46	**HRM-5**	Serik K1 Kavşağı	Cemetery	Late Ottoman	On the route			No	**Low**	Negligible Change	Neutral/Slight	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **In the section where a route change could not be implemented, trial excavations will be initiated under the instructions of the Antalya Regional Board for the Protection of Cultural Heritage. Subsequently, salvage excavations will be carried out, and the unearthed graves will be reinterred within the same parcel, in a location that is not impacted by the Project. These activities will be conducted under the supervision of the local imam and the village head (muhtar). In addition, for known graves, waivers of consent will be obtained from the family members.**
47	**HRM 6**	Serik K1 Kavşağı	Building remain	Roman	On the route			No	**Medium**	No Change	Slight	Neutral / Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **In the section where a route change could not be implemented, a deliberate narrowing of the project footprint was carried out to prevent damage to the identified wall alignments. This measure was taken specifically to ensure that these features are not impacted by construction activities.**
48	**HRM 8**	56. km Viyadük-4	Manavgat Arc. or Natural Site Border	Archeological Site Border	On the route			Yes	**Medium**	Negligible Change	Neutral/Slight	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
49	**HRM 9**	59. km	Late Roman Settlement	Late Roman	On the route			Yes	**Medium**	Minor Change	Slight	Neutral / Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant

												Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
50	**HRM 10**	62. km	Settlement	Roman	On the route			Yes	**High**	Negligible Change	Slight	Neutral	This is tunnel area. During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
51	**HRM 11**	62+750 km	Settlement	Roman	On the route			No	**High**	Negligible Change	Sligh	Neutral	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
52	**HRM 16**	70+400. km	Tumuli/Necropolis	Roman	On the route			No	**High**	Moderate Change	Moderate / Large	Moderate / Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
53	**HRM 28**	85+900	Tumuli	Roman	On the route			No	**Medium**	Minor Change	Slight	Neutral/Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a

													1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
54	**HRM 32**	87+100	Church Remains	Roman	On the route			Yes	**High**	Major Change	Large/very Large	Moderate / Large	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. **In the section where a route change could not be implemented, trial excavations and geophysical surveys have been completed under the instructions of the Antalya Regional Board for the Protection of Cultural Heritage. In the final assessment, it was discussed that the entire structure should be excavated, and a decision would subsequently be made regarding whether or not it should be relocated. In the event that relocation is approved, a designated area for the structure's transfer has already been identified.**
55	**HRM 42**	105+00	Settlement	Roman	On the route			No	**Medium**	Minor Change	Slight	Neutral/Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
56	HRM 56	56+750	Build Remain	Roman/Byzantion	On the route			Yes	**Medium**	Minor Change	Slight	Neutral/Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
57	HRM 57	120+800	Settlement	Roman / Byzantion	On the route			Yes	**Medium**	Minor Change	Slight	Neutral/Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in

													mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
58	HRM 58	Taşağıl junction/connection point	Settlement	Roman / Byzantion	On the route			Yes	**Medium**	Minor Change	Slight	Neutral/Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
59	HRM 59	Located along the D-400 highway and near the Taşağıl connection point	Settlement	Roman / Byzantion	On the route			Yes	**Medium**	Minor Change	Slight	Neutral/Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.
60	HRM 60	Located along the D-400 highway and near the Taşağıl connection point	Settlement or Necropolis	Roman / Byzantion	On the route			Yes	**Medium**	Minor Change	Slight	Neutral/Slight	During the construction activities, this area needs to be marked and should be prevented from being damaged. It is recommended that the Directorate of the relevant Archaeological Museum should be informed of its existence to carry out on-site field inspections and if needed for registration to ensure its protection. If an on-site inspection will be done the archaeological area in mention could be proposed for being declared either as a 1st or 3rd Degree Archaeological Site by the Museum. The construction works around the area require archaeological on-site monitoring. First of all, the route change should be evaluated. If changes cannot be made, the notifications of the museum directorate should be followed.

2. LEGISLATION FRAMEWORK

In this section, the legislation framework that is related to the management of cultural heritage is summarized

2.1 Law on Protection of Cultural and Natural Assets (Law No: 2863 (published in the Official Gazette dated July 21, 1983))

The management plan for archaeological heritage mitigation strategies along the project site corridor is to be designed to meet the requirements stipulated in the Law on Protection of Cultural and Natural Assets, Law No. 2863, (July 21, 1983).

The objective of the Law is to set the definitions regarding the movable and fixed cultural and natural assets that shall be protected; to define the procedures and activities to be performed and to establish the formation and responsibilities of the organization that will enforce the required principles and implementation of action decisions on this subject." (Official Gazette, 23/7/1983 number 18113).

In the law archaeological sites are classified under three categories. These are:

- 1st Degree Archaeological Sites,
- 2nd Degree Archaeological Sites,
- 3rd Degree Archaeological sites

Principle Decision No: 658 defines these sites as follows:

- **1st Degree Archaeological Sites:** Areas requiring highest level of protection. They should be preserved with the exception of scientific excavations. The area should be free of any type of buildings and construction. All kinds of construction, excavation, and modification activities are prohibited. However, for exceptional cases such as the necessity for infrastructure construction, Regional Preservation Boards may permit such activities based on the approval of the relevant museum and the head of the scientific excavation team.
- **2nd Degree Archaeological Sites:** Areas requiring ***high*** level of protection. They should be preserved based on the conditions of protection and utilization set by the Regional Preservation Boards. Additional construction is prohibited. As for the 1st Degree Site Degree archaeological sites, for exceptional cases such as the necessity for infrastructure construction, Regional Preservation Boards may permit such activities based on the approval of the relevant museum and the head of the scientific excavation team.
- **3rd Degree Archaeological Sites:** Lowest level of protection area. Construction is permitted based on the decisions of Regional Preservation Boards. Before applying for a construction permit, test pit excavations should be conducted and the outcomes of these excavations should be reviewed by

the relevant museum and, if present, the head of the scientific excavation team. ***All excavations are under the supervision of museum expert.*** Reviews should be submitted to Regional Preservation Boards. The Boards may ask for extension of the areal test pit coverage before taking any decision.

2.1.1 Definitions *(Article 3 of the Law numbered 2863)*

Article 3 of the Protection of Cultural and Natural Entities Law provides the following definitions:

- *Cultural Assets are all over-ground, underground or submarine movable and fixed assets related with science, culture, religion and fine arts, belonging to prehistoric and historic eras.*
- *Natural Assets are the over-ground, underground or submarine assets that belong to geological eras, prehistoric and historic eras and that shall be protected because of their rarity or specifications and preciousness.*

2.1.2 Obligation to Inform (Article 4 of the Law numbered 2863)

In case of chance find of movable or immovable cultural assets, the nearest museum directorate or mukhtar in the villages, local authorities in other places should be informed. If these cultural assets are encountered within military posts and forbidden areas, major commands should be duly informed. Mukhtar should inform the nearest ***local*** authority within a day (24 hours), the ***local*** authority and other authorities should report the incident to the Ministry of Culture and Tourism and the related museum directorate via formal letter. The Ministry of Culture and Tourism, General Directorate of Cultural ***Heritage and Museums*** and related ***Regional Board Directorate of Protection of Cultural Heritage*** are responsible for the registration of the cultural heritage

2.1.3 Legal Necessities before the Impact Mitigation Measures (Article 7 of the Law numbered 2863)

In Article 7, it is stated that the related ***Regional Board Directorate of Protection of Cultural Heritage*** are responsible for the registration of the cultural and natural heritage. Therefore, for the registration of the immovable cultural assets, it is required to apply officially and directly to the related ***Regional Board Directorate of Protection of Cultural Heritage***.

2.2 Regulation on Determination and Registration of Immovable Cultural and Natural Heritage (Official Gazette dated 10.12.1987 and numbered 19660)

The aim of this regulation is to introduce principles on permits about researches and excavations to be conducted under the law of protection of cultural and natural entities, the preservation necessities of the findings, studies on these findings, the assignments, duties and authorizations, rights and expenses of the related persons.

2.3 European Convention on The Protection of The Archaeological Heritage (Revised) (Valetta, 16/01-1992)

This convention is known as the Valetta Convention. It sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage

2.4 Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972

Turkey is a signatory to this Convention (The World Heritage Convention), which was approved by The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO), meeting in Paris from 17 October to 21 November 1972.

The signatories to this Convention have agreed "to ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage" on their territories.

3. ROLES AND RESPONSIBILITIES

Project Owner will be responsible for the preparation and implementation of the environmental and social impact assessment-based management plans, which will be project specific. These plans shall be practical, detailed procedures for use in the field.

Project Owner will ensure the implementation of the commitments stated in the ESIA.

Project Owner will also be responsible for the performance of all sub-contractors with respect to the project specific plans and shall comply with all relevant project standards, statutory requirements, permit and license conditions and secure all applicable permits and licenses.

3.1 Management of Cultural Heritage

The basic definitions regarding the management of cultural heritage are given in the following bullets:

- Ministry of Culture and Tourism is the responsible authority.
- Museum Directorate is responsible to provide experts for the sites within 24 hours after being informed and to officially define the Chance Find (see Appendix-1). ***Museum directorate is responsible excavation of chance find areas. Museum Directorate will follow the directions and decisions from Regional Board Directorate of Protection of Cultural Heritage***.
- ***Regional Board Directorate of Protection of Cultural Heritage*** is the only decision maker on any intervention, which would be made on the site after the chance find.
- Project Owner is responsible for the management of archaeological issues during the progress of construction of the Project site area and implementation of related management plan and chance find procedure.
- *Project Owner will employ archaeologists at the Project site responsible for the monitoring of ground disturbance activities. They are also responsible with the monitoring of the implementation of the Cultural Heritage Management Plan (CHMP) and chance find procedure.*
- *Project Owner will ensure that Chance Finds procedure is adequately enforced during ground disturbance activities. During the implementation of the Chance Finds procedure on site, Project Owner will directly report the issue to Museum archaeologist and relevant Regional Preservation Board.*
- *Salvage excavation (and other Chance find issues) (If necessary) are under the responsibility of Project Owner.*
- Project Owner is also responsible for giving necessary trainings to the field staff about the implementation of the chance find procedure.

- *Project Owner will record all chance finds on the Chance Finds Report Form and in the Chance Finds Register as per the Chance Find Procedure in Appendix-1.*

3.2 Management Structure and Responsibilities

Project Owner will be responsible for the management of the plan and procedure about archaeological issues of Project site. The Archaeologist of Project Owner will train the employees about cultural heritage and chance find procedure (see Section 4.1). Also, the monitoring of the construction works will be the responsibility of Project Owner Archaeologist (see Section 4.3).

The Project Manager will be in charge of the all-construction work team.

The Archaeologists will work with the equipment operators and have authority to the stop work. Each will accompany a topsoil stripping crew during ROW clearing. They will direct the operator to stop work or redirect stripping activities in case of a chance find. They will submit scheduled progress reports and special reports of chance finds to Environmental and Social Coordinators.

In addition to the Chance Find Procedure, the Antalya Regional Board Directorates will decide for the requirement of a salvage excavation if needed. The contact information of these board directorate is given in Appendix-2. The excavation permissions will be obtained by the relevant museum directorate from the General Directorate of Cultural Heritage and Museums. Following the permission, Project Owner will provide a team of qualified archaeologist to conduct the salvage excavation within the framework of their contract under the guidance of Project Archaeologist / Consultant archaeologist, who will follow the instructions of the related museum directorate). These works may cover non- destructive research methods such as remote sensing and geophysics and test pit excavations. The negotiations and meetings with the related Regional Board Directorate of Protection of Cultural Heritage on technical topics during and after the salvage excavation will be held by Project Archaeologist / Consultant archaeologist.

During the construction activities, there will be no blasting within 300 m of archaeological sites (pls see "Implementing Regulation of Mining Activities, Item 24").

4. TRAINING, REPORTING AND MONITORING

4.1 Training

The Archaeological Monitoring archaeologist/consultant of Project Owner will provide cultural heritage training to all project crew including the implementation of the chance find procedure as part of the Project trainings. Archaeologists of Project Owner will receive archaeological training as well as specialized training for the procedures they are to follow for monitoring site construction activities.

4.2 Reporting

Project Owner will record all chance finds on the Chance Finds Report Form (see CHMP, Appendix-1) and in the Chance Finds Register (see Appendix-2) as per the Chance Find Procedure in Appendix-1. The register will be kept up to date by ***Project Owner*** archaeologist. ***The chance finds report form will be kept in hard copy by archaeologist.***

4.3 Monitoring

The function of the archaeological monitoring process will be as follows:

- Provide advice to define the areas where the construction activities may continue or shall be stopped due to Archaeological findings.
- To record archaeological features observed on, and close to the existing project site.
- To record archaeological features discovered during construction activities.
- To provide advice in the form of a 'preliminary assessment' to the construction superintendent on the significance and implications of new archaeological discoveries on the project site.

All ground disturbance activities will be monitored by Project Owner's archaeologist during the construction of the project site and its Above Ground Facilities ***for evidence of cultural heritage items.*** In case of encountering archaeological findings, the Chance Find Procedure described in Appendix-1 will be initiated.

4.4 Intangible Cultural Heritage

In the pre-construction period, meetings should be held with the mukhtars. Dates of the activities, rituals, etc., for local days or more extended activity periods planned to be held in the region should be learned through meetings with the mukhtars and local people. The community should be prevented from being affected by the construction in possible customary practices that can be experienced locally.

5. ARCHAEOLOGICAL FINDINGS

The procedure given below that must be followed in case of encountering a chance find is based on national legislation and provisions in international standards. The significance of the archaeological finding may vary upon evaluation opinions of related museum experts.

5.1 Intangible Cultural Heritage

Project Owner will liaise with local authorities to identify if project activities can interfere with traditional celebrations or festivities; alternative solutions will be agreed with local authorities. Furthermore, Project Owner will liaise with local authorities to identify if project activities restrict access to elements of traditional culture; alternative solutions will be agreed with local authorities

5.2 Archaeological Findings of Minor Significance

This type of archaeological findings is comprised of a finding isolated from its environment or findings in notably small sizes which may be found by chance. In this case, chance find procedure (CHMP, Appendix-1) will be followed.

The finding will be reported to the archaeologist. The construction activities will be ceased in the field where the finding is discovered and the finding will be reported to the relevant museum expert by archaeologist. Following the completion of investigation of the notified relevant Museum Directorate, the necessary arrangements, such as the identification of the boundaries of the archaeological asset/site (finding), preservation by a protection band, notification of workers in order to prevent any physical intervention.

The preservation methods and mitigation measures to be applied are also listed in the CHIA report.

5.3 Archaeological Findings of Moderate Significance

This type of archaeological findings is small scale findings in groups or single findings with medium size architectural elements such as tombs. In this case, chance find procedure (CHMP, Appendix- 1) will be followed. In order to prevent a possible damage, necessary arrangements must be made to determine the boundaries of the archaeological remains to keep the construction equipment out of access.

The finding will be reported to the construction manager and archaeologist by the Project Owner. The construction activities will be ceased in the field where the finding is discovered and the finding will be reported to the relevant museum expert by archaeologist. Following the completion of investigation of the notified relevant Museum Directorate, the necessary arrangements will be taken, such as the identification of the boundaries of the archaeological asset/site (finding), preservation by a protection band, notification of workers in order to prevent any physical intervention.

5.4 Archaeological Findings of Major Significance

This type of findings is comprised of findings with great importance such as a settlement area, a tumulus, a mound or a big necropolis (wide graveyard areas with archaeological characteristic) and the construction activities must be immediately stopped and chance find procedure (CHMP, Appendix-1) will be followed. This type of chance find may cover the entire construction site in such a way that the entrance and exit of the construction equipment and vehicles cannot be managed without giving any damage to the archaeological remains.

The finding will be reported to the construction manager and archaeologist by the archaeologist of Project Owner. The construction activities will be ceased in the field where the finding is discovered and the finding will be reported to the relevant museum expert by archaeologist. Following the completion of investigation of the notified relevant Museum Directorate, the necessary arrangements will be taken, such as the identification of the boundaries of the archaeological asset/site (finding), preservation by a protection band, notification of workers in order to prevent any physical intervention.

6. REFERENCES

- Council of Europe ETS No 143, “European Convention on the Protection of the Archaeological Heritage (Revised) (The Valletta Convention)”, 1992.
- General Directorate of Preservation of Cultural and Historical Heritage, “Law on Protection of Cultural and Natural Assets (1) Law No. 2863”, 1983.
- ICOMOS (International Council of Monuments and Sites) “Guidance on Impact Assessment for Cultural World Heritage”, January 2011.
- IFA (Institute of Field Archaeologists) Standard and Guidance for the Collection, “Documentation, Conservation and Research of Archaeological Materials”, 2001.
- IFA (Institute of Field Archaeologists) 1994, “Standard and Guidance for an Archaeological Desk Based Assessment” (revised 1999)
- IFA (Institute of Field Archaeologists) 1994, “Standard and Guidance for an Archaeological Watching Brief” (revised 1999)
- IFA (Institute of Field Archaeologists) 1994, “Standard and Guidance for an Archaeological Field Evaluation” (revised 1999)
- UNESCO, “Convention Concerning the Protection of the World Cultural and Natural Heritage”, November 1972

APPENDIX-1: Chance Find Procedure

ANTALYA ALANYA MOTORWAY PROJECT

CULTURAL HERITAGE ASSESSMENT REPORT

CHANCE FIND PROCEDURE

HERMES
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SEPTEMBER/2024

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ABBREVIATIONS

CHMP	Cultural Heritage Management Plan
ICOMOS	International Council of Monuments and Sites
IFA	Institute of Field Archaeologists
No	Number
PROJECT	Antalya Alanya Motorway Project
UNESCO	United Nations Educational, Scientific and Cultural Organization

1. PURPOSE

The Archaeological Chance Find Procedure is prepared to provide guidance to all parties and employees regarding the actions to be taken in case of discovery of an archeological asset.

2. SCOPE

It is likely to encounter archeological findings during the construction activities of the Project. Any type of activity requiring excavation or any type of intervention on the landscape through earthworks has potential to lead to discovery or destroying of archeological entities.

3. ROLES AND RESPONSIBILITIES

Project Owner will be responsible for the preparation and implementation of the environmental and social impact assessment-based management plans, which will be project specific. These plans shall be practical, detailed procedures for use in the field.

Project Owner will ensure the implementation of the commitments stated in the ESIA.

Project Owner will also be responsible for the performance of all sub-contractors with respect to the project specific plans and shall comply with all relevant project standards, statutory requirements, permit and license conditions and secure all applicable permits and licenses.

3.1 Management of Cultural Heritage

The basic definitions regarding the management of cultural heritage are given in the following bullets:

- Ministry of Culture and Tourism is the responsible authority.
- Museum Directorate is responsible to provide experts for the sites within 24 hours after being informed and to officially define the Chance Find (see Appendix-1). ***Museum directorate is responsible excavation of chance find areas. Museum Directorate will follow the directions and decisions from Regional Board Directorate of Protection of Cultural Heritage***.
- ***Regional Board Directorate of Protection of Cultural Heritage*** is the only decision maker on any intervention, which would be made on the site after the chance find.
- Project Owner is responsible for the management of archaeological issues during the progress of construction of the Project site area and implementation of related management plan and chance find procedure.
- *Project Owner will employ archaeologists at the Project site responsible for the monitoring of ground disturbance activities. They are also responsible with the monitoring of the implementation of the Cultural Heritage Management Plan (CHMP) and chance find procedure.*

- *Project Owner will ensure that Chance Finds procedure is adequately enforced during ground disturbance activities. During the implementation of the Chance Finds procedure on site, Project Owner will directly report the issue to Museum archaeologist and relevant Regional Preservation Board.*
- *Salvage excavation (and other Chance find issues) (If necessary) are under the responsibility of Project Owner.*
- Project Owner is also responsible for giving necessary trainings to the field staff about the implementation of the chance find procedure.
- *Project Owner will record all chance finds on the Chance Finds Report Form and in the Chance Finds Register as per the Chance Find Procedure in Appendix-1.*

3.2 Management Structure and Responsibilities

Project Owner will be responsible for the management of the plan and procedure about archaeological issues of Project site. The Archaeologist of Project Owner will train the employees about cultural heritage and chance find procedure (see Section 4.1). Also, the monitoring of the construction works will be the responsibility of Project Owner Archaeologist.

The Project Manager will be in charge of the all-construction work team.

The Archaeologists will work with the equipment operators and have authority to the stop work. Each will accompany a topsoil stripping crew during ROW clearing. They will direct the operator to stop work or redirect stripping activities in case of a chance find. They will submit scheduled progress reports and special reports of chance finds to Environmental and Social Coordinators.

In addition to the Chance Find Procedure, the Antalya Regional Board Directorates will decide for the requirement of a salvage excavation if needed. The contact information of these board directorate is given in Appendix-2. The excavation permissions will be obtained by the relevant museum directorate from the General Directorate of Cultural Heritage and Museums. Following the permission, Project Owner will provide a team of qualified archaeologist to conduct the salvage excavation within the framework of their contract under the guidance of Project Archaeologist / Consultant archaeologist, who will follow the instructions of the related museum directorate). These works may cover non- destructive research methods such as remote sensing and geophysics and test pit excavations. The negotiations and meetings with the related Regional Board Directorate of Protection of Cultural Heritage on technical topics during and after the salvage excavation will be held by Project Archaeologist / Consultant archaeologist.

During the construction activities, there will be no blasting within 300 m of archaeological sites (pls see "Implementing Regulation of Mining Activities, Item 24").

4. PROCEDURE

Any physical remains of past human activity, including artifacts, plant and animal remains, structural remains and soil features are defined as archaeological entities. All actions to be carried out in case of discovery of an archaeological entity should comply with the Law on Cultural and Natural Assets Conservation Law Numbered 2863 (**Law Number**: 2863, **Date of Approval**: 21.7.1983, **Publication in the Official Gazette**: Date: 23/7/1983 No: 18113).

In the event of discovery of an archaeological entity, the following procedure shall be implemented:

- All construction and other relevant activities in the vicinity of the chance find will be ceased by the Archaeologist of Project Owner or anyone, who encounters a chance find.
- Project archaeologist will contact construction manager as soon as a chance find is encountered.
- Project archaeologist contacts museum directorate archaeologist immediately.
- Archaeologist of Project will properly secure chance find site via flagging, no-entry signs, etc. and prevent/limit the vehicle traffic within the immediate vicinity of chance find and also protect the site by not moving, removing or further disturbing the chance find.
- Boundaries of discovered archaeological site coordinates will be recorded and photograph of the location and the finding shall be taken and also video record should be made.
- The site and its vicinity will be secured against damage or loss until a final decision is made about this site by Board.
- Archaeologist of Project will fill out Part A of Chance Find Form and send a copy to Museum archaeologist within 24 hours keeping a copy for Project as a record,
- If any human remains such as contemporary grave or graveyard are noticed, security forces will be informed. Unless the remains are determined to be recent, the local administration (village head: mukhtar, or district governor) has the full authority.
- Further steps to be followed and proper procedures to be implemented for the management of the finding(s) (changes in the layout, conservation, preservation, restoration or salvage) will be decided and reported in writing by the Museum Directorate.
- In case the site is considered to be of no significance by the Museum Directorate, Project archaeologist will inform the Construction Manager and they will inform their managers. Subsequent of filling out Part B of Chance Find Form by Archaeologist of Project within 24 hours while retaining a copy of the Chance Find form as a record, the construction works will proceed since no further actions are required.

- In case the site is considered to be of significance by the Museum Directorate, Project archaeologist will be informed by the Museum Directorate about the decision on the further actions. Project archaeologist will inform the construction manager and their managers. Subsequent of filling out Part B of Chance Find Form by Archaeologist of Project within 24 hours while retaining a copy of the Chance Find form as a record, the instructions of the Museum Directorate will be followed. After some field investigation, Museum Directorate will declare their decision on the significance of the site and the actions to be followed as per their decision are summarized in Table 1.

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Table 1 Actions to be followed

Site to be of no Significance	Site to be of Minor Significance	Site to be of Major Significance
✓ Project's archaeologists/relevant personnel will inform their managers, ✓ Archaeologist of Project will record the decision in Part C of Chance Find Form within 24 hours, ✓ Archaeologist of Project will retain a copy of Chance Find form as a record, ✓ No further actions will be required, ✓ This step closes out the chance find procedure, ✓ Construction activities may resume.	✓ A salvage excavation is to be completed ✓ Museum Directorate will provide instructions, and/or supervision for salvage archaeological excavation Project archaeologist, ✓ Project's archaeologists will inform their managers, ✓ Under the guidance of Museum archaeologist (following instructions from other authorities, Antalya Regional Board etc.), Project will provide a team of qualified archaeologist to conduct the salvage excavation, ✓ Once the excavation is completed, Archaeologist of Project will provide a report to construction manager, ✓ Project archaeologist will provide a report to the Museum Directorate, ✓ Regional Board Directorate of Protection of Cultural Heritage will officially confirm the completion of recovery and inform Project archaeologist, ✓ Project archaeologist will inform the construction manager that no further actions are required, ✓ Project's archaeologists will inform their managers, ✓ Archaeologist of Project will record the decision in Part C of Chance Find Form within 24 hours, ✓ Archaeologist of Project will retain a copy of Chance Find form as a record, ✓ No further actions will be required, ✓ This step closes out the chance find procedure ✓ Construction activities may resume.	✓ An excavation is to be completed, ✓ Site will be treated according to "Law on the Conservation of Cultural and Natural Property (2863)", ✓ Museum Directorate will provide instructions, and/or supervision for salvage archaeological excavation to Project archaeologist, ✓ Project's archaeologists will inform construction manager and their managers, ✓ Under the guidance of Museum archaeologist (following instructions from other authorities, Antalya Regional Board etc.), Project will provide a team of qualified archaeologist to conduct the salvage excavation, ✓ Once the excavation is completed, Archaeologist of Project will provide a report to construction manager, ✓ Project archaeologist will provide a report to the Museum Directorate, ✓ Regional Board Directorate of Protection of Cultural Heritage will officially confirm the completion of recovery and inform Project archaeologist, ✓ Site will be officially recorded and protected according to Turkish regulations, ✓ Project archaeologist will inform the construction manager that no further actions are required, or that a relocation is required, ✓ Project's archaeologists will inform their managers, ✓ Archaeologist of Project will record the decision in Part C of Chance Find Form within 24 hours, ✓ Archaeologist of Project will retain a copy of Chance Find form as a record, ✓ No further actions will be required, ✓ This step closes out the chance find procedure, ✓ Construction activities may resume, or relocation is implemented.

APPENDIX-1:

CHANCE FIND REPORT FORM
RASLANTISAL BULUNTU RAPOR FORMU

To be filled out in English
Ingilizce doldurunuz

PART A BÖLÜM A		
Location: *Mevkii*	Date: *Tarih*	ID:
Name of person reporting chance find: *Rastlantısal buluntuyu rapor eden kişinin ismi*		
Name of contractor employee contacted: *İletişime geçilen yüklenici çalışanı ismi*		
Was work stopped in the immediate vicinity of chance find? *Rastlantısal buluntunun tam çevresinde iş durduruldu mu?*	☐ Yes *Evet*	☐ No *Hayır*
Was a buffer zone created to protect chance find? *Rastlantısal buluntuyu korumak için tampon bölge oluşturuldu mu?*	☐ Yes *Evet*	☐ No *Hayır*
NOTIFICATION ***BİLDİRİM***		
Contractor construction manager contacted *Yüklenici inşaat müdürü ile irtibata geçildi*	☐ Yes *Evet*	☐ No *Hayır*
PROJECT archaeologist contacted *PROJE arkeoloğu ile iletime geçildi*	☐ Yes *Evet*	☐ No *Hayır*
CHANCE FIND DETAILS ***RASLANTISAL BULUNTU AYRINTILARI***		
GPS coordinates *GPS koordinatları*	Photo record ☐Yes ☐No (HD quality – no cell phone photos) *Fotoğraf kaydı Evet Hayır* *(HD kalitesinde – cep telefonu fotoğrafı değil)* If not, explain why: *Yok ise nedenini açıklayınız* Other records ☐Yes ☐ No Specify (drawings, HD quality videos, etc.): *Diğer kayıtlar* *Evet* *Hayır Belirtin* *(çizimler, HD kalite videolar, vb.)*	

Description of chance find: *Rastlantısal buluntunun tanımı*
Description of site and vegetation: (e.g. surface sediment type, ground surface visibility, distance to closest watercourse, etc.) *Sahanın ve bitki örtüsünün tanımı: (örn. Yüzey sediman türü, yüzey zemin görünürlüğü, en yakın suyoluna olan mesafe, vb.)*
PART B ***BÖLÜM B***
NOTIFICATION OF_____MUSEUM DIRECTORATE ARCHAEOLOGIST ***_____MÜZE MÜDÜRLÜĞÜ ARKEOLOĞUNA BİLDİRİ***
PROJECT archaeologist contacted museum directorate archaeologist ☐Yes ☐No *PROJE arkeoloğu müze müdürlüğü arkeoloğu ile irtibata geçti. Evet Hayır* Date of notification: *Bildirim tarihi* Name of museum directorate archaeologist : *Müze müdürlüğü arkeoloğunun ismi* Contact number of museum directorate archaeologist: *Müze müdürlüğü arkeoloğunun iletişim numarası*
DECISION OF_____MUSEUM DIRECTORATE ARCHAEOLOGIST ***_____MÜZE MÜDÜRLÜĞÜ ARKEOLOĞUNUN KARARI***
Date of initial investigation: *İlk araştırma tarihi*

☐ Site of no significance - Construction to proceed with no further investigation – End of chance find procedure *Önemsiz saha – İnşaat daha fazla araştırma yapılmadan devam edilebilir – rastlantısal buluntu prosedürün sonu.* Date of notice to resume work : *İşe başlama tarihi bildirisi*	☐ Site of significance - Further investigation required *Önemli saha – Ek araştırma gerekmektedir* Fill out Part C *Bölüm C'yi doldurun.*

Name of museum directorate archaeologist: *Müze müdürlüğü arkeoloğunun ismi* Contact information: *İletişim numarası*		
PROJECT construction manager contacted *PROJE inşaat müdürü ile irtibata geçildi*	☐ Yes *Evet*	☐ No *Hayır*
Contractor archaeologist contacted *Yüklenici arkeoloğu ile irtibata geçildi*	☐ Yes *Evet*	☐ No *Hayır*
PART C ***BÖLÜM C***		
FURTHER FIELD INVESTIGATION *EK SAHA ARAŞTIRMASI*		
☐ Site of no significance *Önemsiz saha*	☐ Site of minor significance *Az önemli saha*	☐ Site of major significance *Çok önemli saha*
Describe additional work to be conducted: *Yapılması gereken ek işlerin tanımları*		
Date started: *Başlangıç tarihi*	Date completed: *Bitiriş tarihi*	
Date of notice to resume work : *İşe başlama tarihi bildirisi*		
Name of museum directorate archaeologist: *Müze müdürlüğü arkeoloğunun ismi:* Contact information: *İletişim numarası*		
Construction manager contacted *İnşaat müdürü ile irtibata geçildi*	☐ Yes *Evet*	☐ No *Hayır*
PROJECT archaeologist contacted *PROJE inşaat müdürü ile irtibata geçildi*	☐Yes *Evet*	☐No *Hayır*

APPENDIX 2: CHANCE FINDS REGISTER

	CHANCE FIND REGISTER
	Reporting Period:

Total of chance find	
To date	**To date**

ID (*)	DATE OF CHANCE FIND	LOCATION	CHANCE FIND SUMMARY	NAME OF AUTHORITY NOTIFIED	DATE PART A COMPLETED	DATE PART B COMPLETED	DATE PART C COMPLETED	ACTION TAKEN	STATUS OPEN OR CLOSED	REMARKS
Project 1										
Project 2										
Project 3										
Project 4										

(*) Keep same ID format

APPENDIX 3: CONTACT INFORMATION OF RELATED MUSEUM DIRECTORATES AND REGIONAL BOARD DIRECTORATES

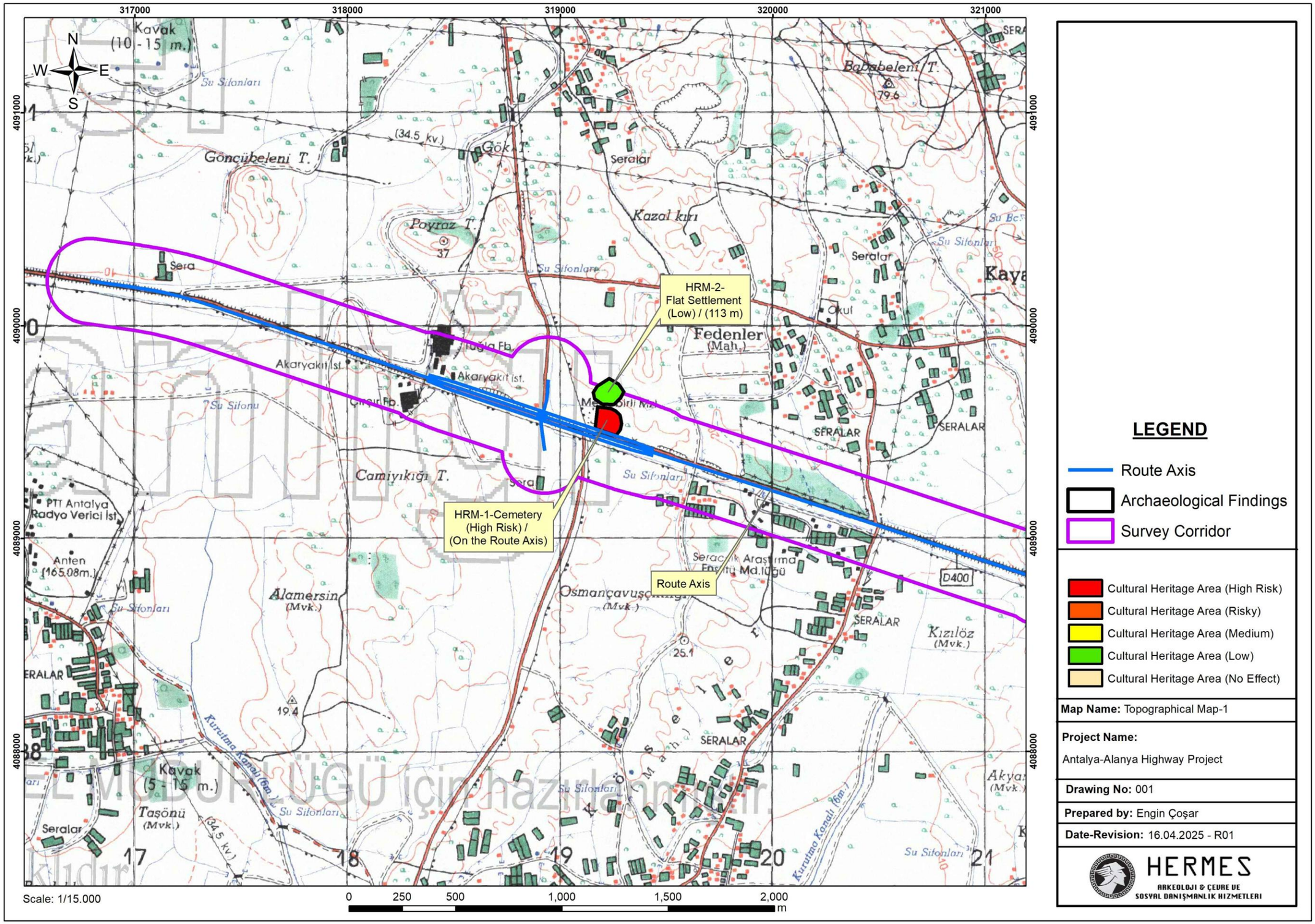
Table 2 Museum Contact Information

Name	Phone	Adress
Antalya Archaeology Museum	Tel: 0242 238 56 88/89	Bahçelievler Mahallesi, Konyaaltı Caddesi, No 88, 07050 ANTALYA E-posta: antalyamuzesi@kultur.gov.tr

Table 3 Contact Information of Regional Board Directorates

Name	Phone	Adress
Antalya Cultural Assets Regional Board Directorate	0242) 243 21 60 (0242) 247 87 61 (0242) 244 55 74	Kılıçaslan Mahç Zafer Sk. No: 6 07100 KALEİÇİ / ANTALYA

APPENDIX-4: MAPS OF ARCHAEOLOGICAL SITES FOR ROUTE AND FACİLİTİES AREAS



LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-1

Project Name:
Antalya-Alanya Highway Project

Drawing No: 001

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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SOSYAL DANIŞMANLIK HİZMETLERİ

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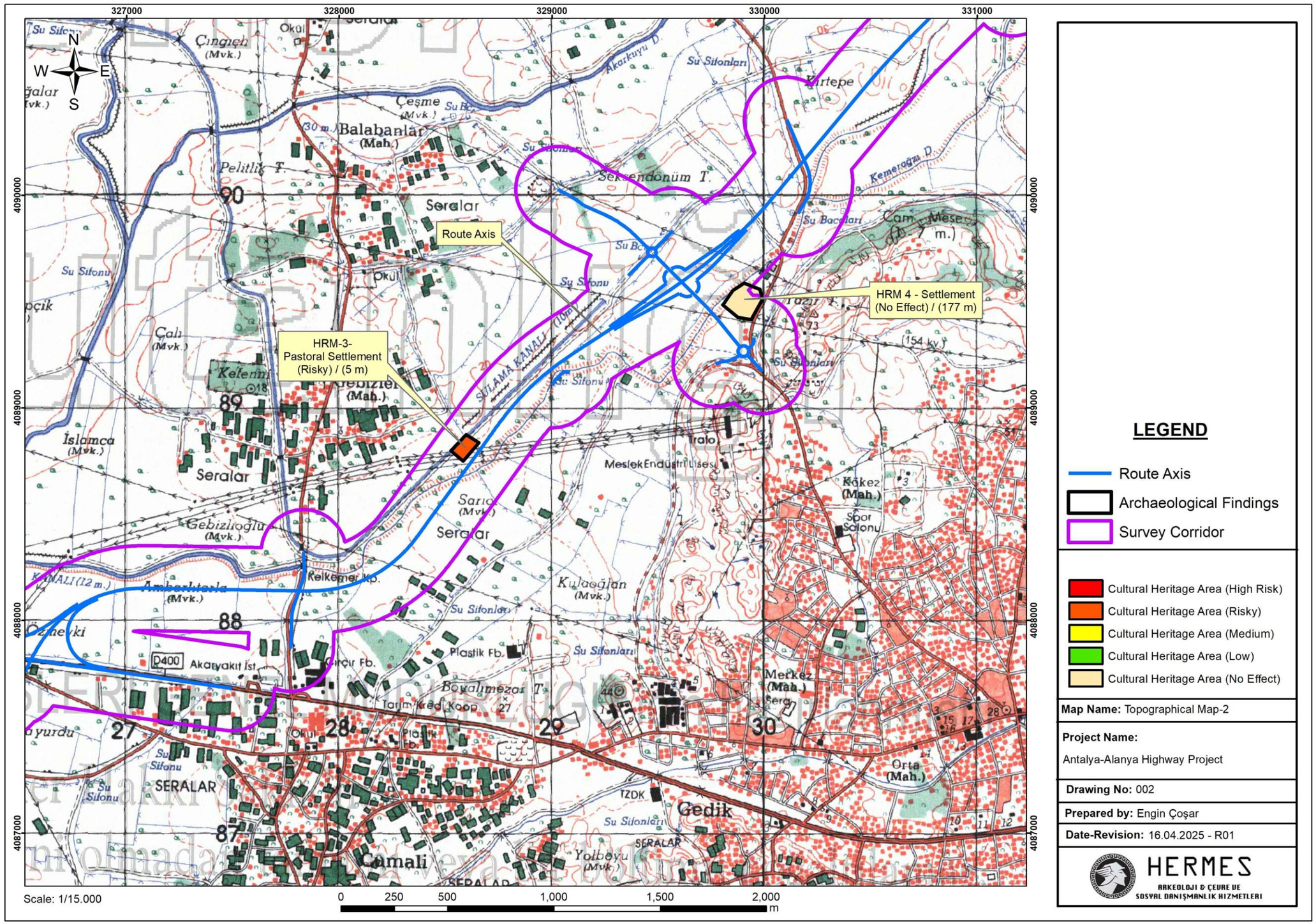
kıdır



LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-2

Project Name:
Antalya-Alanya Highway Project

Drawing No: 002

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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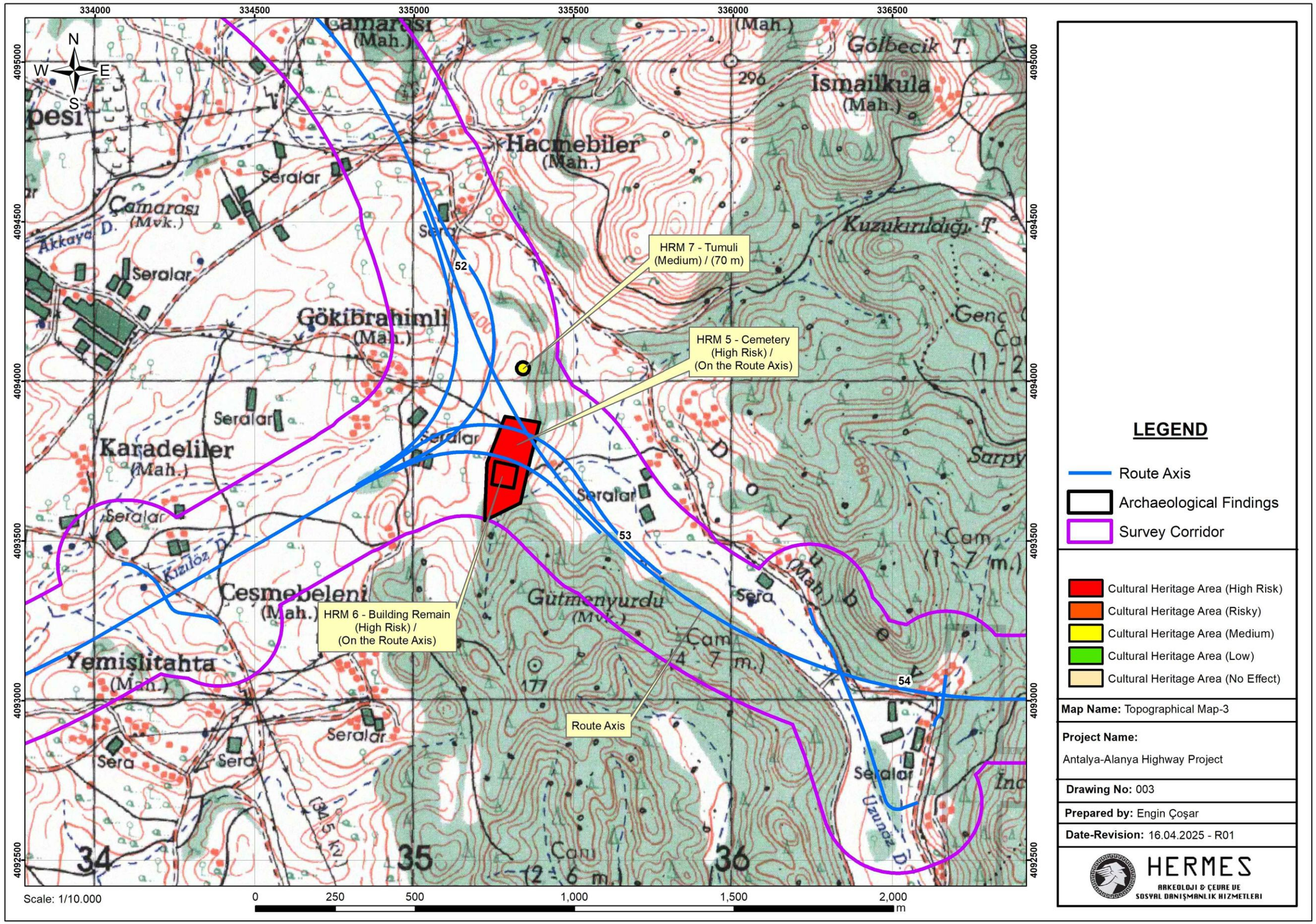

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-3

Project Name:
Antalya-Alanya Highway Project

Drawing No: 003

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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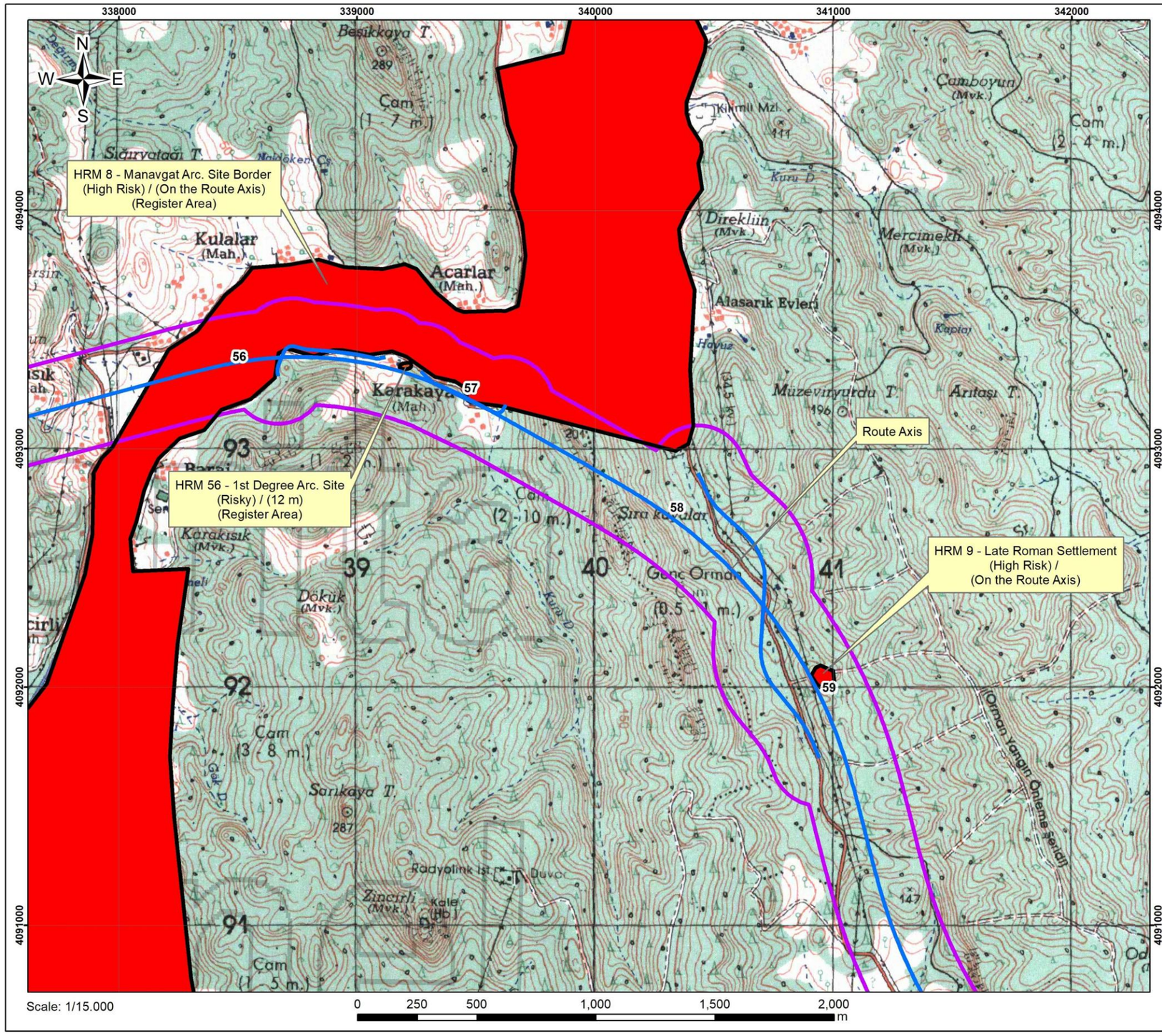

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-4

Project Name:
Antalya-Alanya Highway Project

Drawing No: 004

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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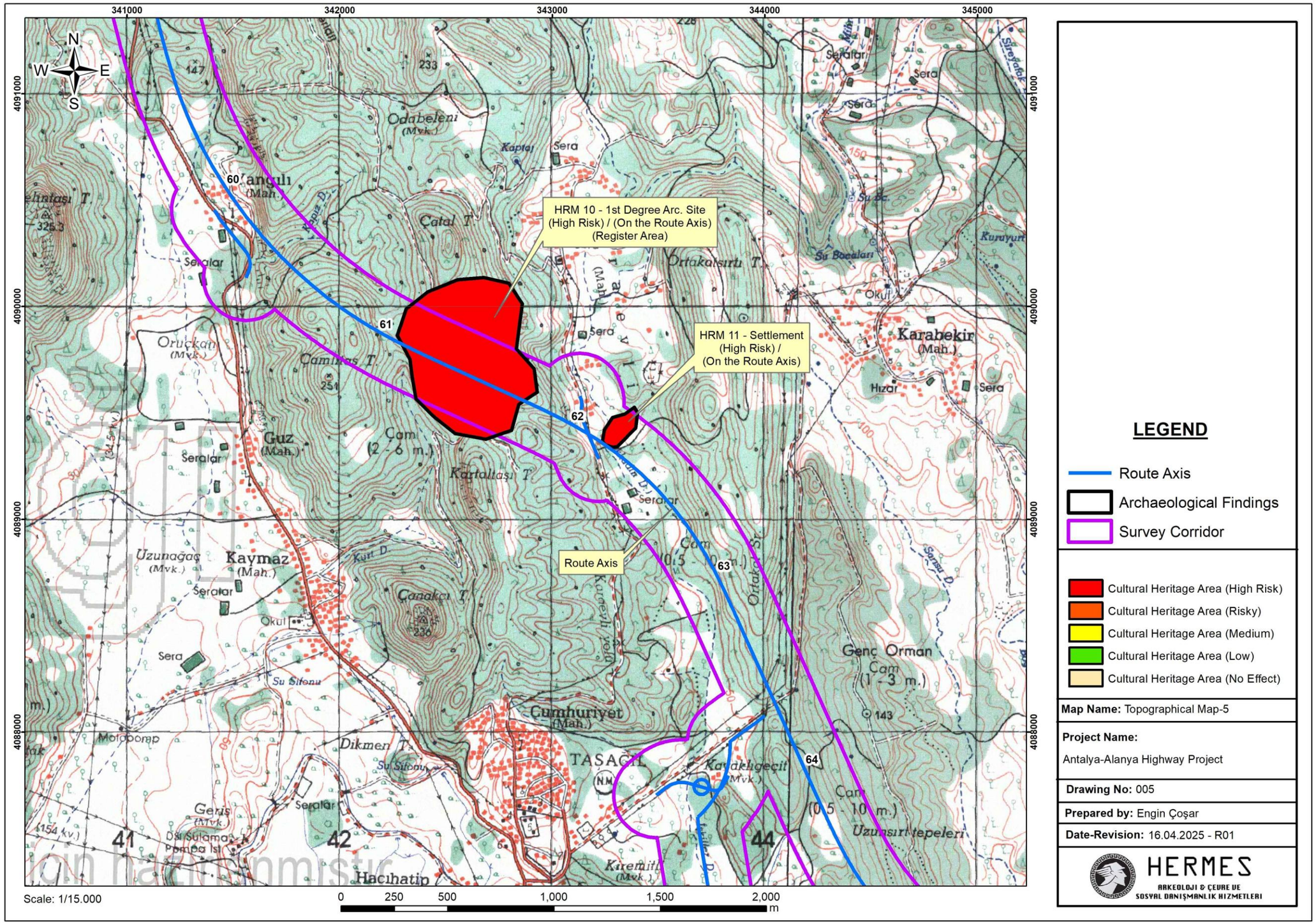

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-5

Project Name:
Antalya-Alanya Highway Project

Drawing No: 005

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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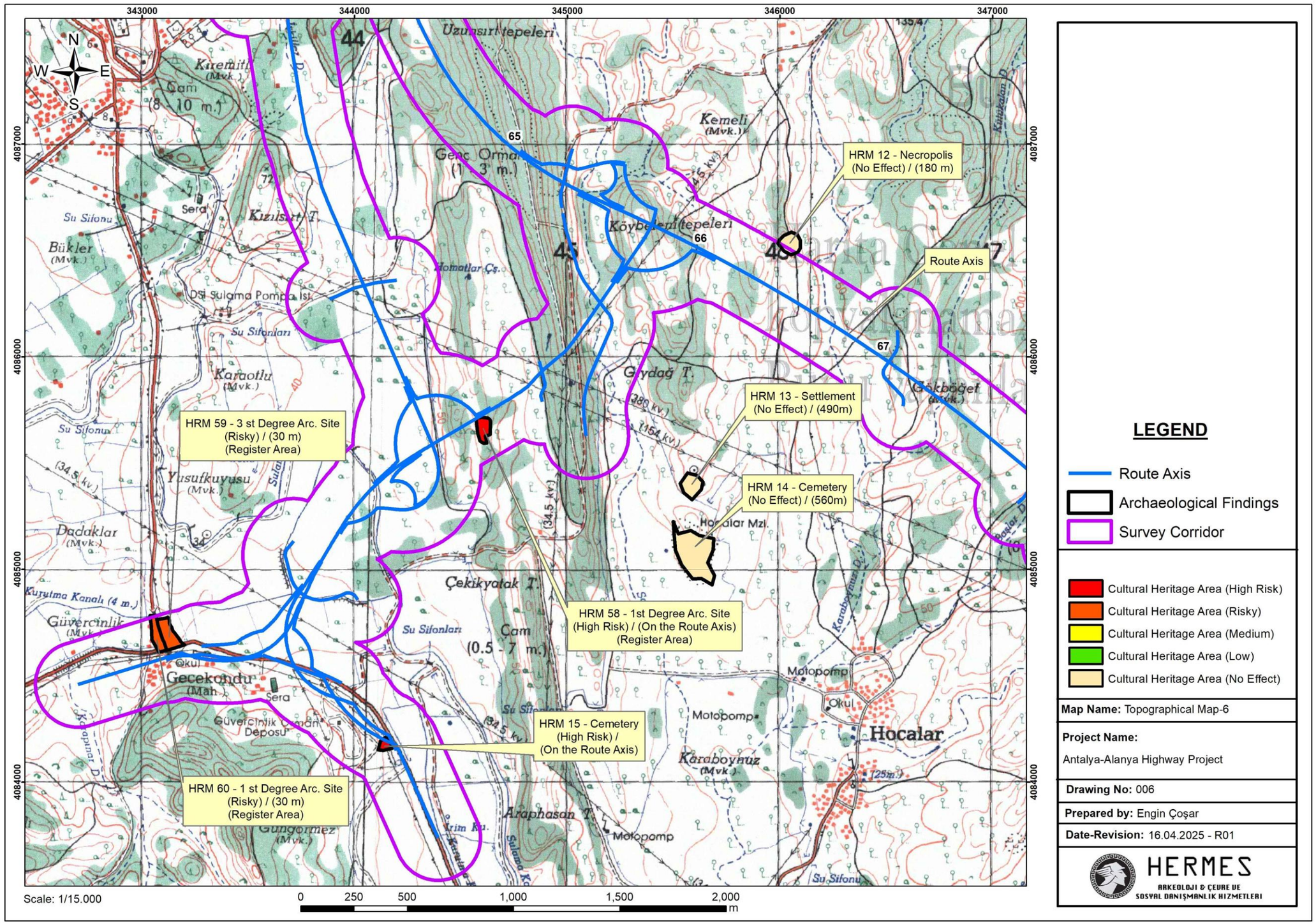

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-6

Project Name:
Antalya-Alanya Highway Project

Drawing No: 006

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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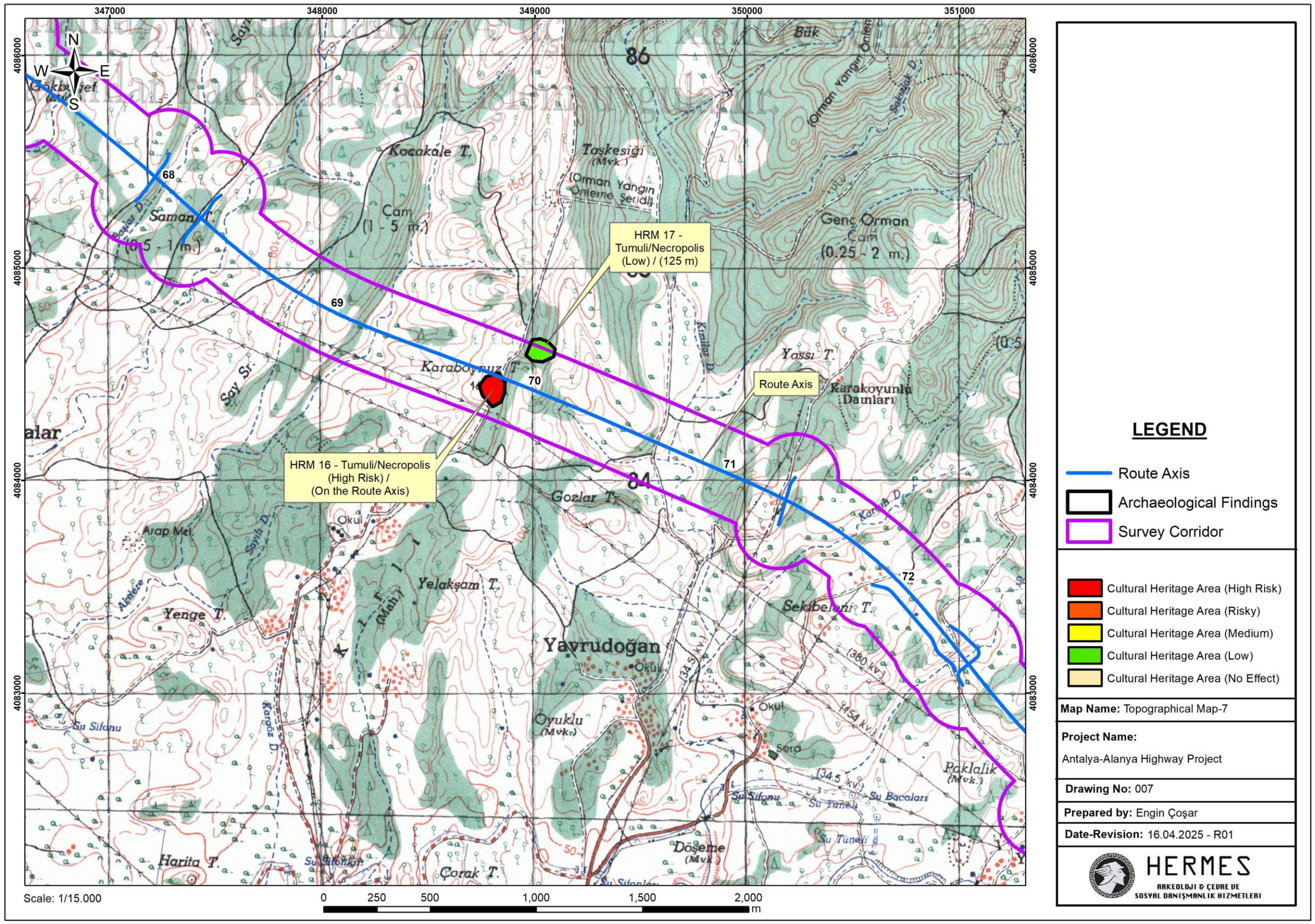

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-7

Project Name:
Antalya-Alanya Highway Project

Drawing No: 007

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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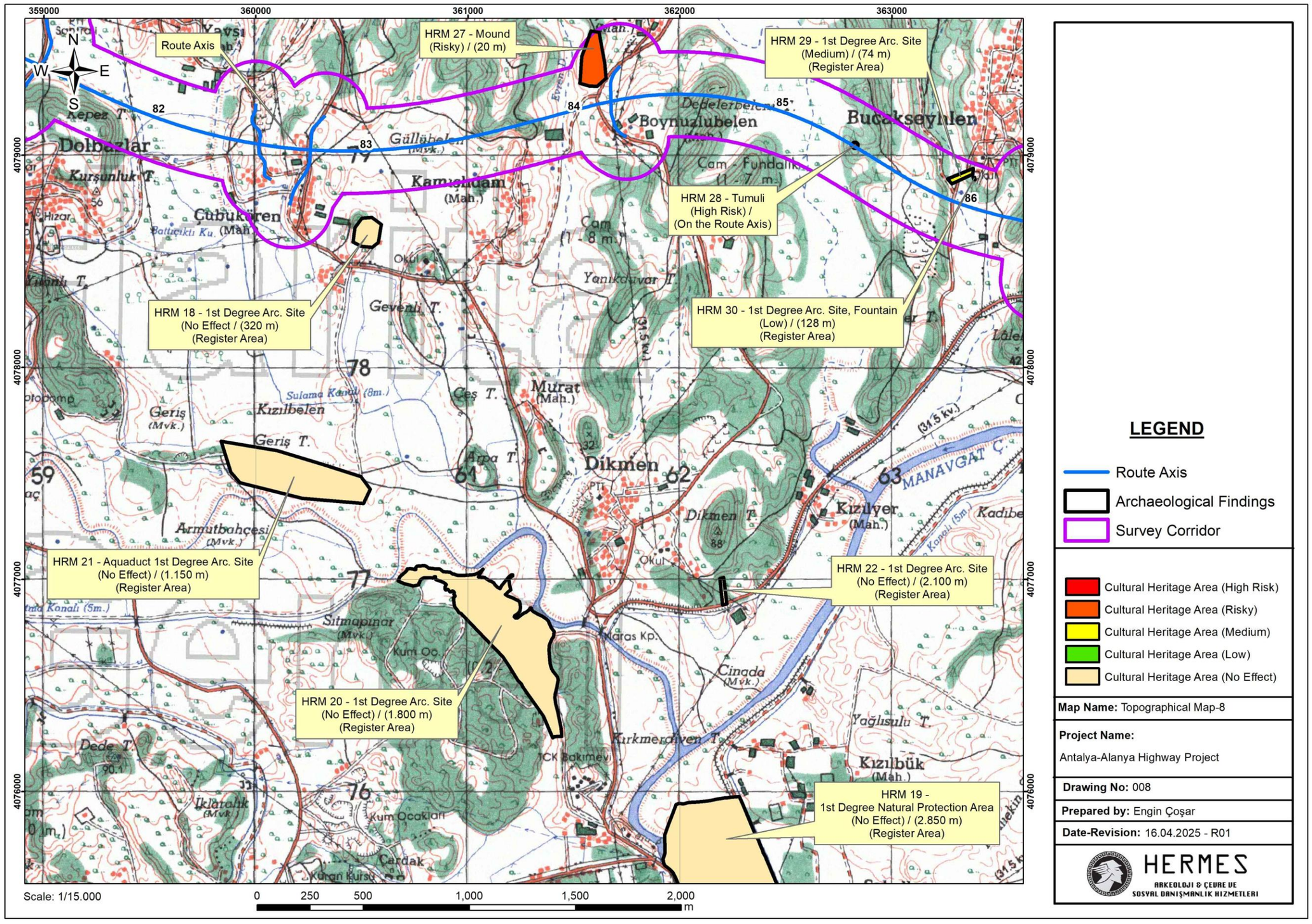

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-8

Project Name:
Antalya-Alanya Highway Project

Drawing No: 008

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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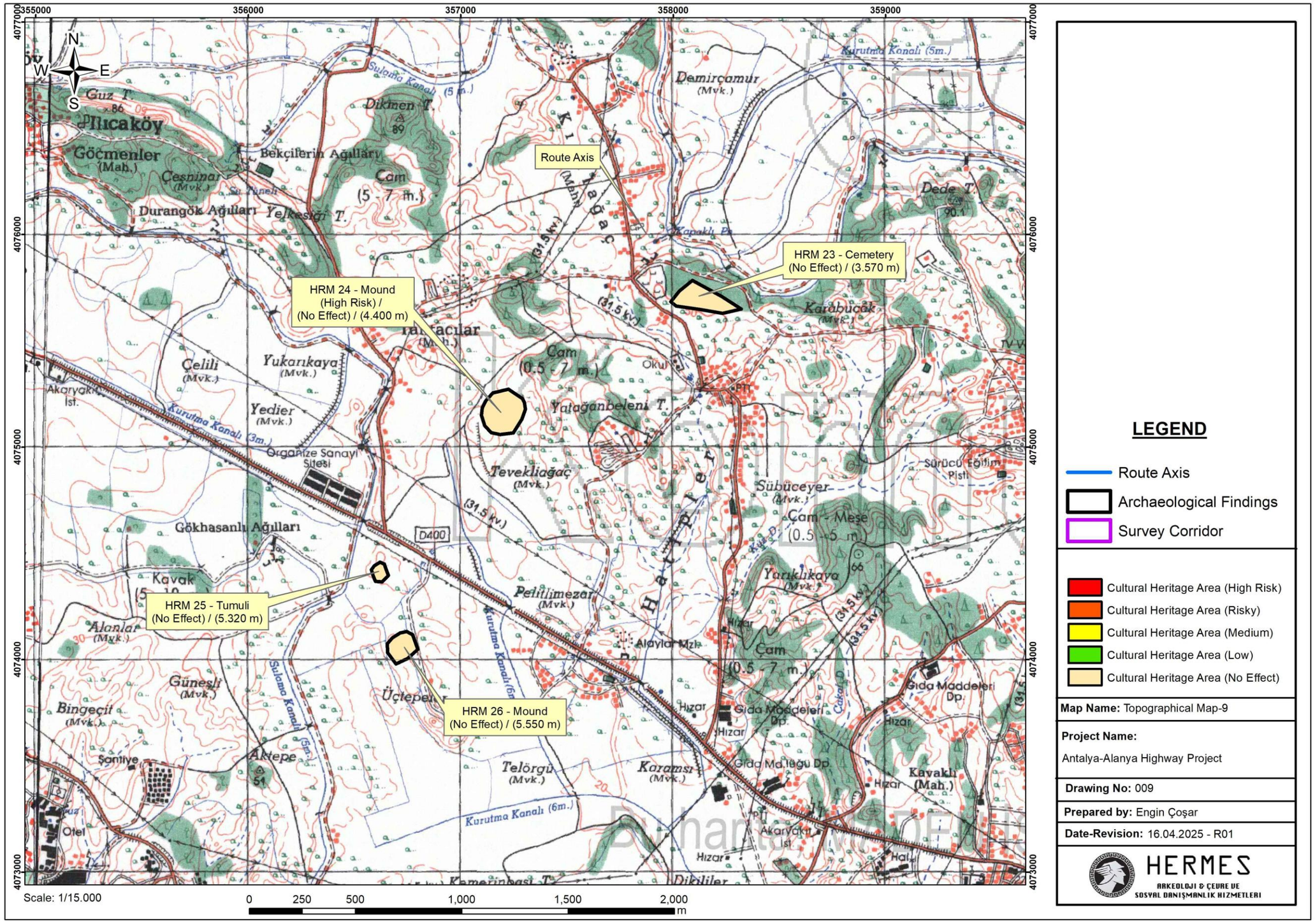

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-9

Project Name:
Antalya-Alanya Highway Project

Drawing No: 009

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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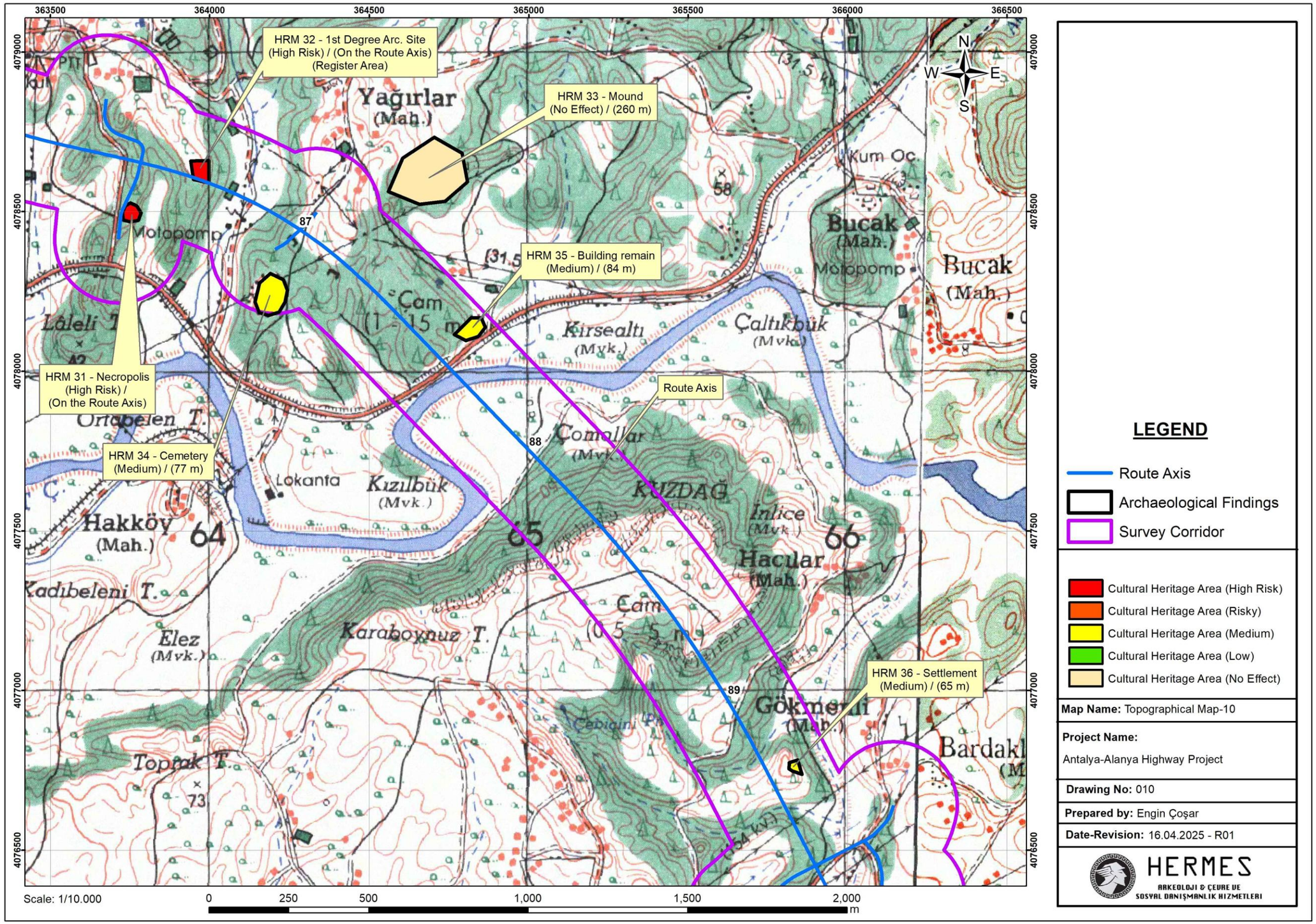

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-10

Project Name:
Antalya-Alanya Highway Project

Drawing No: 010

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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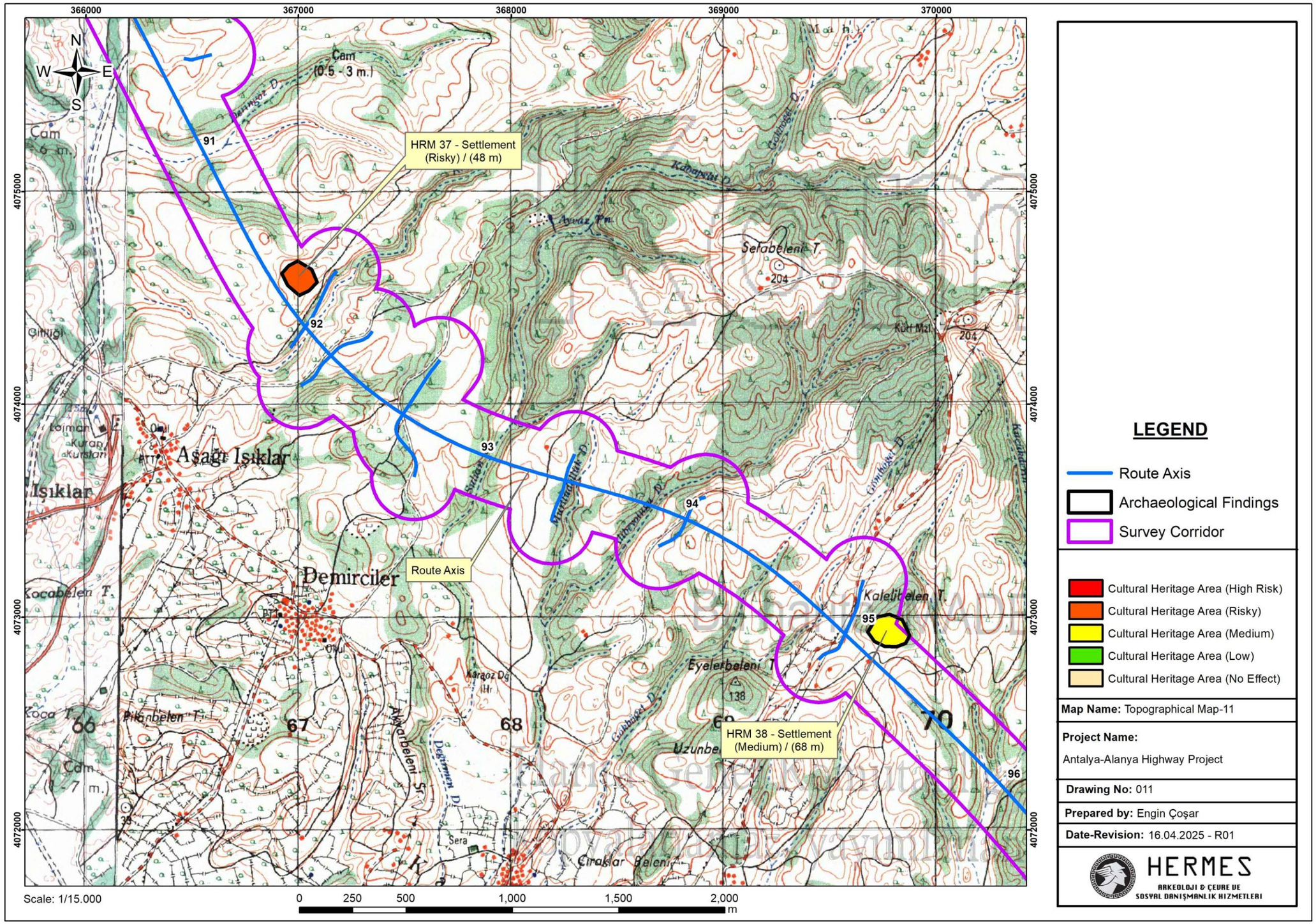

LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-11

Project Name:
Antalya-Alanya Highway Project

Drawing No: 011

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

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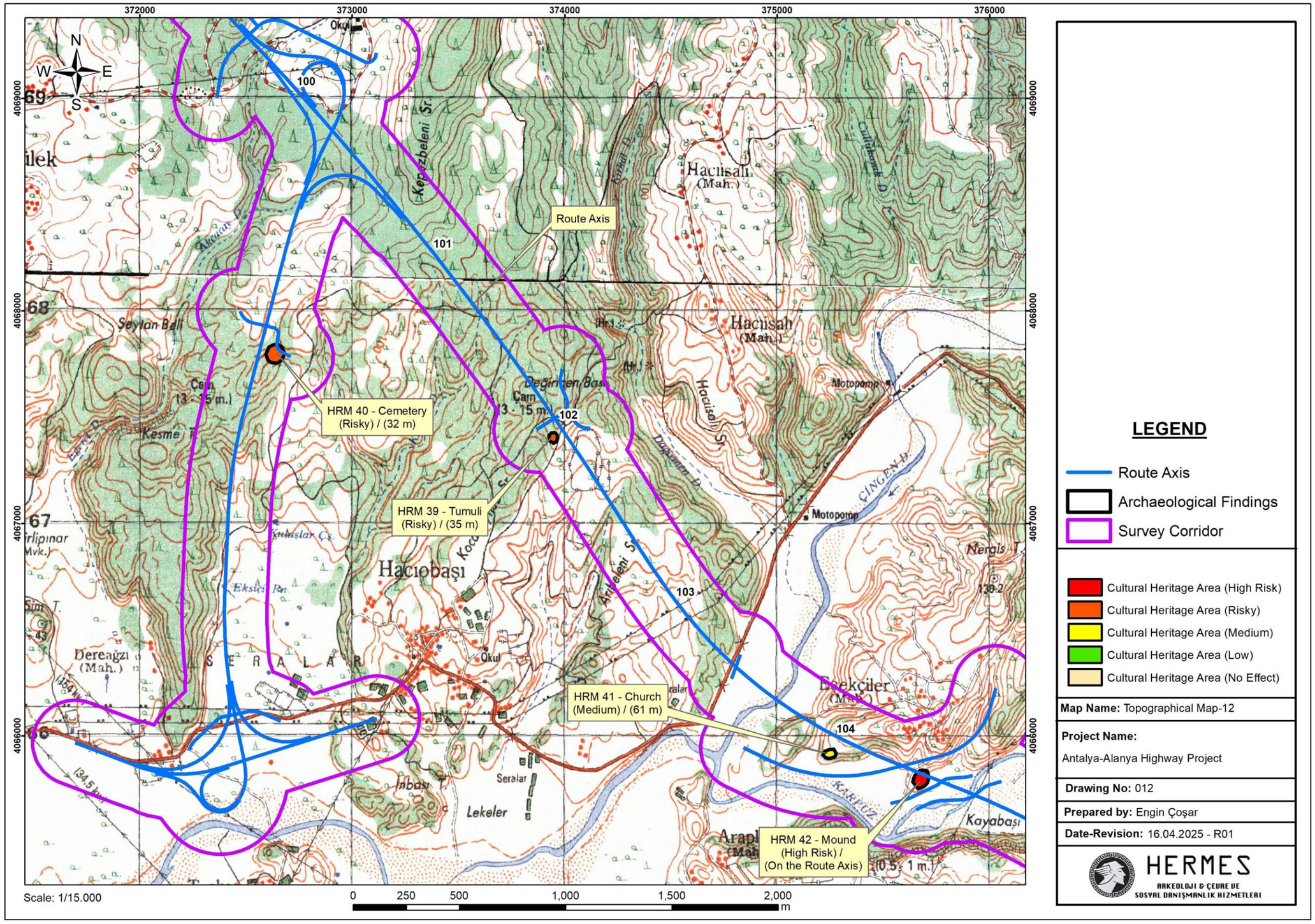
SOSYAL DANIŞMANLIK HİZMETLERİ

Bu çalışma genel kültür ve
sanat eserleri kanunu



LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-12

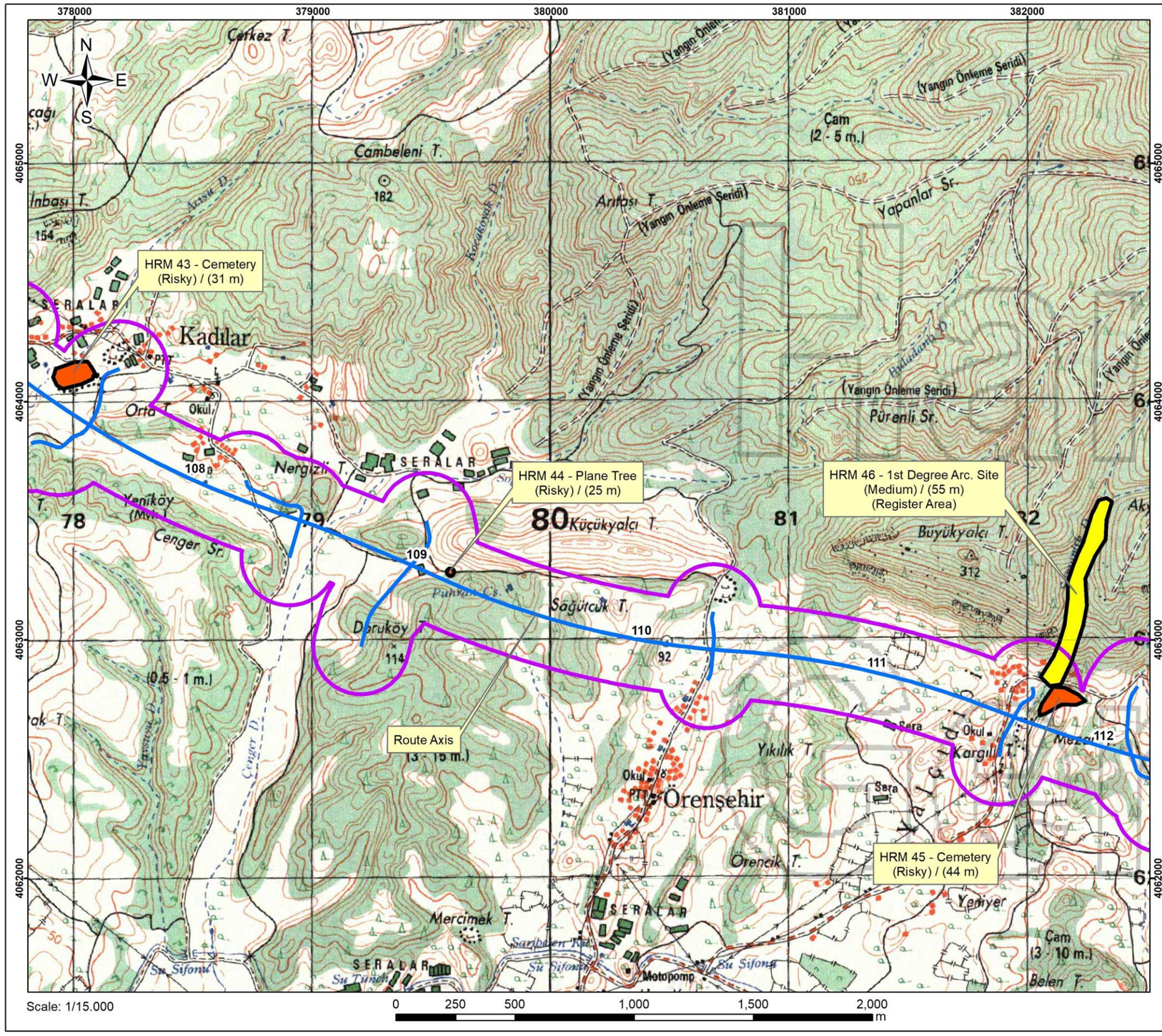
Project Name:
Antalya-Alanya Highway Project

Drawing No: 012

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

HERMES
ARKEOLOJİ & ÇEVRE VE
SOSYAL DANIŞMANLIK HİZMETLERİ



LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-13

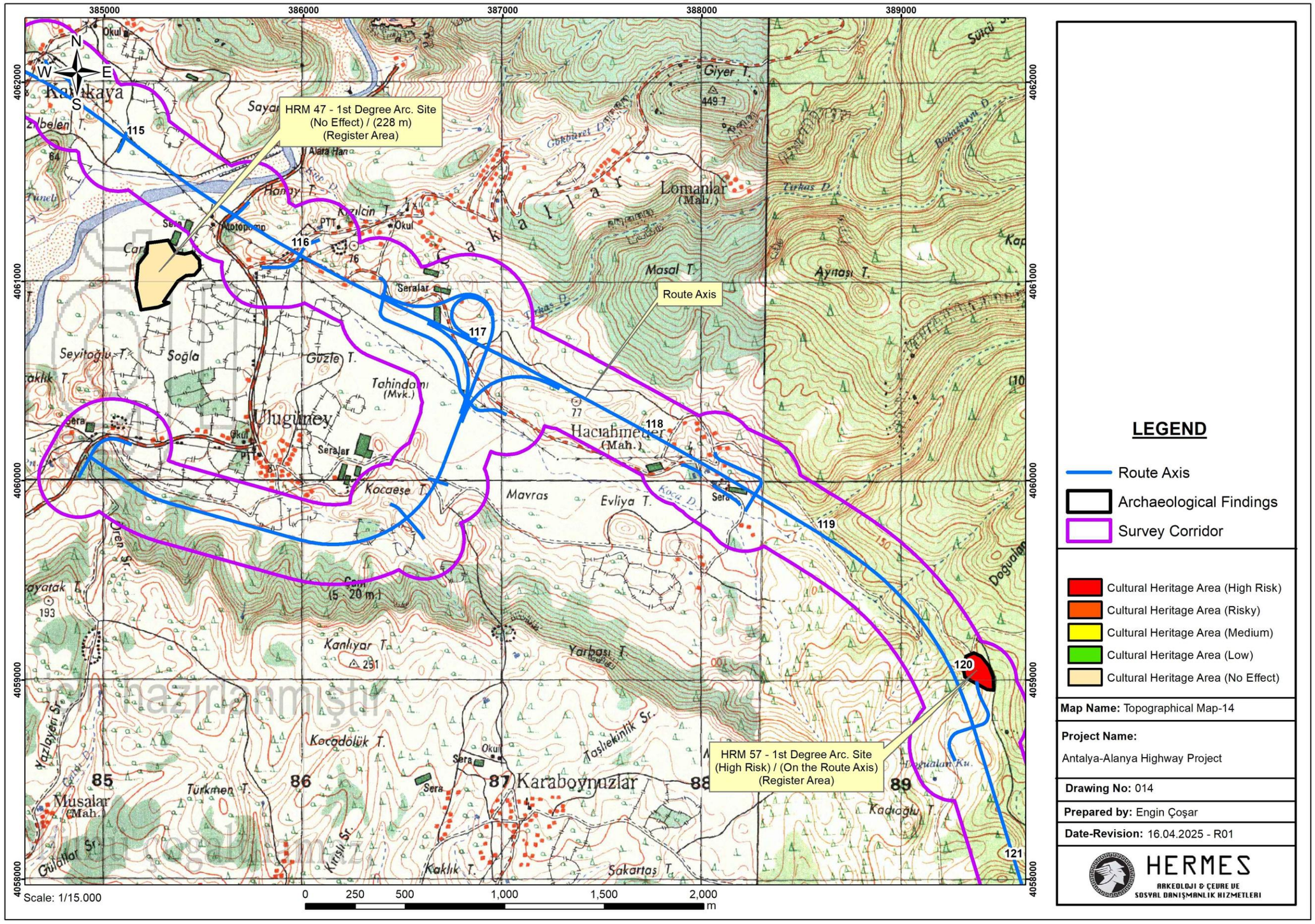
Project Name:
Antalya-Alanya Highway Project

Drawing No: 013

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

HERMES
ARKEOLOJİ & ÇEVRE VE
SOSYAL DANIŞMANLIK HİZMETLERİ



LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-14

Project Name:
Antalya-Alanya Highway Project

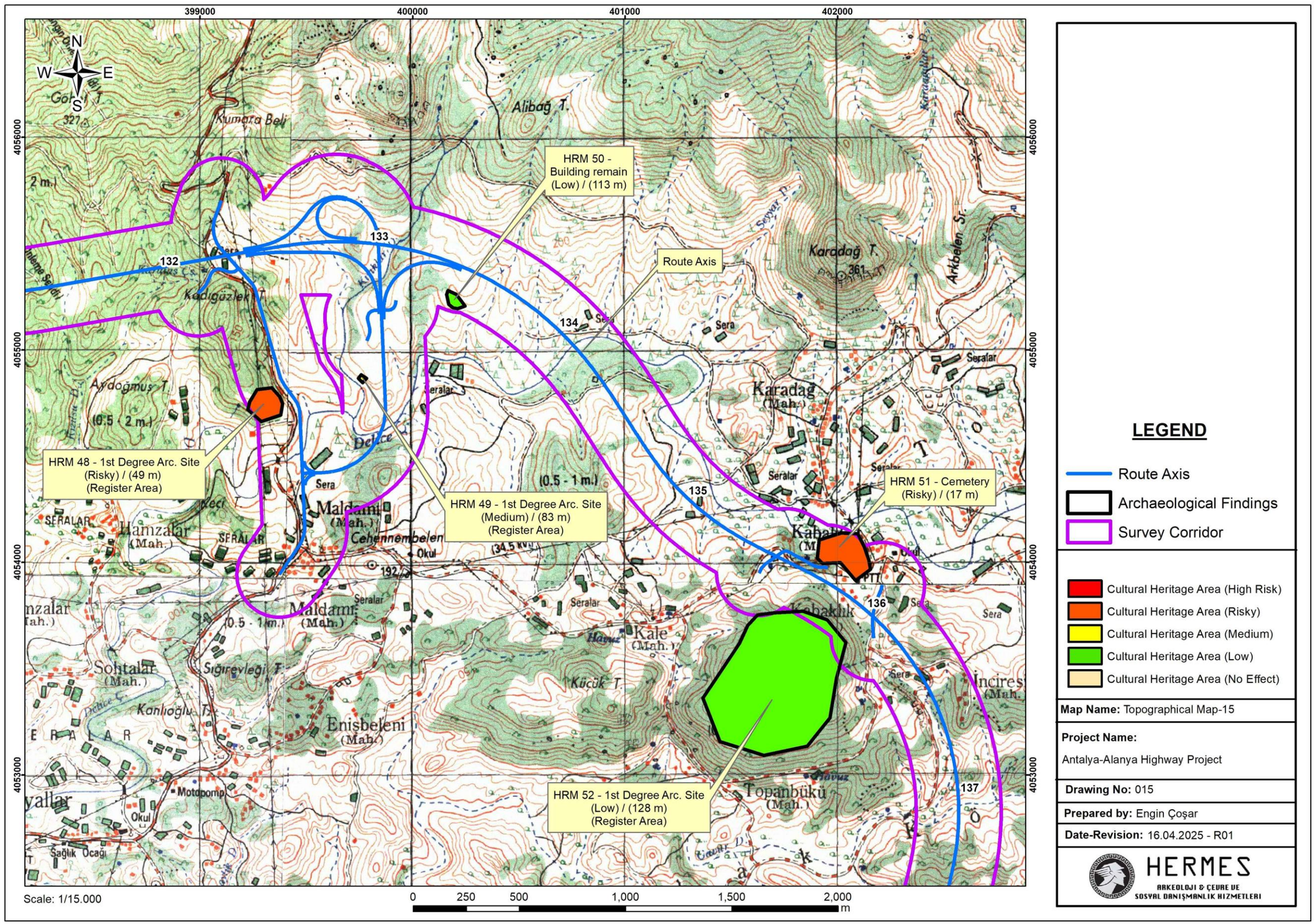
Drawing No: 014

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

HERMES
ARKEOLOJİ & ÇEVRE VE
SOSYAL DANIŞMANLIK HİZMETLERİ

Ön hazırlanmıştır.



LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-15

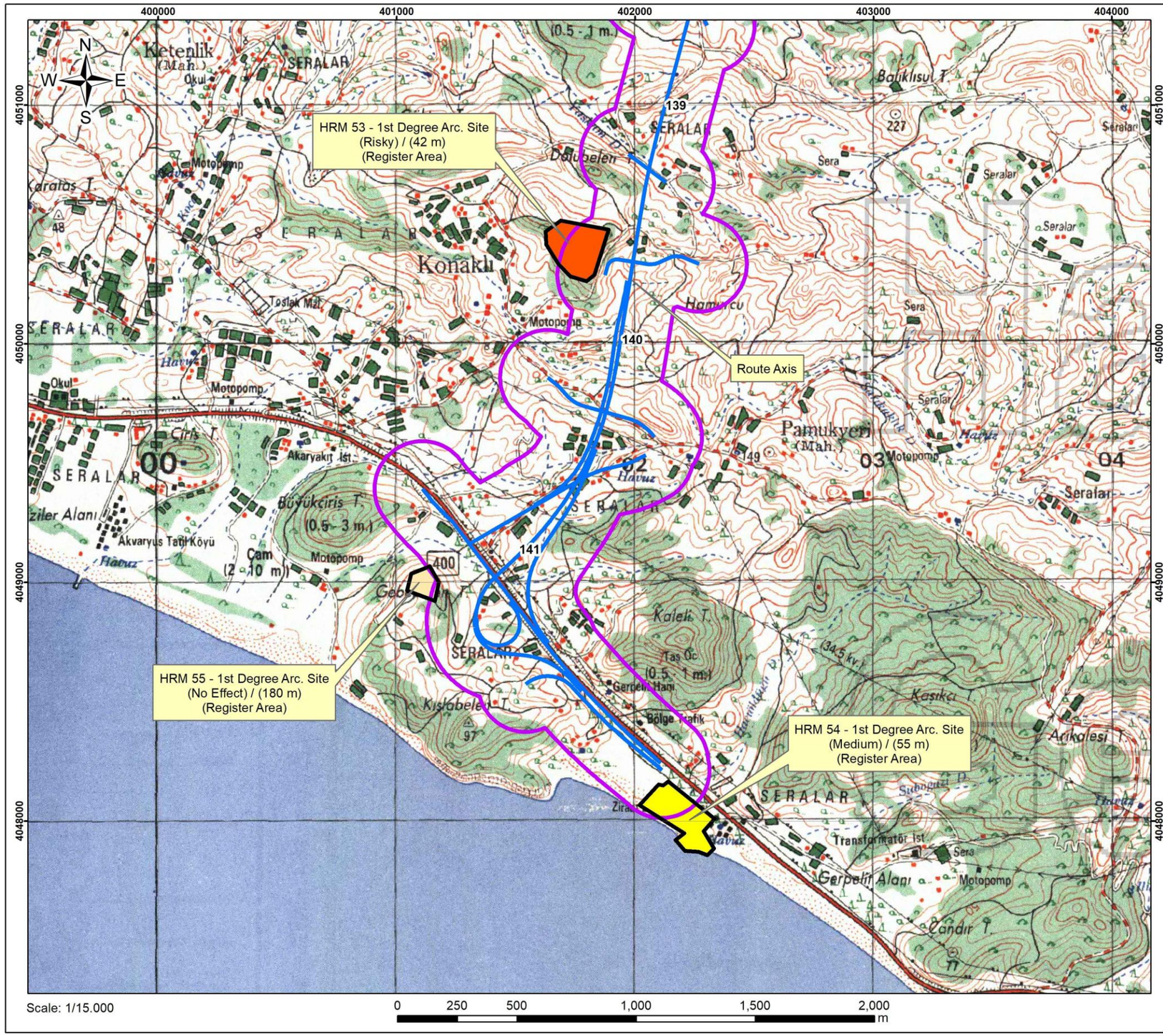
Project Name:
Antalya-Alanya Highway Project

Drawing No: 015

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

HERMES
ARKEOLOJİ & ÇEVRE VE
SOSYAL DANIŞMANLIK HİZMETLERİ



LEGEND

- Route Axis
- Archaeological Findings
- Survey Corridor

- Cultural Heritage Area (High Risk)
- Cultural Heritage Area (Risky)
- Cultural Heritage Area (Medium)
- Cultural Heritage Area (Low)
- Cultural Heritage Area (No Effect)

Map Name: Topographical Map-16

Project Name:
Antalya-Alanya Highway Project

Drawing No: 016

Prepared by: Engin Çoşar

Date-Revision: 16.04.2025 - R01

HERMES
ARKEOLOJİ & ÇEVRE VE
SOSYAL DANIŞMANLIK HİZMETLERİ

APPENDIX 2: CONTACT INFORMATION OF RELATED MUSEUM DIRECTORATES AND REGIONAL BOARD DIRECTORATES

Table 2 Museum Contact Information

Name	Phone	Adress
Antalya Archaeology Museum	Tel: 0242 238 56 88/89	Bahçelievler Mahallesi, Konyaaltı Caddesi, No 88, 07050 ANTALYA E-posta: antalyamuzesi@kultur.gov.tr

Table 3 Contact Information of Regional Board Directorates

Name	Phone	Adress
Antalya Cultural Assets Regional Board Directorate	0242) 243 21 60 (0242) 247 87 61 (0242) 244 55 74	Kılıçaslan Mahç Zafer Sk. No: 6 07100 KALEİÇİ / ANTALYA