CLIMATE AND DISASTER RESILIENT CITIES PROJECT

IZMIR PROVINCE, KONAK DISTRICT, EGE NEIGHBOURHOOD BRIDGE CROSSING PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

MARCH 2026

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ABBREVIATIONS

AoI	Area of Influence
AYBIS	Infrastructure Information System
AYKOME	Infrastructure Coordination Centre
C-ESMP	Contractor's Environmental and Social Management Plan
CDRC	Climate and Disaster Resilient Cities
CIMER	Presidency's Communication Centre
DLP	Defect Liability Period
DSI	State Hydraulic Works
E&S	Environmental and Social
EBRD	European Bank for Reconstruction and Development
EHSG	Environmental, Health and Safety Guideline
EIA	Environmental Impact Assessment
EPRP	Emergency Preparedness and Response Plan
ESHOT	Izmir Municipality Electricity, Water, Gas, Bus and Trolleybus General Directorate
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMR	Environmental and Social Monitoring Report
ESS	Environmental and Social Standard
FI	Financial Intermediary
GBV/SEA/SH	Gender Based Violence/Sexual Exploitation and Abuse/Sexual
GM	Grievance Mechanism
GPS	Global Positioning System
HİM	Citizen Communication Centre
IFC	International Finance Corporation
ILBANK	Iller Bankası A.Ş.
IMM	Izmir Metropolitan Municipality
IPF	Investment Project Financing
IUCN	International Union for Conservation of Nature
IZBAN	Izmir Suburban System
IZSU	Izmir Water and Sewerage Administration
LMP	Labour Management Plan
LMPrs	Labour Management Procedures
MoEUCC	Ministry of Environment, Urbanization and Climate Change
Mw	Moment Magnitude

OHS	Occupational Health and Safety
PAP	Project Affected People
PID	Project Identification Document
PIU	Project Implementation Unit
PMU	Project Management Unit
PPE	Personal Protective Equipment
RCA	Root Cause Analysis
SEP	Stakeholder Engagement Plan
TEDAŞ	Turkish Electricity Distribution Corporation
TUBITAK	The Scientific and Technological Research Council of Türkiye Türkiye)
TUBIVES	Turkish Plants Data Service
TurkStat	Turkish Statistical Institute
UKOME	Transportation Coordination Centre
WB	World Bank
YIMER	Foreigners Communication Centre

EXECUTIVE SUMMARY

The Türkiye Climate and Disaster Resilient Cities (CDRC) Project (hereinafter the "Project") was developed with the participation of the Ministry of Environment, Urbanization and Climate Change (MoEUCC), Iller Bankası A.Ş. (ILBANK) and the World Bank (WB) to increase the resilience of the Government of the Republic of Türkiye to seismic and climate-related risks and build capacity to manage the impacts of natural disasters in participating municipalities. Five metropolitan municipalities, namely Izmir, Tekirdağ, Kahramanmaraş, Manisa and İstanbul, were selected for the Project. These provinces were selected because they are highly vulnerable to the impacts of natural hazards such as floods, droughts and heat waves, and climate change, and most importantly, they are all located in high seismic risk areas. The Project will continue to focus on developing a comprehensive approach to expanding access to finance for beneficiaries living in risky buildings to afford retrofitting and/or reconstruction, together with investments in infrastructure resilience in these municipalities.

Concordantly, the Izmir Metropolitan Municipality (hereinafter "IMM") started the construction document preparations for the highway and stream road bridges projects at various locations within the borders of Izmir province in 2021 and the project design works were completed in 2023.

In this regard, "Izmir Province, Konak District, Ege Neighbourhood Bridge Crossing Project" (hereinafter "the sub-project") will be financed by the Project and will be evaluated under CDRC Component 3 – "Investments in climate and disaster resilient municipal infrastructure" subcomponent. Hereby, ILBANK will be the Financial Intermediary (FI) for this Component, and IMM is the owner of the sub-project and will be responsible for its implementation.

The sub-project area is within Konak district of Izmir province. The general aim of the sub-project is to strengthen the route infrastructure of the existing Mürselpaşa Zafer Payzın Route by increasing the number of lanes to prevent disruption in the traffic flow in case of emergency.

Therewith, the site walkovers to the sub-project areas were made by Envesu Environment Energy Construction and Consultancy Inc. on 14 October 2024. The photographs of the sub-project area are presented in Appendix-A.

Subsequently, Environmental and Social (E&S) risks of sub-project have been identified according to the WB Environmental and Social Standard (ESS)s and CDRC's Environmental and Social Management Framework (ESMF)[1] developed by ILBANK. The E&S risks associated with the sub-project are assessed as "Moderate" and this Environmental Social Management Plan (ESMP) has been prepared. The ESMF of the CDRC provides the framework for the development of this ESMP, which is compliant with WB ESS and national legislation. In addition to this, a Stakeholder Engagement Plan (SEP) has been prepared based on CDRC Project SEP[2] as another document for this sub-project in order to identify sub-project stakeholders and create participation methods for the future of the sub-project.

ILBANK has established an Environmental and Social Management System (ESMS) effective on 24th of Dec 2023. In line with the CDRC Project requirements, the environmental and social

[1] https://www.ilbank.gov.tr/storage/uploads/uidb/esmf_cdrc_ilbank_rev_final_05072024_cc_1720183156.pdf

[2] https://www.ilbank.gov.tr/storage/uploads/uidb/clean_stakeholder_engagement_plan_sep_turkey_cdrc_rev05072024_1721718475.pdf

risk management of the sub-project is carried out under ILBANK's Environmental and Social Management System (ESMS). Accordingly, all sub-project–specific environmental and social documents, including the Environmental and Social Management Plan (ESMP) and the Stakeholder Engagement Plan (SEP), have been prepared in compliance with ILBANK ESMS, the World Bank Environmental and Social Standards (ESSs), and applicable national legislation. The ESMS provides a structured framework for identifying, assessing, managing, and monitoring environmental and social risks and impacts throughout the sub-project lifecycle.

The sub-project's construction works are expected to last 24 months. The number of personnel to work during the construction phase is approximately 13 people. The defect liability period (DLP) of the sub-project is the first 12 months after construction. The target year of the sub-project operation is planned as 2055. The sub-project's construction will primarily progress along the existing road route. Therefore, it is an area where excavation work has been previously conducted. However, an opinion letter from the Museum Directorate will be obtained during the pre-construction phase, prior to the commencement of any construction activities. The opinion letter will be forwarded to ILBANK. To manage activities in terms of cultural heritage, a Chance Find Procedure has been prepared (see Appendix-B).

The sub-project as bridges and the related access roads project is out of the scope of national Environmental Impact Assessment (EIA) as it is not included in the Annex I and Annex II lists of the Regulation on EIA published in the Official Gazette dated 29.07.2022 and numbered 31907. Nevertheless, the IMM will make the required correspondences to secure the relevant "EIA out of scope" official letters for this sub-project. The related official letter will be submitted to ILBANK.

There are no associated facilities such as roads, energy transmission lines, etc. of the sub-project, and no major impact is expected besides dust, noise, and traffic load increment during the construction phase. In addition to this, in the operation phase, there will be maintenance, and repair works in the bridges and their access roads.

When assessed according to the WB Environmental and Social Standards (ESS), ESS5: Land Acquisition, Land Use Restrictions and Involuntary Resettlement standard; it was identified that the lands where the bridge crossing will be constructed are located on the existing roads that are already in use and within the scope of 'public abandonment' according to the Zoning Law under the responsibility of the Municipality. The sub-project area does not overlap with any private land. Therefore, there is no need for land acquisition within the scope of the sub-project. In the research on land acquisition, IMM informed that there is a parcel under the ownership of State Hydraulic Works (DSI) in the sub-project area and that correspondence has been made with the institution on the related parcel. *The correspondence with DSI regarding the sub-project area will be annexed to this ESMP after it is obtained from IMM.*

As a part of the mitigation measures, sub-management plans and procedures on different subjects will be developed by the contractor prior to the construction works. These sub-management plans will be based on the risks and mitigation measures specified in the Environmental and Social Management Plan (ESMP). These plans will be prepared for construction and operation phases of the sub-project, at least one (1) month before the start of the relevant phase and will be submitted to ILBANK. Employees will be trained on the relevant plans to be developed. A list of sub management plans for both phases of the sub-project are presented below (see also Table 4-7).

- Occupational Health and Safety (OHS) Management Plan,
- Emergency Preparedness and Response Plan (EPRP),
- Construction Site Traffic Management Plan,
- Contractor ’s Management and Workforce Management Plan
- Labour Management Plan (LMP) (based on the CDRC's Labour Management Procedures (LMPrs))[3],
- Community Health and Safety Management Plan,
- Air Quality Management Plan
- Asbestos Management Plan,
- Hazardous Materials Management Plan
- Noise and Vibration Management Plan
- Waste Management Plan,
- Chance Finds Procedure.

[3] https://www.ilbank.gov.tr/storage/uploads/uidb/cdrcp_labor_management_procedure_lmp_1685916683.pdf

1 INTRODUCTION

1.1 Background

The Türkiye Climate and Disaster Resilient Cities (CDRC) Project (hereinafter the "Project") was developed with the participation of the Ministry of Environment, Urbanization and Climate Change (MoEUCC), Iller Bankası A.Ş. (ILBANK) and the World Bank (WB) to increase the resilience of the Government of the Republic of Türkiye to seismic and climate-related risks and build capacity to manage the impacts of natural disasters in participating municipalities. Five metropolitan municipalities, namely Izmir, Tekirdağ, Kahramanmaraş, Manisa and İstanbul, were selected for the Project. These provinces were selected because they are highly vulnerable to the impacts of natural hazards such as floods, droughts and heat waves, and climate change, and most importantly, they are all located in high seismic risk areas. The Project will continue to focus on developing a comprehensive approach to expanding access to finance for beneficiaries living in risky buildings to afford retrofitting and/or reconstruction, together with investments in infrastructure resilience in these municipalities.

In this context, " Izmir Province, Konak District, Ege Neighbourhood Bridge Crossing Project" (hereinafter "the sub-project") will be financed by the Project and will be implemented under CDRC Component 3 - "Investments in climate and disaster resilient municipal infrastructure" subcomponent. Hereby, Izmir Metropolitan Municipality (hereinafter "IMM") is the owner of the sub-project and will be responsible for the implementation of it.

Concordantly, the IMM started the construction document preparations for the highway and stream road bridges projects at various locations within the borders of Izmir province in 2021 and the project design works were completed in 2023.

The sub-project areas are within Konak district of Izmir province. The general aim of the sub-project is to strengthen the route infrastructure of the existing Mürselpaşa Zafer Payzın Route by increasing the number of lanes to prevent disruption in the traffic flow in case of emergency.

The specific aim of this sub-project is to regulate the traffic on D300, one of the main arteries of Izmir, especially during peak hours, and to increase the accessibility, mobility and ease of passage for the residents of the region as well as other users by constructing a bridge and crossing that will directly connect the developing Ege Neighbourhood to the main road, especially in line with the expectation that the load on this area will increase with the start of settlement in urban transformation areas. Mürselpaşa Boulevard (D300) is an important highway serving the urban traffic and is one of the important arteries of the region in terms of traffic density. The sub-project application area is a dense region in terms of industry and trade and is an area with a traffic volume that has intensified and is expected to increase in the coming period, especially with the effect of urban transformation and large-scale housing and workplace projects in the region. The sub-project area is in the area between Halkapınar Junction and Basmane Junctions. By connecting the neighbourhood directly to the main road network, the sub-project aims to reduce travel time, improve traffic flow and encourage economic development by providing easy access to the surrounding areas. Furthermore, the new infrastructure will improve safety by providing a safe and designated crossing area, reducing conflicts between pedestrians and vehicles. This connection will support the neighbourhood's access to wider urban areas, providing a more holistic and accessible transport. Ege Neighbourhood Junction K21 Bridge (and Culvert) and K22-K22A Bridge will provide a direct

connection to Ege Neighbourhood, where urban transformation works are taking place, and will serve the emergency response and evacuation of the people of the region after disasters.

The sub-project as bridge crossing and the related access roads project is out of the scope of national Environmental Impact Assessment (EIA) as it is not included in the Annex I and Annex II lists of the Regulation on EIA published in the Official Gazette dated 29.07.2022 and numbered 31907. Nevertheless, the IMM will make the required correspondences to secure the relevant "EIA out of scope" official letters for this sub-project. The related official letter will be submitted to ILBANK.

The sub-project's construction works are expected to last 24 months. The DLP of the sub-project is the first 12 months after construction. The target year of the sub-project operation is planned as 2055.

In this regard, the site walkovers to the sub-project areas were made by Envesu Environment Energy Construction and Consultancy Inc. on 14 October 2024.

The photographs of the sub-project area are presented in Appendix-A. Subsequently, the Environmental and Social (E&S) risks of the sub-project were identified in accordance with ESMS, the World Bank Environmental and Social Standards (ESSs) and the CDRC Environmental and Social Management Framework (ESMF) developed by ILBANK. Based on this assessment, the E&S risk level of the sub-project is classified as Moderate, and accordingly, this Environmental and Social Management Plan (ESMP) has been prepared..

1.2 Objective of the ESMP

This ESMP has been prepared to outline the measures to be taken during the construction (implementation) and operation (throughout the sub-financing agreement lifecycle) of the sub-project to eliminate or offset adverse E&S impacts and risks, or to reduce them to acceptable levels; as well as the actions required to carry out these measures.

1.3 Overview of E&S Requirements Applicable to the Sub-project

The sub-project will be implemented in compliance with the requirements of the applicable national legislation and international agreements and conventions to which Türkiye is a party of, and in accordance with the following international requirements:

- WB Environmental and Social Framework (ESF, 2018) and the Environmental and Social Standards (ESSs) forming part of the ESF,
- WB Group General Environmental, Health and Safety Guidelines (EHSGs) (2007)

Table 1-1**Error! Reference source not found.** outlines the relevance of the WB ESSs to the Sub-project.

Table 1-1. Relevance of the WB ESSs to the Sub-project

ESSs	Definition	Relevance to the Sub-project
ESS 1	Assessment and Management of E&S Risks and Impacts	Assessing, managing and monitoring E&S risks and impacts associated with each stage of the Sub-project to achieve E&S outcomes consistent with the ESSs.
ESS 2	Labor and Working Conditions	To promote sound worker-management relationships and enhance the development benefits of the Sub-project by treating workers in the Sub-project fairly and providing safe and healthy working conditions.
ESS 3	Resource Efficiency and Pollution Prevention and	This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the Sub-project life

ESSs	Definition	Relevance to the Sub-project
	Management	cycle.
ESS 4	Community Health and Safety	This ESS addresses the health, safety, and security risks and impacts on Sub-project-affected communities and the corresponding responsibility of the IMM to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.
ESS 5	Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	There is no need for land acquisition within the scope of the Sub-project. In the research on land acquisition, IMM informed that there is a parcel under the ownership of DSI in the Sub-project area and that correspondence has been made with the institution on the related parcel. The correspondence with DSI regarding the Sub-project Area will be annexed to this ESMP after it is obtained from IMM.
ESS 6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	It addresses sustainable management of primary production and harvesting of living natural resources and recognizes the need to consider the livelihood of Sub-project-affected parties, including Indigenous Peoples, whose access to, or use of, biodiversity or living natural resources may be affected by the Sub-project.
ESS 7	Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not relevant in Türkiye
ESS 8	Cultural Heritage	It sets out measures designed to protect cultural heritage throughout the Sub-project life cycle.
ESS 9	Financial Intermediaries	Not relevant to the Sub-project
ESS 10	Stakeholder Engagement and Information Disclosure	Effective stakeholder engagement will improve the E&S sustainability of the Sub-project, enhance project acceptance, and make a significant contribution to successful Sub-project design and implementation.

When national requirements differ from the levels and measures presented in the EHSGs, the Sub-project will achieve or implement whichever is more stringent.

A summary of the national legislation and international standards applicable to the management of environmental, social, health, and safety aspects of the Sub-project is provided in Appendix-F

1.4 Review and Update

This ESMP will be reviewed and updated by the Sub-borrower (IMM) as necessary during Sub-project implementation to reflect changes in national legislative framework, ILBANK's policies, or other developments. Specific circumstances warranting updates may include changes in the organizational structure, significant incidents or accidents, or the incorporation of new tools, software or database into the ILBANK E&S Risk Management System.

The Sub-borrower will notify ILBANK of any updates made to the ESMP and will ensure that such updates do not result in deviation from the requirements set forth by the national legislation and the E&S requirements applicable to the Sub-project.

1.5 Implementation Arrangements

The Sub-borrower (IMM) will hold ultimate responsibility for implementing this ESMP, ensuring compliance by the Sub-borrower and contractor teams (including sub-contractors engaged for the Sub-project) throughout the sub-financing agreement lifecycle.

The Sub-borrower will ensure that adequate financial and human resources are allocated to enable effective ESMP implementation across the Sub-borrower, supervision consultant, and contractor organizations throughout the sub-financing agreement lifecycle.

The Sub-borrower will determine the arrangements for the Sub-project's operation and will be responsible for ensuring compliance with the national legislation and Operation ESMP during its operation phase.

The roles and responsibilities of the Sub-borrower, contractor and sub-contractor teams concerning ESMP implementation are detailed in Chapter 5.

2 SUB-PROJECT DESCRIPTION

2.1 Sub-project Information

The Izmir Province, Konak District, Ege Neighbourhood Bridge Crossing Project (the "sub-project") is implemented under the Türkiye Climate and Disaster Resilient Cities (CDRC) Project, developed with the participation of the Ministry of Environment, Urbanization and Climate Change (MoEUCC), Iller Bankası A.Ş. (ILBANK), and the World Bank (WB) to enhance the resilience of municipalities against seismic and climate-related risks. The sub-project will be financed under Component 3 – Investments in Climate and Disaster Resilient Municipal Infrastructure, where ILBANK acts as the Financial Intermediary and Izmir Metropolitan Municipality (IMM) is responsible for implementation. Located in the Konak District of Izmir Province, the sub-project aims to improve the transportation capacity of the Mürselpaşa – Zafer Payzın route by increasing the number of traffic lanes to ensure traffic flow continuity, particularly during emergency situations. The environmental and social risks of the sub-project were assessed in accordance with the World Bank Environmental and Social Standards (ESSs) and ILBANK's Environmental and Social Management Framework (ESMF) and classified as Moderate; therefore, this Environmental and Social Management Plan (ESMP) and a Stakeholder Engagement Plan (SEP) have been prepared. The construction phase is expected to last 24 months, with approximately 13 personnel employed during this period, and the sub-project will be implemented mainly along the existing road corridor, without requiring any land acquisition or expropriation.

The sub-project components of Ege Neighbourhood Junction K21 Bridge to be constructed within the scope of the sub-project are given in **Error! Reference source not found.**.

2.2 Sub-project Location

Izmir is located next to the Aegean Sea with the provinces of Manisa to the north and Aydın to the south. The total area of Izmir province is 1,209,827 ha.

The sub-project areas are within Konak district of Izmir province. In this context, the sub-project will be a new bridge crossing over the Meles Stream. Since sub-project is on the roads connecting the urban roads and the areas of the relevant access roads, their Area of Influence (AoI) are limited within to 50 m in all directions along the road where the construction areas are located.

In defining the AoI, particular attention was given to the proximity of residential areas, traffic circulation and access arrangements, pedestrian movements, and the localized nature of construction-related impacts such as noise, dust, vibration, and temporary traffic disruptions. Based on these criteria and considering that the construction activities will be carried out primarily along existing road alignments within a dense urban environment, the AoI has been delineated as a corridor extending up to 50 meters in all directions along the affected road sections. The sub-project area and the neighbourhoods connected by the bridge crossing are presented in Figure 2-1**Error! Reference source not found.Error! Reference source not found.Error! Reference source not found.**.

Figure 2-1. Sub-project Location Map

2.3 Associated Facilities[4]

There is another IMM project assessed as an associated facility of the sub-project. This project, one (1) of the two (2) bridges under sub-project Lot-4, is titled "Yeni Ege Neighbourhood Meles Stream K-20 Bridge Retaining Wall." The project is a bridge crossing located on the main road that coincides with the sub-project and is planned to be implemented concurrently with the sub-project.

Based on consultations held with the Administration, it has been confirmed that the project will be constructed using IMM's own financial resources. Notwithstanding the change in the financing arrangement, the project remains classified as an associated facility, given its functional linkage and simultaneous implementation with the sub-project (see Figure 2-2).

[4] Facilities or activities that are not funded as part of the project and, in the judgment of the Bank, are.
- Directly and significantly related to the project,
- Carried out, or planned to be carried out, contemporaneously with the project,
- Necessary for the project to be viable and would not have been constructed, expanded, or conducted if the project did not exist.

For facilities or activities to be Associated Facilities, they must meet all three (3) criteria.

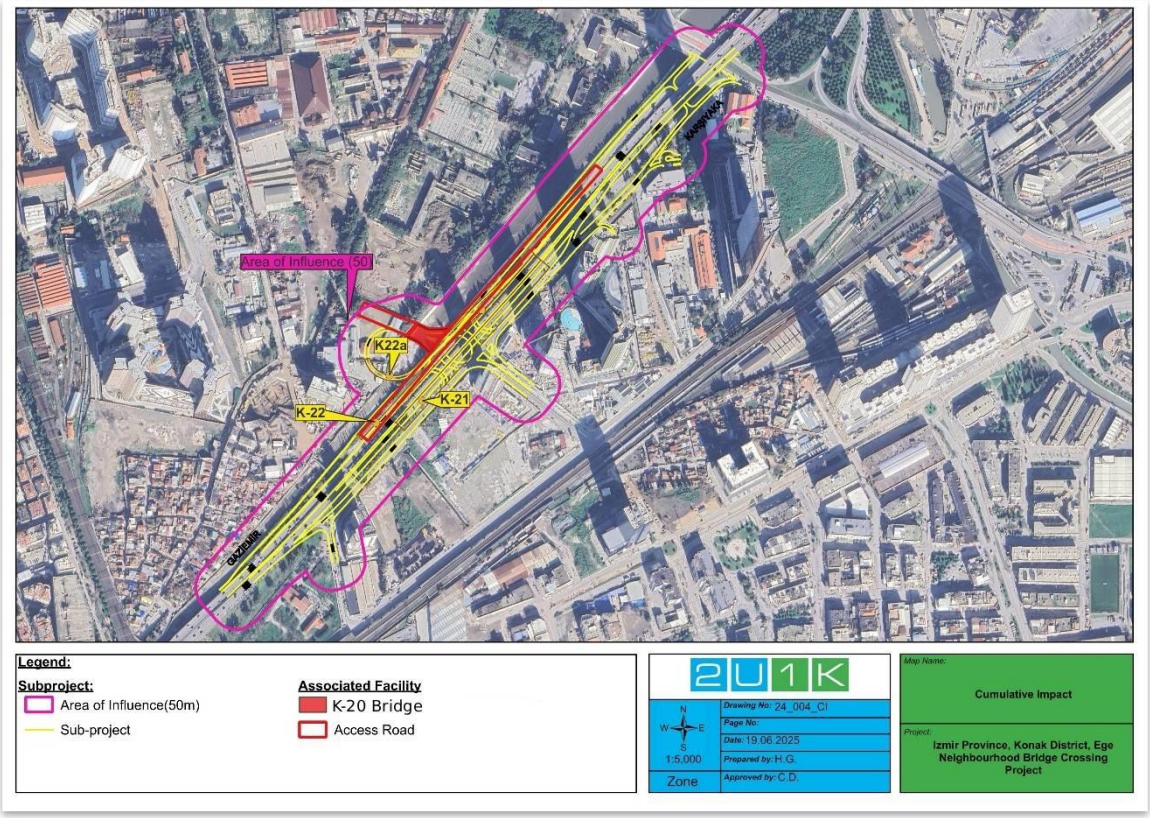

Figure 2-2. Sub-Project and Its Associated Facility

2.4 Sub-project Impact Area

The Area of Influence (AoI) has been defined by taking into account the spatial extent of potential environmental and social impacts associated with the sub-project. This includes the sub-project footprint, existing bridges, access roads, areas associated with construction activities, as well as areas likely to be affected by noise, dust, traffic, and other indirect impacts. While the core physical footprint of the project is largely confined to the existing road infrastructure, the AoI has been determined based on impact pathways rather than a fixed distance criterion. Although most direct physical impacts are expected to remain within the project footprint, the AoI has been assessed more broadly to ensure that indirect and cumulative impacts are also adequately captured. The sub-project area, access roads, and the corresponding AoI are presented in Figure 2-3.

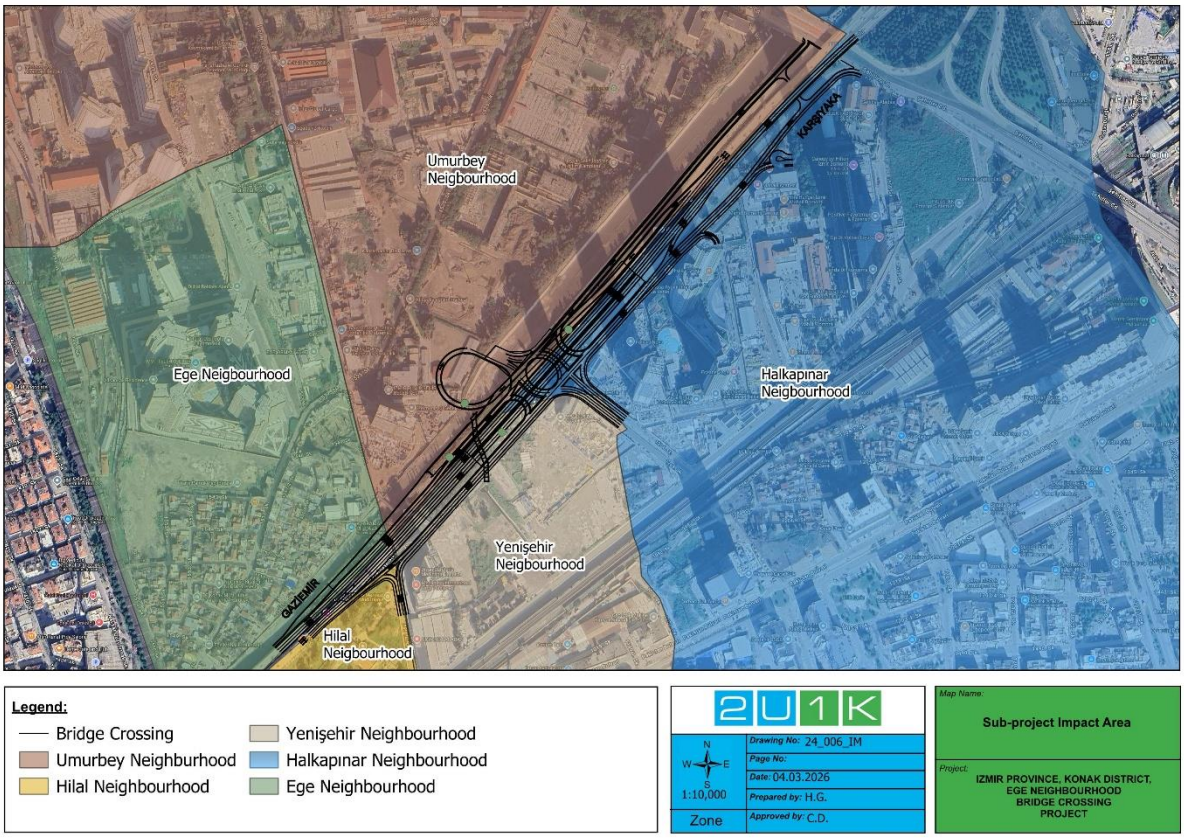

Figure 2-3. Sub-project Area, Access Roads and AoI Map

2.5 Environmental And Social Baseline

Environmental and social (E&S) baseline data for the sub-project area is assessed under this section, while E&S risks/impact assessment of the sub-project is provided under Chapter 4.

IMM estimates that a total of 13 people will work during peak construction times. Based on the environmental, social, and public/occupational health and safety risks/impacts that will potentially occur during the construction phase of the sub-project, the AoI has been determined to include the settlements close to the sub-project areas, and also in this context, The Konak district constitutes the main settlement area within the AoI, and during the operation phase, the sub-project will primarily serve the local residents.

To inform the E&S baseline assessment, a site visit was carried out on 21 February 2024 by environmental and social specialists, during which the physical, environmental, and socio-economic characteristics of the AoI were observed and documented.

2.5.1 Physical Environment

2.5.1.1 Current Situation of Sub-project Area

The sub-project does not include any underground gas and electricity lines works. There are no overhead lines such as high voltage lines in the sub-project areas. The photographs of the sub-project areas taken on the dates of 14 October 2024 are presented in the Appendix-A.

Mürselpaşa Boulevard (D300) is an important highway serving the urban traffic. However, it is one of the important arteries of the region in terms of traffic density. It has no direct connection to Ege Neighbourhood where urban transformation works are being carried out. In other words, there is no bridge over the Meles stream in this sub-project area. The current momentum is that the traffic in the region will become more intense in the coming years.

2.5.1.2 Topography

Konak

With an area of 24.4 km², the district is surrounded by Bornova and Buca in the east, Izmir Bay and Bayraklı in the north, Karabağlar in the south and Balçova in the west. It is surrounded by Çatalkaya Mountains on the Aegean Coast in the west of Anatolia, surrounded by the Gulf coast, high hills and a rugged land structure.[5]

On the other hand, the Gediz Delta as a wetland is within the borders of Çiğli, Menemen, Foça and Karşıyaka in Izmir province. The delta is of international importance and was included in the Ramsar Convention in 1998. The size of the Ramsar area is 14,900 hectares. The size of the buffer zone border of the delta is 32,357 hectares. The Gediz River originates from the Murat Mountain in Central Western Anatolia. Its total length is 400 km. Kemalpaşa Stream, which originates from Yamanlar Mountain within the Izmir border, is one of the most important tributaries of the Gediz. The Gediz reaches the Izmir provincial border in the west of the Manisa Plain, passes through the Menemen Strait between Yamanlar Mountain and Dumanlı Mountain and flows into the sea south of Foça. There is no lake of significant size in the province. The largest of the water bodies that can be considered as lakes are Gölcük Lake, Belevi Lake, Çakalboğaz Lakes and Karagöl. [6]

The distance to the sub-project area from the Gediz Ramsar site is 12.3 km. The sub-project is located outside the area of influence and will not have any negative effects.

In this context, the bridge crossing to be constructed in the sub-project area cross over the Meles Stream. The distance of the Gediz Delta to the sub-project area and the watercourse are shown in Figure 2-4.

[5] Source: www.konak.gov.tr
[6] Source: www.izmir.gov.tr

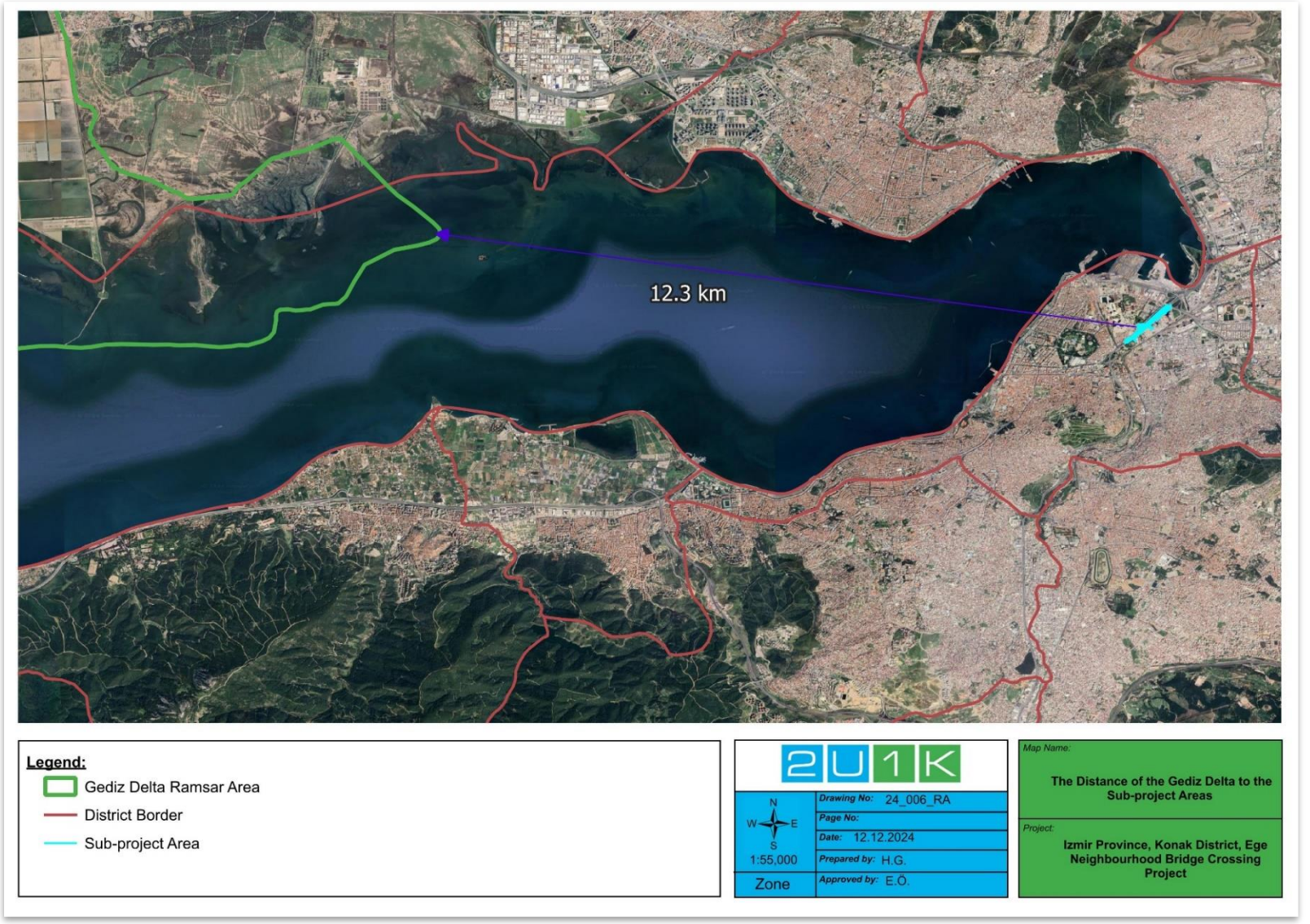

Figure 2-4. The Distance of the Gediz Delta to the Sub-project Area and Meles Stream

2.5.1.3 Geology

Izmir province and its surroundings along the border of Western Anatolia with the Aegean Sea is located in an important region in terms of low-medium-high temperature geothermal source due to its thin crust, high heat flux, active tectonic environment, young igneous/volcanic activity and lithology-structurally controlled reservoir/shroud rock relationship.

The Upper Cretaceous Bornova Complex is the most common unit in Izmir and its region (Erdoğan 1990; Koca 1995). This unit consists of limestone blocks. This rock group is pushed onto the metamorphics of the Menderes Massif, the oldest rock group in the region. The Bornova Complex rocks are spread over a wide area from Manisa to Seferihisar.

2.5.1.4 Tectonic and Seismicity

The Samos earthquake on 30 October 2020 (Mw=6.6) was recorded as the earthquake that caused severe damage to not only property but also life in Izmir in the instrumental period when measurements can be made. 117 people died due to the collapse of the buildings in this earthquake, and one (1) person passed away due to the tsunami in Sığacık Bay after the earthquake. Besides the Samos earthquake, which occurred with the rupture of the submarine Samos Fault delimits the northern margin of Samos Island, the 1928 Torbalı earthquake and the 1949 Dikili earthquake are also known that caused significant death of people and loss of property in the province of the Izmir border during the instrumental period. According to historical earthquake catalogues, albeit it is known that the more severe earthquakes occurred in this region within the historical period, it is poorly known which faults caused historical earthquakes. In order to shed light on this question, the first project funded by The Scientific and Technological Research Council of Türkiye (TUBITAK) was completed in 2021, and followed by the second project was accepted by TUBITAK within the same year. In this first project, trench-based paleo seismological studies were carried out on the Izmir Fault, Tuzla Fault, Gülbahçe Fault, Yağcılar Fault, and Seferihisar Fault and ended up with it is determined that earthquake recurrence interval, which fault produced an earthquake and the elapsed time since the recent earthquake.

Related findings show that earthquakes that occurred in 177/178, 688, 1039/1040, 1056, 1389, and 1688 were generated by the aforementioned faults. The results showed that the 1389 earthquake was caused by the Gülbahçe Fault, the 177/178 earthquake was caused by the Tuzla Fault, the 1039/1040 earthquake was caused by the Yağcılar Fault, and the 1688 earthquake by the Izmir Fault. Accordingly, Gülbahçe Fault has not produced destructive earthquakes for 632 years, Yağcılar fault for 982, Izmir fault for 334 and Tuzla fault for 1843 years. Related results imply that the investigated faults produce earthquakes in a way that triggers each other and that there is an average of 300 years of destructive earthquakes in the region.[7]

2.5.1.5 Soil and Land Composition

Based on the site visit observations, no visual indications of soil contamination associated with hazardous substances were identified. However, considering the nature of the project area

[7] Sözbilir, H. *Et Al.* (2022). "Seismic Hazard Sources of Izmir City and Their Earthquake Potentials," *Izmir Earthquake Workshop* October 31, 2022, Izmir, Türkiye, pp.14-15.

and the surrounding land uses, the presence of potential subsurface contamination cannot be entirely ruled out. Accordingly, this risk will be managed through standard construction-phase environmental management measures, as defined in the Environmental and Social Management Plan (ESMP).Meteorology and Climatic Characteristics

Konak district where the sub-project areas are located are under the influence of Mediterranean climate. Summers are hot and dry, and winters are mild and rainy.

Konak

The altitude is 3 m in Konak Square and 185 m in Kadifekale.[8]

When climate assessment is made at the provincial scale, the average annual temperature in Izmir varies between 16ºC (Bergama) and 17ºC (Bayındır). Considering the extreme values measured in Izmir, it is understood that the temperature varies between a maximum of 45.1ºC (Torbalı) and a minimum of -13ºC (Ödemiş).

Precipitation shows the greatest variability among the climate elements in Izmir. Although the average annual precipitation is 700 mm, depending on the changes in the general atmospheric circulation, the total precipitation approaches 1,000 mm in some years and falls to around 300 mm in some years. The amount of precipitation increases starting from the second half of October and continues until May. The months with the highest average monthly precipitation are December, January, and February. According to the average precipitation values, the contribution of precipitation falling only in December to the annual total is around 20%. In the summer months, the share of monthly precipitation in the annual total drops to 2%.[9]

2.5.1.6 Air Quality

There are currently 25 national air quality monitoring stations in İzmir under the supervision of MoEUCC. The closest air quality monitoring stations to the sub-project areas are the Gaziemir, Konak and Alsancak IMM with coordinates Latitude 38,3143 - Longitude 27,1340; Latitude 38,4006 - Longitude 27,1508, and Latitude 38,4322 - Longitude 27,1444, respectively.

Table 2-1, Table 2-2 and Table 2-3 represent the mean monthly pollutant concentrations based on the national air quality monitoring system for the last 12 months at these three (3) monitoring stations closest the sub-project areas.

Table 2-1. Monthly Average Air Quality Concentrations in Gaziemir, Izmir and Corresponding National and International Threshold Values

Unit (µg/m³) / Month year		SO_2	PM_{10}
Threshold Values	National	350	50
	EU Member States		
May 2023		3.34	39.76
June 2023		9.24	36.54
July 2023		6.69	33.30
August 2023		6.36	33.59

[8] Source: www.konak.gov.tr
[9] Source: www.izmir.gov.tr

Unit (µg/m³) / Month year	SO_2	PM_{10}
September 2023	7.45	32.71
October 2023	8.64	36.99
November 2023	12.11	30.07
December 2023	16.62	37.46
January 2024	15.67	34.47
February 2024	14.35	38.93
March 2024	13.24	27.93
April 2024	11.23	37.19

Source: (Database of T.C. Ministry of Environment, Urbanization and Climate Change, 2024)

Table 2-2. Monthly Average Air Quality Concentrations in Konak, Izmir and Corresponding National and International Threshold Values

Unit (µg/m³) / Month year		$PM_{2.5}$	CO	NO	NO_2	NO_x
Threshold Values	**National**	-	10,000	250		
	EU Member States			200		
May 2023		19.31	860.19	38.05	85.08	133.13
June 2023		17.14	799.62	30.07	90.85	123.41
July 2023		17.91	764.85	26.32	35.21	61.20
August 2023		19.15	839.20	42.05	79.95	122.00
September 2023		19.58	904.64	21.32	37.34	58.66
October 2023		18.94	1,316.99	35.33	52.47	87.80
November 2023		18.64	1,008.14	37.00	62.22	99.22
December 2023		23.06	1,260.20	75.15	84.38	159.53
January 2024		19.02	2,032.68	54.70	72.38	127.09
February 2024		18.72	913.28	55.46	78.75	134.21
March 2024		16.46	805.59	50.03	86.88	136.91
April 2024		14.19	1,085.99	20.55	61.63	82.18

Source: (Database of T.C. Ministry of Environment, Urbanization and Climate Change, 2024)

Table 2-3. Monthly Average Air Quality Concentrations in Alsancak IMM and Corresponding National and International Threshold Values

Unit (µg/m³) / Month year		SO_2	PM_{10}	$PM_{2.5}$
Threshold Values	**National**	350	50	-
	EU Member States			
May 2023		5.34	36.26	18.39
June 2023		5.86	36.75	20.45
July 2023		6.60	***56.20***	28.23
August 2023		5.42	46.05	17.57
September 2023		6.30	***77.78***	16.51
October 2023		6.05	***67.68***	21.34

Unit (µg/m³) / Month year	SO_2	PM_{10}	$PM_{2.5}$
November 2023	6.38	***56.62***	23.56
December 2023	7.11	***57.30***	32.37
January 2024	7.49	24.67	14.43
February 2024	7.91	18.89	10.79
March 2024	8.27	15.82	7.59
April 2024	8.44	13.60	5.20

Source: (Database of T.C. Ministry of Environment, Urbanization and Climate Change, 2024)

In this context, on the website of the MoEUCC, the current air quality index of Gaziemir region is described as "good" in terms of SO_2 parameter for 24 hours average value as 12 µg/m³. On the other hand, the current air quality index for Konak region is described as "good" in terms of NO_2 parameter for 24 hours average value as 81 µg/m³. As for Alsancak IMM station, its current air quality index is also as "good" in terms of PM_{10} parameter for 24 hours average value as 40 µg/m³.

Currently, the air quality of the sub-project areas except for the sub-project area of the Meles Stream 2250-2260 Street Intersection Bridge can be characterized as good, due to measured low concentration values compared to the corresponding national and international threshold values. As regards the sub-project area of the Meles Stream 2250-2260 Street Intersection Bridge, recorded PM_{10} values at the Alsancak air quality monitoring station is higher than the limit value of national and international in the last months of 2023, which are considered to be the result of the contribution of domestic heating emissions in the region, especially in the fall and winter months.

2.5.1.7 Noise

The sub-project areas in Konak are located within dense urban environments characterized by heavy vehicular traffic, which constitutes the dominant source of existing environmental noise. In the absence of project-specific baseline noise measurements at this stage, the current noise environment has been qualitatively assessed based on land use patterns and site observations. Detailed baseline noise measurements will be conducted, where required, prior to construction activities in accordance with national regulations and relevant international standards.

2.5.1.8 Water Resources

Izmir province's water resources are analysed under 6 main headings. Accordingly, Surface Waters, Ground Waters, Natural Lake Surfaces, Dam Reservoir Surfaces, Pond Reservoir Surfaces and River Surfaces.

The drinking water system of 11 districts (Çiğli, Karşıyaka, Bayraklı, Bornova, Konak, Buca, Gaziemir, Karabağlar, Balçova, Narlıdere, and Güzelbahçe), which are considered as the former metropolitan area, are as integrated.

According to 2019 data, 58.8% of the water supply to Izmir city centre is from underground water resources.

Water taken from various regions enters the city from different points and merges in the water distribution system. Sources of water from various regions for the metropolitan area are Sarıkız Deep Wells, Göksu Deep Wells, Menemen Deep Wells, Çavuşköy Deep Wells, Halkapınar Deep Wells, Pınarbaşı Deep Wells, Buca and Sarnıç Deep Wells, Tahtalı Dam, Balçova Dam and Gördes Dam.

The water produced from these sources is transmitted to the city through transmission lines and distributed to all regions at 0-50 m elevation by balancing with Halkapınar 55,000 m³ tank, Poligon tank, Görece Treatment tank, Cumhuriyet tanks. It is transferred to elevations of 50-100 m, 100-150 m and above through pumping stations and tanks.[10]

Two (2) sub-projects are the bridge construction projects over Meles stream, which is a perennial watercourse, conveying flow throughout the year, although its flow regime varies seasonally in response to precipitation patterns and upstream discharges. There are no other water resources in the sub-project areas passing over Meles stream. This stream is formed by the merger of the Uzundere tributary coming from the Uzundere neighbourhood and the stream coming from the Gaziemir direction. After 1.5 kilometres from the confluence of these two (2) main tributaries in the Paşaköprüsü region, it takes the Buca Creek coming from the direction of Buca, heads north and flows into the Gulf of Izmir in Çınar neighbourhood in Konak.

2.5.1.9 Other Natural Hazards

Landslides and Rockfall

Due to its geological and topographical structure, Izmir province experiences frequent mass movements. When considered in terms of intensity, especially landslides and rockfall disasters threatens urban areas. On the other side, when the Provincial Disaster Risk Reduction Plan for Izmir province for 2021 is examined, such a risk for the sub-project areas can be characterized as low in general.

Flooding

Three (3) river basins are particularly important in terms of river flooding in Izmir. These are the Küçük Menderes Basin, the Gediz Basin and the North Aegean Basin. According to 2018 academic research, the majority of Izmir's population lives in these basins. It is foreseen approximately 6% of this population may be exposed to/at risk of river flooding in these basins.[11]

According to the Historical Floodings in Izmir province (1955-2019) records included in the Izmir Province Disaster Risk Reduction Plan 2021, the years when Meles Stream, which pass under the two (2) sub-project areas, caused flooding were recorded as 1976, 2000, and 2001.

In October 2021, the Konak district of Izmir experienced severe flooding due to intense rainfall. The floods caused damage to homes, businesses, and infrastructure.

2.5.2 Biodiversity

[10] Source: www.izsu.gov.tr

[11] Izmir Governorship Provincial Directorate of Disaster and Emergency, Provincial Disaster Risk Reduction Plan 2021, Izmir, Türkiye, pp.81,82

The sub-project area is under the influence of Mediterranean climate. According to the Corine 2018 Land Cover data, the sub-project area is in industrial or commercial units. The surroundings of the sub-project area are consisting of modified habitats such as continuous urban fabric. The habitats within the sub-project area have experienced degradation of their natural structure. The habitats in the sub-project area and its immediate surroundings are given in Figure 2-5**Error! Reference source not found.Error! Reference source not found.**.

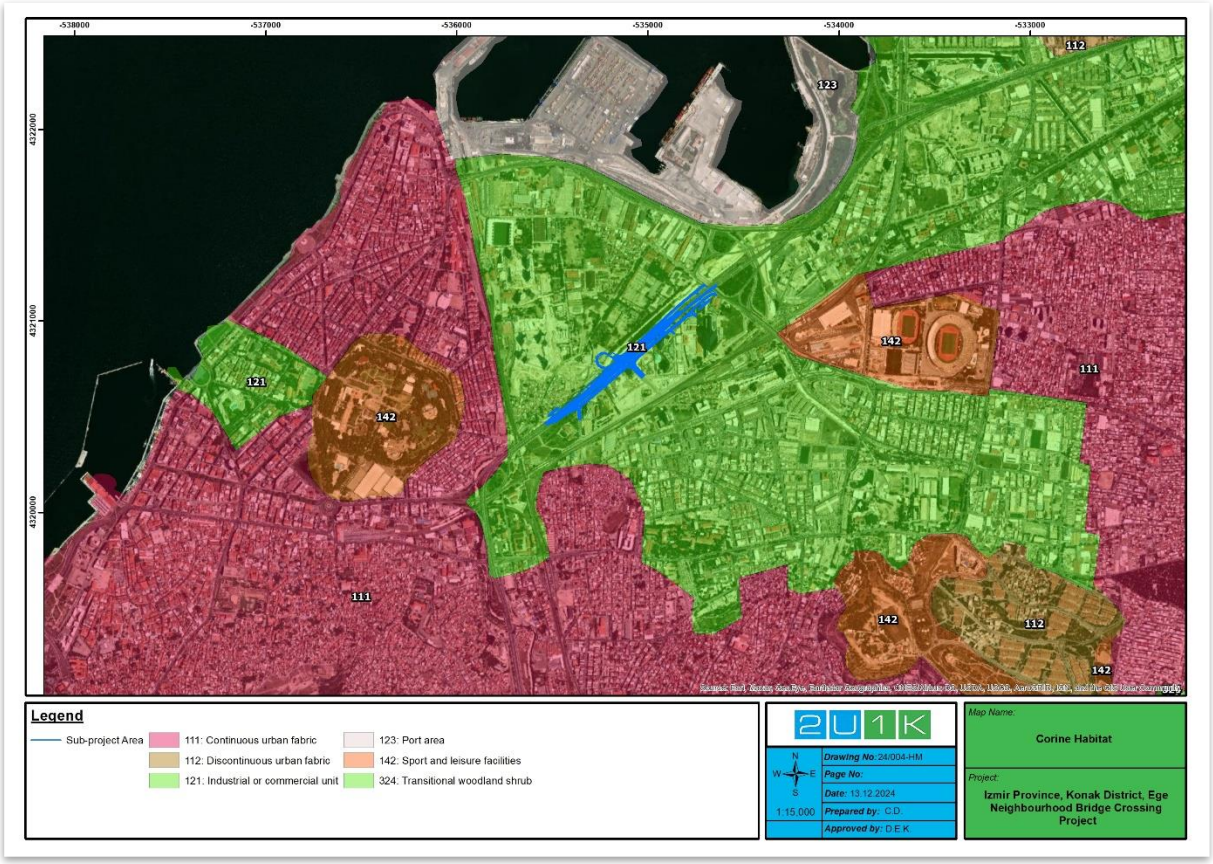

Figure 2-5. Corine Habitat in the Sub-Project Area

Due to the intense anthropogenic impact in the subproject area, the distribution of flora and fauna is suppressed. The species that can be observed in the area are primarily cosmopolitan.

In evaluating the threat/protection status of species, Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats); and IUCN (International Union for Conservation of Nature) Red List Database were used.

Flora

The subproject areas are under anthropogenic influence, yet natural plant species may still be present within the construction zones. The species identified in these subproject areas are typically found in fields, along roadsides, and near streams. There is a total of 16 plant species belonging to 9 families in the project areas. None of these species are endemic. Flora species present or potentially present in these subproject areas are listed in Appendix-E.

Fauna

Fauna species in the subproject area have been heavily suppressed due to the urban structure and human presence. The species found and likely to be found in the subproject area are those adapted to these conditions.

Amphibians

There are 2 species belonging to 2 families in the sub-project area. Amphibian species in the sub-project area are given in the Appendix-F. There is no endangered or vulnerable amphibian species.

Reptiles

There is 1 specie belonging to 1 family in the sub-project area. There is no endangered reptile species in the sub-project area. Reptile species in the sub-project area are given in the Appendix-F.

Birds

There is a total of 13 bird species belonging to 8 families in the sub-project area, and all of them are in the LC category according to the IUCN Red List. Bird species in the sub-project area are given in the Appendix-F.

Mammals

There are 7 mammal species belonging to 4 families in the sub-project area. There is no endangered or vulnerable mammal species in the sub-project area. Mammal species in the sub-project area are given in the Appendix-F.

Protected Areas and Key Biodiversity Areas

There are no protected areas in the sub-project areas. Considering the structure and location of the sub-project, protected areas were not evaluated.

Meles Stream maintains continuous flow year-round; however, the magnitude and characteristics of this flow fluctuate seasonally depending on rainfall patterns and inputs from upstream discharge points. The present condition of the Meles Stream reflects long-term pressures from industrialization and unplanned urban expansion within its catchment. Intensive industrial development and population growth in the basin have resulted in widespread informal settlement along the river corridor, where inadequate infrastructure has historically allowed domestic and industrial wastewater to be discharged directly into the channel. These cumulative inputs have led to persistent water quality degradation, with downstream impacts extending to İzmir Bay.Socio-economic Environment

2.5.2.1 Demography and Population

There are 30 districts in Izmir, 11 of which are central districts. The sub-project will be implemented in Ege neighbourhood, which is in Konak district. The 2023 population data by gender the neighbourhood in the sub-project area and distance to neighbourhood are presented in Table 2-4.

Table 2-4. Population Data in the Sub-project Area and Distance to the Nearest Residential Unit

District	Settlement	Female	Male	Total Population	Distance (m)
Konak	Ege Neighbourhood	909	883	1,792	20

Source: TurkStat, 2024

Konak District is ranked as the most socio-economically developed district in İzmir according to Turkey's socio-economic development studies[12]. This indicates that the district has a generally high level of development in terms of education, health, transportation, employment, and overall quality of life. However, at the neighbourhood scale, the socio-economic conditions differ from the district-wide averages. In Ege Neighbourhood, medium- and low-income groups are more densely represented. A significant portion of the housing stock consists of older buildings, and the area has both the potential for and ongoing implementations of urban transformation. This reflects that the neighbourhood is in a transitional phase in terms of its physical environment and socio-economic structure.

In terms of education levels, primary and lower secondary school completion rates are expected to be higher than the district average, whereas high school and university graduation rates are expected to be lower. This indicates that the socio-economic status of the area is more modest compared to the central neighbourhoods of Konak. Economically, residents are predominantly employed in the service sector, small-scale commercial activities, and informal or daily labour.

2.5.2.2 Land Acquisition

In Ege neighbourhood, the sub-project will be constructed over a riverbed. While preparing the plan sheets of the projects, property surveys were carried out by overlapping with the 1/1000 and 1/5000 scaled Implementation and Zoning Plans. All of the bridges subject to the sub-project are located in areas allocated to lands owned by public institutions as IMM, State Hydraulic Works (DSİ), and District Municipality. On 07.04.2022, a letter was issued by the IMM Directorate of Transportation informing about the allocation of the area for the Mounted Police Unit and providing information regarding the bridge project to be carried out in the region. The relevant document is presented in Appendix-J.

Necessary correspondences will be made for the lands under the ownership of public institutions. The related official letters will be submitted to ILBANK.

Table 2-5. Ownership Status of Bridge and Access Road Construction limits and Land Status

Bridge	Bridge Deck	Access Roads
Ege Neighbourhood Bridge Crossing	The responsibility Izmir Water and Sewerage Administration (IZSU) designated for public/road abandonment	80005/1 District Municipality

Accordingly, the sub-project does not result in involuntary resettlement, including physical or economic displacement, nor does it affect formal or informal land users. As no private land acquisition or displacement is anticipated, the requirements related to resettlement planning under ESS5 are not triggered. Nevertheless, documentation demonstrating land ownership

[12] Ministry of Industry and Technology, "2022 District Socio-Economic Development Rankings (SEGE)", Konak ranked highest among İzmir districts in socio-economic development.

status and public land allocation will be included in the Environmental and Social (ES) documents to ensure transparency and full compliance with ESS5..

2.5.2.3 Vulnerable and Disadvantaged Groups

Vulnerable groups are people who might be directly and differentially or disproportionately affected by a project because of their disadvantaged or vulnerable status. This disadvantaged or vulnerable status may stem from an individual's or group's race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status. Vulnerable and disadvantaged groups can be children, people over the age of 65, people with chronic diseases or in need of special care, people with disabilities, and refugees/immigrants. Based on site observations, local context, and stakeholder consultations, the following vulnerable groups have been identified in the sub-project area. These groups may experience construction-related impacts differently than the general population, particularly in relation to safety risks, access limitations, and temporary disruptions. IMM and the Contractor will therefore apply specific measures to ensure that engagement, information disclosure, and mitigation actions adequately address the needs of these vulnerable groups.

The information presented below was obtained through the consultation conducted with the Ege Neighbourhood Mukhtar, who provided indicative estimates regarding the presence of vulnerable groups within the neighbourhood.

Table 2-6. Identified Vulnerable Groups and Potential Impacts (Ege Neighbourhood)

Vulnerable Group	Estimated Number (Indicative)	Potential Impacts
Children	30	During construction, children may be exposed to safety hazards such as construction materials, traffic diversions, and heavy machinery, increasing the risk of accidents.
People over 65 years of age	20	Construction activities may disrupt daily routines, pedestrian access, and access to essential services, potentially causing inconvenience, stress, or reduced mobility.
People with chronic illnesses or in need of special care	10	Noise, dust, and temporary access restrictions may affect daily routines and access to healthcare services, potentially exacerbating existing health conditions.
Persons with disabilities	15	Temporary closure or alteration of sidewalks, ramps, and access routes may limit mobility and accessibility, causing inconvenience and reduced independence.
Refugees / Immigrants	25	Language barriers and limited awareness of construction schedules and safety measures may increase safety risks and hinder access to information, grievance mechanisms, and support services.

2.5.2.4 Education

The Konak district has 2,056 public and 924 private classes, totalling 2,980 classrooms, with 2,699 public and 873 private classrooms, totalling 3,572. There are 118 public and 89 private schools in the district.

The sub-project indicates that there are 5 teachers, 51 students, and 9 classrooms at a primary school located 350 meters away. The location of the school is shown on the map below.

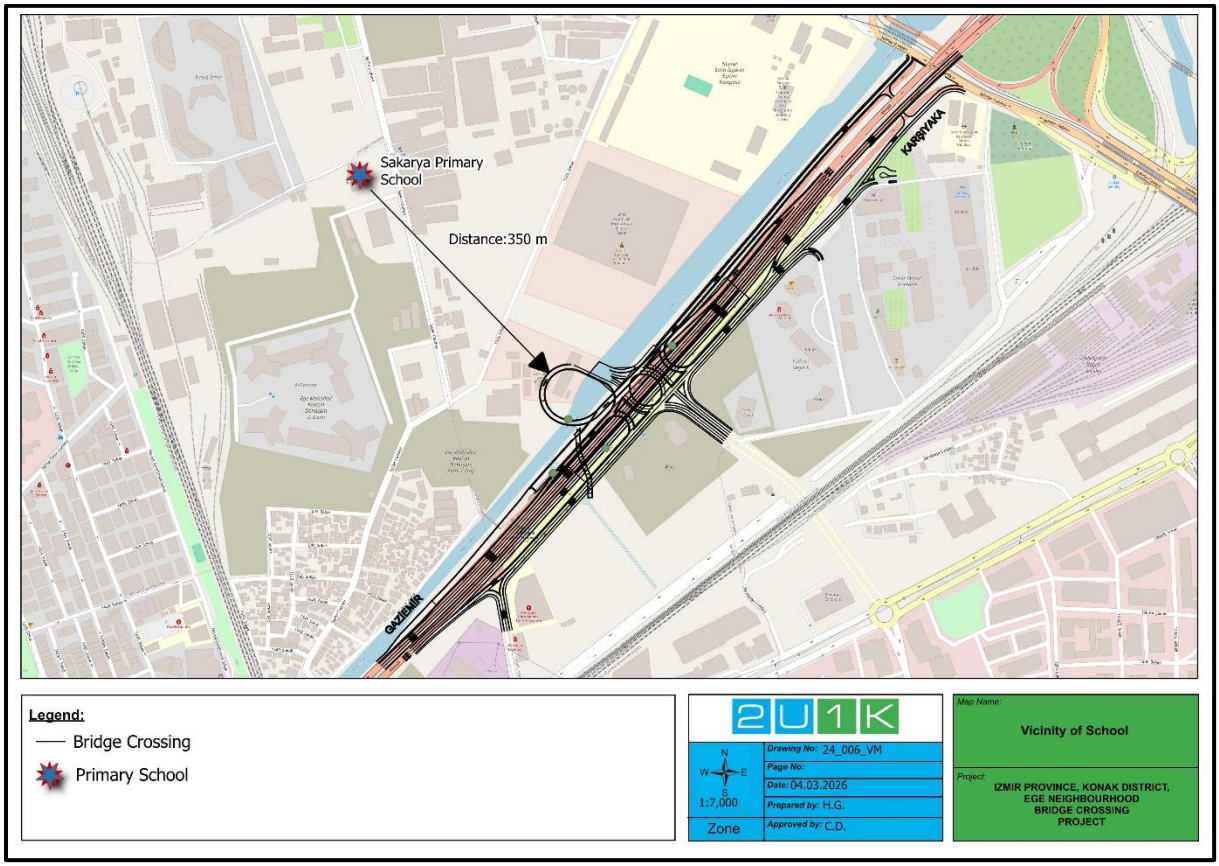

Figure 2-6. Proximity of the School to the Project Area

2.5.2.5 Health

There are a total of 22 hospitals in Konak district. Of these, nine (9) are public and 13 are private hospitals.

There are 968 Family Medicine Centres in the region. These healthcare facilities are affiliated with the Community Health Centres established in 30 districts. Individuals have the flexibility to register with the family physician of their choice, irrespective of their place of residence. According to the Health Statistics Yearbook published by the Ministry of Health of the Republic of Türkiye in 2022, there are more than 3,281 patients per family physician in Izmir province.

There is no healthcare facility in Ege Neighbourhood and the sub-project area of influence.

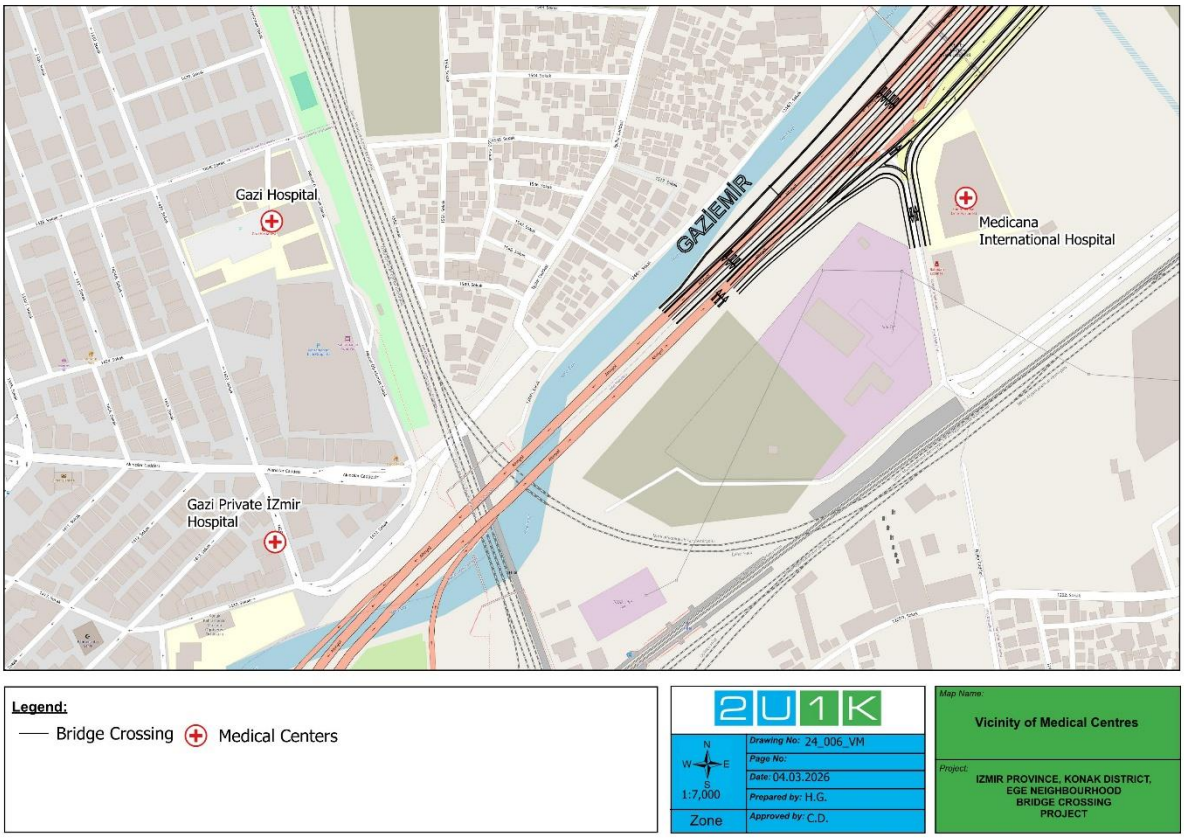

Figure 2-7. Proximity of the Medical Centres to the Project Area

2.5.2.6 Means of Livelihood and Employment

Izmir is an important economic centre located on the west coast of Türkiye and is the third largest city in the count throughout history, the city has played an important role in trade, industry, agriculture, and services. Below is a sectoral description of Izmir's key livelihoods:

1. **Port and Trade:** Izmir has historically operated as a seaport and trade centre. It is still home to Alsancak Port, one of the largest ports in Türkiye. Izmir's geographical location offers a strategic advantage for overseas trade.
2. **Industry:** Izmir is an important industrial centre with factories and industrial zones in various industrial sectors. There are many industrial facilities operating in sectors such as automotive, chemicals, textiles, food, shipbuilding, and electronics.
3. **Agriculture:** The area around Izmir plays an important role in agriculture with its fertile soil. Vineyards, olive groves and vegetable gardens are the agricultural products of the

region. Especially grape production and winemaking are among the agricultural activities for which Izmir is well-known.

4. **Tourism:** Izmir is a tourist attraction with its coastline and historical richness. Shopping, gastronomy, beaches, and historical sites offer a variety of tourist activities for visitors.
5. **Education and Health Services:** Izmir is an important centre of education and health services with its prestigious universities, research centres and hospitals. Institutions operating in these fields contribute to Izmir's economy.
6. **Ports and Logistics:** Alsancak Port and other ports play a critical role for the logistics sector. Maritime transportation has a major impact on Izmir's economy.

As of 2021, 58.1% of the employed in Izmir work in services, 32.9% in industry and 9% in agriculture. It is noteworthy that the share of employment in agriculture in Izmir increased in 2021 compared to 2020. In terms of employment rate, Izmir is above Türkiye's average in the services and industry sectors, while it is below Türkiye's average in the agriculture sector (Izmir Chamber of Commerce, 2023).[13]

Based on the interviews and questionnaire conducted with the neighbourhood muhktar in Ege Neighbourhood, the primary sources of livelihood for residents are predominantly linked to employment in the public sector, private sector services, and industrial zones. A significant portion of the working population consists of white-collar employees employed in offices, service companies, and public institutions, as well as workers employed in organized industrial zones (OIZs) and industrial facilities located within the wider Izmir metropolitan area.

2.5.2.7 Transportation and Traffic

The sub-project is located within Konak District, one of the most densely populated and heavily trafficked districts of Izmir. Konak serves as a major urban centre with intensive residential, commercial, and public service activities, resulting in high daily traffic volumes on its main road corridors.

Within Konak District, the project area is situated in Ege Neighbourhood, along an existing urban road segment that plays an important role in local traffic circulation. The road section within the sub-project Area of Influence (AoI) is characterized by high traffic demand and mixed traffic composition, including private vehicles, buses, and heavy commercial vehicles.

Public transportation accessibility in the vicinity of the project area is well developed. One metro station is located approximately 470 m from the project site, providing rail-based access to other parts of Izmir. In addition, three bus stops are located within approximately 55–60 m of the project area, ensuring convenient pedestrian access to bus services and supporting the use of public transportation in the neighbourhood.

[13] zmir Chamber of Commerce (2023). *Izmir Economic Indicators and Employment Structure Report*.

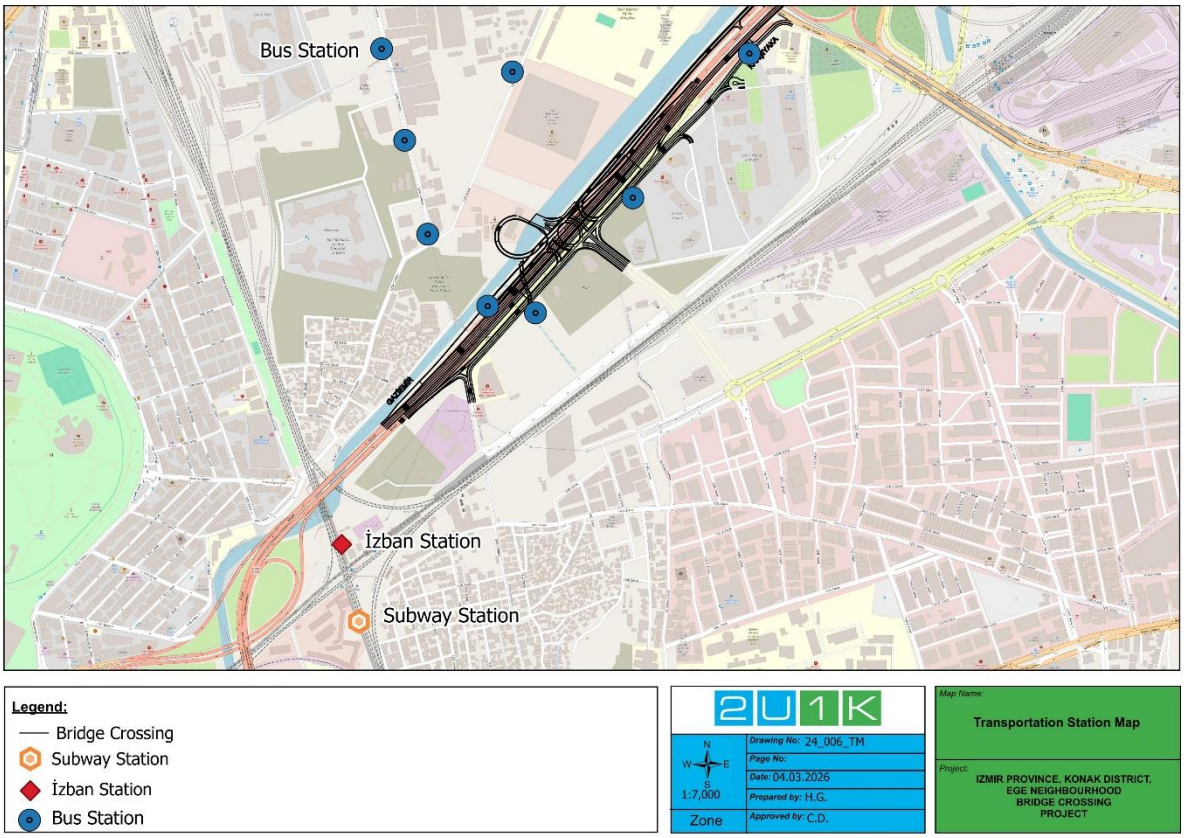

Figure 2-8. Transportation Near the Project Area

According to the State Roads Volume Map of the General Directorate of Highways for the year 2023; 75,580 cars, 8,454 medium-loaded commercial vehicles, 475 buses 6,031 trucks, 3,503 trucks, trailers, tow trucks, semi-trailers and 94,218 vehicles in total pass through the road within the sub-project area daily. According to the indicators of Konak district, the road has a traffic volume of 50,000 and above and has been identified as one of the most heavily trafficked roads. Table 2-7**Error! Reference source not found.** presents traffic data for 2023.

Table 2-7. 2023 Traffic Measurement Data of Konak

Vehicle Types	Konak
Number of Private Car	53,211
Number of Medium-Duty Commercial Vehicle	5,152
Number of Bus	273
Number of Truck	3,530
Number of Truck, Trailer, Number of Tractor unit Semi-trailer	2,579
Total	**64,745**

Source: General Directorate of Highways

2.5.2.8 Cultural Heritage

Konak District

Konak district is an area bordering the Gulf of Izmir and forms the centre of the historic city of Izmir. The Clock Tower, which has become the symbol of Izmir, is located in the centre of this district. Konak district is also home to many historical buildings, inns, and bazaars.

These include important places such as Kemeraltı Bazaar, Konak Square and Konak Pier. The old urban fabric elements are concentrated on the alluvial fill area and the alluvial soil behind it in Konak.

There is a total of 29 protected areas within the borders of Konak district of Izmir province, 22 of which are located within the Management Area Boundary of Izmir Historic Port City. The Management Area includes different types of protected areas such as Urban Protected Area, Historical Protected Area, Archaeological Protected Area, Natural Protected Area, and Urban and 3rd degree Archaeological Protected Area. There are a total of 22 protected areas, including three (3) Urban Protected Areas, two (2) Historical Protected Areas, 14 Archaeological Protected Areas, two (2) Natural Protected Areas and one (1) Urban and 3rd degree Archaeological Protected Area.

There are several protected areas within Konak District; however, no protected areas are located within the sub-project Area. However, the closest one to the sub-project area is the Smyrna Ancient City, located 1.8 km from the sub-project area. It is shown on the Figure 2-9.

Figure 2-9. Closest Cultural Heritage Site to Sub-project Area

Konak district is characterised by artefacts from antiquity, artefacts from the Ottoman period, but mostly artefacts from the Republican period. The Roman ruins of the ancient city of Smyrna, Agora, in Konak district are open to tourists. Agora, Izmir Clock Tower, Kadifekale, Kemeraltı, Kültürpark, Historical Elevator, Historical Havagazı Factory and Ahmed Adnan Saygun Art Centre are some of the historical and cultural places in Konak.

3 SUB-PROJECT ACTIVITIES

Within the scope of the sub-project, Ege Neighbourhood Junction K21 Bridge and Culvert Construction and Ege Neighbourhood Junction K22 and K22A Bridge Construction will be implemented. The layout of the sub-project is presented in Figure 3-1. .

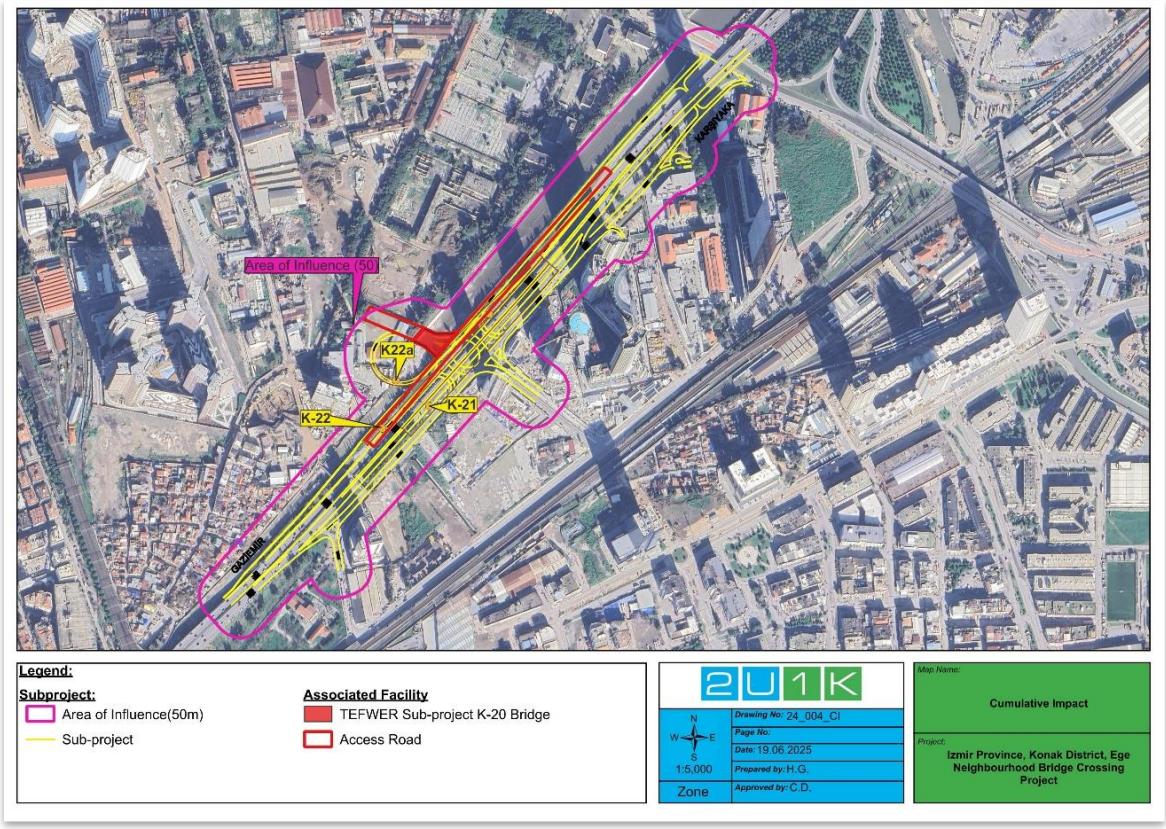

Figure 3-1. The Layout of the Sub-project

The bridge and access roads are designed for vehicle passage and pedestrian access on the pavements. For bicycle transportation, as in many regions in Izmir, it is planned as a shared road.

The bridge has a total of two (2) spans. The distance between the project axis axes is 20.75m+20.75m. The bridge superstructure consists of prestressed precast adjacent I joist and reinforced concrete slab. The minimum superstructure width is 23.5 m (4 m + 7 m + 1 m + 10 m + 1.5 m) and the bridge widens at spans P1-A2. There are 23 joists in the cross-sections, these prestressed precast I joists rest on 250x450x80 (mm) elastomer bearings. The height of the prestressed precast I joists is 120 cm and they are topped with cast-in-place reinforced concrete slabs with a minimum thickness of 25 cm. The side piers rest on an in-line pile system and the centre piers rest on a pile foundation system.

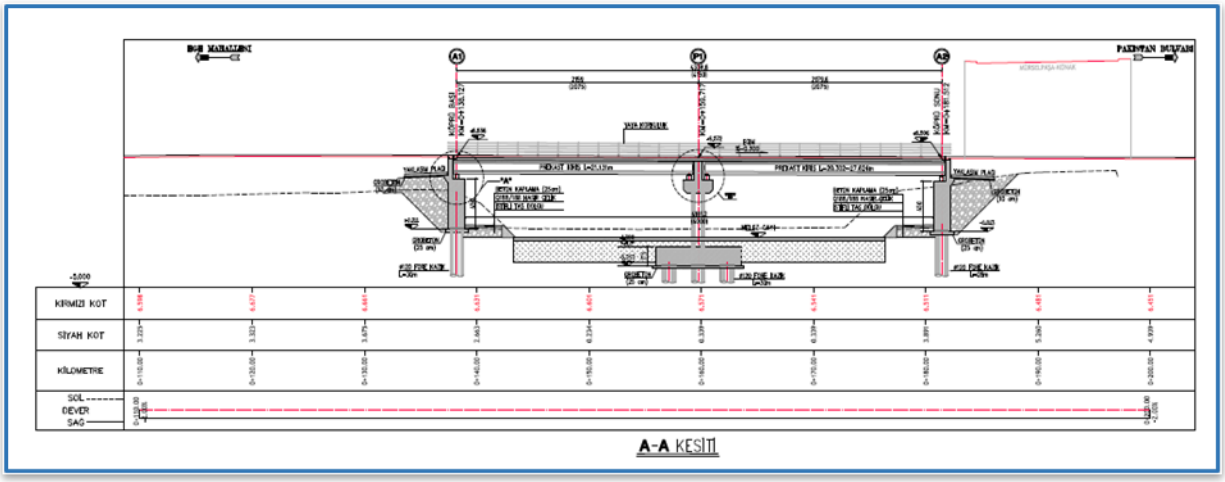

Figure 3-2. Layout Plan of the Meles Stream K 20 Bridge in Yeni Ege Neighbourhood

The Ege Neighborhood Interchange K22 and K22A Bridge consists of a total of 17 spans. The designed bridge is composed of a main deck with 13 spans, and a 4-span creek bridge connected to the main deck through a horizontal curve with a radius of R = 45 m.

The main deck bridge has a total length of L = 385.85 m, while the creek crossing bridge has a total length of L = 72.40 m.

The platform width of the main deck varies between B = 10.0 m and B = 13.50 m, whereas the creek crossing bridge has a platform width of B = 7.50 m.

The bridge has a single deck configuration up to pier axis P9; after axis P9, it separates into two independent decks. These decks serve:

- Mürselpaşa–Konak Branch (K22)
- Karşıyaka–Ege Neighbourhood Branch (K22A)

There is no skew (obliquity) at the bridge piers.

The sub-project's construction works are expected to last 24 months. The number of personnel to work during the construction phase is approximately 13 people. The DLP of the sub-project is the first 12 months after construction. The target year of the sub-project operation is planned as 2055. The sub-project's construction will primarily progress along the existing road route. Therefore, it is an area where excavation work has been previously conducted.

3.1 Construction Phase

3.1.1 Construction Activities

Construction activities will be completed in 24 months.

Construction phase activities are briefly described below:

- Pre-construction activities:

  Pre-construction activities will include:

  - Mobilization of personnel, machinery, and equipment to the site,
  - Establishment of temporary construction facilities and site offices,
  - Site surveying and setting-out works,
  - Geotechnical drilling and investigation works, where required,

- Soil improvement and ground stabilization works,
- Demolition and removal of any minor existing structures, if encountered,
- Relocation or protection of existing utilities and infrastructure,
- Topsoil stripping, land levelling, and site preparation,
- Excavation and filling works to achieve design elevations.

These activities will be undertaken in accordance with approved designs and technical specifications.

- Construction activities:

  Main construction activities will include:

  - Foundation works, including piling and ground improvement,
  - Construction of diaphragm walls and retaining structures,
  - Substructure construction, including piers, abutments, and culverts,
  - Superstructure works, including girder installation and deck construction,
  - Reinforced concrete works, formwork, and curing,
  - Installation of drainage systems, expansion joints, and bearings,
  - Road pavement works, including base, sub-base, and asphalt layers,
  - Installation of traffic safety equipment, signage, and lighting,
  - Landscaping and reinstatement of disturbed areas.

  No blasting or tunnelling activities are anticipated. Construction will be carried out using conventional civil engineering methods in compliance with national standards and international best practices.

- Construction machinery and equipment:

  Construction activities will be supported by the following main machinery and equipment:

  - 1 Fore Piling Machine
  - 1 Ground Improvement Machine
  - 1 Diaphragm Wall Machine
  - 1 Mobile Crane
  - 1 Mobile Concrete Pump
  - 2 Transit Mixers
  - 2 Excavators
  - 2 Loaders
  - 3 Dump Trucks
  - 1 Compactor/Roller
  - 1 Water Tanker
  - 1 Generator
  - 1 Water Pump
  - 1 Concrete Vibrator

- Water use and wastewater management:

  Water will be required mainly for:

  - Dust suppression,
  - Concrete production and curing,
  - Equipment washing,
  - Domestic use at construction facilities.

Water will be supplied primarily from the municipal network and water tankers. No abstraction from surface or groundwater sources is planned.

Wastewater generated from domestic use and equipment washing will be collected and discharged to the municipal sewer system where available or stored in septic tanks and removed by licensed service providers.

- Waste and hazardous materials management:

  Construction activities will generate excavated soil, surplus concrete, formwork residues, packaging materials, scrap metal, and domestic waste. Approximately 31,000 m^3 of excavation material will be generated, of which a significant portion will be transported by dump trucks to licensed disposal or reuse sites.

  Hazardous materials, including fuel for machinery, lubricants, hydraulic oils, welding materials, paints, and bituminous products, will be stored in designated, bunded, and clearly labelled areas. Generators and heavy equipment will be refuelled in controlled zones to prevent spills.

  Spill prevention kits and emergency response procedures will be maintained on-site. All hazardous and non-hazardous wastes will be segregated and disposed of through licensed contractors in accordance with national regulations.

- Supply and use of other resources and materials:

  The project will require construction materials including:

  - Fill material,
  - Aggregates,
  - Cement and concrete,
  - Reinforcement steel,
  - Gravel and asphalt,
  - Drainage and structural components.

  Excavated materials suitable for reuse will be utilized on-site where technically feasible. Remaining materials will be transported to approved disposal sites.

- Supply of materials and equipment:

  Construction materials will be supplied primarily from domestic suppliers and licensed quarries. Concrete will be procured from certified ready-mix plants. Procurement planning will ensure timely delivery and compliance with quality standards.

  Imported materials may be used if required by technical specifications.

- Decommissioning of temporary construction facilities

  Upon completion of construction works, all temporary facilities will be dismantled and removed. Construction camps, storage areas, and access roads will be rehabilitated and restored to their original condition, as far as practicable.

- Activities Outside the Scope of Financing

  No activities outside the scope of the proposed financing are anticipated within the framework of this Subproject.

3.1.2 Construction Facilities

Construction facilities to be used during construction activities are listed in Table 3-1. Information on AFs is separately provided in Section 2.3

All temporary facilities will be dismantled and removed upon completion of construction works, and affected areas will be rehabilitated.

Table 3-1 Construction Facilities

Type	On-site or Off-site	Temporary or Permanent	List of Facilities
Construction Camp Site	On-site	Temporary	•Site Offices •Cafeteria •Sanitary Facilities •Storage Areas
Material Storage Area	On-site	Temporary	•Cement Silos •Aggregate Stockpiles •Steel Storage
Equipment Yard	On-site	Temporary	Machinery Parking and Maintenance Area
Waste Storage Area	On-site		Segregated Waste Containers

3.2 Operation Phase

3.2.1 Operation Activities

During the operation phase, the following activities will be carried out by Izmir Metropolitan Municipality:

- Routine inspection of bridge structures, pavements, and drainage systems,
- Periodic structural monitoring and safety assessments,
- Road surface maintenance, patching, and resurfacing,
- Cleaning and maintenance of drainage channels,
- Maintenance of lighting, signage, and traffic signalization systems,
- Winter maintenance and emergency response operations,
- Vegetation control along road margins and embankments,
- Repair works following extreme weather or seismic events.

Maintenance materials such as asphalt, sealants, paints, and lubricants will be used in limited quantities and in accordance with environmental regulations.

3.2.2 Operation Facilities

Operational facilities will include:

- Bridge and roadway structures,
- Drainage systems,
- Lighting and signalization equipment,
- Safety barriers and signage.

3.3 Labor Requirements

Number of workers (at peak) that will work on site during the construction and operation phases of the Subproject are provided in Table 3-2.

Table 3-2. Labor Requirements of the Subproject

Phase	**Number of Workers** (including contractors and subcontractors)	**Planned Accommodation Arrangement**
Construction Workers (at peak)	54 (15 for demolition and 39 for construction)	No planned accommodation
Operation Workers (at peak)	No additional employment	N/A

3.4 Land Acquisition Status

Based on the title deed records reviewed for the subproject parcels (2939/183, 1387/5, 3369/80, 1371/125 and 1371/124), all land required within the defined project footprint is publicly owned. The parcels are registered either in the name of the General Directorate of State Hydraulic Works (DSI) or Izmir Metropolitan Municipality, including the IZSU General Directorate. There are no privately owned plots within the subproject area. Accordingly, the project does not require land acquisition from private individuals, negotiated settlement procedures under the land acquisition Law, willing-buyer willing-seller transactions, or temporary land acquisition through lease agreements.

For parcels 1371/125 (Road) and 1371/124 (Concrete Canal), the title deed records indicate that land acquisition procedures were completed in 2015 and ownership was formally transferred to Izmir Metropolitan Municipality and IZSU. Therefore, these parcels are already under public ownership and no additional land acquisition or compensation process is required within the scope of this subproject. Relevant land acquisition documentation will be provided in Annex C.

The remaining parcels (2939/183, 1387/5 and 3369/80) are registered in the name of the General Directorate of State Hydraulic Works (DSI) and constitute public land. If needed for implementation, land use will be secured through inter-institutional allocation, administrative transfer, or establishment of easement/right-of-use arrangements between public entities. No market-based transaction or compensation process is anticipated.

Parcels to be acquired as part of the Project have been identified in Section 3.4. Land acquisition status of these parcels is summarized in Table 3-3, while related documentation, including title deeds of each parcel, is provided in **Error! Reference source not found.**.

Table 3-3. Land Acquisition Status for the Subproject

District	**Neighbourhood /Village**	**Lot/ Parcel No.**	**Current Land Ownership** (e.g. Applicant Sub-borrower, Private Person, Legal Entity), Treasury,Non-registered, Other)	**Type of Parcel (according to Title Deed)** (e.g. Agricultural, Pasture, Raw Soil, etc.)	**Title Deed Area of the Parcel (m^2)**	**Area to be Acquired and Used by the Subproject (m^2)**	**Land Acquisition Method** (e.g. Purchase, Lease, Allocation, Easement Rights, etc.)	**Status of Land Acquisition**
Road Corridor								
Konak	Umurbey neighbourhood		General Directorate of State Hydraulic Works (DSI)	Industrial Facility	1,656.00	1,656.00	Allocation (Public Institution)	Public ownership – No acquisition required
			General Directorate of State Hydraulic Works (DSI)	Canal	1,680.50	1,680.50	Allocation (Public Institution)	Public ownership – No acquisition required
			General Directorate of State Hydraulic Works (DSI)	Land Plot	585.00	585.00	Expropriation (Completed – 2015)	Registered to Municipality
			Izmir Metropolitan Municipality	Road	1,032.00	1,032.00	Expropriation (Completed – 2015)	Registered to Municipality
			Izmir Metropolitan Municipality – IZSU General Directorate	Drainage Channel	240.00	240.00	Allocation (Public Institution)	Public ownership – No acquisition required
Total					**5,193.50 m²**	**5,193.50 m²**		

3.5 Permitting Status

Status of permits, licenses, and approvals required to be in place before start construction is presented in Table 3-4.

Table 3-4. Status of Permits for the Construction Phase

Permit, License, Approval	Status (In place, Not in place)	Remarks/ Notes
EIA Decision	**In place**	As confirmed by the official letter from the Provincial Directorate of Environment, Urbanization and Climate Change (Letter Date: 13.13.2024, Letter No: E-48657465-220.03.11210657), the Subproject is "Out of the Scope" of the EIA Regulation in force (Official Gazette Date: 29.07.2022; Official Gazette No: 31907) because the activity is not specified in Annex-1 or Annex-2 lists of the Regulation. The relevant decision is provided in APPENDIX-J Official Letters
Zoning plan approval	**In place**	1/1000 Scale Implementation Zoning Plan Amendment approved by Izmir Metropolitan Municipality Council (Council Resolution No: 05.985, dated 12.09.2022). The amendment supports the Meles Stream Road Bridge and connection roads as public infrastructure in line with the 1/5000 Master Plan decisions.

Permits, licenses, approvals required for operation phase are listed below:

- DSİ /State Hydraulic Works), Land Allocation Letter
- General Directorate of Highways, Great Art Structures Reinforcement and Maintenance Letter

4 ESMP MATRIX: RISK AND IMPACTS, MITIGATION, MONITORING

4.1 E&S Risk and Impacts of the Sub-project

Principally, the sub-project will have a significant positive impact for habitants as it will solve transportation problems to settlements.

The sub-project will have impact on its surroundings during construction phase physically due to noise generation, increased dust emission, management of excavated soil, and emissions from the construction machinery.

In the operation phase, environmental impacts are not expected since maintenance and repair works are not constant.

IMM estimates that a total of 13 people will work during peak construction times. Since the sub-project area include existing bridges on the roads connecting the urban roads and the areas of the relevant access roads, their Area of Influence (AoI) are limited within a 50 m (see Figure 2-3 for the AoI of the sub-project**Figure 2-1Error! Reference source not found.**).

Based on the environmental, social, and public/occupational health and safety risks/impacts that will potentially occur during the construction phase of the sub-project, the AoI has been determined to include the settlements close to the sub-project areas, and also in this context, Konak district is the settlement within the AoI, while during the operation phase, the sub-project will specifically serve the concerned habitants.

The following sections include the environmental, social, and public/occupational health and safety potential risks/impacts of the sub-project pre-construction, construction and operation phases. E&S mitigation measures to be taken for sub-project due to these impacts are given in Table 4-1, Table 4-2 and Table 4-3. Also, the related monitoring table of the sub-project is in Table 4-6.

Due to the cumulative impacts of the associated facility, an additional 13 people are expected to work in the construction works. The number of vehicles and equipment needed is expected to approximately double, as is the maximum number of people to be employed. Construction beginning times of the sub-project and its associated facility are close. In addition, the sub-project is expected to take 12 months longer than its associated facility. Hence, the relevant E&S including OHS subjects have been evaluated in line with their cumulative impacts in corresponding sub-sections of Section 4.1.

4.1.1 Environmental Risks and Impacts

4.1.1.1 Air Quality

Construction phase

The number of vehicles and equipment expected to be used during all construction activities of the sub-project is given below.

- 1 Bored Piling Machine,
- 1 Soil Improvement Machine,
- 1 Mobile Crane,
- 1 Mobile Concrete Pump,
- 2 Truck Mixer,
- 1 Excavator,
- 3 Trucks,
- 1 Cylinder,
- 1 Loader,
- 1 Generator,
- 1 Diaphragm Wall Machine,
- 1 Water Pump,
- 1 Vibrator,
- 1 Water Tanker.

Sub-project's impacts on air quality are limited to the AoI and these impacts are effective for limited time during construction phase. In case of complaints regarding air quality, air quality measurements will be made for impact area.

There will be temporary greenhouse gas emissions from vehicles and equipment to be used during the construction activities of the sub-project.

Operation phase

During the operation phase, maintenance and repair activities may create dust and other airborne pollutants that can impact air quality.

The methods to reduce and effectively manage the negative environmental impacts for both phases of the sub-project that may occur are provided in Table 4-2 and Table 4-3.

Cumulative impact

It is anticipated that the maximum number of vehicle/equipment to be used for the construction period, during which the construction works will be carried out together, will be approximately doubled compared to the sub-project and hence expected adverse air quality cumulative impact of the sub-project will be raised. In this context, to minimise the additional adverse air quality impact due to especially bridge retaining wall project as an associated facility of the sub-project, work programming will be carried out in coordination with this project.

With the cumulative impact of the operation phases of the bridge retaining wall, access roads and sub-project, a positive impact on air quality is expected with a relative decrease in emission levels, as the waiting times of vehicles on the relevant roads will be shortened.

4.1.1.2 Water Use

Construction phase

The contractor has not been contracted within the scope of construction works yet. The contractors to be involved in the construction phase will be selected by tender. During the construction phase, daily potable water demand of personnel will be met by carboys purchased from licensed companies according to the list of licensed companies announced by the Ministry of Health in compliance with the requirements of the Regulation on Water Intended for Human Consumption and Public Health Law.

IMM estimates that a total of 13 people will work during peak construction times. The average daily water consumption per person is regarded as 210 L/day (TurkStat-2022)[14], and the estimated daily amount of water that will be required during the construction phase of the sub-project is calculated below.

$$Daily\ Water\ Demand = 13\ person \times \frac{210\ L}{person \times day} \cong 2.7\ m^3/day$$

Operation phase

During the operation phase of the sub-project, there will be no continuous water use daily.

Cumulative impact

It is expected that the maximum number of people who will work in the sub-project and associated facility work areas will approximately double, compared to the sub-project, for the construction period when the construction works will be carried out together and hence the expected adverse water use cumulative impact of the sub-project will also increase proportionally, but it would be limited and short term.

Maintenance and repair work for the operational phases of the sub-project and its associated facility will be local and short termed for adverse cumulative impacts on water use.

[14] TurkStat, Daily Amount of Water Usage Per Capita (Liters/Person-Day) Data (Izmir), 2022

4.1.1.3 Wastewater

Construction phase

The wastewater to be generated during the construction phase will be domestic wastewater from the personnel. It is predicted that 13 personnel will be employed during the construction phase of the sub-project.

Daily discharged wastewater per person is regarded as 181 L/(person.day) according to TurkStat data (2022)[15], and the estimated daily amount of wastewater to be discharged during the construction phase of the sub-project is calculated below.

$$Daily\ Wastewater\ Amount\ to\ be\ Discharged = 13\ person \times \frac{181\ L}{person \times day} \cong 2.4\ m^3/day$$

The existing sewerage system or mobile toilets will be used to discharge the wastewater generated by the personnel.

Operation phase

Since there will be no continuous of water use during the operation phase of the sub-project, constant daily wastewater generation is not expected.

Cumulative impact

Likewise, it is expected that the maximum number of people who will work in the sub-project and associated facility work areas will about double, compared to the sub-project, for the construction phase when the construction works will be conducted jointly and hence the expected adverse wastewater cumulative impact of the sub-project will also increase at the same rate, but it would be limited and short term.

Limited adverse cumulative impact on wastewater is expected due to local and short-term wastewater generation during maintenance and repair works for the operation phases of the sub-project and its associated facility.

4.1.1.4 Waste Management

Pollution Prevention

Throughout the life of the sub-project, workers will be recruited from the region as much as possible. Priority will be given to working with local suppliers and procuring services from the local employees in the service industry, as much as possible (fuel supply, vehicle maintenance/food, beverage, and spare parts supply, etc.). Resource efficiency and management actions will be taken; use of renewable energy and energy efficiency measures, reducing the carbon footprint, financing for green building, responsible supply chain management and green procurement.

Construction phase

Domestic Solid Waste

Domestic solid waste will be generated from the personnel who will work during the construction phase of the sub-project. The domestic solid waste generated will mostly consist of organic waste.

[15] TurkStat, Daily Amount of Wastewater Discharged Per Capita (Liters/Person-Day) Data (Izmir), 2022

The amount of domestic solid waste from the personnel is calculated according to the data established by TurkStat (2022)[16] that an average of daily 1.22 kg of domestic solid waste will be generated per capita in Izmir.

$$Daily\ Amount\ of\ Solid\ Waste\ to\ be\ Generated\ = 13\ person \times \frac{1.22\ kg}{person \times day}$$
$$\cong 15.9\ kg/day$$

The domestic solid waste generated will be stored in available trash containers and collected by the district municipality via garbage trucks. The waste collected will be delivered to licensed solid waste landfills.

Packaging Waste

The ratio of recyclable packaging waste is in metropolitan cities in Türkiye as follows. 48 kg/P-year paper and board, 14 kg/P-year plastic, 6 kg/P-year nylon, 8 kg/P-year metal, 8 kg/P-year glass, in total 84 kg/P-year[17].

$$Daily\ Amount\ of\ Packaging\ Waste\ to\ be\ Generated$$
$$= 13\ person \times \frac{84\ kg}{person \times year} \times \frac{1\ year}{365\ day} \cong 3\ kg/day$$

Packaging wastes made of plastic, metal, glass, paper and board, composite and similar materials should be collected separately from other wastes and given to Packaging Waste Collection, Segregation and Recovery Facilities licensed by the MoEUCC.

Excavation and Construction Waste

In accordance with the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes, excavated soil and construction waste producers are responsible for the transportation of the excavated soil and construction waste generated to the storage areas that have necessary permissions, using transportation vehicles with the necessary transportation permits.

The excavation soil and construction wastes generated during the construction phase of the sub-project will be transferred to the permitted landfill belonging to the IMM.

Hazardous Waste

During the construction phase of the sub-project, petroleum-based products, such as lubricants, hydraulic fluids, or fuels, may result in the potential for release into the environment during transportation or use in equipment. Additionally, contaminated / oily fabrics, cloths and filters, contaminated packaging materials, toner cartridges, paint residues, fluorescent tubes, cleaning cloths and filters, hazardous insulating materials and pressurized tubes are other hazardous wastes that are likely to be generated.

Hazardous wastes that are likely to be generated during the construction phase will be collected separately in specific vessels / containers at the construction site and stored in a specific area that is established on the concrete floor and connected to the drainage channel to prevent it from reaching the ground or other bodies of water. A roof or overhead cover will be provided for the hazardous waste storage area to protect waste containers from rainwater

[16] TurkStat, Daily Amount of Municipal Waste Per Capita (Kg/Person-Day) Data (Izmir), 2022
[17] Solid Waste Management and Recovery, Environmental Protection and Packaging Waste Recovery and Recycling Foundation (ÇEVKO) Publications

exposure, thus preventing spills, leaks, and environmental pollution while safeguarding workers' safety. Additionally, prevailing wind directions will be considered when designing the storage area to prevent the dispersal of particulate matter, dust, or contaminants, thereby reducing health risks to workers and the environment. The waste generated should be temporarily stored at their source in line with the criteria set based on their types. The temporarily stored waste will be labelled with the phrase 'hazardous or non-hazardous waste' as well as the waste code, the amount of waste stored and the date of storage.

Waste will be delivered to licensed disposal / recycling facilities with separate waste codes. Hazardous waste will be transported by licensed vehicles within the scope of the "Communiqué on the Waste Transportation by Road".

Waste Batteries and Accumulators

Waste batteries will be collected separately in waste battery bins. The collected waste batteries will be delivered to the Portable Battery Manufacturers and Importers Association (TAP) (authorized waste battery collector) for disposal at the licensed facility.

These wastes will be handled in accordance with the procedures and principles of the Regulation on the Control of Waste Batteries and Accumulators. If not handled properly, these wastes can have an adverse impact on human health and the environment.

Medical Waste

During the construction phase, medical waste will be generated from first aid responses. According to the Regulation on Control of Medical Waste, medical wastes stored in specific containers and areas will be collected by licensed vehicles and delivered to licensed disposal companies.

It is expected that the medical waste produced during the construction phase will be generated in very small amounts due to first aid actions. While medical waste is expected to be generated in trace amounts, they can lead to significant effects such as contracting infectious diseases if not handled properly.

Operation phase

Maintenance and repair activities may generate waste materials that require proper disposal. Waste generated during maintenance and repair activities should be segregated into different categories based on their type and potential for reuse or recycling. This can include categories such as hazardous waste, recyclables, and non-recyclables. Each category of waste should be disposed of in the appropriate manner, according to national regulations.

Cumulative impact

Similarly, it is expected that the maximum number of people who will work in the sub-project and associated facility work areas will about double, compared to the sub-project, for the construction phase when the construction works will be conducted jointly and hence the expected adverse solid waste cumulative impact of the sub-project will also increase at the same rate, but it would be limited and short term.

Maintenance and repair work for the operational phases of the sub-project and its associated facility will be local and short termed for adverse cumulative impacts on waste management.

4.1.1.5 Noise

Construction phase

Noise will be generated from vehicles, machinery and equipment that will operate during the construction activities of the sub-project. The equipment and machines used during the construction will be monitored and maintained at regular intervals. In case of complaints regarding noise, noise measurements will be made for impact area.

A grievance mechanism will also be in place to address any noise-related complaints from affected communities.

Operation phase

No activities that could be considered as a noise source is expected during the operation phase of the sub-project except for the repair and maintenance activities that will be local and short termed.

Cumulative impact

It is anticipated that the maximum number of vehicle/equipment to be used for the construction period, during which the construction works will be carried out together, will be approximately doubled compared to the sub-project and hence expected adverse noise cumulative impact of the sub-project will be increased In this context, in order to minimize the additional noise impacts arising particularly from the bridge crossing project assessed as an associated facility, work programming, defined as the coordination and scheduling of construction activities, working hours, equipment usage, and construction phases between the two projects, will be implemented. This approach will aim to avoid overlapping high-noise activities, limit simultaneous operation of heavy machinery where feasible, and align construction schedules with noise-sensitive periods. Such coordination measures will be implemented as part of the construction-phase environmental management practices.

With the cumulative impact of the operation phases of the bridge retaining wall, access roads and sub-project, a reduction in noise levels is expected as a result of improved traffic flow. Specifically, shorter vehicle waiting times and reduced stop-and-go conditions on the relevant roads are anticipated to lead to lower overall traffic-related noise levels in the surrounding area.

4.1.1.6 Land Use and Soil Quality

Construction phase

A change in land use is not expected since the sub-project area is located within the boundaries of the existing settlement zone on open public roads that is under the responsibility of Konak Municipality and at the Municipality service area and will be restored after work. In addition to this, trees along the roadside recreation area within the sub-project area of bridge crossing will have to be properly relocated prior to the construction of the bridge over Meles stream. Also, the structures of the Mounted Police Unit within this sub-project area should be removed prior to the construction of the bridge.

Topsoil stripping will be limited except for the sub-project area of the bridge crossing. It is estimated that approximately 1.6 ha (16,000 m^2) of this sub-project construction area contains topsoil. This corresponds to approximately 3,200 m^3 of topsoil to be stored temporarily in the sub-project area. In this context, topsoil will be separated from general

trash and organic, liquid, and chemical wastes on site, and stored in appropriate containers. Before starting excavation works at this sub-project area, topsoil will be stripped to a sufficient depth (minimum 20 cm) prior to the start of the construction activities. To avoid soil compaction, stripping operation will not be done when soil is wet. Average height of topsoil stacks will be 1.5 m. Side slope of these stacks will not exceed 3:1 (h:v). Stripped topsoil should be temporarily stored in the sub-project area to be used for landscaping.

Since there will be no fuel or similar hazardous chemical storage within the sub-project area, it is not anticipated to experience spill-like accidents. Measures to be taken to prevent soil pollution are given in Table 4-2.

Operation phase

No change in land use is foreseen during the operation phase of the sub-project.

No change in soil quality is expected during the operation phase of the sub-project since there will be no storage or soil related activity.

Cumulative impact

Although the land use of the sub-project overlaps with that of the associated facility, (see Figure 2-2), limited adverse cumulative impacts on land use and soil quality are expected over the lifetime of the sub-project due to the existing roads in areas except for the access road project to the Ege neighbourhood.

4.1.1.7 Landscape/Visual

Construction phase

There are residential areas, especially skyscrapers, hotels, schools, health facilities, entertainment venues around the sub-project area, it consists of predominantly commercial units. A temporary visual disturbance due to the construction is expected, but it will be of short duration.

Operation phase

Since the sub-project is the bridge crossing construction project, and especially for the Meles Stream K 20 Bridge, as the roadside recreation area will be reorganized and stripped topsoil of this sub-project area will be used for landscaping, no adverse impact on landscape/visual is expected during operation phase of all sub-project areas.

Cumulative impact

The adverse cumulative impact from associated facility on the landscape and visual may be temporary for the construction period. With the opening of roads of the sub-project and its associated facility, limited adverse cumulative impact on landscape and visual is expected for the sub-project with the access road project as an associated facility of the sub-project.

4.1.2 Biodiversity Risk and Impacts

Construction phase

Negative impacts due to dust and noise may occur during the construction phase of the sub-project. There are trees in the project area, and it is possible that these trees may be negatively affected by the construction work. Necessary precautions to ensure that trees are not affected by the construction phase are given in the ESMP matrix.

Construction activities in proximity to Meles Stream, particularly piling, excavation, and bank stabilization works, may result in a temporary increase in suspended solids, especially during in-stream or near-stream works. This may locally and temporarily reduce light penetration and influence dissolved oxygen dynamics, potentially affecting the limited aquatic biota present in the stream. Such effects are expected to be short-term and localized.

There is also a risk of pollution associated with accidental spills of hazardous materials such as fuel, lubricants, or hydraulic fluids, as well as the improper discharge of concrete wash water. These substances may pose a chemical risk to the water column and sediments if not properly managed.

In addition, excavation and sediment disturbance within or near the riverbed may potentially mobilize fine sediments that could contain historical contaminants associated with past industrial activities in the catchment. However, with the implementation of standard sediment control and pollution prevention measures defined in the ESMP, these risks are expected to remain minor and temporary.

Operation phase

No significant biodiversity impacts are expected during the operation phase of the sub-project, as the project does not involve water abstraction, direct discharge to the stream, or permanent alteration of the river morphology.

The primary long-term environmental consideration during operation is the discharge of surface runoff from the bridge deck during rainfall events. Runoff may contain suspended particles, hydrocarbons, or trace metals originating from vehicle use. However, provided that the drainage and filtration systems specified in the technical design are properly installed and regularly maintained, the risk to water quality is expected to remain low.

Given that the project area and surrounding riparian corridor are already highly modified and dominated by urban land use, the bridge structure is not expected to significantly alter movement patterns of urban-adapted bird or mammal species, nor to reduce ecological connectivity in a measurable way.

Overall, considering the already modified character of Meles Stream and the limited ecological sensitivity of the immediate project area, no significant residual impacts on biodiversity are anticipated during the operation phase, provided that mitigation and maintenance measures outlined in the ESMP are effectively implemented.

4.1.3 Social Risks and Impacts

4.1.3.1 Population / Demography

Construction and Operation phase

Since the construction works for the sub-project will be carried out in central neighbourhood, it is foreseen by the IMM that no worker accommodation will be constructed within the scope of the sub-project, as the workforce will be locally sourced and composed of personnel residing within the city.. However, containers can be placed on the sub-project area for those who will work on the sub-project to rest, eat and also for sanitary facilities. These containers will meet standards for worker accommodation prepared by International Finance

Corporation (IFC) and European Bank for Reconstruction and Development (EBRD) and approved by the WB[18].

On the other hand, in the settlements that are expected to be affected during the construction phase of the sub-project, no negative impact induced by the sub-project is anticipated regarding the population level, as no accommodation or camp sites will be established for workers, and only 13 people will be working, there will be no additional population increase within the influenced settlement areas. Recruitments for workers employed as part of the sub-project will be conducted by IMM in accordance with the Labour Management Procedures (LMPrs) of the CDRC Project. Legal work permits will be verified to ensure compliance with labour conditions during the construction and operation periods, as detailed in Section4.1.3.4 4.1.3.4 Informal, child labour, or forced labour will not be permitted.

The IMM has not yet entered into a contract with a Contractor for the construction phase, and any Contractors to be involved in the construction phase of the sub-project must act in accordance with the commitments and standards provided within the scope of ESMP and prepare own Labour Management Plan (LMP) based on the parent project Labour Management Procedures (LMPrs).

For the avoidance of any negative impact on the local communities due to presence of workers during the construction phase and their potential interaction with community members, contractors are responsible for providing code of conduct training to each worker and ensuring that all workers are informed about the this.

Cumulative impact

Likewise in the same way, during the construction phase, when the sub-project and associated facility works are carried out simultaneously, the maximum number of workers in these areas is expected to double. Consequently, while the cumulative impact will increase, the project will not lead to additional accommodation needs or population growth, and no labour influx is expected.

This situation can be assessed as a temporary and limited labour influx; as the workforce will be locally sourced and no worker accommodation will be provided, no permanent population increase or additional accommodation needs are expected.

4.1.3.2 Land Acquisition

Construction and Operation phase

Within the scope of the sub-project, a new bridge will be constructed over the riverbed in Ege Neighbourhood. The sub-project area currently does not include an existing bridge structure at this location..

According to IMM Transportation Department Presidency[19], it has been decided by Konak Municipality to allocate the area designated as green space is registered as block 80005, parcel 1. in the zoning plan, which is currently being used by the Police Mounted Unit, until the project is implemented.

[18] https://documents1.worldbank.org/curated/en/604561468170043490/pdf/602530WP0worke10Box358316B01PUBLIC1.pdf
[19] Source: Izmir Metropolitan Municipality Transportation Department Presidency

When assessed according to the WB Environmental and Social Standards (ESS), ESS5: Land Acquisition, Land Use Restrictions and Involuntary Resettlement standard; it was identified that the lands where the bridge crossing will be constructed are located on the existing roads that are already in use and within the scope of 'public abandonment' according to the Zoning Law under the responsibility of the Municipality. The sub-project area does not overlap with any private land. Therefore, there is no need for land acquisition within the scope of the sub-project. In the research on land acquisition, it has been informed that there is a parcel under the ownership of State Hydraulic Works (DSI) in the sub-project area and that correspondence has been made with the institution on the related parcel. The parcel boundaries are presented in Appendix-K Property Boundary Layout Plan. No informal users or occupants have been identified

Accordingly, no sub-project-related land acquisition will be required and, therefore, no physical or economic displacement is anticipated within the scope of the sub-project when evaluated within the scope of WB ESS, ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement Vulnerable/Disadvantaged Groups.

Construction and Operation phase

The construction works to be carried out for the sub-project works will have a short-term and temporary effect. It is not expected that vulnerable/ disadvantaged individuals/groups within the sub-project's area will be specifically negatively affected by the sub-project. However, the general population (incl. Vulnerable groups) may be temporarily exposed to negative impacts during the construction period of the sub-project and measures to mitigate these impacts are given below.

Children:

Possible Negative Impacts: Increased risk of accidents due to construction activities, exposure to hazardous materials or equipment, disrupted routines affecting education and sleep.

People over 65 years of age:

Possible Negative Impacts: Physical strain due to noise and dust, increased risk of falling or tripping around construction sites, disrupted access to healthcare facilities.

People with chronic disorders or special care needs:

Possible Negative Impacts: Disrupted access to medical services, exacerbation of health conditions due to stress or environmental factors, increased vulnerability to infections.

There is a negative impact on access to healthcare facilities during the bridge construction phase in the project area.

Disabled people:

Possible Negative Impacts: Limited mobility due to blocked pathways or inaccessible infrastructure, heightened risk of accidents or discrimination.

People without health insurance:

Possible Negative Impacts: Financial strain from unexpected medical expenses, reluctance to seek medical help due to cost concerns.

People earning below the minimum wage/receiving donations:

Possible Negative Impacts: Increased economic vulnerability due to potential job loss or reduced income, inability to afford basic necessities during construction disruptions.

Female-headed households:

Possible Negative Impacts: Heightened caregiving responsibilities, limited access to income-generating opportunities, increased vulnerability to harassment or exploitation.

Throughout the sub-project's lifespan, it is crucial for stakeholders to have information about the project's route, duration, and alternative passages. Special efforts should be made to identify disadvantaged and vulnerable stakeholders who might be affected differently or face challenges in participating and engaging in the development process. Translator support will be provided, as needed, for stakeholder engagement meetings for refugee/immigrant stakeholders who do not speak Turkish. Stakeholder identification is an ongoing process that will require regular review and updates. To identify project stakeholders and establish methods for their future participation, a Stakeholder Engagement Plan (SEP) has been prepared for this sub-project, guiding the IMM in consultation methods with stakeholders.

During the construction phase of the bridge crossing, stakeholder consultations will be undertaken to ensure safe access for vulnerable groups through temporary crossings and alternative walkways where required. As works will take place in publicly accessible areas, access will be restricted only as necessary for safety, and any open excavations will be properly secured, illuminated, and signposted, including overnight where applicable.

4.1.3.3 Economy / Employment

Construction phase

It is anticipated that the sub-project will result in temporary employment. Priority will be given to contributing to the local economy through the use of local materials and local recruitment of labour during the construction and to paying attention to the procurement of various goods and services from local resources. It is estimated that 13 workers will be employed during different stages of the construction.

In addition, the negative impacts that local businesses in the region may face and the measures to be taken for these negative impacts are given below.

Possible Negative Impacts

- Disruption of Access: Construction operations may make it more difficult or prohibitive for customers to visit establishments, which will reduce pedestrian traffic.
- Noise and Dust: Noise and dust generated during construction may affect both customers and nearby residents by reducing the overall environmental quality, causing disturbance, and potentially leading to decreased business patronage and reduced residential comfort.Traffic Congestion: Increased traffic congestion due to construction vehicles and road closures may discourage customers from visiting local businesses.
- Loss of Parking Spaces: Construction activities may result in the loss of parking spaces near businesses, making it inconvenient for customers to park.

Operation phase

After the sub-project is implemented, maintenance and repair tasks will only require workers. There won't be a need to hire more staff during the operation time because the IMM's current structure has enough employees to handle these maintenance and repair tasks.

Cumulative impact

During the construction phase, as the sub-project and associated facility works progress simultaneously, the workforce in these areas is expected to double. As a result, while the cumulative impact will increase, local businesses in the region may also be affected by noise and dust. Additionally, traffic congestion is likely to rise during the construction period.

4.1.3.4 Labour Conditions

Construction and Operation phase

The IMM will be responsible for human resources for construction phase. The sub-project will comply with national labour, social security and occupational health and safety laws as well as the principles and standards of the International Labour Organization convention by meeting WB expectations according to WB Standards and adherence to LMP of the CDCR Project. Contractor will develop own Labour Management Plan (LMP) on the basis of the Labor Management Procedures (LMPrs) of CDRC. Based on the national principles in the International Labour Organization convention, the IMM will take the following measures:

- Not employing children under the age of 18 nor any forced labour,
- Eliminating forced labour and ensuring a Human Resources Policy compatible with the European Convention on Human Rights and the Turkish Constitution,
- Eliminating discrimination based on language, race, gender, political thought, philosophical belief and religion in business relations,
- Ensuring workers' access to the right of collective bargaining (Law No. 6356 on Trade Unions and Collective Bargaining Agreements, and Labour Law No. 4857),
- All employees will be issued written employment contract defining work, work hours, wages, rights and duties, etc. and,
- Ensuring access to the sub-project Workers' Grievance Mechanism that is functional effectively.

The Labour Law (4857) applies to all workplaces and employers, employees, employer representatives and worker representatives, regardless of the business activity.

4.1.3.5 Training

The occupational health and safety training will be provided to the employees of contractor as part of each contract executed within the scope of the sub-project, which will at least include the subjects provided in the Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees, and the Contractor's Environmental and Social Management Plan (C-ESMP) to be developed by the contractor , based on this ESMP, will contain the plans regarding the training to be provided to personnel.

Additionally, the contractor will provide training to its personnel, who will work during the performance of the work, on the environmental and social impacts that will be considered during the on-site work and are included in this ESMP document. The contractor will train its

personnel in the fulfilment of all measures to prevent and/or minimize environmental and social impacts during the on-site construction, subject to inspection by the IMM.

The contractor will ensure that the on-site personnel are primarily trained in the issues that include the risks, and protection measures specific to the worker's job and post before starting work.

In addition, training on risks that may arise from the circumstances, such as changes in post or job, replacement of work equipment or application of new technology, will be provided.

Training programs will be repeated periodically considering the changing and emerging risks provided in the Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees. Information and training will be provided not only for personnel, but also for the measures to be taken for public health and safety.

The contractor is required to separately and measurably demonstrate the knowledge, skills, behaviours, and attitudes that the on-site personnel will have regarding occupational health and safety, environmental and social issues.

The Contractors are obliged to give code of conduct training, including Gender Based Violence (GBV), Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), to each worker so that the presence of workers who will work during the construction do not result in any disturbance/conflict within the local communities and their interaction with community members do not result in inappropriate behaviours/misconducts. The IMM will ensure that the Contractors develop a Code of Conduct and that all workers are informed and receive training about it before starting to work. A Code of Conduct will be part of the employment contract to be signed by all workers at the job start-up phase. The training given in the Code of Conduct will be checked and reported by Environmental and Social Experts. Scaling and evaluation will be carried out at the end of the training provided. According to the results of the evaluation, training material will be updated by adding the learnings from near misses or incidents when happen. Regular toolbox trainings should also be conducted to raise awareness about health and safety procedures. These toolbox trainings will aim to enhance safety awareness and ensure that workers understand how to minimize potential hazards on the construction site.

4.1.3.6 Occupational Health and Safety

Construction and Operation phase

If the required precautions are not taken during construction, this could lead to mishaps that endanger the workers' health and safety. In this sense, it is the responsibility of the contractor and the IMM to give employees a safe and healthy workplace. Workers may be exposed to a variety of risks during the building phase, including working at heights, in confined spaces, with electrical equipment, with tiny cranes, and in environments with noise, dust, heat, and toxic chemicals. Most common OHS Risk areas and general mitigation measures are provided in Appendix-D.

Occupational accidents and injuries may take place during these activities if potential risks at various stages of the sub-project are not managed properly. Potential accidents occurring during the operation phases of sub-project may lead to potential health concerns associated with non-routine risks.

Dust suppression techniques such as the application of water or non-toxic chemicals should be used to minimize dust from vehicle movements. Necessary measures will be taken due to COVID-19 other infectious diseases at the construction site, and sanitary and hygiene conditions will be provided. During the operation, the storage, use and disposal of hazardous materials will be strictly controlled in alignment with occupational health and safety, near-miss accidents, work permits, driving permits, height work permits, and environmental protection and good industrial practices.

Employees will receive adequate information regarding their job descriptions, responsibilities, and occupational health and safety risks. In line with the hierarchy of controls, collective (engineering and organizational) protection measures will be prioritized to eliminate or minimize risks at source before reliance on individual protective measures. Where risks cannot be fully controlled through collective measures, employees will be provided with appropriate personal protective equipment (PPE) that meets national and international standards. In addition, regular occupational health and safety training will be provided to ensure safe working practices.

The IMM will require all employees and contractors to adhere to local and international health and safety legislation and guidelines. This will include using OHS Management Plan and suitable PPE (safety helmets, ear protectors, protective gloves, etc.), implementing a management system for activities associated with health and safety risks, keeping available the permits for working at height, working in hot work permits (welding, cutting, grinding), and driving vehicles, and adhering to these rules.

Lastly, the Occupational Health and Safety Management Plan and Emergency Preparedness and Response Plan (EPRP), which will include the response measures for the risks and impacts associated with the works to be conducted, in case of accident, sabotage, fire and electric shock, infectious diseases, earthquake, dent, flood, storm and chemical spill, will be developed with the regular exercises according to regulation by the IMM for operation phase and by the Contractor for the construction phase.

Cumulative impact

Especially considering that the construction works of sub-project and the bridge retaining wall project will be carried out in very close proximity to each other, and both the maximum number of employees and the maximum number of vehicles/equipment to be used will be approximately doubled compared to the sub-project for the construction period when the construction works will be carried out together, thus expected adverse cumulative impact in terms of OHS will increase during the sub-project construction works, but it would be limited and short term. In this context, required coordination will be ensured in terms of OHS in areas where an associated facility intersects with the sub-project through the construction phase of the sub-project.

During maintenance and repair works for the operation phases of the sub-roject and its associated facility, limited adverse cumulative impact on OHS is expected due to local and short-term working condition.

4.1.3.7 Community Health and Safety

Construction and Operation phase

Community health and safety issues are associated with risk factors that may arise from construction and operation phases of the sub-project. There is a possibility that the local people will be affected by the resulting dust and noise, especially during the construction phase.

To minimize the impact of the traffic activities that are expected to intensify during the construction phase, the working hours will be adjusted according to the peak hours of transportation. The views of relevant stakeholders will be sought to determine a common working strategy for construction activities to be performed especially in front of and/or around areas, such as schools and hospitals. The construction activities to be performed around or in front of hospitals and/or healthcare providers will be planned not to hinder the public access to these services. Special crossings will be developed by taking additional measures for the elderly, pregnant women, people with small children and the disabled. The IMM and Contractors will comply with the measures presented in this ESMP to create temporary security measures so that the construction works to be carried out around the mosque and the residences located next to the sub-project area will not cause unjust treatment to the citizens.

Accidents and failures can be expected in the site of construction. The IMM is responsible to prevent the adverse impacts of the construction phase over the community. However, since the scope of the sub-project is not land but a network, it will not be possible to encircle the construction site completely. Yet, pits and dangerous materials, which will be present at the construction site will be managed by safety standards. Necessary warning signs and with physical barriers with no gaps in between will be provided by the IMM to protect the community health and provide safety.

Existing roads will be used within the scope of construction works. Possible damage to road surfaces due to traffic caused by heavy machinery will be rehabilitated by the Contractor. In case of any damage to the infrastructure elements on private lands due to construction activities, it will be compensated by the Contractor. Mitigation measures will be implemented by the Contractor. In order to make a clear assessment, the present condition of the roads and existing infrastructure can be documented (e.g. by photographs) by the contractor before the start of construction works. IMM will monitor and manage the compensation process for these damages.

Communities in the vicinity of the sub-project area may be exposed to physical hazards, such as exposure to noise, exposure to dust emissions, hazard from electricity, traffic accidents, etc., associated with sub-project components during the construction phase. In this context, within the scope of the Regulation on Coordination Centres of Metropolitan Municipalities, Infrastructure Coordination Centre (AYKOME) and Transportation Coordination Centre (UKOME) will continue to use the Infrastructure Information System (AYBIS) to systematically carry out, monitor and control the documentation of all excavation permits (electricity, gas, telephone, etc.) in the sub-project area. Sub-project work areas will not be opened to the public until all checks have been coordinated, approved and completed by the concerned interested parties including especially electricity, gas distribution companies in the sub-project area. A Community Health and Safety Management Plan of the sub-project will be

prepared, developed, and implemented to include this coordination throughout the lifetime of the sub-project.

Additionally, falling hazards may occur due to unattended infrastructure. Construction activities will be announced to the affected local people, businesses, and governmental bodies at least two (2) days in advance through communication channels such as mukhtars, sending text messages, publishing an announcement on IMM's website.

Cumulative impact

During the construction phase, when the sub-project and associated facility works are carried out simultaneously, the maximum number of workers in these areas is expected to double. Consequently, the cumulative impact will increase, potentially leading to hazards such as dust, noise, electrical risks, and traffic accidents.

4.1.3.8 Traffic and Transportation

Construction and Operation phase

The proximity of the sub-project to the port area and its inclusion within the urban renewal zone make it of great significance for the region, and it will serve as a solution to the increasing density here. When vehicle passages from each point are examined in both directions, considering the current routes and the projected routes, it is observed that the sub-project will contribute to reducing traffic load and shortening distances after its completion.

Traffic flow will be maintained by opening service roads, redirecting traffic to side lanes, or converting the opposite direction to a dual lane. The duration of the traffic redirection will vary depending on the construction progress, but the exact timeline will be clarified before the construction of the sub project.

Excavation trucks will preferentially operate during low-traffic periods, and appropriate warning signage will be erected for the dedicated connecting route. Personnel responsible for operating trucks and heavy equipment will be allocated with dedication and trained in traffic and road safety. This should be included in the Traffic Management Plan that the contractor will prepare. Regular maintenance of the construction machinery and equipment will be performed, and construction vehicles are committed to all speed restrictions.

As this is a road infrastructure project, traffic- and access-related risks are recognized as one of the key environmental and social risks during the construction phase. The road is not expected to be fully closed for the entire construction period. Instead, construction will be carried out in phases, allowing at least one lane or a portion of the road to remain open where technically and safely feasible. Temporary full closures, if required for specific activities (e.g., bridge placement or critical structural works), will be limited in duration, scheduled during off-peak hours where possible, and communicated in advance to road users and local stakeholders. Detailed traffic phasing, temporary closures, alternative routes, and mitigation measures will be comprehensively defined in the Traffic and Transport Management Plan (TMP), which will form part of the Contractor’s site management documentation.

Cumulative impact

As part of the cumulative impact assessment, similar traffic management measures will be evaluated in coordination with other related projects to minimize overall disruption.

Additionally, excavation trucks will primarily operate during low-traffic periods, with clear warning signs placed along the designated route.

4.1.3.9 Cultural Heritage

Construction phase

The construction of the sub-project will mostly proceed along the current road route. As such, it's a location where excavation has already been done. However, the Museum Directorate will provide an opinion letter before any construction can begin. The opinion letter will be forwarded to ILBANK. A chance find procedure has been developed to oversee activities related to cultural assets (see Appendix-C). There will be provisions in the contract pertaining to the employment of the chance find technique with the contractor doing the construction job. As an appendix to the contract, the chance find procedure will be shared with the contractor, and it will be ensured that the relevant personnel are knowledgeable and trained in this regard. In the event of any archaeological remains or artifacts being discovered during construction, all activities will be halted, recorded as specified in the chance find procedure, and reported to the Museum Directorate in accordance with Article 4 of Law No. 2863.

Operation phase

To ensure the continued functionality of the existing infrastructure without adversely affecting cultural heritage, it is crucial that maintenance and repairs to the bridge are limited to routine activities during the operational phase of this sub-project.

However, it is crucial to maintain vigilance and consider the possibility of unforeseen events or emergency scenarios that could call for deeper excavation or excavation activities outside the present pathways. There is a chance that you will come across artifacts related to cultural heritage in such cases. The operational team of the sub-project will be ready to handle these unforeseen circumstances by following the correct procedures if objects of cultural heritage are accidentally discovered. They will make sure that these artifacts are preserved, properly documented, and reported to the appropriate authorities.

All personnel involved will receive training on the chance find procedure underscoring the sub-project's commitment to minimizing any potential negative impact on cultural heritage during the operational phase. The respect and safeguarding of cultural heritage sites are paramount for the sub-project's sustainability and will remain a fundamental consideration across all sub-project stages.

Cumulative impact

The maintenance and repair work will be strictly limited to the asphalt surface of the bridge and surrounding roads, with no plans for additional excavation or significant alterations to the existing infrastructure. During the cumulative impact assessment phase, the same chance-find procedure will be applied in conjunction with other projects.

4.2 Pre-Construction, Construction and Operation ESMP Matrices

Table 4-1. ESMP Pre-Construction Phase Matrix Table for the Sub-project

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
ESS1	**Assessment and Management of E&S Risks and Impacts**				
1.1	Missing documentation	Sub-project's Stakeholders	▪IMM's PIU will examine the C-ESMP which are based on this ESMP to be developed by Construction contractor of the sub-project. Supervision Consultant will review C-ESMP of the contractor. List of E&S management plans to be developed by the contractor prior to construction phase are presented below. o Occupational Health and Safety (OHS) Management Plan, o Emergency Preparedness and Response Plan (EPRP), o Construction Site Traffic Management Plan, o Contractor Management Plan o Labour Management Plan (LMP) (based on the CDRC's Labour Management Procedures (LMPrs)), o Community Health and Safety Management Plan, o Air Quality Management Plan o Asbestos Management Plan, o Hazardous Materials Management Plan o Noise and Vibration Management Plan o Waste Management Plan, o Chance Finds Procedure.	▪IMM ▪Contractor ▪Supervision Consultant	▪C-ESMP
ESS2	**Labour and Working Conditions**				
2.1	Improper Working Conditions, Child labour, forced labour and unregistered employment	Sub-project workers	▪All workers will be issued written contract containing job description, work hours, salary, rights and duties, code of conduct, and information about GM for workers during the pre-construction phase and the construction phase (for employees who will start work after construction). ▪Prohibition and control of child labour and forced labour. ▪Contractor will develop its own Labour Management Plan (LMP) (based on the CDRC's Labour Management Procedures (LMPrs)),	▪IMM ▪Contractor ▪Supervision Consultant	▪LMP (based on the CDRC's LMPrs) ▪SEP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
2.2	Labour and working condition related risks as a result of inadequate training	Sub-project's workers	▪Training topics to be given to workers before construction: o Grievance mechanism, o E&S documents, o SEP, o OHS, o GBV, SEA/SH.	▪IMM ▪Contractor ▪Supervision Consultant	▪C-ESMP ▪SEP ▪ESMP ▪LMP
ESS4	**Community Health, Safety, and Security**				
3.1	Community health, safety and security risks as a result of inadequate training	Sub-project's Stakeholders	▪Training topics to be given to workers before construction: o Grievance mechanism, o E&S documents, o OHS, o GBV, SEA/SH.	▪IMM ▪Contractor ▪Supervision Consultant	▪C-ESMP ▪SEP ▪ESMP ▪LMP
ESS5	**Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**				
4.1	Land Acquisition	Sub-project's Stakeholders	▪There is no need for land acquisition within the scope of the sub-project. In the research on property, IMM informed that there is a parcel under the ownership of DSI in the sub-project area and that correspondence has been made with the institution on the related parcel. The correspondence with DSI regarding the sub-project area will be annexed to this ESMP after it is obtained from IMM.	▪IMM	▪ESMP ▪SEP ▪
ESS10	**Stakeholder Engagement and Information Disclosure**				
5.1	Inadequate disclosure, Communication problems as a result of lack of open communication with stakeholders	Sub-project's Stakeholders	▪After the completion and approval of the ESMP for the sub-project, a public consultation meeting will be held. Announcements will be published in newspapers 10 days prior to the meeting, providing the date, time, and location, and the information will be also posted on the official IMM website. Additionally, the neighbourhood mukhtars within the sub-project's AoI, media outlets, and professional chambers will be notified about the meeting via phone messages and emails. Further details regarding the stakeholder participation meeting will be annexed to this ESMP and SEP.	▪IMM	▪C-ESMP ▪SEP ▪ESMP

Table 4-2. ESMP Construction Phase Matrix Table for the Sub-project

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
1	**ESS2 Labour and Working Conditions**				
1.1	Inadequate workers health and safety conditions	Workers at the sub-project area	▪The Project implementation unit (PIU) to be formed by the IMM and the contractor's project team will include staff(s) (at least one environmental and social expert and ''A'' Class OHS expert) who will take part in full-time and effectively control the implementation of the sub-project. Also, The IMM will make sure that the measures provided below are taken by the contractor and enforce necessary actions/sanctions in case lack of these measures on site. In this regard, most common OHS risk areas and corresponding general mitigation measures throughout the life of the sub-project are provided in Appendix-D. ▪Including project engineers, management team and workers shall be informed about job descriptions, responsibilities, and risks according to be prepared ''Project OHS Management Plan''. The workers will be provided working conditions in accordance with the Labour Law and the Labor Management Procedures (LMPrs) of CDRC (such as wages, working hours, payment for overtime hours, period of rest, social security benefits). The workers will be provided with the necessary personal protective equipment and information on works and occupational safety through regular trainings. Before the construction works starts, a Risk Assessment Report shall be prepared for all works to be carried out and necessary measures shall be taken to avoid related risks. Emergency Preparedness and Response Plans (EPRP)s shall be prepared for possible accidents and emergency situations (i.e., fires, earthquakes, floods, etc.) events and emergency teams shall be established and drills and training shall be carried out in line with the emergency scenarios. ▪OHS management plan will be prepared to outline all the actions and procedures for ensuring OHS for all workers by the contractor during the construction period and by the IMM during the operation period. ▪To control the cases (fire, earthquake, etc.), which may occur during the construction activities under the sub-project, and which require urgent action, an EPRP and an Occupational Health and Safety Management Plan will be prepared by the contractor and shared with all employees. The contractor will prepare a training program regarding the plans. ▪The IMM will ensure a safe working environment for the workers and will require all employees and contractors to adhere to local and international health and safety legislation and guidelines. Workers will be provided with all necessary personal protective equipment (PPE) (hard hats, safety harnesses, protective coveralls, glasses, gloves, armour-clad shoes, etc.). ▪Smoking areas will be allocated at the construction site. ▪Appropriate hand and face washing facilities will be provided for the employees, and shower facilities for dusty works. ▪Technical and OHS training, including the code of conduct indicating the possible risks regarding the work site and the work to be carried will be given to workers by the contractor with a training plan including toolbox talks. These will include regular training to workers on infectious diseases how to be protected and what to do when symptoms appear. Training will also be given in risks that may arise due to changes in the workplace or job, change of work equipment, application of	▪IMM ▪Contractor ▪Supervision Consultant	▪OHS Management Plan ▪Emergency Preparedness and Response Plan

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			new technology. Information and training activities will be carried out not only for the employees, but also about the measures to be taken for public health and safety. ▪All employees will receive written contracts with job description, wages, working hours, rights and duties, Code of Conduct (CoC) etc. ▪Workers will be required to comply with all national OHS regulations and necessary inspections will be made. ▪The contractor will prepare own Labour Management Plan based on the LMP of CDRC prior to commencement of any civil works in the sub-project area. ▪All activities will be implemented in line with both the Law on Occupational Health and Safety and its relevant regulations, and the WBG EHS Guidelines. ▪Emergency teams will be formed, and drills and training programs will be carried out in line with emergency scenarios. ▪Employees will have a good command of EPRP, and the grievance will be reported to the authorized teams and resolved, if they require urgent action. ▪Appropriate signposting of the sites will be provided and then workers will be informed of key rules and regulations to follow. ▪First aid kit will be kept available at the construction site, taking into account that first aid response may be required before the casualty is referred to the nearest healthcare provider. ▪First aiders will be provided according to the national regulation. ▪Both trainings, incidents (fatalities, lost time incidents, any significant events including spills, fire, outbreak of pandemic or communicable diseases, social unrest, etc.) and near misses will be recorded. ▪The IMM will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24 hours and submit an incident report, including Root Cause Analysis (RCA), precautions and compensation measures taken within 15 business days. ILBANK will forward the incident report to the WB immediately upon receipt from the IMM. ▪The areas to be excavated will not be accessible except by authorized personnel. Loading and unloading activities will be carried out together with the persons who will supervise the personnel who will carry out the activity. ▪Unauthorized access to the construction site will be restricted. The construction areas will be surrounded, and necessary security measures will be taken, no one will be allowed to enter except for the staff. If a trench needed to be left open for night, the sufficient illumination of the area shall be ensured by the Contractor and necessary signs shall be placed, and the area shall be enclosed with physical barriers without any gaps between. ▪Installation of concrete moulds, concreting, installation of water tank etc. may require working at height etc. Therefore, workplace relevant procedures such as Working at Height Procedure, etc. will be prepared in accordance with applicable national requirements and internationally accepted standards. ▪Only physician approved employees can work at height holding the height work permit will work at height, and safeguarding measures (guardrails, fall arrest) will be in place.		

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			▪The WBG General Environment, Health and Safety Guidelines will apply. ▪All equipment used during the construction phase will be kept in good working condition. Equipment that meets international standards in terms of performance and safety will be used.		
1.2	Inadequate workers health and safety conditions related to pandemic/communicable diseases	Workers at the Sub-Project Area	▪Guidance, directives and recommendations of Ministry of Family and Social Services, Ministry of Labour and Social Security, WHO and the WB shall be followed, and all relevant necessary measures shall be taken, both for occupational health and safety of employees and for workplaces, in case of an outbreak of any other pandemic/communicable disease including COVID-19. ▪The contractor will ensure a safe working environment for the workers in line with international best practice and Turkish Legislation including the health and safety measures related to COVID-19 provided by the Ministry of Health and Ministry of Family, Labour, and Social Services. ▪Before the construction works start, a Risk Assessment study will be implemented for all works to be carried out. EPRP will be prepared and put into practice. Both the Risk assessment and EPRP will take into consideration the COVID-19 risks and other communicable disease risks, as relevant. ▪Sub-project and site-specific OHS Management Plan based on construction site OHS risk assessment and that will also cover measures to address COVID-19 and/or any other pandemic/communicable disease risk, which will be in line with the WBG EHS Guidelines (both general and sector specific) will be developed before the commencement of works and implemented on site. ▪OHS trainings and toolbox talks will be provided to the employees including the code of conduct indicating the possible risks regarding the work site and works to be carried out. These will include regular training to workers on symptoms of COVID-19 and other infectious diseases, how to be protected and what to do when symptoms appear.	▪IMM ▪Contractor ▪Supervision Consultant	▪OHS Management Plan ▪Emergency Preparedness and Response Plan
1.3	Child labour, forced labour and unregistered employment	Local Parties, Workers, and Settlements within the AoI	▪All workers should sign voluntary contracts to ensure their employment is not coerced. Regular inspections and audits should be carried out to monitor compliance. Ensure strict age verification checks to prevent child labour. Conduct awareness programs for workers and local communities about relevant laws. The work permits of the employees will be controlled within the scope of the sub-project, prohibiting child labour, forced labour, and child labour under the age of 18. ▪A Contractor's Labour Management Plan, based on the CDRC Labour Management Procedures (LMPrs), will be prepared by IMM. This plan will manage the contractor's work process and ensure that written contracts are issued to all workers. ▪All employees will receive written contracts with job description, wages, working hours, rights and duties, Code of Conduct (CoC) etc.	▪IMM ▪Contractor ▪Supervision Consultant	▪LMP (based on the CDRC's LMPrs) ▪SEP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
1.4	Improper working conditions, (GBV/SEA/SH)	Workers at the sub-project area	▪Workers will be provided access to the Grievance Mechanism and will be informed about this Mechanism. ▪In the Worker Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. In addition, translation support will be provided in case non-Turkish speaking Refugee/Migrant workers have grievances about the sub-project or its impacts. ▪Information on GBV/SEA/SH service providers should be shared during public consultations. The sub-project GM should be designed to receive GBV/SEA/SH grievances anonymously and ensure they are addressed in a confidential and sensitive manner. Relevant sub-project staff should be trained in order to refer GBV survivors to existing identified service providers and ensure that they are provided services promptly. The Code of Conduct for workers will include the prohibition of GBV/SEA/SH. ▪All workers will be given training on avoidance of discrimination and codes of conduct. The trainings given to the employees will be explanatory about the concepts of SEA/SH and GBV. At the same time, through the trainings, it will be ensured that workers learn the Grievance Mechanism of the sub-project (explained in detail in the sub-project's SEP document) and the steps to be followed in exercising their legal rights. Access to the Grievance Mechanism will be easy and effective. The Grievance Mechanism officer designated for the sub-project will be announced to all employees during the trainings to be given before starting work. There will be brochures and posters containing the Grievance Mechanism and the contact information of the authorized person in places such as the cafeteria, canteen and service areas used by the employees. ▪Minimum legal labour standards will be met (child/forced labour, anti-discrimination, working hours, minimum wages) in accordance with International Labour Organization (ILO) regulations. ▪Compliance with the Labour Management Procedures (LMPrs) of the Project and the contractor's Labour Management Plan, which is subject to approval, will be ensured. ▪Additionally, the Operation Policies of the World Bank and the national legislation will be adhered to in terms of working conditions. ▪Workers will be provided hygienic and adequate facilities. ▪Workers will be allowed to have access to primary healthcare on site, enabling the provision of prescriptions. ▪Discrimination based on language, race, gender, political thought, philosophical belief, and religion will be avoided in business relations. ▪A LMP based on the CDRC's LMPrs will be prepared by the IMM to manage the contractor's work process. ▪Workers will be issued a written contract stipulating working hours, wages, rights, and duties etc., and the Code of Conduct.	▪IMM ▪Contractor ▪Supervision Consultant	▪LMP (based on the CDRC's LMPrs) ▪SEP ▪GM

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
2	**ESS3 Resource Efficiency and Pollution Prevention and Management**				
2.1	Failure to set sustainable and resource efficiency goals[20]	Local Parties and Settlements within the AoI	▪Throughout the life of the Sub- Project, workers will be recruited from the region as much as possible. ▪Throughout the life of the sub-project, priority will be given to working with local suppliers and procuring services from the local employees in the service industry, as much as possible (fuel supply, vehicle maintenance/food, beverage, and spare parts supply, etc.). ▪Resource efficiency and management actions will be taken; use of renewable energy and energy efficiency measures, reducing the carbon footprint, responsible supply chain management and green procurement.	▪IMM ▪Contractor ▪Supervision Consultant	▪C-ESMP ▪Environmental and Social Monitoring Report (ESMR)
2.2	Air pollution from construction works (Dust emissions, Exhaust gases from equipment and vehicles)	Sensitive receptors within the Sub-project's AoI	▪Dust from outdoor sources will be minimized by employing control measures such as covering the piles and increasing the moisture content. ▪Dust suppression techniques such as the application of water or non-toxic chemicals will be used to minimize dust from vehicle movements. ▪Close or cover trucks for the transport of materials. Spraying water on the ground where dust is generated, disposing of excess material, and cleaning the location upon the finalization of works. Protective covers or curtains for zone where the largest amounts of dust are generated. ▪Truck loading and unloading operations will be carried out with due care, and materials will be prevented from scattering around. ▪Modern equipment and vehicles that can meet the applicable emission standards will be selected for construction works. ▪All vehicles will have exhaust emission permits, and all vehicles will be regularly maintained. ▪Exhaust systems and emission levels of machinery and vehicles will be checked by the contractor. ▪Sub-project Grievance Mechanism will be implemented. ▪In case of any complaints, air quality measurement will be carried out at the nearest sensitive receptors by an authorized environmental laboratory, and the results will be recorded. ▪Speed limits will be set for construction equipment, and actions will be taken to ensure that such limits are complied with. ▪During transportation, excavated materials will be covered with nylon canvas or materials with grain size larger than 10 mm. ▪Any damage caused by inadequate dust suppression measures (i.e. pollution of the surrounding area, transport to a residential area by wind, dust deposits by the wind, etc.) will be compensated by the contractor.	▪IMM ▪Contractor ▪Supervision Consultant	▪Construction Site Traffic and Transport Management Plan ▪GM

[20] As mentioned in the United Nations Development Cooperation Strategy Türkiye 2016-2020 Government of The Republic of Türkiye and The United Nations System in Türkiye, Sustainable, Inclusive Growth and Development Goals.

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			▪Compliance with the air emission limit values stipulated in national legislation and WBG General EHS Guidelines will be ensured.		
2.3	Noise from construction works (Increase in noise and vibration levels)	Sensitive receptors within the Sub-project's AoI	▪Residents living near the sub-project area will be informed during the construction phase. ▪Construction works will be planned in consultation with local communities, and operations with the highest noise generation potential will be scheduled during the time of the day that will cause minimum disturbance. ▪Noise control devices, such as temporary noise barriers and deflectors, will be used for operations causing impact as well as exhaust silencers for combustion engines. ▪Use of roads close to the settlements in transportation activities for the project will be avoided or minimized. ▪Equipment and vehicles used externally will be regularly maintained. ▪"Low noise" equipment will be used as much as possible during the construction phase. Where construction equipment is provided with impermeable acoustic covers or enclosures, covers will be kept closed while equipment is in operation. ▪When equipment is not working, they will be turned off or reduced to the minimum level. ▪Vibration levels will be monitored in case of complaints, and measures will be taken to reduce vibration if standards are exceeded. ▪Noise measurement will be carried out at the nearest noise sensitive receptors by an authorized environmental laboratory, in case of any complaints. ▪Compliance with the noise limit values stipulated in national legislation and WBG General EHS Guidelines will be ensured. ▪Restricting works during daytime (e.g. 7AM to 5 PM). Establish schedules and/or other forms of specific limitations for works.	▪IMM ▪Contractor ▪Supervision Consultant	▪Construction Site Traffic and Transport Management Plan ▪GM
2.4	Waste management failure, pollution from hazardous waste	Sensitive receptors within the Sub-project's AoI	▪All non-waste and excavated material generated in the course of construction has to be deposited in the landfill and in a manner that is not harmful to the environment. Stone, soil, and other materials that may be reused shall be utilized in the procedure of sub-project realization. Materials that cannot be used and hazardous waste should be removed in compliance with entity level regulations.	▪IMM ▪Contractor ▪Supervision Consultant	▪Waste Management Plan
2.5	Waste management failure, pollution from domestic waste	Sensitive receptors within the Sub-project's AoI	▪Any domestic waste generated will be sorted at source (plastic, glass, paper, etc.), and reusable waste will be recycled. ▪Unrecyclable waste will be collected in closed sanitary trash bins and will be disposed of by the solid waste collection system of Izmir/Konak Municipalities.	▪IMM ▪Contractor ▪Supervision Consultant	▪Waste Management Plan
2.6	Waste management failure, pollution from waste oils	Sensitive receptors within the Sub-project's AoI	▪If different categories of oils are generated from the works at the construction site, these oils will be stored separately. ▪Containers where waste oils are stored will be kept closed and protected from rainwater. ▪Waste oils will only be transported by licensed transportation companies and will only be delivered to licensed recycling or disposal facilities.	▪IMM ▪Contractor ▪Supervision Consultant	▪Waste Management Plan ▪Spill Response Plan

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
2.7	Waste management failure, pollution from waste batteries and accumulators	Sensitive receptors within the Sub-project's AoI	▪Waste batteries will be collected separately from other wastes, delivered to authorized organizations and recycled. ▪Waste batteries and accumulators will be delivered to waste battery and accumulator disposal facilities within the Municipal borders through authorized transportation companies.	▪IMM ▪Contractor ▪Supervision Consultant	▪Waste Management Plan
2.8	Waste management failure, pollution from demolition waste, loss of topsoil	Sensitive receptors within the Sub-project's AoI	▪Consideration will be given to recycling of excavation soil and construction wastes and especially to their reuse as infrastructure material. ▪For a robust recycling and disposal system, waste will be sorted at source. ▪Removal of the excavated material, which will not be used for backfilling, from the site will be performed at regular intervals without waiting. These materials will be transferred to permitted excavation waste storage area by licensed transportation companies.	▪IMM ▪Contractor ▪Supervision Consultant	▪Waste Management Plan ▪Construction Site Traffic Management Plan
2.9	Wastes of construction works (Transportation management of waste (both hazardous and non-hazardous) to the appropriate landfills/disposal sites)	Sensitive receptors within the Sub-project's AoI	▪Waste management plan will be prepared, and the employees will be trained on the plan. ▪During the construction period, any waste will be collected separately at source and stored in the temporary waste storage area. ▪All types of waste shall be transferred to a licensed disposal facility via licensed waste transportation companies following the relevant legislation. ▪Wastes generated will only be temporarily stored on site in the temporary storage area that is maintained/equipped with appropriate precautions according to the type of wastes, when needed, and wastes will be transported to licensed disposal facilities with licensed transport vehicles appropriate to the type of waste. Information related to the operations in this context will be recorded and records will be kept. ▪Impermeability will be provided on the floors of the temporary storage area and a suitable drainage system which is closed and does not reach surface water will be installed. Spill kits will be available at the temporary storage area and necessary precautions will be taken against possible fires such as provision of appropriate firefighting equipment. ▪Topsoil will be separated from general trash and organic, liquid, and chemical wastes on site, and stored in appropriate containers. ▪Before starting excavation works elsewhere where there is topsoil, concerned topsoil will be stripped to a sufficient depth (minimum 20 cm) prior to the start of the construction activities. To avoid soil compaction, stripping operation will not be done when soil is wet. Average height of topsoil stacks will be 1.5 m. Side slope of these stacks will not exceed 3:1 (h:v). Stripped topsoil should be temporarily stored in the sub-project area to be used for landscaping. ▪Construction waste will be regularly collected by licensed collectors at the permitted excavation waste storage site of the Municipality. ▪Waste disposal records will be kept regularly. To keep these records, a waste registry information form will be prepared, which will contain information on the waste code, amount, and transfer and disposal method as presented in the Annex 4 of the Regulation on Waste Management. ▪Where appropriate, waste can be reused or recycled.	▪IMM ▪Contractor ▪Supervision Consultant	▪Waste Management Plan ▪Construction Site Traffic Management Plan

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			▪Temporary storage of medical waste will be performed in accordance with Article 14 of the Regulation on Control of Medical Waste. In addition, medical waste will be transported to processing facilities in accordance with Article 15 of the concerned regulation.		
2.10	Soil contamination from construction works (Spill outs of fuel, lubricant, antifreeze etc. may result in contamination)	Sensitive receptors within the Sub-project's AoI	▪Establish safe delivery/storage/handling procedures in accordance with safety data sheets (SDSs). Immediately contain and clean-up any spilled material. ▪Provisions of the Regulation on the Control of Soil Pollution and Sites Contaminated by Point Sources shall be complied with within the scope of the sub-project. ▪Periodic examination of the condition of vehicles and other machinery and equipment used in the course of the performance of works. Compliant warehousing of fuel and lubricant, and in case of a spill out, isolation and cleaning of the location. ▪Wastes and wastewater to be generated during the construction phase of the sub-project will be stored and disposed of in a controlled manner in accordance with the relevant regulations and in line with the management practices described in this report. ▪Measures such as regular equipment maintenance, providing workers with appropriate training, and ensuring that all equipment and materials are properly stored and handled will be implemented. ▪A spill response plan will be developed before construction begins to ensure that a timely and effective response can be carried out in the event of a spill or accident. The plan should include procedures for containing and cleaning up spills, as well as identifying the responsible parties and the reporting requirements. Employees will be trained on the plan prior to the construction phase. ▪Removing contaminated soil, using remediation techniques to break down pollutants, and replacing affected soil with clean soil. ▪After a spill or accident, monitoring of the soil quality will be conducted to ensure that remediation efforts are effective. Additionally, all spills and accidents will be reported to the regulatory agencies.	▪IMM ▪Contractor ▪Supervision Consultant	▪Spill Response Plan ▪Waste Management Plan
2.11	Topsoil loss, Deposit of excavated soil, erosion, landslides, or sedimentation may occur	Sensitive receptors within the Sub-project's AoI	▪The provisions of the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes shall be complied during the land preparation and construction phase of the sub-project. ▪The provisions of the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes shall be complied with during the land preparation and construction phase of the sub-project. ▪Prior to excavation, topsoil will be stripped separately and temporarily stored in designated areas under appropriate conditions, with measures implemented to prevent erosion and contamination. The stored topsoil will be reused, where feasible, for site reinstatement and rehabilitation works.	▪IMM ▪Contractor ▪Supervision Consultant	▪Waste Management Plan
2.12	Pollution from hazardous materials	Sensitive receptors within the Sub-project's AoI	▪Establish safe delivery/storage/handling procedures in accordance with safety data sheets (SDSs). Immediately contain and clean-up any spilled material. ▪If hazardous wastes are stored in the sub-project area, those wastes will be stored in containers that are strong, leak-proof, safe and in accordance with internationally recognized standards. The containers will bear "hazardous waste" label, with the amount, content, properties, storage conditions and storage date of the stored material indicated on the containers.	▪IMM ▪Contractor ▪Supervision Consultant	▪Spill Response Plan ▪C-ESMP ▪ESMR

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			▪Containers containing hazardous materials will be placed in sealed vessels to prevent spills and leaks. ▪Hazardous wastes will be transported by licensed waste transportation companies and will be disposed of at licensed facilities. ▪Toxic paints, solvents or lead-based paints will not be used. ▪Hazardous waste management will be fulfilled in consultation with Izmir/Konak/ Municipality in accordance with the Regulation on Control of Hazardous Waste Control. ▪Hazardous chemicals and wastes likely to be generated at the construction site will be stored not to pose a threat to community health. ▪Construction activities may pose the potential for accidental release/leakages of petroleum-based products, such as lubricants, hydraulic fluids, or fuels during their, transfer, or use in equipment. All chemical storage containers, including diesel fuel, and hazardous liquid waste drums/containers will be placed in secondary containment so as to minimize the risk of soil, surface water and groundwater contamination during construction. ▪The disposal of hazardous chemicals and wastes that may be generated at the construction site will be carried out at licensed facilities under the supervision of authorized companies and experts.		
2.13	Wastewater management failure, pollution from wastewater (Water Quality and Domestic wastewater generation)	Sensitive receptors within the Sub-project's AoI	▪Discharge of wastewater, residues, or other waste into groundwater or into surface water will be avoided. ▪Wastewater generated during the construction works will be integrated into the existing sewerage system, and necessary agreements will be executed with the municipality so that the wastewater sewer system ending with Wastewater Treatment Plants of IMM. ▪The water amount consumed for dust suppression will be followed in m^3. ▪Surface runoff due to dust suppression activities will be prevented.	▪IMM ▪Contractor ▪Supervision Consultant	▪C-ESMP ▪ESMR
3	**ESS4 Community Health and Safety**				
3.1	Community health and safety risks	Sub-project's Local communities	▪Within the scope of the Regulation on Coordination Centres of Metropolitan Municipalities, Infrastructure Coordination Centre (AYKOME) and Transportation Coordination Centre (UKOME) will continue to use the Infrastructure Information System (AYBIS) to systematically carry out, monitor and control the documentation of all excavation permits (electricity, gas, telephone, etc.) in the sub-project area. Sub-project work areas will not be opened to the public until all checks have been coordinated, approved and completed by the concerned interested parties including especially electricity, gas distribution companies in the sub-project area. A Community Health and Safety Management Plan of the sub-project will be prepared, developed, and implemented to include this coordination. ▪The construction area should be fenced to prevent trespassing. Necessary signage and lighting equipment shall be established. Traffic safety shall be established through appropriate management measures. Community should be informed about transfer of large machinery and equipment. If necessary, emergency drills should be implemented with the participation of the emergency authorities in the area.	▪IMM ▪Contractor ▪Supervision Consultant	▪Community Health and Safety Management Plan ▪Construction Site Traffic and Transport Management Plan ▪SEP ▪EPRP ▪Grievance Mechanism

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			▪Design and the construction work of the sub-project should be in line with the WBG guidelines including the life and fire safety provisions. ▪Special crossings will be created by taking additional measures for the elderly, pregnant women, people with small children and the disabled. ▪The sub-project area will be fenced to avoid physical hazards to the communities associated with the sub-project and construction activities will be announced to the affected local people, businesses, and governmental bodies at least two (2) days in advance. ▪Contractors will take necessary health and safety measures, such as using appropriate warning signs and signboards, arranging time schedule of noisy works (mostly after 9:00 AM before 6 PM), making the regular maintenance of the machinery, replacement or repair of part which cause noise and performing watering in dry seasons, under the management of the IMM during site preparation and construction activities so that the public is informed of the construction plan and locations in a timely manner and the construction sites are determined. ▪Necessarry measures will be taken to ensure that warning signs are visible at night and in bad weather conditions. ▪The adequate number of appropriate firefighting equipment will be always kept available at construction sites. ▪An EPRP will be prepared and implemented in order to be able to take and manage measures to protect public health and safety. Sub-project employees, local people and response teams will be informed about this plan. ▪Local people will be informed about possible dangers and precautions to be taken with brochures that will be placed on signs and notice boards to be hung in various areas in the neighbourhood. ▪During the construction period, warning signs and announcements placed for precautionary purposes for community health and safety risks will be translated into the desired language (mostly Arabic and English) in line with the requests of Refugee / Immigrant stakeholders who do not speak Turkish. ▪Detailed information on the use of the Grievance Mechanism and contact information on the Grievance Mechanism officer will be made available to the public. (Via the project website, information brochures left at the Mukhtars offices, posters, and hand brochures in places such as schools, health centres, hospitals, mosques, which are the common areas used by the community intensively). ▪In the sub-project's Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. In addition, translation support will be provided in case non-Turkish speaking Refugee/Migrant workers have grievances about the sub-project or its impacts. ▪Community health and safety management plan will be prepared by the contractor during the construction period and by the IMM during the operation period. ▪During the construction phase, the simultaneous work on the sub-project and associated facility will double the number of workers, increasing cumulative risks like dust, noise, electrical hazards, and traffic accidents. To mitigate these, workforce management and safety protocols will be enforced.		

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
3.2	Interruptions in Transport and Transport Safety (Direct and indirect threats posed by construction activities against traffic and pedestrians)	Sub-project's Local communities	▪Traffic and Transport Management Plan to be prepared by the Contractor will be implemented and the workers will be trained about the Plan. ▪Actions will be taken to ensure that any vehicles operating during the construction period obey the set speed limit (30 km/hr). ▪Traffic and warning signs will be placed around and near the sub-project area. Positioning clear warning and information signs around the construction zone. Imposing time constraints (e.g. 7AM to 5PM) for works. Considering disabled, women, children and people with special needs while locating and marking alternative roads (roundabouts) ▪The sub-project area will be made visible. ▪Local people will be informed about potential hazards and risks through brochures and posters left in common areas frequently used by local people such as headman's offices, hospital, health centre, mosque, coffee house and marketplace. ▪The activities affecting the local traffic will be planned considering the rush hours of the traffic as much as possible. ▪All drivers involved in the sub-project will be informed about road safety, speed limits, and traffic rules to be followed during the construction sub-project, and requirements to be observed. ▪The weight of all vehicles will not exceed the legal limits according to Highway Traffic Regulation. ▪In case of hazardous chemical or waste storage on site, the transfer of these wastes will be performed out by licensed carriers not to pose a threat to community health. ▪The routes developed in agreement with the competent authorities will be used for special cargos. The designated routes will be programmed to prevent traffic congestion on the roads and will be published in advance to prevent possible disturbance. ▪The arrangements in traffic will be discussed with the Municipality and planned jointly. ▪To prevent unauthorized access to the construction site, the construction site will be surrounded by fence/curtain/protection tape, and uncontrolled entrances will be prevented.	▪IMM ▪Contractor ▪Supervision Consultant	▪Construction Site Traffic and Transport Management Plan ▪Community Health and Safety Management Plan ▪EPRP ▪ESMP ▪SEP ▪Grievance Mechanism
3.3	Damage to road cover	Local communities	▪Damages that may occur on the road surfaces due to traffic caused by heavy construction machinery during construction works on existing roads will be repaired by the contractor. In case of any damage to infrastructure elements on private lands due to construction activities, mitigation measures will be taken by the contractor in line with ESS4 and ESS5. ▪Public roads and streets will be backfilled and recovered.	▪IMM ▪Contractor ▪Supervision Consultant	▪Community Health and Safety Management Plan ▪ Construction Site Traffic and Transport Management Plan ▪EPRP ▪SEP ▪GM

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
4	**ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**				
4.1	Land Acquisition	Local communities	▪Continuous access to businesses within the construction area will be maintained. Temporary access disruptions will be managed by providing alternative routes, and businesses will be informed in advance about any changes. ▪ All land acquisition processes will be conducted in compliance with national legislation and ESS5 requirements.. ▪ No private land will be acquired under the sub-project..In the event that private land acquisition becomes necessary, affected persons will be identified and consulted in advance. ▪No economic displacement is anticipated under the sub-project. Where economic displacement occurs, livelihood restoration measures will be implemented in line with ESS5. In addition, any damage to land or other assets attributable to sub-project activities will be compensated in accordance with ESS5. ▪ Grievance Mechanism (GM) will be accessible to all affected stakeholders throughout the sub project lifecycle and affected people will be able to convey their complaints concerning land acquisition (if any).	▪IMM ▪Contractor ▪Supervision Consultant -	ESMP SEP GM
	Access to common resources or services may be interrupted due to construction works	Local communities	▪Time schedule for all construction works should be communicated with local communities prior to construction. Alternative and secure means to access resources and services should be introduced. ▪To minimize the impact of the traffic activities that are expected to intensify during the construction phase, the working hours will be adjusted according to the peak hours of transportation.	▪IMM ▪Contractor Supervision Consultant	▪Construction Site Traffic and Transport Management Plan Grievance Mechanism
5	**ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**				
5.1	Biodiversity conservation	Sensitive receptors within the Sub-project area	▪Species encountered during the construction phase should not be killed or collected, and eggs and nests will not be deliberately damaged. Workers working in construction will be trained and notified. ▪If species with low mobility are encountered during construction work in the project area, even if they are not present in the project area during the baseline studies, they will be released to a suitable and safe area.	▪IMM ▪Contractor ▪Supervision Consultant	▪C-ESMP ▪ESMR
5.2	Damage to trees and vegetation may onset in the course of construction	Sensitive receptors within the Sub-project area	▪Minimizing the areas requiring the removal of vegetation, and upon finalization of works, replace/restore removed vegetation. Special measures if needed to avoid damage to protected trees or species. ▪Measures to suppress the dust that will occur will be implemented as mentioned in the air quality section.	▪IMM ▪Contractor ▪Supervision Consultant	▪C-ESMP ▪ESMR
5.3	Temporary deterioration of water quality and sedimentation risk in Meles Stream during construction	Meles Stream water column and sediments;	▪▪ Sediment control measures (such as silt fences, sediment traps, hay bales, and sediment curtains where technically feasible) will be installed prior to earthworks and maintained throughout construction. ▪ In-stream and near-stream works will be limited to the minimum duration and footprint necessary.	▪IMM ▪ Contractor	▪ C-ESMP ▪ESMR ▪Spill Response

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
	(increase in turbidity and suspended solids)	limited aquatic biota; downstream receptors	▪ Excavated materials will be stored at a safe distance from the stream bank (20–30 m where space permits), covered or bermed to prevent runoff ▪ Disturbance of fine sediments will be minimized through staged excavation and prompt stabilization of exposed surfaces to reduce sediment transport to the stream. ▪ Sediment control structures will be visually inspected regularly, particularly after rainfall events.	▪ Supervision Consultant	Plan ▪Waste Management Plan
6	**ESS8 Cultural Heritage**				
6.1	Loss of cultural heritage	Sensitive receptors within the Sub-project area	▪Any artifacts found during the construction works will be indicated and recorded as “chance finds”. A “Chance Find Procedure” has been prepared for the steps to be followed and will be implemented in case of the chance find (see Appendix-C). ▪Workers/employees will be trained in cultural heritage equirements, including the Chance Finds Procedure. ▪In case of a chance find, all activities will be stopped, the site will be secured, and the Cultural and Natural Assets Conservation Board or Museum Directorate will be informed about the chance finds and site will be secured by the Contractor. The approval of the relevant Conservation Board, who is responsible for the area where the construction site is located, will be required to continue any activity on site. No demolition/construction work will be carried out when awaiting the said approval. ▪Any correspondence on this subject will be updated in accordance with all decisions taken, and all documents will be submitted as annexed to ESMP. ▪The maintenance and repair work will be strictly limited to the asphalt surface of the bridge and surrounding roads, with no plans for additional excavation or significant alterations to the existing infrastructure. During the cumulative impact assessment phase, the same chance-find procedure will be applied in conjunction with other projects.	▪IMM ▪Contractor ▪Supervision Consultant	▪Chance Find Procedure
7	**ESS10 Stakeholder Engagement and Information Disclosure**				
7.1	Potential community complaints	Sub-project’s Stakeholders	▪To avoid any impact on the safety and daily life of communities, safety and information signs will be placed on site before the work. The public, nearby institutions and organizations, as well as hospitals and schools, will be informed at least one (1) week prior to the commencement of repair or maintenance works that may cause temporary disturbance.”The construction activities to be performed around or in front of hospitals and/or healthcare providers will be planned not to hinder the public access to these services and the opinions of the relevant stakeholders will be sought in order to determine the common working strategy in this regard.It will be ensured that the grievance mechanism is in place and accessible to all stakeholders.	▪IMM ▪Contractor ▪Supervision Consultant	▪SEP ▪Grievance Mechanism
7.2	Stakeholders' negative opinions about the sub-project due to insufficient information	Sub-project’s Stakeholders	▪Before the start of construction works, the local people and all relevant stakeholders will be informed of the works to be performed and the measures to be taken.	▪IMM ▪Contractor ▪Supervision Consultant	▪SEP ▪C-ESMP ▪ESMR

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			▪ The information on the start and finish dates of construction and working periods and the permits obtained from the provincial/district municipality will be shown by the operations owner in a signboard that is easily visible to all personnel at the construction site.		▪ Grievance Mechanism
7.4	Damages to adjacent lands and structures	Sub-project's Stakeholders	▪ Any unintended damages caused to adjacent land and structures during construction will be compensated and repaired by the Contractor in line with ESS5. ▪ Materials will be stored in closed and protected areas designated in sub management plans. ▪ If it is required to provide an additional space for closed and protected areas, the contractor will fulfil temporary rental formalities or obtain relevant permits.	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ SEP ▪ Grievance Mechanism
7.5	Communication problems as a result of lack of open communication with stakeholders	Sub-project's Stakeholders	▪ Consultation on risks and adverse impacts of the sub-project and create opportunities to receive affected communities view on sub-project. ▪ Establishment of grievance mechanism to collect and provide timely resolution of affected communities concerns and grievances regarding of the sub-project's environmental and social performance. ▪ Transparent public disclosure to inform each phase of the sub-project through website, notice boards, telecommunication tools and public meetings. ▪ Establishing well designed and structured public questionnaire to receive feedback from affected communities. ▪ Regular consultations will be carried out with the authorities and communities regarding the sub-project management. ▪ Comprehensive information on the stakeholder engagement is provided in SEP of the sub-project and the SEP will be updated and implemented throughout the sub-project.	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ SEP ▪ Grievance Mechanism
7.6	Weak Management of Grievance Mechanism	Sub-project's Stakeholders	▪ An efficient Grievance Mechanism will be initiated to allow potentially affected individuals to voice their concerns on the sub-project. ▪ The Grievance Mechanism will be strengthened through regular monitoring of its implementation, timely handling of grievances, clear designation of responsible persons, and periodic review of its accessibility and effectiveness. ▪ In the Grievance Mechanism for the subproject, Public Grievance Mechanism and Worker Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. In addition, translation support will be provided in case non-Turkish speaking Refugees/Migrants have grievances about the subproject or its impacts.	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ SEP ▪ Grievance Mechanism
7.7	Missing documentation	Sub-project's Stakeholders	▪ All activities, information meetings, opinions/suggestions, grievance mechanism , etc. provided during the construction period will be documented continuously. ▪ The contractor will develop C-ESMP, prepare monthly and quarterly ESMRs and submit them to the IMM through the Supervision Consultant. The Supervision Consultant will review the quarterly ESMRs and C-ESMP of the contractor/s and will include its own assessments and observations on ESHS aspects and prepare quarterly ESMRs and submit them to the IMM. The IMM's PIU will examine the monthly and quarterly ESMR of the contractor/s and the Supervision Consultants and will be responsible for the timely delivery of the Monthly (if requested by ILBANK) and Quarterly ESMRs to ILBANK. The ILBANK's PMU will review the quarterly reports delivered by	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ C-ESMP ▪ ESMR ▪ SEP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			the IMM during the construction phase. ILBANK will inform the WB by providing regular semi-annual monitoring reports on the ESHS performance of the sub-project. The WB will review regular semi-annual monitoring reports on the ESHS performance of the sub-project and instruct ILBANK if any non-conformity or non-compliance identified. ▪IMM's PIU will examine the C-ESMP which are based on this ESMP to be developed by Construction contractor of the sub-project. Supervision Consultant will review C-ESMP of the contractor. List of E&S management plans to be developed by the contractor for the construction phase are presented below. o Occupational Health and Safety (OHS) Management Plan, o Emergency Preparedness and Response Plan (EPRP), o Construction Site Traffic Management Plan, o Labour Management Plan (LMP) (based on the CDRC's Labour Management Procedures (LMPrs)), o Community Health and Safety Management Plan, o Waste Management Plan, o Spill Response Plan, o Chance Finds Procedure.		

Table 4-3. ESMP Operation Phase Matrix Table for the Sub-project

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
1	**ESS2 Labour and Working Conditions**				
1.1	Inadequate workers health and safety conditions	Workers at the sub-project area	▪The workers shall be informed about job descriptions, responsibilities, and risks about OHS. The workers will be provided working conditions in accordance with the Labour Law (such as wages, working hours, payment for overtime hours, period of rest, social security benefits). The workers will be provided with the necessary personal protective equipment and information on works and occupational safety through regular trainings. Before the operation, a Risk Assessment Report shall be prepared for all works to be carried out and necessary measures shall be taken to avoid related risks EPRPs shall be prepared for a possible accident and emergency, and emergency teams shall be established, and drills and training shall be carried out in line with the emergency scenarios. The workers shall be made aware of accessible GM. ▪Before starting work, employees will be knowledgeable about job descriptions, responsibilities, relationships with the local people, and risks that may threaten occupational health and safety. ▪Workers will be provided with appropriate induction, health and safety training and information. ▪All equipment used during the operation phase will be kept in good working condition. ▪EPRP will be prepared for a potential accident and emergency. Emergency teams will be formed, and drills and training programs will be carried out in line with emergency scenarios. ▪Employees will have a good command of EPRP, and the grievance will be reported to the authorized teams and resolved, if they require urgent action. ▪In case of any potential accident involving injury during the operation phase, the equipment for the first aid will be kept available at the rehabilitation centre, taking into account that first aid response may be required before the casualty is referred to the nearest healthcare provider. ▪The IMM formally agrees that all work will be carried out in a safe and disciplined manner and is designed to minimize risks on neighbouring residents and environment. ▪All activities will be implemented in line with both the Law on Occupational Health and Safety and its relevant regulations, and the WBG's EHS Guidelines. ▪The IMM will ensure a safe working environment for the workers and supply appropriate personal protective equipment (PPE). ▪Guidance, directives, and recommendations of Ministry of Health, Ministry of Labour and Social Services, WHO and the WB shall be followed, and all relevant necessary measures shall be taken, both for occupational health and safety of employees and for workplaces, in case of an outbreak of any other pandemic/communicable disease including COVID-19. ▪All regulations regarding OHS will be effective for the personnel. ▪OHS trainings and toolbox talks will be provided to the employees including the code of conduct. These will include regular trainings to workers on COVID-19 symptoms, how to be protected and what to do when symptoms appear. ▪Both trainings and incidents (fatalities, lost time incidents, near misses, outbreak of pandemic or communicable diseases, social unrest, etc.) will be recorded.	▪IMM	▪OHS Management Plan ▪Emergency Preparedness and Response Plan ▪Grievance Mechanism ▪Labor Management Plan

			▪The IMM will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24hours and submit an incident report, including RCA, precautions and compensation measures taken within 15 business days. ILBANK will forward the incident report to the WB immediately upon receipt from the IMM.		
1.2	Improper working conditions Child Labour, forced labour and unregistered employment	Workers at the sub-project area	▪Workers will be familiar with the Workers' Grievance Mechanism officer and will be enabled to have access to and be aware of the Grievance Mechanism. ▪Minimum legal labour standards will be met (child/forced labour, anti-discrimination, working hours, minimum wages) as per ILO regulations. ▪At the same time, WB and the national legislation will be complied with in terms of the working conditions. ▪Workers will be issued a written contract stipulating working hours, wages, rights, and duties etc., and the Code of Conduct.	▪IMM	▪LMP (based on the CDRC's LMPrs) ▪SEP ▪Grievance Mechanism ▪Labor Management Plan
2	**ESS3 Resource Efficiency and Pollution Prevention and Management**				
2.1	Waste and chemical risks	Sensitive receptors within the Sub-project's AoI	▪Wastes generated should only be temporarily stored on site in the temporary storage area that is maintained/equipped with appropriate precautions according to the type of wastes, when needed, and wastes should be transported to licensed disposal facilities with licensed transport vehicles appropriate to the type of waste. Information related to the operations in this context should be recorded and records should be kept. ▪Waste will be characterized based on their composition, source, types, generation rates or local legal requirements in case of maintenance of the sub-project. ▪In addition to the adoption of waste prevention strategies, putting recycling plans into practice will considerably reduce the total amount of waste. ▪If waste materials are still generated after appropriate waste prevention, reduction, reuse, and recycling measures are put into action, all necessary measures will be taken to avoid potential effects of waste material treatment and disposal on human health and the environment. ▪Establish safe delivery/storage/handling procedures in accordance with safety data sheets (SDSs). Immediately contain and clean-up any spilled material.	▪IMM	▪Waste Management Plan ▪Spill Response Plan
3	**ESS4 Community Health and Safety**				
3.1	Community health and safety risks	Sub-project's Stakeholders	▪The operations should be engaged without posing risk to the community safety. During the operational phase, alternative routes should be provided to manage traffic flow in coordination with local authorities, with appropriate signage and continuous driver warnings to ensure safety. ▪The public, and nearby institutions and organizations, and hospitals and schools will be informed at least two (2) days before starting repair / maintenance works that may cause disturbance temporarily. ▪The Grievance Mechanism officer will be introduced to the local people and updated information about the Grievance Mechanism will continue to be provided. In case of an update in the documents, the updated information will be announced to the local people through the relevant headman's office.	▪IMM	▪Community Health and Safety Management Plan ▪Traffic and Transport Management Plan ▪SEP ▪EPRP ▪Grievance Mechanism
4	**ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**				

5.1	Biodiversity conservation		▪No significant biodiversity impacts are expected during operation; however, the following good practice measures will be implemented: ▪Regular inspection, cleaning, and maintenance of the bridge drainage and filtration systems, particularly before and after the rainy season. ▪Use of eco-friendly lighting design to minimize light spill into the riparian corridor. ▪Periodic inspection and maintenance of replanted or restored vegetation along the stream banks. ▪Strict adherence to pollution prevention procedures during bridge maintenance and repair works to prevent accidental discharge of fuels, oils, or other contaminants into the stream.	IMM	▪O-ESMP ▪ ERP
5	**ESS10 Stakeholder Engagement and Information Disclosure**				
7.1	Stakeholders' negative opinions about the sub-project due to insufficient information	Sub-project's Stakeholders	▪Before the start of maintenance works, the local people and all relevant stakeholders will be informed of the works to be performed and the measures to be taken. ▪The information on the start and finish dates of maintenance works periods and the permits obtained from the provincial/district municipality will be shown by the operations owner in a signboard that is easily visible to all employees at the site.	▪IMM	▪SEP ▪Grievance Mechanism
7.2	Weak Management of Grievance Mechanism	Sub-project's Stakeholders	▪An efficient Grievance Mechanism will be initiated to allow potentially affected community members and the employees to voice their concerns on the sub-project and have their grievances adequately addressed in a timely manner. ▪In the sub-project level Grievance Mechanism, and Workers' Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. In addition, translation support will be provided in case non-Turkish speaking Refugees/Migrants have grievances about the project or its impacts.	▪IMM	▪SEP ▪Grievance Mechanism
7.3	Community complaints	Sub-project's Stakeholders	▪During the operation phase, communication channels with communities and relevant institutions will be maintained primarily to address issues related to traffic flow, accessibility, noise, and overall service performance of the sub-project. ▪The Grievance Mechanism established for the sub-project will remain operational to receive, record, and resolve community complaints related to the operational impacts of the bridge and associated road infrastructure. ▪Grievances will be submitted in Turkish using standard forms; translation support will be provided if non-Turkish speaking users submit complaints related to the operation of the facility. ▪Information on operational arrangements, contact points, and grievance procedures will be disclosed through municipal communication channels, including websites and notice boards. ▪Periodic feedback from users and affected communities may be collected, where necessary, to support continuous improvement of operational performance.	▪IMM	▪SEP ▪Grievance Mechanism

4.3 Monitoring and Reporting

Key performance indicators (KPIs) of this procedure will be monitored, verified, and evaluated within the scope of the sub-project monitoring phase. The KPIs for both construction and operation phases of the sub-project are presented in Table 4-4.

The monitoring, review and audit program detailed in Table 4-6 will be implemented during construction and operation to monitor the implementation of the environmental and social commitments of the sub-project's ESMP requirements. The IMM will be responsible for ensuring that the contractor comply with applicable national/international regulations and WB's requirements during the construction phase of the sub-project.

Table 4-4. Key Performance Indicators for Both Construction and Operation Phases of the Sub-project

Monitoring Focus	KPI
Documentation	
Following ESMP Sub-Project specific plans will be developed and be in place.	Full compliance with Sub-project's ESMP
Air Quality	
Air Quality incidents	Minimization and continued improvement in the number of the reported air quality related incidents.
Non-Compliance with air quality standards	Zero grievances per year Zero non-compliance with standards
Community grievances	Minimization and continued improvement in the number of air quality related community grievances
Violation on speed limit	Minimization and continued improvement in the number of reported violations on speed limit
Noise	
Noise and Vibration incidents	Minimize and continued improvement in number of reported noise and vibration related incidents
Non-Compliance with Project standards	Zero Non-Compliance Reports (NCRs) per year
Number of noise-related community grievances	Zero grievances per year
Community grievances	Minimization and continued improvement in the number of noise related community grievances
Water / Wastewater	
Spill incident	Minimization and continued improvement in the number of the reported water quality related incidents.
Non-Compliance with Sub-project standards	Zero NCRs per year
Groundwater levels of the community/private wells	No significant adverse impact
Water quality analyses	Meeting set national and international water quality standards for surface and groundwater impacted and/or near the sub-project
Flood incidents	No infrastructure damage and damage to loads/humans
Waste	
Waste Generation	Minimization of total waste generated Decrease in the ratio of hazardous waste generated to total waste (by contamination + by generation)
Waste Disposal	Increase in the ratio of recovered/reused/recycled waste to total waste generated
Soil Quality	
Spill incident	Minimization and continued improvement in the number of the reported soil quality related incidents
Non-Compliance with Sub-project standards	Zero NCRs per year
Soil quality accidents	Zero accident per year
Number of soil-related community grievances	Zero grievances per year
Traffic	
Number of non-compliances against the mitigation controls identified in Traffic and Transport Management Plan	Decreasing number/ continuous improvement in number of reported non-compliances
Number of drivers found to be exceeding speed limits or driving unsafely	Zero exceedance per year

Monitoring Focus	KPI
Number of road traffic accidents involving: Accidental injuries and deaths, Spillages (such as cargo or fuel), Wildlife-vehicle collisions.	Zero accidents per year
Number of traffic-related grievances	Zero grievances per year
Health, Safety and Environment	
% of scheduled HSE Inspection	>90
% of attendance at HSE meetings	>90
% of closing of NCRs	100
Reporting safe observations	100%
Reporting unsafe observations	100%
Reporting near misses	100%
Reporting number of incidents	100%
Reporting number of accidents	100%
Reporting day-loss	100%
% of Toolbox attending	>90
% of Risk Assessment compliance	>90
% of Legal Requirements compliance	100%
Results of scheduled audits	>85
HSE training carried out to training matrix > 90% of all training to matrix	>90
% of attendance at scheduled trainings	>90
Engagement in HSE program by individual managers and supervisors	>90
Engagement in HSE program by contractor's	>90
Labour and Working Conditions	
Number of worker grievances closed out within the target timeframe	100% compliance with labour laws and regulations Zero unresolved health and safety incidents within the target timeframe 100% availability of required PPE 90% or higher worker satisfaction rate
Community Health and Safety	
Number of communicable and non-communicable diseases and injuries.	Negative Trend/No significant increase in communicable and non-communicable disease and injury rates per 1,000 residents per annum.
Number of community health safety & security grievances from local communities as recorded in the grievance management system.	Decreasing number/ continuous improvement in number of grievances
Number of reported community health & safety incidents	Zero incidents per year
Number of reported air quality or noise incidents	Zero incidents per year
Direct and indirect threats posed by construction activities against traffic and pedestrians	Zero number of drivers found to be exceeding speed limits or driving unsafely Zero accidental injuries and deaths, Zero traffic-related grievances
Access to the Construction Site - Security Fence/ Protection Tape	Zero Number of unauthorized accesses to the sub-project area
Trainings	
Training records	Trainings on ESMP and SEP documents. Providing all trainings (including GM, GBV, SEA/SH) to all employees. 100% of scheduled training sessions conducted 80% or higher participant satisfaction rate Zero participants without completion certificates if applicable
Disclosure	
Organizing of stakeholder consultation meeting	Announcements will be published in newspapers 10 days prior to the stakeholder consultation meeting, providing the date, time, and location, and the information will be also posted on the official IMM's website. Additionally, the neighbourhood mukhtars within the sub-project's AoI, media outlets, and professional chambers will be notified about the meeting via phone messages and emails.
Disclosures of up-to-date ESMP and SEP in two languages (English and Turkish) at IMM's website	ESMP and Project specific SEP will be updated and disclosed at IMM's web site in line with the minutes of the stakeholder consultation meeting to be held. Disclosures of construction works at IMM's website and settlements near the sub-project area

Monitoring Focus	KPI
Disclosure of construction works or a significant change in the Project Disclosure of operation works	Disclosures of operation works at IMM's website and IMM's office
Vulnerable groups:	
Incidents, Grievances, Toolbox talks and trainings, Information/ disclosure	All grievances closed-out within the target timeframe Sufficient information provided to the VGs
Grievance mechanism	
Grievance Records, GM disclosure	All grievances closed-out within the target timeframe GM disclosure at Sub-project web site
Cultural Heritage	
Existence of a Chance Find	Zero Grievance Records

Reporting processes that should be put into action during the implementation phase of the sub-project and the requirements of such processes are presented in Table 4-5.

Table 4-5. Reporting Requirements of Relevant Entities

Responsible Party	Reporting Process Requirements
Construction Contractor	▪ The construction contractor should develop C-ESMPs, which are based on this ESMP, and report monthly and quarterly ESMRs and submit them to the IMM through the Supervision Consultant.
IMM's PIU	▪ The PIU will examine the monthly and quarterly ESMRs and C-ESMPs of the contractor/s and the Supervision Consultants and will be responsible for the timely delivery of the Monthly (if requested by ILBANK) and Quarterly ESMRs to ILBANK. ▪ The IMM will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within24 hours and submit an incident report, including RCA, precautions and compensation measures taken within 15 business days.
Supervision Consultant	▪ The Supervision Consultant will review the quarterly ESMRs and C-ESMPs of the contractor/s and will include its own assessments and observations on ESHS aspects and prepare quarterly ESMRs and submit them to the IMM. The Supervision Consultant has the responsibility to prepare non-conformity forms in the event of any non-conformity observed during the site inspections and within the reports.
ILBANK's PMU	▪ The PMU will review the monthly/quarterly reports delivered by the IMM during the construction phase. ILBANK will inform the WB by providing regular semi-annual monitoring reports on the ESHS performance of the sub-project. ▪ ILBANK will forward environmental or social incident report to the WB immediately upon receipt from the IMM.
WB	▪ The WB will review regular semi-annual monitoring reports on the ESHS performance of the sub-project and instruct ILBANK if any non-conformity or non-compliance identified.

For reporting on OHS, E&S incidents, the IMM will report details of any significant incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24 hours and submit an incident report, including RCA, precautions and compensation measures taken within 15 business days. ILBANK will forward the incident report to the WB immediately upon receipt from the IMM.

Table 4-6. Environmental and Social Monitoring Table of the Sub-project

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
1.1	Pre-Construction	Disclosure	▪Organizing of stakeholder consultation meeting ▪Disclosures of up-to-date ESMP and SEP in two languages (English and Turkish) at IMM's website	▪Settlements near the sub-project area ▪IMM's website	▪Minutes of meetings ▪Up-to-date ESMP and SEP at IMM website	Monthly	▪WBG General EHS Guidelines	▪Announcements will be published in newspapers 10 days prior to the stakeholder consultation meeting, providing the date, time, and location, and the information will be also posted on the official IMM's website. Additionally, the neighbourhood mukhtars within the sub-project's AoI, media outlets, and professional chambers will be notified about the meeting via phone messages and emails. ▪ESMP and Project specific SEP will be updated and disclosed at IMM's web site in line with the minutes of the stakeholder consultation meeting to be held.	▪IMM	▪ Included in sub-project Budget
1.2	Construction	Disclosure of construction works or a significant change in the Project	▪Disclosures of up-to-date ESMP and SEP in two languages (English and Turkish) at IMM's website	▪Settlements near the sub-project area ▪IMM's website	▪Up-to-date ESMP and SEP	Monthly	▪WBG General EHS Guidelines	▪Disclosures of construction works at IMM's website and settlements near the sub-project area	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget
1.3	Construction	Labour Conditions	▪Grievance records ▪Percentage of closed grievances	▪Sub-project area	▪Internal and external audits ▪Grievance records	Monthly	▪Labour Law (No. 4857)	▪All grievances closed out within the target timeframe	▪IMM ▪Contractor ▪Supervision Consultant	▪ Included in sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			within the target timeframe		▪ Accident records ▪ Training records ▪ Sample contracts ▪ Human Resource Policy ▪ Number of the local employees ▪ Legal work permit		▪ Law on Trade Unions and Collective Bargaining Agreements ▪ ILO International Regulations	▪ 100% compliance with labour laws and regulations ▪ Zero unresolved health and safety incidents within the target timeframe ▪ 100% availability of required PPE ▪ 90% or higher worker satisfaction rate		
1.4	Construction	Occupational Health and Safety	▪ Safe conditions on the construction site ▪ Risk analysis and procedures ▪ Disease ▪ Incidents ▪ Grievances ▪ Toolbox talks and trainings ▪ HSE Inspection ▪ Legal Requirements ▪ EPRP ▪ Drill reports ▪ OHS practices in the field (Use of PPE, etc.)	▪ Sub-project area ▪ Settlements near the sub-project area	▪ On-site inspections ▪ Interviews with employees ▪ Complaint records ▪ Training and toolbox records ▪ Contract examples ▪ Internal and external audits ▪ Incident/Accident and near miss records ▪ Drill records ▪ Availability of an adequate OHS organizational structure	Monthly	▪ Occupational Health and Safety Law(No. 6331) ▪ Regulation on Health and Safety Requirements for the Use of Work Equipment	▪ Health and Safety KPIs detailed in Table 4-4.	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget
1.5	Construction	Community Health & Safety	▪ Safety conditions at the site ▪ Fencing of construction site ▪ Warning signs and flashlights ▪ Grievances ▪ Incidents	▪ Sub-project area ▪ Residential areas around sub-project area	▪ Records of comments/ suggestions/ grievances ▪ Site Audits ▪ Training records ▪ Review of Construction Site	Monthly	▪ Public Health Law ▪ Regulation on Health and Safety Signs	▪ Negative Trend/No significant increase in communicable and non-communicable disease and injury rates per 1,000 residents per annum.	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			▪ Accidents ▪ Construction Site Traffic and Transport Management Plan		Traffic and Transport Management Plan			▪ Decreasing number/ continuous improvement in number of grievances ▪ Zero incidents per year ▪ Zero number of drivers found to be exceeding speed limits or driving unsafely		
1.6	Construction	Documentation	▪ Availability of following ESMP sub-Project specific plans and reports ○ OHS Management Plan, ○ EPRP, ○ Construction Site Traffic Management Plan, ○ Contractor Management Plan ○ LMP (based on the CDRC's LMPrs), ○ Community Health and Safety Management Plan, ○ Air Quality Management Plan ○ Asbestos Management Plan, ○ Hazardous Materials	▪ Sub-project area ▪ IMM Office	▪ On-site inspection ▪ Record control	During the construction period, the contractor will develop C-ESMP (based on this ESMP), monthly and quarterly report the ESMRs to the IMM, the IMM to ILBANK quarterly together with the Grievance Register. Moreover, ILBANK, will compile these ESMRs and report them to WB biannually together with the Project Progress Report.	▪ WB ESS1	▪ Full compliance with Sub-project's ESMP	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			Management Plan ○ Noise and Vibration Management Plan ○ Waste Management Plan, ○ Chance Finds Procedure.							
1.7	Construction	Grievance Mechanism	▪ Grievance records ▪ Percentage of closed grievances within the target timeframe	▪ Sub-project area ▪ Settlements near the sub-project area ▪ IMM's office	▪ View/suggestion/ grievance records ▪ Grievance database ▪ On-site inspection ▪ Existence / accessibility of grievance boxes	Monthly	▪ ILBANK CDRC ESMF[21] ▪ ILBANK CDRC SEP[22]	▪ All grievances closed-out within the target timeframe ▪ GM disclosure to the PAPs, stakeholders ▪ GM disclosure at Sub-project web site	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget
1.8	Construction	Air Quality	▪ Number of air quality-related grievance records ▪ Percentage of closed grievances within the target timeframe ▪ Air Quality incidents ▪ Records of non-compliance with air quality standards ▪ Visually, on the basis of irritation of	▪ Sub-project area ▪ Settlements, schools, hospitals, and place of worship near the sub-project area	▪ On-site inspections ▪ $PM_{2.5}$ and PM_{10} Measurements to be performed by an authorized environmental laboratory in case of grievance	Daily	▪ Regulation on Air Quality Assessment and Management ▪ WB ESS3	▪ Minimization and continued improvement in the number of the reported air quality related incidents. ▪ Zero NCRs per year ▪ Zero grievances per year ▪ Minimization and continued improvement in the number of air quality related community grievances.	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget

[21] https://www.ilbank.gov.tr/storage/uploads/uidb/esmf_cdrc_ilbank_rev_final_05072024_cc_1720183156.pdf
[22] https://www.ilbank.gov.tr/storage/uploads/uidb/clean_stakeholder_engagement_plan_sep_turkey_cdrc_rev05072024_1721718475.pdf

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			the respiratory system							
1.9	Construction	Noise	▪Number of noise-related grievance records ▪Percentage of closed grievances within the target timeframe ▪Noise and vibration incidents ▪Records of non-compliance with noise standards	▪Sub-project area ▪Settlements, schools, hospitals, and place of worship near the sub-project area	▪Monitoring conducted at the nearest sensitive receptors using noise measuring devices ▪On-site inspections ▪Measurements to be performed by an authorized environmental laboratory in case of grievance	In case of grievance Monthly	▪Regulation on Control of Ambient Noise	▪Minimize and continued improvement in number of reported noise and vibration related incidents. ▪Zero NCRs per year ▪Zero grievances per year ▪Minimization and continued improvement in the number of noise related community grievances	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget
1.10	Construction	Soil Quality	▪Soil quality/Spill incident and accidents ▪Records of non-compliance with soil quality standards ▪Incident and accident reports	▪Sub-project area	▪On-site inspection	Daily	▪Regulation on Control of Soil Pollution and Point Source Contaminated Lands ▪Regulation on Waste Management	▪Minimization and continued improvement in the number of the reported soil quality related incidents ▪Zero NCRs per year ▪Zero accident per year ▪Zero grievances per year	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget
1.11	Construction	Waste Management	▪Temporary waste storage area conditions ▪Total amount of waste generated ▪Recovery / reuse / recycle ratio	▪Sub-project area	▪Waste records ▪On-site inspection regarding proper collection and temporary storage of wastes	Daily	▪Regulation on Waste Management	▪Minimization of total waste generated	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget
1.12	Construction	Domestic Waste	▪Total amount of domestic waste generated ▪Ratio of recovered/reused/ recycled domestic	▪Sub-project area	▪Waste records ▪On-site inspection	Daily	▪Regulation on Control of Packaging Waste	▪Minimization of total waste generated ▪Increase in the ratio of recovered/ reused/ recycled to landfilled	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			waste to total waste generated ▪ Domestic waste storage conditions ▪ On-site inspection				▪ Regulation on Waste Management			
1.13	Construction	Waste Oils	▪ Total amount of waste oil generated ▪ Ratio of recovered/reused/ recycled waste oil to total waste generated ▪ Waste oil storage conditions ▪ On-site inspection	▪ Sub-project area	▪ Visual observations ▪ Waste records	Weekly	▪ Regulation on the Management of Waste Oils	▪ Minimization of total waste generated ▪ Increase in the ratio of recovered/ reused/ recycled waste to total waste generated	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget
1.14	Construction	Waste Batteries and Accumulators	▪ Total amount of waste batteries/accumulators generated ▪ Recovery /reuse/ recycle ratio	▪ Sub-project area	▪ Waste records	Monthly	▪ Regulation on the Control of Waste Batteries and Accumulators	▪ Minimization of total waste generated ▪ Increase in the ratio of recovered/ reused/ recycled waste to total waste generated	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget
1.15	Construction	Excavation Soil, Construction and Debris/ Demolition Wastes	▪ Total amount of excavation and demolition waste generated ▪ Excavation and demolition waste transfer records ▪ Soil stripping, excavation, and backfilling activities ▪ Waste storage conditions ▪ Transfer records ▪ Soil stripping, excavation and backfilling activities	▪ Sub-project area	▪ On-site inspection	Daily	▪ Regulation on the Control of Excavation Soil, Construction and Demolition Wastes	▪ Minimization of total waste generated ▪ Increase in the ratio of recovered/ reused/ recycled waste to total waste generated	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
1.16	Construction	Hazardous Waste Management	▪Total amount of hazardous waste generated ▪Total amount of asbestos waste generated ▪Hazardous waste storage conditions ▪On-site inspection	▪Sub-project area	▪Waste records ▪On-site inspection	Daily	▪Regulation on Waste Management	▪Decrease in the ratio of hazardous waste generated to total hazardous waste (by contamination + by generation)	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget
1.17	Construction	Cultural Heritage	▪Existence of a Chance Find	▪Sub-project area ▪Settlements near the sub-project area	▪On-site inspection ▪Existence of a Chance Find Procedure	Monthly	▪Law on the Conservation of Cultural and Natural Properties ▪WB ESS8	▪Zero Grievance Records	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget
1.18	Construction	Vulnerable Groups	▪Access to essential services (healthcare, education, social services) ▪Safety and security conditions ▪Communication and information dissemination ▪Grievance Records	▪Sub-project area ▪Settlements near the sub-project area ▪Designated temporary healthcare facilities ▪IMM's office	▪Surveys and interviews with affected populations ▪Review of healthcare and social service access records ▪On-site inspections ▪Coordination with local service providers ▪Tracking of communication efforts and outreach effectiveness ▪Grievance database	Monthly	▪ILBANK CDRC ESMF ▪ILBANK CDRC SEP	▪All grievances closed-out within the target timeframe ▪Sufficient information provided to the VGs	▪IMM ▪Contractor ▪Supervision Consultant ▪Local Health and Social Services Departments	▪Included in Sub-project Budget
1.19	Construction	Trainings	▪Training Records ▪Number of participants	▪Sub-project area ▪Training venues	▪Review of training attendance sheets	Monthly	▪ILBANK CDRC ESMF	▪Trainings on ESMP and SEP documents. ▪Providing all trainings (including GM, GBV,	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in Sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			attending the training sessions ▪ Percentage of participants successfully completing the training ▪ Feedback from participants	▪ Settlements near the sub-project area	▪ Evaluation forms completed by participants ▪ On-site observation of training sessions ▪ Interviews with trainers and participants			SEA/SH) to all employees. ▪ 100% of scheduled training sessions conducted ▪ 80% or higher participant satisfaction rate ▪ Zero participants without completion certificates if applicable	▪ Training Providers	
1.20	Construction	Direct and indirect threats posed by construction activities against traffic and pedestrians	▪ Grievance records ▪ Information gathered through Public Consultation ▪ Information on available pedestrian ways ▪ Number of non-compliances against the mitigation controls identified in Traffic and Transport Management Plan ▪ Existence of EPRP ▪ Driver training records ▪ Number of road traffic accidents involving: ▪ Existence and number of warning signs properly installed at designated location ▪ Training records for drivers	▪ Sub-project area	▪ On-site inspection	Daily	▪ Occupational Health and Safety Law	▪ Zero number of drivers found to be exceeding speed limits or driving unsafely ▪ Zero accidental injuries and deaths, ▪ Zero traffic-related grievances	▪ IMM ▪ Contractor ▪ Supervision Consultant	▪ Included in sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			▪Installation of warning signs ▪Availability of EPRP.							
1.21	Construction	Access to the Construction Site - Security Fence/ Protection Tape	▪Grievance records	▪Settlements near the sub-project area	▪On-site inspection	Daily	▪Occupational Health and Safety Law	▪Zero Number of unauthorized accesses to the sub-project area	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget
1.22	Construction	Biodiversity	▪Integrity of tree protection fencing and vegetation buffers. ▪Effectiveness of sediment barriers/silt curtains in Meles Stream. ▪Visual turbidity levels (upstream vs. downstream). ▪ Availability of spill kits and concrete wash-out pits. ▪ Biodiversity awareness training records for workers.	▪Sub-project area and Meles Stream banks	▪On-site visual inspections ▪Review of training logs ▪Review of Spill Response records	• Daily (Visual) • Weekly (Reporting)	▪WB ESS6, C-ESMP, Law on Conservation of Cultural and Natural Properties	▪Zero unauthorized tree removal/damage ▪100% functionality of sediment control measures. ▪No visible turbidity plume downstream. ▪100% of staff trained	▪IMM ▪Contractor ▪Supervision Consultant	▪Included in sub-project Budget
2.1	Operation	Disclosure of operation works	▪Disclosures of up-to-date ESMP and SEP in two languages (English and Turkish) at IMM's website	▪IMM's office ▪IMM's website	▪Up-to-date ESMP and SEP	Monthly	▪WBG General EHS Guidelines	▪Disclosures of operation works at IMM's website and IMM's office	▪IMM	▪Included in sub-project Budget
2.2	Operation	Labour Conditions	▪Grievance records ▪Percentage of closed grievances within the target timeframe	▪Sub-project route and maintenance areas	▪Internal and external audits ▪Grievance records ▪Accident records ▪Training records	Monthly	▪Labour Law (No. 4857) ▪Law on Trade Unions and Collective	▪All grievances closed out within the target timeframe	▪IMM	▪Included in sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
					▪ Sample contracts ▪ Human Resource Policy ▪ Number of the local employees ▪ Legal work permit		Bargaining Agreements ▪ ILO International Regulations			
2.3	Operation	Occupational Health and Safety	▪ Disease ▪ Incident and accident reports ▪ Grievance records ▪ Percentage of closed grievances within the target timeframe ▪ Trainings ▪ HSE Inspection ▪ Legal Requirements ▪ Compliance with EPRP ▪ OHS practices in the field (Use of PPE, etc.)	▪ Sub-project area ▪ Settlements near the sub-project area	▪ On-site inspections ▪ Interviews with employees ▪ Complaint records ▪ Training records ▪ Contract examples ▪ Internal and external audits ▪ EPRP Emergency Plans ▪ Incident/ Accident records ▪ Availability of an adequate OHS organizational structure	Monthly	▪ Occupational Health and Safety Law ▪ Regulation on Health and Safety Requirements for the Use of Work Equipment	▪ Health and Safety KPIs detailed in Table 4-4.	▪ IMM	▪ Included in sub-project Budget
2.4	Operation	Community Health & Safety	▪ Grievances records ▪ Percentage of closed grievances within the target timeframe ▪ Incident and accident reports	▪ Sub-project area ▪ Residential areas around sub-project area	▪ Records of comments/ suggestions/ grievances ▪ Site Audits ▪ Training records	Monthly	▪ Public Health Law ▪ Regulation on Health and Safety Signs	▪ Negative Trend/No significant increase in communicable and non-communicable disease and injury rates per 1,000 residents per annum. ▪ Decreasing number/ continuous improvement in number of complaints ▪ Zero incidents per year	▪ IMM	▪ Included in sub-project Budget
2.5	Operation	Grievance Mechanism	▪ Grievance records ▪ Percentage of closed grievances	▪ Sub-project area	▪ View/ suggestion/ grievance records	Monthly	▪ ILBANK CDRC ESMF	▪ All grievances closed out within the target timeframe	▪ IMM	▪ Included in sub-project Budget

Ref.	Sub-project Phase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			within the target timeframe ▪GM of the sub-project	▪Settlements near the sub-project area	▪Grievance database ▪On-site inspection ▪Existence / accessibility of grievance boxes		▪SEP			
2.6	Operation	Waste Management	▪Total amount of waste generated ▪Recovery / reuse / recycle ratio	▪Sub-project area	▪Waste records ▪On-site inspection regarding proper collection and temporary storage of wastes	In case of grievance Daily	▪Regulation on Waste Management ▪Regulation on Control of Packaging Waste ▪Regulation on the Management of Waste Oils ▪Regulation on the Control of Waste Batteries and Accumulators ▪Regulation on Control of Medical Waste	▪Minimization of total waste generated ▪Decrease in the ratio of hazardous waste generated to total waste (by contamination + by generation)	▪IMM	▪Included in sub-project Budget
2.7	Operation	Biodiversity	▪Functionality of oil-water separators and bridge drainage filters. ▪Survival and health of eplanted/restored riparian vegetation. ▪Directional alignment and intensity of bridge lighting (light spill).	▪Bridge deck, drainage outlets, and restored stream banks.	▪Maintenance record reviews. ▪Site audits and vegetation health assessment. ▪Visual lighting inspection.	▪Bi-annually (Drainage) ▪Annually (Vegetation)	▪WB ESS6, O-ESMP, Routine Maintenance Procedures	▪100% drainage systems functional. ▪ Min. 80% survival rate for replanted species. ▪Zero non-compliant (upward) lighting.	▪• IMM	▪Included in Budget

4.4 List of Associated Plans and Procedures

The E&S management plans and procedures to be prepared by Contractor/s are listed in Table 4-7.

Table 4-7. Plans and Procedures Associated

Management Plan or Procedure Relevant Subproject Phase	Relevant Sub-project Phase (Construction only, Operation only, both Construction and DLP)
Occupational Health and Safety (OHS) Management Plan	Construction and Operation
Emergency Preparedness and Response Plan (EPRP)	Construction and Operation
Construction Site Traffic Management Plan	Both Construction and DLP
Contractor 's Management and Workforce Management Plan	Construction and Operation
Labour Management Plan (LMP) (based on the CDRC's Labour Management Procedures (LMPrs))[23]	Construction and Operation
Community Health and Safety Management Plan	Construction and Operation
Air Quality Management Plan	Construction and Operation
Asbestos Management Plan	Construction and Operation
Hazardous Materials Management Plan	Construction and Operation
Noise and Vibration Management Plan	Construction and Operation
Waste Management Plan	Construction and Operation
Chance Finds Procedure	Construction

The plans/procedures will be reviewed and revised in the event of any major change and/or at least every six (6) months.

4.5 Management of Change

The Sub-borrower shall notify ILBANK of any material changes to the Subproject (including those resulting from the activities of the Sub-borrower and/or contractor) using ILBANK's Change Notification Form template (see Appendix J).

Such changes may include, inter alia, the following:

- Administrative/ organizational structure changes at the decision-making level
- Changes in assigned environmental, social and/or OHS staff
- Legislative changes impacting Subproject implementation (e.g. new permitting processes).
- Design changes (e.g. any changes in the Subproject description, footprint such as new temporary or permanent sites/facilities – on-site or off-site, changes in number of workforce involved, changes in on-site/off-site worker accommodation arrangements).
- Schedule changes
- Changes related to E&S issues (e.g. new biodiversity features or cultural heritage assets identified, additional resettlement need, etc.)
- Changes in the contractor or construction supervision consultants at any phase of the Subproject that require: (i) clarification of E&S commitments and roles and responsibilities with the new contractor or supervision consulting firm, and (ii) reorganization and redelivery of E&S training to the staff of the new contractor or supervision consulting firm

[23] https://www.ilbank.gov.tr/storage/uploads/uidb/cdrcp_labor_management_procedure_lmp_1685916683.pdf

5 CAPACITY DEVELOPMENT AND TRAINING

5.1 Organizational Capacity

The main actors in the implementation of this ESMP for the sub-project are the WB, ILBANK's Project Management Unit (PMU) and the IMM. Also, the graphic organigram for the ESMP implementation of the sub-project is in Figure 5-1.

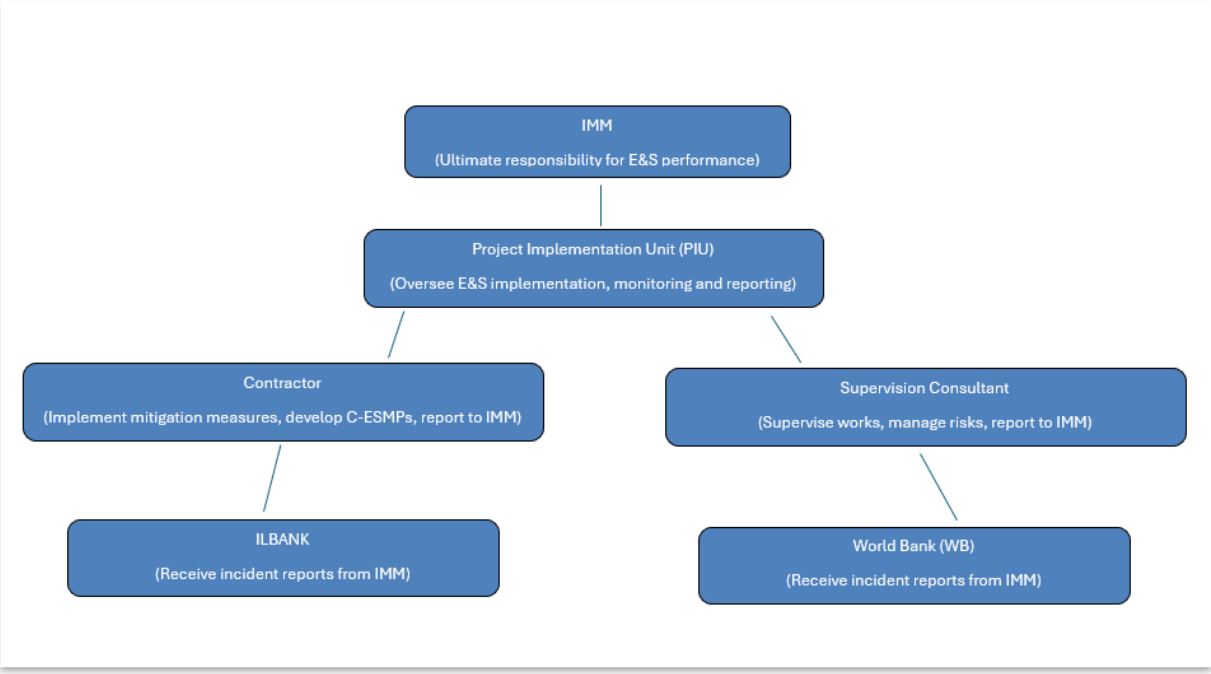

Figure 5-1. ESMP Implementation

5.2 Roles and Responsibilities

The roles and responsibilities of these institutions are presented in Table 5-1.

Table 5-1. Roles and Responsibilities

Party	Role	Key Responsibilities
Sub-borrower		
IMM	Sub-borrower Management	• Hold ultimate responsibility for the E&S performance of the Subproject to the satisfaction of the ILBANK, including the performance of Subproject contractors throughout the sub-financing agreement lifecycle. • Establish Project Implementation Unit (PIU) following the execution of sub-financing agreements to carry out operational and administrative tasks to oversee the implementation of the E&S instruments and monitoring progress; allocate resources for the recruitment of in-house environmental, social and OHS staff under the PIU • Ensure that ESMP, SEP and other E&S management plans and procedures required by ILBANK is prepared within the timeframes agreed with ILBANK and allocate adequate financial and human resources – either from the Sub-borrower's own resources or from the Subproject loan and implement. • Cooperate with the ILBANK representatives to discuss and agree on the ESAP and other E&S covenants for incorporation into sub-financing agreements to be executed between the ILBANK and the sub-borrower (with support from RD E&S team as necessary)

Party	Role	Key Responsibilities
		• Ensure that EHSS requirements of ILBANK are incorporated into relevant contractor tender and agreement documents to be prepared in collaboration with the construction supervision consultant • Hold and use the authority and responsibility to stop any Subproject related work activity if it poses an imminent danger to health, safety, or the environment. • Allocate resource to ensure monitoring of Subproject E&S performance and reporting to ILBANK at IFI standards in line with the sub-financing agreement conditions • Facilitate monitoring visits and audits by ILBANK and their consultants • Notify the ILBANK DG of any significant E&S incident or accident within maximum 24 hours of the accident/incident; contractually require the supervision consultants and/or contractors to promptly report such incident and accidents (timeframe to be defined by ILBANK) • Prepare and submit a detailed E&S Incident Investigation Form, supplemented by a RCA to be conducted pursuant to GIIPs, to ILBANK within 15 days of the accident/incident date for significant accidents or incidents (in line with the template presented in the E&S Supervision, Monitoring and Reporting Procedure). The investigation will be supplemented by a RCA. (see Appendix H and Appendix I for the E&S Incident Notification and Investigation Templates)
	E&S Team - Environmental staff - Social staff - OHS staff	• Participate in the training to be organized by ILBANK as part of ILBANK ESMS Training Procedure implementation • Ensure that satisfactory ESMP, SEP and as required other E&S assessment documentation required by ILBANK is prepared by qualified independent specialists and submitted to ILBANK for appraisal and credit decision-making, coordinate commissioning independent third-party specialists (such as external E&S consultancy companies, individual consultants) to carry out the E&S assessment and prepare the E&S documentation required for ILBANK's appraisal and credit decision-making processes • Provide ILBANK with relevant adequate information to undertake the E&S due diligence in accordance with the ESMS (e.g. duly completed sub-borrower questionnaire and supporting documentation to be requested by ILBANK in accordance with the E&S Screening and Risk Classification and ESDD procedures) • Support the sub-borrower management as required in the review and evaluation of ESAP and other E&S covenants for incorporation into sub-financing agreements to be executed between the ILBANK and the sub-borrower • Ensure compliance of Subproject operations (including contractor activities on site) with national legislation and E&S requirements of the lending IFIs as included in the sub-financing agreements, ESAP and Subproject-specific E&S documentation (such as ESMP, SEP and other E&S management plans and procedures required by ILBANK) • Undertake monitoring of Subproject E&S performance and reporting to ILBANK at IFI standards in line with the sub-financing agreement conditions • Ensure implementation of corrective actions in case of E&S non-compliances in coordination and agreement with ILBANK DG and RD E&S teams over reasonable timeframes • Coordinate the construction supervision consultants, contractors and/or external E&S consultants for collection of the monitoring data

Party	Role	Key Responsibilities
		and compilation of or providing input to periodic monitoring reports as necessary and appropriate • Allow ILBANK representatives (including individual consultants) to access Subproject facilities and records.
Construction Supervision Consultants ("*Müsavir*")	Management and E&S staff	Carry out the following tasks on behalf of the sub-borrowers: • Participate in the training sessions to be organized by sub-borrowers in line with the requirements of ILBANK ESMS Training Procedure • Supervise the construction works of contractors on-site, including implementation of Subproject-specific E&S requirements (requirements stemming from ESMP, SEP and other E&S management plans and procedures required by ILBANK as applicable) by contractors on a daily basis • Ensure sufficient E&S capacity for implementation of E&S requirements as set out in the sub-financing agreements between the sub-borrower and ILBANK • Support the sub-borrowers for the supervision and review of E&S management documentation prepared by construction contractors and submit them to sub-borrowers upon finalization • Review monthly self-monitoring reports prepared by the construction contractors for early identification of E&S issues and/or non-compliances and submit them to municipalities/municipal utilities upon finalization • Identify E&S non-compliances on site and enforce construction contractors to undertake corrective actions within defined and agreed timeframes • Support the sub-borrowers (as requested) in the preparation of periodic E&S monitoring reports to be submitted to ILBANK in line with the ILBANK E&S Supervision, Monitoring and Reporting Procedure • Notify the sub-borrower of any significant E&S incident or accident that have taken place in Subproject related operations within 24 hours.
Construction Contractor	Management and E&S staff	• Ensure sufficient E&S capacity for implementation of E&S requirements as set out in the construction contracts • Participate in the training sessions to be organized by sub-borrowers in line with the requirements of ILBANK ESMS Training Procedure • Prepare Subproject-specific E&S management plans and procedures prior to start of construction works as required by the construction contracts • Comply with the requirements of national legislation and implement the E&S requirements as set out in the sub-financing agreements (executed between ILBANK and the sub-borrowers) and construction contracts • Submit periodic (in frequencies to be set by ESAP) E&S self-monitoring reports to the municipalities/municipal utilities through construction supervision consultants ("*müşavir*") – in line with the format provided by ILBANK. • Fill in monthly occupational health and safety (OHS) forms – reviewed by construction supervision consultants. • Implement corrective actions in case of E&S non-compliances under the supervision of sub-borrower's construction supervision consultant • Promptly notify the sub-borrower of any significant E&S incident or accident that have taken place in Subproject related operations within 24 hours.

IMM

The IMM will hold ultimate responsibility for the environmental and social performance of the sub-project, including the performance of its contractors. A Project Implementation Unit (PIU) will be established to carry out operational and administrative tasks to oversee the implementation of the E&S instruments and monitoring progress. The IMM will be responsible for the preparation and implementation of ESMP and SEP including management of sub-project level Grievance Mechanisms; for the monitoring environmental and social performance of the contractors' works on site, in line with the site-specific environmental and social requirements; for the reporting to ILBANK on quarterly basis on E&S compliance and monitoring as stated in Table 5-1.

The IMM will be responsible for the incident and accident reporting and informing the necessary institutions (WB, ILBANK etc.), as per the provisions explained below:

- The World Bank (WB) and ILBANK will be promptly notified of any incident or accident related to the sub-project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers including but not limited to; incidents and accidents encountered during construction works, environmental spills, etc.
- Sufficient detail will be provided regarding the incident or accident, findings of a RCA, indicating immediate measures or corrective actions taken or that are planned to be taken to address it, compensation paid, and any information provided by any contractor and supervision consultant, as appropriate. It will be ensured that the incident report is in line with the WB's Environment and Social Incidence Response Toolkit. Subsequently, as per the Bank's request, a report on the incident or accident and propose any measures to prevent its recurrence will be prepared.
- The IMM will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24 hours and submit an incident report, including RCA, precautions and compensation measures taken within 15 business days. ILBANK will forward the incident report to the WB immediately upon receipt from the IMM.

Contractor

The contractor will carry out the construction activities of the sub-project in line with the approved design documents and will be the responsible body to implement and apply the mitigation measures given in ESMP during construction phase. The construction contractor will develop Contractor's Environmental and Social Management Plan (C-ESMP), which is based on this ESMP, and report monthly and quarterly ESMRs detailed in Table 4-5. The contractor should adhere to assigned duties and responsibilities as specified in the ESMP to ensure compliance with related national regulations, CDRC Project ESMF, and WB's ESSs. The contractor will employ a full time OHS specialist and a full time environmental and social expert who will instruct and consult the workers on GM and implementation of ESMP (including grievance mechanism and the applicable stakeholder engagement activities detailed in sub-project SEP). Furthermore, a competent environmental expert and a social expert of contractor

will monitor implementation of measures given in the mitigation plan and report to the IMM on a monthly basis. The prompt notification of accident and incidents within the scope of construction works in line with the above-described provisions is the responsibility of the contractor. The contractor will keep an incident register at construction site throughout the construction and DLP.

During the construction phase, the contractor firm will train its workers on environmental and social aspects (including OHS) as per WB's ESSs and national regulations in order to raise environmental and social awareness. During the DLP, the contractor will be responsible for any repairs of the newly constructed facilities, in accordance with legal regulations as of provisional acceptance. Within the liability period, the contractor will implement measures given in the Environmental and Social Mitigation Plan for operation.

Supervision Consultant

Supervision consultant contracted by the IMM will include at least one Environmental Expert, one Social Expert and one A Class Occupational Health and Safety Expert. The number of experts will be increased if necessary. Supervision Consultant will provide supervision of construction and/or rehabilitation works and installation of equipment. The experts will identify and manage environmental, social and OHS related risks and initiate corrective actions where necessary. The experts will also monitor and evaluate the performance of services provided by the contractor. In addition, a regular monthly report regarding to environmental, social and OHS issues of the sub-project during construction phase will be provided by Supervision Consultant to the IMM.

5.3 Capacity Building and Training

Sub-borrower staff (trained by ILBANK) will deliver E&S training to contractors. The training contents are summarized in Table 5-2. The Sub-borrower will identify specific training programs to be conducted in line with these modules and submit this to ILBANK prior to commencement of works.

The Sub-borrower will ensure that E&S training programs are extended to subcontractors by contractors in the event of their involvement in Subproject implementation.

Table 5-2. Training Components for Training of Contractor Staff

Module	Training Name	Training Duration	Key Training Content
Module 1	ILBANK E&S Requirements	1 hour	- Overview of ILBANK E&S requirements: ○ ILBANK E&S Policy (including but not limited to the guiding principles on human rights, labor rights and working conditions, community health, safety and well-being, cultural heritage, gender equality, etc.) ○ External Communications (including stakeholder engagement, grievance management, etc.) ○ Monitoring, Review and Reporting ○ Labor Management, Contractor Management - ILBANK Code of Conduct
Module 2	Subproject-level E&S	3 hours	- Subproject specific requirements: ○ E&S covenants included in sub-loan

Module	Training Name	Training Duration	Key Training Content
	Requirements for contractors as per sub-financing agreement conditions		agreements ○ Subproject ESAP requirements ○ Subproject-level E&S assessment and management documentation (such as ESMP, SEP and other E&S management plans and procedures as applicable); ○ Emergency Preparedness and Response Plan including a training program for emergency responders including drills at regular intervals; ○ Specific training (such as driver training in case of involvement of vehicles or fleets of vehicles in Subproject-operations, training of security forces in the use of force (and where applicable, firearms), and appropriate conduct toward workers and affected communities, etc.). - Preparation and implementation of Labor Management Plans.
Module 3	Environmental and Social Framework	3 hours	▪ Implementation of ESMP, LMP, SEP, and GM Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. Refresher trainings at least once a year or as needed, during sub-project implementation.
Module 4	Occupational Health and Safety	3 hours	▪ Workplace risk management Prevention of accidents at work sites ▪ Mandatory legal training, Work instructions Trainings (i.e. Working at Height, Material Handling) for the target groups ▪ Use of Personal Protection Equipment's (PPEs) ▪ Health and safety standards ▪ Hazardous waste management ▪ Solid and liquid waste management ▪ Preparedness and response to emergency situation ▪ Awareness on communicable diseases (i.e. Covid-19, HIV/AIDS etc.) Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. Refresher trainings at least once a year or as needed, during sub-project implementation
Module 5	Labour and Working Conditions	3 hours	▪ Implementation of the LMP ▪ Terms and conditions of employment according to national working laws and regulations ▪ Contractor and sub-contractor codes of conduct ▪ Worker's organizations ▪ Child labour and forced labour issues. ▪ Workers' Grievance Mechanism Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. Refresher trainings at least once a year or as needed, during sub-project implementation.
Module 6	Grievance Mechanism	3 hours	▪ Implementation of GM

Module	Training Name	Training Duration	Key Training Content
			▪ Registration and processing procedure ▪ Documenting and processing grievances Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. Refresher trainings at least once a year or as needed, during sub-project implementation.

6 IMPLEMENTATION SCHEDULE AND COST ESTIMATES

6.1 Implementation Schedule

The sub-project's construction works are expected to last 24 months. The DLP of the sub-project is the first 12 months after construction. The target year of the sub-project operation is planned as 2055.

6.2 Cost Estimates

The cost estimates for the implementation of the ESMP including the trainings and meeting of the sub-project is provided below.

Table 6-1. The Cost Estimates for the Implementation of the Sub-project's ESMP

Item No	Heading of the Training / Meeting / Implementation	Target Group	Timin and Duration	Cost**
1	**Employment of E&S & OHS Experts Under PIU**	IMM	▪ After signature of sub-loan agreement	144,000 Euro*
	Employment of E&S & OHS Experts Under Contractor(s), and Supervisor Consultant	PIU of the IMM	▪ Prior to construction	108,000 Euro*
2	**Preparation and Implementation of E&S Sub-Management Plans**	Contractor	▪ Prior to construction	8,000 Euro*
		PIU of the IMM	▪ Prior to operation	80,000 Euro*
3	**Waste Management, Spill Response and Pollution Prevention Activities**	Contractor	▪ Throughout the construction	8,000 Euro*
		PIU of the IMM	▪ Throughout the operation	80,000 Euro*
4	**Environmental and Social Framework Training:** ▪ Implementation of ESMP, LMP, SEP, and GM	PIU of the IMM	▪ Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. ▪ Refresher trainings at least once a year or as needed, during sub-project implementation.	3,500 Euro*
5	**Occupational Health and Safety Training:** ▪ Workplace risk management Prevention of accidents at work sites ▪ Mandatory legal training, Work instructions Trainings (i.e. Working at Height, Confined Space Entry, Material Handling) for the target groups ▪ Use of Personal Protection Equipment's (PPEs) ▪ Health and safety standards ▪ Hazardous waste management ▪ Solid and liquid waste management ▪ Preparedness and response to emergency situation	PIU of the IMM	▪ Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. ▪ Refresher trainings at least once a year or as needed, during sub-project implementation.	1,800 Euro*

Item No	Heading of the Training / Meeting / Implementation	Target Group	Timin and Duration	Cost**
	▪ Awareness on communicable diseases (i.e. Covid-19, HIV/AIDS etc.)			
6	**Labour and Working Conditions Training:** ▪ Implementation of the LMP ▪ Terms and conditions of employment according to national working laws and regulations ▪ Contractor and sub-contractor codes of conduct ▪ Worker's organizations ▪ Child labour and forced labour issues. ▪ Workers' Grievance Mechanism	PIU of the IMM	▪ Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. ▪ Refresher trainings at least once a year or as needed, during sub-project implementation.	800 Euro*
7	**Grievance Mechanism Training:** ▪ Implementation of GM ▪ Registration and processing procedure ▪ Grievance Mechanism procedure ▪ Documenting and processing grievances	PIU of the IMM	▪ Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. ▪ Refresher trainings at least once a year or as needed, during sub-project implementation.	600 Euro*
8	**Stakeholder Consultation Meeting:** ▪ Presentation by the counsellors about the sub-project ▪ Stakeholders' questions about the sub-project and sub-project impacts are answered ▪ Stakeholders' opinions on the sub-project and its impacts are recorded ▪ Stakeholders are informed about the addresses to which they can send their inquiries, suggestions and complaints about the sub-project	Affected groups and other relevant/affected stakeholders	After the draft ESMP report is completed. (Stakeholder meetings or any information sharing activities to be notified ten (10) days in advance by the IMM through brochures, website announcements and newspaper advertisements (at least one national and one local newspaper))	2,000 Euro*
		Total:		**436,700 Euro**

**Including transportation and accommodation costs.*

***Costs are indicative and for orientation purposes only - at time of preparation of this ESMP.*

7 LIST OF APPENDICES

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APPENDIX-A
Photographs of the Sub-project Area

	Description: The existing multi-lane arterial road carrying significant traffic volumes, surrounded by high-rise residential and mixed-use developments within a dense urban context.
	Date Taken: 21.02.2024

	Description: The existing traffic flow conditions and roadway configuration along the multi-lane corridor, showing active vehicular movement
	Date Taken: 21.02.2024

	Description: The adjacent water channel and surrounding infrastructure within the project area, emphasizing environmental considerations.
	Date Taken: 21.02.2024

APPENDIX-B
Chance Find Procedure of the Sub-project

INTRODUCTION

This document presents the Chance Find Procedure for "Izmir Province, Konak District, Ege Neighbourhood Bridge Crossing Project" (hereinafter referred to as 'sub-project') and is prepared by Envesu Environment Energy Construction and Consultancy Inc. for " Izmir Metropolitan Municipality (IMM) " (hereinafter referred to as 'Borrower / Project Owner').

This document is intended to avoid potential impacts of the sub-project on any cultural heritage during land preparation works, including excavation activities. Excavation works are planned to be undertaken during the construction phase and may also be required during the operation phase for maintenance and repair activities. This Procedure forms part of the general documentation package as an annex to the Environmental and Social Management Plan (ESMP) developed for the sub-project.

SCOPE

Types of Cultural Heritage Covered by This Procedure

Tangible Cultural Heritage

Tangible (physical) cultural heritage refers to movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.

DEFINITIONS

Chance Find	According to WB ESS8, a chance find is archaeological material encountered unexpectedly during Project/Subproject construction or operation. Most often, chance finds occur during the construction phase of a Project/Subproject. Such finds include for example, the discovery of a remains, fossilized plant or animal remains or animal tracks or a natural object or soil feature that appears to indicate the presence of archaeological material.

REFERENCES

- Law on the Conservation of Cultural and Natural Properties (LCCNP) (No: 2863)
- World Bank Protection Policy on Physical Cultural Resources (OP/BP 4.11)
- Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention).

ROLES AND RESPONSIBILITIES

Roles	Responsibilities
Contractors	• Compliance with the Chance Find Procedure provided in contractor agreements, • Provide appropriate training and information to the worksite personnel who work in the sub-projects and who may disturb the cultural heritage so that they understand their responsibilities for cultural heritage.
Project Owner	• Ensure compliance of the sub-project with the Project Standards and other requirements given in this procedure, • General responsibility for the scope and implementation of the procedure,

Roles	Responsibilities
	• Development, monitoring and revision of this procedure, • Fulfilment of cultural heritage evaluation processes, • Ensure that the operations do not disturb cultural properties and sites without the approval of the relevant authority, • Investigation, reporting and monitoring of unauthorized damages to the worksite as well as of procedure violations, • Management of amendments to laws or policies, • Coordination with the organizations involved in the implementation and other stakeholders.
All Workers	• Learn about the Chance Find Procedure through induction training and any other training provided.

CHANCE FINDS PROCEDURE

The following step-by-step procedure shall be implemented in the event that previously unidentified cultural heritage assets are encountered during Subproject activities.

Step 1 – Immediate Actions Upon Discovery

1. All works within the affected area shall be suspended immediately.
2. A temporary buffer zone shall be established around the discovery site.
3. Site management and the designated Museum Archaeologist shall be informed without delay.
4. The discovery area shall be secured appropriately through the use of markings, signage, barriers, and warning notices.
5. The discovered material shall not be removed, handled, transported, or otherwise disturbed to prevent further damage.

Step 2 – Documentation and Registration

1. Section A of the Chance Find Notification Form shall be completed by the designated Subproject representative (e.g., environmental or social staff appointed by the Contractor) within 24 hours of the discovery. A copy of the completed form shall be submitted to the Contractor's management and the Sub-borrower within the same timeframe.
2. The Contractor's management shall forward the completed Notification Form to the Sub-borrower within 24 hours of the discovery.

Step 3 – Notification of Local Authorities

1. The relevant Subproject representative shall notify the Director of the respective Museum regarding the discovery without delay.

Step 4 – Museum Evaluation and Initial Determination

1. Museum officials shall assess the discovery and determine its level of significance and the required course of action:

a) If the Site/Chance Find is Determined to be of No Significance:

- The Museum officials shall formally declare the discovery insignificant.

- Records shall be maintained accordingly, and the Chance Finds Procedure shall be closed.
- No further action shall be required, and construction activities may resume.

b) If the Site/Chance Find is Determined to be Significant:

- The Museum officials shall formally declare the discovery significant.
- The required actions shall be determined and communicated to the relevant Subproject representative.
- The Subproject representative shall coordinate with the Sub-borrower and other relevant parties to implement the necessary actions.

Step 5 – Site Survey and Final Determination

1. The Subproject workforce shall be informed by the designated representative of the Museum Directorate's decision and instructions.
2. Following a detailed site survey, Museum officials shall classify the discovery as minor, moderate, or high significance:

a) Minor Significance:

- The Museum officials shall formally declare the discovery of minor significance.
- The Subproject representative shall notify the Contractor's management, who shall inform the Sub-borrower.
- All documentation shall be maintained, and the Chance Finds Procedure shall be concluded.
- Construction activities may resume.

b) Moderate Significance:

- The Museum officials shall determine the required mitigation or management actions.
- The Subproject representative shall notify the Contractor's management, who shall inform the Sub-borrower.
- Records shall be maintained, and the Chance Finds Procedure shall be formally closed following implementation of required measures.
- Construction activities may resume upon approval.

c) High Significance:

- The Museum officials shall declare the discovery to be of high significance and specify the actions to be undertaken.
- The Subproject representative shall notify the Contractor's management, who shall inform the Sub-borrower.
- Further actions shall proceed in accordance with the instructions of the relevant authorities.

Procedure for the Discovery of Potential Human Remains

Identification of human remains is very clear in terms of graves or burial sites. If a grave or burial site is found, the procedures to be followed are not different from the procedure applicable to archaeological finds as per Article 6 of LCCNP. Modern burials or forensic human remains will not be addressed within the scope of LCCNP.

REPORTING AND MONITORING

Contractor will comply with reporting requirements including chance finds defined in site-specific ESMP (contractor will develop monthly and quarterly monitoring reports and submit to IMM through supervision consultant; IMM will examine submit the reports to ILBANK quarterly (and monthly if requested by ILBANK); ILBANK will inform the World Bank by providing regular semi-annual monitoring reports.

Sample Chance Find Notification Form

Part A *Bölüm A*		
Date: *Tarih:*	**Form No:** *Form No:*	
Sub-borrower: *Alt Borçlu:*	**Sub-project:** *Alt Proje*:	
Construction Supervision Consultant: *Müşavir Firma:*	**Contractor:** *Yüklenici:*	
Sub-project Location: *Alt Proje Konumu:*	**District:** *İlçe:*	**Neighbourhood/Village:** *Mahalle/Köy:*
Name of the Person reporting the chance find: *Rastlantısal buluntu raporlayan kişinin ismi:*		
Immediate Actions *Acil Önlemler*		
Was work stopped in the immediate vicinity of the chance find? *Rastlantısal buluntunun çevresinde iş durduruldu mu?*	☐ **Yes** *Evet*	☐ **No** *Hayır*
Was a buffer zone created to protect the chance find? *Rastlantısal buluntuyu korumak için tampon bölge oluşturuldu mu?*	☐ **Yes** *Evet*	☐ **No** *Hayır*
Were the management representatives of the contractor contacted? *Yüklenicinin yönetim temsilcileri ile irtibata geçildi mi?*	☐ **Yes** *Evet*	☐ **No** *Hayır*
Was the E&S team of the Supervision Consultant contacted? *Müşavir firmanın Ç&S ekibi ile irtibata geçildi mi?*	☐ **Yes** *Evet*	☐ **No** *Hayır*
Was the sub-borrower contacted? *Alt Borçlu ile irtibata geçildi mi?*	☐ **Yes** *Evet*	☐ **No** *Hayır*
Chance Find Details *Rastlantısal Buluntu Detayları*		
GPS Coordinates *GPS Koordinatları*	**Photo Record** *Fotoğraf Kaydı*	
Description of Chance Find *Rastlantısal Buluntunun Tanımı*		
Other specifications of site/finding: *Sahanın/buluntunun diğer özellikleri:*		

Part B *Bölüm B*			
Notification of Museum Directorate Officials *Müze Müdürlüğü Yetkililerine Bildirim*			
Was the Subproject representative contacted relevant museum directorate? *Alt proje temsilcisi ilgili müze müdürlüğü ile irtibata geçti mi?*		☐ **Yes** *Evet*	☐ **No** *Hayır*
Date of notification: *Bildirim tarihi:*			
Name of the museum directorate: *Müze müdürlüğünün adı:*			
Name of the museum directorate official: *Müze müdürlüğü yetkilisinin adı:*			
Contact number of the official: *Yetkilinin iletişim numarası:*			
Decision of Museum Directorate Archaeologist *Müze Müdürlüğü Arkeoloğunun Kararı*			
Date of site visit: *Saha ziyareti tarihi:*			
☐ **Site/Finding of no significance – Construction to proceed with no further action – End of Chance Find Procedure** *Önemsiz Saha/Buluntu – Daha fazla araştırma yapılmadan inşaat devam edebilir – Rastlantısal Buluntu Prosedürünün sonu* **Date of notice to resume work:** *İşe devam etme bildirisinin tarihi:*		☐ **Site/Finding of significance – Further actions required** *Önemli Saha/Buluntu – Ek araştırma gerekmektedir* **Please fill out Part C** *Lütfen Bölüm C'yi doldurun*	
Part C Further Field Investigation *Bölüm C İlave Saha Araştırmaları*			
☐ **Minor significance finding** *Az önem taşıyan buluntu*	☐ **Moderate significance finding** *Orta derece önem taşıyan buluntu*	☐ **High significance finding** *Çok önemli buluntu*	
Describe additional actions required to be implemented: *İlave uygulanması gereken aksiyonların tanımı:*			
Part D Implementation of Actions and Resumption of Works *Bölüm D Aksiyonların Tamamlanması ve İşe Devam*			
Date of actions started: *Aksiyonların başlangıç tarihi:*		**Date of notice from the cultural heritage authorities to resume work:** *Kültürel miras otoritelerinden işe devam izni bildirimi tarihi:*	
Date of actions completed: *Aksiyonların tamamlanma tarihi:*			

Chance Findings Log

Date of Chance Find	Brief Description of Chance Find	Notification of Sub-Project Representatives	Notification of Relevant Authorities	Actions Required by the Authorities	Status of Actions (Open/Closed)	Other Remarks

APPENDIX-C
Common OHS Risks and General Mitigation Measures

Risk Area	General Mitigation Measure
WORKING AT HEIGHTS Working from heights is the most common cause of fatal injuries to workers.	▪ All employees who have received a certificate from the workplace physician that they can work at height need suitable training in working on different pieces of equipment, and such work must be planned appropriately. Safety approaches and precautions should be adopted, such as: Where practical, avoid the need to work at height. ▪ Put collective measures and implement a ‘’Working at Height Permit System where working at height can’t be avoided to prevent falls. Such as the use of equipment to provide an extra level of safety to reduce the risk of a fall - according to ‘’Occupational Health and Safety Regulation in Construction Works’, a scaffold with a double guard-rail or edge protection is needed. Minimize the consequences of a fall by providing a safety net. ▪ Wear the necessary Personal Protective Equipment (PPE) such as a safety harness.
MOVING OBJECTS A construction site is an ever-changing environment, with many objects moving around, often on uneven terrain. Delivery vehicles, heavy plant machinery and overhead lifting equipment pose a hazard to site workers and operators.	▪ Sites should always be planned to manage plant and pedestrian interface where physical barriers and suitable segregation is in place. ▪ To reduce risks, workers should: ▪ Never stand behind large operating plant machinery (sweeping area) and never stand under suspended loads. ▪ If they do not have lights or sound warnings, they should not be allowed to work in the project area. Periodic checks of the construction machines should be up to date. ▪ Always ensure you have a banksman to guide plant vehicles when reversing or manoeuvring on a public road. ▪ Always wear PPE such as a hard hat and high visibility jacket to ensure he/she is seen.
SLIPS, TRIPS, AND FALLS Slips, trips, and falls can happen in almost any environment, and, in construction, there are more common incidents of these kinds of injuries than in other industries. The HSE reports that around a quarter of injuries reported are due to Slips, Trips and Falls. As construction sites often have uneven terrain and the typography is forever changing, it is unsurprising that slips, trips, and falls are a common hazard. HSE reports that several thousand construction workers are injured every year following a slip or trip. Most of these could be avoided by effectively managing working areas and access routes, such as excavations and footpaths.	▪ Managers and Site supervisor on construction sites must effectively manage the site so that workers can move around it safely. Risks should always be reported and sorted to reduce the chances of injury. To reduce harm due to Slips, Trips and Falls: ▪ Keep work and storage areas tidy and designate specific areas for waste collection. ▪ Where surfaces are slippery with mud, they should be treated with gravel. ▪ Where surfaces are slippery with ice, they should be treated with grit. ▪ All slippery areas should be signposted, and safety shoes with slip-resistant soles should be worn.
NOISE Working around loud, excessive, and repetitive noise can cause long term hearing problems, such as deafness. Noise can also be a dangerous distraction and may distract the worker from the task at hand, which can cause accidents.	▪ A comprehensive noise risk assessment should be carried out where the risk assessment has highlighted a noise hazard with the works to be undertaken.

Risk Area	General Mitigation Measure
HAND ARM VIBRATION SYNDROME HAVS (Hand Arm Vibration Syndrome) is a debilitating and painful disease of the blood vessels, nerves, and joints. It is typically caused by the continued use of hand-held power tools, including vibratory power tools and ground working equipment. Some of the workers at risk of developing HAVS, resulting in the inability to do fine work, and cold temperatures can trigger painful attacks on the fingers. Once the damage is done, it is permanent.	▪ HAVS is preventable if construction works are correctly planned to minimize exposure to vibration during work and workers are monitored are given appropriate protection when using vibrating tools and equipment. ▪ Management should ensure that employees exposed to vibration are regularly rotated.
MATERIAL HANDLING – MANUAL AND BY EQUIPMENT Materials and equipment are constantly being lifted and moved around construction sites, whether manually or by equipment. Either way, handling carries a degree of risk.	▪ For manual handling, training must be provided to ensure employees can lift and carry materials safely. ▪ For lifting equipment handling, there are lots of risks, especially when operating lifting equipment on uneven ground. If an employee is required to use lifting equipment, they must be trained to operate the equipment safely, and a regular test should be taken to check their ability to use the equipment. Always check your plant is fit for use and that it's certificated and inspected before use.
EXCAVATIONS Incidents commonly occur within excavations on construction sites, such as an unsupported excavation collapsing with workers inside.	▪ Common safety measures that need to be put in place according to ''Occupational Health and Safety Regulation in Construction Works'' to prevent excavations from collapse and to reduce the risk of operatives falling into excavations. ▪ Never work in an unsupported excavation. ▪ Shoring or terracing application will also be used. ▪ Ensure an excavation is supported and fully secure. ▪ Regularly inspect the excavation both before and during the work shift. ▪ Always check that the edge protection of an excavation is 100% intact before you enter it. ▪ Always maintain a safe distance from the edge of all deep excavations.
ELECTRICITY Most of the accidents arise from contact with overhead or underground power cables and electrical equipment/machinery.	▪ In civil engineering, strikes to services are common. The strikes happen when excavation is undertaken without adequately checking the ground for existing services. Consequently, incidents can easily be avoided by using technology such as CAT and Genny scanning equipment to scan an area and foresee potential services and prevent service strikes.
AIRBORNE FIBRES AND MATERIALS Construction dust is often an invisible, fine, and toxic mixture of hazardous materials and fibres. This can damage the lungs and lead to chronic obstructive pulmonary disease, asthma, silicosis, and other such diseases.	▪ All employers have to ensure suitably chosen protective equipment is used.
SITE SECURITY Having inadequate security around a construction site may danger the public and lead to an unnecessary incident	▪ Always make sure that boundary safety fencing is 100% secure and there are no openings for the public to access.
FIRE PROTECTION RISK	▪ According to the Regulation on the Protection of Buildings from Fire (Official Gazette Date:

Risk Area	General Mitigation Measure
Despite the presence of firefighting equipment, safe storage of chemicals, personnel training, controlled ignition, regular cleaning, and inspection measures, the risk of fire can increase if proper protection is not ensured.	19.12.2007, Issue: 26735), fire-fighting equipment will be available on site (including but not limited to, rubber beaters when working in grass/bush areas, at least one fire extinguisher of the appropriate type when welding or other 'hot' activities are undertaken): ▪ Surplus chemicals/flammable materials needed at the project site will not be stacked and these chemicals will be stored in safe warehouses. Uncontrolled storage of chemicals increases the danger of fire and sabotage. ▪ All employees will be trained about the fire risks and how to deal with any fires in case occurs; • Fires won't be lit for any reason. ▪ Debris will be cleaned regularly. ▪ Work areas and buildings will be inspected regularly to detect and eliminate potential fire sources. ▪ Smoking will be allowed only in designated smoking areas. Cigarette butts will not be thrown to the ground.

APPENDIX-D
List of Flora Species in the Sub-project Area

Family and Species Name	Common Name	Endemism	IUCN	BERN	CITES
Papaveraceae					
Papaver purpureomarginatum	Purple-Fringed Poppy	-	-	-	-
Hypecoum procumbens subsp. procumbens	Sickle-Fruited Hypecoum	-	-	-	-
Fumaria capreolata	Ramping Fumitory	-	-	-	-
Brassicaceae					
Brassica tournefortii	African Mustard	-	-	-	-
Calepina irregularis	White Ballmustard	-	-	-	-
Coronopus squamatus	Greater Swinecress	-	-	-	-
Resedaceae					
Alyssum strigosum subsp. strigosum	-	-	-	-	-
Sisymbrium orientale	Indian Hedgemustard	-	-	-	-
Caryophyllaceae					
Dianthus tripunctatus	Three-Spotted Pink	-	-	-	-
Polygonaceae					
Rumex pulcher	Fiddle Dock	-	-	-	-
Fabaceae					
Trifolium clypeatum	Helmet Clover	-	-	-	-
Asteraceae					
Xanthium strumarium subsp. strumarium	Common Cocklebur	-	-	-	-
Aster subulatus	Eastern Annual Saltmarsh Aster	-	-	-	-
Matricaria chamomilla var. recutita	Chamomile	-	-	-	-
Isoetaceae					
Isoetes histrix var. histrix	Land Quillwort	-	-	-	-
Ranunculaceae					
Nigella elata	-	-	-	-	-

APPENDIX-E
List of Fauna Species in the Sub-project Area

Species	Common Name	IUCN	BERN	CITES
Amphibians				
Bufonidae				
Bufo bufo	Common Toad	LC	Ann-III	-
Ranidae				
Rana ridibunda	Marsh Frog	LC	Ann-III	-
Reptiles				
Typhlopidae				
Typhlops vermicularis	Eurasian Blind Snake	LC	Ann-III	-
Birds				
Falconidae				
Falco peregrinus	Peregrine Falcon	LC	Ann-II	App-I
Falco tinnunculus	Common Kestrel	LC	Ann-II	-
Falco naumanni	Lesser Kestrel	LC	Ann-II	-
Paridae				
Parus major	Great Tit	LC	Ann-II	-
Corvidae				
Corvus corone	Carrion Crow	LC	-	-
Corvus monedula	Eurasian Jackdaw	LC	-	-
Pica pica	Eurasian Magpie	LC	-	-
Fringillidae				
Carduelis carduelis	European Goldfinch	LC	Ann-II	-
Passeridae				
Passer montanus	Eurasian Tree Sparrow	LC	Ann-II	-
Passer domesticus	House Sparrow	LC	-	-
Strigidae				
Athene noctua	Little Owl	LC	Ann-II	-
Hirundinidae				
Hirundo rustica	Barn Swallow	LC	Ann-II	-
Turdidae				
Turdus merula	Eurasian Blackbird	LC	Ann-III	-
Mammals				
Muridae				
Mus musculus	House mouse	LC	-	-
Rattus norvegicus	Brown rat	LC	-	-
Rattus rattus	House rat	LC	-	-
Vespertilionidae				
Pipistrellus pipistrellus	Common Pipistrelle	LC	Ann-III	-
Rhinolophidae				
Rhinolophus ferrumequinum	Greater Horseshoe Bat	LC	Ann-II	-
Rhinolophus hipposideros	Lesser Horseshoe Bat	LC	Ann-II	-
Mustelidae				
Meles meles	Eurasian Badger	LC	Ann-III	-

APPENDIX-F
Summary of the National Legislation and International Standards Applicable to the Management of Environmental, Social, Health, and Safety Aspects of the Sub-Project

National Environmental, Legal and Political Framework		
Environmental Impact Assessment		**Relevancy/Implications for the Sub-project**
Environmental Law	Law No: 2872; Date of Ratification: 1983	It is the general law that regulates the main environmental rules for all activities to be carried out during the lifetime of the Sub-project.
Regulation on Environmental Impact Assessment	OG. No. 31907 dated 29 July, 2022	It is the regulation that regulates the national environmental impact assessment processes in Türkiye. In this context, the sub-project as bridge crossing and the related access roads project is out of the scope of national Environmental Impact Assessment (EIA) as it is not included in the Annex I and Annex II lists of the Regulation on EIA. Nevertheless, the IMM will make the required correspondences to secure the relevant "EIA out of scope" official letters for this Sub-project. The related official letter will be submitted to ILBANK.
Water		**Relevancy/Implications for the Sub-project**
Groundwater Law	Law No: 167; Date of Ratification: 1960	It is the general law on the use of groundwater. Thus, compliance with this law should be ensured.
Regulation on Control of Water Pollution	OG. No. 25687 dated 31 December 2004 (Last amendment on 12 May 2023 with OG. No. 32188)	The Sub-project is subject to the regulation due to activities that may cause water pollution within the Project's AoI during the lifetime of the Sub-project.
Regulation on Water Intended for Human Consumption	OG. No. 25730 dated 17 February 2005	Compliance with this regulation should be ensured due to the monitoring of the suitability for human consumption of the surface water used and packaging water within the scope of the Sub-project.
Regulation on Surface Water Quality	OG. No. 28483 dated 30 November 2012 (Last amendment on 1 February 2023 with OG. No. 32091)	Due to the effluent sourced from the Sub-project within the Project's AoI, it should comply the provision of the regulation.
Regulation on the Quality and Treatment of Water intended for Potable Water Supply	OG. No. 30823 dated 06 July 2019	Compliance with this regulation should be ensured due to the controlling of the suitability as potable water supply from the surface water used and packaging water within the scope of the Sub-project.
Regulation on the Control of Pollution caused by Hazardous Materials in and around Water Sources	OG. No. 26005 dated 26 November 2005	The Sub-project is subject to the regulation due to the impacts on the surface water and its surroundings that may occur during the Sub-project lifetime activities within its AoI.
Air		**Relevancy/Implications for the Sub-project**
Regulation on Air Quality Assessment and Management	OG. No. 26898 dated 06 June 2008	The Sub-project is subject to this regulation due to activities that may cause the deterioration of the air quality during the lifetime of the Sub-project, especially the construction phase of the Sub-project within its AoI.
Regulation on Control of Exhaust Gas Emission	OG. No. 30004 dated 11 March 2017	The Sub-project is subject to the regulation due to activities sourced from vehicles that may cause gas emissions during the lifetime of the Sub-project within its AoI.
Soil		**Relevancy/Implications for the Sub-project**
Soil Conservation and Land Use Law and Applicable Regulation	Law No: 5403; OG. No. 25880 dated 03 July 2005 (Last amendment on 5 April 2023 with Amended Law No. 7442)	Due to land use within the scope of the Sub-project, the law and applicable regulation should be complied with.

National Environmental, Legal and Political Framework		
Regulation on Control of Soil Pollution and Point Source Contaminated Lands	OG. No. 27605 dated 08 June 2010	The Sub-project is subject to the regulation due to the suspicion of soil pollution, especially the area for which land preparation has not yet been made in the Sub-project Area.
Noise		**Relevancy/Implications for the Sub-project**
Regulation on the Ambient Noise Emission Caused by Equipment Used Outdoors	OG. No. 26392 dated 30 December 2006	The Sub-project is subject to the regulation due to the noise that may occur during the use of equipment, especially throughout the construction phase within its AoI.
Regulation on Control of Ambient Noise	OG. No. 32029 dated 30 November 2022	The Sub-project is subject to the regulation due to the noise that may occur during especially throughout the construction phase within its AoI.
Energy Efficiency		**Relevancy/Implications for the Sub-project**
Energy Efficiency Law	Law No: 5627, OG. No. 26510 dated 2 May 2007	It is the regulation that is subject to all activities that will directly or indirectly require energy throughout the lifetime of the Sub-project.
Waste		**Relevancy/Implications for the Sub-project**
Regulation on Waste Management	OG. No. 29314 dated 02 April 2015	It is the main regulation regarding the wastes that will occur as a result of all activities to be carried out throughout the lifetime of the Sub-project.
Regulation on Management of Waste Electrical and Electronic Equipment	OG. No. 32055 dated 26 December 2022	It is the regulation on electrical and electronic equipment waste as a result of activities to be carried out throughout the lifetime of the Sub-project.
Regulation on the Control of Excavation Soil, Construction and Demolition Wastes	OG. No. 25406 dated 18 March 2004 (Last amendment on 9 October 2021 with Amended with OG. No. 31623)	It is the regulation that is subject to activities that will cause generation of excavation soil, construction and demolition wastes during especially the construction phase of the Sub-project.
Regulation on Control of Packaging Waste	OG. No. 31523 dated 26 June 2021	It is the regulation on packaging waste that will occur as a result of activities that can be carried out throughout the lifetime of the Sub-project.
Medical Waste Control Regulation	OG. No. 29959 dated 25 January 2017	It is the regulation on the generation of medical waste as a result of first aid treatment throughout the lifetime of the Sub-project.
Regulation on the Control of Waste Batteries and Accumulators	OG. No. 25569 dated 31 August 2004	It is the regulation on battery and accumulator wastes that may occur as a result of office or vehicle use throughout the lifetime of the Sub-project.
Regulation on the Management of Waste Oils	OG. No. 30985 dated 21 December 2019 (Last amendment on 12 January 2023 with OG. No. 32071)	It is the regulation on waste oils that may occur as a result of vehicle/equipment maintenance throughout the lifetime of the Sub-project.
Regulation on Control of Waste Vegetable Oil	OG. No. 29378 dated 06 June 2015	It is the regulation on waste vegetable oils that may occur as a result of cooking in the cafeteria, if available.
Regulation on the Control of End-of-life Tires	OG. No. 26357 dated 25 November 2006	It is the regulation on waste oils that may occur as a result of vehicle/equipment maintenance during especially the construction phase of the Sub-project.
Communiqué on the Transport of Wastes by Road	OG. No. 29301 dated 20 March 2015	It is a communiqué including the provisions regarding the transportation of wastes that will be generated as a result of all activities to be carried out throughout the lifetime of the Sub-project.

National Environmental, Legal and Political Framework		
Zero Waste Regulation	OG. No. 30829 dated 12 July 2019 (Last amendment on 9 October 2021 with Amended with OG. No. 31623)	It is the regulation on the zero-waste management system that aims to protect the environment and human health and all resources regarding the wastes that will be generated as a result of all activities to be carried out throughout the lifetime of the Sub-project.
National Social Legal and Policy Framework		
Community Health and Safety		**Relevancy/Implications for the Sub-project**
Public Health Law	Law No: 1593; OG. No:1489 dated 6 May 1930	It is the law that expresses the whole of the measures required for a healthy life. It is related to the protection of public health in the project cycle process.
Law on Disabled People	Law No: 5378; OG. No:25868 dated 7 July 2005	It is the law that will ensure that the necessary arrangements are made to promote and ensure the enjoyment of fundamental rights and freedoms by persons with disabilities, to ensure their full and effective participation in equal conditions and to take measures to prevent disability.
Regulation on Special Educational Services	OG. No: 30471 dated 7 July 2018	It is a regulation to ensure that individuals with special educational needs benefit from their educational rights.
Regulation on Health and Safety Signs	OG. No. 28762 dated 11 September 2013	Regulation specifying the minimum requirements for the application of health and safety signs to be used at workplaces.
Highway Traffic Regulations	OG. No 23053 dated 18 July 1997	It is the regulation that ensures traffic order and safety on motorways.
Labour and Working Conditions		**Relevancy/Implications for the Sub-project**
Law on Occupational Health and Safety	Law No 6331; OG. No. 28339 dated 30 June 2012	It is the main law that regulates the duties, authorities, responsibilities, rights and obligations of employers and employees to ensure occupational health and safety at workplaces and to improve existing health and safety conditions throughout the lifetime of the Sub-project. It is the regulation that regulates the minimum occupational health and safety conditions to be taken in construction works during the construction phase of the Sub-project.
Regulation on Occupational Health and Safety in Construction Works	OG. No. 28786 dated 05 October 2013	The minimum occupational health and safety conditions that should be taken during the construction works of the Sub-project during his lifetime.
Regulation on Emergencies in Workplaces	OG. No. 28681 dated 18 June 2013	For the lifetime of the Sub-project, it is the regulation that regulates the procedures and principles regarding the preparation of emergency responses plans, prevention, protection, evacuation, firefighting, first aid and similar, as well as the safe management of these situations and the determination of the employees to be assigned in these subjects.
Regulation on First Aid	OG. No. 29429 dated 29 July 2015	For the lifetime of the Sub-project; it is the regulation that regulates the procedures and principles regarding increasing the basic health information of individuals and the society, teaching first aid knowledge and skills to the public, having first aiders according to the number of personnel in all public and private institutions/organizations and reducing the risk of death and disability due to accidents, in this respect, the training of first aid trainers, first aid trainers and first aiders, and the opening, operation and inspection of the centres that will organize these trainings.

National Environmental, Legal and Political Framework		
Regulation on the Use of Personal Protective Equipment in Workplaces	OG. No. 28695 dated 02 July 2013	This regulation determines the principles and procedures regarding the characteristics, supply, use and other issues of personal protective equipment to be used in cases where the prevention or sufficient reduction of risks at the workplace cannot be ensured by collective protection based on technical measures or work organization or working methods for the Sub-project during its lifetime.
Regulation on the Procedures and Principles of Occupational Health and Safety Trainings of Employees	OG. No. 28648 dated 15 May 2013	It is the regulation that regulates the procedures and principles of occupational health and safety training to be given to employees throughout the lifetime of the Sub-project.
Regulation on Protection of Employees from Noise-Related Risks	OG. No. 28721 dated 28 July 2013	During the lifetime of the Sub-project, it is the regulation that regulates the minimum requirements for the protection of the employees from the health and safety risks that may occur as a result of exposure to noise, especially the risks related to hearing.
Regulation on Protection of Buildings Against Noise	OG. No. 30082 dated 31 May 2017	With this regulation, the rules to be followed in terms of design, construction, use, maintenance and operation in order to provide good hearing and perception conditions that will minimize the negative effects of noise originating from outside or inside the buildings on the peace and tranquillity, physical and mental health of people to which people will be exposed during the operation and use phases of all kinds of structures, buildings, facilities and businesses are determined for the lifetime of the Sub-project.
Regulation on Protection of Employees from Vibration-Related Risks	OG. No. 28743 dated 22 August 2013	During the lifetime of the Sub-project, it is the regulation that regulates the minimum requirements for the protection of the employees from the health and safety risks that may occur as a result of exposure to vibration.
Regulation on Occupational Health and Safety Risk Assessment	OG. No. 28512 dated 29 December 2012	It is the regulation that regulates the procedures and principles of the risk assessment to be made in terms of occupational health and safety at the Sub-project Area throughout the lifetime of the Sub-project.
Regulation on Disaster and Emergency Response Services	OG. No. 31760 dated 24 February 2022	This regulation plans the capacity needed to respond to disasters and emergencies at national and local levels, ensures that this capacity is delivered to the incident area quickly and effectively and used, determines the duties, responsibilities and planning principles of the main and support solution partners responsible for the coordination of response services and these services, and of the units responsible at the local level for the lifetime of the Sub-project.
Regulation on Fight Against Dust	OG. No. 28812 dated 05 November 2013	It is the regulation that regulates the terms of occupational health and safety against the effects of dust and prevent the risks that may arise from dust throughout the Sub-project.
Regulation on Health and Safety Measures in Working with Chemicals	OG. No. 28733 dated 12 August 2013	This regulation specifies the minimum requirements to protect the health of employees from existing or potential risks arising from the effects of chemical substances found, used or processed in any way and to provide a safe working environment for the Sub-project throughout its lifetime.
Regulation on Health and Safety Measures in Working with Asbestos	OG. No. 28539 dated 25 January 2013	It is the regulation that regulates the procedures and principles of health and safety measures while working

National Environmental, Legal and Political Framework		
		withs asbestos in Sub-project Area, during the lifetime of the Sub-project.
Regulation on Protection of Employees from the Hazards of Explosive Environments	OG. No. 28633 dated 30 April 2013	It is the regulation that regulates the procedures and principles of the protection of the employees from the hazards of the explosive environments in terms of occupational health and safety at the Sub-project Area throughout the lifetime of the Sub-project.
Regulation on General Lighting	OG. No. 28720 dated 27 July 2013	With this regulation, the roles and responsibilities are determined related with the general lighting throughout the Sub-project.
Regulation on Electrical Installers	OG. No. 18129 dated 08 August 1983	It is the regulation that determines training of workers and limits of authority in the construction, maintenance and operation of electrical installations for the Sub-project throughout its lifetime.
Regulation on Health and Safety Measures in Working with Displayed Tools	OG. No. 28620 dated 16 April 2013	The procedures and principles regarding the minimum health and safety measures to be taken in working with screened vehicles throughout the Sub-project life are determined by this regulation.
Regulation on Groundings in Electrical Facilities	OG. No. 24500 dated 21 August 2001	This regulation covers the provisions regarding the establishment, operation, inspection and safe performance of the grounding facilities for electrical installations in terms of life and property safety for the Sub-project during its lifetime.
Regulation on Equipment and Protective Systems Used in Possible Explosive Environment	OG. No. 29758 dated 30 June 2016	This regulation determines the basic health and safety rules required for the safe placing on the market of equipment and protective systems used in potentially explosive environments, as well as the procedures and principles regarding conformity assessment procedures and market surveillance and inspection for the Sub-project.
Regulation on Machinery Protectors	OG. No. 18050 dated 17 May 1983	This regulation states the necessary safety protectors for the equipment that will be used that will be used during the lifetime of the Sub-project.
Regulation on Machinery Safety	OG. No. 27158 dated 03 March 2009	It is the regulation that regulates the minimum conditions to be complied with in terms of safety regarding the use of machinery in the Sub-project Area throughout the lifetime of the Sub-project.
Regulation on Health and Safety Requirements for the Use of Work Equipment	OG. No. 28628 dated 25 April 2013	It is the regulation that regulates the minimum conditions to be complied with in terms of health and safety regarding the use of work equipment in the Sub-project Area throughout the lifetime of the Sub-project.
Regulation on Fire Protection of Buildings	OG. No. 26735 dated 19 December 2007	Throughout the lifetime of the Sub-project, it is the regulation that regulates the procedures and principles of organization, training and supervision, the measures to be taken before and during the fire in order to minimize the fires that may occur during the design, construction, operation, maintenance and use phases of all kinds of structures, buildings, facilities and businesses used, and to extinguish any fire that may occur in any way by minimizing the loss of life and property.
Regulation on Occupational Health and Safety Committees	OG. No. 28532 dated 18 January 2013	This regulation determines, in which workplaces occupational health and safety committees will be established, their formation, duties and authorities, working procedures and principles, and methods of coordination and cooperation between committees in the event that there is more than one committee.

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Regulation on Occupational Health and Safety Services	OG. No. 28512 dated 29 December 2012	With this regulation, the establishment of workplace health and safety units to be established to carry out occupational health and safety services, the authorization of joint health and safety units, the cancellation of their authorization certificates, their duties, authorities and responsibilities, and their working procedures and principles had been determined for the Sub-project area during the lifetime of the Sub-project.
Regulation on Contractors and Sub-contractors	OG. No. 27010 dated 27 September 2008	It is the regulation that regulates the conditions for the establishment of the main contractor-subcontractor relationship, the notification and registration of the workplace belonging to the subcontractor, and the issues that should be included in the subcontractor agreement during the lifetime of the Sub-project.
Regulation on Duties, Authorities, Responsibilities and Training of Occupational Safety Experts	OG. No. 28512 dated 29 December 2012	This regulation determines the qualifications, training and certification, duties, authorities and responsibilities and working procedures and principles of occupational safety experts working in occupational health and safety services that will be taken during the lifetime of the Sub-project.
Regulation on Occupational Hygiene Measurement, Test, and Analysis Laboratories	OG. No. 32086 dated 27 January 2023	Throughout the lifetime of the Sub-project at the Sub-project Area, it is the regulation that regulates the obligations regarding occupational hygiene measurements, tests and analyses related to physical, chemical, and biological factors for personal exposure and working environment, and the procedures and principles regarding authorization, certification and inspection of laboratories that will carry out these operations.
Regulation on Occupational Health and Safety in Temporary or Limited Period Work	OG. No. 28744 dated 23 August 2013	This regulation ensures that employees working with temporary or fixed-term employment contracts receive the same level of protection as other employees in the workplace in terms of health and safety for the lifetime of the Sub-project.
Regulation on Manual Handling Works	OG. No. 28717 dated 24 July 2013	It is the regulation that regulates the minimum conditions to be complied with in terms of safety regarding manual handling in the Sub-project Area throughout the lifetime of the Sub-project.
Regulation on Health and Safety Signs	OG. No. 28762 dated 11 September 2013	It is the regulation that regulates the minimum requirements for the application of health and safety signs to be used at the Sub-project Area throughout the lifetime of the Sub-project.
Regulation on Stopping Work in Workplaces	OG. No. 28603 dated 30 March 2013	This regulation regulates the issues of stopping work in a part or all of the workplace until this danger is eliminated and allowing work to resume in the workplace where a decision to stop has been made in accordance with this regulation, in cases where a matter posing a life-threatening risk to employees is detected in the working methods and methods or work equipment, or in workplaces construction works in the very dangerous class, or where work involving hazardous chemicals is carried out, or where major industrial accidents may occur. This regulation is relevant for the project during its lifetime.
Regulation on Preparation, Completing and Cleaning Works	OG. No. 25446 dated 28 April 2004	This regulation determines the working conditions for the preparation, completion and cleaning works that are required to be carried out in order to continue the main work carried out in a workplace in an orderly, healthy and safe manner throughout the life of the Sub-project.
Labour Law	Law No. 4857; OG. No. 25134 dated 10 June	It is the main law that regulates the rights and responsibilities of the workers employed based on the

National Environmental, Legal and Political Framework		
	2003 (Last amendment on 28 December 2022 with Amended Law No. 7429)	labour contract with the employers, regarding the working conditions and working environment during the lifetime of the Sub-project.
Law on Trade Unions and Collective Bargaining Agreements	Law No. 6356; OG. No. 28460 dated 7 November 2012	For the lifetime of the Sub-project, it is the law that regulates the procedures and principles related to the establishment, management, functioning, supervision, working and organization of workers' and employers' unions and confederations, making collective bargaining agreements to determine mutual economic and social situations and working conditions of workers and employers, to settle disputes by peaceful means, to resort to strikes and lockouts.
Stakeholder Engagement		**Relevancy/Implications for the Sub-project**
Law on Right to Information	Law No. 4982; OG. No. 25269 dated 24 October 2003	It is the law the exercise of the right to information by individuals as a requirement of democratic and transparent governance.
Social and Economic Rights and Responsibilities		**Relevancy/Implications for the Sub-project**
Expropriation Law	Law No. 2942; OG. No. 18215 dated 8 November 1983 (Last amendment on 26 November 2022 with Amended Law No.7421)	The purpose of laws on land acquisition/expropriation is to provide the framework for the State's right to exercise eminent domain and acquire property for public use.
Municipal Law	Law No. 5393; OG. No. 25874 dated 13 July 2005 (Last amendment on 5 April 2023 with Amended Law No.7446)	
Zoning Law	Law No. 3194; OG. No. 18749 dated 9 May 1985 (Last amendment on 26 November 2022 with Amended Law No.7421)	
International Standards Framework		**Relevancy/Implications for the Sub-project**
WB ESF, 2018 and the ESSs forming part of the ESF		The ESF was approved by the Board of Executive Directors on August 4, 2016. It consists of a Vision for Sustainable Development; ten ESSs, which set out the requirements that apply to Borrowers; an Environmental and Social Policy for Investment Project Financing (IPF), which sets out the requirements that apply to the Bank; and an Environmental and Social Directive/Procedure for IPF and a Directive on Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups. It applies to all IPF projects initiated on or after October 1, 2018.
WB Group General EHSGs 2007		The General EHSGs contain information on cross-cutting environmental, health, and safety issues potentially applicable to the Sub-project.

APPENDIX-G
E&S Incident Notification Form Template

1) Incident Details		
Date of Incident: [*Please indicate*]	**Time of Incident:** [*Please indicate*]	
Location of the Incident:	[*Please indicate*]	
Full Name of Sub-borrower:	[*Please indicate*]	
Date Reported to ILBANK: [*Please indicate*]	**Reported to ILBANK by**: [*Please indicate]*	**Notification Type**: [*Please indicate; e-mail/phone call/media notice/other]*
Date Reported to WB: [*Please indicate*]	**Reported to WB by**: [*Please indicate]*	**Notification Type**: [*Please indicate; e-mail/phone call/media notice/other]*
Full Name of the Contractor of the Subproject:	[*Please indicate]*	
Full Name of the Sub-contractor involved in the incident:	[*Please indicate]*	

2) Type of incident (please check all that apply)[24]	
☐ Fatality ☐ Lost time injury ☐ Displacement without due process ☐ Child labor ☐ Forced labor ☐ Disease outbreaks	☐ Acts of violence/protest ☐ Unexpected impacts on heritage resources ☐ Unexpected impacts on biodiversity resources ☐ Environmental pollution incident ☐ Dam failure ☐ Other

3) Description/Narrative of Incident

For example:

I. *What is the incident?* [*Please briefly describe*]

II. *What were the conditions or circumstances under which the incident occurred (if known)?* [*Please briefly describe*]

III. *Are the basic facts of the incident clear and uncontested, or are there conflicting versions? What are those versions?* [*Please briefly describe*]

IV. *Is the incident still ongoing or is it contained?* [*Please briefly describe*]

V. *Have any relevant authorities been informed?* [*Please briefly describe*]

4) Actions taken to contain the incident

[24] See Appendix 2 for definitions.

Short Description of Action	Responsible Party	Expected Date	Status

For incidents involving a Contractor:

Name of Contractor:
Have the works been suspended? Yes ☐ No ☐
Note: Please attach a copy of the instruction suspending the works

5) What support has been provided to affected people

[*Please briefly describe*]

APPENDICES

Appendix 1: Supporting documents

[Note: Please mark the relevant documents available at this stage and submit them attached to the report]:

☐ Copy of the social security registration records of the victims and involved persons
☐ Copy of the instruction suspending the works
☐ Statement of victims
☐ Statement of witnesses
☐ Copies of notifications done to the relevant authorities
☐ Copies of legal investigation reports of relevant authorities
☐ Copies of E&S training records of the affected and involved persons
☐ Copies of OHS training records of the affected and involved persons
☐ Photographs related to the incident

☐ Others

Appendix 2: Incident Types

The following are incident types to be reported using the environmental and social (E&S) incident response process:

Fatality: Death of a person(s) that occurs within one year of an accident/incident, including from occupational disease/illness (e.g., from exposure to chemicals/toxins).

Lost Time Injury: Injury or occupational disease/illness (e.g., from exposure to chemicals/toxins) that results in a worker requiring 3 or more days off work, or an injury or release of substance (e.g., chemicals/toxins) that results in a member of the community needing medical treatment.

Acts of Violence/Protest: Any intentional use of physical force, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, deprivation to workers or project beneficiaries, or negatively affects the safe operation of a project worksite.

Disease Outbreaks: The occurrence of a disease in excess of normal expectancy of number of cases. Disease may be communicable or may be the result of unknown etiology.

Displacement Without Due Process: The permanent or temporary displacement against the will of individuals, families, and/or communities from the homes and/or land which they occupy without the provision of, and access to, appropriate forms of legal and other protection and/or in a manner that does not comply with an approved resettlement action plan.

Child Labor: An incident of child labor occurs: (i) when a child under the age of 14 (or a higher age for employment specified by national law) is employed or engaged in connection with a project, and/or (ii) when a child over the minimum age specified in (i) and under the age of 18 is employed or engaged in connection with a project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral or social development.

Forced Labor: An incident of forced labor occurs when any work or service not voluntarily performed is exacted from an individual under threat of force or penalty in connection with a project, including any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. This also includes incidents when trafficked persons are employed in connection with a project.

Unexpected Impacts on heritage resources: An impact that occurs to a legally protected and/or internationally recognized area of cultural heritage or archaeological value, including world heritage sites or nationally protected areas not foreseen or predicted as part of project design or the environmental or social assessment.

Unexpected impacts on biodiversity resources: An impact that occurs to a legally protected and/or internationally recognized area of high biodiversity value, to a Critical Habitat, or to a Critically Endangered or Endangered species (as listed in IUCN Red List of threatened species or equivalent national approaches) that was not foreseen or predicted as part of the project design or the environmental and social assessment. This includes poaching or trafficking of Critically Endangered or Endangered species.

Environmental pollution incident: Exceedances of emission standards to land, water, or air (e.g., from chemicals/toxins) that have persisted for more than 24 hours or have resulted in harm to the environment.

Dam failure: A sudden, rapid, and uncontrolled release of impounded water or material through overtopping or breakthrough of dam structures.

Other: Any other incident or accident that may have a significant adverse effect on the environment, the affected communities, the public, or the workers, irrespective of whether harm had occurred on that occasion. Any repeated non-compliance or recurrent minor incidents which suggest systematic failures that the task team deems needing the attention of Bank management.

APPENDIX-H
E&S Incident Investigation Form Template

1) Investigation Findings
For example: I. *where and when the incident took place,* II. *who was involved, and how many people/households were affected,* III. *what happened and what conditions and actions influenced the incident,* IV. *what were the expected working procedures and were they followed,* V. *did the organization or arrangement of the work influence the incident,* VI. *were there adequate training/competent persons for the job, and was necessary and suitable equipment available,* VII. *what were the underlying causes; where there any absent risk control measures or any system failures.*

2) Corrective Actions from the investigation to be implemented (to be fully described in Corrective Action Plan)		
Action	**Responsible Party**	**Expected Date**

3a) Fatality/Lost Time Injury Information
Fatality ☐ **Lost time injury ☐**
Immediate cause of fatality/injury for worker or member of the public (please check all that apply) [25]**:** ☐ Caught in or between objects ☐ Struck by falling objects ☐ Stepping on, striking against, or struck by objects ☐ Drowning ☐ Chemical, biochemical, material exposure ☐ Falls, trips, slips ☐ Fire & explosion ☐ Electrocution ☐ Homicide ☐ Medical Issue ☐ Suicide ☐ Project Vehicle Work Travel ☐ Non-project Vehicle Work Travel ☐ Project Vehicle Commuting ☐ Non-project Vehicle Commuting ☐ Vehicle Traffic Accident (Members of Public Only) ☐ Other

Name	**Age/ Date of Birth**	**Nationality**	**Gender**	**Date of Fatality/ Injury**	**Cause of Fatality/ Injury**	**Affected Party (Employee/ Public)**
			☐ Female ☐ Male			☐ Sub-borrower employee ☐ Contractor employee

[25] See Appendix 1 for definitions

						☐ Sub-contractor employee ☐ Public

3b) Financial Support/Compensation Types (to be fully described in Corrective Action Plan template – template is given in Appendix 3)

☐ No Compensation Required
☐ Workman's Compensation/National Insurance
☐ Contractor Direct
☐ Contractor Insurance
☐ Other
☐ Court Determined Judicial Process

Name	Compensation Type	Compensation Amount (TRY)	Responsible Party

4) Supplementary Narrative

Appendix 1: Definition of fatality/injury immediate causes

1. **Caught in or between objects:** caught in an object; caught between a stationary object and moving object; caught between moving objects (except flying or falling objects).
2. Struck by falling objects: slides and cave-ins (earth, rocks, stones, snow, etc.); collapse (buildings, walls, scaffolds, ladders, etc.); struck by falling objects during handling; struck by falling objects.
3. Stepping on, striking against, or struck by objects: stepping on objects; striking against stationary objects (except impacts due to a previous fall); Striking against moving

objects; Struck by moving objects (including flying fragments and particles) excluding falling objects.
4. Drowning: respiratory impartment from submersion/emersion in liquid.
5. Chemical, biochemical, material exposure: exposure to or contact with harmful substances or radiations.
6. Falls, trips, slips: falls of persons from heights (e.g., trees, buildings, scaffolds, ladders, etc.) and into depths (e.g., wells, ditches, excavations, holes, etc.) or falls of persons on the same level.
7. Fire & explosion: exposure to or contact with fires or explosions.
8. Electrocution: exposure to or contact with electric current.
9. Homicide: a killing of one human being by another.
10. Medical Issue: a bodily disorder or chronic disease.
11. Suicide: the act or an instance of taking, or attempting to take, one's own life voluntarily and intentionally.
12. Others: any other cause that resulted in a fatality or injury to workers or members of the public.

Vehicle Traffic
13. Project Vehicle Work Travel: traffic accidents in which project workers, using project vehicles, are involved during working hours and which occur in the course of paid work.
14. Non-project Vehicle Work Travel: traffic accidents in which project workers, using non-project vehicles, are involved during working hours and which occur in the course of paid work.
15. Project Vehicle Commuting: traffic accidents in which project workers, using project vehicles, are involved while travelling to (i) the worker's principal or secondary residence; (ii) the place where the worker usually takes his or her meals; or (iii) the place where he or she usually receives his or her remuneration.
16. Non-project Vehicle Commuting: traffic accidents in which project workers, using non-project vehicles, are involved while travelling to (i) the worker's principal or secondary residence; (ii) the place where the worker usually takes his or her meals; or (iii) the place where he or she usually receives his or her remuneration.
17. Vehicle Traffic Accident (Members of Public Only): traffic accidents in which non-project workers/members of the public are involved in an accident while travelling for any purpose.

Appendix 2: Supporting documents

[Note: Please mark the relevant documents available and submit them attached to the report]:

☐ Copy of the social security registration records of the victims and involved persons
☐ Copy of the instruction suspending the works
☐ Statement of victims
☐ Statement of witnesses
☐ Copies of notifications done to the relevant authorities
☐ Copies of legal investigation reports of relevant authorities
☐ Copies of E&S training records of the affected and involved persons
☐ Copies of OHS training records of the affected and involved persons (such as basic OHS training, induction training, visitors training, job-specific training, refreshment training, etc.)
☐ Photographs related to the incident
☐ Health examination records of the affected and involved employees
☐ Copies of Personal Protective Equipment delivery forms (signed copies)
☐ Root Cause Analysis completed for the incident
☐ Information/documentation related to any judicial process
☐ Others

Appendix 3: Corrective Action Plan template							
Action No:	**Brief Description of E&S non-compliance**	**Corrective Action**	**Financial and Human Resources Required**	**Responsible Party**	**Due Date for Completion of Corrective Action**	**Indicators for Successful Completion of Corrective Action**	**Status of Corrective Action**

APPENDIX-I
Change Notification Form

Change Notification Form		
Subproject Name		
Subproject Location		
Subproject Phase	☐	Pre-construction
	☐	Construction
	☐	Operation
Name of the Institution Notifying the Change		
Date		
Category of the Change *(please select all that apply)*	☐	Legislative Change
	☐	Design Change
	☐	Schedule Change due to E&S factors
	☐	Project Schedule Changes due to technical, financial, legal or administrative factors
	☐	Changes due to E&S issues encountered at

Change Notification Form	
	Subproject implementation
	☐ Contractor or Construction Supervision Consultant Change
	☐ Other *(please specify below)*
Detailed Description of the Change(s)	
Documents Submitted with Change Notification Form	
Name of the Staff Notifying the Change	
Position of the Staff Notifying the Change	
Signature	

APPENDIX-J Official Letters

Kurumun Kayıt Tarihi ve Sayısı: 13.12.2024-2335697

T.C.
İZMİR VALİLİĞİ
Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü

İVEDİ

Sayı : E-48657465-220.03-11210657 — 13.12.2024

Konu : ÇED Görüşü(Ege Mahallesi Köprülü Kavşak İnşaatı Projesine Ait Fizibilite, Çevresel Etki Tarama, Çevresel Sosyal Yönetim Planı ve Kredi Değerliliği Raporlarının Hazırlanması İşi)

İZMİR BÜYÜKŞEHİR BELEDİYE BAŞKANLIĞINA
(Ulaşım Planlama Şube Müdürlüğü)

İlgi : a) 21.11.2024 tarihli ve 78461167-604.01.01.01-E.2228632 sayılı yazımız.
b) 29.11.2024 tarihli ve E-48657465-220.99-11076944 sayılı yazımız.
c) Bakanlığımız Çevresel Etki Değerlendirmesi, İzin ve Denetim Genel Müdürlüğü'nün 11.12.2024 tarih ve 11177661 sayılı yazısı.

İlgi (a) yazı ile; İzmir ili, Konak İlçesi, Ege Mahallesi sınırları içerisinde İzmir Büyükşehir Belediyesi tarafından yapılması planlanan "Ege Mahallesi Köprülü Kavşak Projesi" ile ilgili olarak ÇED Yönetmeliği kapsamında kurum görüşümüz talep edilmiştir.

İlgi (b) yazı ile konu ile ilgili Bakanlığımız görüşü talep edilmiştir.

İlgi (c) Bakanlığımız yazısında "*yazı ve eklerinin incelenmesi neticesinde; söz konusu Köprülü Kavşak Projesi kapsamında köprü, viyadük, hemzenin yollar ve bunlara ilişkin altyapı inşaatlarının yapılmasının planlandığı anlaşılmakta olup proje için 29.07.2022 tarih ve 31907 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren ÇED Yönetmeliği hükümlerinin uygulanmasına gerek bulunmamaktadır. Diğer yandan, 2872 Sayılı Çevre Kanunu ile bu Kanuna istinaden çıkarılan Yönetmeliklerin ilgili hükümlerine uyulması, ilgili kurum ve kuruluşlardan diğer mer'i mevzuat çerçevesinde öngörülen gerekli onay ve izinlerin alınması, ekolojik dengenin bozulmamasına, çevrenin korunmasına ve geliştirilmesine yönelik tedbirlere riayet edilmesi, proje kapsamında değişiklik planlanması durumunda ise İzmir Valiliğine (Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü) veya Bakanlığımıza başvuru yapılması gerekmektedir.*" denilmektedir.

Söz konusu projeye ait işlemlerin ilgi (c)' deki Bakanlığımız yazısı kapsamında yürütülmesi hususunda;

Bilgilerinizi ve gereğini rica ederim.

Halit ERGİN
Vali a.
Çevre, Şehircilik ve İklim Değişikliği İl Müdürü

Ek: İlgi (c) Bakanlığımız Yazısı (1 Sayfa)

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: FE422499-45D1-4C86-8C7A-67AF47B01FAF — Doğrulama Adresi: https://www.turkiye.gov.tr

Tel : (232) 341 68 00 KEP Adresi : izmircevrevesehircilik@hs01.kep.tr
Fax : (232) 503 93 93 Adalet Mah. Anadolu Cad. No : 41/2 Bayraklı/İZMİR
E-posta : izmir@csb.gov.tr İnternet Adresi : izmir.csb.gov.tr
KEP Adresi : izmircevrevesehircilik@hs01.kep.tr

Bilgi için:Gürkan ÖKTORVACI
Çevre Yüksek Mühendisi
Telefon No:(232) 341 68 00-2419

T.C.
ÇEVRE, ŞEHİRCİLİK VE İKLİM DEĞİŞİKLİĞİ BAKANLIĞI
Çevresel Etki Değerlendirmesi, İzin ve Denetim Genel Müdürlüğü

Sayı : E-81195450-220.99-11177661 11.12.2024
Konu : Ege Mahallesi Köprülü Kavşak İnşaatı Projesi

İZMİR VALİLİĞİNE
(Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü)

İlgi : 29.11.2024 tarihli ve E-48657465-220.99-11076944 sayılı yazınız.

İlgi yazı ile; İzmir ili, Konak İlçesi, Ege Mahallesi sınırları içerisinde İzmir Büyükşehir Belediyesi tarafından yapılması planlanan "Ege Mahallesi Köprülü Kavşak Projesi" ile ilgili olarak ÇED Yönetmeliği kapsamında Genel Müdürlüğümüz görüşü talep edilmektedir.

İlgi yazı ve eklerinin incelenmesi neticesinde; söz konusu Köprülü Kavşak Projesi kapsamında köprü, viyadük, hemzenin yollar ve bunlara ilişkin altyapı inşaatlarının yapılmasının planlandığı anlaşılmakta olup proje için 29.07.2022 tarih ve 31907 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren ÇED Yönetmeliği hükümlerinin uygulanmasına gerek bulunmamaktadır.

Diğer yandan, 2872 Sayılı Çevre Kanunu ile bu Kanuna istinaden çıkarılan Yönetmeliklerin ilgili hükümlerine uyulması, ilgili kurum ve kuruluşlardan diğer mer'i mevzuat çerçevesinde öngörülen gerekli onay ve izinlerin alınması, ekolojik dengenin bozulmamasına, çevrenin korunmasına ve geliştirilmesine yönelik tedbirlere riayet edilmesi, proje kapsamında değişiklik planlanması durumunda ise İzmir Valiliğine (Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü) veya Bakanlığımıza başvuru yapılması gerekmektedir.

Bilgilerinizi ve gereğini rica ederim.

Fatih EKMEKÇİ
Bakan a.
Çevresel Etki Değerlendirmesi,
İzin ve Denetim Genel Müdürü V.

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: C208C655-8173-4D4A-90CE-1CE14DA4C26D Doğrulama Adresi: https://www.turkiye.gov.tr

Mustafa Kemal Mahallesi 2082. Cadde No:52 Çankaya / Ankara
Telefon No: (0312) 410 10 00 Faks:(0312) 419 21 92
KEP Adresi : cevrevesehircilikbakanligi@hs01.kep.tr

Bilgi için:Mesut AYYILDIZ
Şehir Plancısı
Telefon No:(312) 410 17 49

Evrak Tarih ve Sayısı: 26.12.2024-2357070

T.C.
İZMİR BÜYÜKŞEHİR BELEDİYE BAŞKANLIĞI
Emlak Yönetimi Dairesi Başkanlığı

Sayı : E-19606469-756.99-2357070
Konu : Konak İlçesi , Ege Mahallesi, 2939 ada 183 parsel, 1387 ada 5 parsel ve 3369 ada 80 parsel Hk

26.12.2024

(DSİ 2. BÖLGE MÜDÜRLÜĞÜ)
DEVLET SU İŞLERİ 2. BÖLGE MÜDÜRLÜĞÜ
KAZIM DİRİK MAHALLESİ
SANAYİ CADDESİ NO:39 35100
BORNOVA/İZMİR

Finansmanı Dünya Bankası tarafından sağlanan ve İller Bankası tarafından yürütülmekte olan İklim ve Afete Dayanıklı Şehirler Projesi (CDRC) kapsamına dâhil edilen projemiz ile ilgili olarak, fizibilite raporları, etüt çalışmaları, çevre ve sosyal dokümanlar vb. hazırlık dokümanları ile Belediyemiz kredibilite analizinin ivedilikle hazırlanarak taraflarına iletilmesi talep edilmiştir.

Konak ilçesi "Ege Mahallesi Köprülü Kavşak İnşaatı Projesine Ait Fizibilite, Çevresel Etki Tarama, Çevresel Sosyal Yönetim Planı ve Kredi Değerliliği Raporlarının Hazırlanması İşi" 'ne yönelik çalışmalara başlanmış olup Envesu Çevre Enerji İnşaat ve Müş. A.Ş. ile 23/08/2024 tarihinde sözleşme imzalanmıştır.

Bahse konu iş kapsamında yer alan Ege Mahallesi Köprülü Kavşak İnşaatı için yazımız eki projede belirtilen taşınmazların mülkiyetlerinin Devlet Su İşleri'ne ait Konak 2939 ada 183 parsel, 1387 ada 5 parsel ve 3369 ada 80 parsellere isabet ettiği tespit edilmiştir.

Bu kapsamda, yukarıda bahsi geçen proje dahilinde yer alan mülkiyeti İdarenize ait Konak İlçesi, Ege Mahallesi, 2939 ada 183 parsel, 1387 ada 5 parsel ve 3369 ada 80 parselde kayıtlı taşınmazların 5216 Sayılı Büyükşehir Belediyesi Kanununun 7 maddesinin (f) bendi gereğince Belediyemize tahsis edilmesi hususunda gereğini rica ederim.

İsmail MUTAF
Büyükşehir Belediye Başkanı a.
Genel Sekreter Yardımcısı

Ek :
1- Tapu Kayıt Örnekleri (6 Sayfa)
2- Kroki (1 Sayfa)
3- proje (1)

Bu belge, güvenli elektronik imza ile imzalanmıştır

Belge Doğrulama Kodu :*BSFY6M212P* Pin Kodu: 83642 — Belge Takip Adresi : https://www.turkiye.gov.tr/izmir-ebys

İlgili Birim	: Emlak Şube Müdürlüğü			Bilgi İçin	: Burcu COŞKUN
Adres	: MİMAR SİNAN MAHALLESİ KÜLTÜRPARK 1 NOLU HOL 9/52 BASMANE İZMİR			Unvan	: Tekniker
Birim Telefon	: 0232293200	Birim Faks	: 0232293995	Telefon	: 2322931838
Elektronik Ağ	: www.izmir.bel.tr	E-Posta	: tasinmazlamd@izmir.bel.tr	Kep	: izmirbuyuksehirbelediyesi@hs01.kep.tr

1 / 1

T.C.
İZMİR BÜYÜKŞEHİR BELEDİYE BAŞKANLIĞI
Ulaşım Dairesi Başkanlığı

Sayı : 78461167-604.99-E.305416 16.12.2019
Konu : Mürselpaşa Caddesi - Zafer Payzın Köprülü Kavşağı Arası Büyük Sanat Yapıları

KARAYOLLARI 2. BÖLGE MÜDÜRLÜĞÜNE

İlgi : a) 28.10.2019 tarih ve 291494 sayılı yazınız.
b) 22.10.1999 tarih ve B091TCK1020100.118 sayılı yazınız.

İlgi (a) yazınızda; Mürselpaşa Caddesi-Zafer Payzın Köprülü Kavşakları arasında kalan bölgedeki, İkiztepe-Konak-Halkapınar kesiminden Mürselpaşa Caddesine devam eden kesime ait sayısal verilerin iletildiği bildirilmiş olup, yazı eki projeler incelendiğinde talebimize ait 2 adet köprü projesinin bulunduğu görülmüş, tüm yapılara ait diğer projelerin bulunmadığı tespit edilmiştir. Ayrıca, yazı ekinde tarafımıza iletilen diğer projelerin bahsi geçen güzergahta bulunmadığı görülmüştür.

İlgi (b) yazınızda; Genel Müdürlüğünüzün 13/09/1999 tarih ve B091TCK01001/11-118/Gn-1747 sayılı yazısıyla, Eski adıyla Bayındırlık ve İskan Bakanlığı 'nın 09/08/1999 tarih ve 1999/32 sayılı kararı ile 300-01 K.K.Nolu yolda ağ değişikliği yapıldığı bilgisi verilmiştir. Bahsi geçen güzergah Mürselpaşa Caddesi-Zafer Payzın Köprülü Kavşaklarını kapsamaktadır. Devir ile ilgili yazı incelendiğinde tarafımıza herhangi bir teknik dosyanın gönderilmediği görülmektedir.

Devir işlemleri sırasında, yapıların işletme süresince bakım-onarım çalışmalarının ekonomik, hızlı ve tutarlı biçimde yapılabilmesinde, imalat ve işletme süresince tutulan kayıtlar önem arz etmektedir.

İzmir Büyükşehir Belediyesi Alanı Kent İçi ve Yakın Çevre Ulaşım Ana Planı Revizyonu işinde, Mürselpaşa Caddesi-Zafer Payzın Köprülü Kavşakları arasındaki mevcut sanat yapılarının yapısal performanslarının incelemesi ve yeni trafik düzenlemeleri yapılması kapsamında ek sanat yapıları yapılarak günümüz trafik taleplerinin karşılanması planlanmıştır. Planlama sebebiyle "Mürselpaşa Caddesi – Zafer Payzın Köprülü Kavşağı Arası Karayolu, Bağlantı Yolları ve Büyük Sanat Yapıları Uygulama ve Güçlendirme Projelerinin Danışmanlık Hizmet Alımı" işi ihale edilmiş ve sözleşmesi 07.08.2019 tarihinde imzalanmıştır.

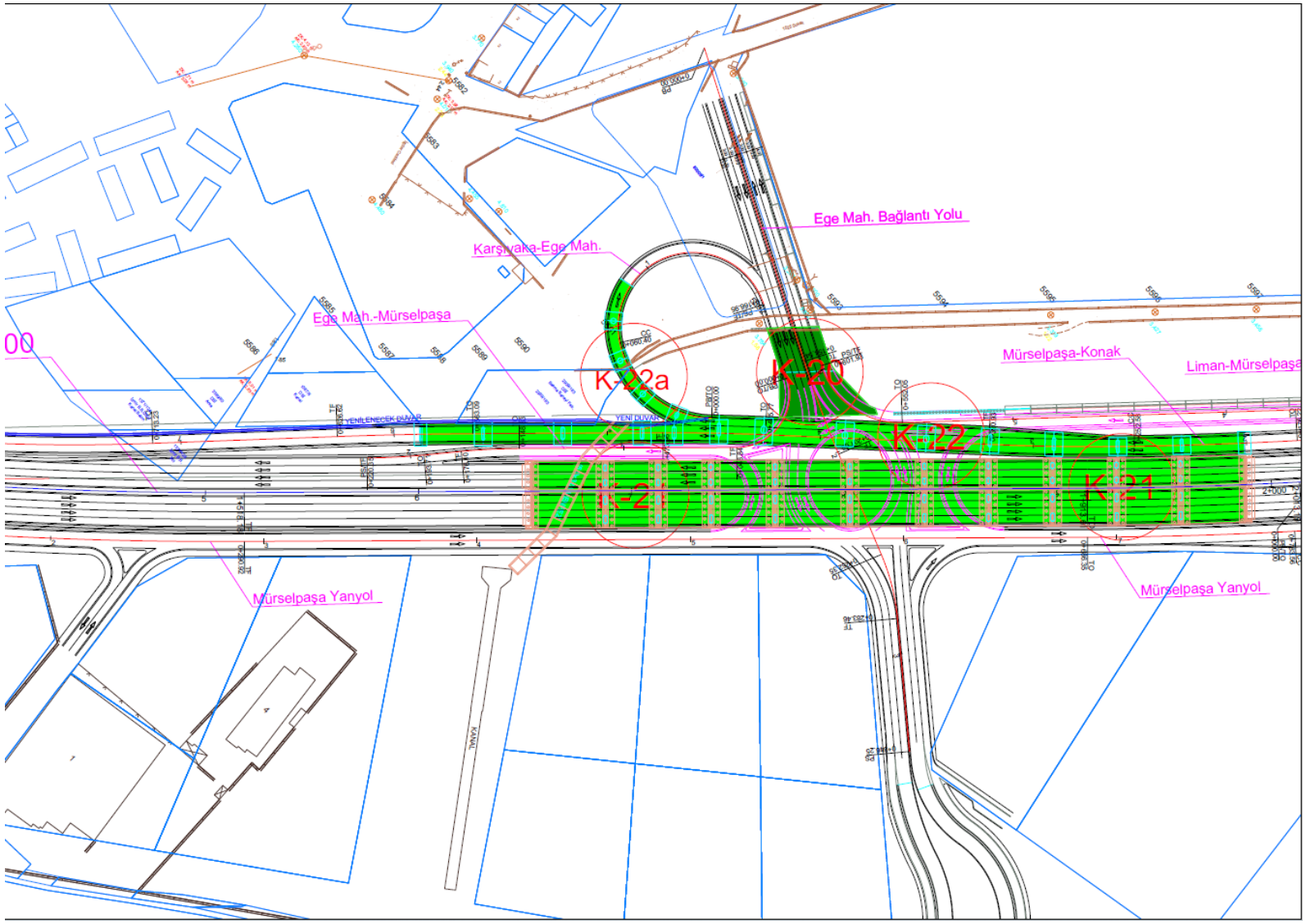
İş kapsamında; mevcut yapılar için yapılacak yapısal analizlerde kullanılmak üzere yapıların imalat sonrası hazırlanan onaylı nihai projelerine, inşaa aşamasında şantiyede tutulan şantiye defteri gibi teknik dökümanlara ihtiyaç duyulmaktadır. Ayrıca; bahsi geçen köprülü kavşakların tarafınızca işletildiği süreç içinde, varsa yapılan bakım onarım çalışmalarına ait kayıtlarında paylaşılması hususunda bilgilerinizi ve gereğini rica ederim.

E-İmzalıdır
Eser ATAK
Belediye Başkanı a.
Genel Sekreter Yardımcısı

Ek :
1- 28.10.2019 tarih ve 291494 sayılı yazınız. (1 sayfa)
2- 22.10.1999 tarih ve B091TCK1020100.118 sayılı yazınız. (3 sayfa)

İlgili Birim : Ulaşım Planlama Şube Müdürlüğü
Adres : Cumhuriyet Bulvarı No:1 Konak PK:35250 İZMİR
Birim Telefon : **Birim Faks** :
Elektronik Ağ : www.izmir.bel.tr **E-Posta** : ulasimplanlama@izmir.bel.tr
Bilgi İçin : Nurettin PELEN
Unvan : Mühendis
Telefon : 2322933334
Kep : izmirbuyuksehirbelediye@hs01.kep.tr

APPENDIX-K Property Boundary Layout Plan



APPENDIX-L Title Deeds

BU BELGE TOPLAM 3 SAYFADAN OLUŞMAKTADIR BİLGİ AMAÇLIDIR. Tarih: 26-4-2024-11:38

webtapu tapunun kısayolu

Kaydı Oluşturan: ÖZGÜR KARTAV (İzmir Büyükşehir Belediye Başkanlığı)

Tapu Kaydı (Hepsi)

TAPU KAYIT BİLGİSİ

Zemin Tipi:	AnaTasinmaz
Taşınmaz Kimlik No:	89602221
İl/İlçe:	İZMİR/KONAK
Kurum Adı:	Konak
Mahalle/Köy Adı:	KURUÇAY Mah.
Mevkii:	1517
Cilt/Sayfa No:	14/1361
Kayıt Durum:	Aktif

Ada/Parsel:	1371/124
AT Yüzölçüm(m2):	1032.00
Bağımsız Bölüm Nitelik:	
Bağımsız Bölüm Brüt YüzÖlçümü:	
Bağımsız Bölüm Net YüzÖlçümü:	
Blok/Kat/Giriş/BBNo:	
Arsa Pay/Payda:	
Ana Taşınmaz Nitelik:	Kanal Beton

TAŞINMAZA AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

Ş/B/İ	Açıklama	Malik/Lehtar	Tesis Kurum Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
Beyan	Kentsel Dönüşüm Ve Gelişim Projesi Sınırları İçinde Kalmaktadır.(Şablon: Kentsel Dönüşüm Ve Gelişim Projesi Alanında Kalan Taşınmazlara Tesis Edilecek Beyan)		Konak - 22-03-2013 18:41 - 5933	
Beyan	BU PARSELE 77 PARSEL 203.30 M² TECAVÜZ ETMİŞTİR.19/04/1966 Y:1675(Şablon: Tecavüzlü Binaların Belirtilmesi)		Konak 5.Bölge (Kapatildi) -	

			19-04-1966 00:00 - 1675	

MÜLKİYET BİLGİLERİ

(Hisse) Sistem No	Malik	El Birliği No	Hisse Pay/Payda	Metrekare	Toplam Metrekare	Edinme Sebebi-Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
~~306683165~~	~~(SN:46316534) ABDULLAH NEVRES GÖKÇE : HİLMİ HİLMİ Oğlu KN:31495886756~~	~~-~~	~~1/1~~	~~1032.00~~	~~1032.00~~	~~İfraz İşlemi (TSM) 29-06-2015 16297~~	~~Kamulaştırma 29.06.2015 16299~~
306684674	(SN:8160133) İZMİR BÜYÜKŞEHİR BELEDİYESİ İZSU GENEL MÜDÜRLÜĞÜ VKN:4840008262	-	1/1	1032.00	1032.00	Kamulaştırma 29-06-2015 16299	-

MÜLKİYETE AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

Ş/B/İ	Açıklama	Kısıtlı Malik (Hisse) Ad Soyad	Malik/Lehtar	Tesis Kurum Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
~~Beyan~~	~~6830 SAYILI KANUNUN 32. MADDESİ GEREĞİNCE ŞERH 06/06/1970 T. 3691 YEV.~~	~~ABDULLAH NEVRES GÖKÇE~~	~~(SN:2859087) İZMİR BÜYÜKŞEHİR BELEDİYESİ VKN:4840008254~~	~~Konak 5.Bölge (Kapatildi) - 06-06-1970 00:00 - 3691~~	

Bu belgeyi akıllı telefonunuzdan karekod tarama programları ile aşağıdaki barkodu taratarak;

veya Web Tapu anasayfasından (**https://webtapu.tkgm.gov.tr** adresinden) **AG6dhGvI544** kodunu Online İşlemler alanına yazarak doğrulayabilirsiniz.

BU BELGE TOPLAM 3 SAYFADAN OLUŞMAKTADIR BİLGİ AMAÇLIDIR.

Tarih: 26-4-2024-11:41

Kaydı Oluşturan: ÖZGÜR KARTAV (İzmir Büyükşehir Belediye Başkanlığı)

Tapu Kaydı (Hepsi)

TAPU KAYIT BİLGİSİ

Zemin Tipi:	AnaTasinmaz
Taşınmaz Kimlik No:	89602222
İl/İlçe:	İZMİR/KONAK
Kurum Adı:	Konak
Mahalle/Köy Adı:	KURUÇAY Mah.
Mevkii:	1517
Cilt/Sayfa No:	14/1362
Kayıt Durum:	Aktif

Ada/Parsel:	1371/125
AT Yüzölçüm(m2):	585.00
Bağımsız Bölüm Nitelik:	
Bağımsız Bölüm Brüt YüzÖlçümü:	
Bağımsız Bölüm Net YüzÖlçümü:	
Blok/Kat/Giriş/BBNo:	
Arsa Pay/Payda:	
Ana Taşınmaz Nitelik:	Yol

TAŞINMAZA AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

Ş/B/İ	Açıklama	Malik/Lehtar	Tesis Kurum Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
Beyan	Kentsel Dönüşüm Ve Gelişim Projesi Sınırları İçinde Kalmaktadır.(Şablon: Kentsel Dönüşüm Ve Gelişim Projesi Alanında Kalan Taşınmazlara Tesis Edilecek Beyan)		Konak - 22-03-2013 18:41 - 5933	
Beyan	BU PARSELE 77 PARSEL 203.30 M² TECAVÜZ ETMİŞTİR.19/04/1966 Y:1675(Şablon: Tecavüzlü Binaların Belirtilmesi)		Konak 5.Bölge (Kapatildi) -	

			19-04-1966 00:00 - 1675	

MÜLKİYET BİLGİLERİ

(Hisse) Sistem No	Malik	El Birliği No	Hisse Pay/ Payda	Metrekare	Toplam Metrekare	Edinme Sebebi-Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
~~306683166~~	~~(SN:46316534) ABDULLAH NEVRES GÖKÇE : HİLMİ HİLMİ Oğlu KN:31495886756~~	~~-~~	~~1/1~~	~~585.00~~	~~585.00~~	~~İfraz İşlemi (TSM) 29-06-2015 16297~~	~~Kamulaştırma 29.06.2015 16299~~
306684675	(SN:2859087) İZMİR BÜYÜKŞEHİR BELEDİYESİ VKN:4840008254	-	1/1	585.00	585.00	Kamulaştırma 29-06-2015 16299	-

MÜLKİYETE AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

Ş/B/İ	Açıklama	Kısıtlı Malik (Hisse) Ad Soyad	Malik/Lehtar	Tesis Kurum Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
~~Beyan~~	~~6830 SAYILI KANUNUN 32. MADDESİ GEREĞİNCE ŞERH 06/06/1970 T. 3691 YEV.~~	~~ABDULLAH NEVRES GÖKÇE~~	~~(SN:2859087) İZMİR BÜYÜKŞEHİR BELEDİYESİ VKN:4840008254~~	~~Konak 5.Bölge (Kapatildi) - 06-06-1970 00:00 - 3691~~	

Bu belgeyi akıllı telefonunuzdan karekod tarama programları ile aşağıdaki barkodu taratarak;

veya Web Tapu anasayfasından (**https://webtapu.tkgm.gov.tr** adresinden) **Fswli33W8CD** kodunu Online İşlemler alanına yazarak doğrulayabilirsiniz.

2 / 3

3 / 3

BU BELGE TOPLAM 2 SAYFADAN OLUŞMAKTADIR BİLGİ AMAÇLIDIR.

Tarih: 26-4-2024-11:52

webtapu
tapunun kisayolu

Kaydı Oluşturan: ÖZGÜR KARTAV (İzmir Büyükşehir Belediye Başkanlığı)

Tapu Kaydı (Hepsi)

TAPU KAYIT BİLGİSİ

Zemin Tipi:	AnaTasinmaz
Taşınmaz Kimlik No:	18177811
İl/İlçe:	İZMİR/KONAK
Kurum Adı:	Konak
Mahalle/Köy Adı:	UMURBEY Mah.
Mevkii:	-
Cilt/Sayfa No:	434/915
Kayıt Durum:	Aktif

Ada/Parsel:	1387/5
AT Yüzölçüm(m2):	1680.50
Bağımsız Bölüm Nitelik:	
Bağımsız Bölüm Brüt YüzÖlçümü:	
Bağımsız Bölüm Net YüzÖlçümü:	
Blok/Kat/Giriş/BBNo:	
Arsa Pay/Payda:	
Ana Taşınmaz Nitelik:	KANAL

MÜLKİYET BİLGİLERİ

(Hisse) Sistem No	Malik	El Birliği No	Hisse Pay/ Payda	Metrekare	Toplam Metrekare	Edinme Sebebi-Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
42239851	(SN:1853333) DEVLET SU İŞLERİ GENEL MÜDÜRLÜĞÜ (DSİ) VKN:3130025631	-	1/1	1680.50	1680.50	Hükmen Tescil 25-06-1971 3483	-

Bu belgeyi akıllı telefonunuzdan karekod tarama programları ile aşağıdaki barkodu taratarak;

1 / 2

veya Web Tapu anasayfasından (**https://webtapu.tkgm.gov.tr** adresinden) **yQ5COiNbuEp** kodunu Online İşlemler alanına yazarak doğrulayabilirsiniz.

2 / 2

BU BELGE TOPLAM 2 SAYFADAN OLUŞMAKTADIR BİLGİ AMAÇLIDIR.

Tarih: 26-4-2024-11:54

webtapu
tapunun kısayolu

Kaydı Oluşturan: ÖZGÜR KARTAV (İzmir Büyükşehir Belediye Başkanlığı)

Tapu Kaydı (Hepsi)

TAPU KAYIT BİLGİSİ

Zemin Tipi:	AnaTasinmaz
Taşınmaz Kimlik No:	18177848
İl/İlçe:	İZMİR/KONAK
Kurum Adı:	Konak
Mahalle/Köy Adı:	UMURBEY Mah.
Mevkii:	UMURBEY
Cilt/Sayfa No:	468/1024
Kayıt Durum:	Aktif

Ada/Parsel:	2939/183
AT Yüzölçüm(m2):	1656.00
Bağımsız Bölüm Nitelik:	
Bağımsız Bölüm Brüt YüzÖlçümü:	
Bağımsız Bölüm Net YüzÖlçümü:	
Blok/Kat/Giriş/BBNo:	
Arsa Pay/Payda:	
Ana Taşınmaz Nitelik:	BASMA SANAYİ FABRİKASI

MÜLKİYET BİLGİLERİ

(Hisse) Sistem No	Malik	El Birliği No	Hisse Pay/ Payda	Metrekare	Toplam Metrekare	Edinme Sebebi-Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
42239903	(SN:1853333) DEVLET SU İŞLERİ GENEL MÜDÜRLÜĞÜ (DSİ) VKN:3130025631	-	1/1	1656.00	1656.00	Satış 08-05-1981 2220	-

MÜLKİYETE AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

1 / 2

Ş/B/İ	Açıklama	Kısıtlı Malik (Hisse) Ad Soyad	Malik/Lehtar	Tesis Kurum Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
Beyan	8460 M KARESİ 2939ADA 103 PARSEL İRFAN AĞA VERESESİ ÖRFÜ BELDESİNDEN MAHLULEN ARAZİ MİLLİYEDEN. 220 M.KARESİ 2939ADA 102 PARSEL İRFAN VERESESİ ÖRFÜ BELDESİNDEN. 320MKARESİ 2939 ADA 101 PARSEL ÖRFÜ BELDESİNDEN.	DEVLET SU İŞLERİ GENEL MÜDÜRLÜĞÜ (DSİ			

Bu belgeyi akıllı telefonunuzdan karekod tarama programları ile aşağıdaki barkodu taratarak;

veya Web Tapu anasayfasından (**https://webtapu.tkgm.gov.tr** adresinden) **mFWWH6GoC6k** kodunu Online İşlemler alanına yazarak doğrulayabilirsiniz.

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BU BELGE TOPLAM 2 SAYFADAN OLUŞMAKTADIR BİLGİ AMAÇLIDIR.

Tarih: 26-4-2024-11:49

webtapu
tapunun kısayolu

Kaydı Oluşturan: ÖZGÜR KARTAV (İzmir Büyükşehir Belediye Başkanlığı)

Tapu Kaydı (Hepsi)

TAPU KAYIT BİLGİSİ

Zemin Tipi:	AnaTasinmaz
Taşınmaz Kimlik No:	21415725
İl/İlçe:	İZMİR/KONAK
Kurum Adı:	Konak
Mahalle/Köy Adı:	KURUÇAY Mah.
Mevkii:	-
Cilt/Sayfa No:	5/480
Kayıt Durum:	Aktif

Ada/Parsel:	3369/80
AT Yüzölçüm(m2):	240.00
Bağımsız Bölüm Nitelik:	
Bağımsız Bölüm Brüt YüzÖlçümü:	
Bağımsız Bölüm Net YüzÖlçümü:	
Blok/Kat/Giriş/BBNo:	
Arsa Pay/Payda:	
Ana Taşınmaz Nitelik:	ARSA

MÜLKİYET BİLGİLERİ

(Hisse) Sistem No	Malik	El Birliği No	Hisse Pay/ Payda	Metrekare	Toplam Metrekare	Edinme Sebebi-Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
49085480	(SN:1853333) DEVLET SU İŞLERİ GENEL MÜDÜRLÜĞÜ (DSİ) VKN:3130025631	-	1/1	240.00	240.00	Satış 13-11-1970 7069	-

Bu belgeyi akıllı telefonunuzdan karekod tarama programları ile aşağıdaki barkodu taratarak;

1 / 2

veya Web Tapu anasayfasından (**https://webtapu.tkgm.gov.tr** adresinden) **pAyH41xtQl_** kodunu Online İşlemler alanına yazarak doğrulayabilirsiniz.

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