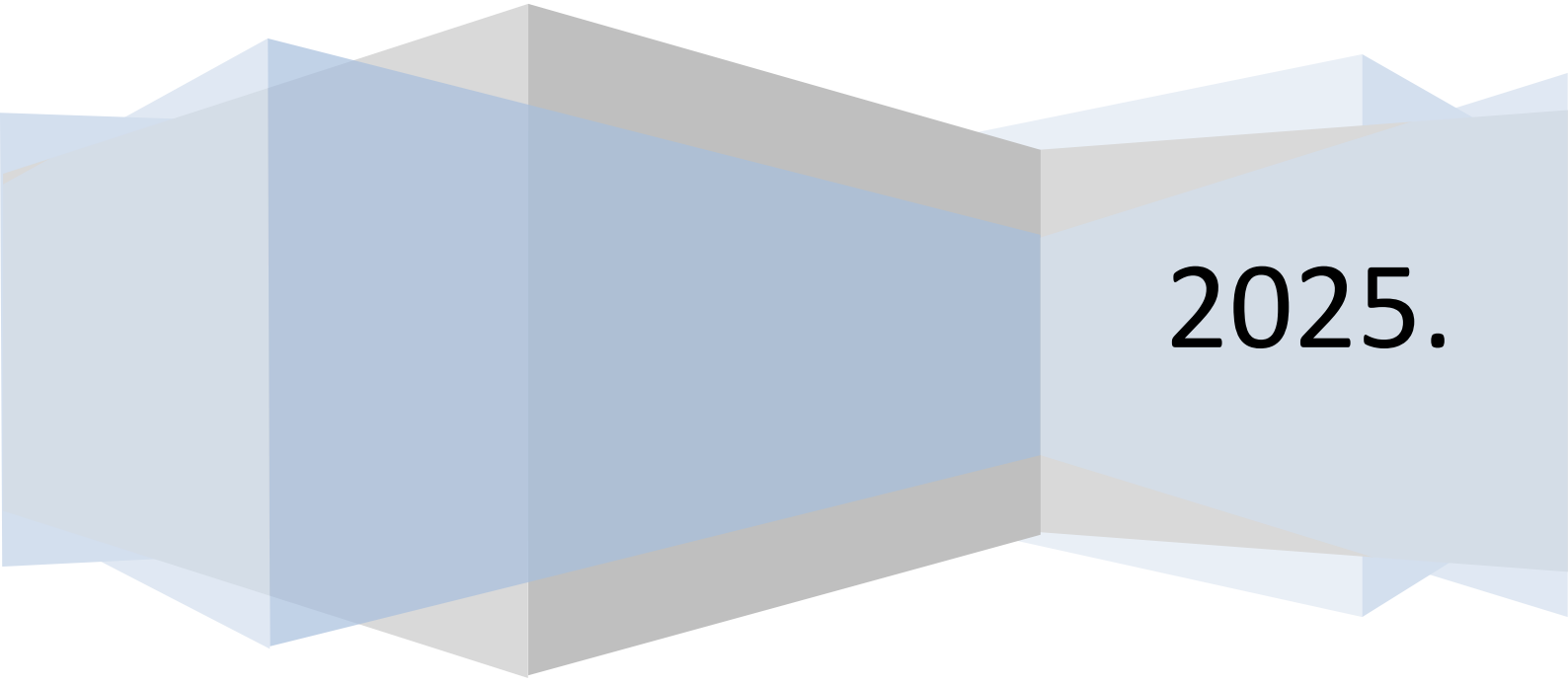
Federation Road Asset Management Enhancement Project - FRAME (P511815)

Environmental and social management plan- ESMP



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Abbreviations

B&H / BiH	Bosnia and Herzegovina
CH	Cultural Heritage
CHS	Community Health and Safety
CGC	Central Grievance Committee
CSOP	Construction Site Organization Plan
EA	Environmental Assessment
EIA	Environmental Impact Assessment
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESSs	Environmental and Social Standards
E&S	Environmental and Social
FIS	Federal Institute of Statistics
FBiH	Federation of Bosnia and Herzegovina
GC	Grievance Committee
GIIP	Good International Industry Practice
GRM	Grievance Redress Mechanism
LMP	Labor Management Plan / Procedures
OHS	Occupational Health and Safety
PAP	Project Affected Person
PC Roads of FBiH	Public Company Roads of Federation of BiH
PIMT	Project Implementation and Management Team
PDO	Project Development Objective
PPE	Personal Protective Equipment
RAP	Resettlement Action Plan
RDDR	Resettlement Due Diligence Report
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
SE	Supervision Engineer
TCI	Total Condition Index
WB	World Bank

1. INTRODUCTION

1.1. Brief Description of the Road Project and the Location

The project titled “Reconstruction of the ‘North Entrance to Mostar’ Intersection” involves the reconstruction and geometric redesign of a critical traffic node located at the intersection of Main Roads M17 (section 014) and M17.4 (section 101) in the Zalik neighborhood, City of Mostar, Federation of Bosnia and Herzegovina. This location is positioned at a vital connection point between the Pan-European Corridor Vc (M17) and the urban road network leading directly into Mostar city center.

The junction lies in proximity to key facilities such as the Kort shopping center and Hotel Amicus, both located within approximately 50–60 meters of the site, while the INA fuel station is situated around 150 meters away. The closest residential houses are located at an estimated distance of 30–40 meters from the junction, while small cultivated plots used for fruit and vegetable production can be found at a distance of roughly 150–250 meters. In addition, the Jewish Cemetery is located approximately 200 meters of the project site, representing an important cultural-historical landmark.

The surrounding environment is primarily urbanized, with sparse patches of ruderal and low-growing vegetation occurring along road verges and unused plots. The Neretva River is located approximately 300 meters to the west of the site, forming the main hydrological feature of the wider area. There are no designated natural protected situated in a 10 km radius, so no natural protection zones are located in the immediate project vicinity. Local drainage is primarily surface-based, with runoff directed towards the urban stormwater system and ultimately into the Neretva River. Geologically, the terrain consists predominantly of alluvial and carbonate deposits typical for the Mostar basin, characterized by permeable soils and stable ground conditions suitable for road infrastructure development.

The existing intersection is currently configured as an at grade, three legged junction with limited traffic control and substandard geometric conditions. Sharp turning angles, poor visibility, wide curves, inconsistent signage, and unregulated access points contribute to its designation as a traffic black spot, with a documented history of frequent and severe traffic accidents.

The main objectives of the project are to:

- Enhance road safety for all users, including vehicles, pedestrians, and cyclists
- Improve traffic flow and reduce congestion at one of the main entrances to Mostar
- Address hazardous traffic conditions and mitigate accident risks
- Upgrade the intersection to comply with modern design and safety standards
- Facilitate smoother access to regional and international transport corridors

The planned intervention includes the construction of a modern roundabout integrated with a cut and cover tunnel (L=150m), designed to separate through and turning movements, reduce conflict points, and enable efficient and safe circulation. The new infrastructure will accommodate the existing Average Annual Daily Traffic (AADT) of 13,868 vehicles, with capacity to absorb expected traffic growth over the coming years.

This sub-project is being implemented under the Federation Road Asset Management Enhancement Project (FRAME, ID P511815), with financial support from the World Bank. It is one of several priority

interventions identified for reducing high risk locations and improving road safety across the Federation of Bosnia and Herzegovina.

Figure 1: Aerial View – North Entrance to Mostar Intersection

1.2. Purpose of the Environmental and Social Management Plan (ESMP)

The purpose of this Environmental and Social Management Plan (ESMP) is to define and ensure the implementation of appropriate mitigation, monitoring, and institutional measures to manage and minimize the adverse environmental and social impacts associated with the proposed reconstruction of the North Entrance to Mostar intersection.

This ESMP:

- Identifies potential environmental and social risks and impacts during the preconstruction, construction, and operational phases
- Proposes feasible and cost-effective mitigation and enhancement measures
- Assigns responsibilities for implementation, monitoring, and supervision
- Ensures compliance with the World Bank Environmental and Social Framework (ESF), particularly relevant Environmental and Social Standards (ESSs) such as:

    - ESS1: Assessment and Management of Environmental and Social Risks and Impacts,
    - ESS2: Labor and Working Conditions,
    - ESS3: Resource Efficiency and Pollution Prevention and Management
    - ESS4: Community Health and Safety, and
    - ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
    - ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
    - ESS8: Cultural Heritage

  - ESS10: Stakeholder Engagement and Information Disclosure

- Aligns with applicable national laws, regulations, and permitting procedures as well as World Bank Environmental, Health and Safety Guidelines (EHSG) and Good International Industry Practices (GIIP). In the case they differ, the stricter ones will prevail and apply.

The ESMP serves as a binding document for contractors, supervising engineers, and implementing agencies throughout the project lifecycle. It is also a reference tool for communication with affected communities and stakeholders to ensure transparency and accountability.

1.3. Overview of Key Environmental and Social Risks

Although the project is expected to deliver significant long-term safety and mobility benefits, several environmental and social risks have been identified based on field assessments and the World Bank's ESS screening. These include:

Social Risks (rated as *Substantial*):

- Land acquisition and economic displacement: The project requires partial land take to accommodate the new roundabout and tunnel structure. While most of the affected area is non-residential, the land includes commercial plots and utility infrastructure, potentially affecting private users and access.
- Traffic congestion and access restrictions during construction: This is a critical issue given that the intersection lies along a major national route (M17) with a high traffic volume (AADT ~13,868). Even though alternative roads exist, significant congestion and delays are expected, which may affect mobility for residents, businesses, and emergency services.
- Proximity to urban areas and critical facilities: The site lies close to urban neighbourhoods, the INA fuel station, and private driveways. Inadequate construction-phase planning could lead to increased risk for accidents or disruption of local livelihoods.
- Safety risks due to poor existing conditions: The site is designated a black spot due to its accident history. Construction works must be carefully managed to avoid exacerbating existing safety risks.
- Very limited risk for Cultural Heritage (CH), including chance finds.

Environmental Risks (rated as *Moderate*):

- Air and noise pollution, also vibrations, during construction, especially due to excavation and heavy machinery operation in a populated zone.
- Dust generation and soil disturbance, particularly during earthworks and tunnel excavation (cut and cover).
- Waste and spoil disposal, including large quantities of mineral material, the need to manage hazardous materials if encountered (e.g., from utility relocation or fuel station vicinity).
- Potential risks to water and drainage systems, including possible interference with surface water flow or contamination during works and turbidity in the implementation phase.
- Biodiversity impact is expected to be minimal as the site is located within a disturbed urban-industrial area, but care must be taken not to impact nearby green corridors or water bodies (e.g., the Neretva River nearby).

- Occupational Health and Safety (OHS) risks during works.

The ESMP provides specific measures to manage these risks, including environmental protection provisions in construction contracts, traffic and safety management plans, stakeholder engagement protocols, and a grievance mechanism for affected persons.

Field	Value
No.	107
Road Designation	M17
Section Name	Potoci – Mostar (Centre)
Counter Location Code	573
Counter Location Name	Potoci
Year	**Value**
2006	9.400
2007	10.058
2008	10.360
2009	10.660
2010	10.593
2011	-
2012	10.723
2013	9.875
2014	8.240
2015	10.391
2016	12.184
2017	12.456
2018	12.603
2019	12.578
2021	12.139
2022	12.732
2023	13.480
2024	13.868

Table 1: Average Annual Daily Traffic (AADT) – M17 Potoci – Mostar (Centre)

2. REGULATORY AND INSTITUTIONAL FRAMEWORK

2.1. Relevant national environmental and social laws and regulations.

2.1.1. Environmental Impact Assessment Procedure

The process of Environmental Impact Assessment (EIA) in FBiH is under the jurisdiction of the Federal Ministry of Environment and Tourism (FMoET), and is regulated by the following regulations:

- Law on Environment Protection of FBiH[1]
- Regulation on Projects for which an environmental impact assessment is mandatory and Projects for which a decision is made on the need for an environmental impact assessment[2]
- Rulebook on the content of Environmental Impact Assessment Study[3]

[1] Official Gazette of FBiH, No. 15/21
[2] Official Gazette of FBiH, No. 51/21
[3] Official Gazette of FBiH, No. 63/21

For Projects for which an environmental impact assessment is mandatory and Projects for which a decision is made on the need for an environmental impact assessment, the assessment procedure begins by submitting a Request for a Preliminary Impact Assessment to FMoET. The Request is prepared by the legal entities authorized by FMET. The context of the Request is prescribed by the Law on Environment Protection.

FMoET publicly disclosed the electronic version of the Request through its website and invited the stakeholders to submit their written comments and suggestions. After the preliminary environmental impact assessment procedure has been carried out and the factual situation has been established, FMoET issues a Decision that determines:

- that there is no need to carry out an environmental impact assessment (development of EIA Study)
- that environmental impact assessment is obligatory, during which the obligation to develop an Environmental Impact Assessment Study is determined, and the scope and content of the Study are also determined.

The context of the EIA Study is prescribed by the special by-law. FMET also publicly disclosed the electronic version of the EIA Study through its website, informed and invited all the stakeholders to public consultation, and appointed an Expert Committee to evaluate the EIA Study. Within 30 days after completion of the public consultation process, the evaluation by the expert committee must be completed. Once the process of evaluation of the EIA study is completed, the FMoET issues a Decision on Approval or Rejection of the EIA Study within 60 days. If the Study is rejected, the new EIA study can be submitted after 6 months upon the Decision on Rejection of the EIA Study, at the earliest.

Under the FBiH legislation, the envisaged Project activities do not trigger EIA.

Following the Regulation determining plants and facilities that must have an environmental permit[4], the envisaged Project activities do not require an environmental permit.

2.1.2. Waste Management Regulations

In FBiH, waste management is regulated by the Law on Waste Management FBiH[5]. According to the Law on Environment Protection FBiH, the Request for Environmental Permit must be accompanied by a Waste Management Plan. The Waste Management Plan must contain the following:

- documentation on the waste generated by the company (origin, type of waste under waste classification list, composition, volume)
- measures to be taken to limit waste generation, particularly in the case of hazardous waste
- separation of waste, particularly separation of hazardous waste from other types of waste and recyclables
- waste disposal
- waste treatment and/or disposal methods

[4] Official Gazette of FBiH, No. 51/21
[5] Official Gazette of FBiH, No. 33/03, 72/09 and 92/17

2.1.3. Water Management Regulations

In FBiH, the Water Law[6] regulates water management, including water protection, water use, protection against the harmful effects of water, and regulation of watercourses and other waters.

The Regulation on Requirements for the Discharge of Wastewater into the Environment and Public Sewerage Systems in FBiH[7] establishes conditions for collection, treatment, and discharge of municipal wastewater; conditions for treatment and discharge of technological wastewater into the environment or public sewage systems; limit values of wastewater emissions when discharged into the environment or public sewage systems; deadlines for reaching limit values; and monitoring and testing wastewater.

The Water Law prescribes that water permits must be obtained, regardless of their impact on water abstraction in all industries and activities, especially for industry and energy, as well as for any other activity that may affect the volume and quality of water.

According to the Water Law of FBiH, the water permitting process consists of three stages:

1. issuing of Preliminary Water Approval
2. issuing of Water Approval
3. issuing of Water Permit

Preliminary Water Approval sets the conditions, which have to be met by Project documentation, such as Project design. The request for issuing of Preliminary Water Approval should be submitted parallel with the Request for Environmental Permit, as they both are subject to the issuing of Urban Permit. Request for Preliminary Water Approval has to be accompanied by a Study for issuing Preliminary Water Approval. This Study must be prepared by the company licensed by the Federal Ministry of Agriculture, Water and Forestry. Preliminary Water Approval validity is expiring after three years if a Request for Water Approval was not submitted in that period.

Water Approval confirms that Project documentation submitted with the Request for issuing of Water Approval is by Preliminary Water Approval and other planning documentation. Water Approval sets the conditions that have to be met during construction works, necessary research and observations during the execution of works, obligations to keep records, submit data to the water information system, as well as obligations to compensate third parties for damages incurred as a result of the works and the validity period of the Water Approval. The request for issuing of Construction Permit has to be accompanied by Water Approval. Water Approval validity expires after two years if a Construction Permit was not issued and construction works were not started in that period.

The water Permit confirms that all the requirements set in the Water Approval are met and are issued before the Use Permit. The Water Permit defines the purpose, terms, and conditions of water use, facility and plant operating regime, terms and conditions of wastewater discharge, terms and conditions of solid waste and liquid waste disposal, and other terms and conditions. It also defines the applicant's obligations related to wastewater measurement, measurement frequency, quality control, and records keeping on used water, as well as obligations related to water fees accounting and payment. Water Permit is being issued for a limited time, but not longer than 15 years.

[6] Official Gazette of FBiH, No. 70/06
[7] Official Gazette of FBiH, No. 26/20

In FBiH, water documentation is issued under the Regulation on Content, Form, Conditions, and Manner of Issuance and Keeping of Water Documentation[8].

In FBiH, the Sava River Water Agency, the Adriatic Sea Water Agency, and Cantonal Ministries are responsible for issuing water management acts.

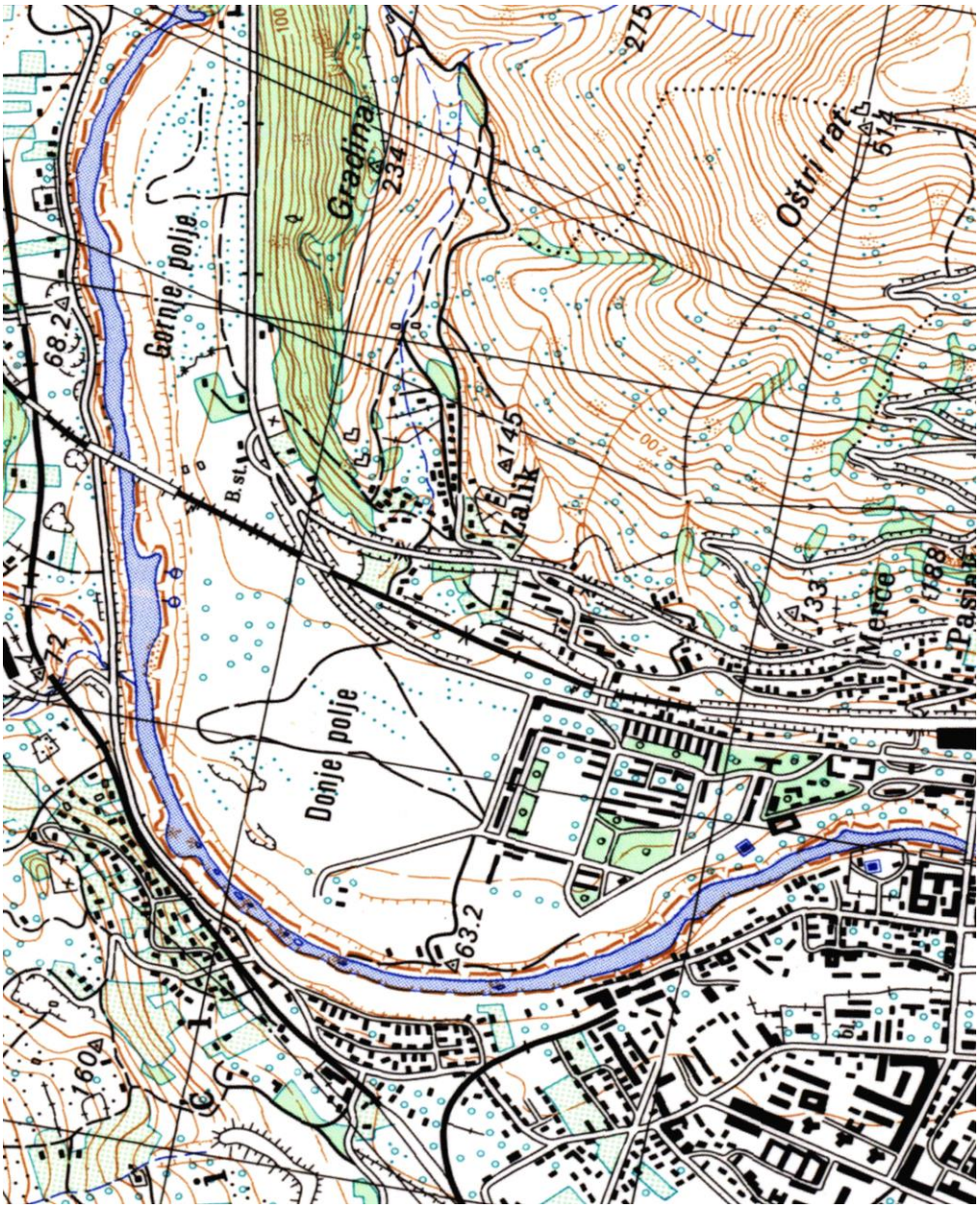

Figure 2: Overview Map - North Entrance to Mostar Intersection

2.1.4. Nature Protection Regulations

The Law on Nature Protection FBiH[9] prescribes: the responsibilities of nature protection authorities, general nature conservation measures, management of protected areas, assessment of the acceptability of interventions in nature, habitat types and ecologically significant areas, species and subspecies, species protection, protection and preservation of biodiversity, eco systems, the establishment of the European ecological network of specially protected areas - Natura 2000,

[8] Official Gazette of FBiH, No. 31/15, 55/19, 41/20, 63/22
[9] Official Gazette of FBiH, No. 66/13

protected natural values, compensation for damage, making proposals for concessions on protected natural values, inventory and monitoring, access to information and public participation, etc.

In addition, 13 by-laws regulate different activities concerning the management of nature protection, including:

- Rulebook on the content and method of preparation of the protected area management plan[10]
- Rulebook on the conditions of access to the protected area[11]
- Rulebook on the content and manner of keeping the register of protected areas[12]
- Regulation NATURA 2000 -protected areas in Europe[13]

When project activities occur within or near Natura 2000 sites or designated protected areas, the Law on Nature Protection FBiH requires an Assessment of Acceptability of the proposed intervention. This procedure includes screening to determine potential ecological impacts, followed by a detailed assessment if significant effects cannot be excluded. The process involves consultation with the competent environmental authorities, preparation of ecological studies (as needed), and public participation. Approval must be obtained before proceeding, and mitigation measures may be required to minimize impacts on species and habitats.

Other Key Legislative Areas Relevant to the Project:

- Seismic Resistance: Construction activities must comply with national seismic design standards (aligned with Eurocode 8), especially in high-risk zones prevalent in southern and central FBiH.
- Fire Safety: The Law on Fire Protection and the Rulebook on Technical Norms require fire risk assessments and integration of preventive measures in road design, particularly in forested or drought-prone areas.
- Climate Change Adaptation: Projects must integrate resilience measures under the FBiH Climate Change Strategy, addressing flood protection, slope stabilization, and material durability under extreme weather.
- Mineral Extraction (Quarries, Gravel, Sand): Governed by the Law on Geological Research and the Law on Mining, extraction must be licensed, environmentally assessed, and monitored to prevent over-exploitation and land degradation.
- Noise: The Law on Environmental Protection and the Rulebook on Noise Protection require noise assessments for road projects near residential or sensitive zones, with design-based mitigation such as barriers or low-noise pavements.

2.1.5. Construction Regulations

The purpose of spatial planning is the optimal deployment of people, material goods, and activities in space through organization, arrangement, use, and protection of land resources. Spatial planning adopts an integrated approach that combines natural, anthropogenic, and created spaces to solve

[10] Official Gazette of FBiH, No. 65/06
[11] Official Gazette of FBiH, No. 69/06
[12] Official Gazette of FBiH, No. 69/06
[13] Official Gazette of FBiH, No. 43/11

spatial conflicts. In legal terms, spatial planning in BiH is the exclusive constitutional competence of entities and cantons. Such division of competencies requires the adoption of laws and bylaws at the entity and cantonal levels. The coverage of the country with spatial plans is incomplete.

In FBiH, construction is governed by the following legislation:

- The Law on Spatial Planning and Land Use of FBiH[14]
- Cantonal Laws on Spatial Planning and Construction

The Law on Spatial Planning and Land Use of FBiH regulates the planning of land use through the development and adoption of planning documents and their implementation; the type and content of planning documents; land use at the entity level; control of the implementation of planning documents relevant for the entity; control over the enforcement of this legislation and penalties for legal entities and individuals.

Planning at all federal levels must be harmonized with specific regulations from the sectors of environment, water, land, forestry, health, etc. as per Article 9 of the Law.

According to this Law and cantonal regulations on spatial planning and construction, to construct facilities, it is necessary to obtain an Urban Permit, Construction Permit, and Use Permit. Depending on the type of construction, these permits are issued by the Federal Ministry of Spatial Planning, the Cantonal Ministries relevant to spatial planning, or by the local self-government units (Cities or Municipalities).

The investor is responsible for the submission of the Request for issuing of Urban Permit. The request has to be accompanied by a Preliminary design and Environmental Permit (if required). The Ministry is obliged to respond to the request within 30 days of submission of the Request. An urban permit is valid for one year, and within that period Request for issuing of Construction Permit has to be submitted.

The party to which the Urban Permit is assigned is responsible for the submission of the Request for issuing of Construction Permit. The request for issuing of Construction Permit has to be accompanied by a detailed design. The Ministry is obliged to respond to the request within 30 days of summation of the Request.

Based on a Request, a Use Permit is issued by the Ministry after the conducted technical inspection.

The Decree on Construction Site Organization, Mandatory Documentation on Construction Site and Construction Participants[15] specifies the documents that must be kept at construction sites, including a Construction Site Organization Plan (CSOP). The CSOP contained the following:

- Map of the location
- Description of preparatory works and site arrangements during and after construction works
- Description of the technological scheme
- Elaborate on Safety (composed of Elaborate on Protection at Work and Fire Fighting and Explosion Protection Elaborate)

[14] Official Gazette of FBiH, No. 2/06, 72/07, 32/08, 4/10, 13/10, 45/10, 85/21, 92/21
[15] Official Gazette of FBiH, No. 25a/22, 42/22, 93/22

- Description of the measures planned for monitoring emissions within the area and/or their impact

The CSOP must be developed by the Contractor for construction works before the commencement of construction works. It has to be controlled and signed by the Supervisory Authority which is the legal entity responsible for the overall supervision of construction works, as stipulated by the above-mentioned Decree. The Plan should correspond to the requirements, safety measures, and obligations contained in the Environmental Permit or environmental protection requirements laid down in the construction approval process.

2.1.6. Land Acquisition

The proposed Project activities are not expected to involve physical displacement; however, certain subprojects may require permanent and/or temporary land acquisition, particularly for safety enhancement measures, climate adaptation interventions, or the construction of temporary bypasses during rehabilitation works. Prior to submission for funding consideration, each subproject will undergo detailed screening to assess whether land acquisition is necessary, its nature (permanent or temporary), and its scope. All land-related impacts will be addressed in accordance with the provisions of the RPF.

The land acquisition in FBiH is regulated by the Law on Expropriation of FBiH[16]. This Law regulates the conditions, manner, and procedure of expropriation of the property for the construction of facilities of public interest. Property can be expropriated for the construction of roads, business and industrial zones, economic, communal, medical, educational, and cultural structures, civil defence structures, and other structures of public interest. The expropriation target includes real property owned by individuals and legal entities.

Property can only be expropriated upon the declaration of public interest for the Projects. Expropriation may be carried out for the needs of the FBiH, cantons, cities, municipalities, public companies, their 100% owned subsidiaries, and public institutions. Exceptionally, expropriation may establish an easement in favour of citizens to install water and sewage pipes, electric and telephone cables, gas pipelines, and in other cases determined by Law as defined by Article 6.

Public interest is declared by a special decree or the Law (Art. 14 and 15). The public interest in the construction of a facility or the performance of other works in the area for which a regulatory plan or urban plan has been adopted shall be considered determined by that plan, i.e., Project.

Expropriation may be complete or incomplete.

Complete expropriation allows the beneficiary of expropriation to obtain legal title over the expropriated property, while the rights of the previous owner over the property as well as other rights over that property cease to exist (Art. 7).

Incomplete expropriation does not entail a change of ownership of land. Incomplete expropriation can establish easement on land and buildings as well as lease on land for a certain period (Art. 8)

By expropriating the property, the beneficiary of the expropriation acquires the right to use that real estate for the purpose for which the expropriation was performed. Landowners affected by a partial loss of their property are entitled to request complete expropriation and the corresponding compensation, in case partial expropriation would deteriorate the economic situation of the actual property owner or make the remaining part of the property useless or difficult to use. Owners must

[16] "Official Gazette of FBiH", no. 70/07, 36/10, 25/12, 8/15 and Decision of Constitutional Court 34/16

be informed of such rights by the municipal/city authority. Such a request may be submitted until the Decision on Expropriation is issued in the first instance, as well as during the appeal procedure if the affected owner was not informed of such right. (Art. 11).

Before submitting the proposal for expropriation, the expropriation user is obliged to invite the property owners through a public announcement to acquire the property by mutual agreement as per Art 23. Expropriation can be started only after the required funds have been secured and deposited with the bank in the assessed total sum for payment, or proof of existence of replacement properties provided (Art. 24), and compensation must be provided before formal transfer of ownership (Art. 31).

For reasons of urgency and to avoid major damage, the beneficiary of expropriation may take possession of land even before the Decision on Expropriation becomes final and before compensation is paid, but solely based on a decision by the FBiH Government. Generally, compensation is provided by replacement with another appropriate property corresponding to the market value of the real estate expropriated in the same municipality or city but if the owner refuses such replacement property, or replacement property cannot be provided by the beneficiary of the expropriation, compensation is paid in cash at market value of the property.

The Law on Proprietary Rights[17] stipulates the acquisition, use, disposal, protection, and termination of ownership rights and other proprietary rights as well as possession rights, including issues of restricting such rights, the right of servitude, co-ownership, and joint ownership rights, the procedure for acquiring property rights over land and/or structures build on someone else's land. Protection of ownership rights and other proprietary rights is guaranteed by this Law. According to Article 2, ownership rights and other proprietary rights can only be limited or taken away in the public interest but only under specific conditions defined by the Law following principles of international law. For the protection of natural resources, the environment, human health, cultural and historical heritage, etc., the manner of use and disposal of certain items may be limited or specifically regulated. A significant provision of the Law is that occupants of property acquire ownership rights upon 10 years of conscientious and legal occupancy, or 20 years of conscientious occupancy. In addition, the Law provides that the conscientious builder of a structure on land owned by another person is entitled to acquire such land if the land owner does not oppose the construction. The land owner is in this case entitled to request to be compensated for the market value of the land.

2.1.7. Labor Regulations

The key legislation that regulates the terms and conditions of employment in FBiH are:

- Labor Law of FBiH
- Law on Health Insurance

Labor Law of FBiH[18] regulates the rights, obligations, and responsibilities of employers and workers concerning the implementation and improvement of safety and health protection of workers at work, as well as general principles of prevention and the system of rules of safety and health at work whose application helps in preventing injuries at work, occupational and other diseases related to work, as well as the protection of the working environment, and other issues related to safety and health at work. Law defines the conclusion of an employment contract, working hours, salary, work contract termination, rights and obligations under employment contracts, and collective bargaining.

[17] "Official Gazette of FBiH", No. 66/13, 100/13 and Decision of Constitutional Court 32/19
[18] "Official Gazette of FBiH", No. 29/16, 89/18 and 23/20 - Decision of Constitutional Court

The Law, inter alia, treats the rights of worker and employer to enter an employment contract, the rights of minor and female workers, and safety and health at work. Provisions of this Law are harmonized with International Labor Organization (ILO) Conventions on forced work, discrimination, child work, equal pay, freedom of association, freedom of organization, and collective bargaining.

The laws prescribe in Article 20 the minimum employment age of 18 for concluding an employment contract, except for allowing persons between 15 and 18, with the consent of their legal custodians and based on a medical certificate issued by a health facility, and provided that the given job does not endanger the minor's health, moral and education. Employment contracts can be concluded as open-ended fix-term or part-time (Art. 22).

The terms and conditions provided by this Law include the prohibition of discrimination in terms of employment requirements and selection of candidates, education, training and professional development, promotion, and employment contract termination (Art. 10). Discrimination of workers and job seekers is prohibited concerning sex, sexual orientation, marital status, family obligations, age, disability, pregnancy, language, religion, political and other opinions, ethnic origin, social origin, financial status, birth, race, skin color, membership or lack of in political parties and trade unions, health status, or any other personal characteristic. Harassment and sexual harassment are also prohibited (Art. 8).

Women in the course of pregnancy and childbirth are given special protection. Women are entitled to 52 weeks of maternity leave. Employers cannot refuse to hire a woman because of her pregnancy or maternity leave. Furthermore, it is not allowed to terminate a labor contract with a woman after the expiry of the maternity leave.

Full working hours amount to 40 hours per week and they can be allocated to max. six working days (Art. 36). The Law prescribes breaks during working hours, as well as daily (at least 12 hours) and weekly rest (at least 24 hours). For working longer than 6 hours a day, a worker shall be entitled to rest for at least 30 minutes (Art. 44).

Employers must register workers for pension and disability insurance, health insurance, and insurance in case of unemployment.

The worker is entitled to an increased salary for difficult working conditions, overtime, and night work, and for work on a weekend, holidays, or any other day for which it is determined by law not to work following the collective agreement, work regulations, and employment contract (Art, 76). The Law guarantees the worker's right to a fair salary and full compensation of salary for the period of annual holidays, official holidays, and temporary inability to work due to injury at work or occupational disease (Art. 81).

Workers are entitled to remuneration of salary during temporary inability to work caused by sickness or injury or other reasons provided for by the Law on Health Insurance[19]. Salary compensation is entitled to the worker only for the days for which he would be entitled to salary or salary compensation in terms of employment regulations. Salary compensation is determined in the amount of at least 80% of the base for compensation, provided that it cannot be lower than the amount of the minimum salary valid for the month for which the compensation is determined. Salary compensation during sick leave amounts to at least 80% of the salary, whereas salary compensation during sick leave for injuries at work, for diseases related to pregnancy and birth, and for organ transplantation amounts to 100% of the salary.

[19] "Official Gazette of FBiH", No. 30/97, 7/02, 70/08, 48/11, 100/14 and Decision of Constitutional Court 36/18

The salary of workers and the elements for basic salary based on working performance are determined by the collective agreement, the rulebook, and the employment contract.

2.1.8. Work Safety Regulation

The legislation that regulates occupational health and safety in FBiH is the Law on Protection at Work of FBiH[20]. This Law has been harmonized with the ILO Convention on Occupational Safety and Health, No. 155[21] and Occupational Safety and Health Recommendation No. 164[22] of the ILO, as well as the provisions of the revised European Social Charter relating to the right of workers to safe and healthy working conditions[23], which Bosnia and Herzegovina has accepted and ratified. The provisions of Council Directive 89/391/EEC of 12 June 1989[24] on the introduction of measures to encourage improved security and Occupational Health, which contains general principles regarding the prevention of occupational risks, safety and health at work, and the elimination of risks that may cause accidents, on which all modern European laws governing this area are based, have been used during the preparation of this Law and the said directive has been transposed into legislation of Federation of Bosnia and Herzegovina.

Safety and protection of health at work, in terms of this law, is the provision of such working conditions that prevent the occurrence of occupational injuries, and occupational and work-related diseases as much as possible and which create a precondition for full physical, mental, and social safety of employees.

As per Article 10, the employer who prepares technical documentation for facilities and technical-technological processes is obliged to apply the prescribed safety and health protection measures at work when designing facilities and technical-technological processes, with an indication of all risks and measures for their elimination.

An employer who performs works on construction, installation, replacement of equipment, overhaul or reconstruction of facilities is obliged to prepare a Study on the arrangement of the work site and ensure the performance of works according to that study Art. 12). Work equipment must correspond to the work process being performed and must be appropriately adapted to that purpose so as not to endanger the safety and health of workers.

The employer is obliged to determine the organization of the implementation of occupational safety, and the rules of prevention and protection by its internal act on occupational safety (Art. 23).

The employer is obliged to organize safety and health at work, perform a risk assessment for each job, enable the employee to get acquainted with safety and health measures before starting work, adopt an internal act on occupational safety, inform workers about the introduction of new technologies and means for work, and dangers and harms to the health of workers, prepares workers for safe work and provides workers with means and equipment of personal protection, provides periodic medical examinations, provides periodic examinations means of work and equipment for protection at work, implement fire protection measures, implement measures to ensure first aid, and

[20] "Official Gazette of FBiH", No. 79/20
[21] Convention on Occupational Safety and Health No. 155, 1981, ILO, Available at: http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312300
[22] Occupational Safety and Health Recommendation (No. 164), 1981, ILO, available at: http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312502:NO
[23] European Social Charter 1961, Available at: https://www.coe.int/en/web/european-social-charter
[24] Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work

to inform the competent labor inspection of any death, an accident that struck one or more workers, serious injury, occupational disease, any occurrence or diseases affecting more than one worker and any occurrence which could endanger the life or health of workers at work (Art. 22).

Workers are obliged to use personal protection equipment and comply with other instructions related to safety at work.

In cases when workers have to handle hazardous substances, the Law stipulates the obligations of employers to reduce the danger to workers (Art. 26). However, there are no specific asbestos-related OHS requirements. If such risk becomes relevant under the Project WB EHSG and GIIP will guide the definition of specific measures.

Vulnerable groups, such as pregnant women, mothers or nursing mothers, minors, persons with disabilities, as well as workers with changed working capacity in terms of pension and disability insurance regulations, are not allowed to work in jobs where there is a risk to their physical and mental health and life and in a difficult working condition (Art. 70).

2.1.9. Protection of cultural property regulations

The Decision on the Provisional List of National Monuments of BiH[25] adopted the list of national monuments of BiH, and it is stipulated that the Commission for the Protection of National Monuments will make an individual decision on the declaration of a property as a national monument for each property entered on the Provisional List.

The Law on the Implementation of the Decisions of the Commission for the Protection of National Monuments established under Annex 8 of the General Framework Agreement for Peace in BiH[26] establishes measures for the protection and rehabilitation of assets that have been established as national monuments of BiH. This Law stipulates that the competent Ministry is obliged, before issuing an approval, to obtain an expert opinion from the competent institution for the protection of cultural and historical heritage on the Project of rehabilitation of national monuments.

The Law on the Protection of the Cultural Heritage of ZDC[27] regulates cultural heritage assets, measures for their protection, use and restoration, rights and obligations of owners, subjects of protection, financing of activities, supervision, local self-government affairs, and penalties for offenses in the territory of ZDC. According to this Law, without the consent of the Cantonal Institute for Cultural Heritage Protection, works may not be carried out on: (i) a protected site, asset and in the protective zone, which could directly or indirectly change the appearance, authenticity, originality or other properties of the cultural heritage assets, (ii) the area where it is reasonably assumed that cultural heritage assets can be found. The Decision by which the Cantonal Institute gives consent for the execution of works on a protected site, asset, and protective zone must also contain protective measures. When an unforeseen danger to a protected cultural asset appears during the execution of works or a potential cultural asset is discovered, the contractor is obliged to stop the works without delay and inform the Cantonal Institute. The suspension of works lasts until the Cantonal Institute establishes protective measures, but not longer than 60 days. Protection measures are borne by the contractor.

[25] "Official Gazette of BiH", No. 03/02
[26] "Official Gazette of FBiH", No. 2/02, 08/02, 27/02, 06/04, 51/07
[27] "Official Gazette of ZDC", No. 02/02

The Law on the Protection of the Cultural Heritage of HNC[28] regulates the term cultural-historical heritage and the unique basis for the protection, preservation, use, and restoration of cultural heritage, the obligations and rights of owners of cultural heritage assets, the performance of professional and administrative tasks, the financing of the protection and preservation of cultural heritage and other issues on the territory of HNC. According to this Law, without the consent of the Cantonal Institute for the Protection of Cultural-Historical Heritage of HNC, it is forbidden to make changes to the cultural heritage assets, as well as in its immediate vicinity, that is, to damage the integrity of the cultural heritage assets. These activities include conservation, restoration, reconstruction, rehabilitation, and adaptation of heritage assets. Without the consent of the Cantonal Institute, works may not be carried out on (i) a protected site, asset and in a protective zone, which could directly or indirectly change the appearance, authenticity, originality, or other properties of the cultural heritage asset, (ii) the area where it is reasonably assumed that cultural heritage assets can be found. The Decision by which the Cantonal Institute gives consent for the execution of works on a protected site, asset, and protective zone must also contain protective measures. When an unforeseen danger to a protected cultural asset appears during the execution of works or a potential cultural asset is discovered, the contractor is obliged to stop the works without delay and inform the Cantonal Institute. The suspension of works lasts until the Cantonal Institute establishes protective measures, but not longer than 60 days. Protection measures are borne by the contractor.

The Law on the Protection of the Cultural Heritage of SC[29] regulates cultural heritage assets, measures for their protection, use and restoration, rights and obligations of owners, subjects of protection, financing of activities, supervision, local self-government affairs, and penalties for offenses in the territory of SC. According to this Law, without the consent of the Cantonal Institute for Cultural Heritage Protection, works may not be carried out on: (i) a protected site, asset and in the protective zone, which could directly or indirectly change the appearance, authenticity, originality or other properties of the cultural heritage assets, (ii) a recorded potential cultural heritage asset, (iii) the area where it is reasonably assumed that cultural heritage assets can be found. The Decision by which the Cantonal Institute gives consent for the execution of works on a protected site, asset, and protective zone must also contain protective measures. When an unforeseen danger to a protected cultural asset appears during the execution of works or a potential cultural asset is discovered, the contractor is obliged to stop the works without delay and inform the Cantonal Institute. The suspension of works lasts until the Cantonal Institute establishes protective measures, but not longer than 60 days. Protection measures are borne by the contractor.

2.1.10.Traffic safety regulations

The Law on the Basics of Road Traffic Safety in Bosnia and Herzegovina[30] establishes basic principles of mutual relations and behavior of road users and other traffic subjects, basic conditions that must be met by roads in terms of road traffic safety, maintenance of the Central Register of drivers and vehicles, road traffic rules, the system of traffic signs and signs given by authorized persons, duties in the event of a traffic accident, driver's training, requirements for acquiring the right to drive motor vehicles, taking driver's tests, requirements for vehicle devices and equipment, dimensions, total weight and axle load of vehicles, the basic conditions that must be met by vehicles in traffic, the work

[28] "Official Gazette of HNC", No. 02/06
[29] "Official Gazette of SC", No. 02/02, 37/08
[30] "Official Gazette of BiH", No. 6/06, 75/06, 44/07, 84/09, 48/10, 48/10 -other law, 18/13, 8/17, 89/17 and 9/18

of professional organizations in BiH, and other issues in the field of road traffic safety that are unique to the entire territory of BiH.

The Law on Road Transportation[31] regulates the conditions and manner of carrying out the activity of transporting persons and cargo by motor vehicles, trailers, and carts in road transport; operation of technical inspection stations in the territory of the FBiH; activity of public transport of passengers and cargo in regular and non-regular road transport; transportation for own needs; operation of bus stations; and inspection supervision. Public transport and transport for personal needs can only be carried out if the special operating conditions for certain types of transport are met and if the vehicle meets the technical and operating conditions. The technical and operating conditions are prescribed by the Ordinance on the technical and operating conditions under which certain types of transport are performed[32].

2.1.11.Regulations on air quality and protection

FBiH has adopted an appropriate set of laws and rulebooks regulating the area of air quality management. Among the most important laws, the following stand out:

- Law on Air Protection[33]
- Rulebook on Air Quality Monitoring[34]
- Rulebook on the manner of monitoring air quality and defining the types of pollutants, limit values, and other air quality standards[35]
- Rulebook on emission limit values of pollutants into the air[36]

The Law on Air Protection regulates technical conditions and measures for preventing or reducing emissions into the air caused by human activities that must be observed in the production process, in the territory of FBiH, air quality protection planning, special sources of emissions, emissions cadaster, air quality, supervision and penalties for misdemeanors for legal and natural persons. The provisions of this Law do not apply to air emissions from domestic activities or domestic combustion sources whose thermal power is less than 250 KW. Only fuels (solid and liquid) listed in the standards established by the Institute for Standards of BiH can be used in domestic emission sources. Fuels for motor vehicles must comply with the quality standards published by the Institute for Standards of BiH.

The Rulebook on Air Quality Monitoring establishes that the authorized institution for managing the air monitoring system is the Federal Hydrometeorological Institute (FHMI), which is responsible for the following:

- establishment, organization, and management of the air quality monitoring system in FBiH, as part of monitoring in BiH
- establishment of an air quality information system to report on monitoring results in prescribed formats

[31] "Official Gazette of FBiH", No. 28/06, 2/10, 57/20
[32] "Official Gazette of FBiH", No. 51/06, 79/06, 11/09
[33] "Official Gazette of FBiH", No. 33/03 and 04/10
[34] "Official Gazette of FBiH", No. 12/05 and 09/16
[35] "Official Gazette of FBiH", No. 01/12, 50/19 and 3/21
[36] "Official Gazette of FBiH", No. 12/05

The air quality monitoring network can be 1) federal (as part of the national), 2) cantonal, 3) city/municipal, 4) operators of plants and facilities, and 5) special areas. Monitoring of federal significance is conducted by the FHMI. The choice of the location of the Federal monitoring stations and their type and number, as well as the measurement frequency, are determined in the Federal Air Pollution Protection Strategy.

The FHMI is obliged to report on the monitoring results to the FMoET, the Federal Ministry of Health, i.e. within it the Federal Institute for Public Health FBiH, the Federal Institute for Statistics, and the public in BiH. FHMI is also obliged to submit the monitoring results to the BiH institutions which are responsible for reporting to the European Environment Agency (EEA) and the Secretariat of Relevant Conventions which BiH has ratified, signed, or acceded to.

2.2. Applicable World Bank Environmental and Social Standards (ESS)

The project is being financed through a World Bank grant and, as such, must comply with the World Bank Environmental and Social Framework (ESF), adopted in October 2018. The ESF sets out the World Bank's commitment to sustainable development, through a risk-based approach tailored to each project. The framework is composed of ten Environmental and Social Standards (ESS), which collectively establish mandatory requirements for Borrowers and implementing agencies.

The following Environmental and Social Standards are relevant to this road construction project:

ESS1 -Assessment and Management of Environmental and Social Risks and Impacts

ESS1 establishes the requirement for identifying, assessing, and managing the environmental and social risks of the project. In line with this standard, an Environmental and Social Management Plan (ESMP) has been prepared as part of the due diligence process. The project has been classified as Substantial risk-primarily due to social impacts related to land acquisition and expected traffic disruption during construction. Environmental risks are considered Moderate and typical of linear infrastructure construction.

ESS2 -Labor and Working Conditions

ESS2 applies to all project workers, including those engaged by contractors and subcontractors. It requires the implementation of fair labor practices, worker health and safety provisions, grievance mechanisms for workers, and procedures to prevent child labor and forced labor. A dedicated Labor Management Procedures (LMP) document is prepared in line with this standard.

ESS3 -Resource Efficiency and Pollution Prevention and Management

ESS3 requires that projects use resources (e.g., water, energy, raw materials) efficiently and avoid or minimize the release of pollutants. The ESMP includes measures for minimizing construction-related dust, noise, and water runoff, and requires contractors to adopt site-specific waste and pollution management practices.

ESS4 -Community Health and Safety

Given the proximity to densely populated areas and the location at a known traffic blackspot, ESS4 is particularly relevant. It covers traffic and road safety, emergency response planning, and the prevention of construction-related hazards to nearby communities. Mitigation measures include proper traffic diversion signage, fencing of active worksites, and emergency coordination protocols.

ESS5 -Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is triggered due to the permanent land acquisition required for the construction of the roundabout and associated infrastructure, as well as potential temporary access restrictions during the construction phase. The land acquisition process for this project is already at an advanced stage, and expropriation is nearly complete, carried out in accordance with the national Expropriation Law and applicable procedures at the cantonal and municipal levels.

To comply with ESS5, a Resettlement Action Plan (RAP) was prepared under the broader World Bank supported road modernization framework. The RAP covers key principles such as fair compensation, assistance to affected persons, livelihood restoration where applicable, and consultation throughout the process. Importantly, the RAP was developed based on census and socioeconomic surveys of affected persons and includes entitlement matrices outlining compensation eligibility.

However, since this specific sub-project (reconstruction of the intersection “North Entrance to Mostar”) is being implemented as part of a larger framework, the World Bank requires that an ex-post resettlement audit be carried out. This audit will serve to confirm that the land acquisition was conducted in a manner consistent with the principles and requirements of ESS5, particularly with respect to:

- Whether affected persons were adequately informed and consulted
- Whether compensation provided was timely and fair
- Whether there are any outstanding grievances or unresolved claims
- Whether vulnerable groups were adequately identified and supported

The audit findings will help identify any gaps or non-compliance with ESS5, and corrective actions-if necessary-will be agreed with the World Bank and implemented before construction begins. The audit will also feed into ongoing monitoring and be disclosed publicly in accordance with ESS10 requirements.

ESS6 -Biodiversity Conservation and Sustainable Management of Living Natural Resources

While the project is not located in or near protected areas, general measures to avoid habitat degradation and ensure protection of local flora and fauna will be implemented during construction. Site clearance, excavation, and materials sourcing must be conducted responsibly.

ESS8: Cultural Heritage

The subproject is not located in or near known cultural heritage sites. However, procedures will be in place to ensure that any chance finds are reported and managed in accordance with national legislation and World Bank requirements. Contractors will be required to train workers on the chance find procedure and to stop works immediately in case of discoveries.

ESS10 -Stakeholder Engagement and Information Disclosure

ESS10 underscores the importance of early and continuous stakeholder engagement. A Stakeholder Engagement Plan (SEP) has been prepared to guide the process of identifying stakeholders, disclosing information, conducting consultations, and managing grievances. Public consultations are also integrated into the environmental assessment process.

2.3. Institutional roles and responsibilities for ESMP implementation, including road and transport authorities.

Institutional Roles and Responsibilities for ESMP Implementation

The implementation of the Environmental and Social Management Plan (ESMP) requires close coordination between various stakeholders, including government agencies, contractors, and the project financier. Each party plays a distinct role to ensure the effective application of environmental and social mitigation measures throughout the project lifecycle. The key institutions involved are:

Public Company Roads of the Federation of Bosnia and Herzegovina (PC Roads FBiH):
As the Project Implementing Entity, PC Roads FBiH is responsible for the overall coordination, management, and supervision of the project. Its key responsibilities include:

- Integrating the ESMP requirements into the project's design and bidding documents
- Ensuring contractors implement environmental and social mitigation measures
- Supervising the preparation and application of the Contractor's ESMP (CESMP)
- Coordinating land acquisition and resettlement activities in line with ESS5, including completion of audits as required
- Managing the project-level Grievance Redress Mechanism (GRM)
- Submitting regular monitoring and progress reports to the World Bank
- Coordinating with municipal institutions and stakeholders as needed

The PC Roads FBiH's Environmental and Social Unit or designated ESG specialists will serve as the lead on safeguards compliance.

Construction Contractor:
The contractor selected through competitive bidding will be responsible for implementing the ESMP on-site. Key responsibilities include:

- Developing a site-specific Contractor's Environmental and Social Management Plan (CESMP)
- Assigning qualified environmental, health, and safety (EHS) staff
- Implementing mitigation measures such as traffic control, dust and noise suppression, erosion control, and worker safety
- Monitoring and documenting ESMP implementation and submitting regular updates to the supervision engineer and PC Roads FBiH

Supervision Consultant / Engineer:
The engineer engaged by PC Roads FBiH will provide daily supervision and technical oversight of the construction process, with a strong focus on safeguards. Responsibilities include:

- Monitoring the contractor's adherence to the CESMP and ESMP
- Reporting on environmental and social performance
- Providing recommendations for corrective measures in case of non-compliance
- Acting as a liaison between the contractor and PC Roads FBiH regarding safeguards issues

Municipality of Mostar:
The municipality plays a key role in facilitating land acquisition and managing community relations. Its responsibilities include:

- Supporting administrative procedures related to expropriation and land access
- Assisting with stakeholder engagement and public disclosure processes
- Participating in grievance resolution, where relevant

Federal and Cantonal Environmental Authorities:
Although **an environmental permit is not required for this project** at present, these authorities may still have an oversight role in ensuring environmental protection during construction. They may conduct inspections in case of public concern, emergency incidents, or environmental damage.

3. PROJECT DESCRIPTION

3.1. Details on project components and phases (e.g., planning, construction, operation, and maintenance)

The project entails the reconstruction and safety enhancement of the northern entrance to the city of Mostar, specifically at the intersection of **Main Road M17.014** and **M17.4 101**, through the construction of a modernized **roundabout** combined with a **cut-and-cover tunnel**. The intervention is part of broader efforts by the Public Company Roads of the Federation of Bosnia and Herzegovina (PC Roads FBiH) to improve traffic safety, efficiency, and resilience within the regional road network.

The project consists of the following key phases and components:

- **Planning and Design Phase**
  This included site reconnaissance, traffic studies, geotechnical surveys, topographic mapping, and the preparation of the main design by authorized design consultants. A previous Environmental and Social Management Framework (ESMF) developed under the World Bank-financed Road Sector Modernization Program provided the foundation for early screening and safeguards planning.
- **Pre-Construction Phase**
  This phase involves finalization of design documents, procurement of works contractors, and near-completion of **land expropriation**. A **Resettlement Action Plan (RAP)** has already been prepared under the larger FRAME Project, and a resettlement **audit** specific to this subproject will be conducted to ensure consistency with ESS5.
- **Construction Phase**
  The main civil works will include:
  - Construction of a new **roundabout** to replace the current T-intersection configuration
  - Excavation and construction of a **cut-and-cover tunnel** beneath a section of M17.014 to ensure uninterrupted transit flow
  - Installation of **drainage systems**, **retaining walls**, and **safety barriers**
  - **Utility relocation**, including electricity, telecom, and possibly water infrastructure
  - Pavement works, road markings, signage, and street lighting
  - Implementation of **traffic diversion and management plans** to mitigate disruption
- **Operation and Maintenance Phase**
  After completion, the road segment will be handed over to PC Roads FBiH for routine and periodic maintenance. The roundabout-tunnel combination is expected to significantly

reduce delays, minimize accident risks, and accommodate future traffic volumes. Long-term maintenance will follow national road safety and engineering standards.

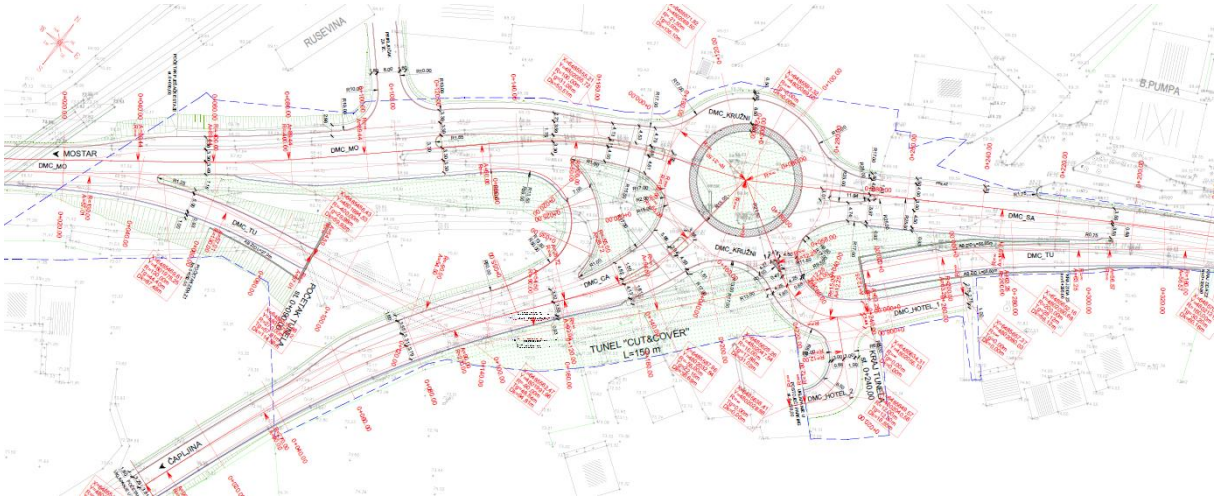

Figure 3: Layout on Geodetic Base Map – North Entrance to Mostar Intersection

3.2. Project Location, Scope of Works, and Direct Impact Zone

The reconstruction site is located at the northern entrance to the City of Mostar, in the Zalik neighborhood, near the INA petrol station, where the **main road M17 014** intersects with **M17.4 101** This intersection serves as a primary urban-rural connector, facilitating traffic flow between central Mostar and the wider regional corridor. Due to its outdated configuration and high accident rate, the site has been officially identified as a **black spot** in the road safety assessment conducted across the Federation road network.

The intervention covers a linear distance of approximately **300 to 400 meters**, encompassing:

- The construction of a modern **roundabout** at the current T-shaped at-grade intersection
- A **cut-and-cover tunnel section**, designed to ensure uninterrupted vehicle flow for the main through route
- Upgrades to **approach roads** on all branches, including improved geometrical alignment and sight distance
- **Sidewalks** and pedestrian-safe zones for improved non-motorized traffic access
- Reconstruction of the **stormwater drainage system** to meet urban runoff requirements
- **Street lighting**, traffic signage, and road markings to enhance safety
- **Utility relocation**, where necessary, to accommodate the new infrastructure layout

The direct impact zone includes:

- Portions of the M17.014 and M17.4 101 corridors
- Several **private parcels** that have already been or are in the process of being expropriated
- **Access roads** to local facilities, including a petrol station and a residential structure in the immediate vicinity
- Temporary construction-related impacts on nearby **businesses, homes, and pedestrian routes**

Due to the intersection's strategic location and the complex layout involving a sharp entry angle and poor visibility, the redesign is expected to **drastically reduce safety risks**, improve traffic flow, and provide a resilient infrastructure solution capable of accommodating future traffic volumes.

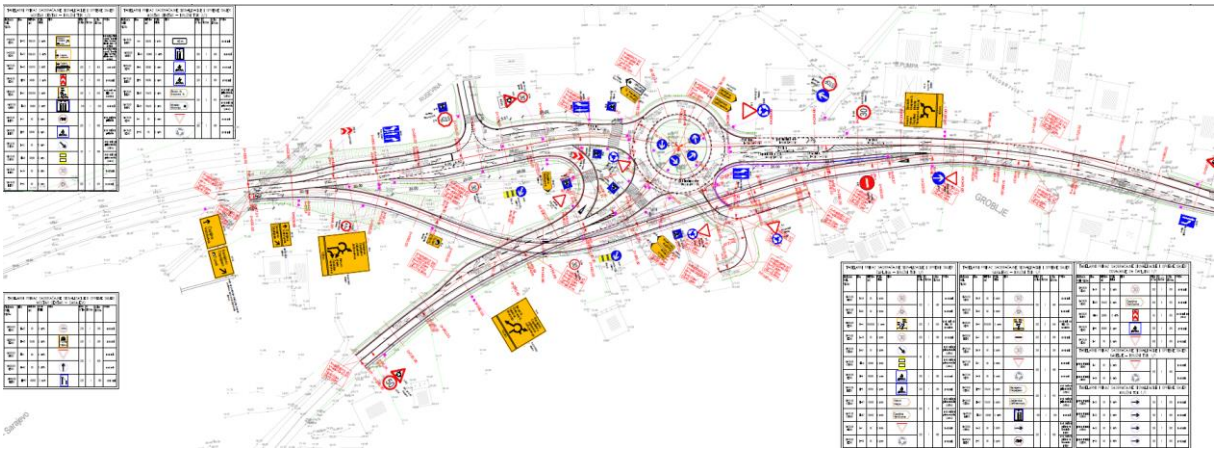

Figure 4: Traffic Layout – North Entrance to Mostar Intersection

3.3. Description of the project's physical, biological, and social setting

Topography and Geology:
The project is located in a relatively flat-to-gently sloping urban corridor. The terrain is suitable for the planned construction methods, including tunnel excavation using cut-and-cover techniques. The soil profile consists primarily of compacted alluvial materials and bedrock at moderate depth.

Hydrology and Drainage:
Although no major water bodies are present directly at the site, **stormwater management** is critical due to the impermeable urban surface and high rainfall events. The project will include modern drainage and sediment control systems to manage runoff.

Biological Environment:
The intervention site is in a **developed urban zone** with negligible ecological value. There are no protected areas, natural habitats, or rare species recorded in the project footprint. Vegetation consists of ornamental roadside trees and shrubs, some of which may need to be removed or relocated.

Air and Noise Environment:
Baseline air quality and noise levels are affected by high traffic volumes. During construction, **temporary deterioration** is expected due to machinery and transport, but the project will not have long-term adverse effects. Post-construction, air quality is expected to improve due to smoother traffic flow and reduced idling.

Social Setting:

- The broader area includes **residential neighborhoods**, **local businesses**, and **commuter infrastructure**.
- Some **private properties** are affected by the expropriation process, but no large-scale displacement is anticipated.
- The location serves as a **key corridor** for regional and city-level traffic, and is particularly sensitive to congestion.

- The **tourism economy** of Mostar makes efficient transport access a high priority for local authorities and businesses.
- **Vulnerable groups**, such as elderly or disabled residents, may be temporarily affected by access changes during construction.

4. ENVIRONMENTAL AND SOCIAL BASELINE

4.1. Existing environmental conditions

The project area is located at the northern urban fringe of Mostar, in a zone with mixed-use characteristics-predominantly urban infrastructure with pockets of undeveloped and green areas. While not considered environmentally sensitive, the site lies within proximity to the Neretva River basin, which makes stormwater management and runoff control critical during construction.

Key environmental parameters are summarized below:

- **Air Quality**: As a heavily trafficked urban entrance corridor, ambient air quality in the project area is already under pressure due to emissions from private vehicles and freight transport. Monitoring data from past years indicate levels of particulate matter (PM_{10} and $PM_{2.5}$) that periodically approach national thresholds, especially during winter months.
- **Noise Levels**: Baseline noise is elevated due to continuous vehicular traffic. Noise-sensitive receptors, such as residential homes and a nearby petrol station, are located within 100 meters of the construction site.
- **Water Resources**: Although the Neretva River is located over 500 meters away, the project area is connected to urban stormwater systems that eventually discharge into the broader watershed. Therefore, sediment and hydrocarbon control during construction will be important. There are no open water bodies or wetlands directly affected by the works.
- **Soil and Geology**: The terrain is moderately sloped and consists of compacted urban soils, partially disturbed by past infrastructure development. No geohazards have been recorded within the immediate project area.
- **Biodiversity and Protected Areas**: There are no protected areas, endemic species, or designated ecological corridors within or adjacent to the project site. The flora is typical of urban settings, including planted trees, shrubs, and unmanaged green patches. No fauna of conservation concern is expected to be impacted by the planned activities.

4.2. Socioeconomic conditions

The project area is characterized by a combination of residential, commercial, and transit-oriented land uses, making it a densely trafficked urban interface with multiple socioeconomic functions.

Key aspects include:

- **Local Communities**: The intersection connects the Zalik neighborhood to central Mostar and surrounding rural settlements. Residents in the immediate vicinity are primarily urban dwellers who rely on road access for daily commuting, school, and access to public services.
- **Land Use**: The area is predominantly used for transport infrastructure, flanked by individual residential properties, a petrol station, and small-scale businesses. A limited number of

parcels have been identified for expropriation and are mostly unoccupied or partially developed.

- **Existing Road Infrastructure**: The M17.014 and M17.4 101 corridors are primary regional routes. However, the current intersection layout is outdated, leading to congestion, unsafe maneuvers, and frequent collisions. This project aims to resolve such long-standing safety and efficiency problems.
- **Cultural Heritage**: Based on consultations with the Federal Institute for the Protection of Monuments, no immovable cultural heritage has been identified within the project footprint. However, chance-find procedures will be applied during excavation works as a preventive measure.
- **Businesses and Services**: A functional INA petrol station is located immediately adjacent to the intersection, and construction activities may temporarily disrupt customer access. Measures will be taken to preserve business continuity. Other affected entities include informal vendors and roadside businesses, which will be assessed during RAP implementation or audit.

5. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

5.1. Identification of key positive and negative impacts

The proposed reconstruction of the “North Entrance to Mostar” intersection is expected to generate several environmental and social impacts. While some may pose risks, others are beneficial and contribute to improved transport efficiency, safety, and socio-economic development.

Positive impacts include:

- Enhanced traffic flow and reduced congestion.
- Improved road safety at a recognized accident black spot.
- Increased accessibility and connectivity for local residents and businesses.
- Job creation during construction phases.

Negative impacts include:

- Temporary traffic disruptions and access limitations during construction.
- Increased noise, dust, and vibration from construction activities.
- Potential minor loss of vegetation and disturbance to local fauna.
- Risk of water contamination from runoff.
- Temporary adverse effects on local businesses due to construction access restrictions.
- Residual social impacts related to land acquisition, although most expropriation is nearly complete.

5.2. Key impacts specific to road construction:

a) Land Acquisition and Resettlement

Land acquisition for this subproject is approximately 90-95% complete. Remaining issues will be addressed through a dedicated audit process to ensure compliance with World Bank ESS5. No physical displacement is anticipated. The audit will verify that compensation and grievance redress mechanisms have been properly implemented.

b) Disruption of Traffic and Transport Services
Due to the intersection's strategic importance and high traffic volumes, phased construction will cause significant disruptions. A Traffic Management Plan will be critical to minimize congestion and maintain safe passage for motorists and pedestrians.

c) Increased Noise, Dust, and Vibration Levels
Noise and dust emissions will be generated during demolition, excavation, and construction works. Impacts are expected to be localized and temporary, but mitigation measures including dust suppression and noise barriers near sensitive receptors will be implemented.

d) Potential Biodiversity Loss in Ecologically Sensitive Areas
The site does not include protected or ecologically sensitive areas. Vegetation removal will be minimized and offset with landscaping and restoration measures.

e) Water Contamination Risks Due to Construction Runoff
Runoff containing sediment, oils, and construction materials poses a risk to nearby water systems. Erosion and sediment control measures, along with appropriate wastewater handling, will be employed.

f) Impacts on Local Businesses and Accessibility
Some informal shops and roadside businesses may experience temporary reduced accessibility. Coordination with affected parties and clear signage will help mitigate impacts.

g) Occupational Health and Safety (OHS)
Road construction activities expose workers to various occupational health and safety risks, including accidents involving heavy machinery, exposure to dust and noise, and potential traffic-related incidents at the work site. To mitigate these risks, contractors will be required to implement strict OHS measures such as provision of personal protective equipment (PPE), safety training, enforcement of site safety rules, and proper traffic management around construction zones. Regular supervision and monitoring will ensure compliance with OHS standards.

h) Excavation Works – No Blasting
Excavation for the tunnel will be carried out using mechanical equipment only. No blasting activities are foreseen, which significantly reduces potential impacts such as vibration, noise, and structural damage to nearby properties.

i) Groundwater
No significant impacts on groundwater are expected during excavation of the tunnel. Nevertheless, works will be monitored to ensure that seepage or water ingress, if encountered, is properly managed and does not affect local water resources.

5.3. Assessment of direct, indirect, and cumulative impacts

Direct impacts are predominantly short-term, arising from construction works including emissions, noise, waste generation, and land acquisition.

Indirect impacts may arise from traffic pattern changes and increased pressure on adjacent infrastructure.

Cumulative impacts are considered moderate given potential concurrent infrastructure works in the region. Coordination among stakeholders will be essential.

5.4. Screening of impacts based on significance

Based on the Subproject Screening Form, the subproject's overall **Environmental and Social Risk Rating is classified as Substantial** due to:

- Elevated social risks related to managing high traffic volumes and phased construction disruptions.
- The near completion of land acquisition reduces but does not eliminate social risks; a land acquisition audit is recommended.
- Environmental risks are low to moderate, with no significant impact expected on protected areas or cultural heritage.
- Compliance with national permits is ongoing; no full Environmental Impact Assessment (EIA) is required under local law.
- Hazardous materials and construction waste require careful management.
- Labor and occupational health and safety risks will be addressed under the Labor Management Plan.
- Stakeholder engagement and grievance mechanisms are in place to ensure community concerns are addressed promptly.

Recommendations based on screening:

- Implement a detailed, site-specific ESMP addressing all identified risks and impacts.
- Conduct a land acquisition audit to ensure full compliance and closure of compensation issues.
- Develop and enforce a Traffic Management Plan to reduce disruption risks.
- Maintain strong stakeholder engagement and transparent communication throughout construction.

6. MITIGATION MEASURES

6.1. Specific measures to mitigate identified environmental and social risks, including:

a) Proper Land Acquisition and Compensation Mechanisms

- Complete all pending compensation payments promptly in accordance with the Resettlement Policy Framework (RPF) and World Bank ESS5.
- Conduct a formal audit of the land acquisition process to verify compliance and address any outstanding grievances.
- Maintain transparent communication with affected landowners and ensure grievance mechanisms remain accessible and responsive throughout implementation.

b) Traffic Management Plan to Reduce Congestion and Detours

- Develop and implement a comprehensive Traffic Management Plan (TMP) before construction begins, in coordination with the Federal Ministry of Transport and Communications.
- Ensure TMP includes clear signage, detour routes, and traffic flow management to minimize congestion, especially during peak hours.
- Provide regular public notifications about traffic changes and construction schedules.
- Assign dedicated traffic marshals to control and guide traffic during critical construction phases.

c) Noise and Dust Suppression

- Schedule noisy construction activities during daytime hours to reduce disturbance to residents and businesses.
- Use water spraying or other dust suppression techniques on exposed soil and construction areas, especially during dry and windy conditions.
- Install temporary noise barriers or screens near sensitive receptors if necessary.
- Regularly maintain equipment to minimize noise and exhaust emissions.

d) Erosion Control and Proper Drainage

- Implement erosion and sediment control measures such as silt fences, sediment traps, and stabilization of exposed soils.
- Design and maintain effective drainage systems to prevent waterlogging and contamination of nearby water bodies from runoff.
- Monitor water quality in receiving water bodies regularly during construction.

e) Road Safety Measures

- Install temporary and permanent road signage, lighting, and speed control devices to safeguard workers and the public during and after construction.
- Enforce strict safety protocols for construction zones, including barriers separating traffic from worksites.
- Conduct road safety awareness campaigns targeting local communities and drivers.
- Ensure emergency response plans and contacts are in place in case of accidents.
- In the case of chance findings, the PIMT, competent authorities for Cultural Heritage (CH) and WB will be informed without delay and works stopped immediately. The competent authorities guidance will be followed and the works can only recommence with a written approval form the CH competent authorities

6.2. Responsibilities for implementation (contractors, government agencies, etc.)

Mitigation Measure	Responsible Party	Support/Monitoring
Land acquisition audit and compensation	JP Ceste FBiH (Project Proponent)	World Bank, Independent Auditor
Traffic Management Plan development	Contractor (under supervision)	Federal Ministry of Transport and Communications, PIMT
Noise and dust control	Contractor	Environmental and Social Safeguards Specialist (ESSS), PIMT
Erosion control and drainage	Contractor	ESSS, Environmental Agencies
Road safety measures	Contractor	Local Traffic Police, PIMT

Stakeholder engagement and grievance handling	Project Proponent, SEP Team	Independent Monitoring Consultant

Table 2: Responsibilities for implementation

6.3. Timeline of mitigation actions

Mitigation Action	Timeline	Remarks
Completion of Land Acquisition & Audit	Within 3 months before construction	Finalize outstanding land matters
Development of Traffic Management Plan	1 month before construction	Includes design, consultation, and public info
Implementation of Noise and Dust Controls	Throughout construction phase	Watering equipment, barriers, monitoring
Erosion and Drainage Controls	During earthworks & construction	Materials and maintenance
Installation of Road Safety Measures	Prior to and during construction	Signage, lighting, barriers
Stakeholder Engagement and Grievance Handling	Continuous through project life	Communication, meetings, grievance resolution

Table 3: Timeline of mitigation actions.

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) IMPLEMENTATION

7.1. Mitigation Plan table

Potential impact		Impact scale	Proposed mitigation measures	Responsibility
Aspect: General measures and site organisation	***Potential impact:*** Possible adverse safety and health impacts to the workers and local population in construction phase. Legality, quality and possible related delays.	**Local/ short term/major with moderate significance increasing to significant during the summer months (as this is the main route to the coast)**	• Preparation, approval and implementation of **OHS** and **community safety Plan** • Preparation, approval and implementation **Traffic Management Plan** together with the municipal staff prior start up activities; • Provision of the information via TV, radio and municipality web site about the construction activities – start and finish of work for each day and location of activities, duration of work and traffic access on other streets; • All legally required permits, authorisations, opinions, etc. have been acquired for the project activities and are kept on site. • The state inspectorate has been notified of upcoming activities and the copy of notification is available at the construction site. • Contractor/subcontractors have valid operating licenses. • All work is carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment. • Construction Work Plan is available at the construction site, and all occupational health and safety measures are ensured (all emergency response protocols and instructions have to be available at site, e.g. in case of earthquake, fire, etc). • Assign person who is in charge of establishment and management of project GRM (communication with and receiving requests/complaints from local population and project workers). • Appropriate installation of sign posting of the project sites will inform workers of key rules and regulations to follow. • Ensure appropriate marking in and out of the construction sites /section by section and speed-reduction signs. • Temporary material storage should be clearly marked. • No temporary storage of construction materials and waste occurs within any type of private property.	• **Contractor** • **Supervisor**

			• Limit construction activities to day hours. When necessary, carefully schedule night work, obtain approval form the competent and local authorities and inform affected community beforehand. • The surrounding area near the project is kept clean and good housekeeping practices are applied at the site. Works are carried out in a safe way. • Stockpiles are located away from drainage lines, natural waterways and places susceptible to land erosion. • Stockpiles do not exceed 2 m in height to prevent dissipation and risk of fall. • Producer of asphalt, gravel, concrete will possess all necessary concessions, working and OHS permits, and emission permits and quality certifications. • Ensure all transportation vehicles and machinery have been equipped with appropriate emission control equipment, regularly maintained and attested. • There will be no unlicensed borrow pits, quarries, or waste dumps in adjacent areas, especially not in protected areas.	
Occupational Health and Safety (OHS)	***Expected impact:*** Possible adverse safety and health impacts to the workers and local population in construction phase of local street due to: - Lack of ensured safety measures at the start of construction work - Injury passing nearby the construction site and open trench and water manholes - Not compliance with strict OHS standards and work procedure	**Local/ short term/major with moderate to significant**	• Workers who will be engaged, will be trained and regularly use/wear Personal Protective Equipment (PPE) complying with national legislation international good practice (will always wear hats, masks and safety glasses, harnesses and safety boots, and other work specific protective equipment). • All dangerous spots in the working sites such as pits, trenches, etc. are clearly marked and fenced. • Staff is properly trained for the positions and work performed, workers hold valid workers certificates. • First aid kits are available on the site and personnel trained to use it. • Appropriate informative and warning signposting of the sites inform workers of key rules and regulations to follow. • Machines and heavy vehicles are handled only by experienced and appropriately trained personnel, thus reducing the risk of accidents. • Procedures for cases of emergency (including spills, accidents, fire etc.) are available at the sites and conveyed to all employees. • Devices, equipment and fire extinguishers are always functional, so in case of need they could be used rapidly and efficiently. Supervision	• **Contractor** • **Spervisor**

	- inadequate public access		of fire protection/fire-fighting facilities to be carried out by a designated staff. • Constant presence of attested firefighting devices will be ensured on sites in case of fire or other damage. Their position is communicated to workers and marked. The level of fire-fighting equipment must be assessed and evaluated through a typical risk assessment. • The transportation routes outside the construction areas (local, county and state roads) will be kept clean. • Provide adequate lavatory facilities (toilets and washing areas) with adequate supplies of hot and cold running water, soap, and hand drying devices. • Materials and chemicals must be handled by professionally trained persons according to Material Safety Data Sheet and Technical Sheet.	
Community Health and Safety	***Expected impact:*** - Traffic safety reduced - Congestion - Unauthorised access and possible accidents/ injuries	**Local/ short term/major with high significance**	• Public is timely informed on the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) • Local community is timely informed in case of power shortages • In an event where the traffic will be interrupted the Contractor needs to organize alternative routes and timely announce alternative traffic regulation to the local communities; • Safe passages are provided for the pedestrians. • All dangerous spots in the working sites such as pits, trenches, etc. are clearly marked and fenced. • Entry for unemployed person within the sub-project location is prohibited (within the warning tapes and fences when/where deem needed). • Ensure appropriate marking in and out of the construction sites /section by section and speed-reduction signs. • Roads are regularly swept and cleaned at critical points. Spilled materials are immediately removed from a road and cleaned.	• **Contractor –Bidder** • **Supervisor**
Aspect: Waste	***Expected impact:*** Possible adverse environmental impact	**Local/short term/ with major significance**	• Each type of generated waste on the location has to be temporary stored in separate waste container which have to be labelled with waste type name and waste code and located at the solid surface foreseen for that purpose on the construction site.	• **Contractor - Bidder** • **Supervisor** • **Municipal staff (Environmental**

	and health effects could occur as a result of generation of the different waste streams The inappropriate waste management and not in time collection and transportation of waste streams	**within the project location**	• All waste, including construction waste has to be disposed exclusively on the licensed landfills or licensed processing plants. • Records of waste streams and amounts has to be kept for each type of generated waste at the location. • This is the obligation of the principal contractor, unless contractor and investor/another contractor didn't define in contract that investor/another contractor has to keep records. • All waste has to be handed over with appropriate documentation to the companies authorized for the waste management (companies that have adequate waste permit. • In the case of hazardous waste, information on handing over waste to the final destination must be obtained. • Whenever feasible the contractor should reuse and recycle appropriate and viable materials. • Mineral (natural) construction wastes have to be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and temporarily stored in appropriate containers. Depending on its origin and content, mineral waste has to be reapplied to its original location or reused with an approval from the competent authority and the beneficiary. • Burning or illegal dumping of waste is strictly prohibited.	**Inspector and Communal Inspector)** • **PCE**
Aspect: Noise disturbance	***Expected impact:*** Possible noise disturbance as a result of outdoor equipment usage and transportation vehicles driving around the construction site	**Local/ short term /with major significance/ along the project location**	• Maximum permissible noise level for the construction site is 65dB. It is allowed to exceed that level for additional 5 dB in the period from 8 to 18 hours. It is desirable to carry out works in the period from 8 to 18 hours and not to carry works during the nights. • Community should be informed in advance of any work activities to occur outside of normal working hours or on weekends. Obtain permission form competent authorities. • All equipment must be maintained in good operating condition and be attested. • Employees have to be asked to use personal hearing protection equipment in the cases defined by the article 8 of Ordinance on the protection of workers from noise exposure at work (OG 46/08). • During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and	• **Contractor –Bidder** • **Supervisor**

			equipment placed as far away from nearby residential houses as possible.	
Aspect: **Water and soil quality**	***Expected impact:*** Possible environmental impact on the relevant water recipients could occur due to ground contamination (from the spillage of materials such as vehicle fuel, motor oils and lubricants) and waste disposal near or in river bands	**Local/Short term/near the relevant water recipients Medium significance/** **Low probability**	• Regularly maintain and service the construction machines. • Responsible handling of liquid waste. • Adding oil activities carry out on the part of the construction site that is derived from an impermeable working surface. • Handle all materials in accordance with instructions included in Material safety data sheets (MSDS) and Technical Sheets which have to be available at the construction site. • Adhere the measures and standards for construction machinery. • Try to avoid fuel and lubricant storage on construction site. If installation of fuel storage tanks will be needed, they should have secondary tanks with sufficient volume to contain a spill from the largest fuel tank in the structure as well as be protected from the impact of weather. The containment area has to have a device (pump) to remove accumulated water. • The containers with hazardous substances will be kept in a leak-proof container to prevent spillage and leaking. This container should possess secondary containment system such as bunds (e.g. bunded-container), double walls, or similar. Secondary containment system must be free of cracks, able to contain the spill, and be emptied quickly. • The containers with hazardous substances must be kept closed, except when adding or removing materials/waste. They must not be handled, opened, or stored in a manner that may cause them to leak. • In the case of an accident, any hazardous liquid remove from the soil using adsorption materials such as sand, sawdust or mineral adsorbents. Such waste material you have to collect in tanks, store in the space provided for hazardous waste storage and hand over to authorized companies. • Prevent hazardous spillage coming from tanks, containers (mandatory secondary containment system, e.g. double walled or bunded containers), construction equipment and vehicles (regular maintenance and check-ups of oil and gas tanks, tend to park (manipulate) machinery and vehicles only on asphalted or concrete surfaces with surface runoff water collecting system.	• **Contractor –Bidder** • **Supervisor**

			• Isolate wash down areas of concrete and other equipment from watercourse by selecting areas for washing that are not free draining directly or indirectly into watercourse. • Do not extract groundwater, nor discharge cement slurries, or any other contaminated waters into the ground or adjacent streams or rivers. This is strictly prohibited. • Ensure proper storm water drainage systems installed and take care not to silt, pollute, block or otherwise negatively impact natural streams, rivers, ponds and lakes by rehabilitation activities. • All loads of soil are covered when being taken off the sites for reuse/disposal. •	
Accidents and emergencies			• In the case of significant accident/incident (fatality, serious injury, larger spilling, fire, and similar) the PIMT must be notified within 24 hours. • Emergency Preparedness and Response (EPR) plan (prepared separately for construction and use phase) shall cover actions that must be taken to ensure staff/worker's safety from fire and other emergencies. The fire prevention plan must include a list of the major workplace fire hazards, their proper handling and storage procedures, potential ignition sources and control procedures, and a description of fire protection, training equipment or systems. The plan should include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.	•
Aspect: **Air quality**			• Sprinkle water to limit dust emissions in the area near the construction materials and non-asphalted roads. Use water with all land clearing, grubbing, scraping, excavation, land levelling, grading, uploading, cut and fill and demolition activities which may cause dusting and particles emissions. • Cover surfaces with plastic coverings during material storage and transportation.	• **Contractor –Bidder** • **Supervisor**

			• Adequate locations for storage, mixing and loading of construction materials should be established. • Limit vehicles speed (30 km/h) in the area and access roads. • Periodically clean location and access roads from debris. • Use modern attested construction machinery to minimize emissions, provided with mufflers and maintained in good and efficient operation condition. • Additionally, to minimize dust (mainly PM10) from construction material collection, material retention time at the site should be reduced to a minimum, in order to minimize exposure to wind.	
Aspect: Management of materials			• Producer of asphalt, concrete, and the stone aggregate quarry has to obtain/hold all required working and emission permits and quality certifications. • Producer of asphalt, concrete and the stone aggregate quarry has to present a proof of conformity with all national environmental and H&S legislation. • There will be no water extraction at the site. • There will be no asphalt production at the site. • Ensure the subcontractor has all the necessary skills and experience and precautionary systems in place to prevent a wash off of bituminous materials (primer or primer binder). • Water in bitumen emulsion production or concrete should not be contaminated (however, technological water is preferred). • Asphalt and bitumen emulsion application will take into account metrological data and conditions when planned and carried out (raining periods, overcast, cooler and dumper weather, etc.) • Bitumen emulsion is applied only to adequately compacted and swept surfaces with adequate moisture content. • Positioning of the emulsion sprayer should be such so spaying beyond the area to be primed or primer sealed. • Ensure that emulsion sprayers are well maintained, operated by trained crew and spray nozzles are operating correctly. • Avoid windy conditions when spraying. • Equipment shall be cleaned in areas where there will be no impact to the environment or danger of surface run-off (e.g. areas where water is collected to retention basins and transported to proper	•

			water treatment, and waste is separated and appropriately disposed). • All materials have to be approved by the site engineer. • Materials temporarily stored on site shall be protected and separated. HDPE pipes are not to be in touch or stored next to oil, coatings, solvents, etc. •	
Traffic disturbance			• Traffic management have to be conducted in accordance with provisions of traffic legislation (e.g., appropriate lighting, traffic safety signs, barriers and flag persons that are seen easily or are easy to follow, road speed should be clearly posted). • All materials prone to dusting are transported in closed or covered trucks. • All materials prone to dusting and susceptible to weather conditions are protected from atmospheric impacts either by windshields, covers, watered or other appropriate means. • Roads are regularly swept and cleaned at critical points. Spilled materials are immediately removed from a road and cleaned. Access roads are well maintained. • Spilled materials are immediately removed from tracks and cleaned. Tracks are well maintained. • Access of the construction and material delivery vehicles are strictly controlled, especially during the wet weather.	•
Land acquisition			• Investor has the proofs of owning all the parcels for the road before the usage permit, e.g. donation contract between the private landowners and investor or equivalent.	•
Cultural Heritage			• In the unlikely case of chance findings, installation works will be stopped, and competent authorities notified. Works will recommence upon their approval.	•
Biodiversity and nature protection			• Restrict the movement of heavy machinery to the minimum working corridor possible. • Limit work along watercourses and on watercourses and canals to as small an area as possible. • As much as possible, avoid cutting of trees and other natural vegetation. In the case of removing vegetation, to prevent unnecessary loss of vegetation in the project area, clearly marked	•

			the areas where vegetation will be removed. In the case of removal of individual trees, seek approval of the competent authority. In the case larger number of trees (over 5) ned to be removed, it is a subject to WB approval. No trees that are historical, important for community or biodiversity will be removed without prior approval of WB and consultations with the national competent authorities and local community. • The potential removal of vegetation plan for the period when birds do not nest. All birds that nest they need to protect until their birds can fly. In case of finding the nests of endangered bird species, prevent their disturbance, and inform about the discovery the central state body responsible for nature protection. • Where possible, the area under construction shall be fenced to lessen even occasional disturbance and dust on habitats and biodiversity. If noise barriers need to be constructed, they should be opaque or with a design and density of stickers that will prevent birds from entering the barriers as much as possible. • Discarding any type of waste to nature or water bodies is strictly prohibited. • After construction and in parallel with landscaping the School area, landscape the area around the access road. In landscaping, use only autochthonous plant species that occur in the vegetation communities present in the wider area of the sub-project. • Check the construction for presence of animals before works commence. In the case some are present, ensure they are relocated from the site safely. •	
Operational phase				
Traffic safety			• **Horizontal and vertical traffic signalization is installed and regularly maintained (speed limitation of the vehicles, signs warning the school is nearby, pedestrian crossing etc.)**	•

7.2. Monitoring Plan table

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)	
						Implementation	Supervision
PREPARATORY PHASE							
All required permits are obtained before construction works start	-	By inspecting of all required documents	Before construction works start	To ensure all permits are obtained	By Investor	PIMT	PIMT
All proofs of owning the land are obtained before the use permit	-	By inspecting of all required documents	Before construction works start	To ensure all land property issues are solved	By Investor	PIMT	PIMT
Public and relevant institutions are notified	Contractor's premises	Inspection of all required documents	Before construction works start		Included in the project budget	Supervising engineer	PIMT's Environmental and Social specialists
CONSTRUCTION PHASE							
The project is executed in accordance with design documentation and obtained permits, and the ESMP Checklist	On project site	By inspecting the site and keeping written records.	Monthly	To ensure alignment with design documentation and permits obtained	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
If the construction site has a work plan and is kept tidy and safe.	On project site	By inspecting the site and keeping written records.	Monthly	To ensure workers safety and minimize the risks of accidents	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)	
						Implementation	Supervision
The construction site is fenced and properly marked.	On project site	By inspecting the site and keeping written records.	Monthly	To ensure workers and community safety and minimize the risks of accidents	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
All hazardous places on the construction site (e.g. ditches, holes, materials) are marked and protected in such a way as to prevent injury.	On project site	By inspecting the site and keeping written records.	Monthly	To ensure workers and community safety and minimize the risks of accidents	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
Protective clothing and equipment, including firefighting equipment, is available in sufficient quantity and used regularly.	On project site	By inspecting the site and keeping written records.	Monthly	To ensure workers and community safety and minimize the risks of accidents	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
The safety of pedestrians and other road users is ensured.	On project site	By inspecting the site and keeping written records.	Monthly	To ensure workers and community safety and minimize the risks of accidents	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
All machinery and vehicles are switched off when not in use.	On project site	By inspecting the site and keeping written records.	Monthly	To ensure workers and community safety and	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)	
						Implementation	Supervision
				minimize the risks of accidents			
The construction site is equipped and organised according to the measures prescribed by this ESMP: **- If a sufficient number of containers for municipal and other waste is provided on the construction site,** **- If a sufficient number of chemical toilets is provided on the construction site.**	On project site	By inspecting the site and keeping written records.	Monthly	To minimize the risks of air, soil, groundwater and surface water pollution	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
Refuelling and machine servicing is performed outside the project site at the designated location.	On project site	By inspecting the site and keeping written records.	Monthly	To minimize the risks of air, soil, groundwater and surface water pollution	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
All hazardous liquids (waste, fuel, oils, etc.) are kept in containers	On project site	By inspecting the site and keeping written records.	Monthly	To minimize the risks of air, soil, groundwater and	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)	
						Implementation	Supervision
equipped with tanks or other containment systems.				surface water pollution			
If soil or water contamination occurs, will it be disposed of and managed in accordance with national legislation (as hazardous waste)	On project site	By inspecting the site and keeping written records.	In case of accident	To minimize the risks of air, soil, groundwater and surface water pollution	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
The construction site is sprayed with water, if necessary.	On project site	By inspecting the site and keeping written records.	In case of accident	To minimize the risks of air, soil, groundwater and surface water pollution	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
The vehicles and pavements are cleaned regularly and transportation takes place in closed or covered vehicles.	On project site	By inspecting the site and keeping written records.	In case of accident	To minimize the risks of air, soil, groundwater and surface water pollution	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
Construction waste and other types of waste are sorted, stored and disposed of in accordance with	On project site	By inspecting the site and keeping written records.	Monthly	To ensure proper waste management	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)	
						Implementation	Supervision
applicable regulations.							
All certificates and accompanying document sheets are kept.	On project site	By inspecting the site and keeping written records.	Monthly	To ensure proper waste management	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
Construction works are performed only on weekdays, during daylight hours.	On project site	By inspecting the site and keeping written records.	Monthly	To minimize the noise emission	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
Noise does not exceed the values specified in the Ordinance on Maximum Permissible Noise Levels 145/04.	On project site	By inspecting the site and keeping written records.	Upon complaints from the local community or request form PIMT	To minimize the noise emission	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists
Dust	At the project site	Daily visual inspection. Laboratory testing PM10 and PM2.5 upon complaints.	Daily visual inspection. Laboratory testing upon complaints.	Minimize dust impact to local community and local economy	Included in project budget	Supervising engineer	PIMT's Environmental and Social specialists

7.3. Roles and responsibilities of key stakeholders

Stakeholder	Roles and Responsibilities
JP Ceste FBiH (Project Proponent)	- Overall responsibility for ESMP implementation and compliance- Ensure timely land acquisition audit and grievance redress- Provide necessary resources for environmental and social management- Liaise with government agencies and the World Bank
Project Implementation and Management Team (PIMT)	- Day-to-day oversight of ESMP execution- Coordinate between contractors, government authorities, and stakeholders- Monitor environmental and social performance- Facilitate stakeholder engagement and grievance mechanism implementation
Contractor	- Implement mitigation measures as per the ESMP- Comply with environmental, social, health and safety requirements- Prepare and submit regular environmental and social monitoring reports- Ensure workforce compliance with Labor Management Procedures (LMP)
Environmental and Social Safeguards Specialist (ESSS)	- Provide technical support and guidance to PIMT and contractor- Conduct regular site inspections and audits- Track compliance with mitigation measures- Support reporting and documentation
Federal Ministry of Transport and Communications	- Review and approve Traffic Management Plan and other relevant submittals- Provide regulatory oversight and enforcement
Local Authorities and Community Representatives	- Support stakeholder engagement- Provide feedback and raise concerns through grievance mechanisms- Facilitate local coordination and communication

Table 4: Roles and responsibilities

7.4. Institutional capacity and training requirements

Capacity Assessment:
The PIMT and contractor teams currently have foundational knowledge of environmental and social safeguards. However, to ensure effective ESMP implementation, targeted capacity strengthening is necessary.

Training Topics:

- Overview of World Bank Environmental and Social Standards (ESS), focusing on ESS1, ESS2, ESS3,ESS5, ESS10.
- Implementation of site-specific mitigation measures and monitoring procedures.
- Occupational health and safety practices consistent with the Labor Management Plan, national regulation, World Bank EHSG and best practices (GIIP).
- Stakeholder engagement and grievance handling processes.

- Emergency preparedness and response protocols.
- Environmental and social reporting and documentation requirements.

Training Frequency:

- Initial induction training before construction start for all contractors and PIMT staff.
- Refresher training sessions at key project milestones or upon changes in project scope or personnel.
- On-the-job mentoring and spot training during site visits by the ESSS. **Training Delivery:** Training sessions will be delivered through workshops, practical site demonstrations, and distribution of guidance materials/manuals. External consultants or World Bank experts may be engaged for specialized topics.

7.5. Reporting and documentation requirements

Regular Monitoring Reports:
Contractors shall prepare monthly environmental and social monitoring reports documenting compliance with mitigation measures, any incidents or non-compliance, and corrective actions taken. These reports will be submitted to the PIMT and ESSS for review.

ESMP Implementation Reports:
PIMT will compile quarterly ESMP implementation reports summarizing overall environmental and social performance, stakeholder engagement activities, grievance records, and audit findings, and submit reports to World Bank in line with the Project Environmental and Social Commitment Plan (ESCP).

Incident and Non-compliance Reporting:
Any environmental or social incidents, accidents, or grievances requiring urgent attention shall be reported immediately to the PIMT and relevant authorities, with a detailed follow-up report within 7 days. Reporting arrangements and further reporting will be caried out in line wth the Project ESCP.

Record Keeping:
All environmental and social documentation, including monitoring reports, training records, permits, grievance logs, and audit reports, shall be systematically filed and made accessible for review by the Project Proponent, World Bank, and regulatory bodies.

Disclosure:
Key ESMP reports and updates will be disclosed to stakeholders through the Project's website, community meetings, and other accessible communication channels in line with ESS10 requirements.

8. MONITORING AND EVALUATION PLAN

8.1. Indicators for monitoring environmental and social impacts, including:

Impact Area	Key Indicators	Measurement/Method
Air Quality	- Levels of particulate matter (PM10, PM2.5)- Dust levels during construction	Regular air sampling at sensitive receptors and construction zones

Noise Pollution	- Noise levels in decibels (dB)- Complaints related to noise	Periodic noise monitoring near residential and sensitive areas; grievance records
Traffic Disruptions and Safety	- Number and duration of traffic detours or closures- Number of traffic accidents during construction	Contractor and PIMT logs; police/traffic authority accident reports
Land Acquisition and Compensation	- Percentage of affected persons compensated- Timeliness and completeness of compensation payments	Review of RAP records, compensation receipts, and audit reports
Water Quality	- Parameters such as turbidity, pH, and pollutant levels in nearby water bodies	Periodic water sampling upstream and downstream of construction sites
Waste Management	- Quantity of hazardous and non-hazardous waste generated- Proper disposal practices followed	Contractor waste logs and inspection reports
Community Grievances	- Number and types of grievances received- Time taken to resolve grievances	Grievance mechanism logs and monthly summaries
Occupational Health and Safety	- Number of workplace incidents and accidents- Compliance with OHS protocols	Contractor's safety records, incident reports, and site inspections

Table 5: Indicators for monitoring environmental and social impacts

8.2. Monitoring schedule and reporting format

Monitoring Activity	Frequency	Responsible Party	Reporting Format
Air and Noise Monitoring	Monthly during construction	Contractor with ESS Specialist support	Monitoring reports with data tables and graphs
Traffic Disruption and Safety	Weekly and after major events	Contractor and PIMT	Incident and traffic management logs
Land Acquisition Compliance	Quarterly during acquisition phase and audit post-completion	PIMT and Independent Auditor	Audit report and compliance checklist
Water Quality Monitoring	Quarterly	Contractor and ESS Specialist	Laboratory reports and analysis summary
Waste Management	Monthly	Contractor	Waste management logs and disposal certificates
Community Grievances	Continuous, summarized monthly	PIMT	Grievance log and resolution status report
Occupational Health and Safety	Daily monitoring, monthly summary	Contractor OHS officer and ESS Specialist	Incident reports and safety audits

Table 6: Monitoring schedule and reporting format

All monitoring reports will be compiled into a semi-annual Environmental and Social Performance Report by the PIMT and submitted to the Project Proponent and the World Bank for review.

8.3. Responsible parties for data collection and reporting

Responsibility	Entity/Role	Description of Duties
Environmental and Social Monitoring	Contractor	Collect environmental and social data during construction; prepare monitoring reports
Compliance Oversight and Review	Environmental and Social Safeguards Specialist (ESSS)	Conduct site inspections, verify data accuracy, and support reporting
Project Implementation and Management	PIMT	Coordinate monitoring activities, compile reports, liaise with authorities and World Bank
Independent Auditor (for land acquisition audit)	External Audit Firm	Review land acquisition compliance and compensation adequacy; prepare audit report
Stakeholder Engagement and Grievance Management	PIMT and Community Liaison Officers	Collect and log grievances, follow up on resolution, and report grievance trends

Table 7: Responsible parties for data collection and reporting

9. GRIEVANCE REDRESS MECHANISM (GRM)

9.1. Process for receiving and addressing stakeholder complaints, particularly regarding land acquisition and construction disruptions

A formal Grievance Redress Mechanism (GRM) is in place to ensure that individuals or communities affected by the project-including those impacted by land acquisition, construction disruptions, or traffic impacts-can raise concerns and receive timely, transparent, and fair responses.

Complaints can be submitted **verbally or in writing**, **anonymously or with personal identification**, and through various accessible channels:

- **Mail**: PC Roads FBiH, Terezija 54, 71000 Sarajevo
- **Phone**: +387 33 250 370
- **Email**: info@jpcfbih.ba
- **Web form**: https://jpdcfbh.ba/bs/kontakt

Once received:

- The grievance is **logged** and assigned a reference number;
- An **acknowledgment** is sent within **3 working days**;

- A **response or resolution** is provided within **15 working days**, following investigation and internal consultations;
- The grievance is then **closed** with written confirmation to the complainant (unless submitted anonymously).

Grievances may also be escalated to the **Central Grievance Committee** if the complainant is not satisfied with the initial response.

Special attention is given to **vulnerable groups**, such as people with disabilities, women, elderly persons, and those at risk of marginalization, ensuring they can access the GRM without barriers.

9.2. Roles and responsibilities for grievance handling

- **PC Roads FBiH (PIMT Safeguards Team)** is responsible for:
  - Receiving, logging, and responding to grievances;
  - Coordinating investigations and liaising with relevant departments;
  - Keeping records and reporting on grievance resolution performance.
- **Contractor and Supervision Consultant**:
  - Maintain a local presence for grievance intake during construction;
  - Assist in resolving operational complaints at the site level.
- **Central Grievance Committee (Ministry of Transport and Communications)**:
  - Acts as a second-instance mechanism for unresolved grievances;
  - Reviews escalated cases and ensures compliance with national regulations.

For issues related to **labor**, a separate mechanism is provided under the **Labor Management Procedures** in line with ESS2. Complaints involving **SEA/SH (sexual exploitation, abuse, and harassment)** are handled with confidentiality, survivor-centered approaches, and with involvement of trained personnel.

9.3. Mechanisms for transparency and accountability

- A **Central Grievance Log** is maintained and updated regularly;
- Grievance records are analyzed and summarized in quarterly **Environmental and Social Progress Reports**, shared with the World Bank;
- **Anonymous grievances** are handled with equal diligence and outcomes are published online where possible (without disclosing personal information);
- **Monitoring data** is disaggregated by gender, category, and resolution timeframe;
- Lessons learned from grievance trends are used to improve project communication and mitigation actions.

Additionally, project-affected persons may also contact the **World Bank's Grievance Redress Service (GRS)** or **Inspection Panel** if local remedies are exhausted or ineffective:

- GRS: www.worldbank.org/GRS
- Inspection Panel: www.inspectionpanel.org

10. STAKEHOLDER ENGAGEMENT PLAN

10.1. Key stakeholders

For this sub-project, key stakeholders have been identified in alignment with the overarching SEP of the FRAME Project. They include:

- **Project-Affected Persons (PAPs):** Residents and property owners along the new roundabout and tunnel alignment, especially those impacted by land acquisition and construction-related disturbance.
- **Local businesses:** Particularly those near the existing intersection whose access or customer flow may be affected during construction.
- **City of Mostar authorities:** Including the Department for Urban Planning and Municipal Services.
- **PC Roads FBiH:** The implementing entity and main project promoter.
- **Cantonal and Federal ministries:** Responsible for transport, environment, and spatial planning.
- **Environmental NGOs and community organizations:** That may have an interest in biodiversity, cultural heritage, and sustainable mobility.
- **Emergency services:** Police, fire, and ambulance providers involved in road safety and emergency coordination.

10.2. Public consultation process

As per the SEP, stakeholder engagement for the Mostar North Entrance sub-project was initiated during the planning phase. This included:

- **Information disclosure:** Project concept, ESMP scope, and key environmental and social issues were disclosed through municipal notice boards and the PC Roads FBiH website.
- **Consultation meetings:** Were held in coordination with the City of Mostar, where community members could raise concerns related to land use, traffic management, and environmental risks.
- **Feedback incorporation:** Stakeholder feedback was used to inform design aspects (e.g., access provisions, temporary bypass routes) and mitigation planning.

Future consultation milestones include:

- Disclosure of this **draft ESMP** for public review (in local language and English).
- A **public consultation session** in Mostar, planned during the finalization of the ESMP, where stakeholders can submit written or verbal feedback.
- Ongoing consultations during construction, especially if any design changes occur or unforeseen impacts emerge.

10.3. Communication strategies

Consistent with the SEP, the following communication strategies will be implemented:

- **Regular updates** on construction timelines, detour routes, and expected disruptions will be published on the PC Roads FBiH website and shared via local media and notice boards.
- **Community liaison focal points** will be designated within the contractor and PC Roads FBiH to handle inquiries and maintain open channels with local stakeholders.
- **Grievance hotline and email** will be available and promoted at all key locations near the construction site.
- Emergency communication protocols will be coordinated with local services in case of incidents affecting traffic or public safety.

The SEP will continue to guide engagement activities, and this ESMP will reference and adhere to it throughout implementation.

11. EMERGENCY RESPONSE PLAN

11.1. Procedures for responding to environmental or social incidents

The project will maintain a robust Emergency Response Plan (ERP) as part of the overall Construction Environmental and Social Management System (CESMP). This plan will outline detailed procedures for effectively addressing the following potential incidents:

- **Traffic accidents** in or near the construction site, including multi-vehicle collisions and incidents involving workers or pedestrians.
- **Hazardous material spills**, such as fuel or lubricants from construction machinery.
- **Construction-related fires** or explosions due to equipment failure or fuel handling.
- **Severe weather events** (e.g., flash floods, storms) that may cause site erosion, worker risk, or public safety concerns.
- **Unintended damage** to utility infrastructure (e.g., water or gas lines) or private property.
- **Discovery of cultural heritage items** or sensitive environmental resources during earthworks.

Each scenario will include:

- Immediate notification procedures (contractor site lead, PC Roads FBiH, emergency services)
- Site evacuation and first response actions
- Environmental containment (e.g., spill control barriers)
- Incident documentation and reporting (to PC Roads, inspection authorities, World Bank if required)
- Root cause analysis and corrective/preventive action planning

The ERP will be updated as needed based on risk assessments and actual incidents.

11.2. Roles and responsibilities during emergencies

Contractor: Responsible for preparing a site-specific Emergency Response Plan, conducting risk assessments, and ensuring emergency preparedness (equipment, signage, drills).

- Must designate an **Emergency Response Coordinator** on-site at all times.

- Trains staff in first aid, spill response, and evacuation protocols.

PC Roads FBiH: Reviews and approves the contractor's ERP, ensures coordination with municipal emergency services, and monitors compliance.

Supervision Consultant: Verifies readiness during routine inspections and may assist in the investigation of major incidents.

Workers and subcontractors: Must follow protocols, attend safety briefings, and immediately report any emergency or unsafe condition.

11.3. Coordination with local emergency services

Effective coordination with local emergency service providers is essential. The following will be arranged prior to the start of works:

- Notification of the **Mostar Fire Department**, **Emergency Medical Services**, and **Police Department** about the construction timeline and potential risks.
- Development of **joint response protocols**, particularly for traffic accidents or hazardous spills on M17.4 and M17.014.
- Provision of **emergency site access maps** and contact persons.
- Periodic joint drills or tabletop exercises (depending on project duration and risk profile).

All emergency contacts and procedures will be displayed on signage at the construction site and included in worker induction materials.

12. ANNEXES

ANNEX B: GRM templet

Grievance Form

Protocol Number	
Name and Last name (*optional*)	
Contact Info We urge you to check the box in which way you want to be contacted	☐ By post (Address): _____ ☐ By phone: _____ ☐ By e-mail: _____
Preferred language	☐ Bosnian/Croation/Serbian ☐ English
Grievance description	What happened? Where did it happen? Who did it? What was the result?

Date of grievance and the number of times it occurred	
☐ One time (date:_____) ☐ It happened more than once (How many times did it happen? ___) ☐ Ongoing (It happened recently)	
Preferred outcome?	

Table for the register of grievances

Serial number	Method of the due date of complaint	Project	Date of receipt	Complaint type	Complaint description	Applicant		Date of confirmation of receipt	Description of actions taken	Date of resolution
						Age	Gender			